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# The Africa Prosperity Report

2016



# Foreword



The Prosperity Index tells us that the story of human progress goes beyond economics. It tells us that for nations to flourish they must provide opportunity and freedom to their citizens. It shows how access to quality healthcare and education provides the foundations on which nations can grow. It proves that effective and transparent government empowers citizens to take control of their lives, and it shows that protection from violence and oppression, as well as strong social bonds, are crucial to a thriving society.

The 2016 *Africa Prosperity Report* underscores the importance of having these vital foundations in place in order to achieve prosperity. In providing a comprehensive view of what's happening in Africa beyond traditional economic indicators, it casts a new perspective on enduring policy challenges.

As falling commodity prices hit growth forecasts across the continent, this year's report considers the legacy of prosperity delivery in Africa given a decade of strong growth. Sub-Saharan Africa itself has made significant progress on prosperity, particularly in health and opportunity, but has still been outpaced in translating wealth into prosperity by both developing Asia and Europe. Given the low hanging fruit still available in Africa, that more rapid gains have not been made is surprising.

Within the region, we find vast variation in how well countries have done in transforming their wealth into prosperity for their citizens, from countries like Rwanda that have delivered a lot with very little, to countries like Angola that have delivered very little with a lot.

The report finds that the characteristics of delivering high levels of prosperity with your given wealth transcend wealth itself, a powerful message for policy-makers trying to write a new narrative of Africa Rising in a slow-growth climate. Indeed, these characteristics – economic complexity, good governance, and simple freedoms – are structural, and don't require high growth rates to fix.

Despite the fact we find that Sub-Saharan Africa has been outpaced by other parts of the developing world, our findings are optimistic about the potential for future prosperity gains, despite a more challenging economic climate.

We urge policy-makers across the continent to take the findings of this report and reflect on the state of the fundamental cornerstones of prosperity delivery at home. We hope that this report shows that slower-growth need not spell the end of rising prosperity in Africa, but rather demonstrates practical ways in which governments can deliver greater prosperity with the wealth they have.

We hope you enjoy this edition of the *Africa Prosperity Report*.

To interact with the data, rankings and analysis visit [www.prosperity.com](http://www.prosperity.com)

A handwritten signature in black ink, appearing to read 'Alexandra Mousavizadeh', with a long horizontal flourish extending to the right.

**Alexandra Mousavizadeh & the Prosperity Index Team**

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# THE LEGATUM PROSPERITY INDEX™ AFRICA RANKINGS 2016

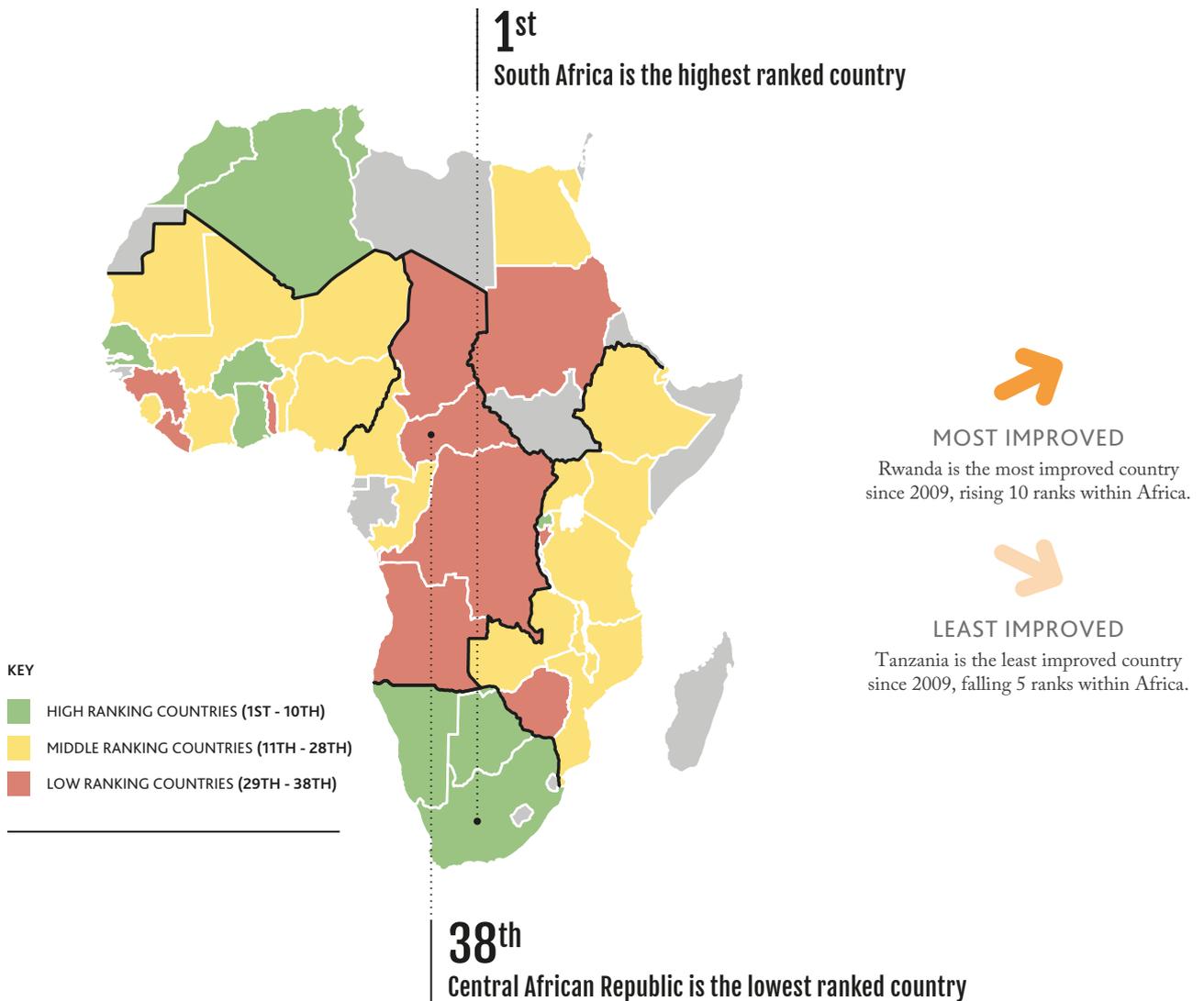
HIGH RANKING COUNTRIES (10)

MIDDLE RANKING COUNTRIES (18)

LOW RANKING COUNTRIES (10)

OVERALL PROSPERITY RANK	COUNTRY	ECONOMY	ENTREPRENEURSHIP & OPPORTUNITY	GOVERNANCE	EDUCATION	HEALTH	SAFETY & SECURITY	PERSONAL FREEDOM	SOCIAL CAPITAL
1	South Africa	12	1	4	2	9	19	8	6
2	Botswana	25	3	1	4	11	3	3	15
3	Morocco	1	4	7	8	3	7	23	8
4	Namibia	20	5	2	6	16	8	6	23
5	Algeria	2	7	18	1	1	9	35	21
6	Tunisia	10	2	12	3	2	5	29	35
7	Senegal	17	13	8	21	7	10	2	3
8	Rwanda	4	18	3	12	6	12	16	18
9	Ghana	30	9	5	7	5	2	12	25
10	Burkina Faso	3	27	13	24	17	11	5	17
11	Kenya	24	8	14	11	12	33	7	9
12	Benin	21	22	9	16	19	1	1	36
13	Egypt, Arab Rep.	15	6	24	5	4	15	37	27
14	Mali	13	24	22	35	18	17	9	1
15	Zambia	27	12	10	9	33	24	18	13
16	Niger	5	36	11	36	15	13	11	10
17	Uganda	19	20	19	15	22	32	10	11
18	Cameroon	8	19	25	14	10	25	19	22
19	Tanzania	22	16	15	22	21	21	21	12
20	Cote d'Ivoire	7	10	27	28	25	23	4	33
21	Mozambique	14	14	20	26	31	18	14	26
22	Djibouti	31	33	16	27	14	6	26	16
23	Mauritania	23	17	31	25	8	16	34	5
24	Malawi	35	28	6	17	13	14	25	30
25	Sierra Leone	34	30	21	23	36	27	15	4
26	Nigeria	16	11	28	20	27	34	30	14
27	Ethiopia	11	34	17	29	20	28	22	28
28	Congo, Rep.	9	26	32	13	32	20	24	32
29	Zimbabwe	28	23	34	10	23	29	31	20
30	Togo	29	29	26	18	26	4	13	38
31	Guinea	37	35	35	32	30	22	17	29
32	Liberia	38	15	30	34	29	26	28	19
33	Angola	18	25	29	31	28	30	36	31
34	Sudan	32	21	36	33	24	36	38	2
35	Congo, Dem. Rep.	26	31	37	30	34	38	32	7
36	Burundi	36	32	23	19	35	31	33	34
37	Chad	6	37	38	37	37	35	27	24
38	Central African Republic	33	38	33	38	38	37	20	37

# Prosperity in Africa 2016



CHANGE IN PROSPERITY INDEX SUB-INDEX SCORES FOR AFRICA BETWEEN 2009 AND 2015



# Ranking Prosperity Delivery in Africa

Across the continent, prosperity is delivered to a greater or lesser extent as shown by the rankings and results on the previous pages. Some of the findings are not surprising. Central African Republic, the poorest country on the continent, sits at the bottom. Comparatively wealthy South Africa sits at the top.

However, the level of prosperity delivered by a country can, using GDP per capita, be compared against the level of prosperity expected given that country's wealth.

It is here where the countries in most need of praise are identified, those delivering far more prosperity than you would expect given their wealth. These delivery rankings highlight the continent's over-performing nations, and those who are under-delivering for their citizens.

COUNTRY	SIZE OF PROSPERITY GAP (AFRICA)	
Rwanda	30.7	Significant over-delivery
Senegal	30.4	
Morocco	27.9	
Burkina Faso	22.0	
Ghana	21.1	
Kenya	16.4	
Mali	16.4	
Benin	16.2	
Niger	14.3	
South Africa	11.9	Over-delivery
Uganda	11.2	
Namibia	9.7	
Tanzania	7.9	
Mozambique	6.8	
Cameroon	6.7	Delivering as expected
Zambia	6.3	
Malawi	5.0	
Cote d'Ivoire	2.3	
Tunisia	1.9	
Djibouti	0.0	
Sierra Leone	-1.7	
Ethiopia	-1.7	
Botswana	-2.5	
Mauritania	-2.5	
Zimbabwe	-3.1	Under-delivery
Togo	-5.2	
Algeria	-7.9	
Egypt, Arab Rep.	-13.6	
Liberia	-14.4	
Guinea	-14.7	
Nigeria	-15.0	
Congo, Rep.	-17.2	
Burundi	-19.7	
Congo, Dem. Rep.	-26.0	
Sudan	-26.2	Significant under-delivery
Chad	-26.9	
Angola	-35.7	
Central African Republic	-45.2	

Explanatory note: The figures are the percentile rank gap between a country's actual prosperity and its expected prosperity based on its wealth. This is created by generating percentile ranks for each country in Africa and modelling that against GDP per capita. The gap is the difference between the percentile rank of the country, and the percentile rank of the modelled result.

# Africa's Prosperity: Rising but not Shining

**More than with any other region, we look for narratives to help us understand Africa's progress. Its poor performance throughout the 1990s earned it a 2000 cover story in *The Economist* called "the hopeless continent." War, famine, and disease were insurmountable barriers to prosperity, or so the narrative went.**

In every single year since that cover story was published, African growth – averaging 5.5% a year over the last decade alone – outpaced global growth. *The Economist* renamed Africa "the hopeful continent" in 2011. Africa, the new narrative held, was "rising".

The *Legatum Prosperity Index*<sup>TM</sup> shows that, alongside growth, global prosperity has been on the rise. With the exception of North Africa, where declining governance and security has pushed prosperity into retreat, the same trend can be seen across the African continent.

## HEALTH AND OPPORTUNITY DRIVING PROSPERITY GROWTH IN AFRICA

The most significant prosperity gains have been made in Health, where life expectancy has increased by an average of five years and infant mortality has fallen by a third. Entrepreneurship & Opportunity too has seen large positive change. Here, business start-up costs have fallen by a third and economic development has grown steadily more equal. The only sub-index to record a decline is Safety & Security (see page 5). Increasing conflict across the continent has driven a notable increase in refugees and internally displaced people.

While this instability has resulted in a fairly sizeable decline in this sub-index, it has not been enough to halt Africa's rising prosperity.

Given a decade of strong growth, this prosperity gain is not unsurprising. Much of it has come from low hanging fruit, particularly in Health, where life expectancy at its lowest in Africa a decade ago was a full 15 years less than the lowest in developing Latin America or Asia. Much was to be gained from simply catching up. Zambia has added 17 years to life expectancy since 2000 and far fewer African babies now die from preventable diseases. Yet, despite this, Sub-Saharan Africa's prosperity gain has not set it apart. Indeed, Africa has been outpaced by Asia and Eastern Europe.<sup>1</sup>

## AFRICA: IN ASIA'S SHADOW

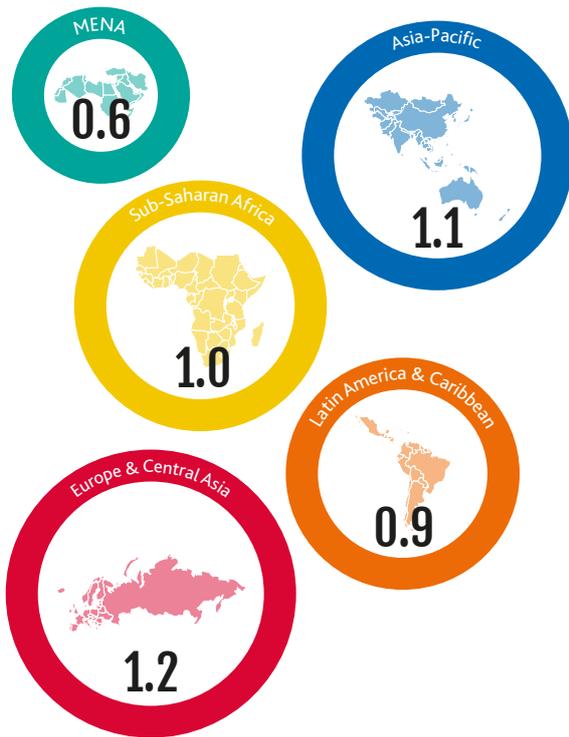
Sub-Saharan Africa has seen neither the biggest absolute prosperity gain, nor the biggest gain relative to its growth, when compared to the rest of the developing world. Asia's prosperity grew by nearly a third more than that of Sub-Saharan Africa in the last seven years (see figure 1). When you consider the prosperity delivered with the growth achieved in each region<sup>2</sup>, Sub-Saharan Africa is trailed significantly only by the Middle East. The continent delivered similar increased prosperity with its growth as Latin America and the Caribbean, but less than in developing Europe or Asia (see figure 2). Given Africa's low starting point and fast economic growth, that picking off the low hanging fruit has not led to rocketing prosperity is a surprise.

FIGURE 1: HOW DOES SUB-SAHARAN AFRICA'S PROSPERITY GAIN COMPARE TO THE WORLD?



Note: Prosperity gain 09-15 relative to Sub-Saharan Africa

FIGURE 2: PROSPERITY GAIN TO GROWTH RATIO  
(SUB-SAHARAN AFRICA = 1)



It is not just prosperity where the continent is being outdone, but in fundamental long term targets like poverty reduction too. In 1990, poverty in East Asia – those living on less than \$1.90 a day<sup>3</sup> - was 60.6%, slightly higher than Sub-Saharan Africa at 56.8%. By 2012, poverty in Sub-Saharan Africa remained high at 42.7%, but had dropped to just 7.2% in East Asia (see figure 3). Africa rising? Not for almost half the continent’s population.

This failure to keep up with the rest of the world is reflected in Africa’s rankings within the Index. Despite strong absolute prosperity growth, the African continent has made no relative progress on prosperity. The median rank of Sub-Saharan African countries remains unmoved at 98.5. Meanwhile, that of developing Asia has risen eight ranks to 57.

**THE RAMIFICATIONS OF PROSPERITY LOST**

The failure to deliver on prosperity during the boom years will have ramifications as growth across the continent slows. The “exuberance” around Africa, the *Financial Times* now tells us, “has evaporated”. Despair re-enters the narrative.

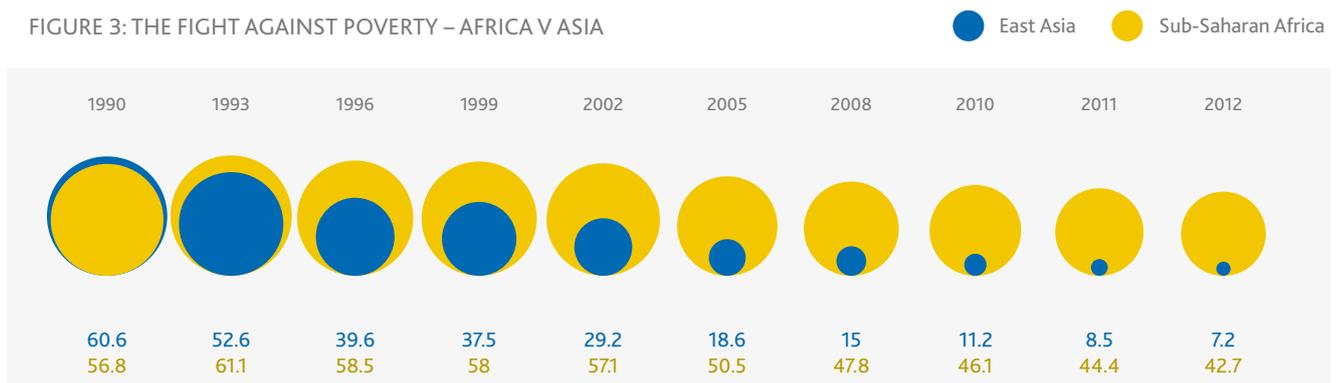
Nigeria and South Africa make up more than half of the continent’s economy and face deep structural problems. The same can be said for many other African nations highly dependent on commodities. In a new era of structurally lower commodity prices, a more hopeful narrative, one of growing prosperity, will be harder to write.

This report explores the African challenge in detail, highlighting the drivers of prosperity delivery over the last decade and how they can inform policy priorities over the next ten years. With prosperity in Asia not only rising, but rising relative to the rest of the world, the challenge for Africa is if, and how, it can do the same.

**Given Africa’s low starting point and fast economic growth, that picking off the low hanging fruit has not led to rocketing prosperity is a surprise.**

<sup>1</sup>Based on developing countries included in the Index.  
<sup>2</sup>10 year average growth rate of developing countries in the Index, calculated using World Bank data.  
<sup>3</sup>World Bank regional aggregation using 2011 PPP and \$1.90/day poverty line.

FIGURE 3: THE FIGHT AGAINST POVERTY – AFRICA V ASIA



# Key Findings

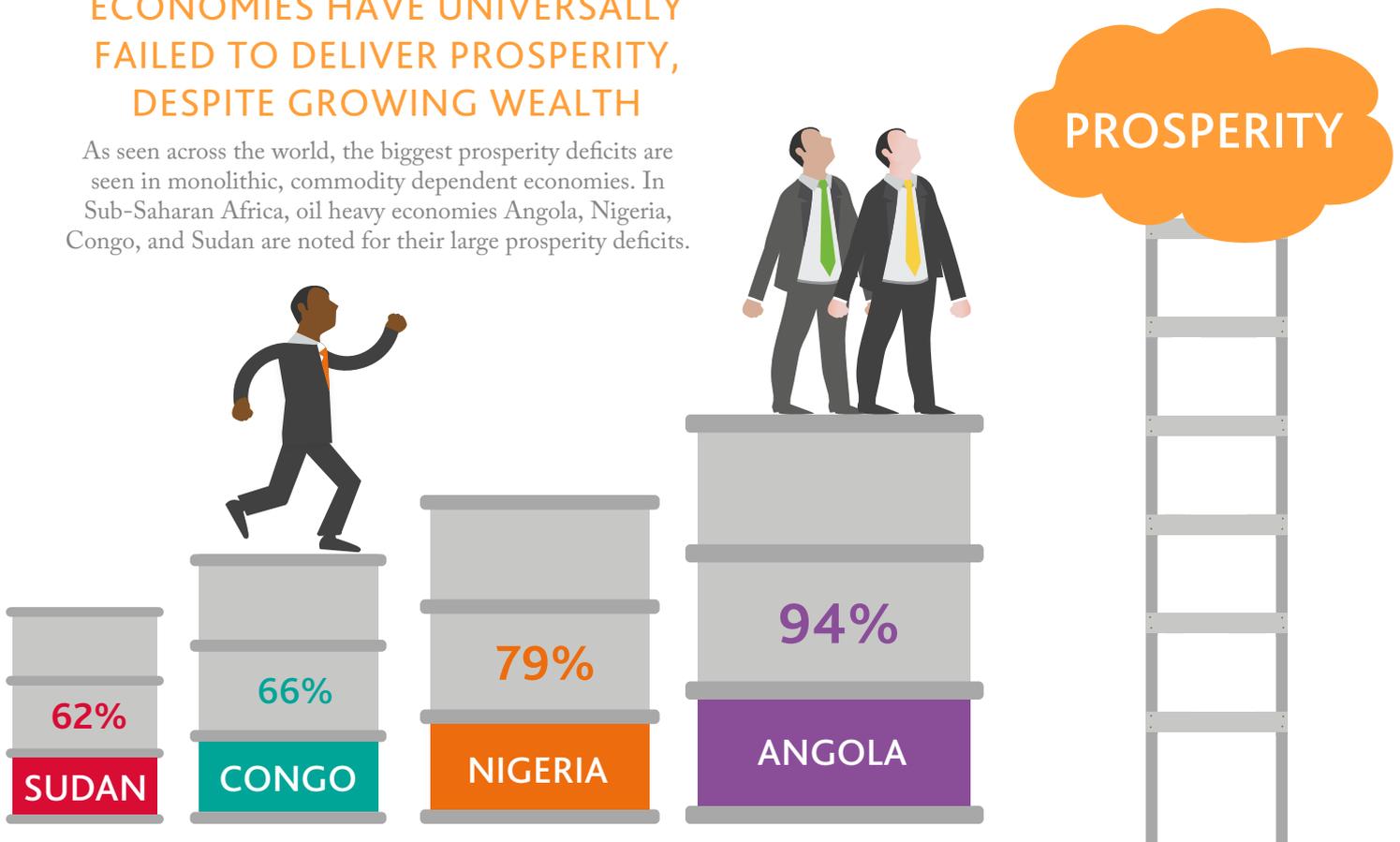
## “AFRICA RISING” HAS BEEN OUTPACED BY ASIA AND EASTERN EUROPE

When looking at the prosperity gain delivered with economic growth, Sub-Saharan Africa is outpaced by both developing Asia and Eastern Europe.



## NARROW, COMMODITY HEAVY ECONOMIES HAVE UNIVERSALLY FAILED TO DELIVER PROSPERITY, DESPITE GROWING WEALTH

As seen across the world, the biggest prosperity deficits are seen in monolithic, commodity dependent economies. In Sub-Saharan Africa, oil heavy economies Angola, Nigeria, Congo, and Sudan are noted for their large prosperity deficits.



Figures reflect share of export that are oil-based.



## DELIVERY NOT WEALTH MATTERS FOR PROSPERITY IN AFRICA

The frontier of over-delivery or under-delivery can, for a single country, regardless of wealth, mean the difference between being among the most prosperous on the continent, or among the least. Delivery matters more in determining the level of a country's prosperity than its wealth.



## PROSPERITY OVERACHIEVERS

OVERPERFORMING COUNTRIES ARE MORE LIKELY TO HAVE COMPLEX ECONOMIES, GOOD GOVERNANCE, AND STRONG FREEDOMS

These are the three key predictors of whether a country over-delivers prosperity or not. Many of these predictors can be improved regardless of the size of economic growth.



# The Legacy of Prosperity Delivery in Africa

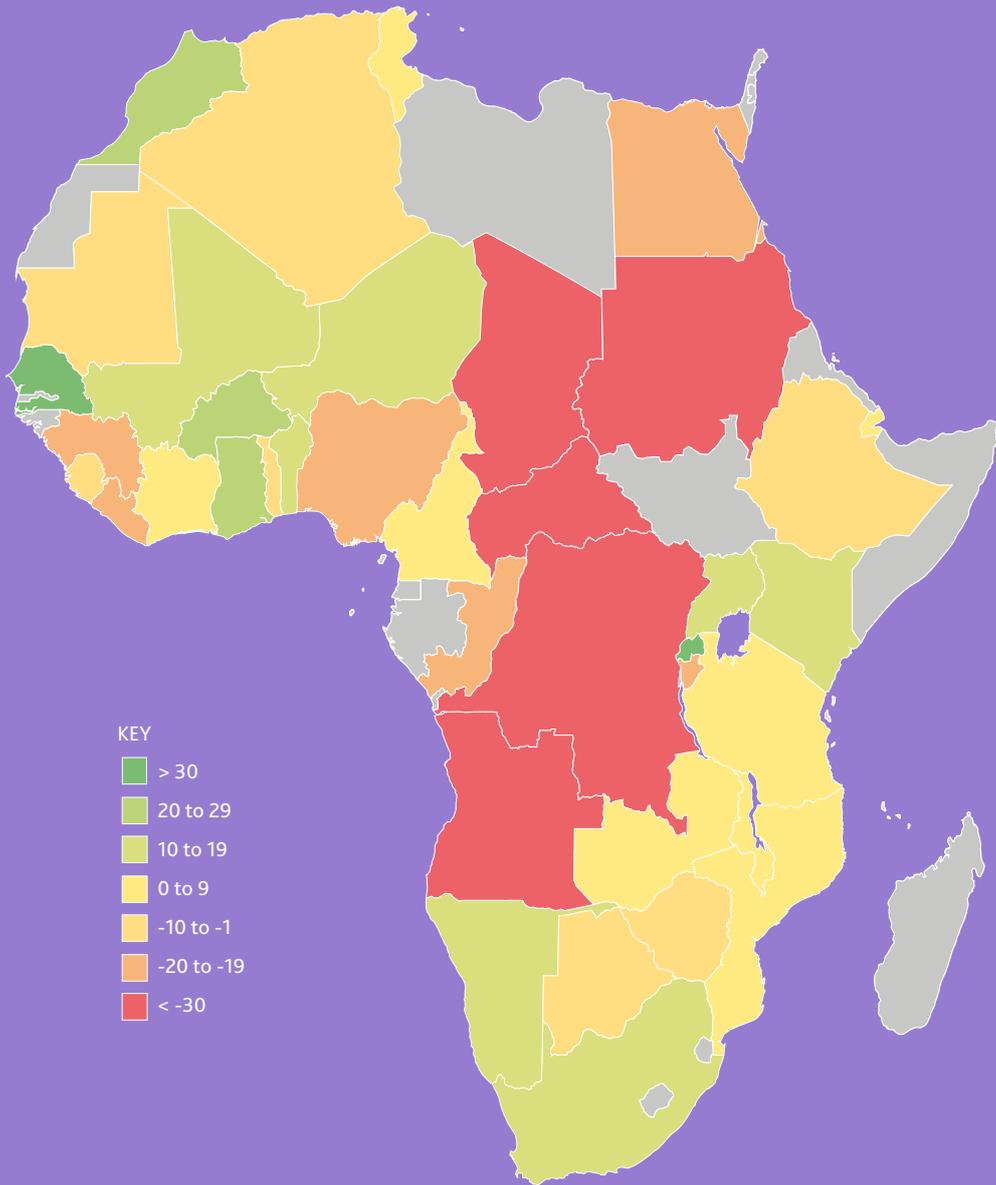
## TURNING GROWTH AND WEALTH INTO PROSPERITY

Across the continent, countries have had mixed success in turning their economic growth and wealth into the prosperity delivered to their citizens. As the delivery ranks on page six of this report show, there is a large variation across Africa, from Rwanda and Senegal with the best record of delivery, to the Central African Republic and Angola with the worst.

This chapter explores the characteristics of the top and bottom performing countries across Africa's different income groups. It finds a number of common attributes that the top performing countries have at every level of wealth, but that are lacking in those nations that under-perform.

These attributes could provide significant prosperity gains to those countries that are under-delivering on prosperity, helping to drive prosperity upward across the continent despite slower growth.

## HEAT MAP: THE PROSPERITY GAP ACROSS AFRICA



# At the Turning of the Economic High Tide: What Next for Africa's Prosperity?

**Drive the palm lined highway along Luanda's waterfront toward the Central Business District and it could almost be a young, nascent, Dubai. Cranes dance among tall, silvered office blocks, and sandy beaches stretch out toward the sea.**

Buoyed by a decade of strong growth and an influx of skilled Portuguese migrant workers, Angola's revival after 28 years of civil war is a testament to the story of Africa's commodities boom. Oil production doubled in the six years following the end of the war in 2002, bringing with it soaring wealth and a twofold increase in GDP per capita. The accompanying 'Africa Rising' narrative did little to caution against commodities as the path to prosperity for the continent.

Yet, beneath the veneer of luxury apartments and vast Chinese-backed infrastructure projects, Angola tells a very different story of 'Africa Rising'. The majority of Luanda's six million residents live in musseques, overcrowded slums where seven in ten still live on under \$1.25 a day.<sup>1</sup> Despite the nation's new found wealth, prosperity has not necessarily followed. Angola ranks just 33rd in Africa for prosperity, despite having the continent's eighth highest GDP per capita. What's worse, it is falling.

The failure of nations to deliver prosperity with the spoils of their commodities boom raises serious questions about their ability to prosper as growth on the continent slows. Sub-Saharan Africa grew at 3.5% in 2015 after averaging 5.8% in 2005-2014.<sup>2</sup>

With China's future growth unlikely to be as commodity-intensive as the past, and OPEC exerting downward pressure on oil prices to freeze out competition, lower commodity prices are not a brief blip in the otherwise onward march of African growth. They are illustrative of a new global climate that is here to stay, at least for the medium-term.

The most fundamental question for the continent is therefore how to deliver prosperity in this new slower-growth age.

Many of the answers to Africa's low-growth conundrum lie in the legacy of prosperity delivery across the continent during the boom years. Angola may not have delivered prosperity with its new found wealth, but plenty of African states have prospered. Through the lens of the Prosperity Index, both the barriers to, and enablers of, delivery can be assessed. Many of them speak to the enduring need for structural reform in many countries, from economic diversification to institutional change. Using insights from the Index, policy priorities for prosperity across a post-boom Africa can be set.

## THE LEGACY OF PROSPERITY DELIVERY IN AFRICA

The remarkable economic boom that has transformed the skyline of post-war Luanda has too often been mistaken for prosperity across the continent. While it is true that higher wealth tends to lead to higher prosperity (see figure 1), this experience is far from universal.

FIGURE 1: HOW MUCH PROSPERITY IS DELIVERED WITH WEALTH?

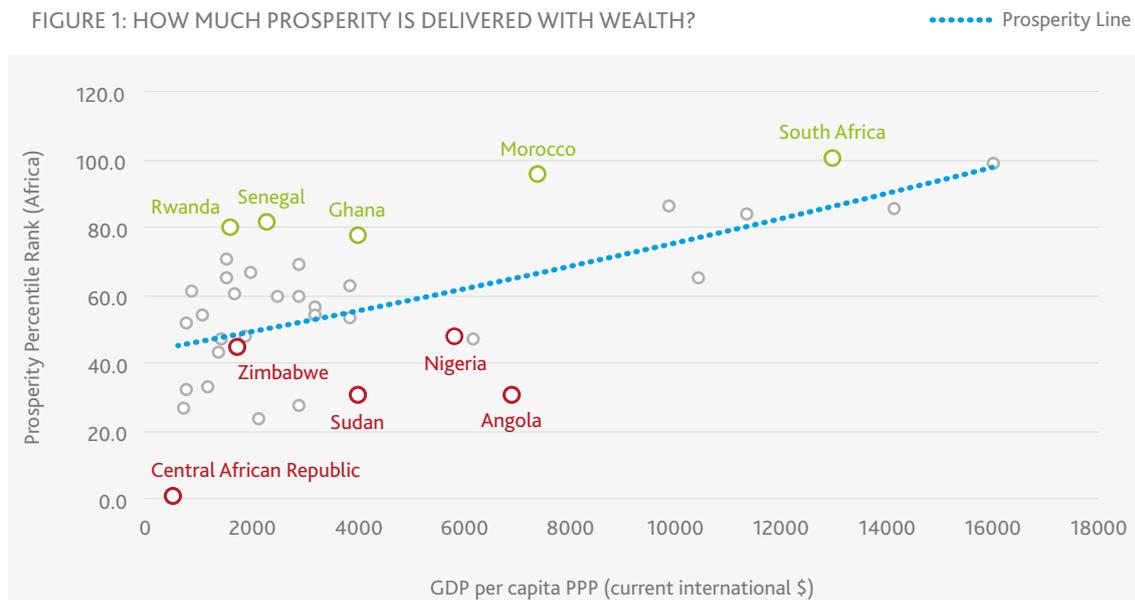
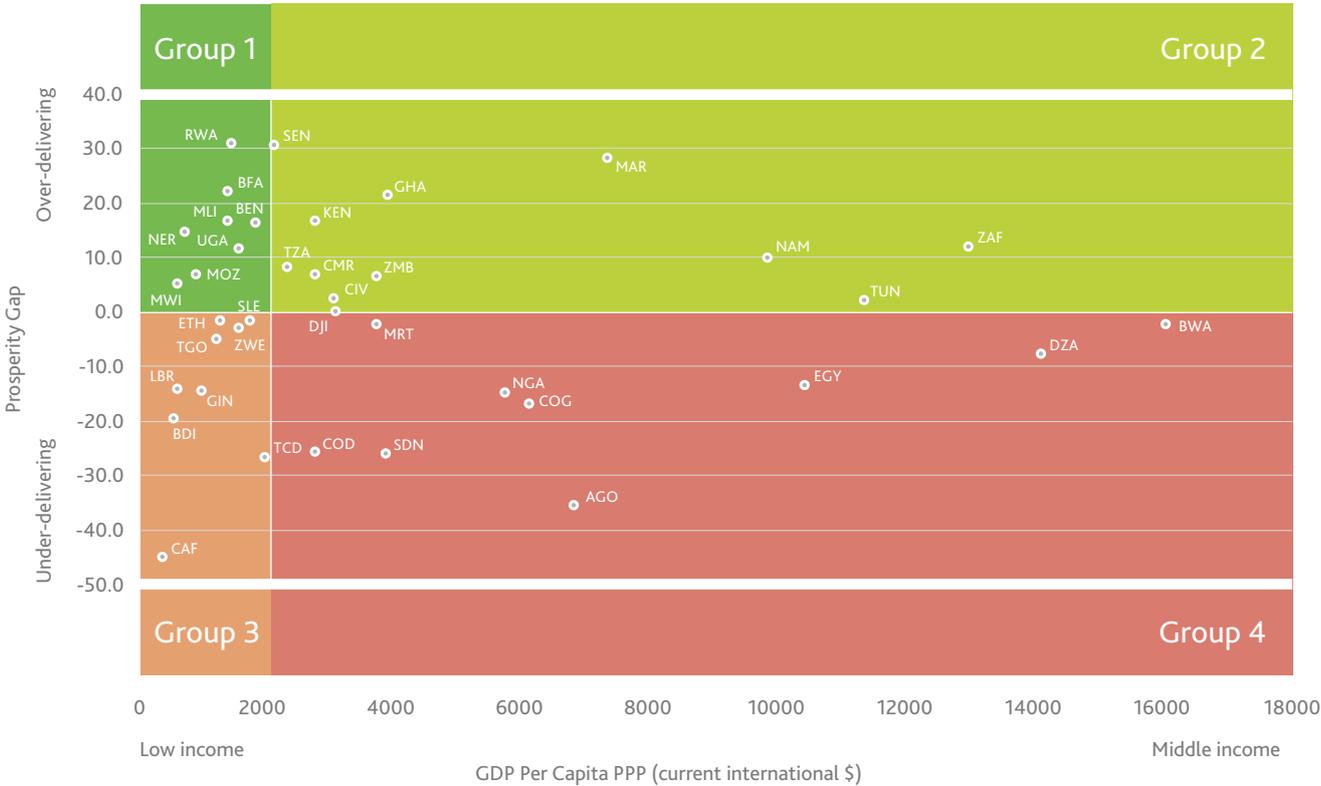


FIGURE 2: PROSPERITY GAP BY INCOME GROUP



Oil-rich Angola sits well below its expected level of prosperity (as indicated by the 'prosperity line' in figure 1), in the 30th percentile rather than the expected 65th, a clear prosperity deficit. Such a deficit is common globally among very commodity-dependent economies, particularly oil based ones. That said, Angola has the second largest prosperity deficit in the world behind Iraq, and notably larger than other oil-rich states, including Iran, Sudan, and Venezuela. By global standards, the absence of prosperity here is marked.

As a result of this under-performance, far poorer African economies significantly outperform countries like Angola on prosperity. Rwanda, with a third of Angola's wealth, ranks in the 79th percentile rather than its expected 48th. This over-delivery means that Rwanda ranks 8th on the continent for prosperity. Based on its wealth its expected performance would be around 27th.

In the African context, the frontier of over-delivery or under-delivery can, for a single country, regardless of wealth, mean the difference between being among the most prosperous on the continent, or among the least. That delivery – driven by policy decisions – matters more in determining the level of a country's prosperity than its wealth is a strong message for leaders and their policy-makers in a slower growth climate.

The prosperity deficit or surplus of a country is a testament to its

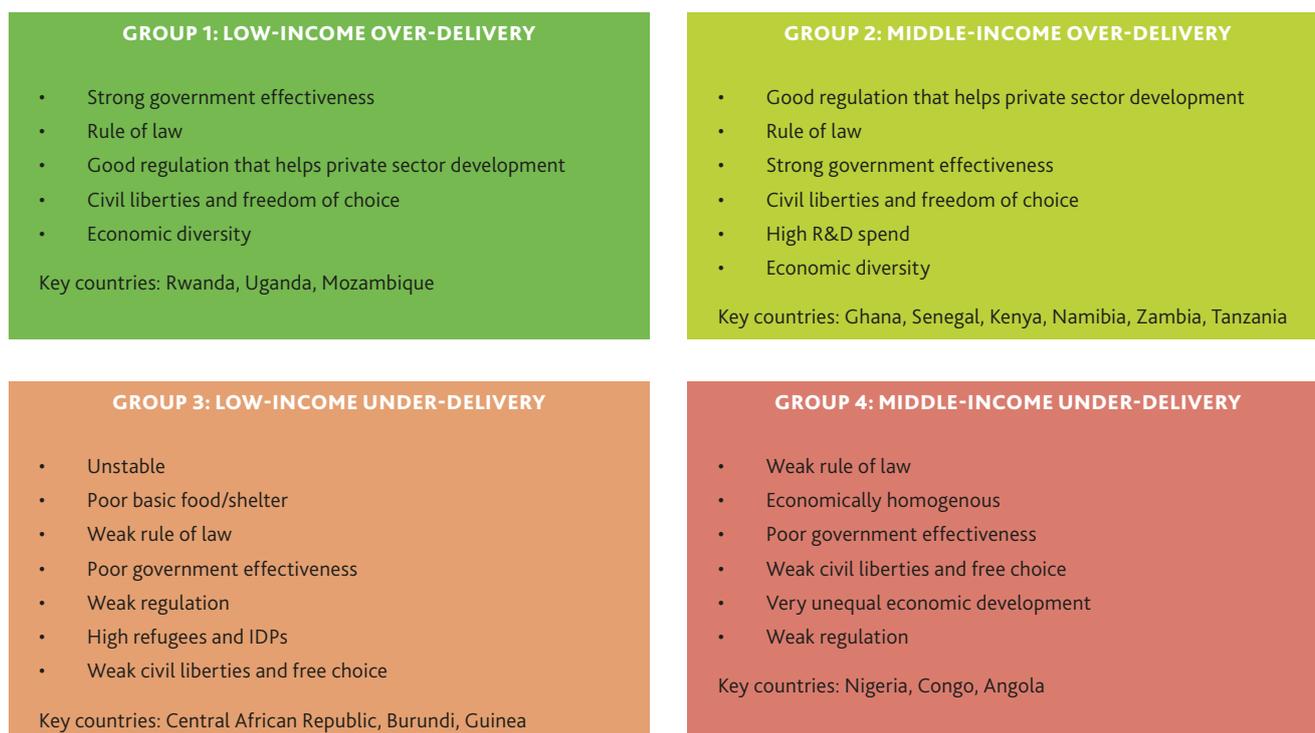
record in delivering prosperity through the boom years. Considered together, the collective characteristics of over-delivering or under-delivering countries begin to speak to the fundamental barriers to, or enablers of, prosperity across the continent.

When considered on their income level (as per World Bank definitions) and prosperity delivery, Africa's nations sit within one of four key groups (figure 2): low-income over-delivery (Group 1: best), middle-income over-delivery (Group 2: good), low-income under-delivery (Group 3: poor), and middle-income under-delivery (Group 4: worst).

Analysis of the Index variables highlights the key characteristics common to countries that sit within the same group. While there is inevitable variation within groups on many measures, including fundamental measures like health and education, there are distinct patterns of prosperity that differentiate the groups (figure 3).

**“That delivery matters more in determining the level of a country's prosperity than its wealth is a strong message for leaders and their policy-makers in a slower growth climate.”**

FIGURE 3: GROUP CHARACTERISTICS



Most importantly for Africa’s future prosperity, there are very few horizontal differences between the groups that are not mere proxies for wealth. Indeed, the Index shows that the fundamental differences between groups are vertical. This suggests that ‘getting richer’ is neither necessary nor sufficient for the improvement of prosperity delivery, and that regardless of wealth, the barriers to greater prosperity are largely shared. In essence, greater prosperity can be achieved in principle for many countries without the need for economic growth.

**Greater prosperity can be achieved in principle for many countries without the need for economic growth**

**WHAT DETERMINES DELIVERY?**

The Index reveals three fundamental themes that characterise the under or over-delivery of prosperity, regardless of wealth.

The first is a country’s economic complexity: a measure of how sophisticated its export basket is (higher number = higher score). Think chemicals and machinery versus simple agricultural goods. While data availability is sparse for low-income countries, it is available for the larger economies. Both over-delivery groups have higher levels of economic complexity in their key economies than their wealth peers in the under-delivery groups. A country is more likely to be over-delivering prosperity if its economy is more complex.

TABLE 1: ECONOMIC COMPLEXITY

COUNTRY	GDP PER CAPITA	ECONOMIC COMPLEXITY
Guinea (group 3)	1221	-1.7
Mozambique (group 1)	1129	-1.2
Uganda (group 1)	1771	-0.9
COUNTRY	GDP PER CAPITA	ECONOMIC COMPLEXITY
Angola (group 4)	6949	-2.3
Nigeria (group 4)	5911	-2.1
Sudan (group 4)	4069	-1.7
Congo (group 4)	6277	-1.5
Kenya (group 2)	2954	-0.7
Zambia (group 2)	3904	-0.7
Ghana (group 2)	4081	-1.4
Tanzania (group 2)	2538	-1.1

The second is Governance. While the eight sub-indices of the Index contribute equally to a country’s final level of prosperity, the sub-indices have very different effects when it comes to under or over-delivery. The strongest relationship seen between the ‘prosperity gap’ (how much countries over or under-deliver) and the same gap within a sub-index is in Governance. This is reflected in the characteristics of over-delivering countries, all of whom have strong rule of law, good regulation that encourages private sector development, and effective governance (all higher number = better score), particularly in comparison to their wealth peers who under-deliver.

TABLE 2: GOVERNANCE

COUNTRY	RULE OF LAW	GOV. EFFECTIVENESS	REGULATION
Guinea (group 3)	-1.4	-1.3	-1
Liberia (group 3)	-0.9	-1.3	-0.9
Mozambique (group 1)	-0.8	-0.7	-0.4
Uganda (group 1)	-0.4	-0.6	-0.2
COUNTRY	RULE OF LAW	GOV. EFFECTIVENESS	REGULATION
Angola (group 4)	-1.3	-1.3	-1.1
Nigeria (group 4)	-1.2	-1	-0.7
Sudan (group 4)	-1.3	-1.5	-1.4
Congo (group 4)	-1.1	-1.2	-1.4
Kenya (group 2)	-0.7	-0.5	-0.4
Zambia (group 2)	-0.3	-0.5	-0.5
Ghana (group 2)	0.1	-0.1	0.1
Tanzania (group 2)	-0.5	-0.7	-0.3

The final theme highlighted by the Index is that of civil liberties and free choice. Those countries that over-deliver are both objectively and subjectively freer than their wealth peers that under-deliver.

TABLE 3: PERSONAL FREEDOM

COUNTRY	CIVIL LIBERTIES AND FREE CHOICE
Guinea (group 3)	0.2
Liberia (group 3)	0.2
Mozambique (group 1)	0.4
Uganda (group 1)	0.4
COUNTRY	CIVIL LIBERTIES AND FREE CHOICE
Angola (group 4)	0.1
Nigeria (group 4)	0.2
Sudan (group 4)	0
Congo (group 4)	0.2
Kenya (group 2)	0.4
Zambia (group 2)	0.4
Ghana (group 2)	0.5
Tanzania (group 2)	0.4

The relationship that these findings have with the nature of prosperity delivery in Africa is illustrated overleaf (figure 4). This illustration also includes a number of weaker factors that emerge from this analysis. Unlike the fundamental three themes, these factors are not necessarily found in all key countries within a group, but emerge when group averages are compared. These weaker factors also seem to transcend wealth. Some relate clearly to governance and economic complexity, but others stand notably alone.

The most striking of the weaker factors is life expectancy. Life expectancy in the under-delivering groups is almost identical, at 55 years for middle-income and 55.2 years for low-income. Move to over-delivering countries and this jumps to 57.5 years for low-income and 61 years for middle-income. One possible driver of this may be immunisation rates, which are much lower in under-delivering countries than in over-delivering wealth peers. This is one key area where policy change could make a significant difference.

One other key area of difference is Entrepreneurship & Opportunity. The equity of economic development is similarly poor in under-delivering countries, and similarly improved in over-delivering ones, though marginally more so among low-income countries. So too is the business environment improved. Not only is rule of law and regulation stronger in over-delivering countries, but start-up costs are lower (28% of GNI per capita v 53% in middle-income countries, and 56% v 85% in low-income countries), and ICT infrastructure is also better.

## CONCLUSION

The mutual reinforcement of property rights, good regulation, an improved business environment, and economic complexity among over-delivering countries is a strong statement about the conditions under which prosperity has thrived in the African context over the last decade of strong growth.

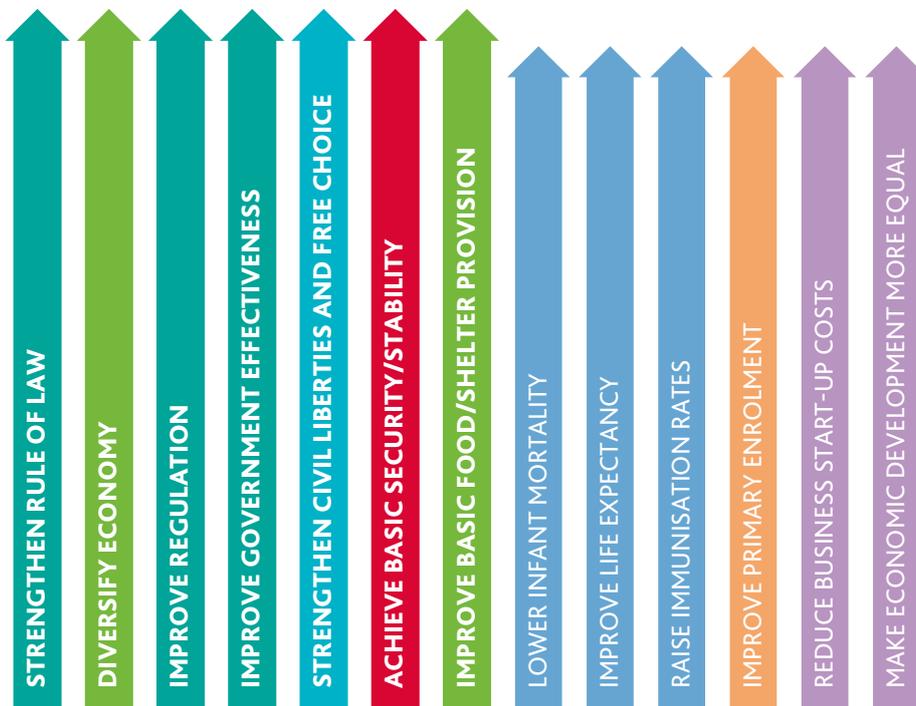
As the economic high tide turns across the continent, these conditions should remain at the forefront of leaders' and policy-makers' minds. Through the rest of its pages, this report will develop the key themes that have emerged from this analysis. We draw on experts from across the continent in asking how Africa achieves and improves the conditions that have helped prosperity to flourish. In doing so, we hope that the Prosperity Index can offer valuable insight on how Africa's leaders can accelerate the delivery of prosperity to their citizens despite slower growth.

<sup>1</sup>USAID estimate

<sup>2</sup>IMF

## GROUP 1 – LOW-INCOME OVER-DELIVERY

- Strong government effectiveness
- Strong rule of law
- Good regulation that helps private sector development
- Economic complexity
- Strong civil liberties and freedom of choice



## GROUP 3 – LOW-INCOME UNDER-DELIVERY

- Unstable
- Poor basic food/shelter
- Weak rule of law
- Poor government effectiveness
- Weak regulation
- High refugees and IDPs
- Poor civil liberties and free choice
- Low economic complexity

INCREASE GDP PER CAPITA

INCREASE R&D SPENDING

IMPROVE SANITATION

REDUCE BUSINESS START-UP COSTS

IMPROVE TELECOMMUNICATIONS INFRASTRUCTURE

REDUCE SCHOOL CLASS SIZE

IMPROVE SECONDARY ENROLMENT

IMPROVE TERTIARY ENROLMENT

## HOW TO DELIVER

This chart shows the key characteristics of countries that sit within each core group identified by Index analysis and what changes need to occur for countries to transition between groups.

The arrows in bold are the changes that relate to fundamental attributes of countries within a group (those

INCREASE GDP PER CAPITA

**IMPROVE BASIC FOOD/SHELTER PROVISION**

**ACHIEVE BASIC SECURITY/STABILITY**

IMPROVE TELECOMMUNICATIONS INFRASTRUCTURE

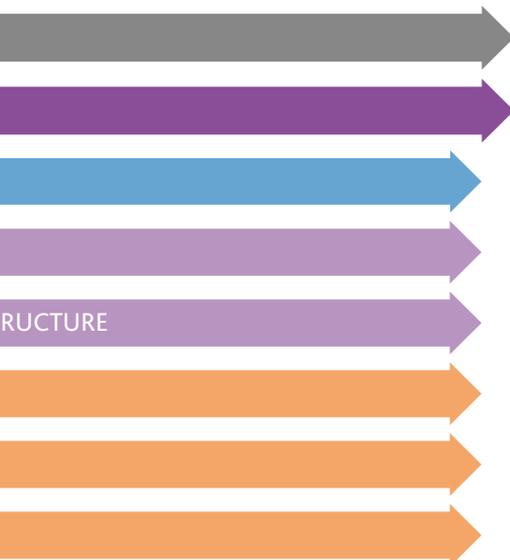
REDUCE SCHOOL CLASS SIZE

IMPROVE SECONDARY ENROLMENT

IMPROVE TERTIARY ENROLMENT

IMPROVE SANITATION

INCREASE R&D SPENDING



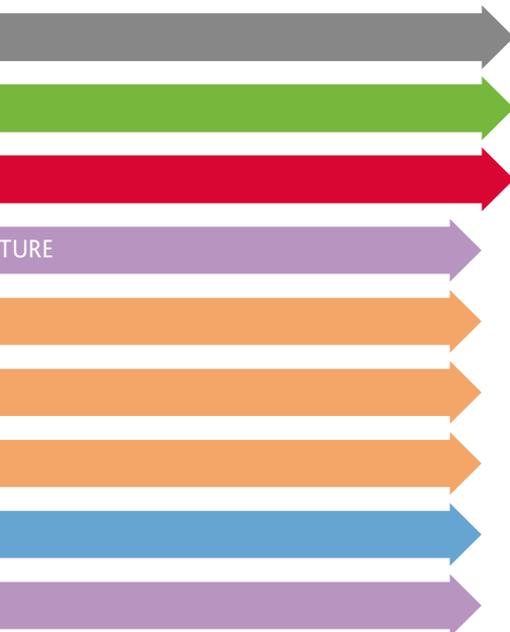
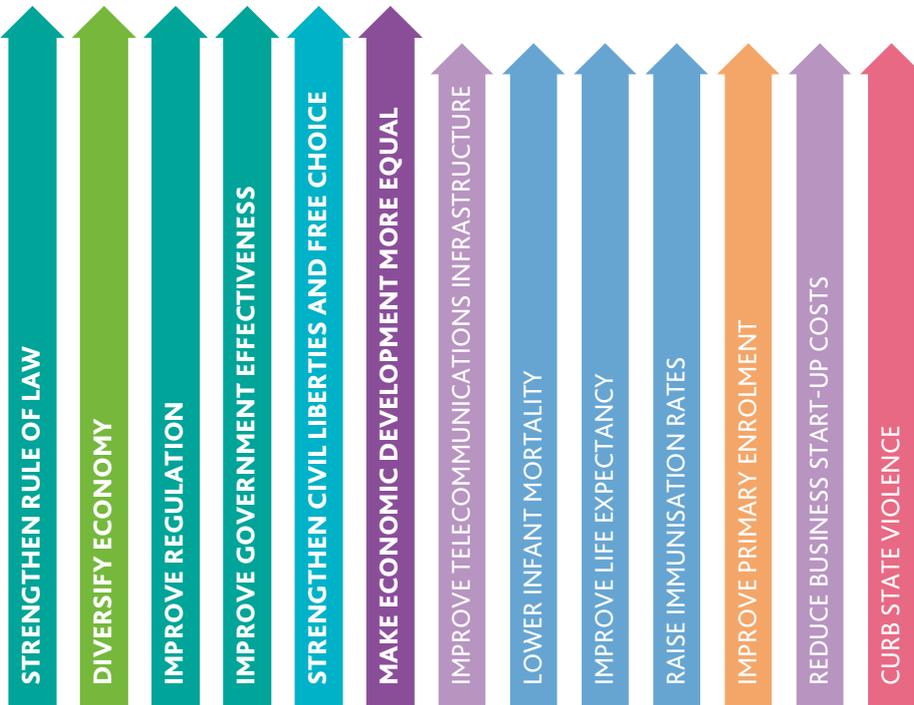
### GROUP 2 – MIDDLE-INCOME OVER-DELIVERY

- Strong government effectiveness
- Strong rule of law
- Good regulation that helps private sector development
- Economic complexity
- Strong civil liberties and freedom of choice
- Higher R&D spend

## MORE PROSPERITY

attributes listed within the boxes). These changes should be prioritised by policymakers and apply in every case.

The other arrows are the changes that apply in general, based on the average performance of the countries in each group. They may not be applicable in every case, but still warrant attention by governments.



### GROUP 4 – MIDDLE-INCOME UNDER-DELIVERY

- Weak rule of law
- Low economic complexity
- Poor government effectiveness
- Poor civil liberties and free choice
- Very unequal economic development
- Weak regulation

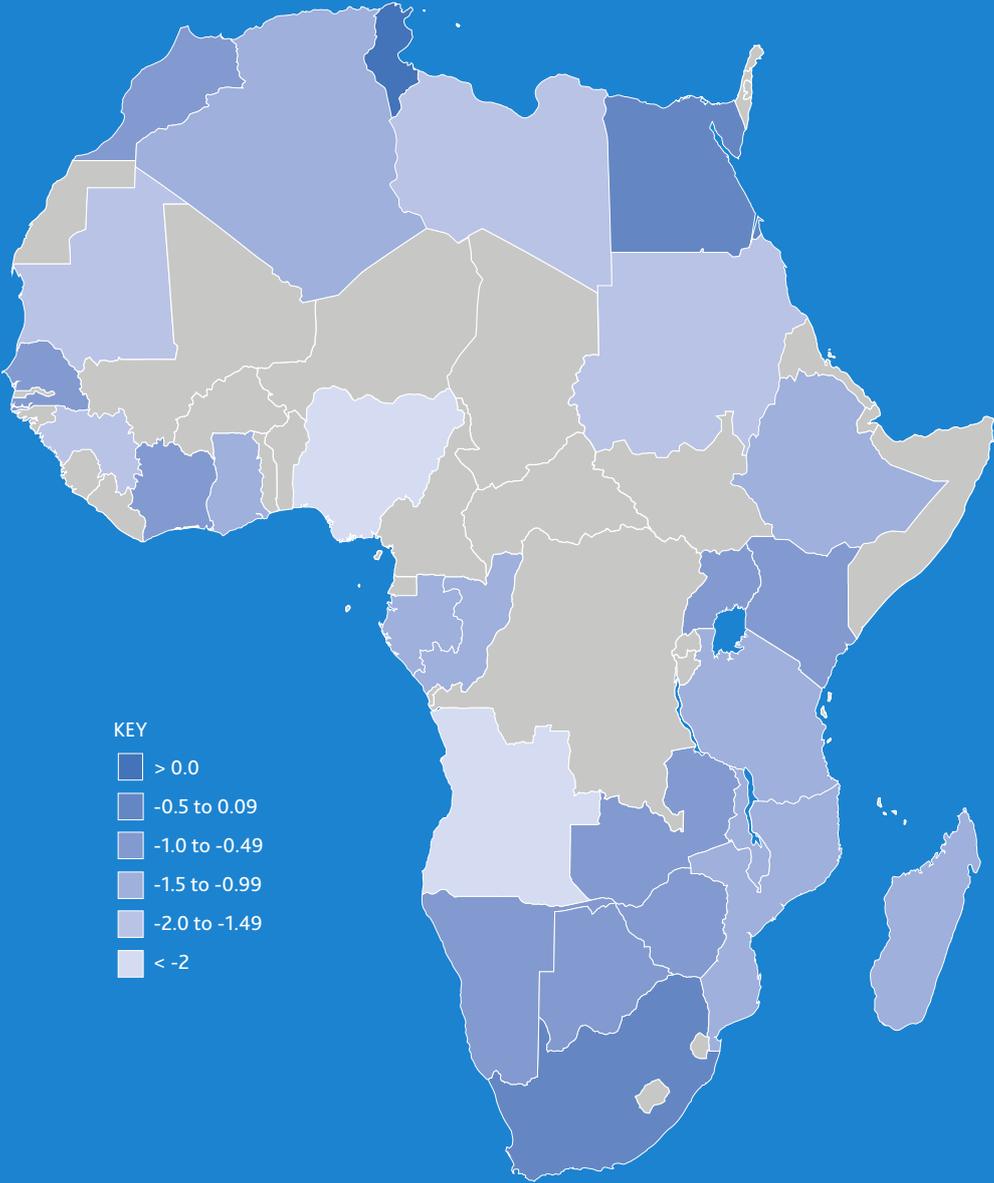
# Delivering Greater Prosperity with Lower Growth

## UNPACKING THE CHARACTERISTICS OF OVER-DELIVERY

That there are three attributes common to over-delivering countries has real relevance to policy-makers across the continent. Furthermore, they are predominantly structural, meaning that change is possible without the need for strong economic growth.

This chapter analyses in more detail these three key drivers of prosperity over-delivery found in the previous chapter. First it considers the importance of economic complexity, and how diversification is necessary for sustainable prosperity growth long-term. Growing their manufacturing sectors is the best hope for African countries, yet barriers remain. The chapter then considers whether good governance and civil liberties are prerequisites for prosperity across the continent.

HEAT MAP: ECONOMIC COMPLEXITY ACROSS AFRICA



# Diversify for Prosperity: Economic Complexity and Prosperity Delivery

**As governments and leaders across the continent face the challenge of delivering prosperity with lower growth, the Index offers an important note of reassurance. The relationship between wealth and prosperity across Sub-Saharan Africa is relatively weak.<sup>1</sup> In terms of prosperity delivery, a country's wealth level is statistically irrelevant.<sup>2</sup> Poor countries can, and do, deliver far greater prosperity than countries with many times their wealth. The slower rise of GDP per capita need not be, by any means, fatal for prosperity.**

Where the economy proves far more important for prosperity delivery is not in its expansion, but in its structure. The Prosperity Index shows that those countries that have best delivered prosperity with their wealth tend to have more complex economies (figure 1).<sup>3</sup>

A complex economy is one whose exports require rare “capability sets” to be made. Metal and chemical products tend to be more complex, as fewer countries are capable of producing and exporting them. Conversely, unprocessed raw materials, like tin ores and whole cocoa beans, tend to be less complex, as the capability set to produce them is common. An economy is complex not only when it exports highly complex products, but also when it exports a wide variety of different products. African economies that have not met expectations on prosperity fail on both dimensions of complexity.

Angola, for example, has the least complex economy of the 38 African nations in the Prosperity Index, and one of the least complex in the world. Unrefined oil<sup>4</sup> accounts for 96% of its exports and is a

product whose complexity is ranked at 1,231st out of 1,240 product classifications. Nigeria, whose export basket is 82% unrefined oil, is the second least complex economy on the continent, and is Africa's largest economy.

Compare the export profile of Sub-Saharan Africa's most and least complex economies, and this difference is clear (figure 2). Angola, one of the world's least complex economies, has the worst prosperity deficit of any country in Africa. In contrast, while still fairly resource-dependent, the breadth of South Africa's export portfolio far outstrips Angola's. Where Angola ships crude products, South Africa shows sign of value-add products. 7% of South Africa's exports are uncut diamonds, but another 2% are of processed cut gems. The country exports metals such as iron ores and concentrates (7%), but also cars (4%); fresh grapes (0.8%), but also wine (0.8%).

There is opportunity for countries like Angola to develop their economic complexity with the aim of seeing the prosperity dividend. This is not to say that the continent's relatively more complex economies can rest on their laurels. They are still vulnerable to commodity price shocks.

South Africa's economy may be complex compared to other African nations but, compared to the world's more complex economies, it is still dependent on a concentrated portfolio of industrial commodities. As a result, the recent global slowdown in industrial growth has weighed heavily on South Africa's economy.

FIGURE 1: MORE COMPLEX ECONOMIES DELIVER GREATER PROSPERITY WITH THEIR WEALTH ..... R<sup>2</sup> = 0.5585

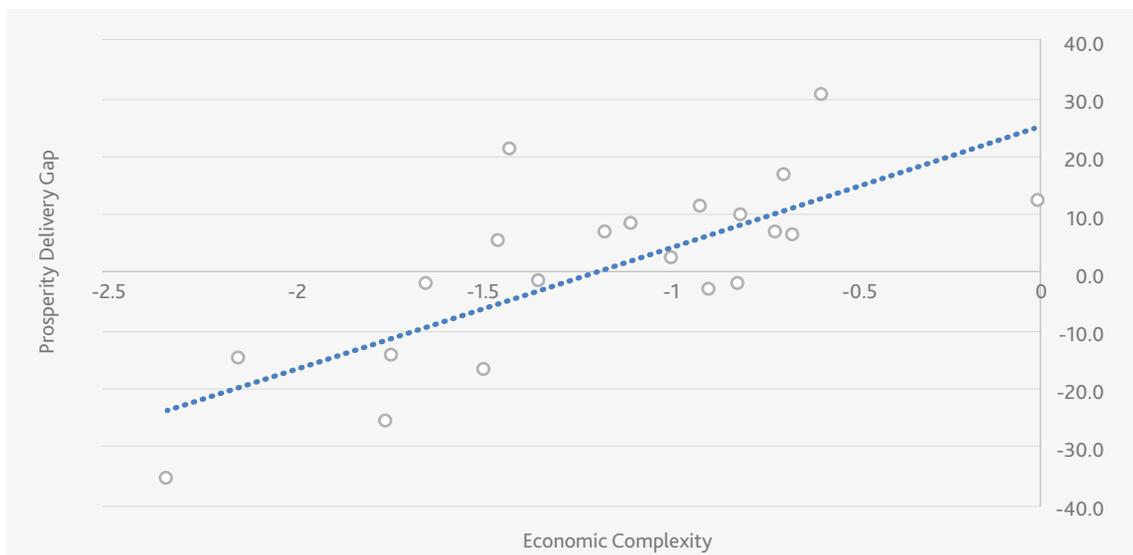
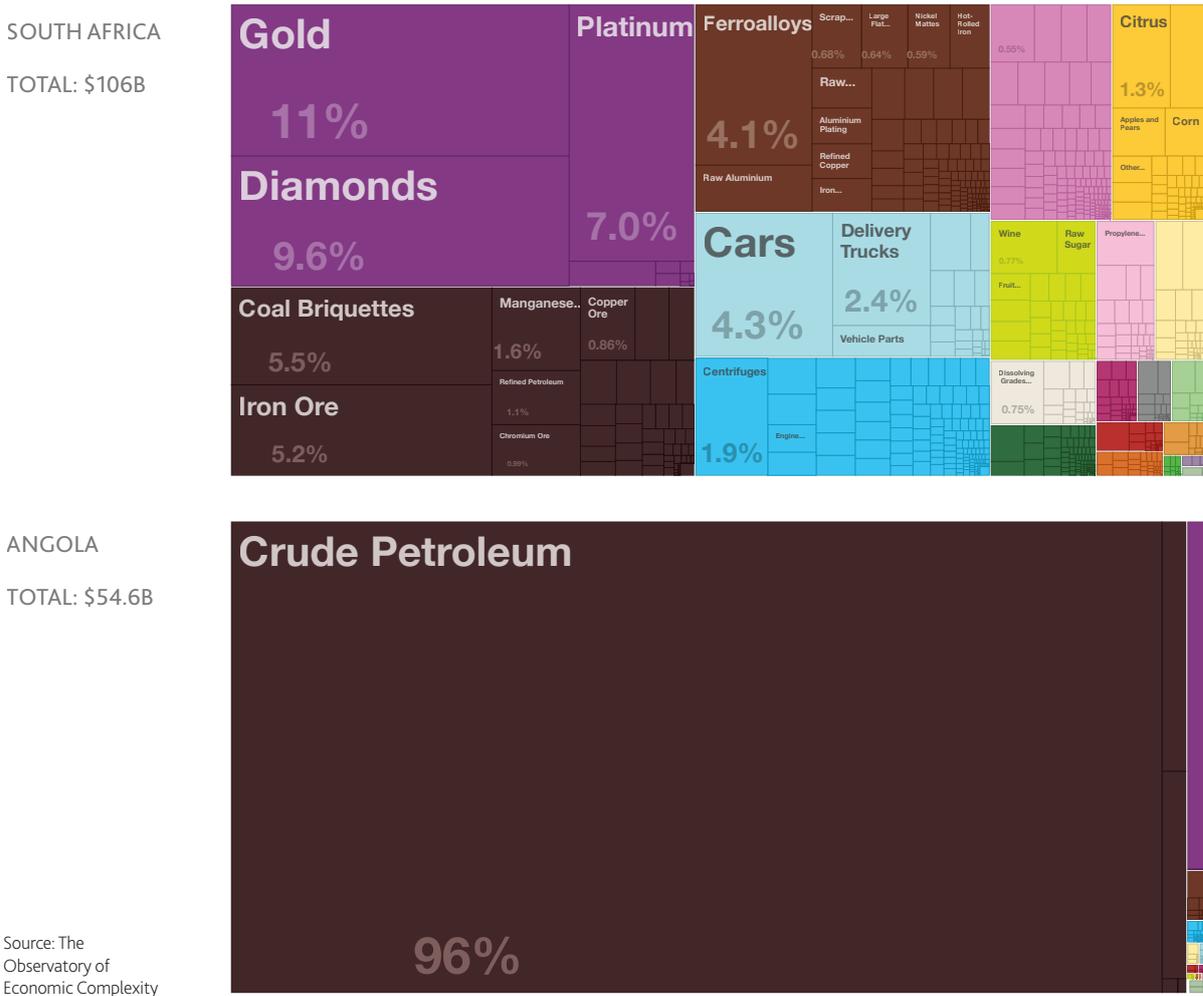


FIGURE 2: EXPORT PROFILES OF THE MOST AND LEAST COMPLEX ECONOMIES IN SUB-SAHARAN AFRICA



So too are countries like Zambia dependent on commodities. Its relatively complex economy is still dominated by copper, though mainly processed in some form. Falling commodity prices may soon undermine the prosperity payoff of complexity. Despite their strong delivery performance, the prosperity gains of these nations are at risk.

Added complexity needs to come through diversification away from commodities. Despite the relative complexity of some African economies, Sub-Saharan Africa is still the least economically complex region in the world, even behind the oil-rich Middle East. There are prosperity gains to be made from complexity, but only through diversification can these be said to be truly sustainable. Here lies a compounding problem with Africa's concentration in commodity exports.

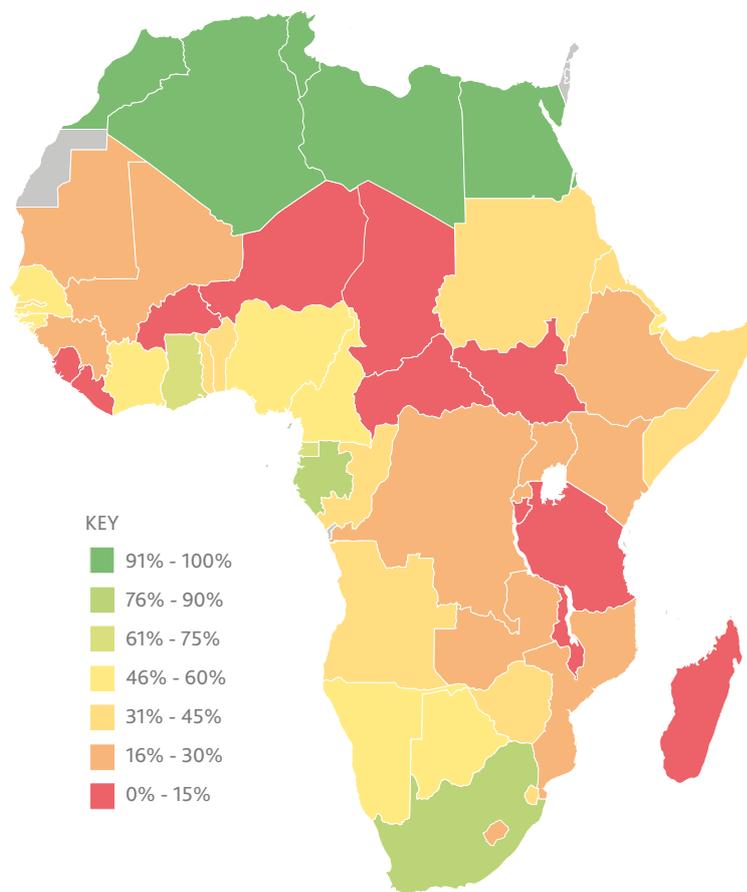
Previously, strong demand for African commodities led to an appreciation of exporters' currencies. This appreciation hit the export competitiveness of other tradable sectors, particularly manufacturing, which has been in secular decline across sub-Saharan Africa over the past three decades - without ever having occupied a large share of the economy.

This premature deindustrialisation poses serious challenges for African nations. It closes off the main avenue of economic growth among developing countries: the shift of workers from the countryside to urban factories, where their productivity tends to be higher. Industrialisation drives growth both through this reallocation effect and because manufacturing experiences stronger productivity growth over the medium to long-term than other sectors, providing opportunities to build and enhance economic complexity.

There are subtler consequences of premature deindustrialisation, which also threaten the long-term sustainability of national prosperity. Industrialisation, which concentrates pools of workers, has historically been associated with the rise of class-based solidarity and labour-based political parties. It was through these two institutions that the working class morphed into a middle class, a group seen as central to Africa's development story.

There are signs that economic diversification is happening, but not along the right lines. Sub-Saharan Africa's services sector has expanded more than in any other part of the developing world since 2000, accounting for 58% of GDP up from 49%.<sup>5</sup> In some parts of the continent, this expansion has been particularly significant.

FIGURE 3: HEAT MAP - % POPULATION WITH ACCESS TO ELECTRICITY



Source: World Development Indicators 2012

Nigeria has seen the biggest increase in its service sector of any country in the world. In 2000, services accounted for 21.8% GDP. By 2014, that had risen to over half the economy at 55.5%.<sup>6</sup> Ghana too has seen a marked increase from 32.2% to 50% in the same period. A dependency on commodities is transitioning into a concentration of low skilled, low productivity services rather than much-needed manufacturing industries.

How can Africa diversify and build the economic complexity needed for long-term prosperity? African nations need to overcome barriers in four broad areas.

The first is energy. A complex, prosperous economy needs a plentiful and stable energy supply. Even as recently as 2012, in only 11 countries in sub-Saharan Africa did more than 50% of the population have access to electricity; in 14 other countries, less than 20% (see figure 3). As Paul Kunert, Managing Director at Havergate Infrastructure Partners, writes (see Box 1), this imposes colossal costs – not just in terms of back-up power but, more importantly, in terms of foregone economic activity. African nations, Kunert argues, need to establish strong, well-crafted regulatory frameworks to incentivise investment in the energy sector.

**BOX 1 - THE ECONOMIC COST OF POOR ENERGY INFRASTRUCTURE**

*Paul Kunert, Managing Director, Havergate Infrastructure Partners*

[I]n 2012, in only eleven countries in sub-Saharan Africa did more than half of the population have access to electricity, and in many countries less than 20%. Poor access and power cuts are bad for the economy, growth and prosperity.

Just as numerous reports highlight lack of access and unreliable supply, so numerous reports – often by development and aid agencies – propose technical solutions of various kinds and highlight the vast sums of capital required. However, technical solutions and capital are not the main constraints. The greater need is for a consistent policy response by government.

Put in place a strong, well-crafted regulatory framework. This incentivises investment and efficient operations, allows investors to reap rewards for doing the right things, but also passes on benefits in lower costs to customers.

You also need structures which reward owners, boards, and management for profitability and service delivery. The boards and management teams of the utility companies should be accountable and empowered to run the business.

## BOX 2 - STEM IN AFRICA: THE BUSINESS CASE

*Dr. Álvaro Sobrinho, Chairman, Planet Earth Institute, and Lord Paul Boateng, Trustee, Planet Earth Institute & Chair, African Enterprise Challenge Fund*

Though doubling, enrolment rates in Africa are still amongst the lowest globally with an average of 7.1% compared to 25.1% elsewhere in the world. Only one in six African students is likely to graduate in a science or engineering field, compared to 40% of students in fast growing economies like China. Research in STEM makes up only 29% of all research in Sub-Saharan Africa. In contrast it's 68% in Malaysia and Vietnam.

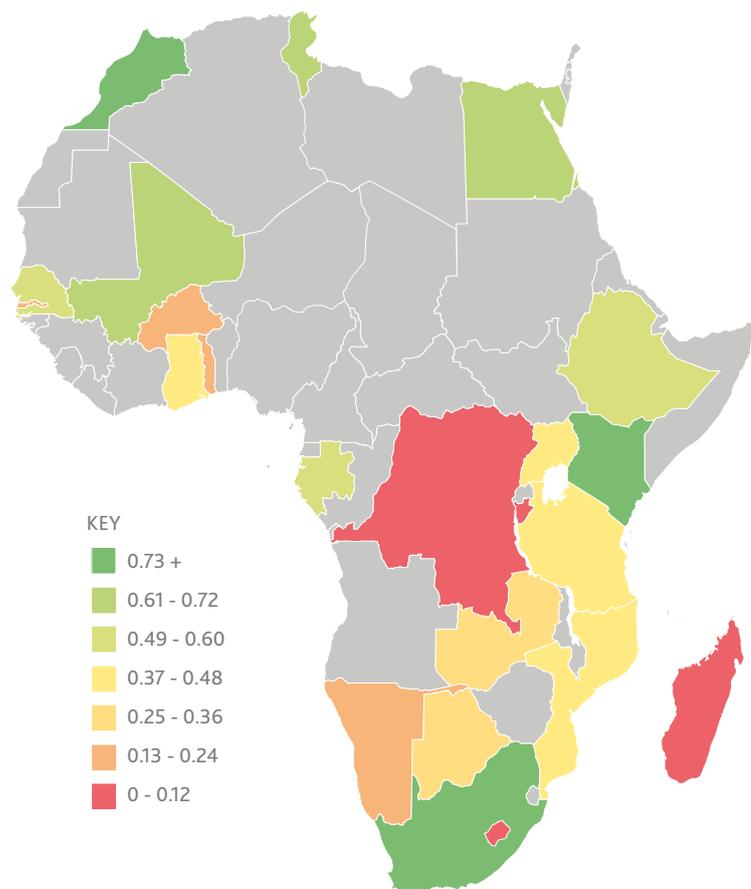
[P]assive and partial private sector engagement is no longer an option – business as usual will not do – a solution is needed to develop and scale-up business-led approaches that go beyond corporate responsibility and instead address future commercial viability.

Open communication is the first and perhaps most important thing that is required. In too many instances, the mechanisms for dialogue and collaboration between higher education institutions and private sector organisations have been lacking. Key to making this happen is ensuring that business is an equal partner and engaged from the beginning.

A second barrier is the skill gap in many African nations, who are now paying the price of years of underinvestment in technical and scientific (STEM) capacity building. As Álvaro Sobrinho, Chairman of the Earth Planet Institute, and Lord Boateng, Chair of the African Enterprise Challenge Fund, write, while progress in building human capital across Africa has been considerable – with a doubling of tertiary enrolment rates between 2000 and 2010 – there is still a long way to go (see Box 2). Tertiary enrolment rates in Africa remain among the lowest in the world, with an average of 7.1% compared to the global average of 25.1%. However, Sobrinho and Boateng argue, expanding access to education without giving thought to the quality and relevance of study will do little to fill Africa's skill gap. Filling the gap requires education with strong links to industry, which ensure that students transition successfully into the workplace. It also requires boosting African R&D investment, which currently stands as a proportion of GDP at the lowest level among all developing regions.

Another important barrier to complexity and innovation in Africa is its inhospitable entrepreneurial environment. In many African nations, SMEs are priced out of the market by tight credit constraints and

FIGURE 4: HEAT MAP - R&amp;D EXPENDITURE (%GDP)



Source: World Development Indicators (last available year 2008)

excessive or inappropriate government regulations. It is harder for a business to get credit in Angola than most other countries in the world.<sup>7</sup> The world's most expensive country in which to start a business is the Central African Republic. Less prohibitive is Angola, where starting a business involves completing eight different legal procedures. These procedures need at least 36 days to be completed and will cost in fees the equivalent of 22.5% of the country's average per capita income. Furthermore, Angolan entrepreneurs must register their business with a minimum paid-in capital equivalent to 18.9% of the country's average per capita income. Supporting African entrepreneurship requires a regulatory environment that enables millions of potential job creators to succeed rather than policies that protect a small number of government or private entities.

Finally, trade. Although, New York University Professor David Rice writes, trade between African nations has doubled since 2005, this growth simply kept pace with global trends (see Box 3). Africa continues to contribute only 2% to global trade. Such poor market access not only holds back the development of important export industries like manufacturing but, Rice argues, hinders economic expansion, slows income growth, and blocks the creation of stronger and more peaceful international relationships. While trade costs between Africa and other regions like the EU remain high, mainly due to import tariffs, trade costs between African countries are often higher. Rice cites the example that crossing borders with commercial products in Sub-Saharan Africa takes 12 days on average compared to six days in Central and East Asia, and four days in Central and Eastern Europe.<sup>8</sup> A concerted effort to accelerate trade negotiations, harmonise regulations, and implement various trade agreements would substantially reduce African nations' dependence on raw materials and commodity exports. It would also help broaden the market for SMEs, helping them to achieve high growth themselves, while in turn driving economic growth across economies.

### BOX 3 - TRADE, ENTREPRENEURSHIP AND LOCAL VALUE CREATION: EASE OF AFRICANS DOING BUSINESS IN AFRICA

*Professor David A. Rice, Development Dividend Project, New York University*

Though trade between African countries has doubled since 2005 to 17% (compared to Europe's 66% and Asia's 48% ), this growth has only kept pace with global trends and the region continues to contribute just 2% to global trade.

The need for eliminating intra-African trade barriers need not be imagined. For example, research has found that crossing borders with commercial products in Sub-Saharan Africa takes 12 days on average compared to six days in Central and East Asia, and four days in Central and Eastern Europe .

Accelerating the ongoing negotiations, harmonisation, and implementation of various African regional trade agreements (including the Continental FTA) in 2016 would greatly help African economies reduce their reliance on raw material or primary commodity exports and develop a greater capacity to compete on a global scale.

<sup>1</sup>GDP per capita PPP (current international \$) v Africa prosperity percentile rank. R-squared value of 0.29

<sup>2</sup>GDP per capita PPP (current international \$) v Prosperity Gap. R-squared value of 0.00007

<sup>3</sup>As measured by the 2014 Economic Complexity Index (Cesar A. Hidalgo, Ricardo Hausmann (2009))

<sup>4</sup>According to the UN's Harmonized Commodity Description and Coding System (HS4), "Petroleum oils, crude."

<sup>5</sup>Services, value added (% GDP), 2000-2014, World Bank (retrieved 25.4.16)

<sup>6</sup>ibid

<sup>7</sup>World Bank Ease of Doing Business Report, 2015. Ranking of 189 countries.

<sup>8</sup>From Africans Investing in Africa, Palgrave MacMillan, 2015

# The Cornerstones of Prosperity: Are Personal Freedom and Good Governance Prerequisites for Delivery?

**In delivering high levels of prosperity with their wealth, one of the striking things about top performing countries in Sub-Saharan Africa is that they seem to share comparatively strong levels of free choice and civil liberties alongside good governance in a number of fundamental areas.**

The most interesting question is whether basic freedoms and good governance are more than mere correlates of prosperity delivery, and are actually its fundamental prerequisites.

Either way, that government holds so much in its gift when it comes to the potential for prosperity delivery is important to highlight as questions are raised about the impact of slower growth across the continent.

## GOOD GOVERNANCE AND PROSPERITY

Whilst the eight sub-indices all have equal weight in determining prosperity, the same cannot be said for their role in its over or under-delivery. The delivery of good governance has by far the strongest relationship with the prosperity gap of any sub-index (figure 1). In particular there are three key variables of Governance where good performance is common to over-delivering countries, particularly in comparison to wealth peers who under-deliver.

Of these – rule of law, government effectiveness, and the extent

to which regulation permits a flourishing private sector – it is government effectiveness that proves the most important when it comes to the prosperity gap (figure 2).

FIGURE 2: WHAT CORRELATES WITH THE GOVERNANCE PROSPERITY GAP?

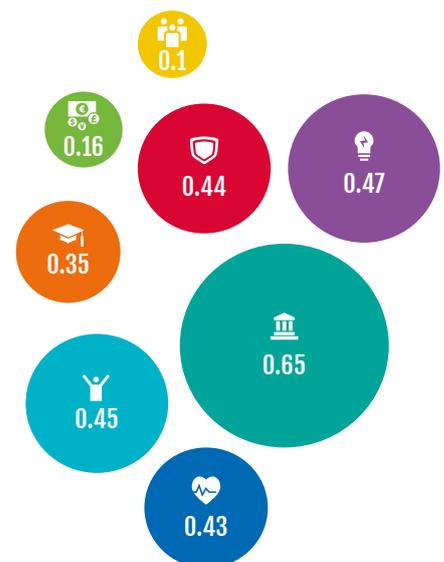
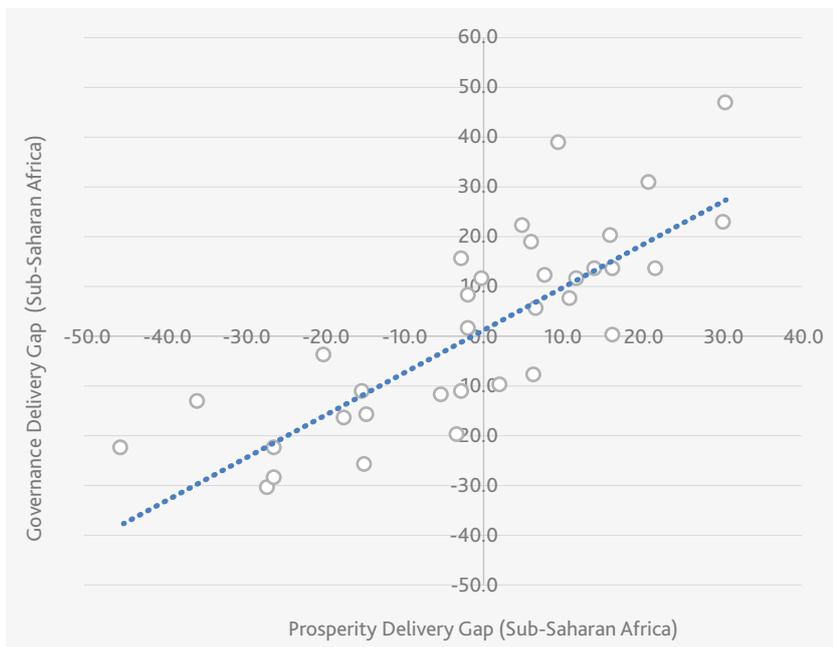


\*numbers denote r-squared value

Indeed, Africa has its very own case study when it comes to the transformative power of effective government. Rwanda is perhaps the best known reform story from the continent, taking itself from a broken post-genocide nation, to Africa's 8th most prosperous county.

Government drove systematic institutional reform, ensuring that the state was decentralised, the business sector reformed, and institutions strengthened. Rwanda ranks 3rd for Governance in Africa, and

FIGURE 1: DELIVER GOVERNANCE AND DELIVER PROSPERITY



\*numbers denote the r-squared value between the delivery gap in each sub-index and the overall prosperity gap.

has the biggest prosperity surplus both overall and in Governance. Its transformation speaks to the enduring importance of good governance and in particular, rule of law, effective government, and regulation as a means of unlocking prosperity growth.

Writing in the *Wall Street Journal* in 2013, Rwandan President Paul Kagame remarked on the ongoing need in Africa for “governance reforms and social development, propelled by economic growth that delivers tangible improvements in the lives of citizens”.

As growth slows, the delivery of the type of health and education investment seen in Rwanda and elsewhere, will be harder to maintain. Yet, the Index suggests that prosperity can still be delivered as long as the potential for governance reform remains.

If governance is a prerequisite for the serious delivery of prosperity, then the budgetary constraints of lower growth driving it to prominence could prove promising for long-term prosperity across the continent.

### LIBERTY AND THE PURSUIT OF PROSPERITY

The Index shows that it is those countries who combine strong structural rights (of association and expression, religious, political etc) and who achieve a sense of self-determination among their citizens, a sense that they control their destiny, that are most likely to be the ones that over-perform.

Here lies an important message for policy makers and leaders across the continent: simple structural reform that guarantees basic rights and freedoms can help supercharge prosperity.

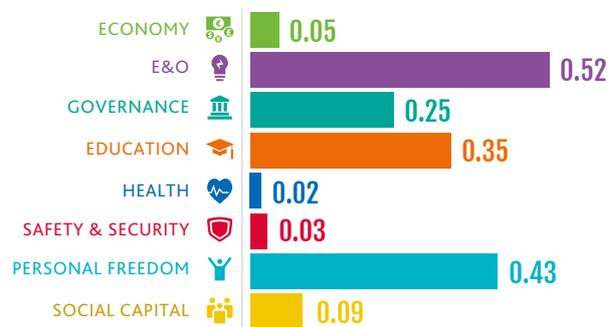
Conceptually, the principle of freedom leading to a prosperity surplus in the African context is easy to see. For prosperity to be created and shared throughout society, the value and contribution of every citizen must be recognised. Wealthy but deeply impoverished states like Angola (with the second lowest level of freedom in Sub-Saharan Africa) are the result of failure here. Freedom is central to getting it right. Property rights enable wealth creation. Freedom of expression enables ideas to be voiced and shared. Freedom of association allows people to come together to try and drive change.

The catalytic effect of freedom gives a prosperity payoff that is not merely confined to the gain made from rising up the Personal Freedom sub-index ranks. The strong effect of freedom can be seen elsewhere.

When looking at the key predictors of economic complexity, unsurprisingly over-delivery in Entrepreneurship & Opportunity comes in top. However, the second strongest relationship comes from the over-delivery of Personal Freedom. Despite the fact that our freedom measure is not strictly of economic freedom, more complex economies tend to have higher levels of freedom relative to

what you'd expect based on their wealth<sup>1</sup> (figure 3).

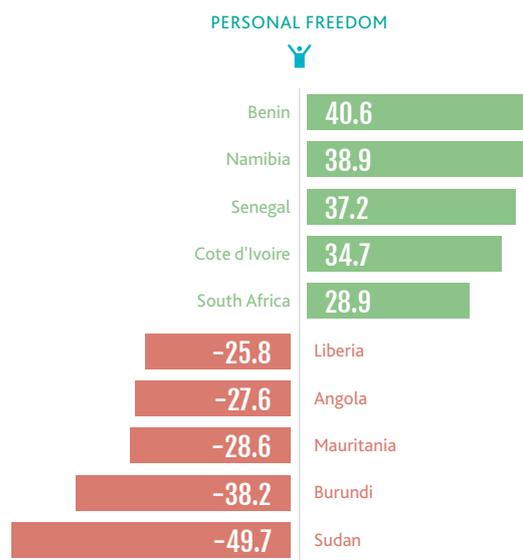
FIGURE 3: HOW DOES ECONOMIC COMPLEXITY RELATE TO PROSPERITY DELIVERY?



Most interestingly, this relationship is not simply about wealth. There is absolutely no relationship between GDP per capita and freedom delivery across Sub-Saharan Africa.<sup>2</sup> That economic complexity and higher than expected levels of freedom are likely found together is capturing something beyond mere GDP.

It is precisely because wealth is found to be irrelevant in its delivery that freedom has the potential to be such a potent source of prosperity gain across the continent in a slower growth climate. Looking at the prosperity gap alongside the delivery of Personal Freedom, and the scope for advance is immediately apparent (figure 4). For the leaders of those countries that fundamentally fail to deliver the expected freedoms to their citizens, the message of the Index is clear. Deliver on basic freedoms and the prosperity payoff will be significant.

FIGURE 4: TOP 5 AND BOTTOM 5 FOR PERSONAL FREEDOM DELIVERY



<sup>1</sup> Personal Freedom prosperity gap v ECI. R-squared = 0.43

<sup>2</sup> Personal Freedom prosperity gap v GDP per capita PPP. R-squared = 8E-8

# Seven Recommendations to Grow Prosperity in Africa

1

For countries under-delivering on prosperity, institutional reform, particularly securing property rights, reforming government bureaucracy, and cutting regulation can deliver a clear prosperity gain.

2

To transition into over-delivery, Ethiopia should focus on improving its regulatory environment, which lags significantly behind other key governance measures.

3

Legislative change that improves civil liberties and basic freedoms will increase prosperity.

4

For strong performers South Africa, Namibia, and Ghana, further gains could now be made from closing their negative Health gaps. For South Africa, this is raising immunisation rates and life expectancy; for Namibia, tackling high disease rates like TB; and for Ghana, improving poor rates of sanitation.

5

Diversifying the economy and expanding manufacturing will drive growth in a way that also increases prosperity.

6

Urgent action is needed across Sub-Saharan Africa to tackle basic needs. Nearly 50% did not have adequate access to food and shelter last year, and just 30% live with basic sanitation. Nigeria has similar levels of sanitation as Afghanistan, despite having three times its wealth. Low growth is no excuse.

7

Rwanda's impressive lead could be solidified and widened by lifting the increasing restrictions on free speech, opposition, and a free press.



# Prosperity to 2030

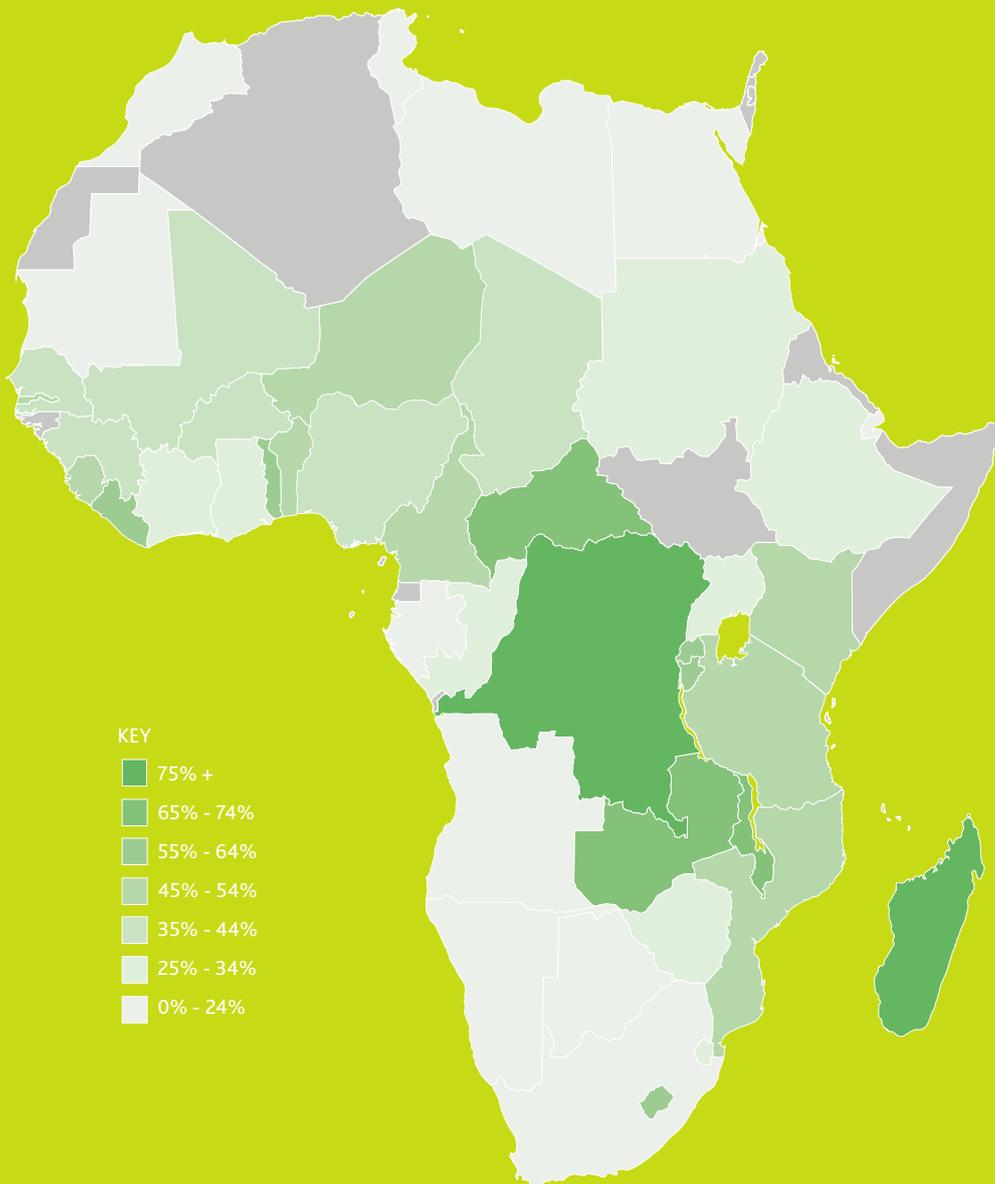
## MEASURING PROGRESS AGAINST THE SUSTAINABLE DEVELOPMENT GOALS

The Sustainable Development Goals set by the UN in 2015 cover 17 separate ambitions that break down into 169 specific targets. Broadly, they seek to eradicate poverty in all forms and dimensions, and help people to live more prosperous lives by securing education, health, and opportunity.

However, the outstanding question is how progress is measured independently.

This chapter looks at how the *Legatum Prosperity Index™* can provide this independent measure of progress. We map our pillars and variables onto the SDGs to show how prosperity for all, in all corners of the world, is the fundamental goal that we are all aiming to achieve. The Index can measure our progress towards it.

## HEAT MAP: % LIVING ON LESS THAN \$1.90 PER DAY (2011 PPP)



Source: World Development Indicators and own calculations

# Prosperity and the SDGs: An Independent Measure of Progress

**The 17 Sustainable Development Goals (SDGs) set by the UN in 2015 aim, broadly, to end poverty and hunger, improve health and education, make cities more sustainable, fight climate change, and protect oceans and forests. There are 169 specific targets that cover these issues.**

Such a wide variety of targets, covering such a large number of countries, has started a debate on whether to monitor individual targets or to monitor a single, composite measure of progress on the SDGs. The UN currently proposes 100 Global Monitoring Indicators, along with advising that each country pick the number and range of Complementary Monitoring Indicators that suit their own national context.

While an important step in monitoring SDG progress, the UN's approach risks creating too much variation in the number and type of national indicators that countries will adopt, making it difficult to set and monitor standards, and making it difficult for policy-makers to communicate their successes and failures.

This is where a single measure like the *Legatum Prosperity Index™* can really step in. The Index overlaps with the SDGs both in terms of their broad ambition, and the detail of how countries get there. It can thus prove useful in identifying targets, measuring progress, and communicating achievement.

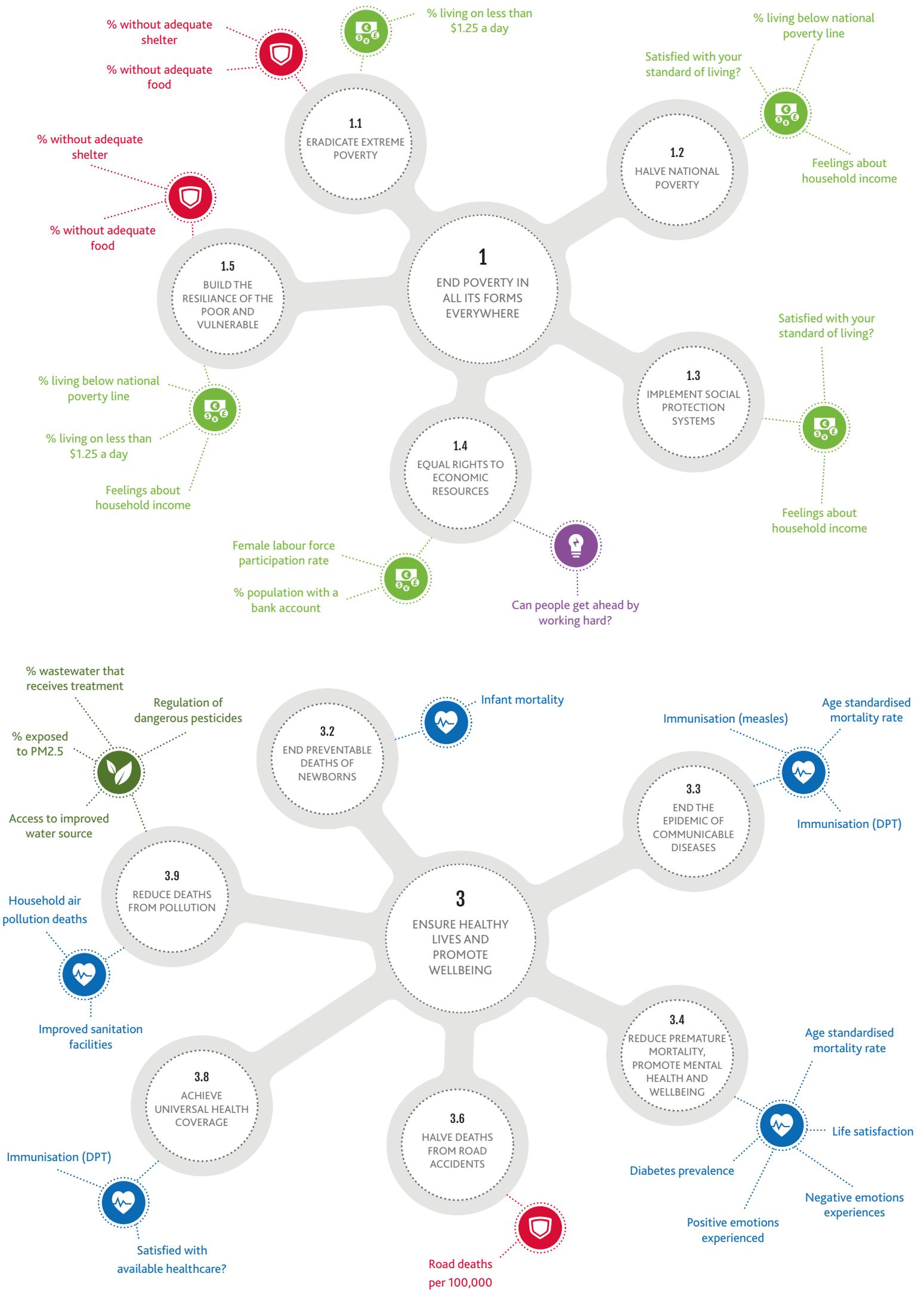
Take, for example, the Prosperity Index's Education pillar, which measures access to and quality of education and human capital, and the "education" SDG - ensure inclusive and equitable quality education and promote lifelong learning. The SDG calls for six targets: universal primary and secondary education, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education, ensure access to vocational and tertiary education, increase the number of youth and adults who have employable skills, eliminate gender disparities, and ensure youth and adult literacy. The Prosperity Index Education pillar measures, amongst other things, progress in primary, secondary and tertiary enrolment rates; equality in education; attainment; vocational education; and literacy. In sum, both pillar and goal are concerned with progress in the access to, and quality of, educational outcomes and inputs.

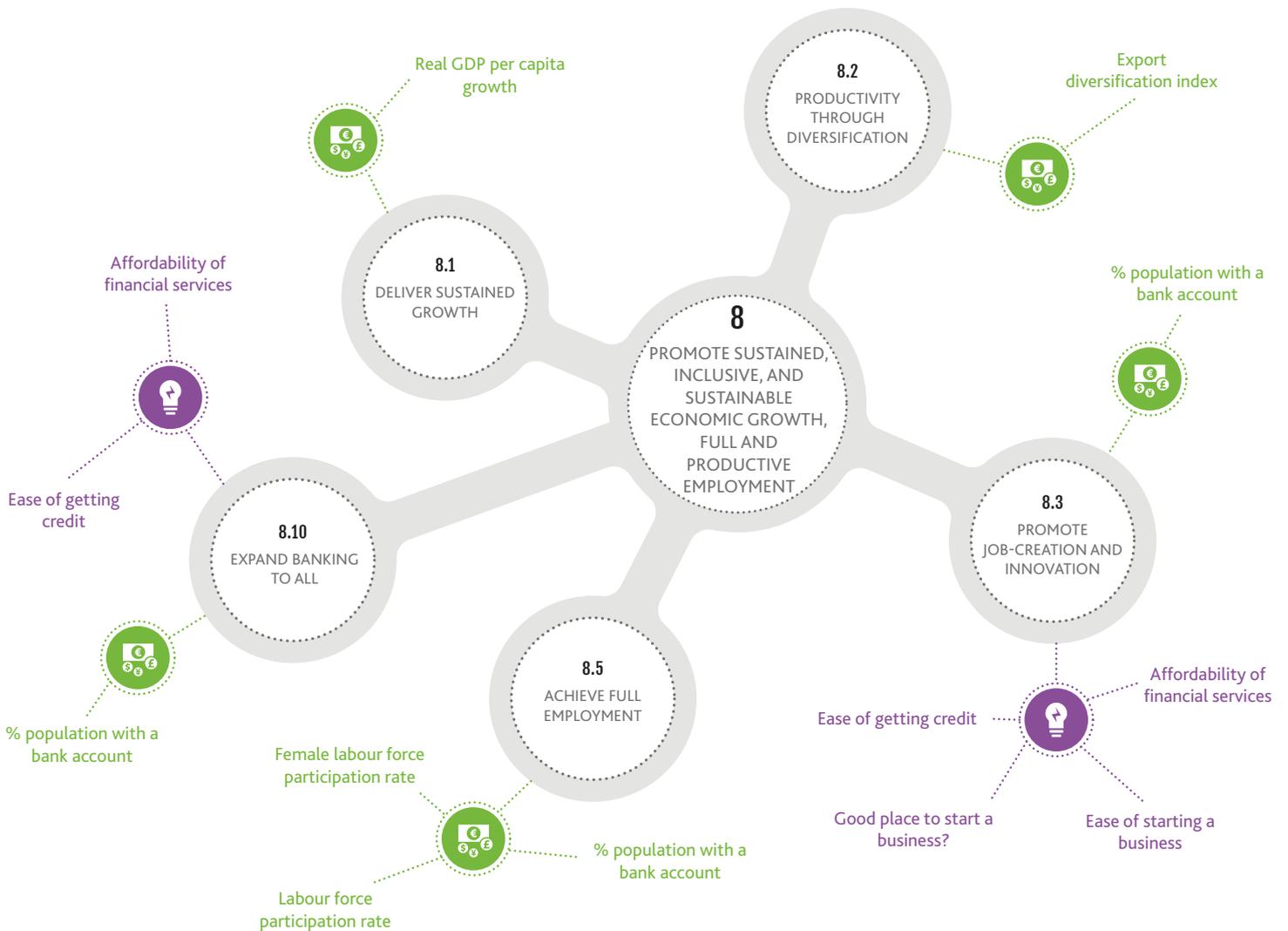
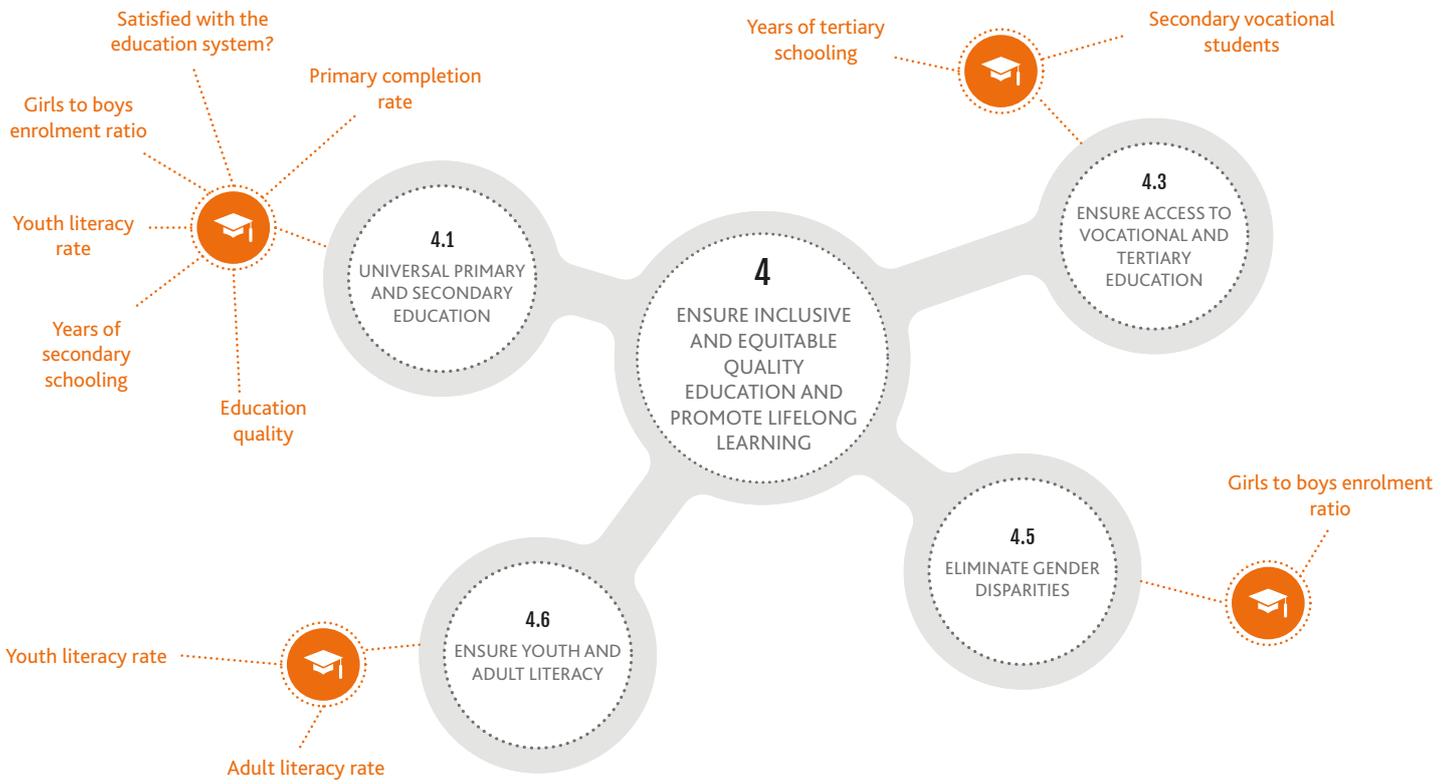
By using a consistent and standardised set of variables, the Prosperity Index provides a composite measure of progress that is internationally comparable. Individual countries' progress can be

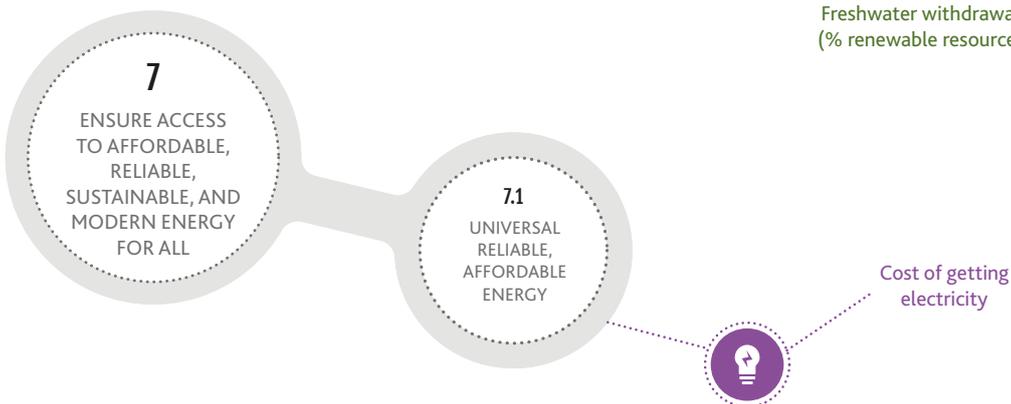
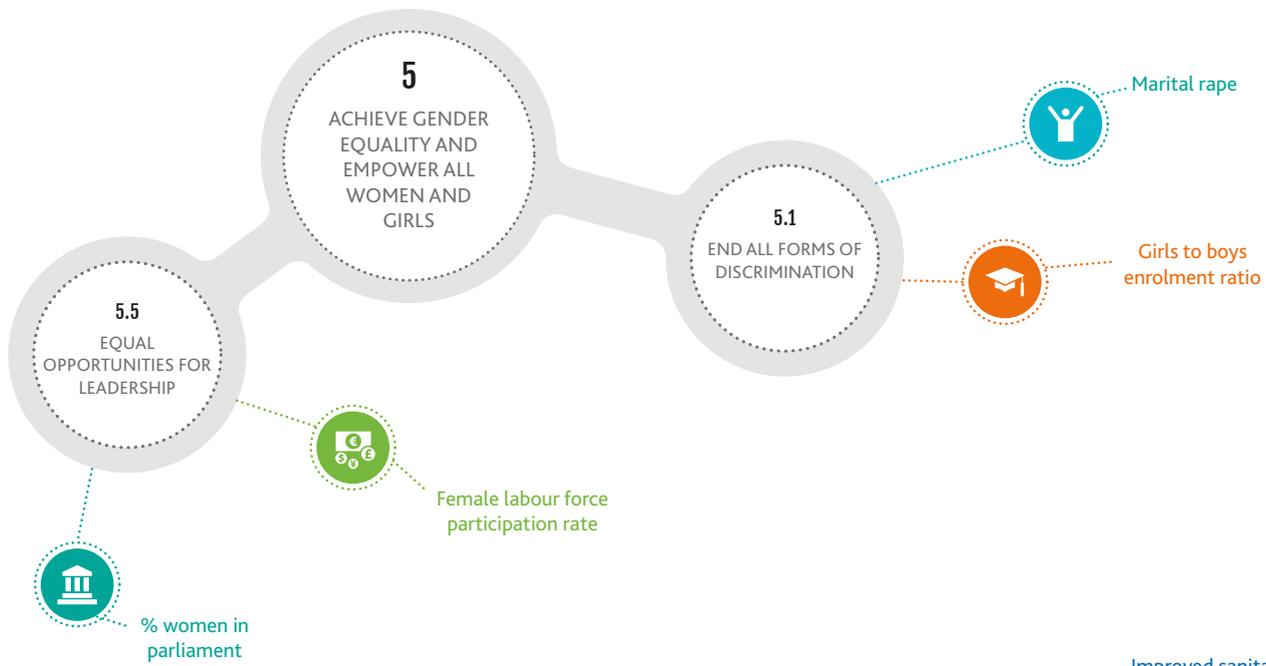
monitored against international standards at the variable level, the pillar level, or at the aggregate Prosperity Index level. Policy-makers can use the Prosperity Index and its components to monitor and easily communicate their work, and the policy trade-offs they face.

The SDGs' underlying thread is eradicating poverty in all its forms and dimensions, enabling people to live more prosperous lives. Rising to this challenge requires effort and expertise not just in execution, but also in monitoring. The Prosperity Index team, which over the past 10 years has measured and tracked prosperity across the world, is well placed to rise to the challenge.









Logistics Performance Index



9.1

DEVELOP RESILIENT INFRASTRUCTURE

9

BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALISATION AND FOSTER INNOVATION

9.3

INCREASE SMALL ENTERPRISE

Good place to start a business?

Ease of getting credit

Affordability of financial services

Cost of getting electricity

Ease of starting a business



9c

INCREASE INTERNET ACCESS

Fixed broadband subscriptions



9.5

ENCOURAGE INNOVATION AND RESEARCH

Intellectual property protection



Refugees (country of origin)



10

REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES

Labour force participation rate



10.2

PROMOTE INCLUSION OF ALL

Good place to live for gay/lesbian people?

Good place to live for ethnic minorities?

Religious restrictions (government)

Religious restrictions (social)

LGBT rights

Civil Liberties



10.7

FACILITATE RESPONSIBLE MIGRATION



Can people get ahead by working hard?

10.3

EQUALITY OF OPPORTUNITY AND OUTCOME



Human Capital Gini

Turnout (% voting age population)



Political Rights



Count on others to help?

Opportunities to make friends?

Were you treated with respect yesterday?

Marine protected areas

Fraction of fish stocks overexploited

Terrestrial protected areas

Freshwater withdrawal (% renewable resource)

12.2

USE OF NATURAL RESOURCES



12

ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

Access to improved water source



Improved sanitation facilities



Satisfied with your standard of living?



11.1

SAFE, AFFORDABLE HOUSING

% without adequate shelter



11

MAKE CITIES AND HUMAN SETTLEMENT SAFE, INCLUSIVE, RESILIENT, AND SUSTAINABLE

Terrestrial protected areas



11.7

ACCESS TO GREEN SPACE

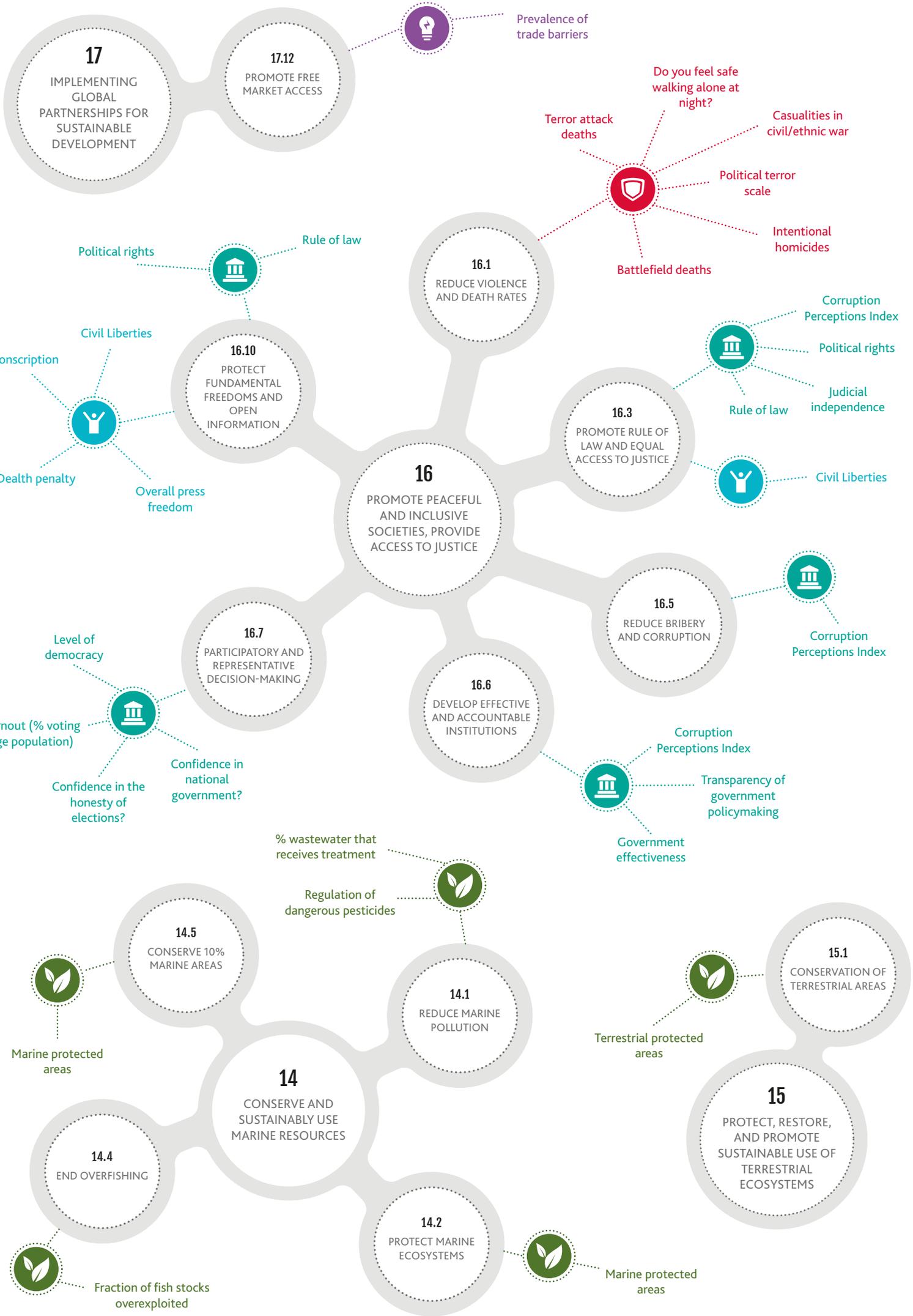
11.6

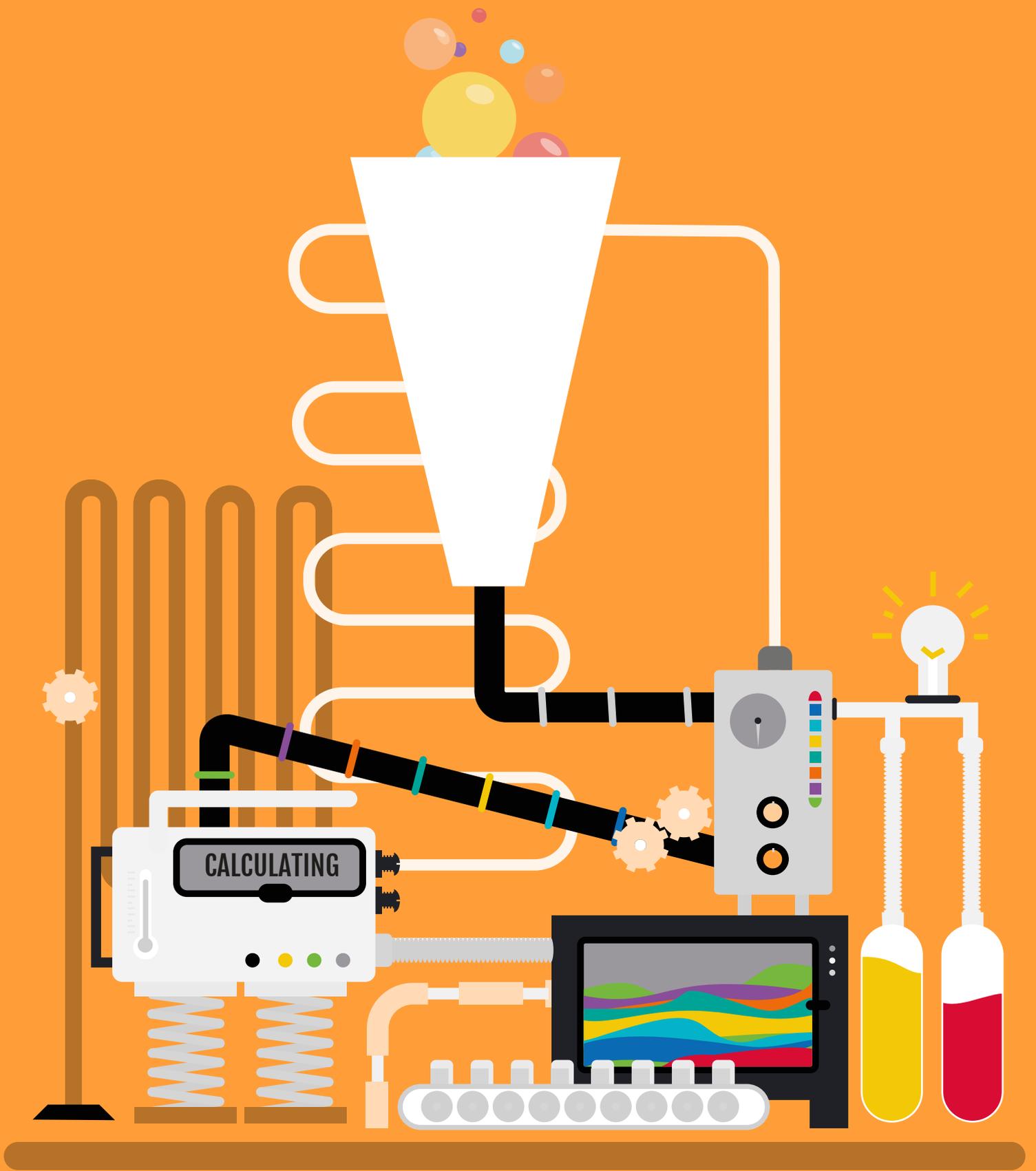
REDUCE ENVIRONMENTAL IMPACT

% wastewater that receives treatment



% exposed to PM2.5





# Methodology

The 2016 *Africa Prosperity Report* uses the *Legatum Prosperity Index*<sup>™</sup> to offer an insight into how prosperity is forming and changing across Africa. The Index is distinctive in that it is the only global measurement of prosperity based on both income and wellbeing.

Traditionally, a nation's prosperity has been based solely on macroeconomic indicators such as a country's income, represented either by GDP or by average income per person (GDP per capita). However, most people would agree that prosperity is more than just the accumulation of material wealth. It is also the joy of everyday life and the prospect of being able to build an even better life in the future.

In recent years, governments, academics, international organisations, and businesses have increasingly moved their attention towards indicators that measure wellbeing as a complement to GDP.

Attempting to understand how we complement GDP, the so-called 'GDP and beyond' approach provides a stimulating challenge, one we strive to meet with academic and analytical rigour in creating the *Legatum Prosperity Index*<sup>™</sup>. Indeed, the Index recognises the

need for a country to promote high levels of per capita income, but also advocates improvements in the subjective wellbeing of its citizens.

This short methodological overview provides an understanding of how the 2015 *Legatum Prosperity Index*<sup>™</sup> is constructed by combining established theoretical and empirical research on the determinants of wealth and wellbeing.

Our econometric analysis has identified 89 variables, which are spread across eight sub-indices. Through this process we are able to identify and analyse the specific factors that contribute to the prosperity of a country.

We endeavour to create an Index that is methodologically sound. To that end, we also publish a full methodology document to provide the reader with all the information required to understand the *Legatum Prosperity Index*<sup>™</sup> in a way that is transparent, useful, and informative.

For more information on our methodology please refer to the Methodology and Technical Appendix published on [www.prosperity.com](http://www.prosperity.com).



**Variables:** capital per worker | market size | high-tech exports | gross domestic savings | unemployment | non-performing loans | inflation | FDI size & volatility | satisfaction with living standards | adequate food and shelter | perceived job availability | expectations of the economy | employed | confidence in financial institutions | 5-year rate of growth |

**Variables:** business start-up costs | secure internet servers | R&D expenditure | internet bandwidth | uneven economic development | mobile phones | royalty receipts | ICT exports | mobile phones per household | perception that working hard gets you ahead | good environment for entrepreneurs |

**Variables:** government stability | government effectiveness | rule of law | regulation | separation of powers | political rights | government type | political constraints | efforts to address poverty | confidence in the judicial system | business and government corruption | environmental preservation | government approval | voiced concern | confidence in military | confidence in honesty of elections |

**Variables:** gross secondary enrolment | pupil-to-teacher ratio | net primary enrolment | girls-to-boys enrolment ratio | gross tertiary enrolment | secondary education per worker | tertiary education per worker | satisfaction with educational quality | perception that children are learning |

## E&O

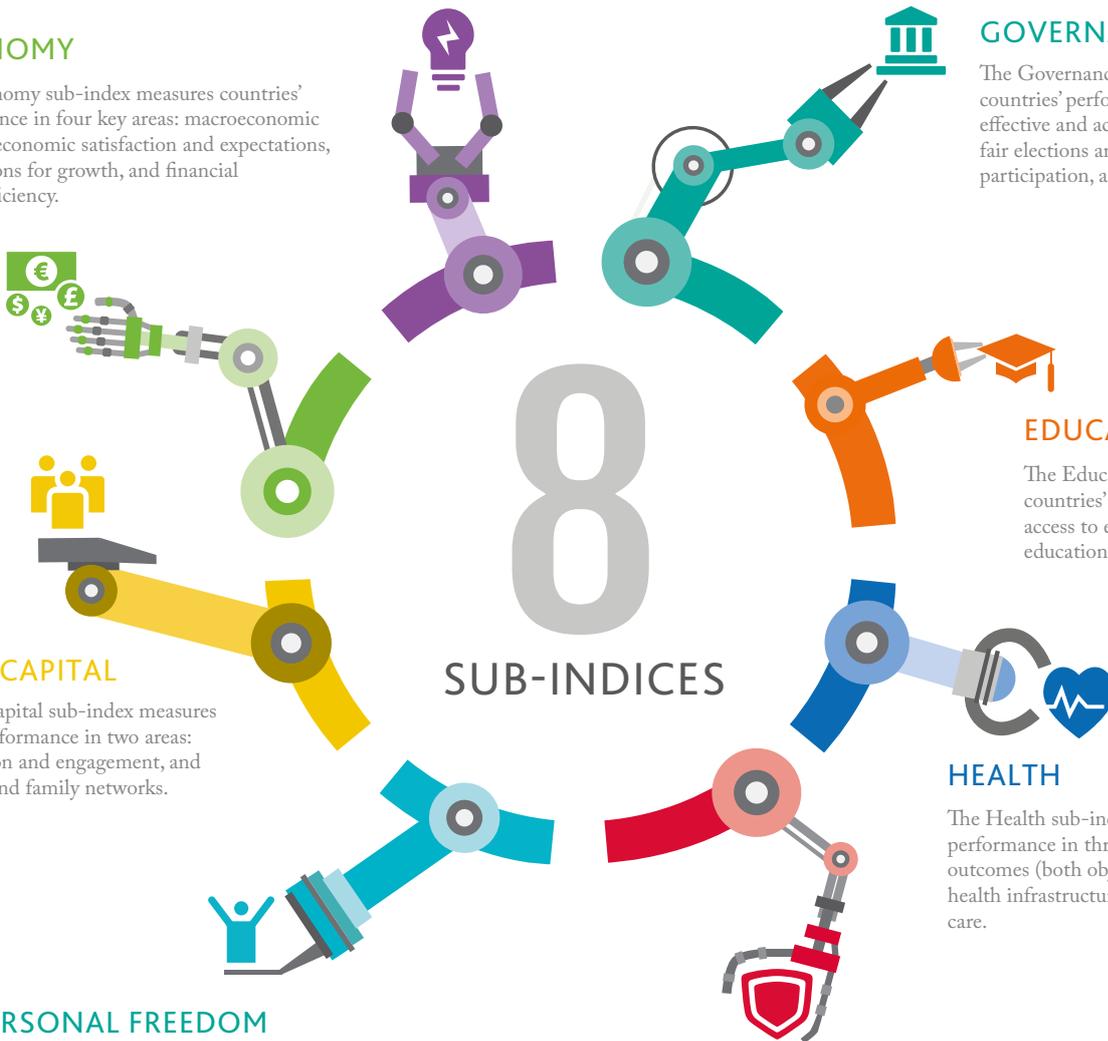
The Entrepreneurship & Opportunity sub-index measures a country's entrepreneurial environment, its promotion of innovative activity, and the evenness of opportunity.

## ECONOMY

The Economy sub-index measures countries' performance in four key areas: macroeconomic policies, economic satisfaction and expectations, foundations for growth, and financial sector efficiency.

## GOVERNANCE

The Governance sub-index measures countries' performance in three areas: effective and accountable government, fair elections and political participation, and rule of law.



## EDUCATION

The Education sub-index measures countries' performance in three areas: access to education, quality of education, and human capital.

## SOCIAL CAPITAL

The Social Capital sub-index measures countries' performance in two areas: social cohesion and engagement, and community and family networks.

## HEALTH

The Health sub-index measures countries' performance in three areas: basic health outcomes (both objective and subjective), health infrastructure, and preventative care.

## PERSONAL FREEDOM

The Personal Freedom sub-index measures the performance and progress of nations in guaranteeing individual freedom and encouraging social tolerance.

## SAFETY & SECURITY

The Safety & Security sub-index measures countries' performance in two respects: national security and personal safety.

**Variables:** perceptions of social support | volunteering rates | helping strangers | charitable donations | social trust | marriage | religious attendance |

**Variables:** tolerance for immigrants | tolerance for minorities | civil liberty & free choice | satisfaction with freedom of choice |

**Variables:** group grievances | refugees and internally displaced persons | state sponsored political violence | property stolen | assault | safety walking alone at night | able to express political opinion without fear | demographic instability | human flight | civil war casualties |

**Variables:** infant mortality rate | life expectancy | DPT immunisation rate | incidence of TB | undernourishment | measles immunisation rate | health expenditure per person | satisfaction with health | level of worrying | satisfaction with environmental beauty | hospital beds | water quality | health-adjusted life expectancy | sanitation | death from respiratory diseases | well-rested | reported health problems |



# Step-by-step guide to the methodology

## 1 SELECTING THE VARIABLES

Starting with the current academic literature on economic growth and wellbeing, we identified a large number of variables (200+) that have a proven impact upon wealth and wellbeing. The final variables were selected according to their global coverage and by using regression analysis to determine those that have a statistically significant relationship with wealth and wellbeing. The resulting 89 variables are divided into the eight sub-indices.

## 2 STANDARDISATION

The variables use many different units of measurement. For example, citizens' confidence in financial institutions is measured in percentage terms, while capital per worker in US dollars. All variables are standardised by subtracting the mean and dividing by the standard deviation.

## 4 INCOME AND WELLBEING SCORES

For each country, the latest data available were gathered. The raw values are standardised and multiplied by the weights. The weighted variable values are then summed to produce a country's wellbeing and income score in each sub-index. The income and wellbeing scores are then standardised so that they can be compared.

## 3 VARIABLE WEIGHTS

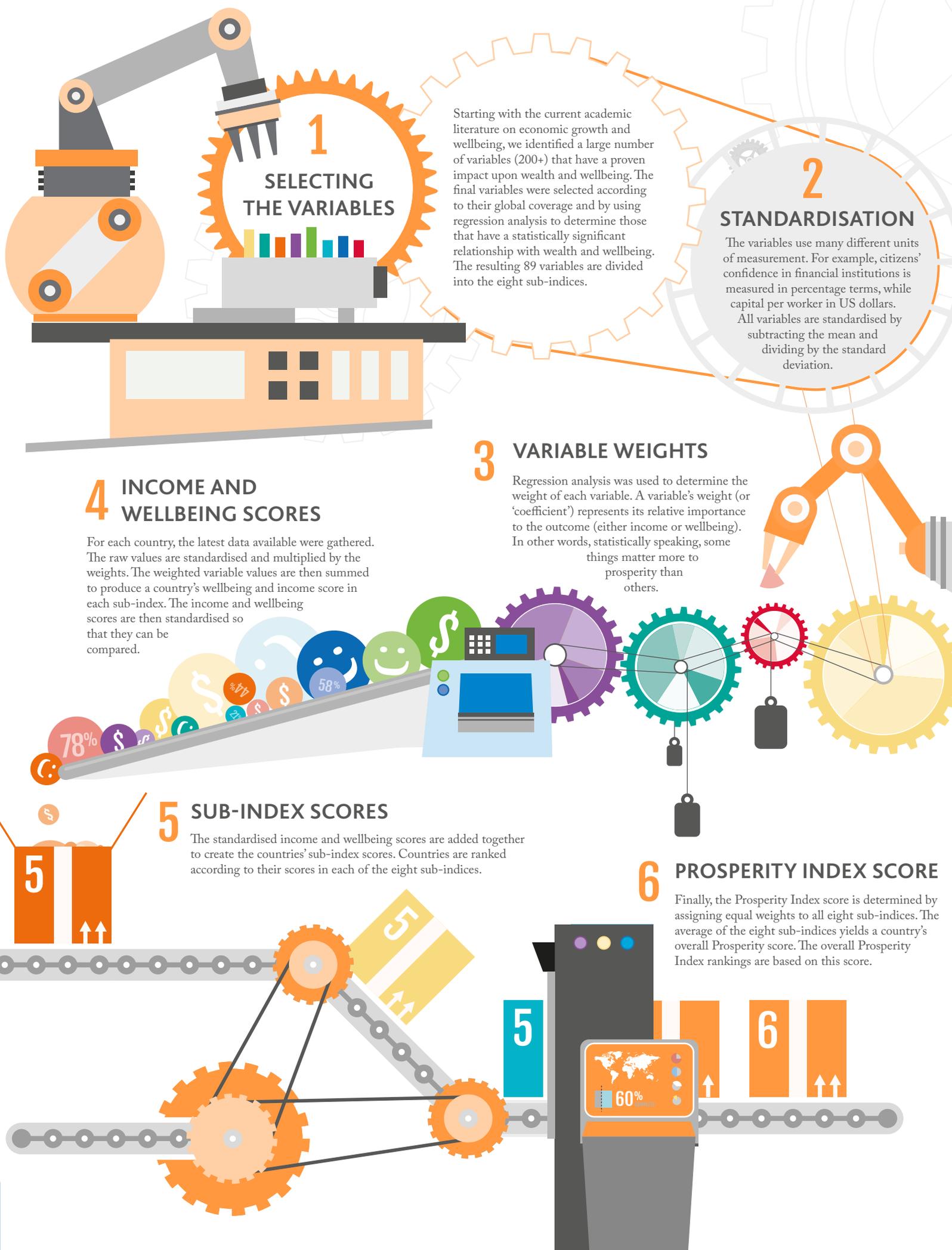
Regression analysis was used to determine the weight of each variable. A variable's weight (or 'coefficient') represents its relative importance to the outcome (either income or wellbeing). In other words, statistically speaking, some things matter more to prosperity than others.

## 5 SUB-INDEX SCORES

The standardised income and wellbeing scores are added together to create the countries' sub-index scores. Countries are ranked according to their scores in each of the eight sub-indices.

## 6 PROSPERITY INDEX SCORE

Finally, the Prosperity Index score is determined by assigning equal weights to all eight sub-indices. The average of the eight sub-indices yields a country's overall Prosperity score. The overall Prosperity Index rankings are based on this score.



# Acknowledgements

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**We encourage you to share the contents of this report. In doing so, we request that all data, findings, and analysis be attributed to the 2016 *Africa Prosperity Report*.**

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Unless otherwise stated, all data is from the 2015 *Legatum Prosperity Index™*. All original data sources can be found in the Prosperity Index methodology report and online at [www.prosperity.com](http://www.prosperity.com)

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Learn more about the Legatum Foundation at [www.legatum.org](http://www.legatum.org)





**“ Whilst GDP growth is important, the success of nations should not just be measured purely in terms of GDP – what makes a nation prosperous goes beyond this. Legatum’s Prosperity Index – which looks at both wealth and wellbeing – is therefore a welcome addition to the discussion on how best to assess and deliver.”**

TSITSI MASIYIWA, EXECUTIVE CHAIRPERSON, HIGHER LIFE FOUNDATION

**“ Success should not just be measured by wealth alone. It should be measured by the impact you are making. Legatum’s Prosperity Index is a useful tool that helps us understand this impact – what works and what doesn’t”**

ASHISHJ. THAKKAR, FOUNDER, MARA GROUP

The Legatum Institute is a charitable public policy think tank whose mission is to help people lead more prosperous lives.

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