

think:act STUDY

In-depth knowledge for decision makers

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INCOME PER CAPITA

2024

Africa is expected to be the world's most dynamic region. Income per capita will grow by 50% over the next 12 years.

GLOBAL TOPICS INSIDE AFRICA

Africa has changed. Its business realities have left old perceptions far behind. Growth is more sustained and diversified than ever before. Income per capita will grow by 50% over the next twelve years, turning it into one of the world's most dynamic regions. Reforms and entrepreneurial drive have transformed Africa into a continent of opportunities that can no longer be ignored.



GLOBAL TOPICS INSIDE AFRICA

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Africa has emerged onto the global scene as a pole of global growth, supported by reforms, demography, African entrepreneurial spirit and a set of global trends

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INTRODUCTION

AFRICA – OUR NEXT OPPORTUNITY FOR
SUSTAINABLE GROWTH AND DEVELOPMENT



Home to one-sixth of the world's population, Africa is a continent that global companies and investors can no longer afford to ignore. Although the growth of leading economies in Europe and North America is flat and the economic miracles in Asia are slowing down, many investors are still cautious about Africa.

Even today, with Africa's economic progress no longer a secret, many businesses and investors are still apprehensive about entering the continent. Those who now continue to underestimate Africa will be left behind. The continent's growth is not a fleeting phenomenon: for example, one only needs to look to Sub-Saharan Africa, with annual real GDP growth of 5.7% between 2000 and 2011¹. Due to the considerable progress that many countries have made in terms of political stability, macroeconomic health and business conditions, sustainable growth in Africa is the new reality.

The African continent represents the opportunities of tomorrow, and we at Roland Berger see historic business opportunities being created by Africa's growing economic strength. Mining this unprecedented potential requires sound knowledge and a thorough understanding of the market. That is why Roland Berger is embarking on INSIDE AFRICA. Our work on the continent in collaboration with strategic and local partners, including many of the continent's emerging champions, has given us an inside perspective on the opportunities there. "Inside Africa" is aimed at top decision-makers and investors. Its main goal is to promote sustainable growth across the continent, and at the same time help companies in industrialized countries benefit from and contribute to this growth.

¹ International Monetary Fund (IMF): Regional Economic Outlook: Sub-Saharan Africa, April 2011

F1

Average annual real GDP growth,
2007 – 2015

Angola
Burkina Faso
Djibouti
Egypt
Ethiopia
Cape Verde
Congo
Ghana
Liberia
Libya
Malawi
Mali
Mozambique
Niger
Nigeria
Rwanda
São Tomé and Príncipe
Sierra Leone
Sudan
South Sudan
Tanzania
Uganda
Zambia



GROWTH

5-7% p.a.

4-5% p.a.

3-4% p.a.

Below 3% p.a.

Below 0% p.a.

Western Sahara
(Status disputed)

No data

Somalia

No data

Zimbabwe

HIDDEN CHANGES

F1 Hidden behind the clichéd, superficial images of Africa is real change. This transformation is happening in places like the high-rise towers of Lagos, Nigeria and Kigali, Rwanda or Abidjan, Côte d'Ivoire. It is occurring in the villages that dot Northern Tanzania and surround Accra, Ghana.

You see it in the Ghanaian farmers who check cocoa prices on their mobile phones and entrepreneurs who start businesses in Rwanda. It is present in the back offices of Lagos banks, where employees process loan applications so that middle-class Nigerians can buy their own homes and cars, and in the foothills of Mount Kilimanjaro, where bank employees on bicycles are opening deposit accounts for Tanzanians. And it is shaped in the boardrooms of companies like Dakar-based telecommunications firm Sonatel, which has grown its stock market valuation to more than 23% of Senegal's GDP. These changes are not the kind of major upheavals reported in the mainstream news. Instead, these transformations are occurring off the radar of most global companies and investors while African countries quietly take their place among the world's economic growth leaders. They are evidence that Africa's potential is becoming a reality.

F2 The question is no longer whether African countries will be the next development success stories, but when. African economies have emerged from the global financial storm much faster than their Western peers. Average growth will be nearly 6% in 2012, up from

3.1% in 2009. Between 2012 and 2016, Sub-Saharan Africa growth **F4** will be 4.9% compared with 2.9% globally². Half of the world's ten fastest-growing countries are in Sub-Saharan Africa³. Economic output in the region is set to double and per capita income to grow by 50% within the next twelve years.

After massive debt reduction and debt forgiveness programs in the past, Africa's public finances now present an encouraging picture. From average debt/GDP ratios of over 80% in the 1990s, these figures are now below 60%, and in many countries even much less. After average budget deficits of 4.6% of GDP in the 1990s, we have seen less than 2% in the first decade of this century. Other macroeconomic indicators are also moving in the right direction. Inflation across Africa averaged 8% between 2000 and 2010, less than half the average of 22% in the 1990s⁴. Trade between Africa and its partners totals USD 673 billion a year, and Africa's manufacturing output, though still low, has doubled in the last decade⁵. Since 2000, external funding for investment has grown by a factor of six⁶. Africa's story is much broader than natural resources and is not driven by development aid.

Africa's demographic trends are further fueling this growth. Africa's middle class of 313 million people, or 34% of its entire population, is larger than the entire population of the United States and on a

2] Economist Intelligence Unit (EIU) **3]** IMF Regional Economic Outlook: Sub-Saharan Africa, April 2011 **4]** World Bank (WB) **5]** Organization for Economic Cooperation and Development (OECD) **6]** IMF

F2

Global Top 10: Fastest growing economies, countries with more than 10 million inhabitants

2001 – 2010

Real GDP growth (CAGR)

Angola	11.1
China	10.5
Myanmar	10.3
Nigeria	8.9
Ethiopia	8.4
Kazakhstan	8.2
Chad	7.9
Mozambique	7.9
Cambodia	7.7
Rwanda	7.6

2010 – 2016 (forecast)

Excluding those with recent conflicts, Real GDP growth (CAGR)

China	9.4
India	7.9
Mozambique	7.7
Zambia	7.4
Niger	7.3
Ghana	7.3
Cambodia	7.2
Tanzania	6.9
Vietnam	6.8
Rwanda	6.8

par with the middle class of India. Africa is gaining 5 million of these new consumers each year⁷. The number of mobile phone users has grown 40% every year during the last decade, from 12 million in 2000 to 343 million in 2010⁸. Facebook reported that 37.7 million of Africa's 118.8 million Internet users have signed up for its service. Over 9 million Egyptians and 2 million Tunisians used Facebook to drive their revolutions, and the website has also become influential south of the Sahara. More than 4.3 million Nigerians, 1.3 million Kenyans, 1.1 million Ghanaians and 900,000 citizens of the Democratic Republic of the Congo have joined the social network⁹. Cities are ballooning at the rate of 3.5% a year and the continent will soon have the world's largest labor force. In many countries across Africa, the median age is under 20, compared with just under 30 in Asia and just under 40 in Europe¹⁰. China's population will begin aging rapidly and India's will peak, but Africa's working age population will continue to expand after 2050.

The continent's natural resources are also full of untapped potential. Africa is home to 10% of the world's oil reserves, 40% of gold reserves and about 85% of chromium and platinum group

metals, wide swaths of which are still to be mined¹¹. And much of the continent's territory remains to be fully surveyed by geologists. In addition, 60% of the world's remaining uncultivated land is in Africa¹². Rising commodity prices are providing an ever-greater incentive to cultivate these areas. Tripling yields per hectare to South American levels could boost GDP by 2.3% a year. Revenue from agriculture is set to grow about 4% a year to USD 320 billion by 2020, which is positive news for the two-thirds of Africans who live in rural areas and the 70% who make their living from agriculture¹³.

PRIMED FOR TAKEOFF

With these raw ingredients, Africa is set to take off. Gains are to be expected across the board: banking and finance, consumer goods, natural resources, agriculture and infrastructure. These main business sectors in Sub-Saharan Africa are expected to grow at 6% F3

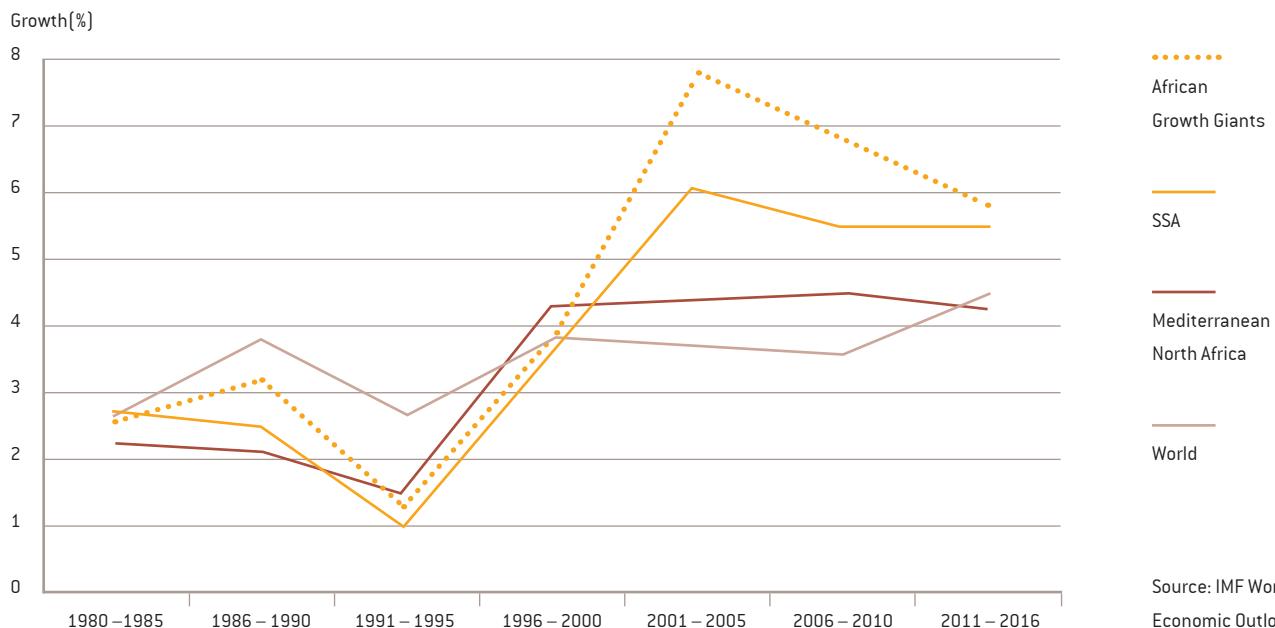
7] African Development Bank (ADB) **8]** Roland Berger Strategy Consultants

9] Facebook, RB Standard: Dec 31, 2011 **10]** UN World Population Prospects

F3

Real GDP growth
(CAGR), 1980-2016

Since 2000, African growth has strongly outpaced the momentum in other parts of the world – and the setting is right for Africa to continue this process



per year, offering USD 2,000 billion in revenue potential by 2020¹⁴. Of course, a conducive environment for growth needs much ongoing work. Africa must attract much needed technology, capital and expertise to ensure that the promised rapid, sustainable development actually occurs. In addition, governments must do their part to strengthen the framework to further foster business growth. Rampant corruption must still be stemmed, overall health conditions and education must be improved and poverty further alleviated.

However, it is clear that Africa does not face less favorable odds than other emerging markets. Indeed, investors can feel more confident about their African exposure than their activities in countries that more frequently capture their attention. In the case of Africa, perception often lags behind reality and the continent is actually far better than its reputation.

South Africa, Rwanda and Botswana, for instance, rank ahead of the Czech Republic, Poland, Spain or Turkey in ease of doing business, and Nigeria is in a league with India and Brazil. When

it comes to protecting investors, Nigeria actually ranks at the same level as Australia, Italy, Turkey and Bahrain (#59) and far ahead of China and Russia (#93). Enforcing contracts in Sub-Saharan Africa is easier and shorter than the average in Latin America and the Caribbean or the Middle East, and while starting a business in Nigeria takes about 31 days, in China you wait a full week longer, while in Brazil it takes four months¹⁵.

In terms of corruption, Africa does present many challenges, but the situation shows a positive trend and Nigeria, for instance, is deemed less corrupt than Russia. Countries such as Ghana, Namibia, Botswana and South Africa are much less corrupt than China, India, Mexico or even Italy and Greece, for that matter¹⁶.

Indeed, when comparing 12 of Africa's most important economies with 10 emerging markets from around the world, we find Africa consistently coming out on top in terms of the average rank. Its two best-placed economies are ahead of the best of its non-African peers in the categories "Ease of Doing Business", "Starting a Business", "Protecting Investor Rights" and "Perceptions of Corruption"¹⁷.

While Africa offers enormous business potential, the continent's regional variations mean that investors need differentiated strategies targeted to each particular market. North Africa, for example, generates a third of the continent's GDP with economies based on oil, gas and tourism. South Africa, meanwhile, has an advanced, diversified economy with a strong consumer class. Behind them, a set of "African growth giants" has emerged that present large economies on firm foundations for continued high growth with many untapped or low-competition market opportunities. At the same time, many "new frontiers" are shaping up to further expand the wave of Africa's renaissance.

F5

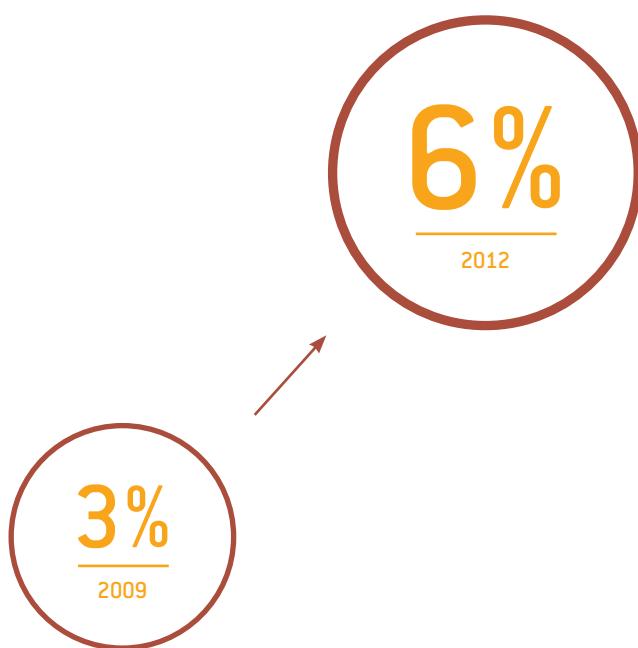
Investors, recognizing the promise of countries in Africa, are moving in to stake their claims. Between 2000 and 2010, foreign direct investment and other financial flows to the continent increased fivefold to USD 54.2 billion¹⁸. German companies have boosted their African investment from USD 11.3 billion in 1997 to USD 25 billion in 2007. China's Africa trade alone grew by a factor of more than fifteen between 2001 and 2011, reaching USD 150 billion¹⁹. Indian, Brazilian and Russian businesses and investors

^{11]} EIU ^{12]} & ^{13]} OECD ^{14]} Bankscope, IMF, ADB, UNCTAD, FAO ^{15]} World Bank, Ease of Doing Business 2011 ^{16]} Transparency International ^{17]} World Bank 2012 and Transparency International 2011 ^{18]} OECD

F4

Average GDP growth, 2009 – 2012

The average growth of African economies will be nearly 6% in 2012, up from 3% in 2009



F5

African Business Opportunities

Africa presents itself as five different business settings to potential investors calling for differentiated strategic approaches

33% of GDP



Mediterranean North Africa

Medium-income countries, large economies in political transitions. Oil & gas and tourism. Trade links focused on EU and Middle East markets for near-shoring labor-intensive manufacturing, service outsourcing, oil & gas, and advanced consumer goods, renewable energies ("Desertec")

14% of GDP



New Frontiers: The most important include Ethiopia, Zambia, Dem. Rep. Congo, Cameroon, Senegal and Cape Verde

Improving governance, post-conflict/crisis economies, large resource endowments or sizeable populations. Pioneer investors present, local financing often a challenge. Targets for special opportunities or expansion after establishing bridgeheads and expertise in Africa

4% of GDP



Question Marks

Special situation (Zimbabwe), small economies or low stage of development. Few resources, poor soils, high incidence of poverty, poor infrastructure. Reserve for special opportunities

27% of GDP



African Growth Giants: Angola, Botswana, Côte d'Ivoire, Ghana, Kenya, Mozambique, Nigeria, Tanzania, Uganda

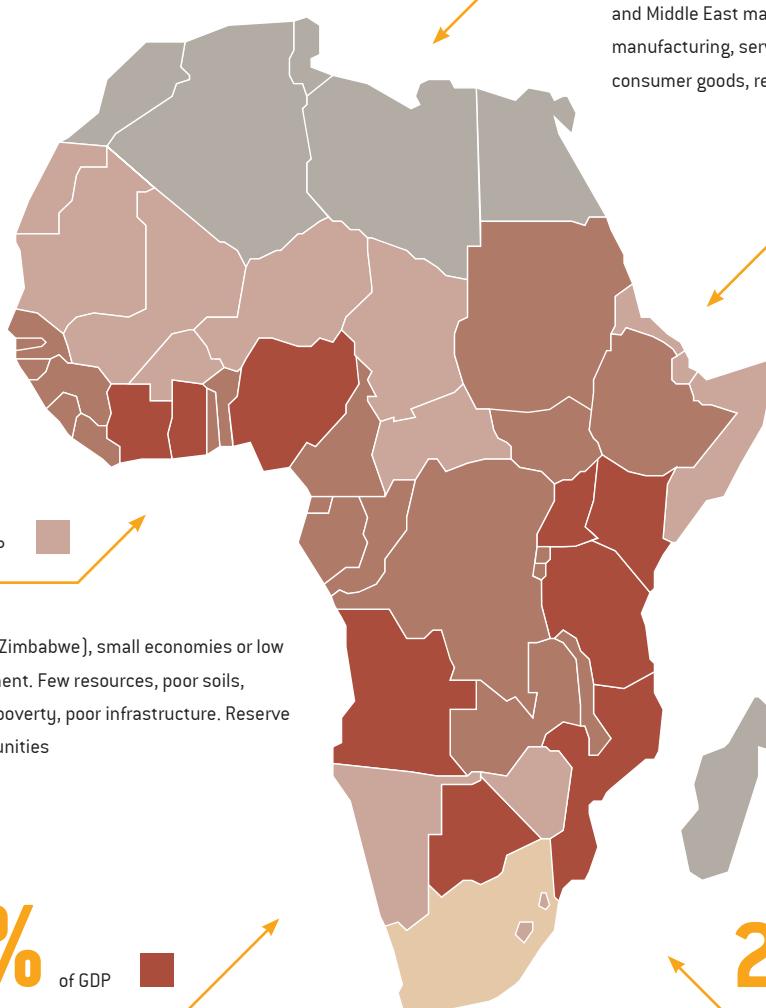
Africa's emerging markets, solid or improving governance, large populations or high per capita income, strong resource endowment or already diversified economy. Focus on strategic expansion in high growth, low competition environment

22% of GDP



South Africa

Africa's diversified economy and traditional hub for Africa. Very large resource endowment and professional business environment. Strong presence of local and international players, manufacturing competitiveness under threat. Sizeable middle class but wide social disparities. Market entry requires clear differentiation



have been active on the continent claiming their share of consumer and industrial markets ranging from oil and gas to telecommunications, mining, hotels, steel and hospitals.

Engaging the private sector will be crucial in enabling African countries to achieve growth. The gap between existing investment and infrastructure needs is USD 33 billion – each year²⁰. Business involvement in delivering telecommunications is already an example of how private companies can spur rapid economic development, changing people's lives practically overnight.

AN OPPORTUNITY THAT CANNOT BE MISSED

More than 20 years ago, few predicted that Brazil, China and India would be the countries on the forefront of investing instead of receiving international aid. As with Africa today, many were skeptical about the ability of these BRIC countries to overcome their challenges in governance, economic instability, violence and poverty to bring about sustained growth. Now BRIC countries are seen as opportunities that cannot be missed. As of today, countries in Africa must be viewed in that same light.

Rapid progress is already being made on a number of fronts. While development in each country and region is proceeding at various paces, African countries are laying firm foundations for future growth. Already today, Africa's leading economies present a mix of business-friendliness and growth perspectives that matches or outpaces that of the BRIC countries.

Political rights, civil liberties and citizen participation are growing throughout the continent. In 2011, 28 national-level elections took place in 20 countries²¹. Since 1999 four parliamentary and presidential elections have been held after the end of military dictatorship in Nigeria, the continent's most populous country with almost 155 million people. In 2010, Kenya adopted a new constitution approved by 67% of voters. Rwanda, Mozambique and Liberia have been able to rebuild their political systems and economies after major conflicts. Last but not least, the "Arab Spring" in December 2010 toppled dictatorial regimes in Tunisia, Egypt and Libya.

Many countries are also implementing reforms that support new business creation, from reduced capital requirements for starting a business and less red tape for entrepreneurs. Rwanda, Cape Verde and Zambia topped the International Finance Corporation's list of the most improved countries in which to do business.

In Rwanda, it now takes about three days to start a business, compared with five in Canada – or Senegal, for that matter. As a result, Rwandan entrepreneurs started 4,545 businesses in 2010, up from just 1,070 in 2006²². Uganda and Ghana have recently started new credit bureaus to help ease the process for consumers and businesses seeking loans²³.

Building on existing regional initiatives and new measures, trade barriers across Africa have also come down, further supporting the continent's economic growth. A 5% increase in trade has the potential to boost GDP by 2.3%. Countries are fostering intra-continental trade through smoother border crossings in East Africa. Closer collaboration through organizations such as the Economic Community of West African States and the South African Development Community has helped lower trade tariffs. Countries are also speeding up trade flows by cutting the number of documents required for customs, introducing electronic data interchange systems and improving port infrastructure. As a result of these measures, the number of days needed to import products to Sub-Saharan Africa fell by 7 from 2007 to 2011, while the number of days required for exports fell by 5²⁴.

Meanwhile, Africa's societies are becoming prosperous and healthy. Even though about 400 million Africans still live in poverty, overall poverty rates are on the decline, from 59% in 1995 to 50% in 2005²⁵. Literacy rates are also improving, with primary school enrollment jumping to 73% in 2009 from 59% in 2000. Ghana's literacy rates among young people have increased 9.9% since 2000, reaching 78% in 2009 which now exceeds that of Tunisia, Africa's country with the highest percentage of middle-class citizens (89.5%). Africans' health has also seen marked improvement thanks to an array of public and private initiatives. The number of deaths among children under five dropped to 132 per 1,000 in 2009, down from 181 in 1,000 in 1990. Countries like Rwanda and Uganda have made enormous gains in life expectancy, of about 8 and 7 years respectively from 2000 to 2009²⁶.

19] Estimate by Chinese Ministry of Commerce

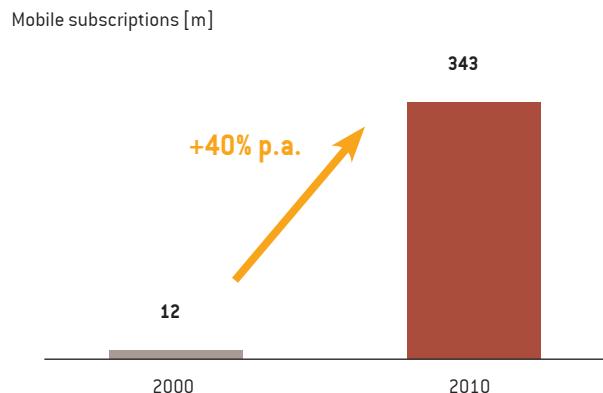
20] WB **21]** OECD **22]** Rwanda Development Board

23] & 24] IFC

25] & 26] World Bank

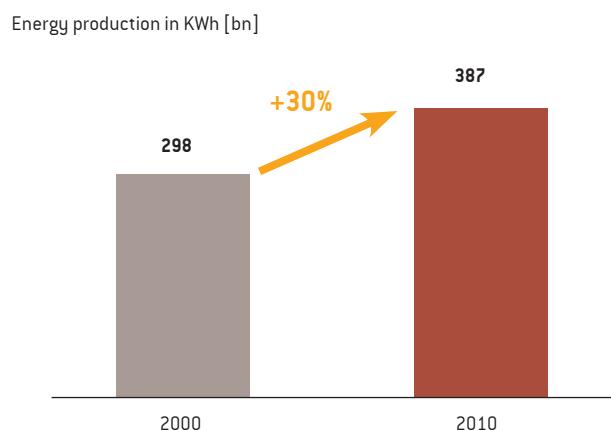
WIND IN THEIR SAILS

Global megatrends are propelling Africa's rise. Combined with internal political, economic and demographic shifts taking place across the continent, four external trends will spur African



Technological leapfrogging

Technological leapfrogging refers to the manner in which the latest technology can take African companies and consumers right to the cutting edge at lower cost and with faster adoption rates. A good example is the way in which many regions throughout Africa bypassed the expensive, time-intensive step of laying down fixed telecommunications cables. Now Africans even in rural areas use mobile phones to stay in touch with remote family members and transfer money over large distances, while farmers can instantly check commodity prices. Many Africans have also found jobs in mobile businesses.



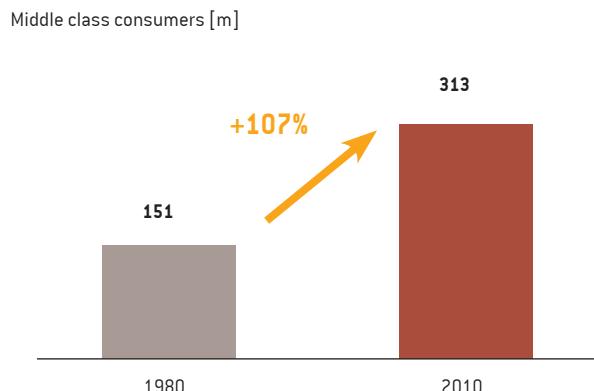
Enhancing infrastructure

In addition, there are huge opportunities for established green technology companies to develop the untapped potential in Africa for solar, wind, biomass and hydroelectric power. Off-grid solutions offered by photovoltaics or small hydroelectric plants, for instance, can help reduce the dependency on the slow and costly expansion of transmission lines across the continent's vast areas.

Energy investments are just one example of how enhanced infrastructure is getting Africa better connected. From decongesting Africa's largest city, Lagos, with the light-rail system built by Chinese contractors and a suspension bridge built by the German-Nigerian construction giant Julius Berger to the major transport corridors that are being rehabilitated or created for road and rail in South, West and East Africa, things are moving ahead.

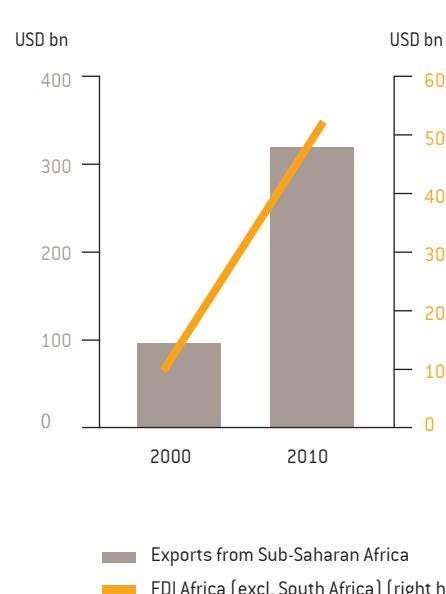
New broadband sea cables and increased Internet penetration are connecting Africans to the rest of the world and making new businesses models in business process outsourcing, e-commerce and tourism a reality. With new high-speed Internet backbones, Kenya and Tanzania are competing to become East Africa's technology hub.

countries to realize their growth potential even more quickly: technological leapfrogging, better infrastructure, emerging consumers and global trade and investment flows.



Emerging consumers

The emerging consumer societies of the BRIC states and beyond have reversed a decades-long price decline and increased demand for Africa's agricultural and mineral commodities. As a result, Africans have found more stable sources of income and domestic demand has increased across Africa. Rising incomes mean that consumers in Africa are spending more on big-ticket items such as appliances, cars and technology as well as on the small luxuries offered by fast-moving consumer goods. As more Africans emerge from poverty to join the middle classes, they create stable foundations for growth. Roland Berger expects 7% annual growth in consumer demand to create a USD 810 bn market in Sub-Saharan Africa by 2020.



Integration in global value chains

Last but not least, Africa's development has had a positive impact on global investment and trade. Foreign direct investment in Africa increased 18% p.a. from 2000 to 2010. Trade links between Sub-Saharan Africa and the rest of the world are also growing. Exports almost tripled from 2000 to 2009, with exports to East Asia alone growing by a factor of almost 6 over that period²⁷.

Africa is no longer a stand-out in global capital markets and trade flows. In a recent survey of top institutional investors, 52% agreed that Africa's frontier markets will offer the best prospects for investment growth of anywhere in the world in the next decade. Accordingly, the 21% of institutional investors still without exposure to Africa are all looking to move in over the next three to five years²⁸.

GROWTH DRIVERS

SEVEN KEY INDUSTRIES PLAY A CRUCIAL ROLE IN SUSTAINING
GROWTH MOMENTUM IN AFRICA



1

ENERGY

Africa is among the most energy-deprived regions of the world. Even with its extensive oil and gas resources, African countries have not been able to solve the most basic problem of providing power to the continent's more than 1 billion people. Average energy consumption levels in Sub-Saharan Africa are just a quarter of that in the rest of the world. This energy poverty has huge implications for the continent in limiting standards of living for the population and choking economic expansion. Although this problem has been chronic for decades, there are several reasons to be optimistic. These include changes in governance, greater investment access and improvements in technology, especially renewable energy. Given these factors, Roland Berger believes that over the next five years, through the combined efforts of governments and private institutions, the energy sector will show strong signs of improvement.

Business interest has certainly picked up, as increasing activity from electrical engineering giants Siemens and GE demonstrates. GE's CEO Jeff Immelt underlined that for his firm's business, "Africa today is bigger than China was 10 years ago." [Source: African Business, No. 384, March 2012]

▲
Siemens subsidiary OSRAM provides solar-powered lanterns and lights to rural areas near the equator that lack electricity



2

FINANCIAL SERVICES

Encouraged by structural reforms, Africa's financial sector has evolved over the past decade, enabling more private businesses and consumers to borrow and lend. Morocco was one of the first to reform and liberalize the financial industry, starting in the 1990s. Many countries have since followed its example, and also now require compliance with Basel Committee principles and international transparency standards. Since 2002, Africa's banks logged an average annual growth rate of 42% for their balance sheets, and almost 54% for their net income²⁹. Now Africa's banks have estimated total assets of USD 1.9 trillion, giving them the firepower necessary to jump-start economic development.

They will need to begin by improving access to finance for the continent's more than 400 million unbanked people, providing them with basic financial tools such as current accounts, savings accounts and loans through alternative, innovative channels. Africa's banks must then channel these new deposit sources into capital-intensive sectors such as manufacturing and infrastructure and to the underserved small and medium-sized businesses that can help create employment for the growing urban populations. Then, Sub-Saharan financial institutions are set to meet Roland Berger's expectations of growing from USD 90 billion in 2010 to USD 390 billion in net revenues by the end of this decade.

A broker makes a bid at the Zimbabwe Stock Exchange in Harare



3

CONSUMER GOODS AND RETAIL

Sustained growth across the continent has raised earnings, giving Africans more disposable income. Already today, Africa's one billion consumers – some 313 million of them with an income between USD 2 and 20 per day – spend an estimated USD 600 million on consumer goods. Consumers at this income level will have enough money to spend on a range of goods and services, such as mobile phones, electronics, processed foods and cosmetics. Naturally following the pattern seen in other emerging countries, much of this consumption will take place in Africa's cities. By 2030, Africa's urban population will have a combined purchasing power of USD 1,300 billion. The continent is now a destination for major retailers and consumer goods companies which have become household names in most major markets.

Wal-Mart's USD 2.9 billion acquisition of South Africa's MassMart is explicitly targeting the expanding retail opportunities across the continent. Nestlé already has USD 3.5 billion annual sales in the region and is even setting up factories in the Dem. Rep. Congo. China's household appliances manufacturers are strongly expanding their footprint, Haier with 5 plants in Africa and Hisense by setting up a factory in Nigeria to complement South Africa, Egypt and Algeria.

▲
Makola Market in Accra, Ghana offers its customers a wide variety of goods



4

TELECOMMUNICATIONS

Mobile phones have already transformed daily life and business in Africa. They increase access to financial services and even help deliver healthcare across the continent. Overall, the sector has already averaged growth of 40% a year between 2003 and 2008, driven partly by annual investments of 33% over the same period. Still, the sector has reached only a fraction of its potential as a growth driver. Rural areas still have room for expansion³⁰. In addition, data services will allow telecom companies to earn more revenue from existing customers while helping to boost overall growth.

▲
Decorated cabins advertising telephone services in Freetown, Sierra Leone

³⁰ See also Roland Berger's recent "think: act" publication on this topic:

"Opportunities in rural areas of emerging markets for mobile telephone operators", February 2012

http://www.rolandberger.com/media/publications/2012-02-12-rbsc-pub-Mobile_telephone_operators_in_rural_areas.html



5

TRANSPORTATION

In contrast to Africa's mature telecommunications markets, its nascent infrastructure sector is in need of investment. The New Partnership for Africa's Development estimates that the continent needs 21% more highways and 26% more rail links to meet its current transportation needs. That translates into overall infrastructure spending needs of about USD 250 billion or about 5% to 6% of expected GDP growth during the next decade, according to the African Union. Some help is already on the way through national and international efforts to secure partners, such as the NEPAD Infrastructure Project Preparation Facility, the African Development Bank and the World Bank. Infrastructure investors in the form of private equity funds like Macquarie, Africa Finance Corporation or Asset & Resource Management Company (ARM), public private partnerships and banks like China's ICBC or South Africa's large banks are also expanding their business in the region. In addition, structural reforms in the form of new transport agreements in Africa's regions make it easier to move strategic goods and give port access to remote landlocked areas.

▲
Crowds at a market and local buses in Lagos, Nigeria



6

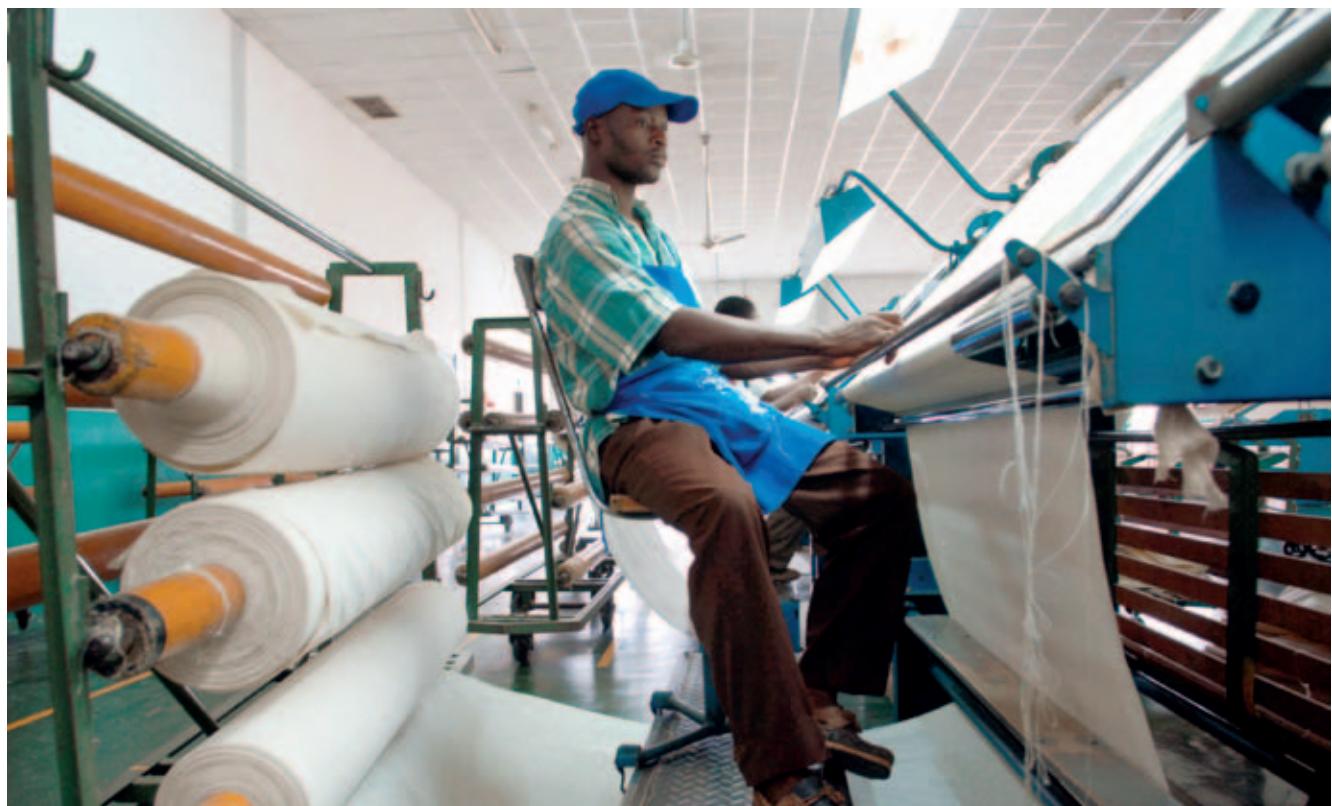
PUBLIC SERVICES

A well-functioning, professional public service sector in Africa will create the framework necessary for human and business development to flourish. Like many emerging markets around the world, many countries in Africa still need to improve the productivity of their health and education departments, local and national administration, judicial and legal structures, and police and military departments. Reforming examples set by Botswana, Cape Verde or Rwanda have set an attractive precedent.

In reforming the public sector, governments in Africa will need to streamline bureaucratic processes, boost IT equipment investment to smooth administrative operations and thoroughly train staff. With a strong public sector, governments can turn their attention to easing business in specific industries. Ethiopia, for example, has supported the floral industry through more investment and fewer export restrictions. Now the country is among the top ten global flower exporters.

The good news is that most African governments are decidedly pro-business and are helping to address growth bottlenecks. The African Peer Review Mechanism and the pressure to compete are also supporting the spread of good governance.

▲ Children at Rema Primary School in Ethiopia using their new 100-dollar laptops. Creating educational opportunities is one of the most pressing issues in Africa



7

MANUFACTURING

Manufacturing remains Africa's most underdeveloped sector, with the continent providing just 1% of global industrial output.

The sector has not kept pace with the dynamism of the natural resource and services industries. By 2008, manufacturing accounted for 9.7% of GDP, down from 15.3% in the 1990s. While Africa is losing ground in labor-intensive low-wage manufacturing, though, the share of high and medium technology exports has edged up 4% since 2000 to reach 29% in 2008³¹.

Reviving the dynamism in this sector will require more private sector involvement and entrepreneurship. Increasing their share of the many value chains that start with African resources offers opportunities, if the success factors for achieving global competitiveness can be put in place. Manufacturers are being helped by favorable government reforms such as technology and innovation policies, financial support and infrastructure development, slowly building the framework required to help get Africa's manufacturing sector off the ground.

▲
*A worker producing cloth for a local market.
 Compagnie Beninoise de Textile (CBT)
 is a Chinese-Beninese company*

ENERGY AND FINANCIAL SERVICES

TWO SECTORS IN PARTICULAR DRIVE CONTINUED HIGH GROWTH:
FINANCE AND ENERGY – ROLAND BERGER IDENTIFIES TRENDS,
OPPORTUNITIES AND CHALLENGES



Financing and powering Africa's growth will be vital to ensuring that the continent lives up to its title as the world's most exciting growth region. Without the development of Africa's financial and energy sectors, higher living standards will be difficult to achieve. However, the good news is that there are plenty of signs that dramatic change is ahead for both these key sectors.

Africa's financial sector can provide the vital function of channeling mass-market deposits into productive enterprises and giving consumers at all income levels an opportunity to build their own financial safety net or finance their ambitions. But so far African banks have grown mainly by focusing on high-end segments. They will no longer be able to continue business as usual. With an increasingly crowded market and pressure building to boost profitability, the next generation of Africa's banks will grow by closing the gaps in their value propositions while reducing expenses.

Ensuring sufficient and stable energy supply enables individuals and businesses to operate longer and more efficiently and improves the overall standard of living. The outlook is promising: new governance structures, privatization and renewable energy policies will support the continent's ability to keep itself powered.

ENERGY

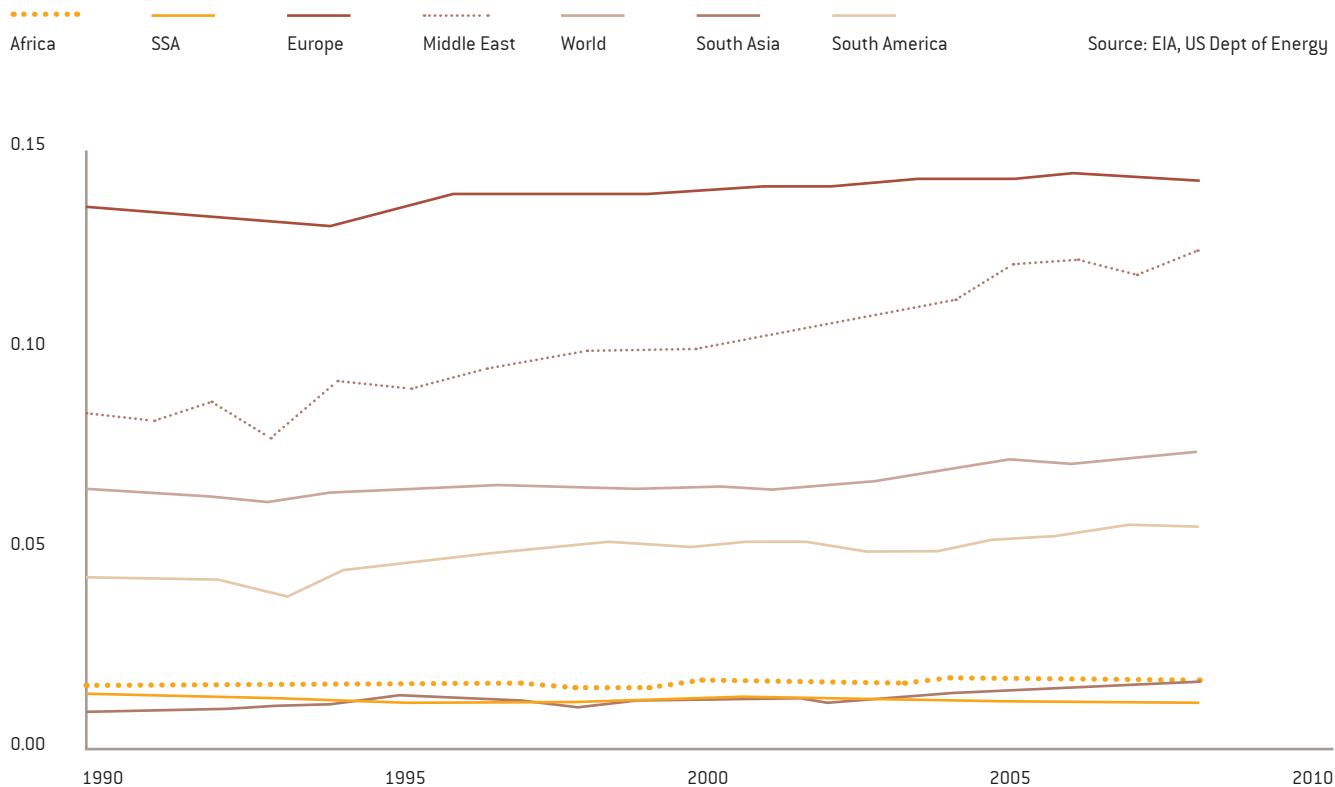
Imagine a world where you cannot not turn on the lights with a mere flick of the switch or charge your mobile phone regularly. What if you had to spend hours a day searching for firewood so that you could cook food, heat your home and have light when the sun goes down?

F6

Total energy consumption per capita (quadrillion Btu per capita)
The average African has access to only about 1/10 the energy a European consumer does. While South Asia increased its energy consumption over the past 20 years to the African average, Sub-Saharan Africa needs to reverse a declining trend.

F6 In Sub-Saharan Africa, energy poverty is an everyday reality for millions of homes and businesses. The region is among the most energy-deprived in the world, annually consuming about 19 million Btu³¹ per capita of energy, or only about 25% of the world average. Take away South Africa and the consumption figure is just 5 million Btu per capita per year and only 26% of households have electricity at all³³.

So far, the lack of reliable energy sources has only slowed economic development in Sub-Saharan Africa; it has not stalled it. Despite this deadweight, the region experienced some of the highest growth in the world over the past decade. As the region's economies become more sophisticated, energy access will take center stage as a necessity for continued growth. As economies



move from early stages toward middle-income level, energy-intense sectors take center stage when it comes to continuing to generate growth and employment.

Although Sub-Saharan Africa's energy problems have been chronic for decades, Roland Berger sees reasons for optimism. Africa has always possessed enormous potential for power generation. Now due to changes in governance, greater investment access and technological improvements, attractive opportunities exist for businesses and investors to help modernize Africa's energy infrastructure. By doing so, they play a crucial part in laying the foundation for continued economic development throughout the region.

SUB-SAHARAN AFRICA'S ENERGY STATUS TODAY

F7 As investment in energy infrastructure has failed to keep pace with Africa's rapidly rising population, millions of homes and business have been left without reliable energy sources. Between 1990 and 2010, the total population in Sub-Saharan Africa increased by 66%³⁴, from 514 million to 851 million. During the same period, energy production in Africa fell short of population growth, whereas it outpaced the increase in users by 33% on a world average.

As a result, about 547 million people in Sub-Saharan Africa have no access to electricity³⁵. Just 51% of the urban population and 8% of rural residents are even connected to the electrical grid³⁶, which still does not guarantee steady access to power due to outages and load shedding. The former are particularly acute in the region, with the average number of days of electrical outages in Sub-Saharan Africa at 90.9, compared to 28.7 in other developing countries³⁷.

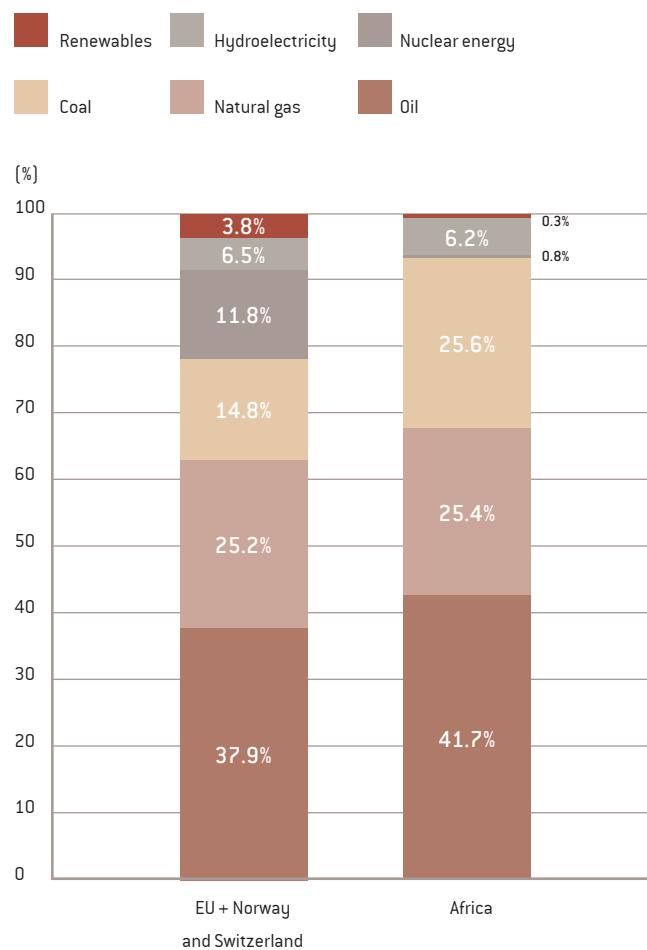
Inattention from state-run power companies, bad governance or crippling civil wars have contributed to decades of neglect of Africa's energy infrastructure. Investment has been overall discouraged. What little investment has been made outside of South Africa often lacked the proper framework to make an impact. Energy generation, transmission and distribution infrastructure

F7

Regional consumption pattern 2010, comparison of energy consumption patterns in Africa and Europe

African depends on fossil fuels (predominantly coal) for more than 90% of its energy

Source: BP Statistical Review of World Energy, 2011



³²] British Thermal Unit, roughly equivalent to the heat produced by burning a single wooden match ³³] G8 Energy Ministers Meeting 2009, World Bank ³⁴] US Energy Information Administration (EIA) ³⁵] G8 Energy Ministers Meeting 2009, World Bank ³⁶] G8 Energy Ministers Meeting 2009, World Bank ³⁷] World Bank, 2007

have not been well maintained. Transmission and distribution losses in Sub-Saharan Africa are currently around 25% of total generation³⁸.

As a result of years of decay Sub-Saharan Africa's current investment needs are massive. Of the total installed generation capacity of 70 GW, about 44 GW needs to be upgraded. Much of the existing capacity is in such poor shape governments may need to consider scrapping some of it all together. As a consequence, installed capacity does not translate into usable capacity. For example, Nigeria has 8.6 GW in installed power capacity but only 4.8 GW is available for generation³⁹. At the same time, the region needs to build 7 GW of new generation capacity every year to meet the suppressed demand, keep pace with projected economic growth and provide additional support for rollout of electrification⁴⁰.

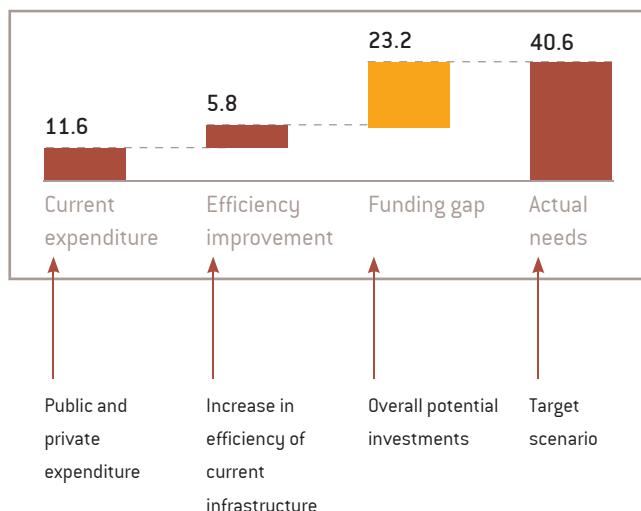
To resolve its power supply challenges, Africa needs a total of **F8** USD 40.6 billion a year, the majority of which is for capital expenditure. Currently, however, the region spends only USD 11.6 billion annually. Assuming that efficiency improvements to

F8

Potential investments in power infrastructure in SSA [USD bn p.a.]

Given the large funding gap in power infrastructure, there is still strong potential to be exploited by private investors

Total



existing infrastructure will make up USD 5.8 billion, a funding gap of about USD 23 billion still remains⁴¹. And every year, this unfunded gap is growing.

CONSEQUENCES OF ENERGY POVERTY

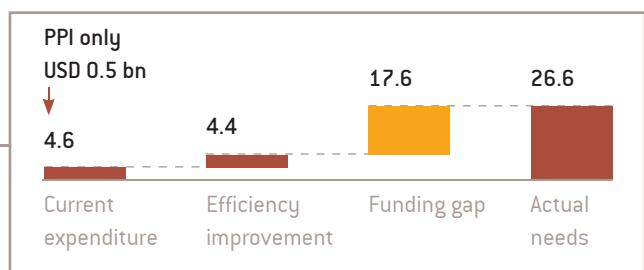
Energy poverty has taken a great toll on Sub-Saharan Africa in terms of both economic development and human well-being. Households and businesses suffer by spending resources on less reliable, costly and often more dangerous substitutes to electricity.

On average, Sub-Saharan Africans spend about USD 17 billion on fuel-based lighting. In some regions, this expenditure can be 30% of household disposable income⁴². In addition, the task of searching for fuel often falls to children who then have less time to focus on school and studying.

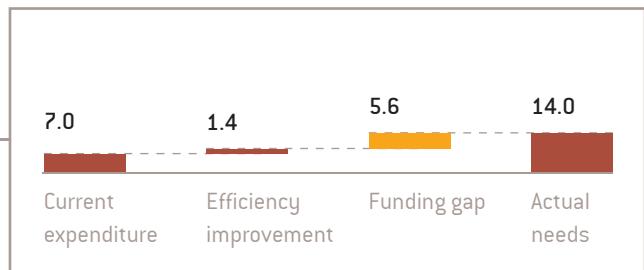
38] Africa's Power Infrastructure, World Bank

39] Presidential Task Force on Power, Nigeria (2011)

Capex



Opex



Source: World Bank, Africa Development Bank, Roland Berger

These substitutes cause environmental degradation and also have a serious impact on the health of Sub-Saharan Africans. More than 80% of them use biomass fuels for indoor cooking stoves, which contribute to global warming as well as acute respiratory infections, cancer, obstructive lung disease and more. Such pollution accounts for 1.5 million deaths a year, mostly women and children⁴³.

Businesses too are limited by lack of reliable electricity, making them less competitive and hindering economic growth. An underdeveloped infrastructure coupled with a heavy reliance on expensive oil-based power generation translates into an average effective tariff in Sub-Saharan Africa of USD 0.14 per kWh, compared to USD 0.04 in South Asia and USD 0.07 in East Asia. Access is also a problem: on average, it takes 137 days in Sub-Saharan Africa to obtain a connection to the grid, compared to 65 in South America or 103 in OECD countries⁴⁴. The power situation therefore constitutes a competitive disadvantage for Africa among emerging markets.

To make up for deficits in the power infrastructure, almost half of private firms in Sub-Saharan Africa maintain their own energy generation equipment, compared with 31.8% for all developing countries. For companies in regulated sectors, such as banking, there is even a legally binding requirement to have their own backup system. The most common power source for urban households and firms is diesel generators, the costs of which are even more prohibitive at USD 0.45 per kWh⁴⁵. That doesn't even include the macroeconomic costs of importing refined fuel.

As power outages in Hanoi, Mexico City or Caracas attest, many emerging markets share this challenge with Africa. In a recent global World Bank survey, managers in 109 countries (71 of which are low or middle income) said that lack of electricity is among the biggest constraints to their business. They estimated losses due to power outages at about 5.1% of annual sales⁴⁶. Rectifying the power deficit could boost annual economic growth by 1.9%.

Some of the leading emerging markets, though, have shown in recent years that with determination and favorable policy framework, dramatic progress can be achieved. For example, East Asia witnessed dramatic energy sector change in just a matter of years. Between 1990 and 2010, the number of people without electricity was reduced by a factor of eight. In China during this period, energy consumption grew 6.2% every year, from 27 quadrillion to 90 quadrillion Btu, while GDP grew at 13% CAGR

from USD 911 billion to 10.1 trillion⁴⁷. The lesson for Sub-Saharan Africa is that the right moves can rapidly modernize the energy sector.

This type of progress is becoming increasingly important for Africa as it moves into the next stages of development. According to the International Energy Agency (IEA), GDP-driving activities in countries that are at the extremes in development tend to be less energy-intensive. This holds true whether the economies are largely pre-industrial or highly advanced, involving activities such as farming and livestock on one end and professional services on the other.

However, in countries that are rapidly industrializing (such as Brazil), economic activities including construction and manufacturing are significantly more energy-intensive. For example, while 77% of GDP growth can be attributed to energy in Brazil, that number is only 11% in USA. Because many countries in Africa aspire to emulate the industrialization seen by Brazil, Malaysia or China, improving energy infrastructure will be crucial.

FOUR TRENDS POINTING TOWARDS GROWTH

African economies will need to step up the pace in developing their energy sources. The IEA projects that if the current situation continues, less than half of Sub-Saharan Africa will reach electricity access targets by 2030⁴⁸, the lowest for any world region. The continent's leading countries are now tackling this challenge. After examining a number of trends, Roland Berger expects the African energy sector to embark on a significant growth phase over the next 5 years and beyond.

New governance structures and frameworks

Historically, lack of governance or political will has prevented the expansion of energy supply and creation of energy infrastructure in the form of power plants, transmission lines and oil refineries. However, improved governance across the region promises more cooperation to boost energy supplies.

40] Africa's Infrastructure: A time for transformation **41]** African Development Bank **42]** World Bank, 2010 **43]** World Health Organization **44]** International Finance Corporation: Doing Business 2012 **45]** G8 Energy Ministers Meeting 2009 **46]** International Finance Corporation: Doing Business 2012 **47]** US Energy Information Administration (EIA) **48]** G8 Energy Ministers Meeting 2009, World Bank

F9 Nigeria, for example, is initiating reform in its energy industry as part of a cross-sector effort to privatize state-run companies that currently require large outlays of public capital. As part of this initiative, the country seeks to privatize 9 companies in the power, oil and gas sectors. As a result, power generation and distribution will be fully privatized, gas production will be partially privatized and power and gas transmission will continue to be state-owned and run. For a long time, many saw the state monopolist Power Holding Company of Nigeria (PHCN) as the key bottleneck. Liberalization now holds the key to transforming Nigerian energy, particularly as privatization comes with an entire set of reforms that will put the country's energy sector on the path to productivity.

These moves will allow private and international public players to invest expertise and capital, alleviating some of Nigeria's electricity starvation. Through the German-Nigerian Energy Partnership, the Nigerian government has agreed to increase exports of liquefied natural gas (LNG) to Germany in exchange for technical assistance and innovative solutions to providing reliable electricity in Nigeria. To this end, Siemens has set up a "Power Academy" in Lagos to address the critical human capacity gaps in the Nigerian and West African electricity markets.

In addition, countries such as Kenya and South Africa are increasingly supporting the development of renewable energy frameworks. In 2006, Kenya passed an Energy Act to boost adoption of renewable forms of energy, especially focusing on wind, hydropower and geothermal. Due to its position atop the geologically active Rift Valley, East Africa holds considerable potential for geothermal power. Iceland has shown how even high energy consumption can be met at low cost from this source of power.

Reforms in countries such as Ghana and Nigeria have also led to promising signs of investor interest. In October 2011, the US Export-Import Bank signed a USD 1.5 billion deal with the Nigerian government to invest in and modernize the electricity sector. In February 2012, the US followed up by sending an energy trade mission to Ghana, Mozambique, Nigeria and Tanzania to explore additional investment projects to boost the countries' abilities to generate electric power⁴⁹. In addition, General Electric plans to work with a group of Turkish investors to build a 10,000 MW power plant in Nigeria⁵⁰.

49] allAfrica.com: U.S. Energy Trade Mission to Visit Four Nations

F10 Finally, given the intensity of capital needed in energy infrastructure, models such as Public Private Partnerships (PPP) are gaining attention as opportunities for African countries to access both technical expertise and critical funds. To ensure success with PPPs, countries will need to give careful consideration to aligning public and private interests, as Roland Berger's experts have seen in numerous projects in both developing and industrialized countries.

Advances in technology

New technological developments are expanding the options that Sub-Saharan African countries can use to resolve their energy challenges. In terms of conventional energy, the improved efficiency of natural gas-based generation and other power-generating efficiency improvements make smaller scale power generation more cost effective. New production enhancement techniques such as hydraulic fracturing will expand potential for conventional energy exploration and production.

It is renewable energy technology, however, that can revolutionize the energy sector in Africa by lowering costs while providing reliable alternatives. Unlike conventional energy, the production costs of renewable technologies decrease over time. Additional innovation in renewable energy technologies such as wind and tidal power could reduce costs down to a fraction of current levels within five years.

This phenomenon makes renewable energy cost-competitive, getting rid of the need for government incentives. For example, large-scale solar PV is estimated to have a fully loaded cost of USD 0.21/kWh under the conditions present in Africa's main population belts. Compared with USD 0.45/kWh for diesel generation, renewable energy is already price competitive with substitutes⁵¹. These opportunity costs are a reality for African businesses, and are above what many European governments currently offer investors as feed-in tariffs for renewable energy. For solar and even more so for wind, Africa effectively already offers grid parity today. Investors and businesses there need not wait for legislation to create revenue incentives. With reliable low-cost energy from new hydropower or natural gas plants still at least a few years away in most places, it pays to take their energy future into their own hands.

50] Business Day

51] Fraunhofer Institut für Solare Energiesysteme, December 2010

F9

Roadmap for sector privatization

Power is a key sector for Nigeria with focused efforts by the government to closely align privatization and industry reform

COMMENTS

The Nigerian government realizes the huge need for reform in the power sector across the value chain and seeks to meet sector needs mainly through private investment

Therefore, the Nigerian government is encouraging establishment of independent power producers and private distribution

The government is prepared to offer financial guarantees because it estimates that the cost of underinvestment will be 10X the cost of contingent liabilities

Current pre-privatization status of the power sector

Post-privatization status of the power sector (by end of 2012)

POWER DISTRIBUTION



POWER TRANSMISSION



POWER PRODUCTION



GAS TRANSMISSION



GAS PRODUCTION



Government

Partially private

Fully private

F10

Challenges of the PPP model in Africa

Efficient allocation of risks is the basis for stable partnership assured by PPP contracts – a particularly acute challenge in Africa

PUBLIC SIDE

African Governments need to offer an attractive investment environment for international firms covering risks like

Political risks
Expropriation risks
Currency risks

At the same time, African governments need to protect themselves against the risks of

Private partner insolvency
Insufficient quality
Unforeseen delays
Lock-in effects
Force majeure

PRIVATE SIDE

Private investors need to guarantee sufficient funds and expertise for up-front investments and continuing operations, covering risks like

Private partner insolvency
Insufficient quality
Unforeseen delays

Additionally, private partners need to protect their substantial investment against

Political risks
Expropriation risks
Currency risks
Subcontractor insolvency
Force majeure

Ensure private interests are aligned with

→ the public interest across the lifetime of the PPP ←

In the same way that telecommunications technology gave many Africans mobile phones and bypassed the need for expensive fixed lines, renewable energies might allow much of Africa to leapfrog expensive and time-consuming transmission build-out. They also enable consumers to make their own energy decisions without waiting for large-scale electricity developments, such as power plants, that require coordination of major government and private entities. Consumers can skip the middlemen and decide for themselves whether they want to boost renewable energy consumption, through, for example, installing solar PV panels. With renewables, the energy sector is giving rise to retail business models. "Retail energy" empowers customers to become producers and can spawn an entire industry of sales and services around them.

Energy as a retail product also allows private companies to solve Sub-Saharan Africa's energy problems without government involvement. For example, UK-based Eight19 is devising new models to allow families to pay a monthly fee for a solar generator. As this fee is lower than what many Sub-Saharan African families pay for paraffin lamps, the company believes its model will catch on. In the coming months they plan to distribute 4,000 solar units in Kenya, Malawi and Zambia⁵².

Emergence of energy finance in Africa

Companies such as Eight19 that combine microfinance and renewable energies, particular photovoltaics, are representative of a wider trend. While financing has often been a key bottleneck to the realization of energy projects, today, new entrants and business models are emerging at the interface of energy and finance on the continent. Major infrastructure financiers are growing their footprint in Africa: large international players such as Macquarie, African funds like Africa Finance Corporation, multilateral agencies like the World Bank and African Development Bank, and even banks such as China's ICBC, which acquired 20% of South Africa's Standard Bank and set up joint facilities for project financing across Africa.

The Independent Power Producer (IPP) model, where investors finance the build-up and operation of energy generation plants and sell electricity via long-term contracts to one or a few large-scale users, has already begun to catalyze energy availability in Africa. Industry-specific solutions may also emerge. Banks across Africa, for instance, face the issue of unreliable power supply for their headquarters, branches and ATMs. By banding together,

banks can reach critical mass and become an attractive client for IPPs in many areas. Nigeria's Central Bank in 2010 piloted an IPP project for banks in Lagos State, aimed at bringing down banks' overhead costs. Finding and assessing solid counterparties for Power Purchase Agreements (PPA)⁵³ for long-term energy supply is a challenge that IPPs face in Africa, as anywhere else in the world. This issue is also being addressed, for instance by establishing entities such as the Nigeria Bulk Electricity Trading (NBET) Plc. The NBET will serve as central buyer, essentially with expected near-sovereign risk profile.

New oil and gas discoveries in Africa

F11

Although renewables could solve many of Africa's energy problems in the future, traditional energy sources also hold vast potential. Angola, Algeria, Libya and Nigeria have been among the world's foremost oil and gas producers for decades. New exploration there continues to identify new reserves. But the club of Africa's energy powers is also expanding. New oil and gas reserves have been found in up to 10 African countries including Ghana, Uganda and Equatorial Guinea, which can provide investors with new revenue streams and give Sub-Saharan Africans desperately needed supplies.

In Ghana, for example, the newly discovered fields are expected to yield five billion barrels by 2015, and further exploration is planned along the Volta basin and other areas. Significant offshore gas discoveries have been made in Tanzania and Mozambique, spurring exploration activity in broader East Africa, including Kenya, Ethiopia and Somalia. With these discoveries, the region could secure resources to meet domestic energy demand and gain export revenues.

Natural gas has indeed been a neglected piece of Africa's energy puzzle. Too far from consumers in Europe to build pipelines, much of the gas produced south of the Sahara was actually flared. With Liquefied Natural Gas (LNG) terminals rising up along the coasts of Africa and plans for highly efficient gas power plants for electricity generation taking shape, this important resource is no longer going to waste.

⁵² Economist: Starting from Scratch, January 24, 2012 ⁵³ Contract between buyer and seller of electricity

F11

Africa's most important reserves of fossil fuels

New discoveries in the Gulf of Guinea have added to Africa's oil & gas reserves, of which Nigeria and Libya hold the majority

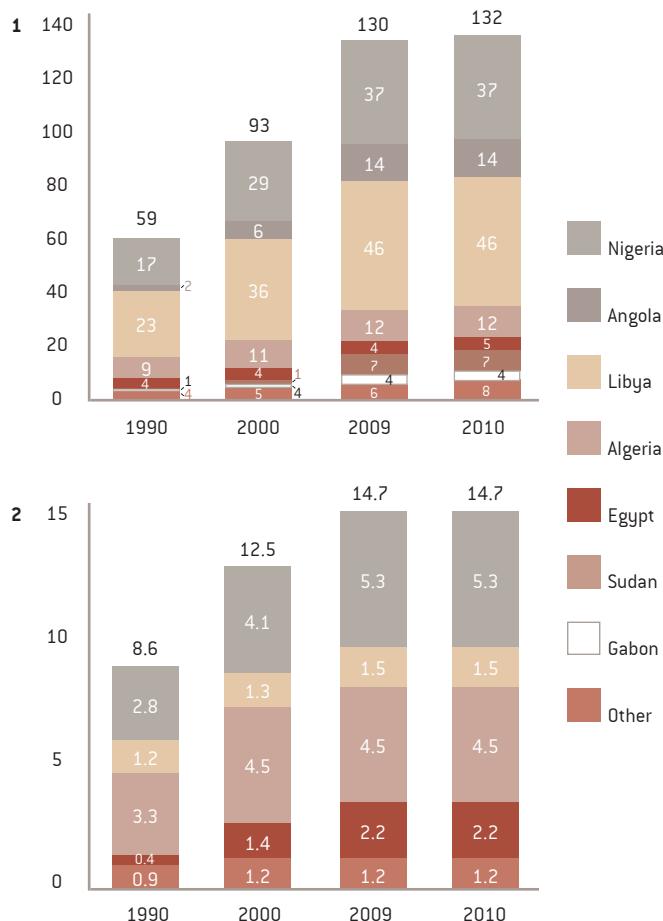
COMMENTS

New discoveries include Uganda (2006), offshore Ghana and Côte d'Ivoire (2007) as well as major gas fields off Mozambique and Tanzania (2010).

On average, Africa's known oil reserves will last another 36 years, known gas reserves for 70. Angola's will last only 20 years, and Libya and Nigeria lead with 76.7 and 42.4 years, respectively.

1 Reserves of Oil [thousand mn barrels],

2 Reserves of Natural Gas [trillion cubic meters]



WHY THIS TIME IS DIFFERENT

Dramatic change in Africa's energy situation may seem far-fetched when looking at many of today's challenges. However, past experience in Africa, the trends outlined above and the strong advances achieved by other emerging markets provide sound reasons for taking an optimistic outlook.

F12/13

While energy deprivation is particularly acute in Africa today, the situation has not always been as pronounced. Until the 1990s, for example, annual energy consumption in Sub-Saharan Africa was 11 million Btu per capita, greater than South Asia's 8.5 million Btu per capita. However, while energy infrastructure in Africa has remained largely stagnant over the last two decades, South Asia has advanced rapidly.

There are signs that the market is already beginning to take note of Africa's energy potential. International interest has been high in projects like Desertec⁵⁴, an initiative promoted by a consortium of large European corporations such as Siemens, E.ON and ABB. At a projected cost of about EUR 400 billion, it involves the construction of large-scale renewable generation in North Africa and the Middle East, connected to Europe via high voltage direct current transmission. Construction of a 500 MW plant, with the price tag of EUR 2 billion, is scheduled to begin in Morocco in 2012.

Countries like Kenya are already emerging as renewable energy champions in the region. Kenya is currently developing the largest wind farm in Africa (Lake Turkana Wind Power Project) – a 365 turbine, 300 MW facility, at a project cost of EUR 617 million. It is expected to add up to 17% to the national installed grid power and is the single largest private investment in Kenya's history. The first 50-90 MW is expected to begin production after 2013.

Elsewhere on the continent, other projects are also beginning to take shape. In Ethiopia, projects such as the Gibe III dam, providing 1.87 GW of energy, are under construction⁵⁵. The Grand Inga dam, although still in the planning stage in the Democratic Republic of Congo in cooperation with South Africa, has the potential to generate 39 GW of electricity, making it the world's largest generating facility. Connecting these vast sources of power to the grid can change the energy situation of an entire region overnight.

⁵⁴ <http://www.guardian.co.uk/environment/2011/nov/02/morocco-solar-farm-renewables>

⁵⁵ Contract between buyer and seller of electricity

With immense untapped resources of water power (96% of commercial hydropower is untapped), Africa has huge potential for low-cost and sustainable energy generation from this source. The complexities of planning, constructing and financing these massive power plants make them predestined to involve international partners.

Finally, there are signs of promise even at the grid level, with initiatives such as Nigeria's new transmission and distribution companies and the West Africa Power Pool that aims at a stronger integrated electricity market across the Economic Community of West African States.

F13

Efficacy of rural electrification policies
[% of annual growth in rural connections]

Policy focus matters: African governments with specific rural electrification policies are advancing at almost 4 times the pace of their peers

Policy

9.4%

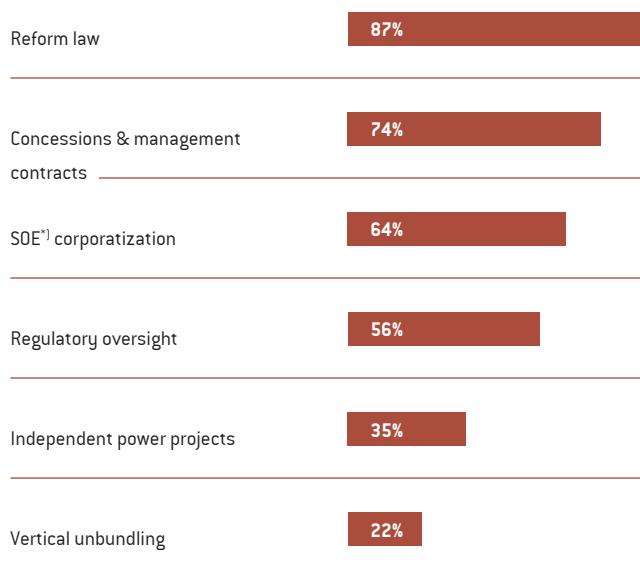


F12

Current SSA policy environment

Institutional reforms to improve the power sector and foster private investment are spreading across Africa

Reforms realized in power sector [% of countries]



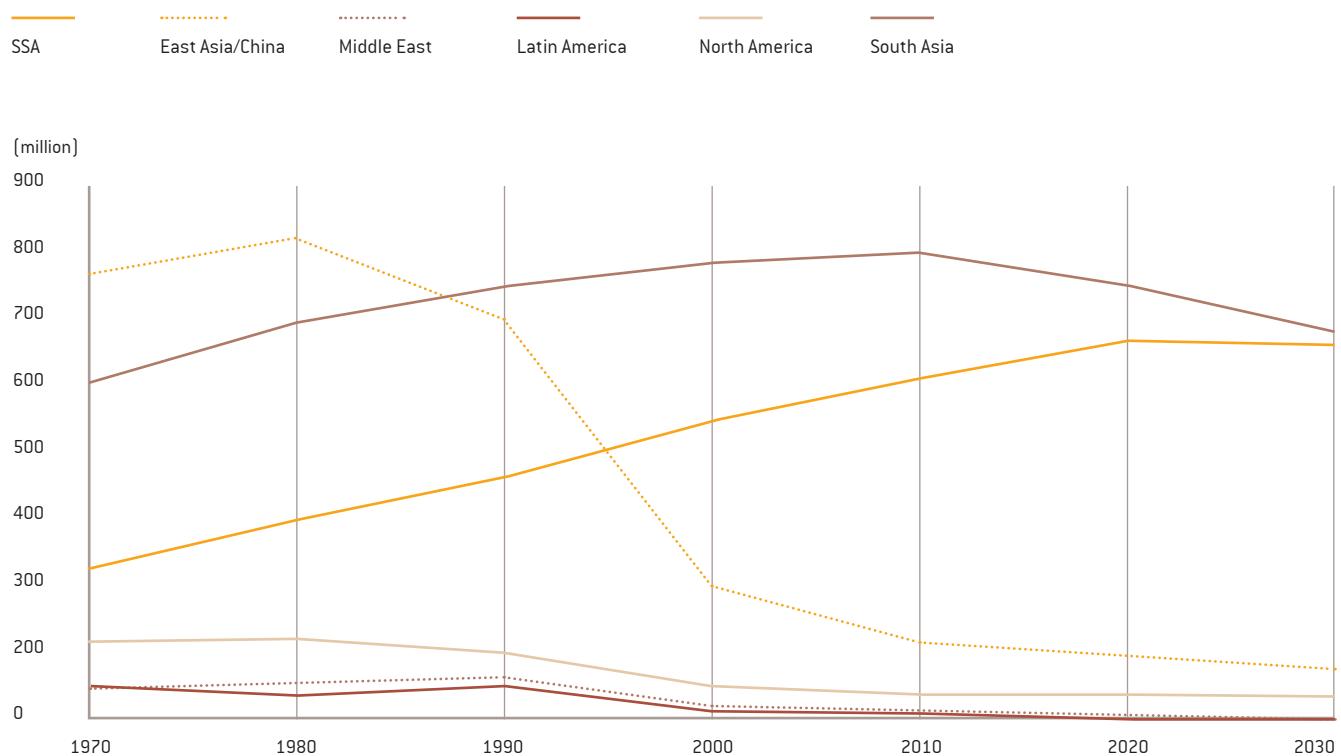
* State-owned enterprise

Rapid progress is possible: Within 20 years, despite strong population growth, East Asia was able to reduce the number of people without electricity by 500 million.

F14

Number of people (actual and projected) without electricity for the period 1970-2030, by region under current policies

Source: The World Bank



OUTLOOK

Roland Berger believes that the time has come for governments and industries to recognize the importance of the energy sector and work to modernize it.

African leaders and governments must realize the urgency of addressing energy needs to meet their own development goals. Government support is especially crucial in the energy industry, as the quality of regulation has a direct impact on how well the sector performs. Streamlining approval processes, ensuring wiring safety, providing transparency on costs and setting performance requirements are just some of the steps that Sub-Saharan African governments must take to bring the industry up to par with other nations⁵⁶.

If policy, regulatory and governance issues are addressed and legal safeguards put in place, private investment flows will augment public funding. International players from development agencies to investors are waiting to play a major role in reforming Africa's energy sector. Indeed, aid agencies can achieve many of their goals, ranging from improving education and healthcare to promoting higher standards of living, through solving energy problems. Energy can truly empower Africa and the lives of its people.

Investors can reap major returns while helping Africa meet its energy needs by putting money into both conventional and renewable energies. Infrastructure improvements, oil and gas exploration and the use of these resources to generate electricity in Africa can offer unprecedented rewards and solve the continent's immediate energy needs. Meanwhile investments in technologies translate into more accessible and affordable energy in Africa.

Sub-Saharan Africa is at a stage where reforming the energy sector is crucial to enable further development. Promising signs of progress are evident throughout Africa, opening up a vast new field of opportunities for engineering and construction firms, equipment manufacturers, financiers and utilities. Through combined efforts of all major players, energy poverty will become a part of Sub-Saharan Africa's past, allowing countries in the region to reach their full growth potential.

FINANCIAL SERVICES

DRAMATIC CHANGES AHEAD: VAST UNMET NEEDS MEET A MATURING BANK SECTOR

A visit to one of the small towns nestled in the foothills of Mount Kilimanjaro or villages skirting Accra reveals the reality of banking across Sub-Saharan Africa. Even with a car, the closest bank branches are hours away. Those bank branches are often packed full of people waiting in lines as harried sales representatives rush around. There is, without question, a huge unmet need for financial services across the region. The reality is that many existing institutions on the continent are currently ill equipped to deal with this need.

As Sub-Saharan Africa continues to grow, African banks must also evolve to support progress. At the most basic level, financial institutions in the region serve as the backbone of economic development by allowing people to save money and channeling those deposits towards productive growth with business loans. Insurers help farmers, business owners and others protect themselves against financial disaster in the face of risk. These roles are not being filled by microfinance institutions or aid organizations. Anyone sitting in an office building in Europe cannot image life without these most basic financial services, but that is the reality for 400 million Africans across the continent. And every year, almost 20 million 18-year-olds join their ranks.

The large number of unbanked and uninsured individuals illustrates just how vastly underserved clients are and how many product categories remain untapped. At a time when growth fundamentals across developed economies remain weak and financial institutions continue to deleverage, writing off massive debt and recapitalizing, Africa's financial sector presents a huge opportunity. Roland Berger predicts that the sector will grow above 15% annually to reach USD will reach USD 390 billion in annual revenues by 2020. And because many of Africa's leading banks are publicly listed, international bankers and investors can take advantage of these dynamics.

In a setting of high growth, we predict dramatic changes ahead. Efficiency and financial inclusion will be the two major topics reshaping the continent's financial institutions over the next decade. Regarding efficiency, the continent's financial sector must become leaner, laying the foundation for future growth by containing costs and boosting revenue. Financial inclusion means banks across Africa must figure out how to meet the needs of the unbanked by proving appropriate products and services through

new distribution channels. If Africa's banks succeed in these two areas, they will be better capable of boosting Africa's growth.

These changes are already occurring as the continent's financial institutions mature. Out of 760 commercial banks and discount houses across the continent, of which 605 are in Sub-Saharan Africa, 162 have grown their balance sheet to exceed USD 1 billion, including 99 in Sub-Saharan Africa. Roland Berger estimates the size of the African banking sector at USD 1,950 billion⁵⁷, with almost three quarters from Sub-Saharan Africa. The continent's leading economy, South Africa, accounts for the lion's share with almost 57% of total assets and is home to the continent's leading financial services groups. Egypt, Tunisia, Algeria and Nigeria also have banks among the top ten.

F15 The global financial crisis did little to temper this growth. While financial institutions in Europe and North America are still plagued with problems, African banks are getting back on track. Nigeria is the exception as it fell victim to an internal blend of stock market speculation, margin lending and lax governance. After Nigerian losses wiped roughly USD 13 billion off of continental profits in 2009, Roland Berger estimates that African banks closed 2010 with operating profit margins at 28.3%, which is almost back at pre-crisis levels of between 30% and 39%. After a return to calmer waters, bank revenues should grow at 3.3 times the pace of real GDP. In other words: within five years, many of Africa's banking markets will increase their revenue by a factor of 2.5 to 3.

THE TIME FOR BUSINESS AS USUAL IS RUNNING OUT

F16 However, there's no room for complacency. The rising tide of strong sector growth will no longer lift all boats. During the past decade, African financial services professionals were able to drive growth by picking the low hanging fruit in conventional banking. They tapped high-end corporate segments as well as urban affluent and middle class private clients. Helped by overall economic booms, they raced to open banks in major cities. Not only oil exporters such as Angola and Nigeria saw their financial sectors surge, but also others such as Kenya, where total assets at banks grew by a factor of 2.8 between 2006 and 2010⁵⁸. By 2010, Kenyan banks were seeing profitability levels of between 21% and 38% of return on equity (RoE), levels that banks in Europe, the U.S. or Japan could only dream of.

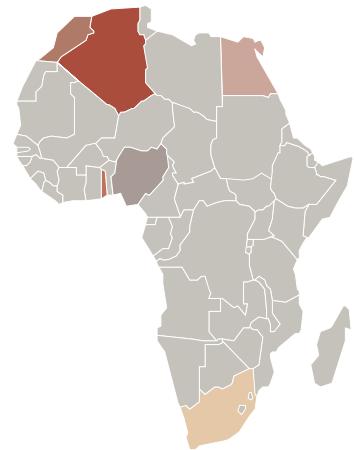
⁵⁷ Bankscope data and RB estimates

⁵⁸ Bankscope, Roland Berger analysis

F15

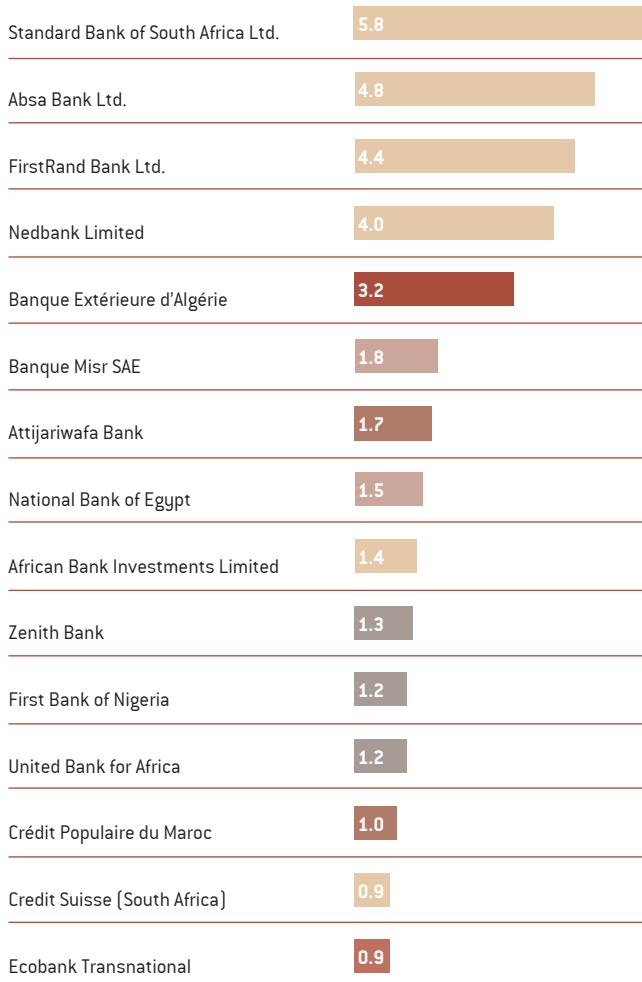
An overview of the top 15 banks in SSA markets, based on operating income, 2010

Location of Africa's largest banks



Source: Company annual reports, Bloomberg, Roland Berger

Operating income (2010), USD bn



Now, though, the low-hanging fruit will soon be gone. The time for business as usual is now running out. As the example of other emerging countries shows, when economies develop and competitive pressure rises, the overall number of banks falls. Larger banks typically swallow smaller entities and more agile ones leave the slow or complacent behind. Banks that can ultimately achieve higher market capitalization will be able to drive market consolidation rather than fall victim to it. Quality of execution, scale and differentiated value propositions for the most relevant target segments will start to separate the wheat from the chaff in Africa's financial markets.

That means that in Africa, banks can no longer succeed by focusing on the already crowded high-end commercial and retail banking segments. They will need to start offering a bigger array of financial products and tapping new client groups.

F17 Most importantly, African banks must start to reap the benefits from economies of scale. Because financial sector growth in Africa has so far been haphazard, banks have been getting more

complex as they grow rather than more efficient. There has been little relationship between the size of bank assets and returns. When banks achieve efficiency of scale, return on assets (RoA) should increase as the bank grows. Often, in African banking, banks have not been able to fully exploit economies of scale.

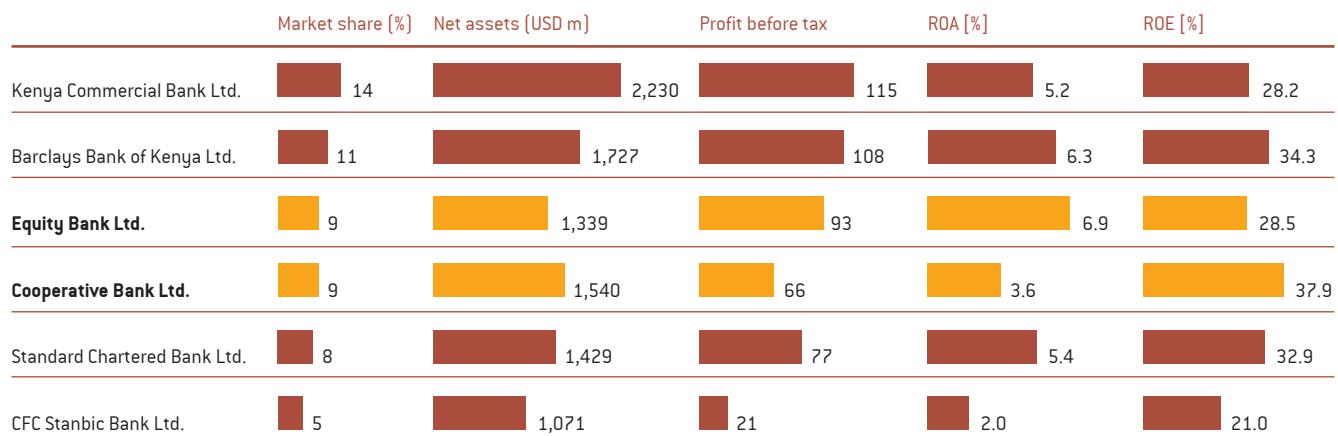
Our analysis of Sub-Saharan's second largest banking market, Nigeria, suggests that the country is still at an early stage in the evolution of the efficiency-scale frontier in banking: its performance curve is indistinct, almost flat across all sizes of banks whether measured by assets or branches. In Nigeria, which in 2010 captured 11% or USD 10.1 billion of the region's banking revenues, cost discipline and improving operations have often taken a backseat to rapid, sometimes undirected expansion of the branch network. These large-scale operations also often lack the proper tools to create transparency, such as management information systems (MIS) and properly priced products.

With many African banks too narrowly focused on crowded segments and failing to achieve efficiency of scale, openings are

F16

Top Kenyan bank rankings, FY 2010

Two institutions focused on mass market, low-income clients are profitability leaders in Kenya: Equity Bank and Cooperative Bank



being created for new players with pioneering management teams. However, those managers who aim for size and undertake major M&A activity without readying their house to deal with the higher complexity of the larger entity are playing a high-stakes game with the odds against them.

Both local and international groups are already getting ahead of the competition. In Nigeria, Guaranty Trust Bank (GT Bank) has grown assets to capture the number four spot in the market, while improving its back-end operations and creating a better banking experience for clients in branches. GT Bank closed the third quarter of 2011 with a cost to income ratio (CIR) of 47%, well ahead of the average of 68% of its nine major peers. Even without a valuation premium, those numbers would give GT Bank a market capitalization that is almost 66% higher than that of an average peer, putting it in the driver's seat for sector consolidation.

IMPROVING EFFICIENCY IN AFRICA: LEAN GROWTH

To stay ahead of the competition, bankers in Africa must prepare

their institutions for the next phase of growth and market consolidation. The potential rewards are huge with the industry expected to add USD 300 billion in revenue during the next decade. In Africa's fast growing markets, a single-minded focus on cost-cutting and rigid optimization would be dangerous.

Instead management must find a way to achieve lean growth, containing costs while boosting revenue from existing and new clients. In order to bring down CIR from 68% today to a more competitive rate of 50% over the next three years, banks would need to edge out a revenue-cost-growth differential of 12% per year. In practical terms, revenue growth will need to keep pace with the overall industry, which should expand 20% to 25% per year. Costs, meanwhile will need to be limited at around inflation levels of 10%⁵⁹.

F18

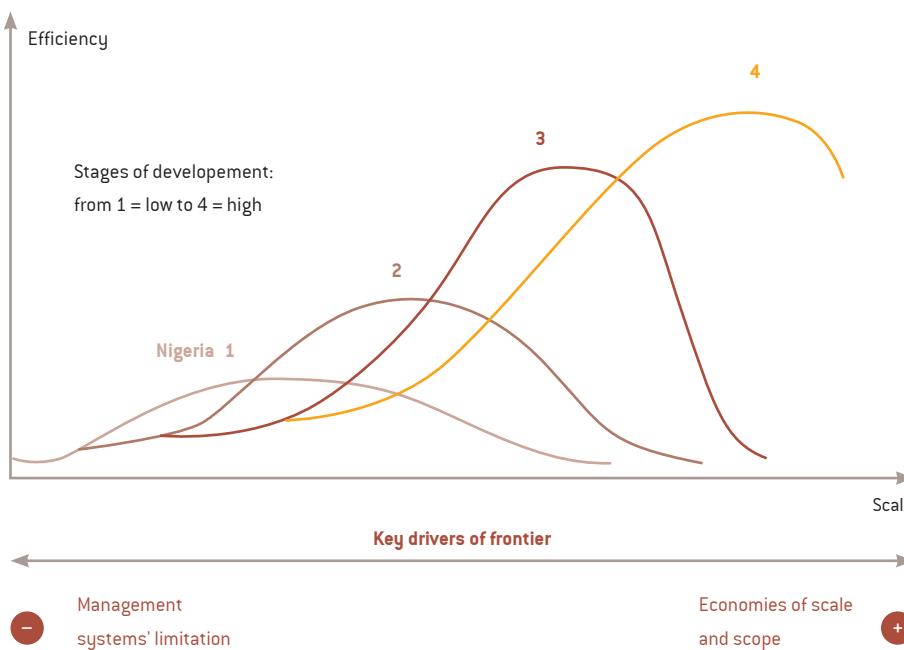
To lay the groundwork for future expansion, banks will have to start by using technology and improving processes to reduce

59] Roland Berger forecasts

F17

Efficiency-scale frontier for banking markets

In general, market evolution and improving management systems enhance benefits from scale and drive success of leading banks



COMMENTS

Scale imparts economies of scale and scope that allow larger banks to be more efficient

However, increased size is also associated with complexity and loss of management control, resulting in reduced efficiency

These factors counter each other, producing an inverted U-shaped efficiency-scale frontier

As banks improve management systems and grow in sophistication, they extend this frontier to reach new levels of performance

Source: Roland Berger

F18

Outlines of a lean growth strategy,
target cost-income ratio of max. 50% and a target RoE of >20%
"Lean growth" program: realizing superior performance
by boosting revenue in key growth areas, while
containing costs



BOOST REVENUES

- 1 Retail mass market
- 2 Small businesses
- 3 Infrastructure
- 4 Other sector opportunities



CONTAIN COST/EFFICIENCY IMPROVEMENT LEVERS

- 1 Resources focused on sales/service
- 2 Optimized resource allocation
- 3 Simplify, automate, centralize
- 4 Reduced complexity
- 5 Financial & performance mgt.

60% front office
25% back office
15% central

operating expenses. Lean banking models, involving differentiated branch concepts and centralizing back-office processes, put financial institutions in a position for sustained growth.

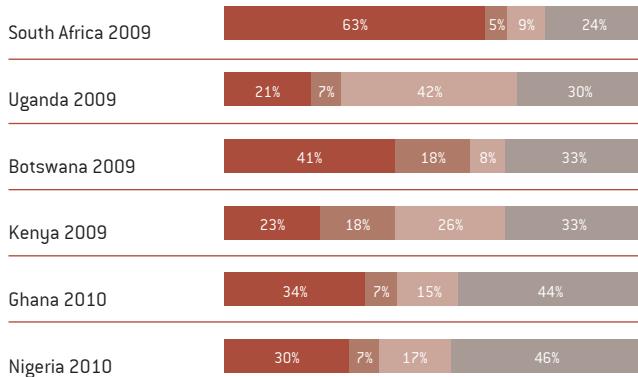
Branches often operate as though they were stand-alone banks, with the entire scope of front and back office tasks in each outlet. Opened in a rush, without adapting to the markets where they operate, branches run on around USD 700,000 to 1 million in annual operating costs. Accounting for more than 60% of a bank's expenses, such high branch cost bases make it tough to break even with each of them. This is more than 60% of a bank's expenses and makes it tough for the branches to break even. Furthermore, haphazard growth has led to banking procedures such as credit approvals for new account openings being too complicated, leaving clients frustrated with their experience.

Centralizing back office tasks will bring down operating costs across branches and allow sales to take center stage. Moving low-value clients to expanded easy-to-use low-cost sales and service channels will further free up sales staff to better address client

F19

Potential of the unbanked market in major African countries

Across Africa, we are looking at a still vastly untapped market of some 400 m adults that will decide the future of African banking



Financially excluded

Informal: Private savings groups, unregulated money collectors and lenders

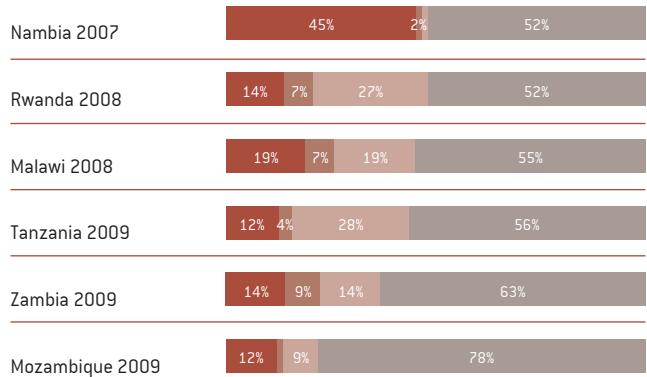
Formal other: Regulated microfinance, insurance, mobile payments

needs and enhance profitability even of low-income clients. Improved sourcing policies and processes and tighter cost control and expense policies also play a key role in bringing down major cost drivers.

Improved management plays a key role in executing these strategies. Boosting bank profits depends on aligning interests of banks, their customers and employees. Management must thoroughly understand their target clientele and how their needs translate into relevant value propositions. Then they need to transmit these insights to employees through carefully designed performance targets. Finally, they should empower sales staff with efficiently designed processes and technology so they can be effective in creating value from client interactions.

DON'T BE LEFT BEHIND

Established players are already feeling the pressure from international and regional market entrants that are implementing best practice lean banking standards from the start. Smaller



Source: Roland Berger; Finscope Ghana 2010

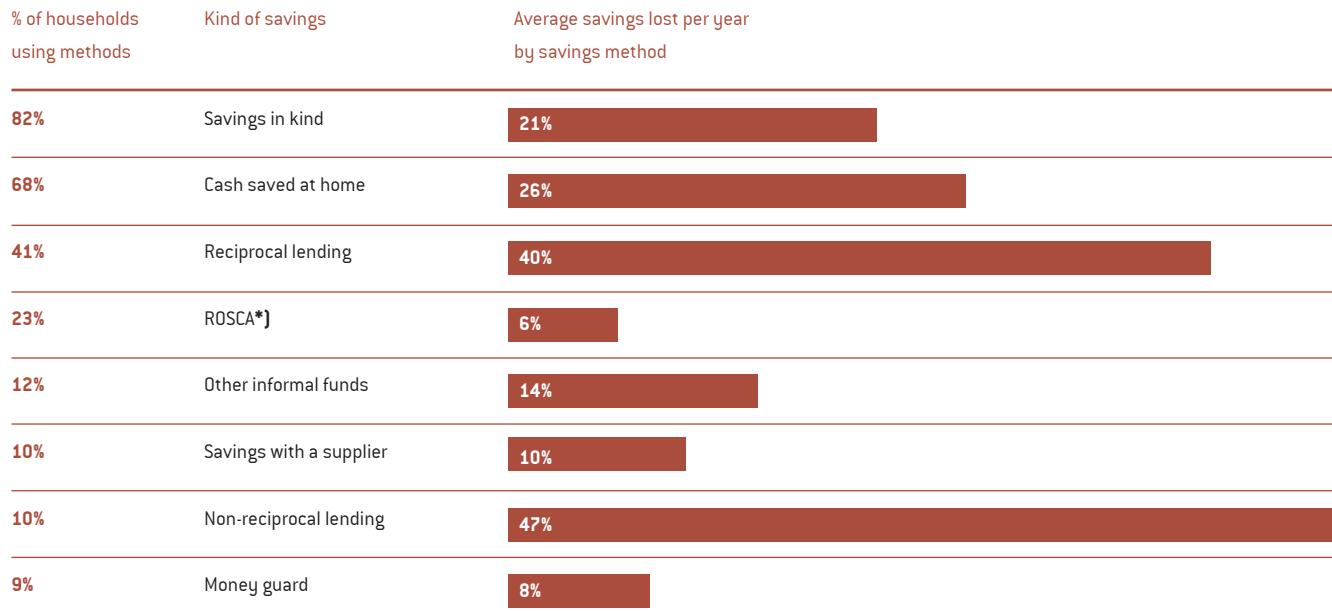
operators that streamline their processes before expanding will also pose a threat. NBS Bank, one of Malawi's top 3 retail banks, has already moved all back-office tasks to a central processing center. This move allowed branch staff to be reassigned to focus on advising clients better and boosting sales. Zemen Bank in Ethiopia features a modern IT base and strong focus on deploying electronic channels and banking kiosks. It closed 2011 prepared for strong growth with a CIR of 28% and ROA of 6.3%.

The potential impact of lean growth goes beyond the financial sector in Sub-Saharan Africa and into the real economy. Efficiency gains enable banks to tap the market potential of segments that before seemed unattainable. They will be able meet the needs of the mass market while boosting market share. Banks become more resilient to crises as higher profit margins leave more room to counter credit losses and allow banks to shore up their risk capital. A collective improvement of 5% in CIRs translates into USD 3 billion additional annual profit for the banking sector, which in turn could finance an extra USD 24 billion in loans per year. That is the equivalent of 80% of Africa's infrastructure financing gap.

F20

Type of household savings and amount lost

Alternative solutions that Africans use when banks do not serve them come at a real cost that makes it harder to emerge from poverty



*] Rotating Credit And Savings Association

REACHING THE MASS MARKET

F19

Many bankers in Africa find it hard to imagine how the more than 300 million adults in Africa⁶⁰ making less than USD 2 a day can put any money aside into a savings account. The reality is that low-income Africans already save and desperately need a safe and convenient way to store and access their money to help smooth often volatile income flows. Income from agriculture, small-scale trading or food processing can be erratic and small, depending largely on external factors like weather. On the other hand, expenses like school fees, medical emergencies, weddings or funerals require large lump sums at unpredictable times.

Yet some 80% of adults in Sub-Saharan Africa do not have bank accounts. And many who do use services only sporadically, such as receiving remittances from family members abroad or paying bills. Often accounts go dormant after clients had initially signed up for a promotional offer and found the bank's products too expensive or inconvenient.

—
60) Euromonitor and World Bank data

F20 Instead, many populations find alternatives for their savings. They buy goods that they believe to have a stable value, such gold, goats or cows. They also create their own lending pools, bypassing institutions all together to lend money to friends and family so they don't have to stuff savings under a bed. And they pay money collectors to come and pick up their savings. The risks are high and losses are huge, amounting to up to 44% a year. Without cheap, reliable, accessible accounts, however, many low-income rural populations in Africa have few alternatives.

This need for formal savings services creates huge business opportunities for commercial banks in Africa. Roland Berger estimates that the potential for annual savings mobilization in Sub-Saharan Africa from clients earning less than USD 10 per day is USD 60 billion per year. Commercial bank loans are also necessary and can be competitive in an environment where local loan sharks commonly charge 20% interest per week, while microfinance banks offer rates of between 3% and 5% a month.

Challenges in reaching the mass market

While the benefits are clear, financial institutions must still find the way to bridge the gaps between themselves and clients. These gaps range from actual physical distances to cultural and administrative ones.

Geographical gaps refer to the large physical distances that need to be bridged to bring together institutions and clients. Alternative electronic channels can play an important role in overcoming this gap. Fast-moving consumer goods from multinationals Nestlé, Unilever and Procter & Gamble and emerging market giants like Indonesia's Indomie Noodles already reach remote African villages. Mobile technology has proven repeatedly that it can do the same for banks⁶¹.

Administrative gaps refer to regulation and policies that are implemented by the financial institutions or demanded by public authorities. Product features like minimum balances or governmental "know your customer" (KYC) regulation create hurdles that keep the majority of the population from financial products and services. Very few Africans have utility bills in their name to confirm their address, and bringing two passport photos for opening an account is also not a very realistic demand for anyone outside of urban centers.

Cultural gaps come from the different realities that the low-income population and those running commercial banks encounter in their daily life. Clients from the base of the income pyramid often feel unwelcome or harassed in conventional bank branches.

Bank marketing portrays a world that feels not like something to aspire to, but impossible to reach. An understanding of business planning, income situation and personal needs and desires is the basis for a trust-based banking relationship. Products tailored to meet the distinct needs of low-income households or employing banking agents that come from the low-income population are successful examples for finding a common cultural ground.

Technology, along with a better understanding of the needs of these low-income groups, will help commercial banks overcome these gaps. Mobile phones, which are as twice as widespread as bank accounts, enable banks to provide financial services without expensive branch networks. They can help drive a profitable expansion into the mass market through distribution concepts such as mini-branches and agent networks, or banking per cell phone⁶².

So far, however, it is mobile network operators and not banks that are leading the way. The success of M-Pesa, the mobile payments service of Kenya's leading mobile operator Safaricom has raised much interest and attempts to emulate it⁶³. With more than 15 million clients and an estimated annual transaction volume exceeding USD 6.5 billion⁶⁴, M-Pesa provides another hint at the immense potential that the mass market in African finance holds.

Commercial banks actually have the most to gain from deploying easy-to-use mobile access to bank accounts⁶⁵. For a large part of their existing client base they already face the need to structurally enhance or even achieve profitability by lowering cost-to-serve and increasing client activity. When used as an enabler for new

61 For more details, see the study published by Roland Berger and International Finance Corporation: "Delivering Financial Services in Africa", June 2011, http://www.rolandberger.com/media/press/releases/511-press-archive2011_sc_content/Banking_in_Sub-Saharan_Africa.html

62 Roland Berger's experts have looked into the success factors of these models and why many don't live up to their promise. They will share these insights in an upcoming "think: act" publication in Q2/2012

63 & 64 Roland Berger estimates based on Safaricom's September 2011 half-year results **65** This specifically precludes the Java App or WAP solutions; difficult to install and incompatible with simple phones, they have failed to reach any sizeable number of clients

branchless banking models, they can drive profitable expansion into the mass market where the strategic future of Africa's leading banks will be lost or won.

Mass market banking success stories

African commercial banks that already focus strongly on the mass market show how small customers can mean big business. These banks have managed to experience financial success and shake up their home markets.

Capitec Bank of South Africa was forged out of more than 300 former microlending businesses. Merely four years after its inception in 1998, it was listed on the Johannesburg Stock Exchange. It has since become a fully fledged retail bank with more than 500 branches, total assets exceeding USD 1.2 billion and return on equity (RoE) of 32% in 2010. Between 2007 and 2010, its active client base grew from 851,000 to more than 2.1 million, with a market share of more than 10% in South Africa.

Having grown to occupy the number three and four spots in Kenya,

F21 Equity Bank Ltd. and Cooperative Bank have both proven how lucrative the low-income market can be. Cooperative Bank led the market with RoE at 37.9% in 2010, while Equity Bank Ltd. was most successful in driving profit from its asset base at RoA of 6.9%. Cooperative Bank has its own clients and lends to the small cooperative banks that are its majority shareholders, while Equity Bank has only direct clients. Despite these differences, both are outperforming the more conventional commercial banks of local origin and subsidiaries of international players like Standard Bank and Barclays.

With a commitment to keeping cost-to-serve as low as possible and banking simple, these three banks share a dedication to the mass market of low-income retail clients and small business in Africa. They have an integrated savings and loans approach, lending principally to the same low-income and small business clientele that is the main source of their deposits. They rely on previous deposit and withdrawal behavior to determine client creditworthiness and the size of the loan. As a result of their focus on these underserved and least interest rate-sensitive segments, they benefit from wide margins in refinancing as well as in lending.

Springing from the ashes of a small building society, Equity Bank's focus on mass market retail has turned it into a leading East African bank and a profit leader

F21

Key performance indicators of Equity Bank

+106% Increase in client/staff ratio since 2000

60% Share of all bank accounts in Kenya

+53% CAGR of client growth 2000-2011

43% Balance sheet growth 2010-2011

28.5% Return on equity 2010

13.8% Net margin 2010

3.1% NPLs/gross loans 2011

PORTRAIT

MALLAM SANUSI LAMIDO SANUSI THE FACE OF FINANCIAL SECTOR REFORM IN AFRICA

When The Banker names the head of an African central bank as Central Bank Governor of the Year for Africa and the world, and TIME magazine ranks him among the world's 100 most influential people in 2011, they may be on to something.

These are just a few of the accolades earned by Nigeria's Central Bank (CBN) Governor Mallam Sanusi Lamido Sanusi. Appointed in 2009 during Nigeria's financial crisis, Sanusi has been at the forefront of efforts to clean up the country's banking sector.

Born in 1961, the grandson of the Emir of Kano had a successful career in banking for nearly 25 years, with responsibility for risk management at two of Nigeria's largest institutions. He was plucked from his position as CEO at First Bank to head the CBN. His understanding of banking, emphasis on enhancing the risk management culture at Nigerian banks and willingness to make a change made him the right man in the right place at the right time.

Once appointed, Sanusi immediately conducted a stress test of the country's banks and took over nine failing institutions. At a time when the industry was in dire need of reform, he took tough action, firing eight of the most powerful and corrupt bank CEOs and publishing a list of reluctant big bank debtors. The outspoken governor has also stood up to international agencies, rejecting the IMF's advice to devalue the naira, the local currency. With the Asset Management Company of Nigeria (AMCON), Sanusi and the CBN found a "bad bank" solution that acquired debts with a nominal value of more than USD 18 billion to clean up bank balance sheets. AMCON's 200 employees are now working to restructure these assets to limit the financial, economic and social impact of the crisis.

Indeed, Nigerian banking today is emerging from the crisis better governed, more transparent and more focused on addressing sustainable market opportunities rather than chasing quick speculative profits. Equity analysts highlight the strong fundamentals and attractive valuations of leading Nigerian banks.

Under Governor Sanusi's watch, the Central Bank has encouraged banks to lend to small businesses to drive credit to the real



economy. It abolished the universal banking model to put up a higher wall between commercial banking and riskier activities. Sanusi wants to improve access to finance so that low income and rural Nigerians can open bank accounts and take out loans. With the advice of Roland Berger, the CBN drew up a "National Strategy for Financial Inclusion", which is now being rolled out with support from the Banker's Committee. The objective is to get formal financial services to 70% of Nigerians by 2020, up from the current level of 36%.

Financial inclusion is just one of the topics that Governor Sanusi has embraced and is advancing because of its importance to the country's economic and social development. Beyond the conventional responsibilities of a central bank, under his stewardship the CBN is also driving issues such as cashless payments. Other items on the agenda include promoting agriculture, SMEs and shared services.

While probably facing the most testing circumstances among his peers, Governor Sanusi is representative of a wider set of central bankers across Africa who have turned their institutions into guarantors of stability, promoters of innovation and agents of change. Africa's central banks are living up to the challenge of paving the way for sustained growth.

ROLE OF GOVERNMENT ORGANIZATIONS IN ENABLING FINANCIAL INCLUSION

Financial inclusion has been on the agenda of development organizations and governments for decades. Bringing money from the informal sector into the banking system boosts the availability of credit, brings down lending costs and enables investment projects from small business expansion to major infrastructure developments. Regulators and policy makers can catalyze access to finance by providing an enabling framework. When supportive regulation is in place, things often start to move surprisingly fast

INSTITUTIONS

Banking supervisors historically target traditional financial institutions to keep the sector stable, by subjecting them to an array of standards for reporting, operations, branch security, internal processes, staff qualifications and minimum requirements for capital ratios or risk management. To ensure continued future stability, they must hold new types of institutions entering traditional banking to the same standards as banks. From large-scale microfinance organizations that have grown from small grassroots NGOs to mobile network operators that offer payments and savings services, these new financial services providers must be subject to the same regulation to avoid the erosion of client trust in the financial system, giving the unbanked 80% of the population more access to new models.

CLIENTS

Because client requirements were designed for developed countries, they don't suit the majority of the Sub-Saharan African population. They often form a major roadblock to faster implementation of mobile and agent banking models. Many low-income, rural populations don't have official ID or physical confirmation of a residential address needed to fulfill "know your customer" and anti-money laundering regulations. Regulators must lower this bar to enable more Africans to take advantage of innovative new banking models and access basic financial services. African regulators can look to other emerging markets like Mexico, where pragmatic solutions that don't compromise the security of the financial system or favor criminal organizations have been successfully applied.

as attested by Kenya's explosive growth of mobile payments or Brazil's agent banking that serves more than 10 million even in remote municipalities deep in the Amazon jungle.

During our work for institutions like the Central Bank of Nigeria, we analyzed the regulatory hurdles that hinder increased financial inclusion. Looking at the reality of people across the continent, we saw how misguided regulation⁶⁶ and policies⁶⁷ often have the

unintended effect of preventing financial institutions from reaching unbanked populations. Roland Berger has identified five core areas regulatory institutions can target to remove these hurdles:

PRODUCTS AND SERVICES

Central banks in Africa remain too narrowly focused on loan products at the cost of ignoring modern developments. Existing banking regulations give attention to details like interest rates, maturity or collateral requirements. Policies spur loans among defined groups such as small business and farmers usually provided by microfinance institutions. Central banks must, however, turn their attention to new products and services. By using electronic or mobile payments services for governmental payments such as government salaries, social payments, or any other form of government-to-people (G2P) payments, they give the providers of payments services a base load of transactions to jump-start large-scale offerings. This proved to be the case in Brazil, where government transfers to households by Caixa Economica Federal supported the build up of a 23,000 strong "Caixa Aqui" agent network. African government payments can give their financial institutions a similar jump start.

PARTNERSHIPS

Successful examples of agent and mobile banking in Africa are often based on cooperation between institutions from different industries. Partnerships between mobile network operators and financial institutions may provide access to bank accounts through cell phones. Existing retail networks like gas stations, post offices or retail stores can be used as mini-branches for financial institutions or payment providers. However, in many countries throughout Africa, regulation prohibiting partnerships limits the flexibility of banks to offer such proven solutions. In Ghana or Malawi, for example, mobile network operators and financial institutions are not allowed to create exclusive partnerships, not even for an initial period. While this is intended to enhance interoperability, it effectively keeps banks from investing in these new channels to avoid free-riding by their peers.

CHANNELS

Innovative agent and mobile banking channels unlink the offering of financial services from the characteristics of the institution, which often means that their product offerings outrun existing regulation and policy. Regulations regarding the legal status of banking agents, the usage of mobile wallets and virtual money, or the accessibility of products and services through mobile phones are often missing. And where they already do exist, they often remain too vague. Regulatory bodies must catch up by specifically focusing on alternative distribution channels. They need to create an environment that allows innovation and competition, while providing a reliable legal framework and keeping client funds secure.

66] We define "regulation" as all legislative laws, guidelines and rules that allow or forbid a certain action or offering

67] We define "policy" in this context as all action by stakeholders that sets incentives or disincentives for clients or retail institutions to increase access to and usage of financial products and services

MICROINSURANCE

For low-income Africans, devastating risks lurk around every corner. Bad weather can wipe out a harvest, driving a farmer into poverty. A death means family members have to pay off debts and hold an expensive funeral. Because of these realities, the market potential for microinsurance is huge – Roland Berger estimates



▲
Accra, Ghana: Fantasy coffins in the workshop of Eric Adjetey Anang, grandson of Seth Kane Kwei, who invented the famous design coffins in the 1950s. They are carved into shapes that represent something important and relevant to the deceased, such as fish, airplanes, drinks, shoes, etc. Funerals and celebrations honoring the deceased are expensive affairs in Ghana and elsewhere in Africa. Funeral insurance is therefore a product in high demand.

CREDIT DEFAULT LIFE INSURANCE

This most common microinsurance reimburses banks or microfinance institutions in the case of loan default due to the death of clients. While credit default insurance is presented as a tool for families to mitigate the risk of having to pay back the loans of deceased family members, in the absence of legal frameworks to enforce payback by relatives of a creditor and poor collection mechanisms by banks, it primarily covers the loan default risk for financial institutions. Credit default life insurance is the natural link between insurers and banks looking to address unbanked and mass market clients. It can spearhead broader collaboration and sharing of distribution channels into a model of what Roland Berger's experts describe as "micro-bank assurance".

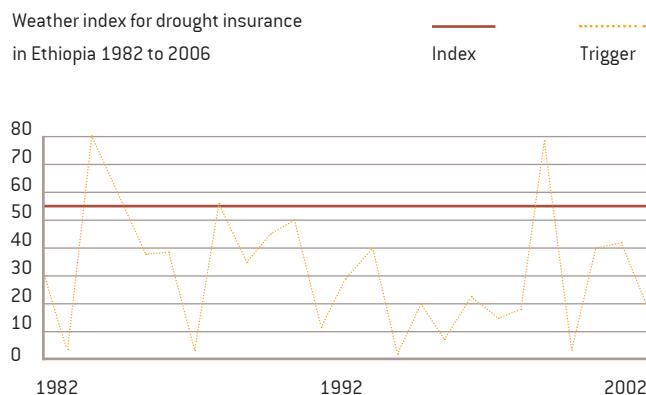
PERSONAL LIFE INSURANCE

Acceptance of speaking about death or even attaching it to a payment varies widely among African countries. In regions where funerals are significant or costly, informal life insurance schemes such as funeral societies have a long history. We have not observed a large role of stand-alone personal life insurance in the low-income segment, but rather as an add-on to credit life default insurance.

potential insurance premiums of some USD 7.3 billion just from those Africans earning less than USD 2 per day. But the products that help mitigate these risks are not widely used. Insurers can tap into this huge market by helping potential clients understand their products and making paying premiums and collecting

payments convenient. Many of the approaches successfully applied for branchless banking can transform the insurance industry in Africa. A few examples of microinsurance categories illustrate relevant products and challenges for this market.

Index-based weather insurance



Source: International Food Policy Research Institute (IFPRI)

INDEX-BASED WEATHER INSURANCE

Because the majority of the African population works in agriculture, helping to insure against bad weather conditions is a huge market. For cyclical crops such as corn, wheat, vegetables or sorghum, weather conditions have a direct and measurable impact on seasonal farming output and income. Connecting a weather index like rainfall to a fixed payment helps farmers control risks of unpredictable Mother Nature.

Farmers most commonly take out policies for amounts that equaled loans they took at the beginning of the season to pay for seeds, equipment and other inputs. In effect, farmers looked to insurance to help pay back those loans in case of catastrophe. Relatively high premiums of 5-10% or more for an insured payment, client trust in and understanding of a product tied to an abstract index, and challenges of obtaining reliable weather data are obstacles to product acceptance.

HEALTH INSURANCE

The success of micro health insurance schemes is strongly linked to the presence of functioning health systems. In Rwanda, where more than 90% of the population uses the governmental health insurance scheme with an annual premium of about USD 2, defined health services are covered and provided by local health centers. The scheme is based on governmental subsidies. At the moment, we primarily see a business case for pharmaceutical companies using insured subscriber schemes, for example for malaria medication.

CONCLUSION



After decades of waiting in the wings, countries in Africa are finally taking their place on the world stage. The long-held promise of economic growth has become a reality. Outside observers can no longer deny that the time for Africa has arrived. Spurred on by global megatrends, African countries are transforming swiftly. Every day we can see that potential is being fulfilled. This is a unique moment in the history of the continent, with many countries among the world's most attractive emerging markets.

Average growth has doubled since 2009, and is back at rates that are expected to make Africa the world's most dynamic region for a second decade in a row. Income per capita will grow by 50% over the next twelve years. Across the continent, inflation and debt-to-GDP ratios are less than half of their levels in the mid-1990s. One third of the population belongs to the middle class and is increasingly adopting a consumer lifestyle. The continent will soon have the world's largest labor force, drawing on a growing young urban population. The continent is teeming with untapped natural resources, from oil and gas to rare earths, gold, timber, copper and diamonds. Agriculture, which employs 70% of Africans, is set to take off due to the continent's wide swaths of uncultivated land. Capital and advice is pouring into the sector on an unprecedented scale.

Economic figures only tell part of the story. Visitors to Kigali, Rwanda, will see more modern coffeehouses and posh restaurants than traces of a civil war. South Africa hosted the World Cup in 2010, proving its ability to organize large international events. Multibillion-dollar urban developments rise out of the hills around Nairobi and on the oceanfront in Lagos. In the foothills of Mount Kilimanjaro, bank agents open accounts for villagers with handheld devices. In Abidjan, one of the most dynamic cities in West Africa, the quick economic recovery strikes the eye more than signs of former conflicts. Across Africa, farmers check crop prices on their cell phones. And even in Somaliland, port facilities are being upgraded and bottling plants installed as part of the current boom in the Horn of Africa.

Many governments in Africa are taking steps to stem corruption and ease business regulations to encourage entrepreneurship and company growth. Peace, political rights, civil liberties and citizen participation are growing throughout the continent. Poverty is decreasing and literacy is increasing. Quality of life is rising for Africans all over the region. Large-cap M&A deals like Wal-Mart's USD 2.4 billion acquisition of MassMart are targeting this unfolding potential of Africa's domestic markets.

Of course, challenges remain. Firmly establishing good governance, enhancing education and providing a welcoming environment for entrepreneurs and investors requires sustained effort. Yet even on these issues, African reality is far ahead of the perception. Whether it's the promise of rapid growth or the protection of investor rights, a whole group of leading African countries are on par or ahead of places like the BRIC economies, Turkey, Malaysia and even some countries in Europe.

And the world has started to take notice. Regular high-profile investor conferences in Lagos, Nairobi, Marrakesh, Luanda and Johannesburg are evidence of that. Businesses and investors are finding myriad opportunities. Between 2000 and 2010, foreign direct investment and other financial flows to the continent increased fivefold to USD 54.2 billion. What seemed impossible just a few years ago is proving to be possible after all.

We at Roland Berger believe that those who do not invest at this rare moment in the continent's history will miss out. Claims are being staked rapidly. Multinational groups, emerging market conglomerates and local champions across Africa are seizing opportunities, no longer just in resource extraction but in a broad range of sectors. We have highlighted two key sectors that are especially important in sustaining growth momentum: energy and finance. In both sectors, strong change is imminent and business models will evolve dramatically. For African bank managers, increasing competition will signal the end of business as usual. Enhancing efficiency and expanding into untapped or underserved client segments will not only become a necessity but also offer huge rewards for early movers. Bottlenecks in Africa's energy sector are being overcome as public and private sectors align their efforts. A wave of privatization and regulatory reforms, new technologies and financing schemes could finally unleash the full potential of Africa's power sector.

Roland Berger has taken a long serious look at the opportunities Africa holds for business and decided that the time is ripe for bold action. African markets deserve our full attention instead of being covered with catch-all EMEA approaches. Our firm has moved ahead and built a permanent presence in the region with dedicated teams of experts. By tapping into the potential of this global growth pole, businesses and investors will reap more than just monetary rewards. They will participate in and help shape the transformation of a continent and its one billion people.

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Footnote 17 on page 9 addition:

Roland Berger compared 12 African countries (Angola, Botswana, Ethiopia, Ghana, Kenya, Morocco, Nigeria, Rwanda, South Africa, Tanzania, Uganda and Zambia) with 10 peer emerging markets at different stages worldwide (Argentina, Brazil, China, India, Indonesia, Mexico, Russia, Turkey, Venezuela and Vietnam)

GLOBAL TOPICS

PROJECT DESCRIPTION



2012 is a year of dramatic economic and social challenges, but especially one of political change, with transitions of power taking place in 60 countries affecting 50% of the world's GDP. With our initiative GLOBAL TOPICS, we assess the most pressing issues and outline possible solutions for leaders. Leveraging the global footprint of our firm, we focus on how debt, welfare issues, energy supply and changes in demographics will affect our world. We also explore how Africa as an entire continent turns these challenges into opportunities.



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