Knowledge Leadership

Taking Stock: The State of Sub-Saharan Africa

by Dr. Azar Jammine and Dr. Martyn Davies

MasterCard Worldwide Insights

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MasterCard Worldwide
A Global Knowledge Leader

MasterCard Worldwide is widely recognized as a knowledge leader around the world. Over the years, the global payment solutions company has devoted extensive resources to developing a deeper understanding of the payments card markets and the business and economic environment through surveys and independent research studies. Some of these initiatives include the MasterCard Worldwide Index of Consumer Confidence, MasterCard Worldwide Index of Women's Advancement, MasterCard Worldwide Centers of Commerce, MasterCard Worldwide Index of Consumer Purchasing Priorities, MasterCard Worldwide Index of Consumer Resilience and MasterCard Worldwide Index of Consumer Spending Capability. Today, these MasterCard offerings are much sought after by analysts, academics and decisionmakers in financial institutions, government agencies and multinational organizations.

Launched in 1993, the MasterCard Worldwide Index of Consumer Confidence has proven to be an excellent barometer of the general consumer pulse in Asia/Pacific. The twice-annual survey analyzes prevailing consumer perceptions of economic conditions for the next six months. Its insights into the dynamics of consumer sentiment, and the market paradigm deliver value to a variety of audiences, including customers and business partners.

In 2003, MasterCard established the MasterIntelligence Knowledge Panel, which comprises leading economists and business strategists from China, Hong Kong, India, Japan, Korea and South East Asia. In 2006, it was expanded to become a global knowledge panel, which now conducts research and provides insights on the economic and business environment globally. The panel is headed by Dr. Yuwa Hedrick-Wong, Economic Advisor, MasterCard Worldwide. In 2009, an African Knowledge Panel was established.

Today, MasterCard continues to demonstrate its commitment by not only adding value with cutting edge research but also through sharing knowledge in new areas. Its knowledge leadership is well recognized and unrivaled.

MasterCard - Opening Foreword

Commentaries on the economic and business prospects of Sub-Saharan Africa tend to vary between extremes; exuberant enthusiasm on the one hand and persistent pessimism on the other.

What is instead really needed is a hard-nosed, objective, and unflinching assessment of the Sub-Saharan African realities in all the key dimensions: social, political, geographic, economic, cultural, demographic, as well as external dimensions.

This is the only way to develop real business insights about this vast and complex continent.

This was the approach adopted in the very successful inaugural MasterCard Knowledge Forum on Africa, which was hosted at the Gordon Institute for Business Studies (GIBS) in Johannesburg, South Africa in November 2010.

MasterCard organized this event to build a platform for open and honest discussions to focus on both the opportunities that the region presents to investors, as well as its complex challenges; so as to shed new light on the Sub-Saharan region's potential.

A panel of leading experts was assembled to share their views at the forum. With a stimulating mix of perspectives and analytic disciplines, they addressed the issues of the region's resource endowment and scarcity, problems of underdevelopment and public policy challenges, causes and consequences of the current surge in economic dynamism, and the role of new global players such as the BRIC nations in changing Sub-Saharan Africa's investment and business climate.

This report has been compiled from presentations delivered by Dr. Jammine and Dr. Davies at the 2010 MasterCard Knowledge Panel on Africa. Additional reports will follow with content from our other presenters.

It shows that the relatively rapid growth of the continent's population and youthful workforce stands to put it at the forefront of longer-term growth in market size and production worldwide.

Recent improvements in governance and macro-economic stability have also encouraged a recognition that the risk-reward trade-off for Africa has improved significantly over the past decade.

I invite you to make full use of this MasterCard Insights Report as a reference for your own analysis and business planning.

Yours sincerely,

Michael Miebach
Division President
Middle East & Africa, MasterCard Worldwide

Foreword - MasterCard Knowledge Forum on Africa 2010

During the past few years, the additional investment and development of infrastructure in Africa and in natural resources, has raised the profile of Africa in the global economy.

However, recent developments in North Africa remind us of the turbulent nature of the African continent. Africa is the largest region of the world that has yet to fully benefit from economic development. The continent has an abundance of natural resources and a fast-growing population of nearly a billion people that may have not yet had the full opportunity to contribute and benefit from the processes of modernity and globalization.

It is easy to see Africa as one continent— however its cultural diversity is probably as varied as the Eurasian landmass. We are in fact a continent of many languages, cultures, religions and outlooks. We are also a continent with many forms of political economy in different stages of economic and political development.

While progress made in the past few years in infrastructure, improved governance and overall economic development is setting a promising foundation for an exciting period ahead; businesses that are interested in being part of Africa's future still face daunting challenges, not the least in terms of gaining a better insights on the region. It is a tremendously complex continent that needs exploration country-by-country and industry-by-industry in order to understand its full potential, not to mention its complexities.

For smart investors, Africa could provide high returns on investment. What is needed is a developmental model, shaped by good values and integrity, with a view to the long run. This report and those to follow lay out much of the background to the excitement and renewed interest in investment in a continent whose time has been delayed, but whose time for better economic development is definitely coming.

Neil Binedell

Professor N.A. Binedell
Director of the Gordon Institute of Business Science

About the Authors

Dr. Azar Jammine

Dr. Azar Jammine is the Director and Chief Economist of Econometrix (Pty) Ltd., a leading economic research institute based in South Africa. Prior to joining Econometrix in 1985, Dr. Jammine worked as a business consultant in Europe, Africa and Asia. Dr. Jammine has conducted groundbreaking research on issues of economic transformation in the context of South Africa, most notably as the co-author of *McGregor's Economic Alternatives, Trends Transforming South Africa,* and *Mindset for the New Generation of South Africa,* with the *McGregor's Economic Alternatives* being used by the African National Congress for internal training prior to taking power in South Africa in 1994. Dr. Jammine serves as a director for a number of companies in the UK and South Africa, and is a member and honorary treasurer of the General Council of the Independent School Association of South Africa, a member of the Advisory Council on Innovations, and a member of the Advisory Council of South African Primary Education Support Initiative.

Dr. Jammine graduated with a B.Sc. in mathematical statistics from the University of Witwatersrand, an M.Sc. from the London School of Economics, and a Ph.D. from the London Business School. He speaks six languages and has made some 3,500 presentations to leading client corporations, public institutions, as well as at conferences dealing with regional and international economic environments. He is a member of the MasterCard Worldwide Africa Knowledge Panel.

Dr. Martyn Davies

Dr. Martyn Davies is the CEO of Frontier Advisory (Pty) Ltd., a leading research, strategy, and capital advisory firm that specializes in emerging markets. He has provided business solutions on behalf of listed and multinational clients in Asia, Europe, Africa and Latin America. He was named "#1 Analyst in South Africa" by the Financial Mail in 2007. Dr. Davies is currently Director of the China Africa Network and the Asia Corporate Network at the Gordon Institute of Business Science (GIBS), University of Pretoria, where he is a faculty member. In 2010, Dr. Davies was named by the World Economic Forum as a "Young Global Leader," and he has chaired World Economic Forum sessions in China and Africa. Dr. Davies was previously the founding director of the Center for Chinese Studies, established under the South Africa—China Bi-National Commission, and he set up the first Confucius Institute in Africa in 2004. In 2008 he was appointed advisor to the OECD for its Global Development Outlook project.

Dr. Davies holds a BA degree in law, a BA (honors) and MA in international relations from the University of Witwatersrand, a diploma of Asian Studies from Yonsei University (S. Korea), and a Ph.D. in international relations from the University of Witwatersrand. Dr. Davies has worked and studied in Asia for extended periods. He is a published author, and a regular presenter at the Chatham House, the African Development Bank, the OECD, the Kennedy School of Government at Harvard University, the European Commission, the School of African and Oriental Studies, the South African Parliament, and the World Bank. He is a member of the MasterCard Worldwide Africa Knowledge Panel.

Taking Stock: The State of Sub-Saharan Africa

1. Taking Stock

In years gone by, Africa was seen as the "dark continent," characterized by poverty, low economic growth, political instability, fiscal and monetary indiscipline, dictatorships, low levels of human development, with seemingly little prospect of improvement. In particular, Sub-Saharan Africa was seen as one of the least interesting regions of the world for economic development notwithstanding the recognition that the continent was probably very rich in natural resources. In May 2000, The Economist magazine published a piece on Africa with the front-page cover caption of "The Hopeless Continent." Ironically, this publication appears to have marked the turning point in perceptions of economic opportunities on the continent. Ever since then, driven in large measure by the insatiable demand for natural resources on the part of the world economy, global investor interest in Africa has resurfaced with a vengeance. Rapidly growing and urbanising emerging markets, led first and foremost by China, have resulted in a demand for raw materials which has pushed up commodity prices strongly, raising the benefits of investments in new resource ventures on the continent. Furthermore, a relative reduction in political instability, coupled with significant improvements in macroeconomic management have seen investment into the continent increasing at an unprecedented rate. The result has been a liftoff in economic growth in Africa to the extent that in recent years the continent has emerged as the third fastest economic growth region of the world, behind China and India. This is the first of a series of four reports on Sub-Saharan Africa that aims to construct a fresh perspective on how this vast continent may perform economically in the coming decades. In this first report of the series, we seek to take stock of the state of Sub-Saharan Africa in terms of both opportunities and challenges in its physical, economic, and social environments.

Topography

When taking stock of the economic environment presented by the African continent, it is important at the outset to recognize the physical magnitude of the continent. This can serve to highlight the potential richness of access to resources and also the opportunities to develop the continent's infrastructure, while at the same time bringing to the fore the enormity of the infrastructural development challenge posed. Africa's size is 11.7 million square miles or 30.3 million square kilometers, which is more than three times the size of either the United States or China. Alternatively, one can conceive of fitting China, the USA, Western Europe, India and Argentina all into the continent, as

Chart 1. Topography

Many global companies have underestimated the impact of Africa's size.
The following would fit within Africa:

China	3,705,390 sq mi
United States	3,618,770 sq mi
India	1,266,595 sq mi
Europe	1,905,000 sq mi
Argentina	1,065,189 sq mi
British Isles	94,600 sq mi
Total	11,655,544 sq mi
Africa's area	**11,707,000 sq mi**

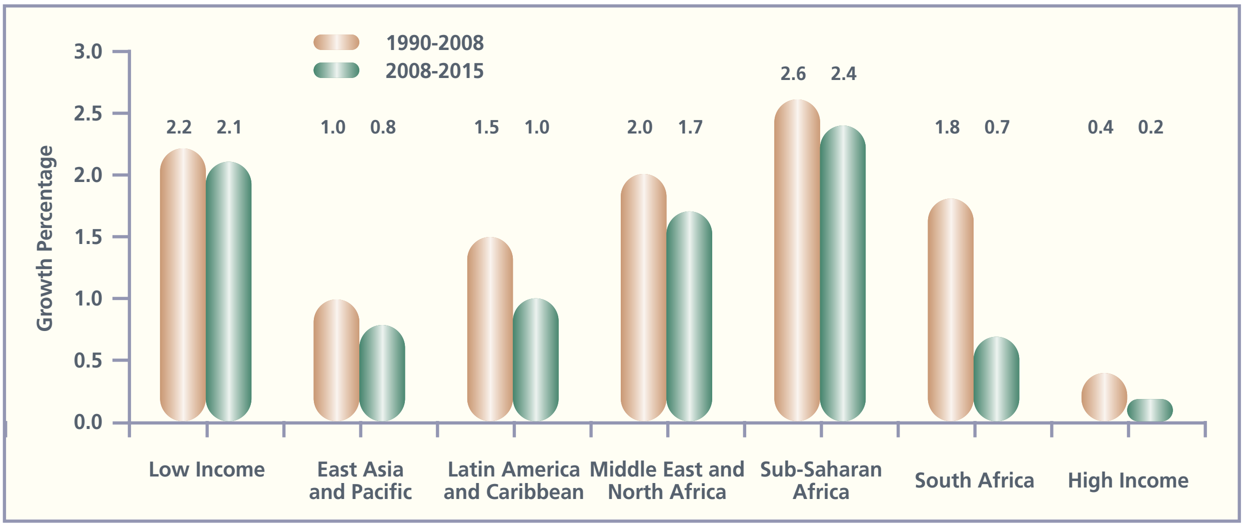
Source: Maps of the World

shown in Chart 1. Sub-Saharan Africa accounts for roughly two thirds of the African continent, is characterized by relatively rich vegetation, either of a grassland or savannah nature, or by tropical rainforests and jungles. In turn, this region provides enormous potential as a breadbasket for the rest of the world in the longer term. The pockets of desert or semi-desert in Sub-Saharan Africa are essentially relatively small in relation to the remaining surface area.

Population

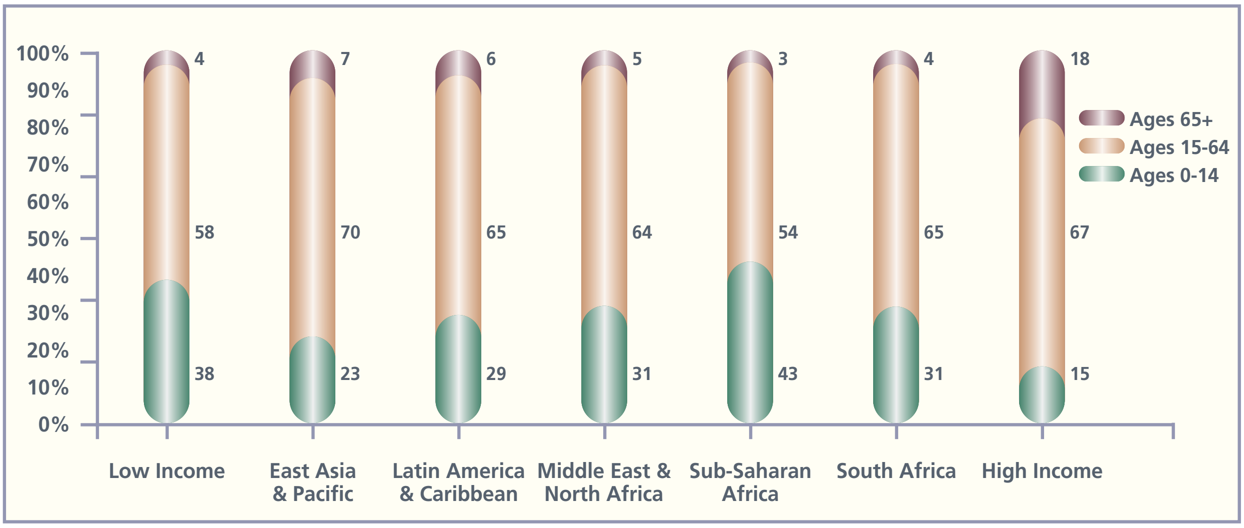
From an economic viewpoint, one of the potentially biggest attractions of Sub-Saharan Africa is its population growth rate, which is the highest of any region in the world. While population growth has been falling in recent years globally and is projected to continue declining over the coming decade, the actual rate of population growth predicted for Sub-Saharan Africa is higher than any other region, as Chart 2 shows. This growth trend has important economic implications. Firstly, this implies that the potential growth in market size, other things equal, is set to outpace that of the rest of the world. Within about six years, Africa ought to have more than one billion people, accounting for close to 15% of the world's population of which Sub-

Chart 2. Population Growth Rates By Region



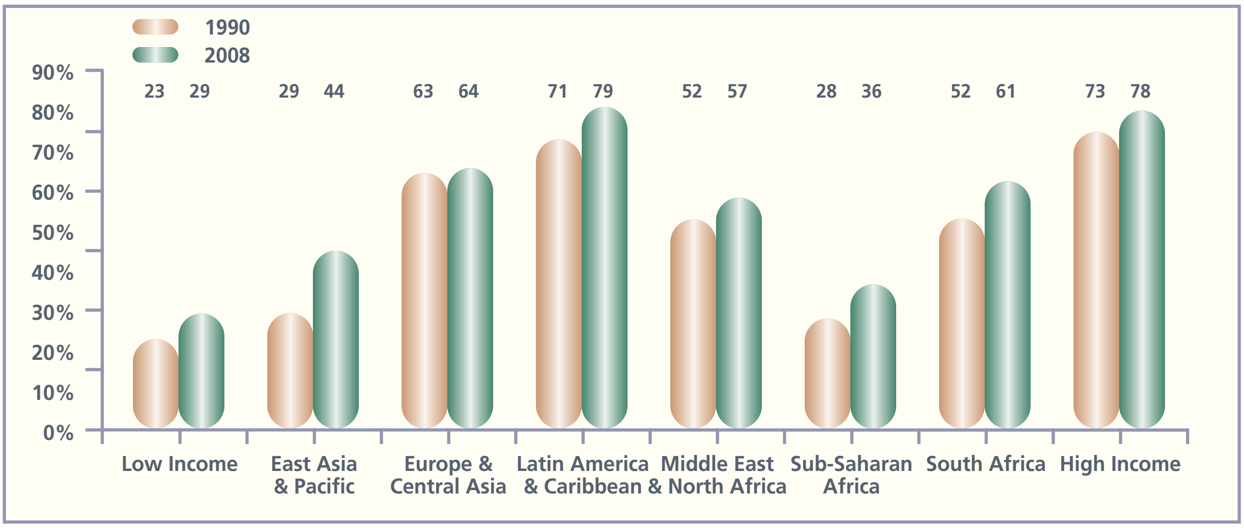
Source: World Bank

Chart 3. Population Age Composition (2008)



Source: World Bank

Chart 4. Urban Population as a Percentage of Total Population



Source: World Bank

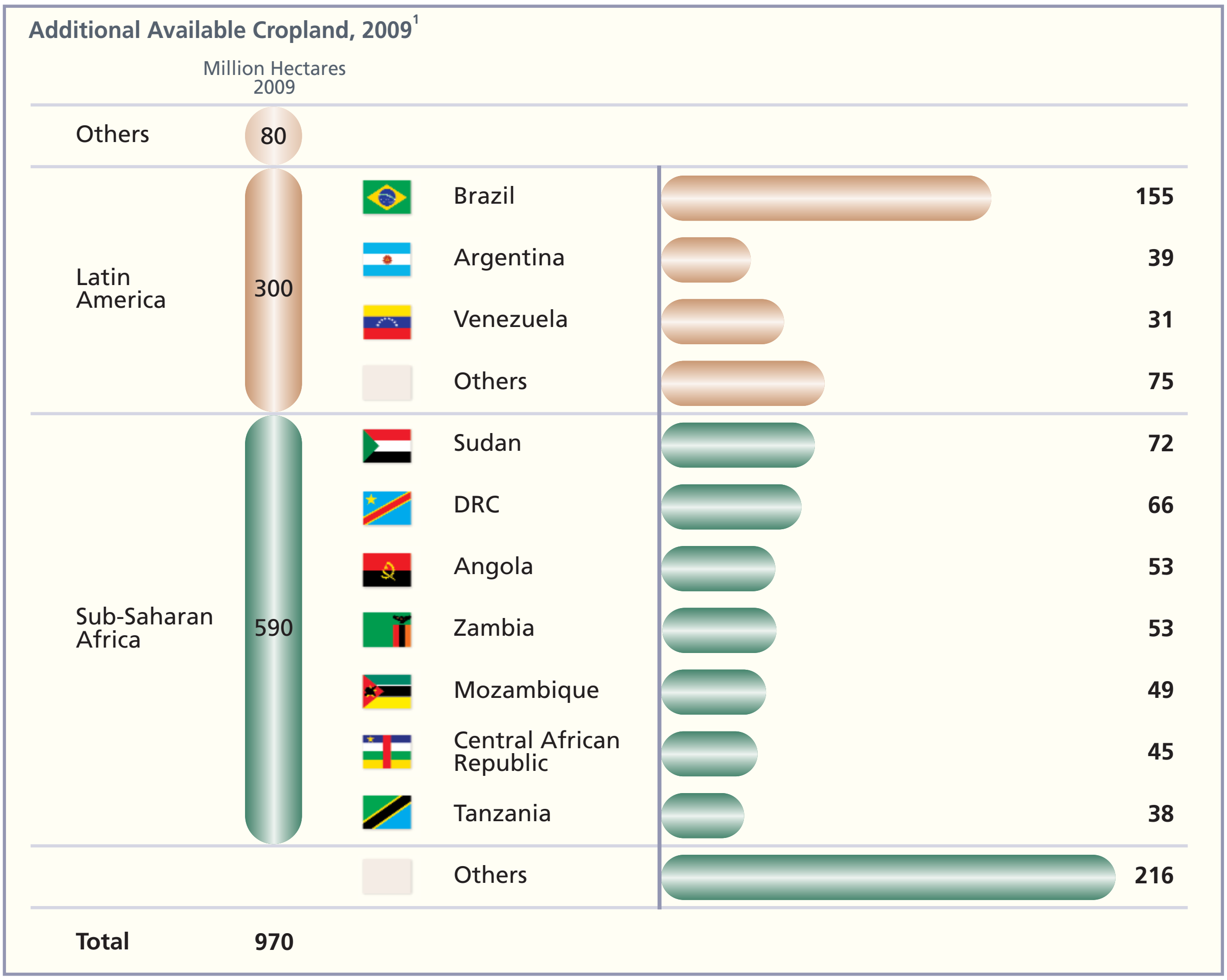
Saharan Africa would account for about two thirds. More importantly, the potential growth of the continent's workforce is set to outpace that of any other region.

Rising life expectancy around the world due to improvements in medical care, nutrition and related factors, is resulting in a situation where a growing section of the population is becoming ever more dependent upon income from pensions and welfare payments generated by the younger working-age population. Chart 3 shows that in high-income markets almost 20% of populations are over the age of 65 and so the strain exacted of governments in using a diminishing pool of productive income-generating taxpayers to finance the welfare and healthcare of the elderly, is increasing. The resultant increase in taxation and/or public debt could prove to be a constraint on economic growth in many advanced economies. By contrast, in Sub-Saharan Africa, more than 40% of the population is under the age of 14 while less than 5% have reached retirement age. It follows that the potential increase in the available workforce is set to outpace that of other regions. For example, whereas the working-age population over the next 40 years is set to grow by 125% in Africa, the corresponding growth rates are 26% for Latin America, 22% for Asia, 16% for North America and -23% for Europe. By 2040, it is estimated that there will be no fewer than 1.1 billion Africans of working age, accounting for almost a quarter of the world's working-age population.

Urbanization

In addition to the region's high rates of population growth, Sub-Saharan Africa's rate of urbanization is also likely to be among the fastest in the world. Global population over the past two decades has been characterized by rising urbanization, with saturation in urbanization at levels close to 80% as in the case of high-income markets, as well as some in Latin America and the Caribbean, as seen in Chart 4. Sub-Saharan Africa has been part and parcel of this trend, but what differentiates the region from many of the other regions is that the level of urbanization is still relatively low, at 36%, providing far more scope for further urbanization than is the case with most other regions. It is estimated that more than 50% of Africans will be living in cities by 2030. If one combines the rapid rate of population growth with the growth in urbanization, one concludes that the potential increase in the urban population of Sub-Saharan Africa is likely to surpass that of every other region in years to come. In turn, this generates a huge requirement for infrastructural development, but also offers enormous opportunities for the expansion of services and consumer markets to accommodate the rapid growth in urban populations. There are already 52 cities in Africa with populations of more than one million, which is more than double the number in 1990 and is already the same number as in Western Europe.

Chart 5. Africa Represents About 60% of the Potentially Available Cropland in the World



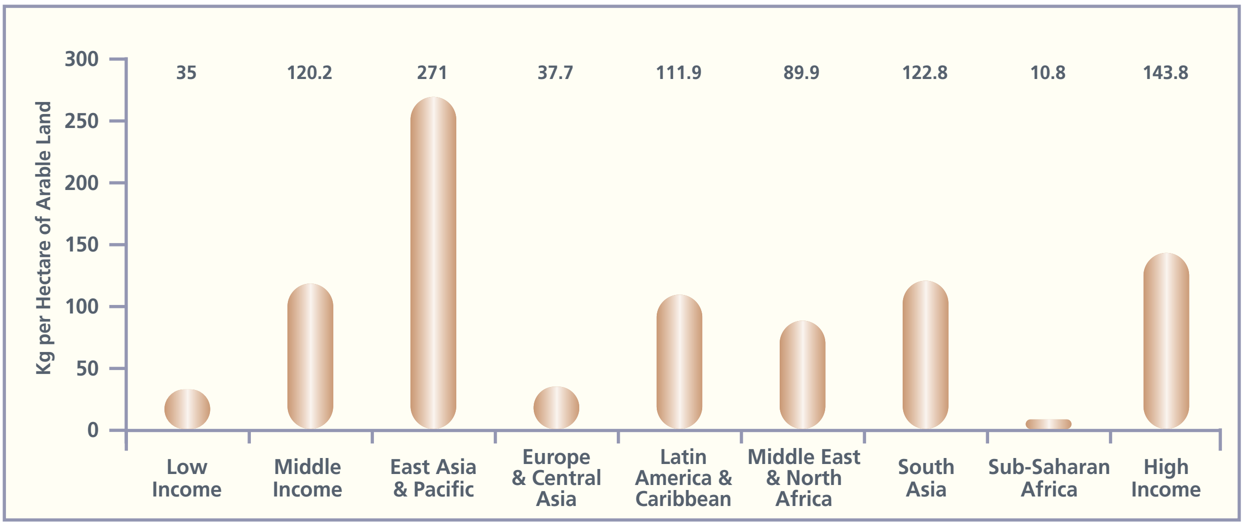
1. Cropland is defined as land producing output greater than 40% of maximum yield under rain-fed conditions, excluding forest areas.
Source: World Bank/Food and Agriculture Organization, *'Awakening Africa's Sleeping Giant,'* McKinsey Global Institute

Commodities

Africa's legendary richness in commodities lies at the heart of the potential economic progress of the continent. Historically, Sub-Saharan Africa was known for its wealth of minerals, being the world's richest source of gold, platinum group metals and diamonds. However, in recent years the importance of its coal, copper, iron ore, manganese, uranium and other mineral reserves have also assumed increasing importance. Over and above this, discoveries of crude oil and natural gas have seen the continent accounting for 12% of the world's reserves in this source of energy. Nonetheless, probably the most important potential resource waiting to be exploited in the region is for Sub-Saharan Africa to provide the world's food resources in a global population which has quadrupled over the past century and is set to rise by a further 25% or so over the next 40 years. As Chart 5 shows, Sub-Saharan Africa comprises more than 60% of the potentially available cropland in the world, far in excess of the potential contribution of any other region. Hitherto, the region's contribution to the provision of the world's nutrition has been minimal.

This is exemplified in a comparison of the fertilizer consumption in the Sub-Saharan region compared with most other regions of the world as illustrated in Chart 6. The potential of increased output is clearly immense, with more intensive fertilizer use, coupled with advanced technologies and knowhow. Such a scenario is still a long way off, but the potential for Sub-Saharan Africa to provide the solution to the world's future demands for food is enormous.

Chart 6. Fertilizer Consumption



Source: World Bank

Economic Growth and Structure

Currently, Africa's collective GDP, at around $1.8 trillion, is roughly equal to that of Brazil or Russia. Sub-Saharan Africa accounts for approximately half of the continental economy and accounted for only 1.5% of world GDP in 2009. When one compares this with the approximate 10% share that Sub-Saharan Africa has of the world's population, one recognizes the enormous scope for economic development in the region if living standards are appropriately raised. Encouragingly, there are many signs to suggest that the start to this process has begun. Consumer spending on the continent already exceeds that of India and is approaching the $1.0 trillion mark. Estimates are that the figure will be $1.5 trillion by 2020. After languishing with growth of no more than 2% to 3% per annum in the last three decades of the 20th century, GDP growth in Sub-Saharan Africa has averaged more than 5% over the past decade. As seen in Table 1, the share of global GDP taken up by Sub-Saharan Africa has risen from 1.1% in 1995, to 1.5% in 2009.

Table 1. Comparison of Gross Domestic Product, Current Prices

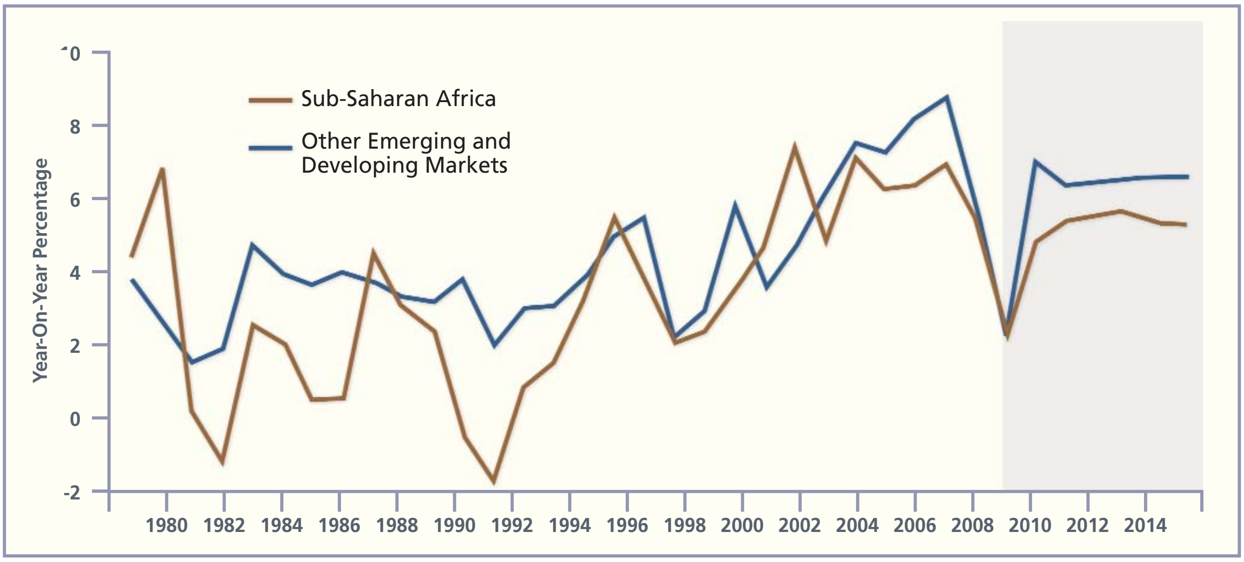
Market	US$ Billions		Percentage of World	
	1995	2009	1995	2009
South Africa	151	287	0.5	0.5
SADC	194	465	0.7	0.8
Sub-Saharan Africa	318	885	1.1	1.5
Advanced Economies	24,241	40,056	81.8	69.1
United States	7,415	14,256	25.0	24.6
United Kingdom	1,157	2,184	3.9	3.8
Euro Area	7,279	12,157	24.5	21.6
Emerging Markets	5,408	17,881	18.2	30.9
World	29,649	57,937	100	100
SA as Percentage of SADC	77.8	61.8		
SA as Percentage of Sub-Saharan Africa	47.6	32.4		

Source: International Monetary Fund

Africa was only one of two regions in the world, Asia being the other, where growth in the collective economy rose through the global recession of 2009. Whereas in the last two decades of the 20th century Sub-Saharan African growth had frequently fallen behind that of much larger and advanced economies, the situation has been conclusively reversed since the start of the 21st century with the region's growth outstripping that of advanced economies by a fairly wide margin, as illustrated in Chart 7.

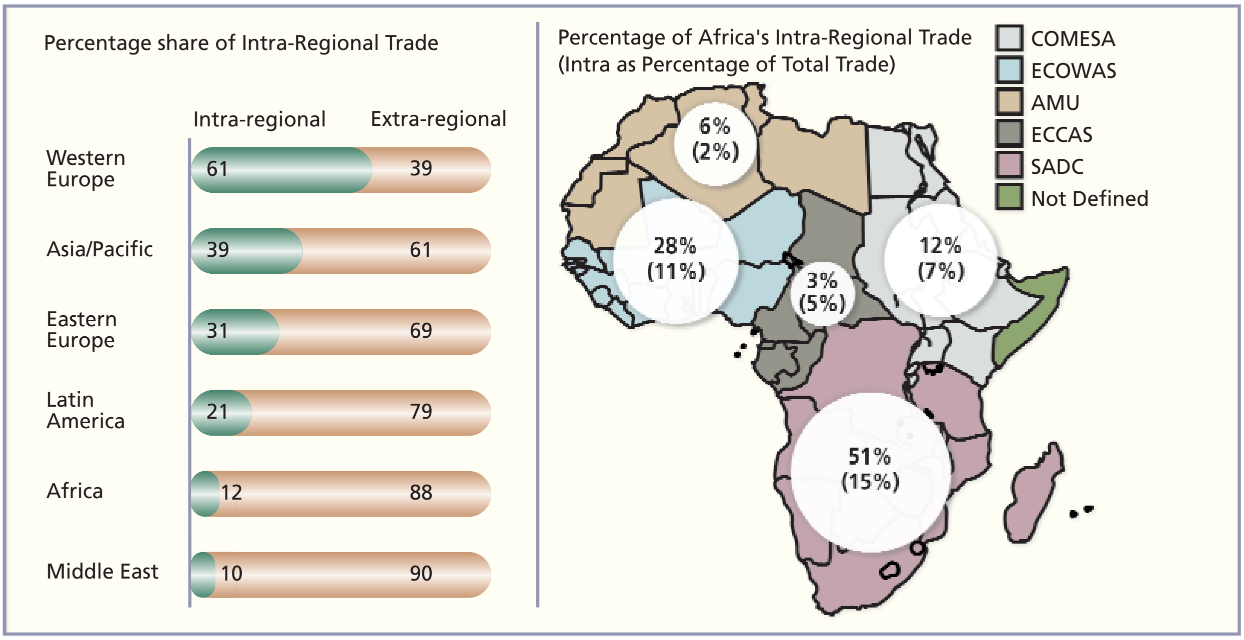
It is no coincidence that this development has coincided with the strong growth of the Chinese economy to a magnitude where it has started exerting a major influence on the overall international economic environment. The demand for resources from Africa by

Chart 7. GDP: Sub-Saharan Africa vs Other Emerging Market and Developing Economies



Source: IMF World Economic Outlook Database October 2010

Chart 8. Intra-African Trade Remains Low Compared to Other Regions



Source: McKinsey & Company

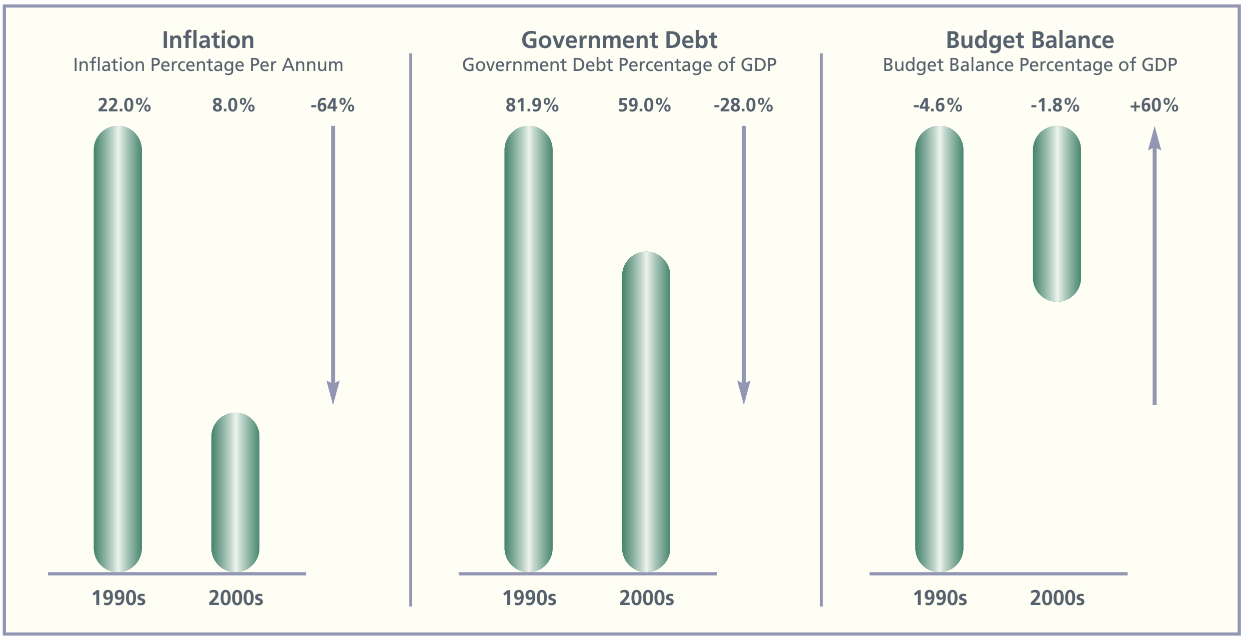
China has been at the forefront of the continent's improvement in growth over the past decade[1]. The knock-on benefits are reflected in the fact that sectoral growth has by no means been dominated by mining and resources. In general terms, the breakdown of imports and exports classified into manufacturing, ores and metals, fuel, agricultural raw materials and food, is not all that different from that in other regions. Furthermore, over the period 2002 to 2007, the fastest-growing sectors of the African economy were, in order of importance, hotels and restaurants (8.7% annual growth), financial services (8.0%), transport and communications (7.8%), construction (7.5%) and utilities (7.3%). The contribution to growth of mineral resources came in at only sixth position, with average growth of 7.1%. Sadly, reflecting the shortfalls in infrastructure, technology and human resource capacity, the slowest growth was recorded in real estate and business services (5.9%), agriculture (5.5%) and manufacturing (4.6%).

On the negative side, one of the biggest drawbacks in Africa's economic picture is the fact that, relative to other regions in the world, intraregional trade remains extremely low as shown in Chart 8. Whereas over 60% of trade between European markets is among themselves and the figure in the Asia/Pacific region is around 40%, no more than 12% of trade with African markets is between each other. The figure is slightly higher in the case of southern Africa, at around 15%, but even here the plethora of rules and regulations and tariff barriers covering trade relations between markets, coupled with logistical constraints, limits the potential benefits to be derived from increased intraregional trade.

Foreign Direct Investment

The improvement recorded in the continent's economic growth has gone hand-in-hand with a general improvement in political stability, general governance and macroeconomic management over the past decade. Although there are still several wars going on throughout the continent, the number of conflicts has diminished, with an increasing number of African societies embracing democracy as opposed to dictatorship. From a macroeconomic perspective, more responsible monetary policy has resulted in a decline in the average inflation rate on the continent from 22% in the 1990s, to 8% over the past decade as Chart 9 shows. Simultaneously, debt forgiveness, together with more conservative fiscal policies, have resulted in the ratio of government debt to GDP declining from around 82% in the 1990s, to less than 60% over the past decade. The average size of budget deficits, which was close to

Chart 9. African Governments Have Significantly Improved Macroeconomic Stability

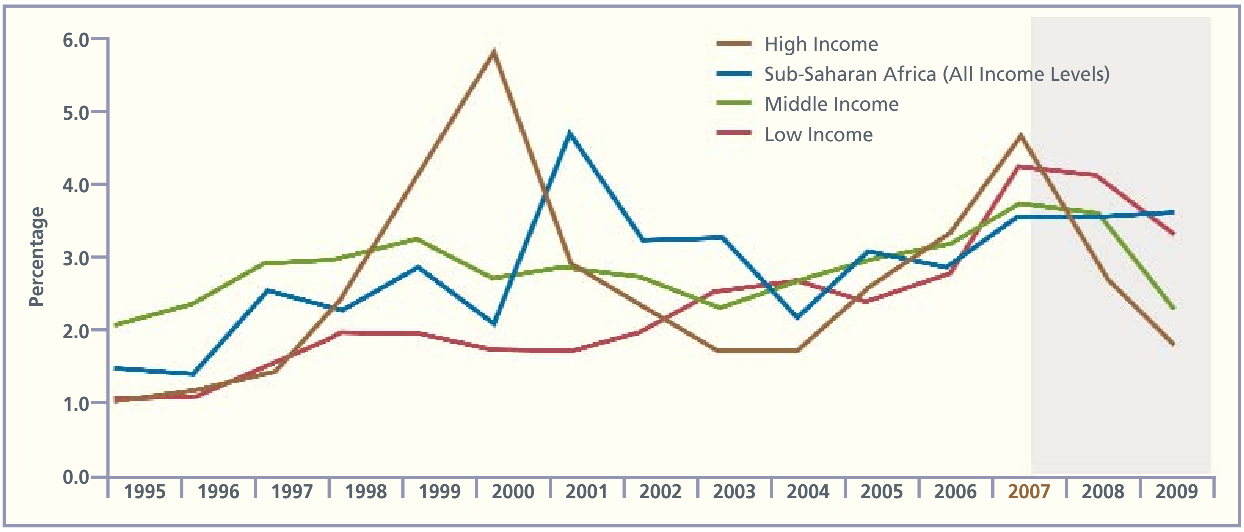


Source: McKinsey & Company

5% of GDP in the 1990s, has narrowed to less than 2% of GDP during the first decade of the 21st century. Ironically, given the prototype image of African dictatorships spending their market's fortunes extravagantly, the level of indebtedness of African governments has assumed a magnitude that could be the envy of many advanced economies.

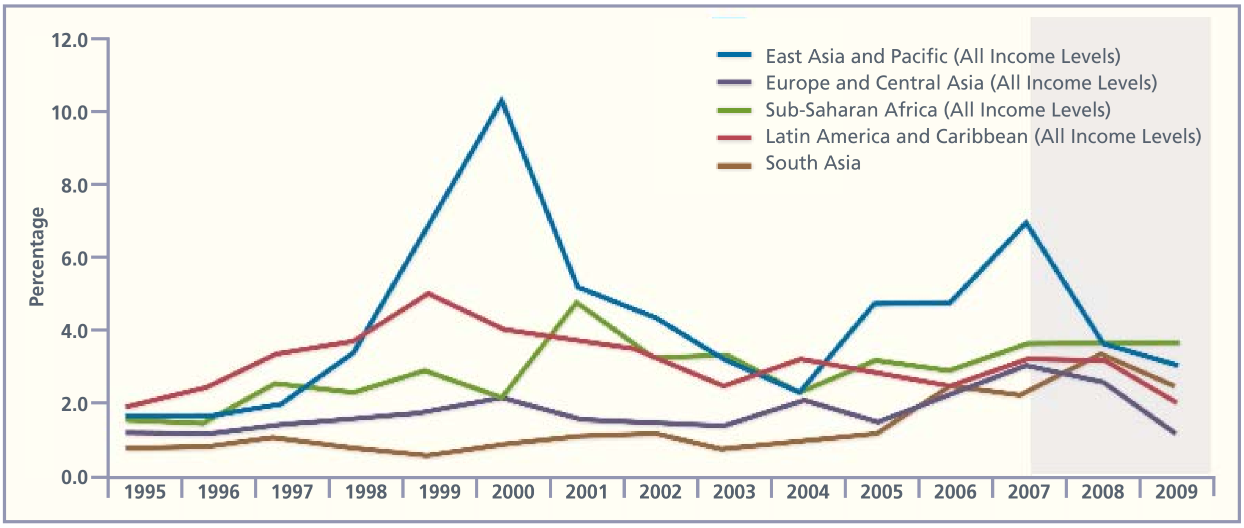
Impressive growth opportunities, coupled with gradually-increasing recognition of improved governance and macroeconomic policy among African markets, in turn has resulted in a significant increase of foreign direct investment inflows into Sub-Saharan Africa; so much so that through the global recession in 2008 and 2009, Sub-Saharan Africa was the sole region to experience an increase in foreign direct investment inflows, as Charts 10 and 11 demonstrate. This has provided fresh impetus in improving the region's infrastructural capacity. Indeed, the ratio of gross fixed capital formation as a percentage of GDP in Sub-Saharan Africa has risen significantly, from a meager 16% at the start of the millennium, to over 20% in recent years. The latter figure is still not partic-

Chart 10. Foreign Direct Investment by Income - Net Inflows (as Percentage of GDP)



Source: World Bank

Chart 11. Foreign Direct Investment by Region - Net Inflows (as Percentage of GDP)



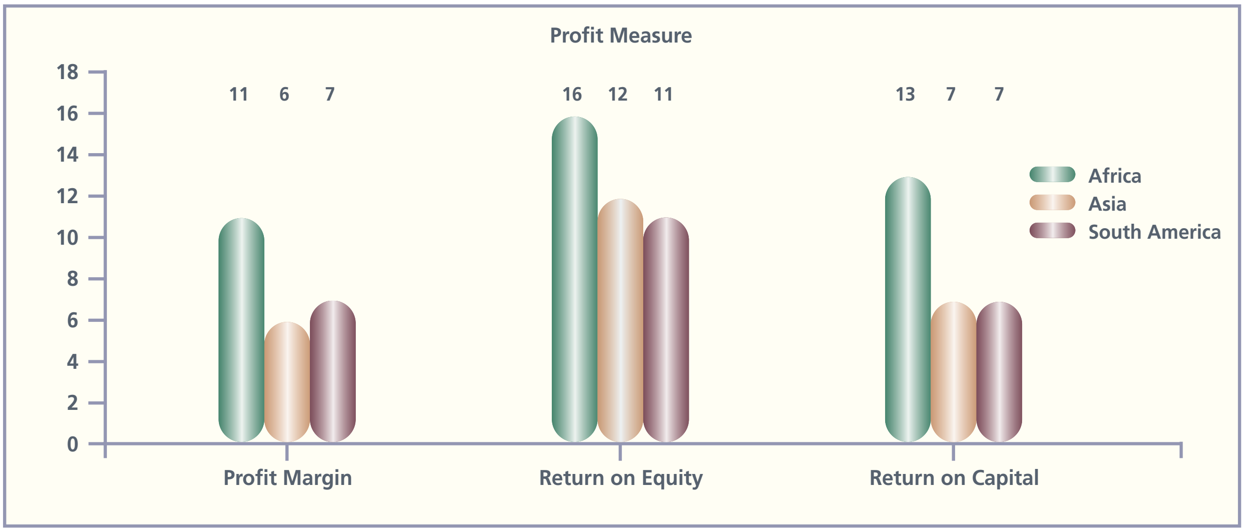
Source: World Bank Development Indicators 2010 ularly high, but the direction in which the ratio is going is the right one. Similarly, one has seen a deepening in regional financial markets, with the ratio of market capitalization of listed companies rising strongly from around 90% of GDP in 2000, to around 150% of GDP more recently.

Risk Profile

The accelerating pace of foreign investment and capital inflows into Sub-Saharan Africa is also linked to a growing recognition that the return on capital and profitability of investment on the continent is among the highest of any region, outpacing both Africa overall and Asia, as shown in Charts 12 and 13.

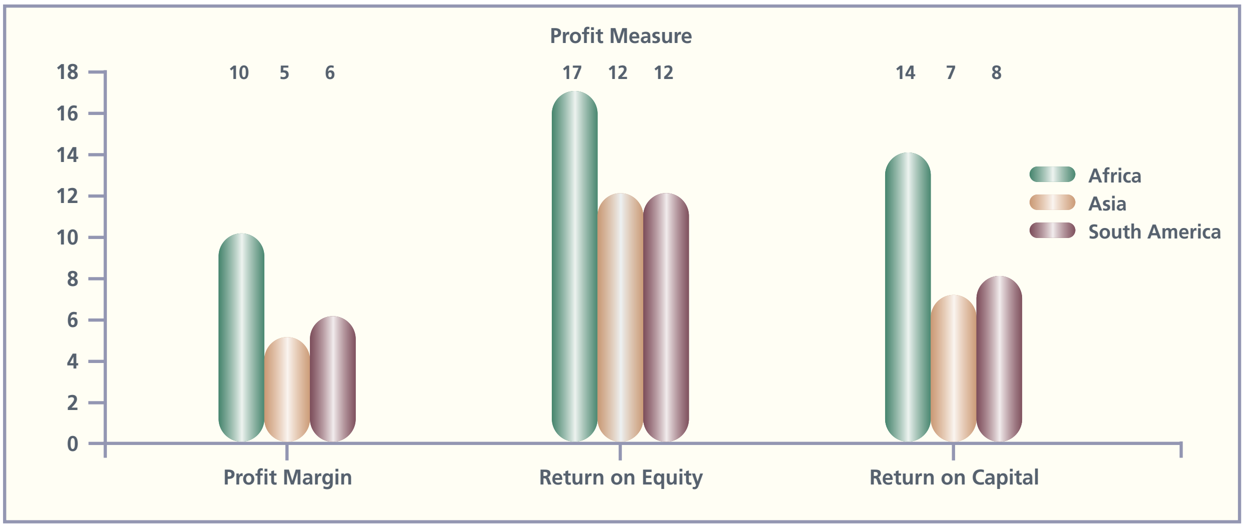
Over many decades there has been a reluctance to invest into the African continent on account of the fact that risks of all sorts have been perceived to be too high. Such risks have included fears of nationalization, expropriation, bureaucratic hurdles, political upheaval and instability, and uncertainty surrounding the ability to export earnings. However, as seen in

Chart 12. Profitability of All Industrial Companies



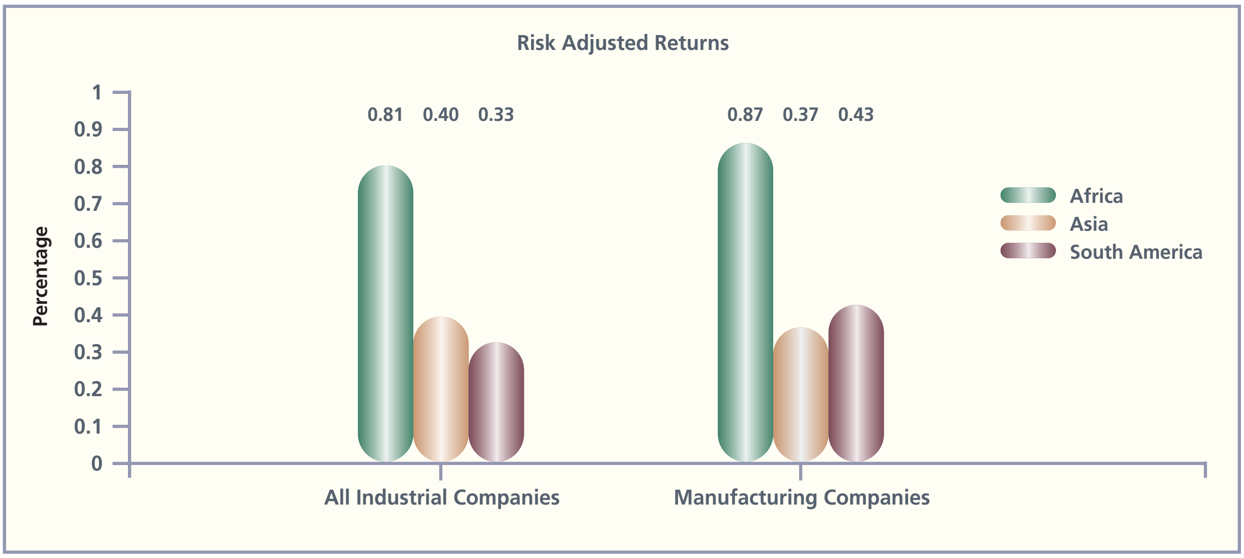
Source: Centre for Studies of African Economies, University of Oxford

Chart 13. Profitability of Manufacturing Companies



Source: Centre for Studies of African Economies, University of Oxford

Chart 14. Risk Adjusted Returns



Source: Centre for Studies of African Economies, University of Oxford

Chart 14, in recent years it has become increasingly recognized that even if one does take into account the risks involved, the risk-adjusted level of returns from investment in the region exceeds that of most other regions.

Infrastructure

Nevertheless, one cannot overlook three important shortfalls currently affecting the African continent, viz. the poor level of infrastructure, the extremely low level of human resource capacity and the appalling state of health facilities in most of the continent. On the infrastructural side, Sub-Saharan Africa falls behind virtually every other region of the world. Furthermore, even the official figures are highly skewed by relatively high levels of infrastructural investment by South Africa specifically. Excluding South Africa, the picture looks much worse. The average road density is 137 km per square kilometer compared with 211 km per square

Chart 15. Electricity

Source: World Bank

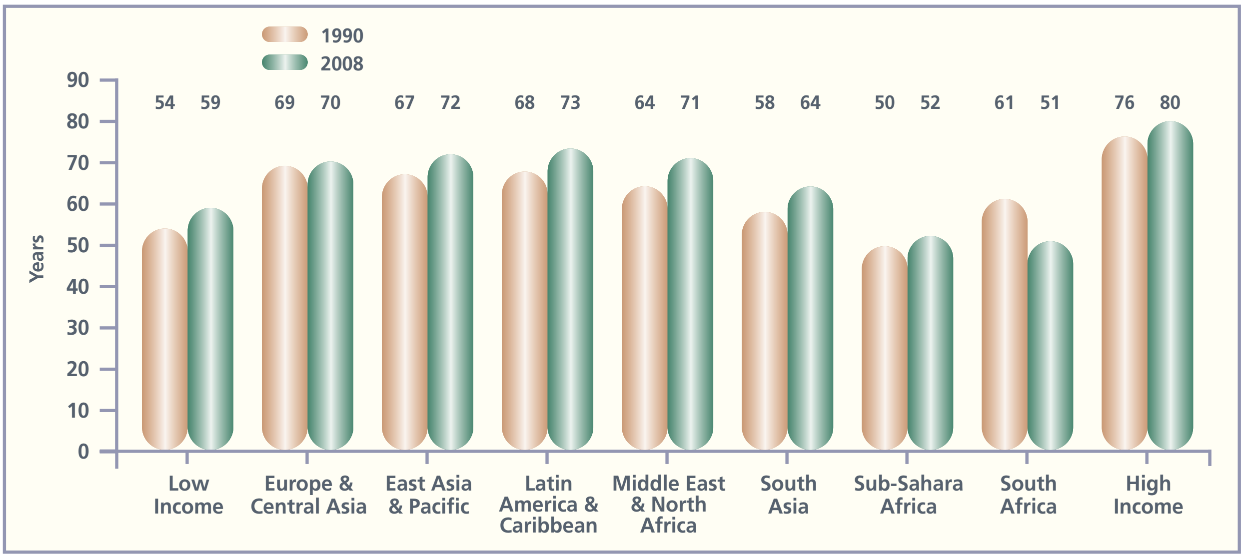
kilometer in the rest of the world. Only a fraction of these roads are paved, so that the paved road density shortfall is even greater, at 31 km per square kilometer compared with 134 km per square kilometer in the rest of the world. No more than a third of rural Africans have access to roads of any kind. The continent has seen very little expansion of its rail network over the past decade, with the proportion of passengers carried on rail networks a tiny fraction of that in other regions. The shortfall in power generation is even greater, at 37 MW per million inhabitants, compared with 326 MW worldwide. Chart 15 shows what Africa looks like at night— where only a minute fraction of the vast continent is illuminated by electricity, with only 16% of the Sub-Saharan African population having access to electricity, compared with 41% worldwide. Even in regard to access to reliable water, only 60% of the Sub-Saharan population enjoys such access, compared with 72% worldwide. Worse still, only 5% of Africa's farmland is irrigated. Similarly, only 34% of the Sub-Saharan Africans have access to decent sanitation compared with 51% in the rest of the world. Official sources estimate that poor infrastructure cuts Africa's GDP by 2% every year and reduces business productivity by 40%. Almost $100 billion is needed to address Africa's infrastructural deficit every year, two thirds for investment and one third for maintenance. This compares with current expenditure of just $45 billion per year on infrastructure. There is obviously an enormous funding gap to accommodate such infrastructural projects, even if one recognizes that substantial gains could be achieved by improving the efficiency of existing infrastructure.

Another important consideration with regard to Africa's infrastructure is its cost. In respect of power tariffs, water tariffs, road freight tariffs, mobile telephony and internet access costs, infrastructure in Sub-Saharan Africa is roughly twice as expensive as in other developing regions. The one area in which significant progress has been made with regard to infrastructure in recent years has been information technology and mobile telephony. For example, over the past decade Nigeria has seen the addition of 11 million Internet users and has overtaken South Africa as the African market with the highest number of mobile cellular users. In recent years, investment in telecommunications has accounted for more than half of overall fixed capital formation in Sub-Saharan Africa. In contrast, investment in energy generation has been less than 10% and in water and sanitation a mere fraction of total investment. However, even in the information technology and communications arena, much more progress could be achieved if the cost of usage of this form of infrastructure were reduced.

Health

Apart from infrastructure, the low level of human development compared with the rest of the world is another serious impediment in Sub-Saharan Africa. The poor level of healthcare in the region is reflected in the fact that the level of life expectancy is the lowest in the world, at just 52 years in 2008, as Chart 16 shows. While one can point to a marginal increase in life expectancy in Sub-Saharan Africa over the course of the last decade, the improvement has been significantly less pronounced than in most other regions. Conversely, the incidence of infant mortality remains by far the highest in the world. The burgeoning HIV/AIDS epidemic in Sub-Saharan Africa has much to do with the lower level of life expectancy in the region. South Africa alone accounts for almost 6 million of the 24 million people worldwide infected with the virus. Unlike the 18.1% prevalence of HIV within the population aged 15 to 49 in South Africa and the 5.0% prevalence in Sub-Saharan Africa, the figure in most other regions of the world is less than 0.5%. Whereas in Sub-Saharan Africa the incidence of tuberculosis is 352 per 100,000 people, the figures in developing markets elsewhere are less than 200 and in high-income markets no more than 14. In most African markets the number of physicians per 1000 people is substantially less than 1.0 compared with figures of 1.5 or more in other developing regions and 2.5 or more in developed economies. Likewise, the number of nurses and midwives per 1000 people in Sub-Saharan Africa is between a third and a fifth of the number in most other regions. These poor figures emerge notwithstanding a relatively high level of expenditure on health as a percentage of GDP. The problem is that in absolute terms health expenditure per capita in Sub-Saharan Africa is less than $100 compared to more than $4000 in high-income markets.

Chart 16. Mortality - Life Expectancy at Birth

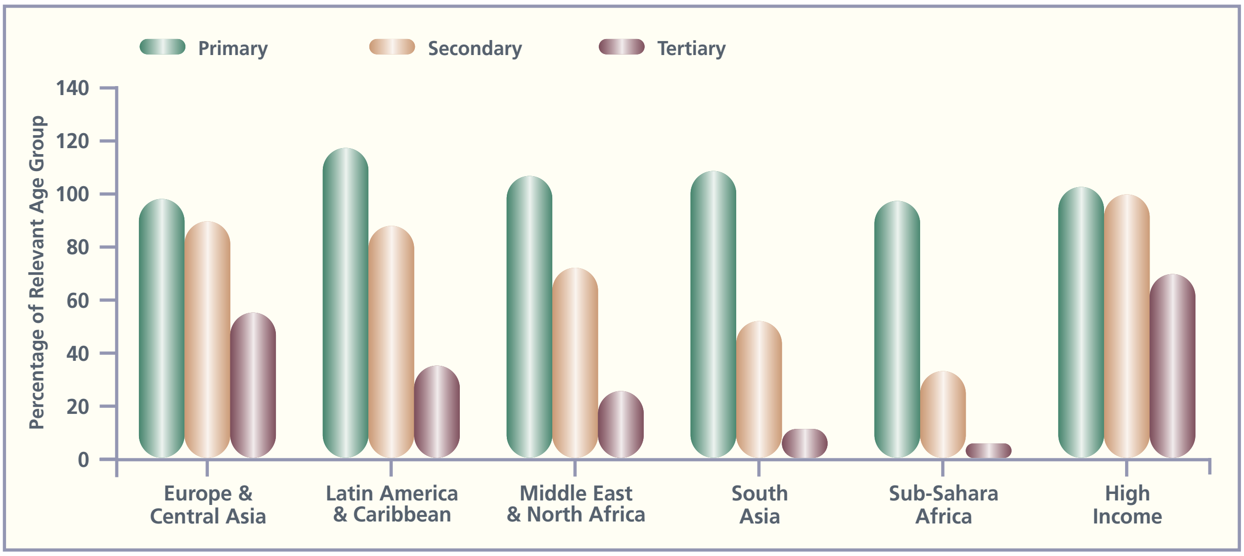


Source: World Bank

Education

A similar picture emerges when comparing the educational standards of Sub-Saharan Africa with the rest of the world. Although enrolment at primary schools in Sub-Saharan Africa is quite high, at 97% of the relevant age group, the figure falls dramatically for secondary school, to just 33%, with only 6% of the relevant age group enrolling at tertiary institutions. As Chart 17 shows, in high-income markets there is a 100% enrollment ratio even at secondary schools and a 69% enrollment figure for tertiary education, i.e. 10 times as high as in Sub-Saharan Africa. It is therefore not surprising to see that the number of graduates emerging from the formal educational institutions in Sub-Saharan Africa is a pittance compared with most other regions. Irrespective of the enrollment ratio, there is an additional problem in schooling in Sub-Saharan Africa in that the pupil-per-teacher ratio averages 49 compared with figures between 16 and 25 in most other regions. Youth literacy in Sub-Saharan

Chart 17. Education - Enrollment and Completion



Source: World Bank

Africa averages no more than 75% compared with almost 100% in most other regions. Furthermore, in many instances, the quality of that literacy is also open to question. Yet, expenditure on education as the portion of GDP in Sub-Saharan Africa is among the highest in the world. There is therefore a problem with the effectiveness of that expenditure; the money has not been well spent in terms of results. As with infrastructure, another important constraint on the rollout of education lies with the cost of the process. Whereas in the US, for example, the cost of a university education per year is between 20% to 65% of per capita income on average; in Sub-Saharan Africa the comparable figure is 170%, unaffordable except for a privileged few. Sub-Saharan Africa is also losing out heavily in terms of a high level of emigration of educated and skilled persons, with a relatively small proportion of such immigrants returning to their homeland. Although this may have resulted in an increase in the quantum of remittances to the continent from abroad, the benefit is small relative to the loss for the continent caused by the emigration of professionals.

Linked to the low level of secondary education is a relative shortage of artisanal skills. Vocational training programs in such skills and trades are few and far between and in many instances very inefficient. These skills are almost as critical to the process of economic development as professional skills. The result is that the region has become ever more dependent upon importing skills from other regions of the world, which comes at a relatively high cost to say the least. It is also in respect of public administration and management that the region is in short supply and it in turn constrains its ability to implement policy programs effectively.

Conclusion

There is no question that the emerging market growth story is becoming more important as we enter the second decade of the 21st century; and Africa is becoming an important part of this story. As the "Taking Stock" section of this report shows, the relatively rapid growth of the continent's population and working-age workforce stands to put it at the forefront of longer-term growth in market size and production worldwide. Improvements in governance and macroeconomic stability have also encouraged a recognition that the risk-reward tradeoff for Africa has improved significantly over the past decade. Nonetheless, the region faces significant challenges, as outlined earlier, if its potential is to be realized. However, addressing some of these challenges in itself offers significant opportunities for businesses prepared to venture into providing solutions. Thus, from the "Taking Stock" perspective, it is clear that the African economic story looks a lot more promising at present than at any stage during most people's lifetimes.

2. State of the Nations

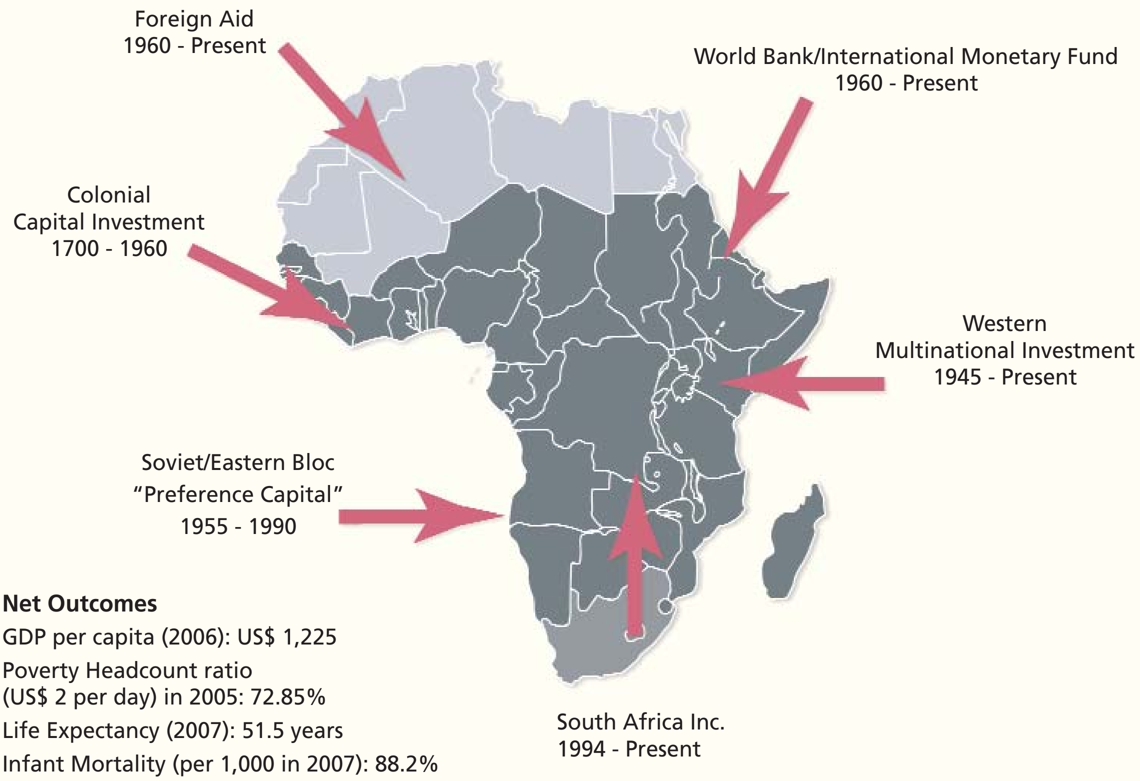
In the second part of this report the current state of the major Sub-Saharan African economies and the factors driving the phenomenal growth that have recently been witnessed in these markets are evaluated; with the role that traditional players as well as emerging economies are playing in the region are highlighted and assessed.

Traditional Sources of Capital

The markets of Sub-Saharan Africa have received enormous amounts of capital from various sources over the centuries. Chart 18 highlights the various traditional sources of financing that the region has engaged with. These relationships often date back centuries to the initial investments made by European states that established colonies in Africa and administered them until the mid-20th century. The influence of the colonial presence and capital input is still entrenched in most African states today, dictating their political alignment, economic relations and even linguistic traits.

Following on obtaining of independence, international financial institutions such as the World Bank and the International Monetary Fund have continually provided much-needed financial support to African states. The Soviet Union was also a key financier for certain states during the Cold War period. Additionally, one cannot discount the role that multinationals from developed markets, and more recently from South Africa, have played in providing capital to Sub-Saharan Africa. The resultant effects of the decades of investments by traditional partners on Sub-Saharan Africa is arguable but the poor developmental state of many states is reflected in the relatively low GDP per capita ($1,225 in 2008 for Sub-Saharan African markets according to the World Bank), high poverty ratios, relatively low life expectancy and high infant mortality rates among other poor statistics.

Chart 18. Traditional Sources of Capital



Net Outcomes

GDP per capita (2006): US$ 1,225

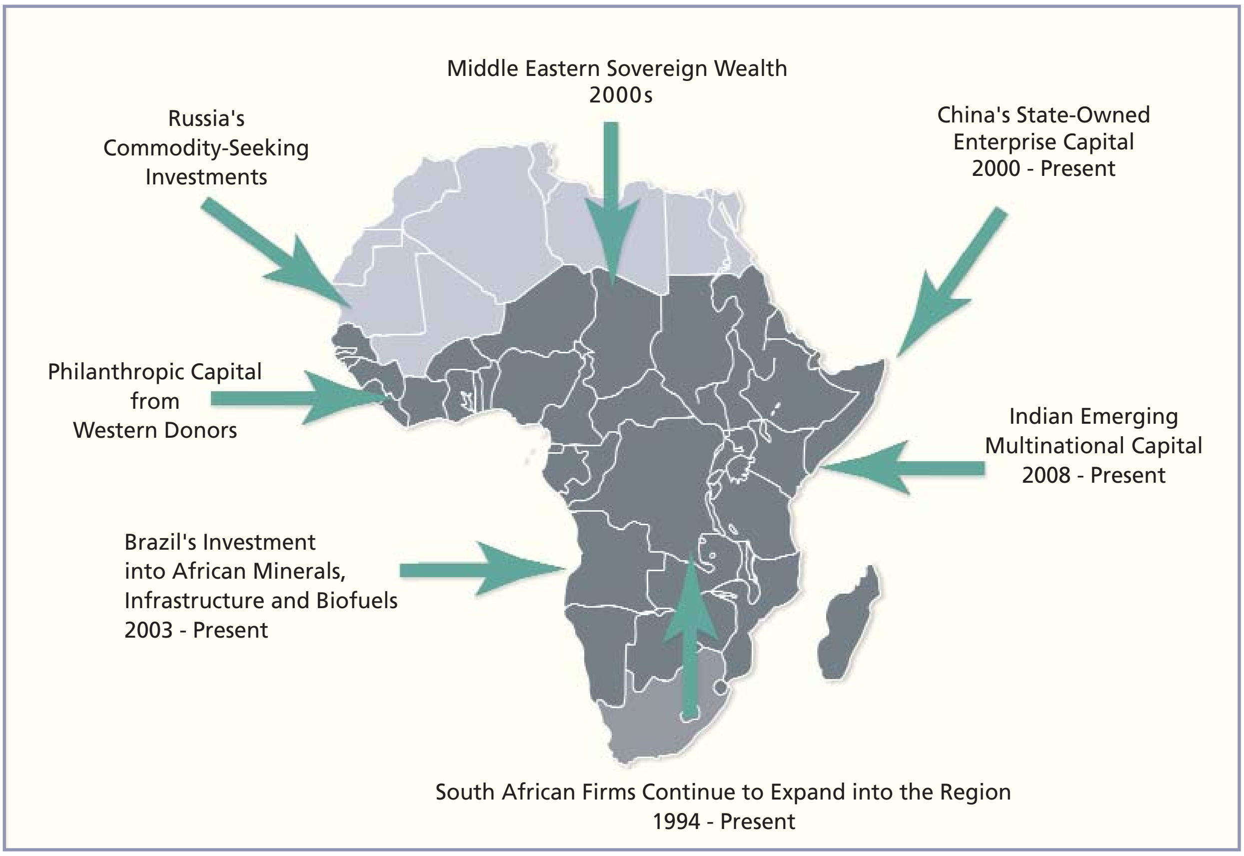
Poverty Headcount ratio
(US$ 2 per day) in 2005: 72.85%

Life Expectancy (2007): 51.5 years

Infant Mortality (per 1,000 in 2007): 88.2%

Source: Frontier Advisory Research, 2010

Chart 19. New Emerging Sources of Capital



Source: Frontier Advisory Research, 2010

Emerging Sources of Capital

Recently new forms of financing have emerged to complement the traditional sources from new emerging markets and challenge the existing status quo in the region leading to a fresh geopolitical context. The new forms of financing are increasingly coming from China, India, Brazil and the Middle East. The upsurge of China's activity in Africa has led to the meteoric rise in the trade, investment and financing figures between the two and is underscored by deepening political engagement with Beijing's involvement in Africa at the highest level.

India has a long history of engagement with Africa, particularly with the Eastern and Southern coasts of the continent. India's emerging multinationals are beginning to establish a presence in Sub-Saharan Africa beyond these "traditional" regions. Other emerging forms of capital witnessed in the region include sovereign wealth from Middle Eastern markets and the investment of South African corporations which have constituted a significant source of capital since 1994.

Economic Growth

The growth in the GDP of Sub-Saharan Africa as a whole since 2000 has been very robust, exceeding that of the industrialized nations and the global average. Even in the wake of the recent economic crisis, the GDP growth rates for the region proved to be very resilient. Table 2 highlights Africa's growth decade between 2001-2010 during which time six of the ten top growth economies (according to The Economist) were Sub-Saharan African markets, notably Angola which was the top global performer with a GDP growth rate of 11.1% and Nigeria which had an average GDP growth rate of 8.9%.

Table 2. Economist's Top Growth for 2001 - 2010

Rank	Market	GDP Growth, Percentage
1	Angola	11.1
2	China	10.5
3	Myanmar	10.3
4	Nigeria	8.9
5	Ethiopia	8.4
6	Kazakhstan	8.2
7	Chad	7.9
8	Mozambique	7.9
9	Cambodia	7.7
10	Rwanda	7.6

Source: Economist and IMF Forecast

Table 3. Economist's Top Growth for 2011 - 2015

Rank	Market	GDP Growth, Percentage
1	China	9.5
2	India	8.2
3	Ethiopia	8.1
4	Mozambique	7.7
5	Tanzania	7.2
6	Vietnam	7.2
7	Congo	7.0
8	Ghana	7.0
9	Zambia	6.9
10	Nigeria	6.8

Source: Economist and IMF Forecast

The Economist has also provided GDP growth forecasts for the period of 2011 to 2015, which includes seven Sub-Saharan African markets among its top ten fastest growing economies with the GDP of Ethiopia, Mozambique, Tanzania, Congo, Ghana, Zambia and Nigeria all forecast to grow at rates in excess of 6%. These are summarized in Table 3.

Drivers of Growth in Sub-Saharan Africa[2]

Africa's economic growth over the past decade has been driven largely by strong commodity prices that reached unprecedented levels in the run-up to the 2008 financial crisis. Since the price collapse in late 2008, prices have largely recovered to pre-crisis levels for the bulk of commodities.

Increasing trade and investment from emerging market economies have also been a critical source of capital for Sub-Saharan Africa, with the BRIC economies playing a particularly important role in this. Additional factors driving the strong growth in the region, as summarized in Table 4, are increasing private equity flows and growing investments from sovereign wealth funds into the region, coupled with increasing remittances from Africa's migrant workforce. Providing additional impetus to the growth being experienced is improving governance and

Table 4. Drivers of Growth in Sub-Saharan Africa

Creating Frontier Markets
Growth underwritten by strong commodity prices
Improving macro-economic frameworks
Capital inflows from BRIC economies
Private capital and sovereign wealth investment increases
Rollout of massive infrastructure development
Remittances boosting cross-border capital flows
Slowly improving intra-regional trade networks
Deepening capital markets-growing equity culture
Emergence of "African Multinationals"
Increasing African consumer spending

Table 5. Selected African Economies Performance (2005 - 2010)

Market	2005	2006	2007	2008	2009	2010
South Africa	42	36	44	45	45	54 ↓
Mauritius	52	55	60	57	57	55 ↓
Namibia	63	72	89	80	74	74 ↓
Botswana	48	57	76	56	66	76 ↓
Nigeria	88	95	95	94	99	127 ↓
Egypt	53	71	77	81	70	81 ↓
Morocco	76	65	64	73	73	75 ↑
Zimbabwe	109	112	129	133	132	136 ↓

Source: World Economic Forum

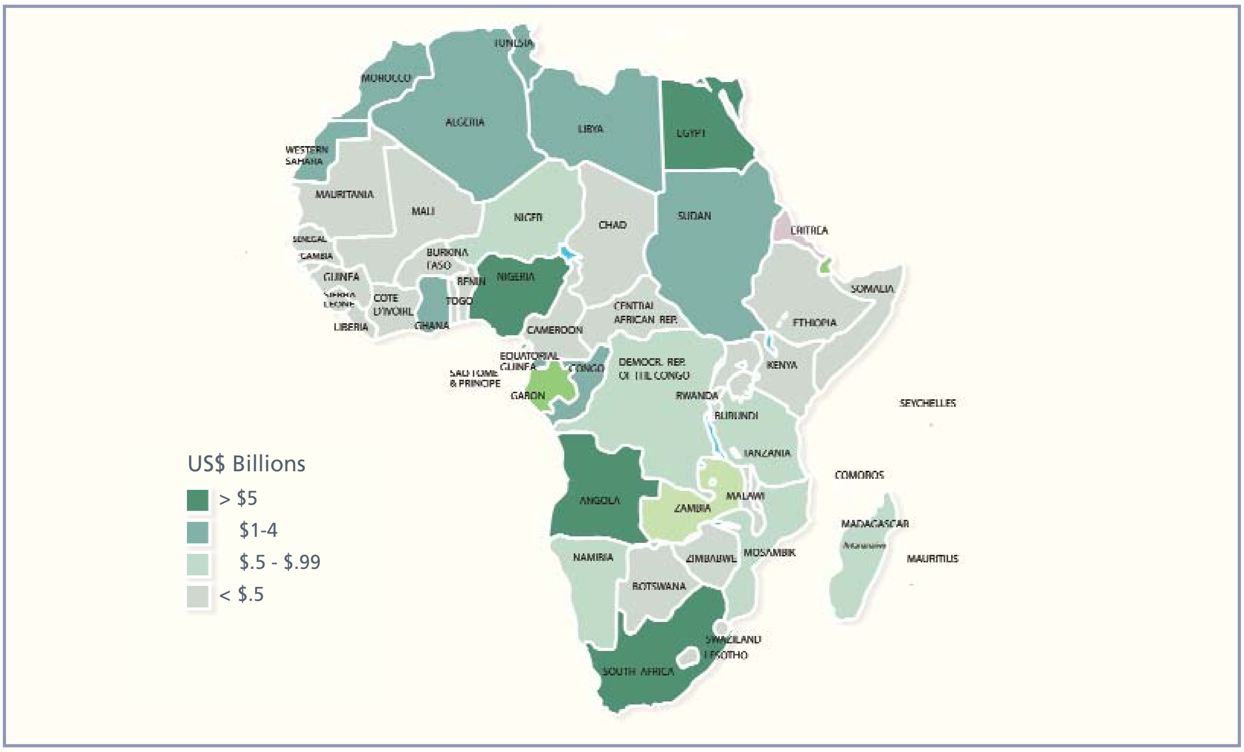
macroeconomic frameworks which have ensured that the economic gains won can be reinvested and better managed. While improvements can still undoubtedly be made in terms of governance in general in the region, the signs of improvement are encouraging. The rehabilitation and development of infrastructural networks that continue to be undertaken in several markets serve to increase the region's competitiveness. Sub-Saharan African capital markets — while still tiny by global standards — are growing, as is the trade between markets in the region (estimated though at only between 8-10% of total trade) and the growing stratum of middle-class consumers which provide an increasingly sizeable and important market.

The Competitiveness of Sub-Saharan African Economies

The ability of Sub-Saharan African states to improve the competitiveness of their economies will ultimately determine their ability to entrench their development and compete at a global level. Despite robust growth, Sub-Saharan African markets have by and large been unable to enhance their competitive positions.

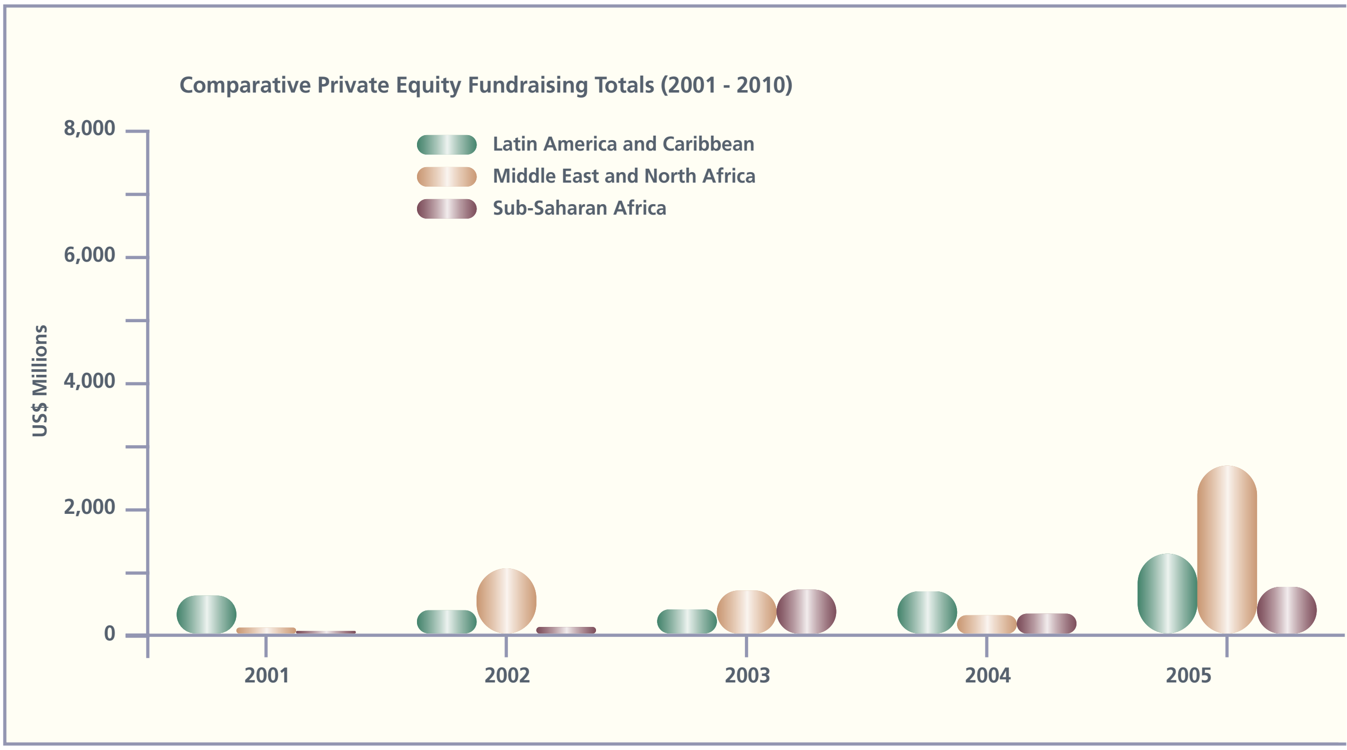
Table 5 shows rankings of global competitiveness as compiled by the World Economic Forum. During the period 2005 to 2010, the top performing African economies have been South Africa, Mauritius, Botswana and Namibia. However, it must be noted that the top performing African economy (South Africa) placed 54th in the world. There clearly still remains a lot of scope for improvement in the competitiveness of these economies and this is particularly so for most of the Sub-Saharan African economies which have consistently been lowly placed in the global competitiveness rankings.

Chart 20. Foreign Direct Investment Inflows Into Africa 2009



Source: UNCTAD, 2010

Chart 21. Foreign Direct Investment Inflows Into Africa 2009



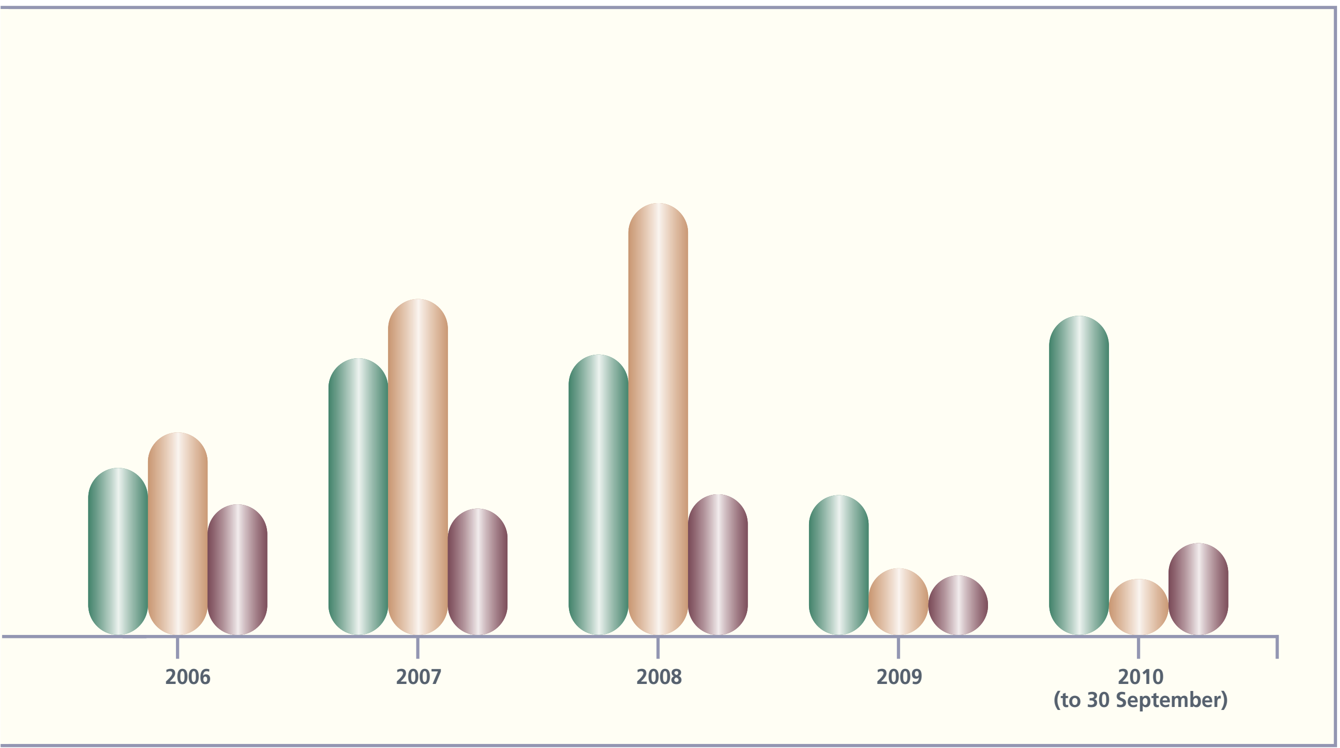
Increasing Levels of Foreign Direct Investment

An encouraging sign for many Sub-Saharan African markets is the increasing flows of Foreign Direct Investment (FDI), both from traditional players as well as from emerging market economies. As highlighted in Chart 20, the major recipients of FDI on the African continent have been South Africa, Nigeria, Angola and Egypt. UNCTAD reports that FDI flows into Africa as a whole increased from $9.8 billion in 2000 to a record $72 billion in 2008. Total 2009 FDI inflow into African economies was $58.5 billion lower than 2008, largely on account of tightened global economic conditions. A substantial portion of the FDI flows has gone into the resources sector such as oil and gas, and precious and base metals, but other sectors such as ICT and finance have also received relatively large investments.

Growing Private Equity Investment

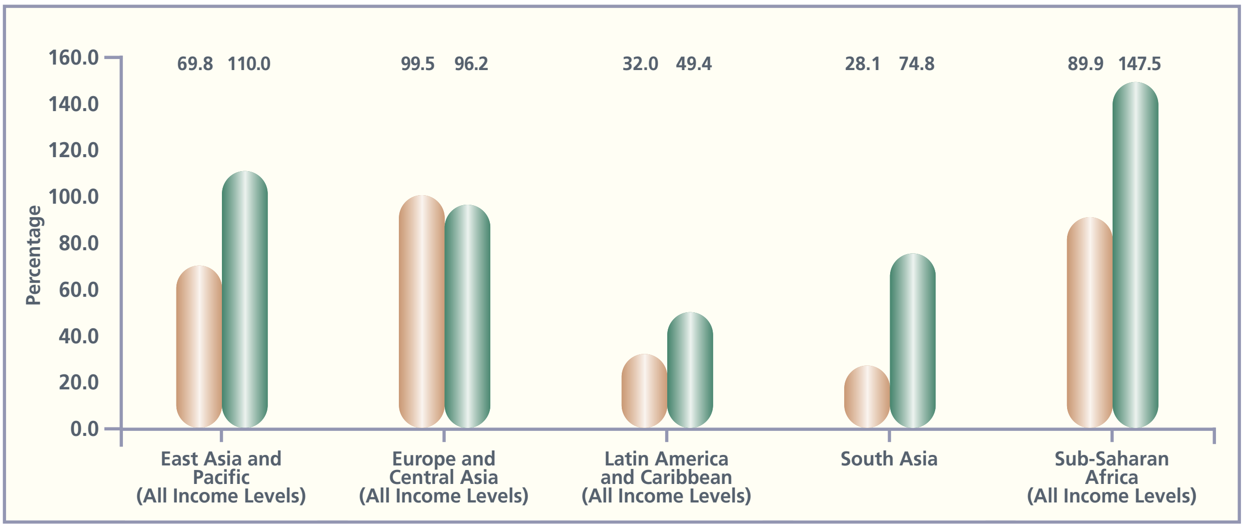
The growth in private equity investments has been strong. Chart 21 highlights private equity fundraising figures for three regions over the period 2001 to 2010.

A clear upward trend is discernible for Latin America, Middle East and North Africa (MENA) and Sub-Saharan Africa. Coming off a low base, private equity figures in Sub-Saharan Africa increased from $92 million in 2001 to a high of $2.2 billion in 2008, representing a very rapid CAGR of 57.8%. While private equity figures across the globe took a sharp dip in 2009, there are growing indications of recovering an upward trend going forward.



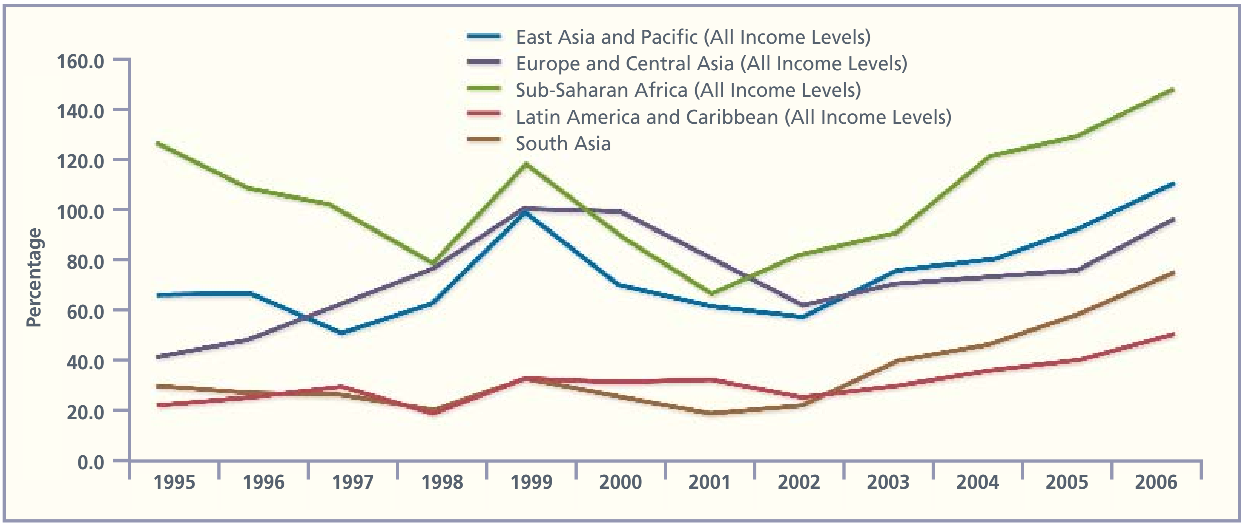
Source: EMPEA, 2010

Chart 22. Market Capitalization of Listed Companies (Percentage of GDP)



Source: World Bank

Chart 23. Market Capitalization of Listed Companies (Percentage of GDP)



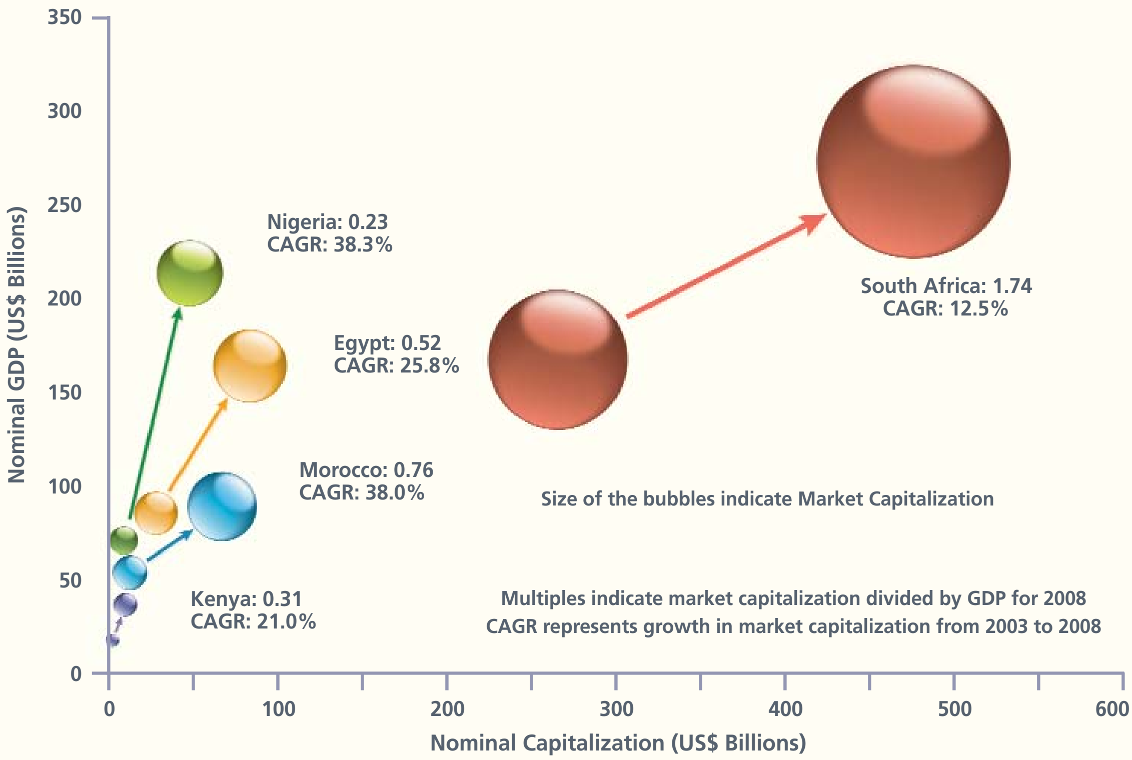
Source: World Bank

Sub-Saharan Africa Capital Markets

Chart 22 shows the cumulative growth of market capitalization of listed companies as a percentage of GDP in all key regions of the world between 2000 and 2008, and Sub-Saharan Africa has clearly performed well. Between 2000 and 2008, for instance, the market capitalization of the region's listed companies increased from 89.9% of GDP to 147.5% of GDP. This represents a CAGR of approximately 8.6% which is one of the largest increments over the period for the regions selected and displayed on Chart 22, only exceeded by that of South Asia.

Chart 23 shows clearly that market capitalization in Sub-Saharan Africa (not including South Africa) started to take off in 2001, and has outperformed other regions since as a percentage of GDP.

Chart 24. African Stock Market Performance - Growth 2003-2008



Market	GDP (US$B)	Market Cap (US$B)	Number of Listed Companies
South Africa	277	483	411
Nigeria	212	48	213
Egypt	163	85	373
Morocco	86	66	77
Kenya	35	11	56

Source: World Bank, 2010; World Federation of Exchanges

The performance of Africa's leading stock markets is highlighted in Chart 24. These include South Africa, Egypt, Nigeria, Morocco and Kenya. The market capitalization of all the bourses selected increased during the period 2003 to 2008. The largest stock exchange is South Africa, whose market capitalization increased from approximately $268 billion in 2003 to $483 billion in 2008 representing a CAGR of 12.5%. Also the region's largest economy, South Africa's ratio of market capitalization to nominal GDP was 1.74 in 2008 indicating the great extent of capitalization in the market. The growth in the market capitalization of the other exchanges has also been significant as is shown by their CAGR for the period 2003 to 2008, ranging from 21% for Kenya to 38.3% for Nigeria. The ratios of the market capitalization to nominal GDP for the rest of the markets, compared to South Africa's, are markedly lower with most of them ranging from 0.23 in the case of Nigeria to 0.76 in the case of Morocco. This provides an indication of the lower capitalization of these markets relative to the size of their economies.

3. Conclusions

The overview of the state of development of Sub-Saharan Africa provided in this report shows three key striking features: (i) the state of socio-economic under-development in all aspects of Sub-Saharan Africa has been the worst in the world in the past 50 years; (ii) growth acceleration in the last decade has been very impressive, with emerging markets from Asia and Latin America playing a new role in the region; and (iii) the region has immense potential for growth and development in Sub-Saharan Africa going forward if the region can begin to effectively tackle many of the crippling constraints that have held the region back in the past. Subsequent reports in this series will systematically address these issues.

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1. More on this in the fourth Insights report of this series to be published later this year.

2. The issue of "drivers" of economic growth in Sub-Saharan Africa is explored in details in the second report of this series.

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