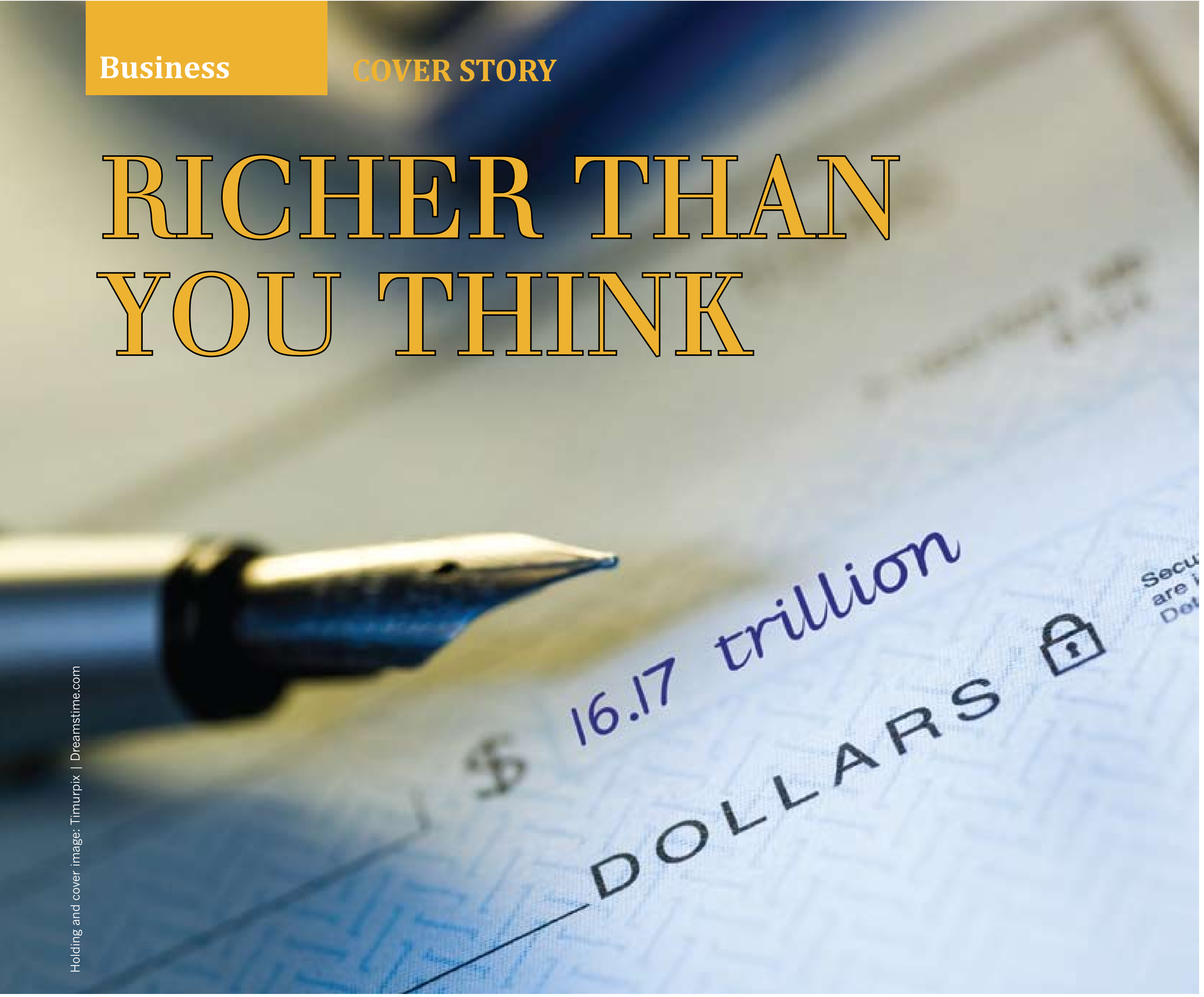
RICHER THAN YOU THINK



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Africa investor and The Africa Group (TAG), a consulting firm with a focus on growth opportunities and investment in the private sector, set out to size and evaluate eight sectors in Africa to determine the potential opportunity over and above today's market size. The result is the Africa Wealth Cheque report, a comprehensive analysis that addresses actual and potential market sizes of energy, minerals, agriculture, tourism, water, forestry, fisheries, and human capital. **Mark Allix** profiles the continent's potential, all $16.17 trillion of it

Imagine, for a moment, you had the opportunity to buy stock in Ford just before it pioneered the first assembly line. The car company had significant pent-up demand that existing infrastructure could not meet, making the potential opportunity for sales many times greater than actual sales in that day. It just needed a bit of capital to achieve outsized returns.

This is the opportunity in Africa today – a pivotal market with potential much greater than actual output today. A market like this needs just a bit of private investment to get the ball rolling.

Africa is the most fertile investment ground in the world today. Besides untapped oil, gas, and mineral opportunities across the continent, there is plenty of opportunity in other sectors and industries, as our Africa Wealth Cheque Report shows.

"The aim of the Africa Wealth Cheque Report was to identify and estimate how much natural, economic and human capital wealth is within the continent, in essence to quantify the beginnings of the asset side of Africa's balance sheet," says Hubert Danso, vice chairman and managing director of *Africa investor*. "We wanted to catalyse debate about how wealthy as opposed to how poor the continent is, and signal tipping points for African governments and global investors seeking growth opportunities."

The result? There is a potential US $1.67trn of annual production opportunity in six key sectors (energy and minerals not included). Saying it another way, leveraging existing assets in Africa, incremental investment may expand the addressable market approximately twofold. In addition, current proven stocks of extractable energy resources in Africa (oil, natural gas, coal, and uranium) are estimated to be worth between $13 and $14.5trn.

Emerging no-brainer

There is no other region in the world with such a vast, open market.

"What makes Africa unique is that incremental dollars invested into the continent will begin to unlock a previously inaccessible market of equal or greater size than Africa today," says Mamo Mihretu, a partner in TAG. "Potential returns in this type of environment are extraordinary."

Emerging markets guru Mark Mobius, executive chairman of Templeton Asset Management, says there is a growing realisation that Africa's resources must be tapped if the needs of China, India and other fast-growing emerging markets are going to be met. "It is not only Africa's mineral resources that are attractive, but Africa's agricultural potential and the abundance of water that will decide the rise and fall of nations in the future," he says.

"With regards to the capital markets outlook and investments in private equity, public equity and bonds, it is a mixed picture. There are many opportunities for private equity since capital markets in many countries are not fully developed, so direct foreign investment is needed as a starter," says Mobius. "In the public equity arena, there are some markets that are now developing rather rapidly. The same goes for the bond market," he says. "But those markets have a long way to go before their potential is fully realised. Nevertheless, we are very active in African investing and our frontier markets funds have substantial holdings in Africa."

Africa is home to 13% of the world's population but accounts for only 2% of the world's GDP and 3% of global commercial energy consumption. Most of the commercial primary energy Africa produces is exported to other continents. South Africa accounts for nearly half of all the electricity consumed, while Egypt, Libya and Algeria take up a further 30%. Sub-Saharan Africa, in which 80% of the continent's population lives, generates only 24% of total electricity output.

But such disparities leave plenty of room for growth. Professor Leonce Ndikumana, director of the Development Research Department at the AfDB, says the growth and investment outlook for Africa is very positive, with most countries expected to grow between 1% and 5% this year, and even faster in 2011. "If I were an investor trying to reap the benefits of domestic demand, I would say Africa is a very good bet. Not just in mining and oil. You now see more investment going into services, and banking is a very profitable sector."

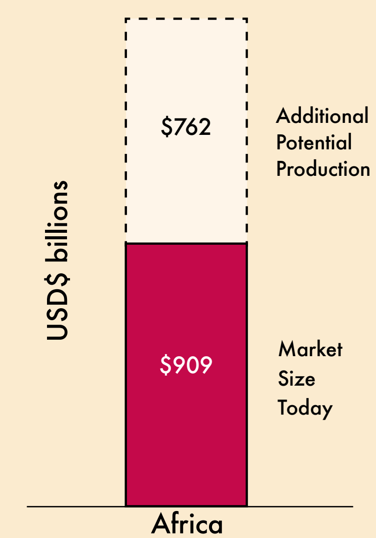
In future, *Africa investor*-TAG says Africa's employment rate, employment mix and wage rates will increase and start to look more like those of Brazil and Thailand, which are presently ahead of most African countries on the development curve. Ndikumana says private sector lending has been the fastest-growing segment for the AfDB, and institutions such as the International Finance Corporation and private banks. "Every dollar the AfDB has invested in the private sector in Africa has seen $5 in private investment, and private investors see AfDB participation as a stamp of assurance that risk will be shared," says Ndikumana.

"Environmentally-friendly investment is something we want to put very high on the agenda, in addition to basic infrastructure investment, especially in the energy sector," he says.

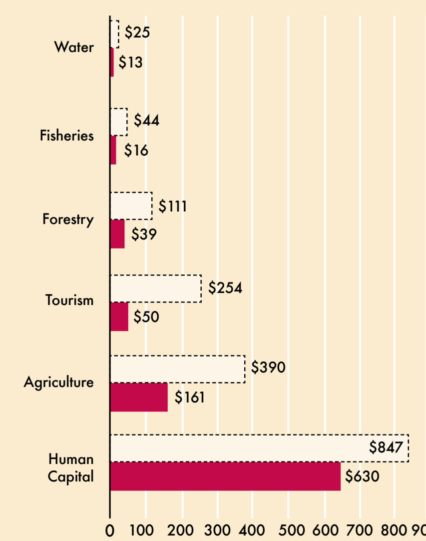
The bank is involved in the $430 million Lake Turkana wind project, which is poised to provide 300MW of clean power to Kenya's national electricity grid, and may take part in the much-vaunted Grand Inga hydro-electric project proposed for the western Democratic Republic of Congo (DRC). This project could deliver 45,000MW of low-carbon electricity to southern African countries in the next decade at a cost of $80 billion.

Apart from the obvious allure of investment into energy and mining, a number of other sectors stand out as areas for potential and rapid growth: tourism, agriculture, forestry, fisheries and water. Capitalising on the attractions of Africa's natural wonders – safaris to see lion, elephant and giraffe; treks

Across six key sectors Africa only produces half of it's potential output today



Market size of selected African sectors has not yet reached their potential



Source: *Africa investor*-TAG

among mountain gorillas, and the continent's stunning beaches and coral reefs – is an immediate prospect in a world where travel has become a primary industry and lifestyle choice.

Africa investor-TAG estimates that of all output in potential growth sectors, tourism – and associated business travel – stands to increase some four times from the current $50bn annually. Angola's AAA Activos is already building a 61-hotel network that will extend throughout the country, and planning has commenced for the Isiolo Resort City in northern Kenya, with the intention of bringing tourists to the Meru, Kora and Marsabit national parks, as well as the Samburu, Buffalo Springs, Shaba, Bisanadi, Losai, Rahole and Mwingi reserves.

Additionally, *Africa investor*-TAG says there is nearly two and a half times the average multiple growth potential in agriculture (to $390bn) – stemming from projects such as the $780m Zambezi Integrated Agricultural-Community Development Programme; forestry (to $111bn) and fisheries (to $44bn), and a doubling of the market for water to $25bn. And some $217bn more could be spent on human capital inputs if Africa's economies functioned more similarly to their emerging market peers.

> What Africa is known to have is spectacular; what it could still have is even more spectacular

Banking on growth

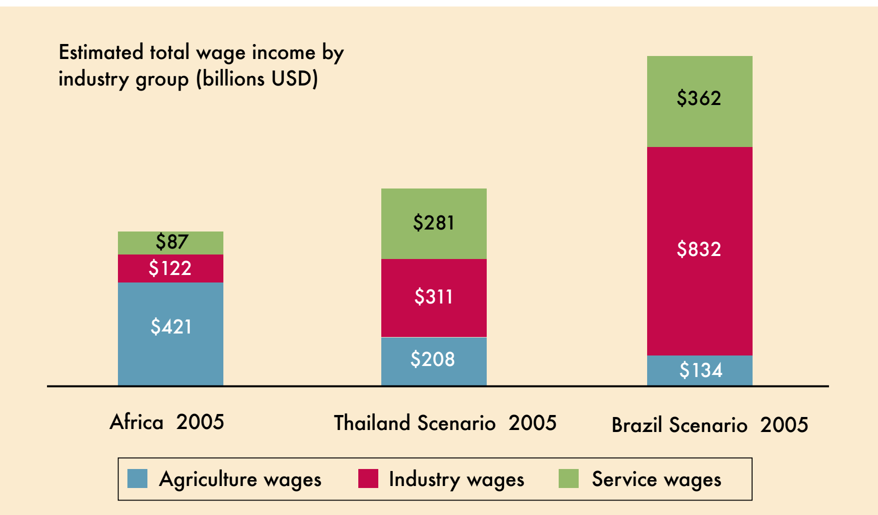
It is of particular significance that in 2007, South Africa's and Africa's largest bank, Standard Bank, with operations in 17 African countries, engaged in a $37bn partnership, giving it 20% alongside the Industrial and Commercial Bank of China, China's largest bank by market capitalisation. To date, foreign direct investment (FDI) has concentrated on oil, gas and mining. Indeed, the strategically vast and vital mineral wealth – including cobalt and coltan – of countries such as the DRC, is crucial to advances in global medicine, battery technology and telecommunications. But perhaps much more important, in seeking access to African resources and markets, China has engaged in massive infrastructure development, building roads, railways, dams and power stations across many African nations.

Such aggressive intent has left Western-bloc nations breathless, and wondering what it will take to match the growing clout of the world's second-largest economy. But there are several considerations to take into account when investing in Africa. Guinea is the world's largest bauxite exporter – the most important source of aluminium ore – but it's also one of the poorest states in the world, and was recently plunged into turmoil after the death of its longtime military dictator, Lansana Conte. The issue of human rights is never far away. In October 2009, the Hong Kong-registered China International Fund signed a $7bn deal with Guinea's military regime for access to bauxite and other minerals, a month after 157 protesters were killed in the streets of the capital Conakry. And then there are the battles between Africa's state-owned mining firms and multinationals over contracts and concessions.

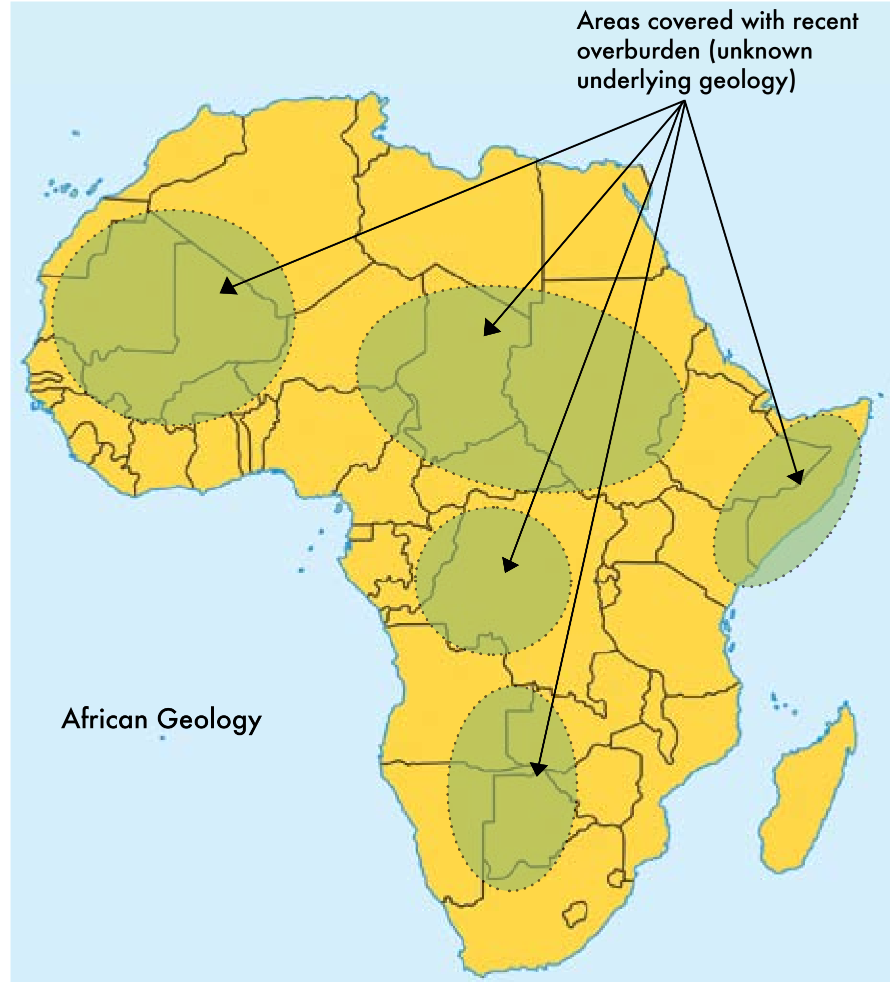
According to figures compiled by *Africa investor*-TAG, extractable energy resources in Africa (oil, natural gas, coal, and uranium) are estimated to be worth between $13 and $14.5trn. However, production far outstrips consumption. In countries like Sudan, Chad, Namibia, Uganda and Madagascar, intense exploration for new oil fields is taking place. In 2008, the US imported 30% of Africa's oil, while Europe imported 37%. US imports represent around 5% of the world's total oil imports, while China's African oil imports are growing fast from 13%. Oil-producing countries that are members of the Economic Community of West African States (ECOWAS) export 56% of their oil to the US and 20% to Europe, while north Africa exports 78% of its oil to Europe and 22% to the US.

For 2010, *Africa investor*-TAG analysis indicates that putting money to work improving the efficiency of extraction may pay outsized gains for investors given the relatively high loss ratio in Africa relative to other areas of the world. As a result, incremental dollars into energy in Africa may yield more substantial production increases moving forward. Paul Jourdan, former CEO of Mintek, a South African mineral research and services organisation, says: "What Africa is known to have is spectacular; what it could still have is even more spectacular. Less than half of Africa has been systematically, geologically surveyed, so there could still be a lot more resources."

Africa has 6% of the world's recoverable coal reserves, and accounts for 4% of the world's production. *Africa investor*-TAG says hard coal is potentially worth $3.4trn to Africa's economy, with natural gas worth some $1.7trn, crude oil a potential $7.9trn, and the cleaner energy alternative, uranium, valued at a possible $63bn. This gives Africa a total current energy resource of some $13trn. On a global scale, South Africa is the fifth-largest coal producer after China, the US, India and Australia. Johannesburg-listed Sasol has pioneered a massive synthetic fuels industry by extracting oil from coal. Mozambique also has a huge store of coal, and the $70m Moatize Coal Project in Tete Province is in early implementation, along with the expansion of Beira port to handle an additional 10 million tonnes of coal per annum in the next five to six years.



Perhaps more importantly, nearly 20% of global uranium production comes from three African producers: Niger, Namibia and South Africa. With the catastrophic BP oil spill in the Gulf of Mexico and the world's eyes turned toward the potential ravages of climate change, nuclear energy is back on the agenda in a big way. But much like Guinea, Niger was plunged into chaos in February 2010, when the military ousted President Mamadou Tandja, illustrating the political uncertainty that prevails in many African states.



Source: Resource-based African Development Strategy (RADS)

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Mining leads the way

Six metals dominate the African metal mining industry. Iron, gold and copper account for about 50% of the total value of metallic minerals produced. They are followed by nickel and zinc, which represent 8.3%, and bauxite, at 1.5% of total production value. While Africa's gold production share has decreased steadily from 32% of world production in 1990 to 21% in 2006, gold output in South Africa in the first quarter of 2010 was at 43,927.8 kilograms.

South Africa is the largest platinum producer in the world, holding 77% of the world's resources. The metal is mainly used in autocatalysts, and is a vital factor in cleaner vehicle exhaust emissions. It's also increasingly valuable in jewellery production. But, mining in Africa has its drawbacks. In the DRC, ongoing conflict, corruption and illicit mining – compounded by a review of contracts drawn up by previous governments – has created uncertainty for investors, and affected the production of gold, copper, cobalt, coltan, zinc and uranium.

But investment in Africa continues apace. The AfDB's outstanding loans and equity portfolio will reach $30.2bn in 2015. Infrastructure of all types now accounts for 52% of the bank's portfolio, with energy shortages and ensuing power outages in many countries being given special attention. Annual private sector lending of the bank came in at $1.8bn in 2009, financing such projects as maritime ports in Senegal and Djibouti, and renewable energies in Cape Verde. The AfDB is also contributing to the recovery of many post-conflict countries, and is helping normalise their relations with the international financial system, while its flagship water programmes have continued to improve rural access to clean water across Africa.

Craig Bond, chief executive of Beijing-based Standard Bank-ICBC Ventures, says China is interested in two things: to grow African economies and create new markets for Chinese goods and services, so it can fully utilise its huge industrial capacity. So far, the Chinese have directly invested in African resources or engaged in off-take agreements, with bilateral investments worth up to $50bn in total. At the same time, China has become Africa's biggest trading partner, conducting some $100bn of trade in 2009.

Bond says in the last six months China's appetite for resources has rebounded, including sourcing minerals from Australia and South America, but that the real focus for Chinese companies is Africa, where they are seeking partnerships on the back of infrastructure development. China's official export credit insurance agency Sinosure is engaging in risk assessment and underwriting, along with Standard Bank and ICBC, in projects such as Botswana's 1,200MW Mmamabula power station and integrated coal mine that will mainly provide electricity to South Africa. Such prudence is necessary, as large-scale infrastructure developments in places such as Nigeria, Zambia, Kenya and Mozambique continue to speed up. Such investment is allied to inputs from the AfDB, the World Bank and other institutions, creating coherence far beyond investment by individual companies and country-level agreements.

"Standard Bank only wants to be an emerging markets bank," Bond says. "China was too big an elephant for us, so we took the view that a partnership with ICBC was the best route. I think ICBC wanted to be closer to their clients in Africa. Standard Bank almost gave them a carte blanche solution to that." He says the Chinese are focusing on infrastructure development in Nigeria, Ghana, Zambia, Botswana, Uganda and Kenya, but are investing in many other African countries as well.

There is enormous scope for hydropower in Africa, particularly in sub-Saharan countries, which account for about 12% of the world's hydropower potential. But only about 17.6% of these resources have been harnessed. The current geographic distribution of hydropower has north Africa contributing 23%, west Africa harbouring 25% and southern/central/east Africa weighing in at 51%. Africa also has abundant arable land and water. Its per capita water resource is 4,600 square metres, against Asia's 3,000 square metres and 164 square metres in the Middle East. Only 15% of Africa's arable land is currently in use, compared with 60% in Asia, while the Middle East has largely exceeded its capacity. And a focus on food security in countries such as Saudi Arabia and South Korea has seen these nations move towards leasing vast tracts of land in places like Sudan, Ethiopia, Mozambique and Madagascar.

Money likes certainty

Templeton's Mobius says South Africa is the king of sub-Saharan African investing, but Nigeria is coming up fast. In north

Capital outlook: Mark Mobius, who oversees $25bn in emerging market investments as executive chairman of Templeton Asset Management, is positive about private equity opportunities available in Africa

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AFRICA WEALTH CHEQUE:

SECTOR	CURRENT MARKET SIZE	TOTAL POTENTIAL
Tourism	$50bn	$254bn
Agriculture	$161bn	$390bn
Human Capital	$630bn	$847bn
Water	$13bn	$25bn
Forestry	$39bn	$111bn
Fisheries	$16bn	$44bn
Total:	$909bn	$1,671bn

CURRENT PROVEN STOCK OF ENERGY RESOURCES	VALUE AT 5YR AVG PRICE	VALUE AT RECENT SPOT PRICE
Recoverable Hard Coal (Million Metric Tons)	$3,402,112,141,354	$3,402,112,141,354
Proven Natural Gas (Trillion Cubic Feet)	$1,717,861,470,564	$1,576,028,127,060
Proven Reserves of Crude Oil (Billion Barrels)	$7,899,927,605,841	$8,439,156,736,200
Uranium Recoverable Resources (Metric Tons)	$63,067,237,382	$105,439,809,770
Total Estimated Value	$13,082,968,455,141	$14,538,250,255,567

Source: *Africa investor*-TAG

Africa, Egypt is the major market. Other markets of interest include Kenya, Botswana, Ghana, Morocco and Tunisia. Liquidity is the key concern, and those markets that are most liquid are the ones that will see the investment flows. But what is really needed to broadly unlock the value of African resources and human potential is law and order, Mobius says, with the elimination of corruption and a predictable set of rules on which investors can depend.

"Money gravitates to places where there is certainty and predictability of the application of taxes and law. If there is uncertainty regarding foreign exchange regulations, taxation and property ownership then investors tend to be very short-term and skittish," he says. So, governments need to realise that good legal systems are key to economic potential. They also need to encourage market-oriented economies, where the larger part of the economy is determined by market forces and the widespread privatisation of government enterprises. But privatisation does not mean wholesale disposal of state entities, but rather government and private sector partnerships where the effectiveness of market-oriented managements can play an important role in increasing productivity.

Emerging markets private equity fund, Schulze Global Investments (SGI), maintains that the economic outlook for Africa is bright, as one of the fastest growing regions in the world, with diverse growth driven by a mix of domestic and export-oriented industries, and a rapidly expanding middle-class. SGI says growth is attributable not only to an explosion in commodity exports, but equally the result of a decade of economic reform programmes, including privatisations, profound adjustments to macroeconomic regimes, and increasingly open trade and investment policies.

SGI President Gabriel Schulze says Ethiopia and its neighbours offer highly compelling investment opportunities across a range of industries. Broadly speaking, SGI recognises potential in the agriculture, natural resources, infrastructure, logistics, manufacturing and tourism sectors.

"SGI does not target venture-stage opportunities, preferring instead to seek firms with positive cash flows and management teams that have proven, if nothing else, that they can keep the business running. In east Africa there is no shortage of entrepreneurs, but unfortunately many of them prove unable to turn their enthusiasm into a sustainable business," says Schulze. "So the opportunities for private equity are diverse, but the key is finding companies which can take private equity capital into their business and actually understand how to apply it effectively and efficiently to achieve growth."

One significant barrier to investment in Ethiopia is the designation of certain sectors as "reserved" – where foreign investors are not permitted to participate. Some foreign investors interested only in restricted areas such as telecoms and banking find these exclusions intolerable. SGI believes, however, that Ethiopia offers a wealth of investment opportunities outside these protected sectors. Shortcomings in the availability, reliability, and pricing of communications – mobile, fixed line and Internet – in Ethiopia also present a constant challenge. However, with the full implementation of the Seacom fibre network up Africa's east coast, these challenges are expected to be resolved.

Another barrier to investment across Africa relates to the availability and accuracy of information. There is very little centralised information in most African states, and this presents formidable hurdles. "The challenge of effectively resolving regulatory, tax, or legal questions arising from any 'new' approach with respect to structuring or executing an investment also presents a significant roadblock in many African markets, including Ethiopia," Shulze says.

Stanislav Vecera, general manager of Procter & Gamble South Africa, says it is part of the company's strategy to continue to expand in the DRC, Ethiopia and the Ivory Coast, where existing operations can be grown considerably. But this depends on resolving issues including foreign exchange and energy supply. The global pharmaceuticals, cleaning supplies and personal care products manufacturer currently has plants in Nigeria, South Africa, Egypt and Morocco, but expects that regional markets will see heightened demand.

"In the next three to five years we want to look at how our brands can succeed in sub-Saharan Africa and South Africa," says Vecera. "We also have a firm plan to expand manufacturing in Nigeria with a capital investment of $100m, and are in the process of evaluating a second plant, as enlargement of the current site would not be enough to service west Africa."

So, far beyond the FDI in base resources, Africa's rapidly expanding consumer markets are attracting the interest of global firms. But that requires that regional trade forums work cohesively. Vecera says that COMESA is the best of the regional bodies, and that it is working not just on paper, but in practice. However, market efficiencies in west Africa and the Southern African Development Community are not yet proven.

"The underlying expectation is that political and demographic forums in sub-Saharan Africa will continue to progress, and we are looking for such regional trade agreements to work together. That's not the case today, but the outlook is very positive," says Vecera.

> If I were an investor trying to reap the benefits of domestic demand, I would say Africa is a very good bet

The outlook is positive indeed. Monetising potential across six non-resource sectors, *Africa investor*-TAG envisages a feasible increase in annual production to some $1.67trn from $909bn now. Africa's inherent endowment ranging from fisheries to human capital is materially untapped and will skyrocket as it optimizes its reforms and consolidates a positive trajectory.

Methodology overview

Africa investor-TAG set out to assess Africa's current output across various sectors of economic activity and then analyse potential output under a scenario that better optimises Africa's inherent endowments. Where growth estimates or output values are not readily available, comparables are used to derive a growth 'multiple' that is applied to current figures in the country of interest

The Africa data analyses direct production values to ascertain the degree to which Africa is positioned to take advantage of its inherent wealth endowment.

Total wealth is defined as the US dollar value of all productive assets in the sector, excluding human capital, at a fixed point in time and, where applicable, using recent prices of an asset freely traded in the market or recent market-based trading averages.

Growth estimates are conservative and avoid unreasonably optimistic projections and assumptions.

The estimation of wealth in each sector is done at country level, unless only regional level data is available. The evaluations cover the following sectors: energy, minerals, agriculture, water, fisheries, forestry, tourism and human capital.

Sector specifics

The **energy** sector evaluation estimates the value of Africa's extractable energy resources: oil, natural gas, coal and uranium. The value estimate is based on the total quantity of each resource that is expected to be extracted over the lifetime of existing mines, wells or exploration sites; a five-year average price and the recently available commodity spot price. For each resource the total "recoverable" reserves are considered.

The value of **natural gas** is estimated by a composite price weighted on the percentage of domestic consumption compared to exports, and derived prices for each category. The **oil** estimate is based on the billions of barrels of proven oil resources by country; OPEC basket prices in US $ per barrel, from 2005 to 2010; and the OPEC spot price of June 2010.

Assumptions

The composite of the OPEC countries' spot price is a reasonable proxy for the average price for African producers as the dominant African producers – Algeria, Angola, Libya, Nigeria – are OPEC members.

For the full methodology and Africa Wealth Cheque Report email Africa investor on editor@africa-investor.com or Matthew Thompson at the Africa Group on matthew@theafricagroup.com