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Furthermore, home page links refer readers when online sources were used. Cenfri encourages readers to further develop awareness around the trends included in this document by visiting the websites contained. If there are any questions, comments, or concerns contact Cenfri by visiting www.cenfri.org. This document is available as a PDF on the website.



The Centre for Financial Regulation & Inclusion

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Cenfri is an independent, non-profit think tank whose mission is to promote financial inclusion in Africa. It does this by supporting the development of financial systems that allow consumers, particularly low-income consumers, to access and use appropriate financial services. Cenfri works at the policy and regulatory level as well as the market development level. Its work complements the efforts of government and the private sector, with the aim of facilitating better regulation to enable the market provision of financial services. The centre does this by conducting research, providing advice, developing capacity-building programmes for regulators, market players and other parties operating in the low-income market, and supporting market innovation.

Special thanks are owed to Timothy Gehring for his key contributions and diligent work in bringing this issue to fruition; to Mia de Vos for dedicating her valuable time and insight to this project; and to Elizabeth Larter, who consistently produces stunning design work for the Finance Forward series.

### Introduction

I recently came across an article titled "In Search of Serendipity" by lan Leslie that I thought resonated with the mission of the *Finance Forward* series. In the article, Leslie examines the ways in which people access information. More and more, information today is accessed through online searches and links propagated through social networks. While the contemporary person has access to more information than any generation before—many would argue that we are bombarded with too much information—the way in which we encounter that information can lead to what Eli Pariser calls the "filter bubble."

Inside the filter bubble, every search result and news feed is tailored to our specific purposes and is influenced by the inputs of those in our social circles. For instance, Google adjusts search results based on finely-tuned algorithms, which take into account your interests, and what your friends have shared with you. We end up reading what "people like us" would read. Sociologists call this tendency to associate with those who think like us "value homophily."

History teaches us that many times breakthroughs in science, art, business, and technology originate not in finding exactly what we're looking for, but through serendipity—that combination of accidents and sagacity that leads us to discover new ideas in places we were not looking—or perhaps where we were looking for something else. Leslie gives the examples of Percy Spencer stumbling upon the idea for the microwave oven by noticing the effects of a microwave-emitting vacuum tube had on the candy bar in his pocket (it melted)—and the famous story of Alexander Fleming's discovery of penicillin in 1928.

"... We believe that innovation is accelerated by the serendipitous collision of ideas, and we hope the *Finance Forward* series can help to facilitate that process in some way."

Today, argues Leslie, "If you are searching for something, you can find it online, and quickly. But a side-effect of this awesome efficiency may be a shrinking, rather than an expansion of our horizons, because we are less likely to come across things we are not in search of."

The *Finance Forward* series has been designed with these dynamics in mind. Rather than narrowly focusing on the topic of financial inclusion, we have sought to take a step back to scan the larger, interlocking environments from which trends and themes emerge. You may call this approach "environmental scanning" or "content curation."

Social media maven Beth Kanter asks pointedly, "Are we creating and leveraging [information streams] to regurgitate and spit out more noise, or are we working to build tools and to help others understand the value of distilling and making sense of the information wave surrounding us?"

At Cenfri, we believe that by widening our gaze, even if just for a defined period, we can begin to recognize areas of strategic importance, to coordinate research efforts with one another, and to identify developments in our field and in the fields that influence it as they take shape.

The intention of *Finance Forward* is to collect and present information that helps the reader to synthesise an understanding of recent trends, driving forces, and relevant issues. This allows each of us to interpret the contents based on the context of our own institutions, projects and aims, ultimately enabling us to create appropriate institutional strategy.

We believe that innovation is accelerated by the serendipitous collision of ideas, and we hope the *Finance Forward* series can help to facilitate that process in some way.

While it is impossible to thoroughly scan every periodical released, *Finance Forward* is the product of a balanced and robust stream of information coming from journals, newspapers, blogs, magazines, quarterlies, special reports, and other periodicals. A list of the periodicals scanned is included at the end of this issue.

The main section of the publication consists of articles which have been reduced in length—with the most relevant information retained. In most cases, the articles have been shortened to less than 50 percent of their original length.

Rather than summarising the articles, they have been directly quoted, with the exception of a few longer journal articles. The only interpretation provided is in the form of an editorial, which follows this introduction.

In the editorial, Cenfri briefly speaks to four of the biggest themes that emerge from the articles selected. Each theme has been coded with a colour, which indicates the content related to that theme throughout the remainder of the document.

I sincerely hope this document plays a part in your own serendipitous discovery. We are always happy to hear from you. Please feel free to contact us at www.cenfri.org with your thoughts, questions, and comments.

#### -Joel D. Carlman, Editor

In Search of Serendipity by Ian Leslie. *Intelligent Life*. 10 January 2012. www.moreintelligentlife.com

Content Curation: Are You a Fire Hose or a Focusing Lens? by Beth Kanter. 12 December 2012. www.bethkanter.org

### **Editorial**

Welcome to the third edition of *Finance Forward*. In this issue we highlight four new themes—the forces that are shaping the future of inclusive financial services in Africa and beyond. This issue builds upon the themes of the previous two issues, which are still at work shaping the landscape of this rapidly changing field.

As with prior issues, each of the four themes in this issue is highlighted with a distinct colour, which can be tracked throughout the entire selection of articles. Therefore, the document can be approached in a variety of ways: linearly, by theme, by environment, by scanning the titles and keywords at the beginning of each article, or by consulting the keyword index at the end of the document.

The box below lists briefly the themes from Issues 1 and 2. Please visit www.cenfri.org to download free copies of prior *Finance Forward* issues.

#### Issue 1

Theme 1: Money Goes Mobile

Theme 2: Africa is Coming Online

Theme 3: The Balancing Act—Climate and Growth

Theme 4: Africa in the Middle

#### Issue 2

**Theme 1:** The Most Versatile Tool—Software Unlocks the Mobile Phone's Potential

**Theme 2:** Interoperability in Branchless Banking—Reaching Across Platforms and Borders

Theme 3: Microcredit Facing Increased Scrutiny

**Theme 4:** Financial Inclusion in Natural Disasters and Human Migration

**Theme 5:** Uniquely African—Initiative and Innovation for African Development

Theme 6: The Rise of the African Consumer

### Theme 1: Africa's Demographic Shift—Dividend or Liability?

This theme explores the massive demographic shift that is occurring in Africa. The continent's population is set to double, from 1 billion to 2 billion, over the next 40 years. As Africa's population continues to grow in size, it will also change in its make-up. The median age is now 20 (compared with 30 in Asia and 40 in Europe). Fertility and mortality rates are falling rapidly (but not everywhere [2012-023]). In the coming years, the median age will rise, and today's mass of young people will move into its most productive years. The dependency ratio will improve, and in many ways this "demographic dividend" [2012-013] will mirror what happened in Asian economies a generation ago.

There is optimism on many fronts regarding this trend —many think that technology holds the key for continued African development in basic areas such as education and banking. Impressive growth rates could continue in countries like Nigeria—possibly allowing them to <u>skip once</u> necessary stages of development. [2012–018] Population growth can be a boost to a fledgling economy as it provides labor and stimulates demand for goods and services, but it can also be a liability <u>when economic growth cannot keep up the pace with population growth.</u> [2012–025]

As demonstrated in Tunisia and Egypt, an economy full of young people that is unable to create jobs is a potent source of unrest. Youth unemployment in Africa could make the continent's population boom a liability rather than a dividend [2012-020]. It has been said that without jobs, "you have a lot of angry young men causing trouble." [2012-027]

#### Theme 2: The Next Agricultural Revolution?— Mobile Phones and Innovative Finance in African Agriculture

The global population is still growing rapidly, and over the next several decades, that population is expected to require a 70% increase in food production. Most of this increase will need to come from the developing world, including Africa. African farming to-date has typically been characterized by chronically low productivity. However, new financial service offerings and greater mobile phone penetration [2012-003] are improving African farmers' productivity and profitability by affording them access to valuable market information and value chain efficiencies. These new dynamics are also reducing the financial gap and economic vulnerability of African farmers by giving them access to innovative savings and insurance mechanisms.

Today, mobile phones penetrate into some of the most remote places in Africa. Estimates put the number of African mobile phones somewhere between 600 and 700 million [2012-013]. Africa is the world's fastest-growing market for mobile phones and, by some accounts, it is on track to become the world's second-largest mobile market by year-end [2012-007].

In Zambia, this increase in mobile technology is being combined with mobile money services, and is being used to implement an electronic voucher scheme for farmers [2012–009], which covers the delivery of seeds, fertilisers, and herbicides. Elsewhere, women are using smartphones to profit from small-scale shea nut businesses [2012–002]. The connectivity that mobile phones bring helps to facilitate transportation logistics, pricing, market research, and financial settlement.

In the international development world, some say that "health has had its decade," and that it is now time for other sectors to take centre stage [2012–033]—agriculture included. There is great potential for small-scale African agriculture at the nexus of mobile technology and innovative financial services.

### **Editorial (cont.)**

### Theme 3: The Importance of Marketing Innovative Financial Services to Women

The role that women play in household earnings, savings, budgeting, and financial management has been well-documented. From small savings groups to extensive microfinance networks, women have long been at the forefront of the advance of inclusive financial services.

This theme explores the emerging focus on reaching low-income women with appropriately tailored financial services—especially in rural areas. For example, in Rwanda, government and civil society organisations have embarked on a national campaign dedicated to <u>training rural women [2012–019</u>] in the administration and management of microfinance schemes.

Recent research has confirmed that women think and behave differently than men when it comes to financial matters. These differences carry major implications for product design and marketing strategy [2012-021]. Many financial institutions are beginning to focus explicitly on marketing to low-income women. As access to mobile phones and the provision of financial services are becoming more and more intertwined, a gender gap has become more apparent. [2012-036] Madagascar is an example where a new "cloud phone" is aimed at those who earn \$1-2 a day. 70% of the people in this segment without a phone are women and 80% are in rural areas.

The consensus is that women should be considered as a segment with <u>distinct goals</u>, <u>attitudes</u>, <u>needs</u>, <u>and behaviors</u> [2012–021] with regard to financial services. Delivering financial products and services that meet women's needs will be a major test for the growth of innovative financial services over the coming years.

### Theme 4: Syncing Up—Africa's Increasing Ties with the Global Economy

Largely as a result of its banking sector's lack of integration with global financial markets, Africa dodged the worst of the global recession, and even managed positive growth in 2009. Real GDP growth has averaged 6.8% a year from 2005–08, and is expected to average 5.5% in 2011–12. [2012-010] Now, in a time of unprecedented stress in global financial markets, macroeconomic risks are of paramount concern [2012-011] in the global banking industry. Africa is less concerned about these risks than other regions. However, Africa has become more integrated with global markets through international trade and investment. It is now much more reliant than ever on its trading partners as markets for its commodity exports.

Trade between Africa and the rest of the world has increased by 200 percent since 2000, and its trading partners are more frequently Brazil, Russia, India, and China. In 2010,

foreign direct investment was more than \$55 billion [2012-013]—more than five times what it was a decade earlier, and much more than Africa receives in aid. If India and China continue to grow, so will Africa; a big commodity exporter like Zambia needs China's cash. However, any significant slowdown in the expansion of Africa's new trading partners [2012-017]—China in particular—would be of great concern.

The impact of global economic trends on Africa's prospects is a likely cause of much hand-wringing in 2012, underscoring questions about ties between economic outcomes and political upheaval. Many wonder whether a further downturn could provoke a belated "African Spring" [2012–017] similar to the Arab Spring experienced in North Africa in 2011.

The articles in this issue branch into many other themes than those described above. We encourage each reader to learn from the entirety of the content presented here, and to apply the various concepts uniquely to their own organisation's institutional learning strategy.

"At Cenfri, we believe that by keeping an eye on the various forces at work behind the scenes of financial inclusion, we are better poised to take advantage of opportunities, anticipate trends, make research decisions, allocate funds, and work strategically with our partners."

The benefit of periodically scanning the business, economic, social, technological, physical, and political environments in the background of the "system" of financial inclusion is that we can continue to monitor and understand the implications of further developments in these trends and act upon our learning.

At Cenfri, we believe that by keeping an eye on the various forces at work behind the scenes of financial inclusion, we are better poised to take advantage of opportunities, anticipate trends, make research decisions, allocate funds, and work strategically with our partners.

It is our hope that this snapshot of recent developments proves both insightful and useful in the context of your organisation. Please enjoy.

-Joel D. Carlman, Editor

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### **Business Environment**

2012-001

Global Cellphone Makers, Telcos Scrambling for East African Market by Christabel Ligami. The East African. 3 September 2011. www.theeastafrican.co.ke

**Keywords:** East Africa, consumer markets, Kenya, fibre-optic cables, 4G

'The telecommunications industry will remain the fastest growing sector in Africa as more international companies like Bharti Airtel, MTN, and Vodafone open up all over the region, heightening competition with the local companies.'

'Growing disposable income especially among the young population is fuelling growth. Also the growing need for high mobility and staying connected is a prime driver for the sector [...]. This coupled with availability of handsets and connectivity at affordable price has triggered the growth of telecoms in the region.'

'The entire African region is a target for all the companies as they are opening up in all countries. But in East Africa, Kenya can serve as the hub. This is because Kenya is the leading provider of the latest telecom services in East Africa and has the biggest business market in the region. Services like M-PESA, have traversed even the rural areas and people are able to shop, pay bills and even bank through their phones. Also because of the good infrastructure in the country, it's easy for companies in the sector to expand because of the ready large market.'

'Fibre-optic cable installations have increased markedly in the region. To some degree, new fibre providers and the additional bandwidth have brought down the cost of telecommunications at the wholesale level.'

'The introduction of the 3G in the industry by some companies which are now moving to introduce 4G is also a sign of how the industry is growing technologically to catch up with the developed world.'

[35%]

2012-002

#### Smartphones in Africa: Nuts and Bits.

Anonymous. The Economist. 7 October 2011. www.economist.com

**Keywords:** smartphones, microfinance, women, SMS, mobile internet

'A combination of smartphones, business software and microfinance may make the women's lot a little less hard.'

'In shea nuts, the software side of things works like this. Each woman is given labels with a personalised barcode. (Spares are used, with her name handwritten, if she runs out or a label rips.) She attaches one to each sack she fills, which typically weighs 85kg. The smartphone scans the label on delivery and talks to the server again when the sacks are weighed and loaded onto a lorry. As a back-up, paper trails are also kept. The software also records and reports what each woman should be paid, according to weight, basic price and quality: the buyer tests the nuts and pays a premium for the best. SAP's software can also break down a buyer's order, assigning bits of it to various groups of women. It can also be done via bulk SMS, which will function with even the most basic mobile network.'

'[T]he synchronisation of the data on the smartphone with that in the cloud does not necessarily require an internet connection. It can also be done via bulk SMS, which will function with even the most basic mobile network.'

'In essence, this applies sophisticated enterprise software to a traditional—even pre-agricultural—activity, carried out by poor people in remote places.'

'A big benefit is that the women have been able to sell their nuts later in the year, when they have dried more and fetch a higher price, rather than offload them early because they need the cash.'

'The women have been given some training too: how to produce better-quality nuts; how to act on price data received on mobile phones given to each group to check prices in the broader market; and how to move up the value chain into processing butter.'

'Now microfinance is coming into play. Loans provided by two local organisations, Grameen Ghana and Maata-N-Tudu, should allow women to buy gloves and boots for protection in the bush. The loans should also provide liquidity for the nut-gatherers and working capital for butter-processors to buy packaging material.'

'The idea is that women will see the benefit of being part of the network and pay a small fee out of their increased incomes to join. In return they will have access to its various services, from loans to phones, and take a step into the formal economy.'

[37%]

2012-003

The Advent of Mobile Financial Services in Agriculture by Camilo Tellez. GSMA Mobile Money for the Unbanked. 15 November 2011. www.mmublog.org

**Keywords:** mobile financial services, agriculture, population growth, m-information services

'As the global population continues to grow—it is expected to reach more than 9 billion by 2050—it will require a 70% increase in food production above current levels. Most of this increased yield will have to be achieved in less developed countries (LDCs), many of whose farmers operate on a small scale and are highly exposed to crop failure and adverse commodity price movements.'

'The farming sector in these countries often suffers from chronically low productivity. Lack of information acts upon productivity and income levels like a glass ceiling. However, with increasing teledensity in the developing world—Africa is being tipped to pass one billion mobile subscriptions and become the world's second largest mobile market by 2016, mobiles are uniquely positioned to address the information and financial needs of farmers—an intervention that can help increase their incomes, yields and economic well-being.'

'Mobile money can reduce the financial gap for farmers by giving them access to savings and insurance, which in itself reduces the impact of extreme weather and allows for greater investment in improving production. Meanwhile, m-information services have the potential to open up significant markets opportunities, by relaying sales prices.'

'[B]y linking them to mobile financial services, farmers will not only improve their productivity but will also be empowered to make better investment and risk management decisions. These benefits are also likely to extend to the wider community as increased agricultural income helps rural families afford education, healthcare and other services.'

[33%]

2012-004

**Ghana: Aiming for Interoperability in Branchless Banking** by Claudia McKay. *CGAP Microfinance Blog.* 16 June 2011. microfinance.cgap.org

**Keywords:** branchless banking, Ghana, interoperability, agent networks

'With 6 live branchless banking deployments involving 12 banks, 3 Mobile Network Operators, 2 start-ups and a government entity, the race is on in Ghana to reach the unbanked with branchless banking services. Ghana has 15 million adults and a majority of the population living on less than \$2 a day [...]. It is a unique market with a regulatory focus on interoperability and interesting dynamics in the bank-MNO partnerships. As the market develops, it should yield useful lessons on the role of government, interoperability and the nature of partnerships.'

'In 2008, the Bank of Ghana issued Branchless Banking Guidelines that allowed for a bank-based model of branchless banking using nonbank retail agents. This is common yet the Bank of Ghana added a stipulation that makes the market different from any other we know: it also prohibited exclusive partnerships and only permitted a many-to-many model. Its reasoning was that "this model offers maximum connectivity and hence maximum outreach and is closer to the desired situation where all banks and all telcos should be able to entertain each other's customers." As a result, each of the MNOs with branchless banking services has signed up at least 3 partner banks.'

'Moving forward, there are at least 4 interesting dynamics within Ghana that should yield lessons applicable to the wider branchless banking world:

#### Interoperability and the Role of Government

TheBank of Ghana is actively trying to ensure that branchless banking services are interoperable from the inception of the industry. In addition, it is pushing its own interoperable card and POS solution in the market. Many governments are interested in interoperability and the Ghana market will provide useful lessons on the pros and cons of direct government support for this.

#### **Bank-MNO Partnerships**

Around the world, banks and MNOs are forming often uneasy alliances, acknowledging that each needs the other but struggling to bring two very different cultures together. In Ghana, these dynamics are exacerbated as each MNO is working with multiple banks. Not only is there disagreement between the MNO and the banks on roles and responsibility

but the banks are asked to invest in a service that will also directly benefit their competitors.

#### **Customer Adoption and Product Development**

The current deployments have struggled to gain traction with customers when pushing domestic remittances. The market to 'send money home' seems to be limited and there is a big opportunity for creative product development in areas such as micro insurance and even savings.

#### **Agent Networks**

The MNOs in Ghana are taking very different approaches to building networks of agents. MTN has built a completely independent network of cash-in/out agents as airtime distributors were initially reluctant to get involved in mobile money. However, other MNOs are attempting to completely leverage their existing airtime staff and distributors.'

[53%]

2012-005

Innovation in Mobile Money Distribution:
TigoPesa's Roving Agents by Neil Davidson.
GSMA Mobile Money for the Unbanked.
31 August 2011. www.mmublog.org

**Keywords:** roving agents, mobile money, TigoPesa, Tanzania, regulation

'The use of independent retail agents is what, in the first wave of mobile money, has dramatically reduced the cost of cash-in and cash-out compared to doing so in bank branches. Recently, TigoPesa in Tanzania has taken this one step further. They have begun to appoint roving agents, who aren't confined to a single retail shop but who can, as the name implies, perform cash-in and cash-out transactions anywhere. They carry a handset with a merchant SIM that is loaded with e-float and cash, and they wear eye-catching aprons which distinguish them from the more common roving airtime resellers.'

'Roving agents make "doorstep service" possible—serving customers where they live and work, rather than making them find the nearest retail agent [and] this level of service may also make it more likely that customers will take advantage of the ability to store value in their account as a simple way to save.'

'Why don't we see roving agents in more markets? One reason is that regulators are concerned about their reliability. But because mobile money services post transactions in real time and require agents to trade on their own account,

cashing in or cashing out with a roving agent is really no less safe than buying a physical good (like batteries or an airtime scratch card) from a roving salesman. Roving agents may be at greater risk of theft than retail agents, and operators may choose to limit the amount of float that they can carry in cash. But since that cash belongs to the roving agent, he has every incentive to make prudent decisions for himself about how much to carry.'

[53%]

2012-006

How MTN Is Profiting from Nigeria's Informal Economy by Robert Neuwirth.

How We Made it in Africa. 6 December 2011.

www.howwemadeitinafrica.com

**Keywords:** informal economy, MTN, Nigeria, street vendors

"System D" [...] translates as the ingenuity economy, the economy of improvisation and self-reliance, the do-it-yourself, or DIY, economy [...]. It stands beyond the law, yet is deeply entwined with the legally recognised business world. It is based on small sales and tiny increments of profit, yet it produces, cumulatively, a huge amount of wealth.

'It stands beyond the law, yet is deeply entwined with the legally recognised business world. It is based on small sales and tiny increments of profit, yet it produces, cumulatively, a huge amount of wealth. At the same time, many major corporations make their money through System D.'

'MTN, a massive multinational based in South Africa and active in twenty one countries through Africa and the Middle East, had spent years looking for a way to gain a share of the Nigerian market [...][w]ith a population of close to a hundred and sixty million.'

'It concluded that in Nigeria, where even scavengers at the garbage dump have mobile phones, the bulk of [MTN's] income—perhaps as much as 90 per cent—would come from selling pay-as-you-go airtime rather than selling costly monthly plans. And that meant that service had to be cheap and readily available.'

'So MTN came back with a new plan based on umbrella stands. Almost all of its products would be sold by hawkers and street vendors. The cheapest airtime would be offered at a bargain basement price—a hundred naira, or less than \$1—and it would be available all over town. The company dropped its vision of selling phones with the MTN label. It dropped the price of SIM cards to less than \$3. And it has ridden this low-priced model to a better than 40 per cent share of the Nigerian mobile phone market.'

'In 2007, MTN had revenues of 73.1 billion rand (approximately \$8.78 billion) and earnings of 31.8 billion rand (\$3.8 billion), and Nigeria was a big part of that, responsible for one-quarter of MTN's one hundred million customers and 28 per cent of the company's cash—or about \$2.4 billion per year. And how does MTN earn that \$2.4 billion? Almost all of it comes from System D.'

[25%]

#### 2012-007

### Radical New Pricing Strategies Required to Support Future Mobile Growth in Africa.

Anonymous. Mobile Business Briefing.
10 Nov 2011. www.mobilebusinessbriefing.com

**Keywords:** mobile phones, consumer markets, prepaid airtime, international calling

'Africa is on track to become the world's second-largest mobile market by year-end, but the region remains highly dependent on prepaid voice income and is characterised by pricing wars, low usage and the relatively high cost of device ownership, says Wireless Intelligence.'

'According to the latest Q3 2011 figures, Africa is the fastest-growing mobile region in the world, growing connections by 19 percent year-on-year (to 620 million) and is poised to overtake the Americas during the current quarter to become the world's second-largest mobile region after Asia-Pacific.'

'Pricing wars have been affecting connections growth in several African markets, including Kenya, Uganda, Tanzania and Egypt. This phenomenon is exacerbated by the dominance of prepaid users—accounting for 97 percent of the region's connections—who are susceptible to pricing fluctuations and more likely to churn.'

'The contrast between Africa and other emerging mobile markets is aptly demonstrated by recent figures from Bharti, which entered 15 African markets following its acquisition of Zain Africa last year. The operator said that in 2010 its African subscribers were averaging 112 voice minutes-of-use (MoU) per month and generating US\$7 per month (ARPU). This compared to 454 MoU and US\$5 ARPU in India. The operator described India as a "high usage, low pricing model" compared to the "low usage, high pricing model(s)" seen in Africa.'

'A new type of African mobile tax emerging is the so-called 'Surtax on International Inbound Call Termination' (SIIT), which centrally fixes the prices that operators can charge when terminating international inbound calls. The GSMA/ Deloitte research found that where the SIIT has been

imposed, the level of inbound international traffic has fallen and prices of outbound calls have increased due to the reciprocation of higher termination prices by operators in other African countries. For example, in Congo Brazzaville, the price of inbound traffic has risen by 111 percent and operators report that inbound traffic fell by 36 percent between May 2009 (when the tax was introduced) and May 2011. There were similar trends identified in Gabon, Senegal and Ghana.'

[41%]

#### 2012-008

Mobile Monitoring and Micro-Insurance for Children in Mali by Anneryan Heatwole. *Mobile Active*. 19 December 2011. www.mobileactive.org

**Keywords:** mortality rates, Mali, Pesinet, microinsurance, mobile monitoring

'Mali has one of the highest infant mortality rates in the world. There are roughly 111 deaths for every 1000 live births in the country and the under-5 mortality rate is 191 out of every 1000 children. The need for early detection of diseases and stronger local health structures led to the creation of Pesinet, a non-profit that uses mobile technology to provide regular health checkups and affordable health insurance for young children in Mali's capital, Bamako.'

'Roughly 600 children are currently enrolled in the program in the neighborhood of Bamako Coura, under the care of four Pesinet agents (each covering around 150 children). Pesinet combines both early warning systems and insurance. Families pay 500 CF a month for each enrolled child; the payments cover doctor examinations and half the cost of any medications the child needs if he or she gets sick.'

'Enrolled children are tested weekly for symptoms of illness such as fever, cough, diarrhea, low weight, or vomiting by community health workers who enter data from each visit into a custom-designed Java application on their phone. The data is sent via GPRS to an online database. Doctors at local community health centers monitor the patient data for sudden changes in health. If changes occur, the community health workers receive an alert on their phones and then go back, in turn, to alert the family that the doctor needs to give the child a checkup.'

'[T]he community health workers adopted the technology quickly; she attributes the rapid pickup to a simple design and the relatively small amount of data collected. However, the organization has faced network connectivity issues which has resulted in the fieldworkers keeping separate, paper-based records and limiting the real-time usefulness

of the program. This would also limit the use of Pesinet in more rural areas where network connectivity is weaker and Internet connections less reliable than in the capital (as the doctors at health centers need Internet access to view the data from the field workers). The organization is currently working on new specifications for its technology so that the application will be less reliant on mobile and web connectivity.'

'A survey of participating families found that the service has been well received by beneficiaries so far; 94% reported satisfaction with Pesinet, 97% of participating families called the service "very affordable", and participating health centers have seen a 37% increase in visits through Pesinet subscribers.'

[60%]

#### 2012-009

**Zambian Farmers Get Innovative e-Vouchers** by Newton Sibanda. *Afrol News*. 30 November 2011. www.afrol.com

Keywords: Zambia, agriculture, e-vouchers

'Zambian farmers could gain faster access to agricultural products and services with Africa's first electronic voucher scheme for farmers. The 'e-voucher project'—the first of its kind on the continent, according to participant Mobile Transactions Zambia Limited (MTZL)—covers the delivery of products including seeds, fertilisers and herbicides.'

'The software for the system has been developed by MTZL and approved by the Bank of Zambia as eligible to make payments. It processes more than 40,000 vouchers worth over US\$ 800,000 each month, according to MTZL.'

"We are using mobile technology to improve access to financial services, and change the way companies, NGOs, and government work with the banked and the unbanked," Hans Hesse, e-voucher manager at the company said. "Our vision is a cashless Africa."

[30%]

### **Economic Environment**

2012-010

Banking in Sub-Saharan Africa to 2020— Promising Frontiers. Anonymous. Economic Intelligence Unit. December 2011. www.eiu.com

**Keywords:** banking, economic growth, financial sector deepening, resource boom

'Sub-Saharan Africa is set to enjoy a banking boom in the decade to 2020. Real GDP growth in the region averaged 6.8% a year in 2005-08, the best for a generation, and stayed positive in 2009, despite the global recession. The subsequent rebound has also been swift, and growth is forecast to average 5.5% in 2011-12, producing brisk real per capita growth of 3.4% a year. Overcoming a long legacy of underdevelopment, the conditions are in place for a doubling of banking assets and deposits, a proliferation of outlets and the extension of services to swathes of the continent's unbanked majority over the next decade.'

'Based on forecast economic growth in each of the countries, our first scenario anticipates that total bank claims for the countries will expand by 178% to US\$980bn at the end of the period [...] deposits will grow by 188% to US\$766bn.'

'Our more likely second scenario anticipates financial sector deepening [...] from more households and businesses saving, borrowing and transferring money with banks, and using these services more intensely. [...] [W]e project bank deposits and asset expansion at 1.5 times the rate of GDP growth. Under this scenario, assets will grow by 248% to US\$1.37trn, while deposits will expand by 270% to US\$1.1trn by 2020.'

'Growth will be strongest in poorly-served countries that are enjoying new resource booms, including Angola, Uganda, Ghana and Tanzania.'

'Nigeria, with its massive population, oil riches and free market orientation (following a more transparent election than usual in 2011), has considerable promise, although weak infrastructure, inefficient administration and extensive corruption mean caution is warranted.'

'[The] slowest [growth is expected] in South Africa, the well-developed financial powerhouse of the continent, as well as in the small but sophisticated financial systems of Botswana and Namibia. In fact, the boom of the coming decade should significantly erode the dominance of South Africa, which currently accounts for about two-thirds of the continent's banking assets and three-fifths of its deposits. By 2020 South Africa will still have the largest banking sector by far, but it will account for less than one-half of the region's financial balance sheet.'

'The coming boom is based first and foremost on high expected economic growth and the continuing development

and application of technology in communications and the financial sector in much of Sub-Saharan Africa over the next ten years [...] driven in large part by recent resource discoveries and a global commodity supercycle that will sustain high prices for oil and gas, basic metals and a variety of agricultural products.'

[30%]

2010-011

**Banking Banana Skins 2012** by David Lascelles. The Centre for the Study of Financial Innovation. In association with PWC. February 2012. www.csfi.org

**Keywords:** Banking, macro-economic risk, survey, eurozone crisis, debt, liquidity

'This report describes the risk outlook for the banking industry at the turn of the year 2012—a time of unprecedented stress in the financial markets. The findings are based on responses from more than 700 bankers, regulators and close observers of the banking scene in 58 countries.'

'In the opinion of these respondents, much the greatest threat facing the banking industry is the fragility of the world economy. If there is a return to recession, it is very likely that banks will suffer severe credit losses, and that more of them will fail or have to be nationalized.'

"The outlook is terrible" was the comment from a director of a large UK bank, reflecting a strength of concern that was shared in all the major regions surveyed: North America, Europe and the Asia-Pacific, plus input from Latin America. The Banana Skins Index, a measure of anxiety levels in the financial sector, is at its highest since it was started 13 years ago."

'The main causes are obvious: the crisis in the eurozone and mounting debt problems in many of the world's largest economies (No. 2), linked to weak banking systems and a scarcity of credit.'

'Specific banking risks lie in the area of funding. Concerns about the adequacy of liquidity (No. 3) and capital (No. 4) are on the rise again due to the low level of confidence in (and among) banks. The banking sector's ability to sustain profitability (No. 7) in a difficult and changing environment is also in doubt.'

'Complicating the picture is the high level of political interference (No. 5) and regulation (No. 6) in the banking industry. Although these efforts are intended to bring about a solution to the banking crisis, bankers say they are also adding cost and distraction to the business, and making it harder for them to supply credit to the economy.'

'Concern about the ability of banks to manage the complexities of modern banking is also high: weakness in corporate governance (No. 9) and risk management (No. 10) are both seen as Top Ten risks. A fast-rising risk is business continuation (up from No. 21 to No. 12), i.e., the ability of the banking system to survive the failure of a major financial institution. Similarly, there is strong concern about change management (up from No. 28 to No. 15): the capacity of banks to handle the huge agenda of restructuring which is being imposed on them by new regulation. Back office risk (up from No. 24 to No. 13) has also risen sharply because of the stresses on systems created by the crisis and the heavy volume of new regulation.'

'In the banking markets, derivatives (No. 8) continue to be seen as a high risk area, though activity is expected to decline. Hedge funds (No. 16), another earlier whipping boy, come out as a middling risk. By contrast, market-related risks are seen to be relatively moderate: little potentially damaging movement is seen in currencies, despite the euro, (No. 19), interest rates (No. 17), and equity markets (No. 21) because banks have the means to protect themselves against volatility.'

#### Big movers

#### RISING RISKS

Macro-economic risk: worries about a new global recession

Liquidity: resurgent fears of a liquidity crunch Capital availability: risks of a shortage Corporate governance: ability to manage risk

Business continuation: inadequacy of crisis recovery plans

Back office: systems could be overwhelmed

#### FALLING RISKS

Interest rates: little volatility foreseen

Emerging markets: in better shape than developed markets

Payment systems: standing up well to the stresses

'Despite the strength of anti-bank feeling generated by the crisis, reputational issues and wider questions about the social sustainability of banks come low down the list (No. 25). The risks associated with management incentives are only seen as middling (No. 14), with banking respondents describing concerns as "wildly exaggerated". Although the need for banks to rebuild trust is widely recognized, the risks to bank survival in this area are seen to be low. The risk that the low reputation of banks will drive away talented human resources is also low (No. 28). Criminality risks (fraud, data theft, rogue traders, cyber attacks) are seen as manageable, though they may rise in difficult economic conditions.'

'Certain operational risks such as reliance on third parties (i.e. offshoring) and payment systems come at the bottom of the list. Although always a potential source of trouble, the prevailing view is that these have stood up well in the crisis.'

'The risks in emerging markets are seen to be falling (down from No. 17 to No. 22) mainly because the sector is seen to be in better shape than industrial countries (though there are worries about China). Emerging markets do, however, have concerns of their own about global economic prospects, and, for the first time in this survey, we include a view of the world from their perspective.'

'A breakdown of responses by type shows a high level of agreement among bankers, non-bankers and regulators about the risks facing banks: all three put the macroeconomic situation, credit risk and liquidity risk in their top three. The availability of capital, the volatility of derivative markets and the outlook for banking profitability are also common top level concerns. The big difference between them is the perception of regulatory and political risk: the bankers rate this very high, while non-bankers put it at the middle and regulators at the bottom of their lists.'

'Geographically, concerns are also strikingly similar in the main regions surveyed. All of them view the macroeconomy, credit and liquidity as major risks. Concern about regulatory risk is strongest in North America followed by Asia Pacific and Europe. There is also little to distinguish the types of risk identified by industrial and emerging countries, underlining the global nature of the dangers currently facing banks, through emerging markets are more confident than industrial countries about their economic prospects.'

'Preparedness. We asked respondents how well prepared they thought the banking industry was to handle the risks they had identified. Ona scale of 1 (poorly) to 5 (well) they gave a score of 2.96, slightly above middling, the broad message being that "banks are trying but could do better".'

[5%]

#### 2012-012

## Africa the 'Final Frontier' for Retail Growth by Mark Potter and Victoria Bryan. *The Globe*

and the Mail. 27 September 2011. www.theglobeandmail.com

**Keywords:** consumer markets, population growth, banking infrastructure

'Africa is starting to appear on the radar screens of Western retailers as they look for the next growth opportunity in emerging markets while having to cope with subdued consumer spending at home. Consultants Deloitte and Planet Retail on Tuesday identified five African countries—Algeria, Kenya, Morocco, Nigeria and South Africa—as being among the 10 new markets most likely to appeal to multinational store groups in the coming years.'

"All have fast-growing economies, young and growing populations and fragmented retail sectors," Deloitte and Planet Retail said in a report published on the second day of the World Retail Congress in Berlin."

"Moreover, although traditional forms of retailing are still dominant, a growing middle class is demanding branded products and the opportunity to shop in modern retail formats," they said. Africa was thrust into the retail limelight this year when U.S. retail giant Wal-Mart Stores Inc. bought a majority stake in South Africa's Massmart, giving it a foothold in the continent's biggest economy and a presence in some 13 other African markets, ranging from Botswana to Zambia."

'Faced with limited population growth and sluggish economies at home, many U.S. and particularly European retailers have been expanding into emerging markets in the hope of finding growth opportunities, but with competition intense in China and Brazil many are looking elsewhere to gain an advantage.'

'While a weak banking infrastructure may deter some retailers from Africa, it could be an opportunity for those prepared to offer their own financial services, which can boost customer loyalty and give an advantage over rivals when it comes to larger purchases.'

[50%]

#### 2012-013

### The Sun Shines Bright. The Continent's Impressive Growth Looks Likely to Continue

by Anonymous. *The Economist*. 3 December 2011. www.economist.com

**Keywords:** economic growth, middle class, natural resources, demography, political stability

'From Ghana in the west to Mozambique in the south, Africa's economies are consistently growing faster than those of almost any other region of the world. At least a dozen have expanded by more than 6% a year for six or more years.'

'Severe income disparities persist through much of the continent; but a genuine middle class is emerging. According to Standard Bank, which operates throughout Africa, 60m African households have annual incomes greater than \$3,000 at market exchange rates. By 2015, that number is expected to reach 100m—almost the same as in India now. These households belong to what might be called the consumer class. In total, 300m Africans earn more than \$700 a year. That's not much, and many of those people could be

pushed back into penury by a small change in circumstance. But it can cover a phone and even some school fees. "They are not all middle class by Western standards, but nonetheless represent a vast market," says Edward George, an economist at Ecobank, another African banking group.'

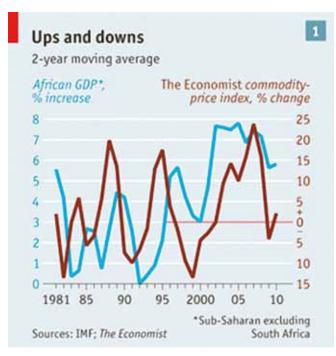
'As for Africans below the poverty line—the majority of the continent's billion people—disease and hunger are still a big problem. Out of 1,000 children 118 will die before their fifth birthday. Two decades ago the figure was 165. Such progress towards the Millennium Development Goals, a series of poverty-reduction milestones set by the UN, is slow and uneven. But it is not negligible. And the mood among have-nots is better than at any time since the independence era two generations ago.'

'Labour productivity has been rising. It is now growing by, on average, 2.7% a year. Trade between Africa and the rest of the world has increased by 200% since 2000. Inflation dropped from 22% in the 1990s to 8% in the past decade. Foreign debts declined by a quarter, budget deficits by two-thirds. In eight of the past ten years, according to the World Bank, sub-Saharan growth has been faster than East Asia's.'

'Even after revising downward its 2012 forecast because of a slowdown in the northern hemisphere, the IMF still expects sub-Saharan Africa's economies to expand by 5.75% next year. Several big countries are likely to hit growth rates of 10%. The World Bank—not known for boosterism—said in a report this year that "Africa could be on the brink of an economic take-off, much like China was 30 years ago and India 20 years ago," though its officials think major poverty reduction will require higher growth than today's—a long-term average of 7% or more.'

'There is another point of comparison with Asia: demography. Africa's population is set to double, from 1 billion to 2 billion, over the next 40 years. As Africa's population grows in size, it will also alter in shape. The median age is now 20, compared with 30 in Asia and 40 in Europe. With fertility rates dropping, that median will rise as today's mass of young people moves into its most productive years. The ratio of people of working age to those younger and older—the dependency ratio—will improve. This "demographic dividend" was crucial to the growth of East Asian economies a generation ago. It offers a huge opportunity to Africa today.'

'Previous African growth spurts undoubtedly owed a lot to commodity prices (see chart 1) After all, Africa has about half the world's gold reserves and a third of its diamonds, not to mention copper, coltan and all sorts of other minerals and metals. Overall, though, only about a third of Africa's recent growth is due to commodities. West and southern Africa are the chief beneficiaries. "Everything is growing, not just commodities," says Mo Ibrahim, a Sudanese mobile-phone mogul who is arguably Africa's most successful entrepreneur."



'When the world economy—and with it commodity prices—tanked in 2008, African growth rates barely budged. "Africa has great resilience," says Mthuli Ncube, chief economist of the African Development Bank. "A structural change has taken place." For one thing, African governments have invested more wisely this time round, notably in infrastructure. For another, Africa's commodities now have a wider range of buyers. A generation ago Brazil, Russia, India and China accounted for just 1% of African trade. Today they make up 20%, and by 2030 the rate is expected to be 50%. If China and India continue to grow Africa probably will too.'

'But two big drivers of Africa's growth would still be there even if the continent held not a barrel of oil nor an ounce of gold. One is the application of technology. Mobile phones have penetrated deep into the bush. More than 600m Africans have one; perhaps 10% of those have access to mobile-internet services. The phones make boons like savings accounts and information on crop prices ever more available.'

'Technology is also aiding health care. The World Bank says malaria takes \$12 billion out of Africa's GDP every year. But thanks to more and better bed nets, death rates have fallen by 20%. Foreign investors in countries with high HIV-infection rates complain about expensively trained workers dying in their 30s and 40s, but the incidence of new infection is dropping in much of the continent, and many more people are receiving effective treatment.'

'The second big non-commodity driver is political stability. The Africa of a generation ago was a sad place. Africa is still not entirely peaceful and democratic. But it has made

huge strides. The dead hand of the Soviet Union is gone; countries such as Mozambique and Ethiopia have given up on Marxism. The dictators, such as Congo's leopard-skinfez-wearing Mobutu Sese Seko, that superpowers once propped up have fallen. Civil wars like the one which crippled Angola have mostly ended. Two out of three African countries now hold elections, though they are not always free and fair. Congo held one on November 28th.'

'A string of privatisations has reduced the role of the state in many countries. Trade barriers have been reduced, at least a bit, and despite the dearth of good roads, regional trade—long an African weakness—is picking up. By some measures, intra-African trade has gone from 6% to 13% of the total volume.'

'Now some of those investors are eyeing Africa. In 2010 total foreign direct investment was more than \$55 billion—five times what it was a decade earlier, and much more than Africa receives in aid.'

'Africa's growth is now underpinned by a permanent shift in expectations. In many African countries people have at last started to see themselves as citizens, with the rights that citizenship brings. Greater political awareness makes it harder for incompetent despots to hold on to power, as north Africa has discovered. Bastions of the continent's past—destitute, violent and isolated—are becoming exceptions.'

[38%]

2012-014

The Socio-Economic Impact of Mobile Financial Services: Analysis of Pakistan, Bangladesh, India, Serbia and Malaysia. Anonymous. Boston Consulting Group. Sponsored by Telenor. June 2011. www.telenor.com/en/news-and-media/press-releases/2011

**Keywords:** Pakistan, Bangladesh, India, Serbia, Malaysia, mobile financial services, economic growth

'Looking across the five study countries [Pakistan, Bangladesh, India, Serbia, and Malaysia], a number of key findings and conclusions emerge:'

'[Mobile Financial Services (MFS)] will drive financial inclusion: The impact varies by country, depending on, for example, the existing level of financial inclusion and the level of mobile penetration. The study finds that the impact ranges from a 20 percentage point increase in financial inclusion in Pakistan (from 21% to 41%) to a 5 percentage point increase in Malaysia (from 90% to 95%). The other

three countries are likely to experience an impact of around 10–12 percentage points.'

'MFS will increase economic growth: MFS could accelerate economic growth by up to 5% in the case of India, where it helps fuel entrepreneurship and new business creation. GDP in Pakistan, Bangladesh and Serbia could be between 2-3% higher in 2020 as a result of MFS, while the impact on Malaysia is more modest, at around 0.3%, reflecting the smaller financial inclusion impact. This additional growth will be associated with an increase in employment, creating up to 4 million additional jobs in India, as well as an increase in tax revenues for governments, spurred by the increase in economic activities.'

'MFS will help the poorest in society: MFS will help reduce income inequality by increasing opportunities for the poorest segments of society to experience the benefits of financial services, and hence mitigate income and expenditure volatility. In addition to a reduction in measured inequality, MFS brings many other important benefits within reach, in particular, education and health-care, for example, by providing access to insurance to help mitigate the impact of unexpected shocks. These will in turn have critical long-term impact on development, especially rural development.'

'In summary, MFS presents enormous potential and certain challenges. More than 2.5 billion people in the developing world are financially excluded, but many already have mobile phones and relationships with telcos. MFS has the potential to be the most powerful tool for economic and social development for all of the countries in this report. For such potential to be realized, multiple elements must be established. And finally, regulators have to create a supportive environment that manages risk but also makes room for flexibility and innovation as the MFS ecosystem evolves.'

[Key Findings and Conclusions]

#### 2012-015

Not as Bad as They Say: Zambians—and Other Africans—Know They Must Get Along with the Chinese. Anonymous. The Economist. 1 October 2011. www.economist.com

**Keywords:** Zambia, China, copper, natural resources, foreign direct investment

'[I]n 2007, [...] [President Sata of Zambia] was eager to tap into growing resentment against Chinese investors in the copper-rich former British colony. He accused them of paying slave wages, of flouting basic safety and environmental standards, and of corrupting African leaders across the

continent with their multi-billion dollar "no-strings-attached" deals. China threatened to break off relations with Zambia should Mr Sata ever be elected."

'Today, with the 74-year-old as president, the tone has changed, on both sides. China is now the world's biggest consumer of copper, Zambia's chief export. As usual, it is ready to work with whoever is in power.'

'[President Sata] is too savvy a politician not to realise how much this impoverished country of 13m people needs China's cash. Over the past decade, the Chinese have invested over \$2 billion in Zambia, the GDP of which is only \$16 billion. More than half of that came in last year. And China is committed to pouring in billions more. There are now about 300 Chinese companies in Zambia, most of them privately owned, employing around 25,000 locals.'

42%

#### 2012-016

The Last Frontier for Branchless Banking: State of Play in WAEMU by Sarah Rotman. CGAP Microfinance Blog. 6 July 2011. microfinance.cgap.org

**Keywords:** branchless banking, WAEMU, e-money, remittances, distribution networks

'The West African Economic and Monetary Union (WAEMU), or UEMOA in French, is a customs and monetary union of the republics of Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal, and Togo. The 8 countries in WAEMU have a total population of 95 million and include many of the poorest countries in the world. 74% of the region's population lives on less than \$2 per day, and all countries in the region rank in the bottom 12% of countries in the human development index.'

#### Opportunities for Branchless Banking in WAEMU:

'Regulation allows for nonbank e-money issuers leading to different and unique business models. The BCEAO was one of the first regulators globally to pass regulation expressly permitting nonbank e-money issuers in 2006, and it remains one of a few central banks that allow this role by nonbanks. Interestingly, none of the MNOs have opted for this license, while MNOs in other parts of the world long to have this option. Three nonbank institutions have received the e-money issuer licenses from the BCEAO. This regulation expands the realm of possibility in terms of the actors that can get involved in branchless banking and the types of services that can be offered.'

'Regional players are big and can leverage their investments leading to greater outreach and scale. The large regional African banks are all present in several countries. These companies are potentially able to leverage an initially high up-front investment in one country into expansion to other countries in the region.'

'Regional remittances represent a major monetary flow which serves as a driver for adoption. The flow of remittances both within the WAEMU region and internationally represents a large portion of the movement of money and is a logical place for branchless banking services to add value in terms of cost, convenience and security.'

#### Challenges for Branchless Banking in WAEMU:

'Underdeveloped distribution networks. The level of sophistication of distribution networks and how these networks are leveraged to create and nurture agent networks directly correlates with the success of branchless banking deployments. The lack of a fully developed, fast moving consumer goods makes branchless banking agent networks difficult to develop.'

'Lack of retail banking expertise among the commercial banks. While banks are usually more cautious than other actors in the branchless banking industry, within WAEMU, this is all the more accentuated by the small amount of retail banking that most commercial banks actually do. Microfinance institutions have been the only financial institutions attempting to reach down-market, and this has not reached substantial scale.'

[41%]

2012-017

#### Sub-Saharan Africa Economy: Key issues in 2012.

Anonymous. Economist Intelligence Unit. 23 December 2011. www.eiu.com

**Keywords:** economic growth, global economic trends, currency, natural resources, African Spring

'Sub-Saharan Africa (SSA) was the fastest-growing region in the world last year, and is expected to stay at the head of the pack in 2012. However, as Christine Lagarde, head of the IMF, warned in late December, many individual Sub-Saharan states are less prepared to deal with an economic shock now than was the case during the 2008 food and fuel crisis, and the global financial turbulence that followed. The impact of global economic trends on Sub-Saharan prospects is likely to dominate the regional headlines in 2012, underscoring

questions about whether economic downturn might provoke a belated "African spring".

'Market Contagion. The ongoing debt crisis in Europe and the weakness in the US has significantly raised the risk of a global recession. Specific risk factors include a drying-up of trade credit, declining commodity prices and contracting demand for the region's exports—as well as falling remittances, aid, foreign direct investment (FDI) and tourist receipts.'

'Around two-thirds of the region's export growth in 2005–10 is explained by an expansion in exports to emerging markets. Consequently, around half of Sub-Saharan Africa's trade is now conducted with emerging economies, compared with negligible amounts in the 1990s. China, India and Brazil, which together account for more than one-quarter of the region's trade flows, are of particular importance. By the same token, this means that any significant slowdown in the pace of expansion in those three—and China in particular—would be of great concern.'

'Currency Concerns. African currencies are likely to come under increasing pressure: many of them are now overvalued because of the commodities boom and aboveaverage inflows of both FDI and workers' remittances. The economic downturn in developed countries-particularly the US and EU states, where most of the Sub-Saharan diaspora live—is also likely to have a negative impact on remittances. Pressures are set to intensify in 2012, particularly if Greece should default on its sovereign debt. Greece's departure from EMU could turn market sentiment towards other heavily indebted euro-zone members fatally negative. prompting their subsequent exit. In this scenario, a currency union of the remaining stronger euro-zone economies could lead to significant appreciation of the euro-and, by extension, the CFA franc. This would be bad news for Franc Zone exporters, which are already globally uncompetitive on price, meaning that pressure would build for a one-off devaluation of the CFA franc's peg to the euro.'

'An Emerging Gas Giant? In late 2011 it was announced that Italy's ENI had discovered estimated gas reserves of 22trn cu. ft. in Mozambique's offshore Rovuma basin in Cabo Delgado province, while Anadarko has discovered 10trn cu. ft. of gas nearby. To put these finds in context, Africa as a whole—excluding the leading continental producers of Nigeria, Algeria, Egypt and Libya—had proven reserves of 41.4trn cu. ft. at end-2010, according to a statistical review published by UK-based BP. This suggests that Mozambique has the potential to join the top flight of African producers.'

**'A Belated African Spring?** One of the defining characteristics of 2011 was the fall of regimes in the Middle East and North Africa that had previously been considered very well-entrenched. States south of the Sahara have not been affected, despite the existence of numerous

geriatric presidents, highly repressive states, and populations facing high unemployment and with long-standing (but bottled-up) resentment. However, the risk of popular social unrest, fuelled by mounting frustration with widening income inequalities, rising food prices, high unemployment and poor social conditions, represents a threat to governability in a number of African countries. However, a North African-style domino effect, with the ousting of one regime leading to waves of unrest, and subsequent governmental overthrows, in neighbouring states, still seems unlikely.'

[54%]

2012-018

The Next, Next Global Superpowers: Why Africa is Rising by Jim O'Neill. The Atlantic Monthly.

15 December 2011. www.theatlantic.com

**Keywords:** demography, Nigeria, mobile broadband, middle class

'Demography is destiny, goes the saying, which if true makes Africa an even hotter prospect. In 2011 the United Nations published its revised estimates for the world's population in 2100. Asia will be home to 60 percent of the world's population, as it is today. But Africa will swell. Between 1975 and 2000, it grew from 416 to 811 million. By 2025, it will reach 1.4 billion and by 2100 a remarkable 2.2 billion.'

'Nigeria is critical to Africa with around 20 percent of the continent's population. By 2100, Nigeria's population could well be bigger than that of the United States. It has a group of politicians who seem determined to weed out the terrible corruption that has restricted its growth for so long.'

'[...] it will be aided by the technological leaps that are now possible. All over Africa, mobile wireless technology is enabling the rapid development of basic services like education and banking. If this continues and expands, countries like Nigeria may be able to grow at an unprecedented rate, skipping once necessary stages of development.'

'Even small improvements in the growth environment can have an enormous impact on a country's growth trajectory, and we estimated that Nigeria's efforts had helped lift its growth rate by 2 percent. The important point is that the rise of Africa's middle class, when coupled with greater transparency and openness, and an improved environment for economic growth, could lead to one of the great economic stories in the coming years.'

'In Egypt, what appeared to start as a "copycat" protest following unrest in Tunisia quickly turned into an uprising of the Egyptian people to reject decades of imposed governance and seemingly demanding a life of more opportunity, hope and perhaps democracy.'

'They are also agitated by high food prices, lack of employment, crumbling infrastructure and an overbureaucratic state. It was the Internet and mobile phones—social media [...] to network and galvanize quickly around a common cause or to find common cause through online discussions.'

'If a new regime can deliver more accountability of leadership and more opportunity for its people, then this could be an extremely positive development. Not just for Egypt, but for the whole region.'

[45%]

### Social Environment

2012-019

#### Governments Need to Reach Out to Rural

**Women** by Aimable Twahirwa. *Microfinance Africα*. 30 July 2011. www.microfinanceafrica.net

Keywords: women, Rwanda, microfinance

'Governments, especially in Africa, need to have strong accountability measures in place in order to effectively reach women in rural areas through gender responsive budgeting. This was one of the recommendations in the Global Call for Action plan drawn up at the end of an international high-level meeting on gender responsive budgeting held in Kigali from 26 to 28 Jul. The meeting was held in conjunction with the United Nations Entity for Gender deEquality and the Empowerment of Women (U.N. Women) and the European Union.'

'Rwanda is involved in a three-year pilot programme, Gender Equitable Local Development (GELD), dedicated to improving women's access to resources and services at local level through gender responsive planning and budgeting.'

'Women comprise 54 percent of Rwanda's population of nine million. Although there are no statistics available on the number of businesses owned by women, government acknowledges that the majority of employees in both the formal and informal sectors are women.'

'The regional programme director for U.N. Women, Diana Ofwona, said it is important to further promote gender equality through women's ownership of development initiatives, such as microfinance schemes. She said it was a way to increase efficient coordination in gender responsive budgeting.'

"This includes removing some barriers which sometimes restrict women from equitably accessing local facilities (such as transport and microfinance schemes) [...] particularly in rural areas," Ofwona says. Economic analysts say the collection of statistical data on gender issues is still a major challenge for some countries."

"Once there is available data about gender, this would enable countries to determine what progress has been made towards achieving their targets (with gender responsive budgeting)," said Bernard Kayinamura, an economic expert based in Kigali.'

'Since 2009 Rwanda's government and civil society organisations have embarked on a national campaign dedicated to training rural women in the administration and management of microfinance schemes. However, there are no available figures about the number of women who have undergone training.'

[48%]

2012-020

#### Demography: Taking the Long View on Success

by Gideon Rachman. *The Financial Times*. 18 October 2011. www.ft.com

**Keywords:** demography, India, China, dependency ratios, fertility, unemployment

'If demography is destiny then the next century will belong to India and Africa. That is because their youthful populations ensure that they will continue to enjoy a plentiful supply of young workers supporting a relatively small population of elderly people.'

'Amid all the current hoopla about the emergence of China as the next global superpower, one of the commonly expressed reservations is "China will get old, before it gets rich". In other words, the current availability of cheap, young labour will reduce and the number of people retiring from the workforce—and requiring support from their families and the state—will soar.'

'[India's] population is likely to surpass that of China sometime around 2030—making India the most populous nation on earth. A large population puts a strain on resources and is still associated with very high levels of poverty in rural areas. However, it also means Indian industry is confident a large market of young workers and consumers will emerge.'

'One problem that both India and China share is the way families have used abortion to favour the birth of sons. The ratio of male to female children is now tragically skewed, creating a potential source of social and political tension among young men who cannot find wives. Some even fear that this could have international ramifications, as angry young men look for an outlet for their energy in nationalism or militarism.'

'The age dependency ratio for the U.S. is less threatening —largely because of higher fertility rates and higher immigration. Nonetheless, the population is ageing and there are warnings that popular social programs for the elderly will gobble up more and more of the national budget. This is an alarming prospect, given that the U.S. government already borrows 40 cents of every dollar it spends.'

'However, even countries that demographers regard as blessed with a favourable dependency ratio have their problems. In theory, north Africa is well placed to prosper because of its large number of young workers. In reality, the inability of economies such as Egypt and Tunisia to create jobs was a potent source of discontent behind the recent Arab uprising.'

'Youth unemployment in Africa and the Arab world also risks exporting tensions to Europe—as an ageing, relatively

### Social Environment (cont.)

rich and socially-conservative region acts as a magnet for young workers, many of them illegal immigrants. The economics make perfect sense, but the politics could be combustible.'

[35%]

2012-021

**Do We Need Pink Check Books?** by Inez Murray. CGAP Microfinance Blog. 26 October 2011. microfinance.cgap.org

**Keywords:** women, marketing strategy, confidentiality, financial products

'Women think and behave differently than men when it comes to financial matters. These differences have major implications for product design and marketing strategy.'

"[G]endered roles" result in different priorities for men and women when it comes to spending, savings, and investment."

'As caregivers, women save for emergencies as well as lifecycle events [...] but [men] focus on investment in business [...]. Targeting women is therefore key to mobilizing deposits.'

#### '3 Specific Strategies in Marketing to Low Income Women:

- Confidentiality is [...] a product attribute greatly valued by women [...] for example, plastic debit cards are preferred to pass books.
- Receiving tangible benefits from using a product is very important to low income women.
- Convenience and accessibility is even more important for women than men, given time constraints and cultural restrictions on their mobility in some contexts. Locating banking correspondents [...] means women can make financial transactions without needing a chaperone.'

'Embedding financial education throughout the marketing mix is a wonderful opportunity. Hosting short events in branches that combine financial education with selling savings products works well. High illiteracy rates among poor women in some regions require still more efforts in communicating through visual marketing materials and equipping front line staff to have productive conversations with women. Implementing marketing campaigns that seek women out in their neighborhoods, relying on [Women's World Banking] have found successful.'

'[W]omen should be considered as a segment with distinct goals, attitudes, needs, and behaviors when it comes to financial services. There are some patterns across countries leading us to develop strong psychographic segments

that acknowledge attitudes and behaviors that cut across income and other demographic characteristics. Embracing these findings to deliver financial products and services that meet women's needs will require the microfinance sector to act on what we already know about women and to deepen our knowledge.'

[33%]

2012-022

#### Weapon of Choice Against Corruption by

Anver Versi. *African Business*. November 2011. www.africasia.com/africanbusiness

**Keywords:** corruption, social media, Kenya, Uganda, Tanzania

'The mobile, in conjunction with the various social media—Facebook, Twitter and YouTube—has changed the nature of media reportage beyond all recognition. People no longer need to rely on traditional forms of information dissemination—radio, TV and the print media. The reverse is true. Traditional media finds itself increasingly beholden to the citizen reporter.'

'Now the call is for this extraordinary device to be used in the fight against corruption.'

'The anti-corruption units in Kenya, Uganda and Tanzania have set up sites that people can call into and report instances of bribes. There have been cases where the victim has simply secretly pressed his on button, having dialled the watchdog number, and the entire conversation soliciting bribes or making threats is not only heard but recorded. A large programme, aimed at cutting down corruption involved in land deals in India has shown spectacular success. The Indian public, it seems, has been so enthusiastic about the use of mobiles to monitor corruption that petty corruption has dropped, in some instances, to less than half. Can the mobile be the front-line weapon of choice in the ongoing war on corruption in Africa?'

[25%]

### Social Environment

2012-023

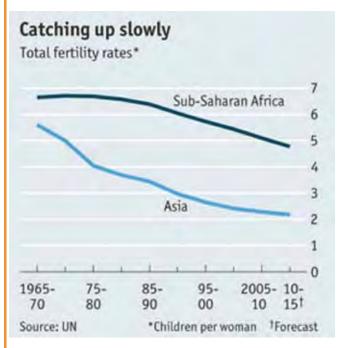
#### Africa's Population: Miracle or Malthus?

Anonymous. The Economist. 17 December 2011. www.economist.com

**Keywords:** demographic dividend, fertility rates, Niger, Liberia, Uganda

'African demography is unique. It is the only continent that will double in size, reaching 2 billion people by 2045 at current rates. Some countries, such as Liberia and Niger, are growing faster still, doubling in size in less than 20 years—a stunning increase that is causing forecasts of Malthusian disaster for countries that cannot feed themselves. With 12% of the world's population, sub-Saharan Africa has 57% of the deaths of mothers in childbirth, 49% of its infant mortality and 67% of HIV infections.'

'Yet Africa is also showing signs of embarking on the same transition towards smaller families that has occurred everywhere else. In north Africa families of two are the norm. Even if you exclude that region, the sub-Saharan part includes areas of relatively low fertility such as southern Africa, where families of three prevail. Evidence of lower fertility is raising hopes that Africa can reap a "demographic dividend", the economic benefit countries get when the share of the working-age population rises relative to children and old people.'



'But convergence is not happening in Africa. In a few countries, including Niger and Uganda, the fall in fertility has barely begun. Where it has started, the decline is usually slower than it was in Asia [...]. But no continent has experienced so many stalls, or so early in the process of decline, as Africa.'

'Mortality also plays a role. The demographic transition is the shift from high mortality and high fertility to low mortality and low fertility—and infant mortality in Africa remains stubbornly high: 85 babies die for every 1,000 live births. True, that is half the level of the 1950s, but more than four times East Asia's current rate. By increasing mortality, the spread of HIV/AIDS probably kept fertility higher than it would have been. Last, female education in Africa, like contraceptive use, has lagged behind the rest of the world, and there is a close connection between educating girls and having fewer children.'

'All this explains why the fall in African fertility has been modest so far. It implies the decline could accelerate if Africa were to get the conditions right. But it also suggests Africa's demographic transition may end up different from the "gold standard" of Asia: it will be patchier (with occasional fertility stalls) and led by cities and a few countries (South Africa, Rwanda). It also means that until Africa reduces rural fertility, it will not reach replacement levels.'

[39%]

2012-024

Africa: Continent's Phone Usage to Hit One Billion By 2016 by Isaac Kisa. *Allafrica.com*. 10 November 2011, www.allafrica.com

Keywords: consumer markets, mobile phones, 3G

'Africa might become the second largest mobile phone market by 2016 as the continent's user numbers continue to grow, according to Informa Telecoms, a research analyst agency.'

'The firm's research findings released last week, indicate that mobile phone activations on the continent, which currently stand at 616 million, is expected to grow by more than 60 per cent over the next five years, projecting the continent as the world's second largest telecom market behind Asia-Pacific.'

'The use of 3G is also tipped to rise at a strong rate from 6.6 per cent to 46 per cent by the end of 2016.'

[59%]

### Social Environment (cont.)

2012-025

East Africa: Regional Population to Hit 400 Million By 2050 As Concerns Grow by Jeff Otieno. Allafrica.com. 13 November 2011. www.allafrica.com

**Keywords:** fertility rates, Kenya, Uganda, unemployment, demographic dividend

'According to the latest State of Kenya Population report, 1.8 million married women have unplanned births every year and another 1.1 million have unmet contraception needs due to difficulties in accessing the necessary family planning facilities. The case is similar in all the East African Community member states. In Uganda, four in every 10 married women would like to use family planning services but neither have access to services nor supplies.'

'Though some economists argue that a big population is good for a fledgling economy as it provides labour and stimulates demand for goods and services, it is also true that it can be a burden when economic growth cannot keep pace with the rapid increase.'

'Population can be an asset but can also a liability. To make it an asset, we must invest in the extra numbers by ensuring they are well fed, educated and also create employment opportunities for them. If not, then the additional population becomes a liability," said Dr K'Oyugi, [CEO of the Kenya Co-ordinating Agency for Population and Development].'

'One of the contraceptive devices East African countries have been relying on to check population increase is the hormonal contraceptive, most popular among educated and urbanised women.'

'But East Africa has suffered a double blow. Apart from the worrying figures released by the United Nations Population Fund, which showed that the region's population was still increasing at a very fast rate, governments are faced with another headache of managing damaging information on injectables. A recent study published in the respected science magazine, The Lancet, argues that hormonal injectables double the risk of users contracting the HIV virus.'

'Kenya has already questioned the validity of the research, urging members of the public to continue using the contraceptive.'

'The World Health Organisation plans to convene a meeting in January, next year, to review the study and consider if the evidence is strong enough to advise women against using the method [...]. "We want to make sure that we warn when there is a real need to warn, but at the same time we don't want to come up with a hasty judgement that would have far-reaching consequences for the sexual and

reproductive health of women," said Mary Lyn Gaffield, an epidemiologist at the WHO's department of reproductive health and research.'

[20%]

2012-026

Risk Sharing and Transaction Costs: Evidence from Kenya's Mobile Money Revolution by William Jack and Tavneet Suri. MIT and Georgetown University. August 2011.

**Keywords:** Kenya, transaction costs, risk-sharing, M-PESA

'In the presence of high transaction costs, the risk sharing benefits of geographic separation and income diversification can go unrealized. Small idiosyncratic risks might be shared within local networks, but larger and more aggregate shocks are likely to affect consumption directly. In this paper we test the importance of transaction costs as a barrier to full insurance in the contextof the rapid expansion of a cost-reducing innovation in Kenya, M-PESA—a cell phone-based money transfer product that has been adopted by a large majority of households in less than four years.'

'M-PESA has been the most widely adopted mobile money system in the world. A number of other countries have followed the example and a number of donors are actively promoting its use across the developing world. At its core, M-PESA is used mostly for remittances and informal person to person transfers at a low cost, especially relative to the available alternatives. Understanding the role of mobile money in allowing households to better smooth risk is therefore important.'

'We find convincing evidence that the innovation has had a significant impact on the ability of households to spread risk, and attribute this to the associated reduction in transaction costs.'

'The results are robust across various specifications and also when we use the data on the rollout of M-PESA agents across the country, which provides a source of exogenous variation in access to the service. In particular, we find that households who do not use the technology suffer a 7 percent drop in consumption when hit by a negative income shock, while the consumption of households who use M-PESA is unaffected. [...][I]n an economy like Kenya's, where much of the population lives close to subsistence, the benefits of smoothing downside risks can be considerably larger. Indeed, the risk smoothing benefits can dominate the welfare effects on any level effects on consumption

### Social Environment (cont.)

arising from M-PESA. In fact, as Dercon (2006) reviews, risk can often be the cause of poverty—he highlights how any assessment of poverty should also include a measure of household vulnerability to risk.'

'Much as the technology also provides a convenient and safe method of saving, which could facilitate self-insurance, we find that an important mechanism that lies behind the improved risk spreading is remittances. When faced with a shock, households with access to the technology are more likely to receive a remittance, they receive a greater number of remittances and also larger amounts of money in total. In addition, the remittances they receive come from further afield and from different network members. These results highlight the importance of transaction costs when using social networks to smooth risk. Mobile money appears to increase the effective size of, and number of active participants in, risk sharing networks, seemingly without exacerbating information, monitoring, and commitment costs.'

[Conclusion]

The full report is available at: http://www.mit.edu/~tavneet/Jack\_Suri.pdf

2012-027

Next Generation: Youth Could Be Source of Wealth, or Conflict by Xan Rice. The Financial Times. 22 November 2011. www.ft.com

**Keywords:** Nigeria, youth, demographic dividend, unemployment, economic growth

'Nigeria [is] a large country filling up fast. With 162m people, according to the latest Population Reference Bureau statistics, the country is already home to one in two west Africans, and to nearly one in six people on the continent [...].'

'It is the world's seventh-most populous nation, but is growing faster than any country ahead of it. By 2050, it is projected to have 433m people, more than the US, and behind only India and China.'

'British Council and the Harvard School of Public Health [...] describes Nigeria's greatest asset as its youth, not oil, and it is easy to see why. Some 43 per cent of Nigerians are under the age of 15.'

'The authors see cause for optimism, concluding that if Nigeria's recent economic growth continues, education and health facilities improve, and jobs are created, the average citizen could be three times richer by 2030. Those are a lot of big ifs, especially considering the poor history of governance and service delivery.'

'Half of Nigerian Muslims, who mainly live in the north, have no schooling, a factor in the growing north-south economic divide.'

'While the finance ministry puts the unemployment rate at 21.7 per cent, it is significantly higher for people under 30.'

'[T]he same factors that can boost an economy, can also spark civil conflict. "Without jobs, you will have a lot of angry young men causing trouble."

[35%]

## **Physical Environment**

2012-028

Seven Trends Likely to Shape African Agriculture in the Coming Years by Femi Adewunmi.

How We Made it in Africa. 14 January 2012.

www.howwemadeitinafrica.com

**Keywords:** agriculture, China, food security, urbanisation, superfarms

#### 1. Increasing demand from China

'China [...] cannot supply its own need for soya beans. In 2001, the country produced 15.4 million tonnes of soya beans. This year production is expected to be about 14 million tonnes. Although Chinese soya bean production has decreased, domestic consumption has skyrocketed from 28.3 million tonnes in 2001 to 71.6 million tonnes in 2011. This higher demand has been met through imports. The same situation as what happened with soya beans could play itself out in other grains, such as maize, wheat and rice. The past two years has seen a minimal increase in the harvested area for wheat and rice, while yields for all three grains have also only seen a marginal improvement.'

#### 2. Food security

'The UN Food and Agriculture Organisation (FAO) believes that 70 million hectares of additional farmland is required to feed the world's 9 billion people by 2050. A similar need to diversify supply will likely arise in agriculture, and this represents a major opportunity for Africa to provide the world with food security.'

#### 3. Resource nationalism

'High prices for agricultural goods, the need to secure alternative food supplies and the sensitivities of access to and ownership of land, all suggest resource nationalism in agriculture is likely to become a more prominent theme in the years ahead.'

#### 4. Will urbanisation lead to farm mechanisation?

'It estimated that 60% (currently 40%) of the continent's population will live in cities by 2050. As more and more workers flood into urban environments and readily available pool of cheap workers disappear from the countryside, farmers are forced into a straightforward labour-capital shift. In short, farms must mechanise if they are to maintain their competitive position.'

#### 5. Superfarms

'Ultimately, the debate over superfarms comes down to money. The volatility of food prices, the rapid urbanisation that characterises large parts of our planet, the relative undercapitalisation of the sector and the sheer variability of the agricultural labour force in its current form, all suggest that in creating those conduits for capital, superfarms are likely to play a hugely important role in attracting investment to the sector.'

#### 6. Sustainability

'The collapse of food-supply systems that support urban societies has been a permanent issue since urban centres were founded. Renaissance anticipates a great deal of new thinking on sustainability in agriculture, and expects Africa to lead much of that new thinking.'

#### 7. The future of aid

'[M]any aid agencies operating on the continent are setting agendas that hamper commercial development. The idea that some aid agencies are seeking to transform themselves into commercial enterprises highlights the new thinking that abounds in Africa. Traditional methods of delivering aid are likely to become redundant in the decades ahead.'

[41%]

## Physical Environment (cont.)

012-029

Climate Change: Global Warming Influences
Demographic Shifts by Mike Scott. The Financial
Times. 23 November 2011. www.ft.com

**Keywords:** climate change, Sudan, demography, globalisation

'The conflict in Darfur has been described as the world's first climate change war. According to the United Nations, one of the main causes of the region's devastating conflict was an ecological crisis caused, in part, by changes in the local climate.'

'This changing climate led to tensions between herders and farmers as pasture disappeared and water holes evaporated, a problem exacerbated by a huge increase in the number of cattle in the region, which overgrazed the fragile soils.'

"Sudan's tragedy is not just the tragedy of one country in Africa," said Achim Steiner, executive director of the UN Environmental Programme. "It is a window to a wider world underlining how issues such as uncontrolled depletion of natural resources such as soils and forests, allied to impacts such as climate change can destabilise communities."

'For some of the world's smaller island states, such as the Maldives and Seychelles, the situation is even more dire. They are at great risk of projected sea-level rises.'

'Of the 20 fastest growing cities in the world, eight are at "extreme risk" from climate change, including Kolkata, Manila, Kabul and Karachi, the group says. A further 11 are at "high risk" and just one—Cairo—is at "medium risk".'

'But in a globalised economy, it is not just the poor residents of megacities that are affected.

Cities [...] are "vital centres of economic growth in key emerging markets." This could have far-reaching consequences, not only for local populations, but on business, national economies and the balance sheets of investors around the world, particularly as the economic importance of these nations is set to dramatically increase.'

[37%]

### **Political Environment**

2012-030

From Basel to Bujumbura: Why Deposit Insurance Matters by Barabara Ryan. CGAP Microfinance Blog. 16 June 2011. microfinance.cgap.org

**Keywords:** deposit insurance, banking, e-money, consumer protection

'Deposit insurance, which insures the safety of depositors' savings in the event of bank failure, can play a key role in protecting savers, particularly those who save in small amounts, have little experience with formal financial institutions, and live in emerging economies with less developed banking systems [...] can help build trust in formal financial institutions.'

'[A] number of important issues and questions are beginning to arise with the introduction and growth of new products and channels of service delivery that lie outside the scope of the traditional deposit insurance system, including:

- Whether membership in the deposit insurance system is compulsory or voluntary and available to specialized microfinance providers as well as mainstream banks and under what terms and conditions;
- The level and scope of coverage provided by the deposit insurance system, and whether very small deposits in the form of e-money and/or depositors with the smallest deposit denominations have adequate protections and under what conditions;
- The deposit insurance funding systems employed, whether they extend to specialized microfinance institutions, and whether funding differs between specialized providers compared to mainstream banks;
- The need for adequate consumer protections and public awareness of the benefits of deposit insurance, particularly among lower-income households that are the target of financial inclusion initiatives;
- Emerging issues such as e-money and pooled trust accounts that support payment transfer services and the need for and applicability of deposit insurance protections; and
- The potential impact of financial inclusion initiatives on the risk exposure faced by deposit insurance systems.'

[32%]

2012-031

Kenya: Experts Push for Shared ATMs to Reduce Costs by David Mugwe. *Allafrica.com*. 26 October 2011. www.allafrica.com

**Keywords:** ATMs, transaction costs, commercial banks

'Industry experts say banks have not cut transaction costs despite the rise in number of ATMs by individual banks.'

'Currently, it costs consumers between Sh30 and Sh40 per transaction, but this can be reduced by more than 50 per cent if the banks were to share the infrastructure.'

'Running costs of the ATM include cash replenishment, security, maintenance, rental and communication-related costs.'

'The industry has been considering establishing a national payments switch either by creating a new entity and have already-established players connect to it or by amalgamating existing payments silos.'

'Commercial banks have been reluctant to let go of individually branded ATMs because shared networks may not allow for added value services such as depositing money into accounts among others and shared networks may reduce an individual banks visibility.'

'[W]hichever direction the industry takes, it must not lose sight of the main objective of providing a low cost platform that allows financial inclusion for the majority of Kenyans.'

[20%]

2012-032

### The Arab Spring: Risks and Opportunities for Mmicrofinance in the MENA Region by

Nadine Chehade. *CGAP Microfinance Blog.* 8 December 2011. microfinance.cgap.org

**Keywords:** Arab Spring, microfinance, MENA, social media, financial access

'The Arab Spring took everyone by surprise. There was a series of underlying factors, among them being a young and growing population, improved education levels for men and women, and decreasing fertility rates, all leading to a vast number of people seeking better economic and social opportunities.'

### Political Environment (cont.)

'As access to new technologies (e.g., mobile, Internet) facilitated the organization of a civil movement, massive uprisings started across the MENA region, now referred to as the Arab Spring, in regard to hopes of a brighter future.'

'From now on, political risk anticipation and readiness to manage crisis will need to be taken into account, along with coordination at industry level, hence the likelihood of a common response in case of need.'

'Before the crisis, a single word sums up all risk mitigation techniques, and that is: preparation. Preparation, for an MFI, means building a strong institution that has a business plan with several scenarios or stress tests. Preparation also includes anticipating a sudden rise of risk levels by putting in place participative and regularly updated contingency plans: a business continuity plan; succession plan for key positions; substitution plan for all staff with a supervisory role; insurance covering cases of war, strife, or civil unrest; and minimum cash reserves covering at least three months of operating costs to cater for sufficient time to leverage new funds. Last but not least, governance-related matters are of utmost importance, such as avoiding political affiliation, having detailed rules to prevent conflicts of interest, and having capable board members who are able to bring in reliable information on the economic and political trends, and who get along well with top managers.'

'During the early stages of a crisis, it is particularly important to avoid emotional decisions, such as the typical granting to all clients a grace period. Some businesses might actually excel during political turmoil. It is also crucial to deliver strong support messages and maintain communications, first with staff, then with clients.'

'As soon as it is safe to do so, operations should resume, starting by an assessment of the current situation. As is the case of staff and clients, fast and transparent communication with lenders, donors, or technical partners remains essential, especially if covenants are breached.'

'As no anticipation can match reality, plans will of course need to be refined and updated after a crisis, with best practices documented.'

'Similarly to all changes, the Arab Spring comes with a mix of hopes and fears. After several years of efforts to overcome risks linked to client protection, a new reputation risk lies ahead as high expectations are put into microfinance as a tool to fight unemployment. But if more enabling operating environments are the opportunity of the Arab Spring, let's bet practitioners will deploy innovative ways to offer financial access to those who need it most.'

[43%]

2012-033

**Global Health in 2012: Development to Sustainability.** Anonymous. *The Lancet.* January 2012. www.thelancet.com

**Keywords:** global health, sustainability, Millenium Development Goals, agriculture

'In 2012 there will be a major strategic shift in global health, away from development and towards sustainability. Since 2000, the Millennium Development Goals (MDGs), driven by a macroeconomic diagnosis of global poverty, have focused on investment in a small number of diseases as the most effective approach to decrease poverty. Institutions such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, Roll Back Malaria, and GAVI have been created to respond to that diagnosis.'

'There is a view among some development experts that health has had its decade. It is time now for other sectors to take centre stage, such as agriculture or energy.'

'World leaders, stakeholders from the public and private sectors, as well as representatives from environment and development communities will convene to define a new roadmap towards economic growth, social equity, and environmental protection. The objectives of Rio+20 will be to review progress on sustainable development from previous summits, identify gaps in implementation, renew political commitment on past action plans, and find ways to safeguard the planet from future destruction from emerging threats. The two core themes will be a move towards a green economy (in the context of sustainable development and poverty eradication) and strengthening the institutional framework for sustainable development, which to date has not fulfilled its potential because of a lack of coordination and coherence.'

'We need to make a strong case for health as part of sustainable development and future sustainable development goals—to protect the gains of the past decade and ensure that the unfinished agenda of the past decade is continued. However, we also need to embrace a new and emerging health agenda—one that includes non-communicable diseases (NCDs) and climate change.'

'We must identify the lessons learned from the MDGs, as well as bringing to the fore evidence for new threats and emerging challenges.'

[35%]

## Political Environment (cont.)

2012-034

Emerging Lessons of Public Funders in Branchless Banking by Meritxell Martinez and Claudia McKay. CGAP Microfinance Blog. July 2011. microfinance.cgap.org

**Keywords:** branchless banking, public funding, knowledge generation, financial infrastructure

'Considerable enthusiasm has surrounded branchless banking in both the private and public sectors in the past few years. There is indeed cause for optimism that branchless banking services can go to scale and offer efficient delivery mechanisms for financial services to poor people around the world. To achieve this potential, knowledge and capital are needed. There are many unanswered questions, such as what financial services poor people really want and what the business case is for different branchless banking models. Public funders can play an important role in helping to answer these questions and to support branchless banking by advising policy makers, investing in knowledge for the public good, providing technical assistance, and funding branchless banking operations.'

'Not all funders are well equipped to be involved in branchless banking. As with other aid, too much money given carelessly or in response to disbursement pressure will harm the industry. This is not an area for one-off solutions intended to show quick results. Funders who engage should have a long-term commitment to robust and sustainable branchless banking services. Those funders who are ready to dedicate significant resources to internal knowledge, to engage with the private sector, and to be creative in how they can bring all their resources—relationships, knowledge, and money—to the table can play an important role in supporting branchless banking services around the world and in advancing toward full financial inclusion.'

[Conclusion]

The full report is available at: www.cgap.org/gm/document-1.9.52408/FN72.pdf

## **Technological Environment**

2012-035

**Information Technology's Dangerous Trend in Africa** by Ndubuisi Ekekwe. *Technology Review*.
5 January 2012. www.technologyreview.com

**Keywords:** information technology, economic development

'For the past few decades, emerging technologies such as biotechnology, microelectronics, information technology and communications technologies have become central to the socioeconomic development of nations. These technologies improve productivity and facilitate better living standards when they penetrate into societies. Among them, information technology (IT) has become the most dominant.'

'IT is good for developing countries—it empowers people and improves their lives. But, in many African countries, the successes afforded by IT can backfire if it becomes a too-dominant focus.'

'The Nigerian government has created a new ministry to focus solely on IT and related areas. And African leaders are neglecting most non-IT technologies. Across most African universities, the only funded and active labs are the IT labs.'

'While IT can be applied to any field, the way Africa is promoting it sets a dangerous precedent. In my continent, "information technology" has become synonymous with "technology" itself.'

'So, what's the danger? Everyone wants to be an IT guy. No one remembers that we still need food...[agricultural science students] know more about mobile operating systems and mobile payments than they do about farming! The farms are now IT labs. And while you can simulate farming on tablets, you can't eat the virtual fruit.'

'The continent needs techies in mining, geology, semiconductors, agriculture, chemicals, and other areas besides IT, and government must ensure that IT does not create a situation that will destroy the continent's capacity to feed her citizens and compete in the future.'

[39%]

2012-036

Movirtu Rolls out a Cloud Phone Aimed at Low-Income Users: First Market is Madagascar, Others Will Follow. Anonymous. Balancingact-africa.com. 24 June 2011. www.balancingact-africa.com

**Keywords:** Movirtu, SIM cards, mobile phone sharing, Madagascar

'Right at the bottom of the pyramid are phone users who can't afford the minimum cost for a SIM to share in someone else's phone. Movirtu has produced a cloud-based, login account which will enable anyone who has access to a GSM phone to share it but still retain their own number.'

'The product has two markets: low-income individuals who want access to a phone without buying a handset or a SIM card and agents who will be able to offer access to phones and individual accounts to use them. It costs as a little as US20 cents to deliver the service set-up compared to anything between US\$14-21 to deliver a SIM card.'

'The product is aimed at those who are earning US\$1-2 a day. There's also a huge gender and geography disparity: 70% in this segment without a phone are women and 80% are in rural areas.'

'People feel a lack of dignity (when they have to borrow a phone) and there's no privacy because the phone owner can see who they've called. So we're trying to ease the ecosystem and offer a solution that meets their needs. All you need to log in is a 4-digit pin code.'

[30%

2012-037

#### Lighting Africa Illuminates A New Market

by Nate Berg. Fast Company. 22 June 2011. www.fastcompany.com

**Keywords:** rural electrification, World Bank, IFC, portable solar

'For nearly 600 million people in sub-Saharan Africa, sundown means living, working, and studying by flickering candlelight or polluting kerosene lamps. Rural electrification is proceeding, but it's outpaced by population growth. So Lighting Africα, a program of the World Bank and the International Finance Corp., is taking a different tack to try to improve the lives of Africans who are not on the grid. By working with private companies and cooperative governments, the group wants to kick-start a functioning market for affordable, efficient, and clean off-the-grid lighting products, including solar lamps. Call it market manipulation for the good.'

'With prices for solar portable devices falling, a market probably would have developed on its own. Eventually. "The question is how long it would take—and how many setbacks there would be," says Dana Rysankova, a senior energy specialist at the World Bank who manages the Lighting Africa program.'

'Lighting Africa starts by giving away solid research about African markets to interested manufacturers [and] shares with manufacturers the \$6,000 cost of testing products that pass an initial screening.'

'To make it easier to sell these products, Lighting Africα—which is now active in six sub-Saharan nations—advises governments to reduce or eliminate import duties, and partners with rural electrification programs to create incentives for their underserved customers to buy solar lights.'

'Solar devices that meet *Lighting Africa*'s standards last longer and cost less over time, but they run from \$22 to \$97—a significant investment for poor families. Convincing consumers to make a big purchase can be difficult, so *Lighting Africa* works to persuade banks and microfinance institutions to ease lending to consumers in the market for solar lights.'

'In the past 18 months, *Lighting Africa* has spent less than \$9 million on its off-the-grid efforts, which have already brought better light to some 950,000 people.'

[50%]

2012-038

Mobile Stats for Africa: Video Report on the Growth of Mobiles by Anneryan Heatwole. MobileActive.org. 15 September 2011. www.mobileactive.org

**Keywords:** Praekelt Foundation, mobile phones, consumer markets, price points

'The Praekelt Foundation, a South African organization that runs several mobile-based programs in South Africa, recently produced a catchy video infographic of mobile statistics for Africa. Looking at accessibility, growth, and usage, the video gives a good look at how mobiles have taken off in in the continent of Africa.'

'The video covers a lot of facts about mobiles, from a breakdown of the rapid growth of mobile phones compared to other forms of media (like radio and television) to the huge drop in price points (the first mobile phone cost US \$3995 in 1973 compared to roughly US \$15 for certain models today).'

View the video at: www.mobileactive.org/blog/infovideo

2012-039

The New Stripped-Down SUV That Will Change Transportation In Africa by Michael Coren. Fast Company. 18 July 2011. www.fastcompany.com

**Keywords:** transportation, Mobius One, Kenya, entrepreneurialism

'Imagine a place where 2 million kilometers of roads have become virtually non-functional after decades of poor maintenance and neglect. Fixing them will cost more than the entire region spends each year on its roads and, as a result, people pay 75 percent more for their daily goods. That's what it's like trying to get around and move products in Sub-Saharan Africa.'

'And that's also the environment for which Mobius One was born. The bare-bones SUV designed by Mobius Motors is the first of a new series of mass-market vehicles—rugged, safe and affordable for more rural Africans—that the Kenya-based company believes will serve as a vehicle for "local entrepreneurs to mobilize the developing world." Now on its second prototype, Mobius Motors is trying to create a viable alternative to the imported vehicles that rarely leave the cities for Africa's hinterlands where rugged transport is desperately needed."

'The company's strategy: replace an emphasis on comfort and extras with pure functionality.'

"Mobius aims to empower transport entrepreneurs across Africa not just with more appropriate vehicles, but with the financing and business advice needed to operate a sustainable transport centric business," writes Jackson by email. For entrepreneurs, it's more than just a car, but a business on wheels. It could be used as a school bus, mobile medical center, or public transport [...]. Our vision is a more connected, more mobile Africa." says Joel Jackson, the car's creator.'

[44%]

2012-040

**Layer By Layer** by David H. Freedman. *Technology Review*. January 2012. www.technologyreview.com

#### Keywords: 3-D printing, manufacturing

'The parts in jet engines have to withstand staggering forces and temperatures, and they have to be as light as possible to save on fuel. That means it's complex and costly to make them: technicians at General Electric weld together as many as 20 separate pieces of metal to achieve a shape that efficiently mixes fuel and air in a fuel injector. But for a new engine coming out next year, GE thinks it has a better way to make fuel injectors: by printing them.'

'To do it, a laser traces out the shape of the injector's cross-section on a bed of cobalt-chrome powder, fusing the powder into solid form to build up the injector one ultrathin layer at a time. This promises to be less expensive than traditional manufacturing methods, and it should lead to a lighter part—which is to say a better one. The first parts will go into jet engines, says Prabhjot Singh, who runs a lab at GE that focuses on improving and applying this and similar 3-D printing processes. But, he adds, "there's not a day we don't hear from one of the other divisions at GE interested in using this technology."

'These innovations are at the forefront of a radical change in manufacturing technology that is especially appealing in advanced applications like aerospace and cars. The 3-D printing techniques won't just make it more efficient to produce existing parts. They will also make it possible to produce things that weren't even conceivable before—like parts with complex, scooped-out shapes that minimize weight without sacrificing strength. Unlike machining processes, which can leave up to 90 percent of the material on the floor, 3-D printing leaves virtually no waste [...]. The technology could also reduce the need to store parts in inventory, because it's just as easy to print another part—or

an improved version of it—10 years after the first one was made.'

'If it weren't for the limitations of the technology, 3-D printing would already be much more broadly used. "Speeds are atrociously slow right now," says GE's Singh. Todd Grimm, who heads an additive-manufacturing consultancy in Edgewood, Kentucky, estimates that the time it takes to produce a part will have to improve as much as a hundredfold if 3-D printing is to compete directly with conventional manufacturing techniques in most applications. That won't happen in the next few years.'

[23%]

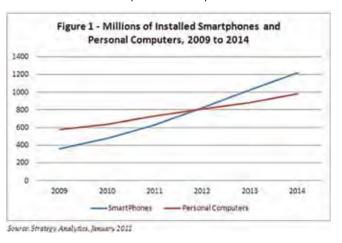
2012-041

# **Ten Facts About Mobile Broadband** by Darrell M. West. *The Brookings Institute*. 8 December 2011. www.brookings.edu

**Keywords:** mobile broadband, smartphones, mobile applications, healthcare, politics

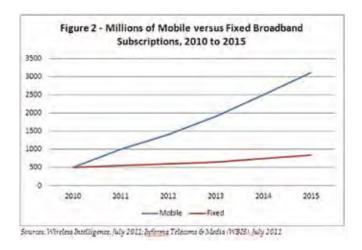
### 1. Smartphones Will Outnumber Personal Computers in 2012

'Smartphone installation currently is growing at about three times the rate of personal computers.'



### 2. Mobile Broadband Is Growing Much Faster than Fixed Broadband

'The number of mobile broadband subscribers around the world surpassed that of fixed broadband at the end of 2010. By 2015, it is anticipated that there will be 3.1 billion mobile broadband subscribers compared to 848 million fixed broadband subscribers. In emerging markets, mobile broadband is expected to increase from 37 to 79 percent of all broadband subscriptions between 2010 and 2015.'



### 3. More Than One-Third of Americans Own Smartphones and Use Them for a Wide Range of Services

'83 percent of American adults own a cellphone and 35 percent of all adults own a smartphone. When asked whether they used various services, smartphone owners indicated that they employed it to send or receive text messages (92 percent), take a picture (92 percent), or access the Internet (84 percent).'

#### 4. Mobile Technology Has Gone Global

'Many developing countries have skipped the landline and desktop computer stages of information technology. Rather than progressing from mainframes to desktops to laptops to tablets to smartphones, they have jumped directly to mobile broadband.'

'Broadband is viewed in many places as a way to stimulate economic development, social connections, and civic engagement. National leaders understand that broadband is a cross-cutting technology that speeds innovation in areas such as health care, education, energy, and social networking. When combined with organizational changes, digital technology can generate powerful new efficiencies and economies of scale.'

#### 5. The Mobile Economy Is Creating Jobs and Driving Development in the United States and Around the World

'In the United States, mobile broadband is a major contributor to job creation and economic development. Advanced digital infrastructure makes possible new businesses, products, and services. According to Deloitte, U.S. investment in 4G technology is expected to generate over \$73 billion in GDP growth between 2012 and 2016 and anywhere between 371,000 and 771,000 new jobs.'

#### 6. Mobile Applications Are Reshaping Education

'Wired classrooms, handheld devices, and electronic instructional sets let pupils learn at their own pace and in their own manner. Personalization makes education more adaptive and timely from the student standpoint and increases the odds of pupil engagement and mastery of important concepts. It frees teachers from routine tasks and gives them more time to serve as instructional coaches and mentors for students.'

'Handheld devices enhance student learning in other ways as well. They have been found to bridge the gap between haves and have-nots, and expose pupils to a rich array of instructional resources. Students find this approach very engaging and report great satisfaction with mobile learning approaches. This is particularly the case with underserved populations located either in geographically remote areas or poor districts.'

#### 7. Mobile Helps Patients and Health Care Providers

'Imagine a different system where, with the aid of the Internet, electronic medical records, and smartphones, the patient is in charge. People monitor their own weight, blood pressure, pulse, and sugar levels, and send test results via remote devices to health care providers. Patients store their medical records online and have access regardless of where they are in the United States or around the world. They get personalized feedback via e-mail and reminders when they gain weight, have an uptick on their cholesterol levels, don't take their medicine, or have high blood pressure. Social networking sites provide discussion forums and the benefit of collective experience from other people suffering similar problems. Patients take responsibility for their routine health care and rely on physicians and hospitals for more serious medical conditions.'

'Mobile devices offer help for developing nations. A majority of sub-Saharan Africa residents are served by cell-phones with texting capabilities. A non-profit organization called Medic Mobile seeks to use text messaging in that part of the world to track epidemics and help disaster relief personnel find those in need.'

'These applications make doctors more efficient because they don't have to be in the physical presence of a patient to judge his or her condition. Digital technology allows people to overcome the limitations of geography in health care and access information at a distance. This makes it possible for patients to get a second opinion by sending that person relevant medical tests. If a personal conference is required, doctors can use video conferencing to speak to patients located in another locale.'

#### 8. Mobile Alters the Way People Engage Politically

'Fast mobile broadband promotes civic engagement and new ways to follow politics and government. A number of organizations around the world have developed interactive mapping software that allows citizens to chart data patterns in their neighborhood or create videos or multi-media that engage people in public debates.'

### 9. Mobile Empowers Entrepreneurs and Overcomes Digital Disparities

'Entrepreneurs play a major role in the economies of many countries. They launch companies, build businesses, and provide jobs. Increasingly, as the globe moves towards a digital economy, they require mobile technology to develop their businesses. Mobile devices allow them to stay connected even while they are on the go. They can reach bank officers, suppliers, and customers as they travel around the area. This helps them remain in close contact and build the required relationships.'

#### Mobile Is Vital to Public Safety and Emergency Preparedness

'Mobile devices are especially helpful for public safety and during various types of disasters. In natural emergencies, fixed line communications often are not available and people must depend on mobile telephony. Landlines get destroyed and telephone and electric wires go down in major storms.'

[30%]

2012-042

## Virgin Territory: Three Unconquered Parts of the Technology Landscape Will Be Fought Over

**in 2012** by Tom Standage. *The Economist*. 17 November 2011. www.economist.com

**Keywords:** social media, mobile payments, Square, Apple, PayPal

'In some parts of the new digital world, it is obvious who is in charge. Google rules in search; Facebook in social networking; Amazon in retail. These territories are still being fought over: Microsoft's Bing is attacking Google in search, Google is attacking Facebook in social, and so forth. But these are all large, relatively mature fields. During 2012 the more interesting battles will be those taking place on the smaller, lesser-known territories on the fringes of the technology world, in areas such as mobile payments, location and augmented reality.'

'Start with mobile payments. One of the oddities of technological progress is that it is easier to use your mobile phone to pay for a taxi in Nairobi than in New York. That is because Kenya is a world leader in mobile-payment systems, which have proved particularly popular in the developing world as an alternative to conventional banking and payment methods. In the developed world, efforts to replace wallets and credit cards with mobile phones have been held up by bickering between banks and mobile operators over who will "own" the customer, and who will pay to upgrade the point-of-sale equipment used by millions of retailers.'

'So keep an eye on two companies that could break the logjam in 2012. The first is Square, [...] a small, square device that plugs into an Apple iPhone or Android-based smartphone and turns it into a mobile till that can take credit-card payments [...]. The next iteration of the technology allows customers who have bought something in this way to use their iPhones instead of their credit cards for subsequent purchases. This is a nifty bottom-up way of doing what years of top-down planning have failed to achieve.'

'The other company to watch is Apple, under its new boss Tim Cook. The firm has repeatedly taken a half-finished idea (digital music player, smartphone, tablet computer) and shown the industry how it should be done. Expect it to attempt this again in 2012 with mobile payments, by embedding a wireless chip into a new version of the iPhone. Apple could thus enable every iPhone to make and receive payments, linking the whole system to the credit cards of more than 200m people who already use its iTunes service. If anyone can create a mobile-payments infrastructure overnight, spawning copycat moves from others and opening up an entirely new market, it is Apple. Also active in this area are PayPal, which dominates payments on the desktop internet, and Google, which launched a mobile-wallet service in 2011.'

[48%]

2012-043

#### The Troubling Future of Internet Search

by Eli Pariser. *The Futurist*. Sept/Oct 2011. www.wfs.org/futurist

**Keywords:** internet search, Google, smartphones, advertising

'Someday soon, Google hopes to make the search box obsolete. Searching will happen automatically.'

"When I walk down the street, I want my smartphone to be doing searches constantly—'did you know?' 'did you know?' 'did you know?' In other words, your

phone should figure out what you would like to be searching for before you do," says Google CEO Eric Schmidt.'

'This vision is well on the way to being realized. In 2009, Google began customizing its search results for all users. If you tend to use Google from a home or work computer or a smartphone—i.e., an IP address that can be traced back to a single user (you)—the search results you see incorporate data about what the system has learned about you and your preferences. The Google algorithm of 2011 not only answers questions, but it also seeks to divine your intent in asking and give results based, in part, on how it perceives you.'

'This shift speaks to a broader phenomenon. Increasingly, the Internet is the portal through which we view and gather information about the larger world. Every time we seek out some new bit of information, we leave a digital trail that reveals a lot about us, our interests, our politics, our level of education, our dietary preferences, our movie likes and dislikes, and even our dating interests or history. That data can help companies like Google deliver you search engine results in line with what it knows about you.'

'Other companies can use this data to design Web advertisements with special appeal. That customization changes the way we experience and search the Web. It alters the answers we receive when we ask questions. I call this the "filter bubble" and argue that it's more dangerous than most of us realize.'

'In some cases, letting algorithms make decisions about what we see and what opportunities we're offered gives us fairer results. A computer can be made blind to race and gender in ways that humans usually can't. But that's only if the relevant algorithms are designed with care and acuteness. Otherwise, they're likely to simply reflect the social mores of the culture they're processing—a regression to the social norm.'

'The use of personal data to provide a customized search experience empowers the holders of data, particularly personal data, but not necessarily the seekers of it.'

'The world often follows predictable rules and falls into predictable patterns: Tides rise and fall, eclipses approach and pass; even the weather is more and more predictable. But when this way of thinking is applied to human behavior, it can be dangerous, for the simple reason that our best moments are often the most unpredictable ones. An entirely predictable life isn't worth living. But algorithmic induction can lead to a kind of information determinism, in which our past clickstreams entirely decide our future. If we don't erase our Web histories, in other words, we may be doomed to repeat them.'

[42%]

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