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a cura di Donatella Saccone, Università di Torino e OEET

Circa un quarto delle economie emergenti si trova nel continente africano. Angola, Etiopia, Ghana, Marocco, Mozambico, Nigeria, Ruanda, Tanzania, Uganda e Zambia rientrano infatti tra i 38 paesi poveri a maggiore crescita (vedi Emerging Economies 4/2016), mentre altri paesi africani si stanno rapidamente riprendendo dalle stagnazioni economiche del passato. In questo numero di Economie Emergenti vogliamo fornire tre esempi della specificità del processo di emersione delle economie africane, costellato di luci e ombre.

Dopo aver documentato l'importanza che il settore turistico riveste per il continente africano, Francesco Abbate ne discute le principali debolezze . In particolare, vengono evidenziate le ancora scarse connessioni intersettoriali, dal momento che la maggior parte dei servizi correlati al turismo – come linee aeree, strutture ricettive e tour operator- è di proprietà straniera. Alla luce di queste valutazioni, il contributo presenta i quattro principali suggerimenti che sono stati proposti dall'UNCTAD nel Report "Economic Development in Africa" del 2017 al fine di rafforzare il settore turistico africano e sfruttarne appieno le potenzialità: consolidamento delle connessioni intersettoriali; intensificazione della capacità turistica per sostenere una crescita inclusiva; sfruttamento del potenziale turistico intra-regionale; promozione della pace e della stabilità politica.

Giorgio Brosio and Jelle Gerbrandy sottolineano l'importanza che una corretta definizione dei diritti di proprietà sulla terra riveste al fine di sostenere i processi di sviluppo economico, analizzando il caso della Tanzania. Il paese rientra infatti a pieno titolo nella categoria delle economie emergenti e, negli anni recenti, ha vantato tassi di crescita del PIL intorno al 6%-7%. Tuttavia, la performance dell'economia tanzaniana, largamente basata sul settore primario, rischia di essere frenata da un sistema di registrazione dei diritti di proprietà terriera inefficiente ed iniquo. Gli autori forniscono quindi una serie di suggerimenti per superare tali inefficienze, enfatizzando in particolare la necessità di un'efficace tassazione della proprietà e della digitalizzazione dell'amministrazione fiscale.

Infine, Gianluca Iazzolino documenta la diffusione dei servizi finanziari digitali e, in particolare, della moneta virtuale nelle economie emergenti africane. L'autore fornisce infatti numerosi esempi concreti del loro utilizzo e discute i molteplici benefici che essi possono apportare. Tuttavia, sembra che i benefici di tali sistemi non siano stati omogeneamente distribuiti da un punto di vista sia territoriale che sociale. Di conseguenza, in alcuni paesi la moneta digitale si è largamente diffusa, mentre in altri stenta a decollare. Allo stesso tempo, stanno sorgendo dubbi sul grado di inclusione sociale che essa porta con sé. L' efficacia ed il grado di inclusione sociale dei sistemi finanziari digitali dipendono infatti dal contesto specifico ed è verso questi orizzonti che la ricerca futura dovrebbe dirigersi.

SOME LIGHTS AND SHADOWS OF EMERGING AFRICA

edited by Donatella Saccone, University of Turin and OEET

Around one-fourth of emerging economies is located in Africa. Angola, Ethiopia, Ghana, Morocco, Mozambique, Nigeria, Ruanda, Tanzania, Uganda and Zambia are indeed among the 38 fastest-growing poor countries in the world (see Emerging Economies 4/2016), while other African economies are sharply recovering by a stagnating past. In this number of Emerging Economies, we want to provide three examples of African specificities in the emergence process, permeated by both lights and shadows.

Francesco Abbate discusses the importance of the tourism sector for the emergence process of many African countries and, drawing on the UNCTAD Report "*Tourism for Transformative and Inclusive Growth*", highlights its strengths and weaknesses. In particular, he focalizes on some important suggestions that can help African countries in maximizing the economic benefits of tourism: strengthening intersectoral linkages, enhancing the capacity of tourism to foster more inclusive growth, tapping the potential of intraregional tourism through deepening regional integration, and harnessing peace and stability for tourism.

Giorgio Brosio and Jelle Gerbrandy underline the importance of well-defined property rights on land for a sustainable process of economic development. They then analyze the case of Tanzania that, with a growth rate of 6%-7%, is a fully-fledged emerging economy. The inefficiencies and iniquities in the Tanzanian registration system of titles however represent a dangerous shadow on an economy that is largely based on the primary sector. The authors hence provide a series of valuable recommendations to address these inefficiencies, particularly emphasizing the need for an effective taxation of property as well as for digital technologies for innovating tax administration.

Finally, Gianluca Iazzolino provides evidence on the diffusion of mobile money in African emerging economies and illustrates the many economic advantages it brings. However, it seems that these advantages have been unequally distributed among people and countries. As a consequence, in some countries mobile money have largely spread, while in other countries it have struggled to take off. At the same time, doubts raised on whether digital financial services have promoted social inclusion. The effectiveness and equity of these services depend indeed on the specific context and their implementation should be adjusted to promote social and financial inclusion.

HOW DOES TOURISM CONTRIBUTE TO AFRICA'S STRUCTURAL TRANSFORMATION AND INCLUSIVE GROWTH? FINDINGS AND RECOMMENDATIONS FROM A UNITED NATIONS REPORT

by Francesco Abbate, University of Turin and OEET

Sintesi

Dopo aver documentato l'importanza che il settore turistico riveste per il continente africano, il contributo ne discute le principali debolezze . In particolare, vengono evidenziate le ancora scarse connessioni intersettoriali, dal momento che la maggior parte dei servizi correlati al turismo – come linee aeree, strutture ricettive e tour operator- è di proprietà straniera. Alla luce di queste valutazioni, il contributo presenta i quattro principali suggerimenti che sono stati proposti dall'UNCTAD nel Report "Economic Development in Africa" del 2017 al fine di rafforzare il settore turistico africano e sfruttarne appieno le potenzialità: consolidamento delle connessioni intersettoriali; intensificazione della capacità turistica per sostenere una crescita inclusiva; sfruttamento del potenziale turistico intra-regionale; promozione della pace e della stabilità politica.

Since 2000, the United Nations Conference on Trade and Development (UNCTAD) has been deepening its analysis of Africa's development challenges and key policy issues by publishing annually *The Economic Development in Africa Report*. The theme of the 2017 issue is *Tourism for Transformative and Inclusive Growth* (http://unctad.org/en/PublicationsLibrary/aldcafrica2017_en.pdf). The report contains many interesting findings, some of which are contrary to common perceptions, as well as important policy recommendations for enhancing the benefits Africa is reaping from tourism.

Tourism in Africa (including not only visitors for leisure but also for business, health, education and other purposes) is a thriving sector which generates more than 21 million jobs, or 1 out of 14, in the continent. Between 1995 and 2014, the industry registered strong growth, with international tourist arrivals and tourism revenues growing annually at 6 per cent and 9 per cent, respectively. As a result, tourism currently represents roughly 8.5 per cent of Africa's GDP and as much as 46 per cent of the continent's services exports.

In small island countries, tourism is the economy's driving force, with a contribution to national GDP ranging from 27 per cent in Mauritius to 62 per cent in Seychelles. Tourism is also an important sector, accounting for more than 10 per cent of GDP, in 13 other non-small island economies, including those from Eastern Africa (Ethiopia, Kenya, Madagascar, Tanzania and Zimbabwe), Northern Africa (Egypt, Morocco, Tunisia), Southern Africa (Botswana, Namibia and Lesotho) and Western Africa (Gambia and Senegal). Interestingly, Central Africa does not appear in this list, while Western Africa is hardly represented. Unsurprisingly, the oil-exporting countries (such as Algeria, Angola, Gabon and Nigeria) are among the least dependent on tourism.

Geographically, tourist arrivals are highly skewed. Northern Africa is the most popular destination, receiving about half of tourists visiting the continent in 2011-2014. Four countries, namely Egypt, Morocco, South Africa and Tunisia, accounted for more than 60 per cent of arrivals over the period.

Africans themselves are increasingly stimulating tourism demand in Africa. Four out of 10 international tourists originate from the continent and the ratio rises to two out of three in sub-Saharan Africa. This finding should not appear as surprising because, as with merchandise trade flows, proximity is one of the main determinants of visitor origin. Furthermore, intra-regional tourism has been spurred by a rise in the continent's disposable income and a growing middle class.

In African economies, growth in tourism earnings is negatively correlated with the share of agriculture in GDP, suggesting that tourism growth is associated with structural transformation. As tourism has relatively few entry barriers for labour and low capital requirements, it may in fact provide new opportunities allowing countries to diversify away from agriculture. Tourism is also contributing to achieving gender equality in the continent. More than 30 per cent of tourism businesses are run by women, against an average of 21 per cent for all sectors. In addition, women make up 46 per cent of employees in hotels and restaurants.

Despite tourism's potential to foster sustainable development, the industry generates weak intersectoral linkages, because of limited domestic productive capacity. Airlines, tour operators, travel agencies, and hotel chains are mostly foreign-owned, while tourism establishments heavily depend on imported inputs. This situation results in an extremely high degree of leakages. These are the different ways in which revenue generated by tourism is lost to other countries' economies. As an example, in South Africa, about half of final demand by hotels and restaurants is met by imports, compared to only 20-25 per cent in Indonesia and Thailand.

Although visitor arrivals have been adversely affected by a number of economic, political and health upheavals, such as the global financial crisis, the Arab Spring and the Ebola outbreak, tourism receipts show a lower degree of volatility than other external flows, namely foreign direct investment and workers' remittances. However, the Ebola crisis shrank tourism across Africa, even in countries where there had been no cases of the disease.

In the light of these findings, the UNCTAD report puts forward a panoply of well-thought and feasible recommendations to policymakers at the national and regional levels, focusing on the following four major challenges:

(a) **Strengthening intersectoral linkages** at national and local levels, so that a greater share of the value added generated in the sector is retained by the destination country. Put it differently, the message is: "From leakages to linkages." Attention should be given not only to better-known linkages between tourism and sectors like agriculture and infrastructure, but also to different market segments such as ecotourism, cultural tourism as well as medical and business travel. All these linkages can play a key role in promoting diversification and structural transformation. The UNCTAD report's focus on tourism's contribution to structural transformation should be read against the background of "growth without industrialization" prevailing in Africa and the new thinking on this issue by John Page of the Brookings Institution, among others, who stresses the importance of tradable, labour-intensive activities "without smokestacks", like cut flowers, call centres and tourism itself.

(b) **Enhancing the capacity of tourism to foster more inclusive growth**. Tourism can play an important role in poverty reduction and inclusion by creating employment opportunities among vulnerable groups such as the poor, women and youth. Tourism is a labour-intensive sector in which expenditure is more likely to reach the poor. Linkages between tourist operators and rural communities providing popular tourism products such as music, handicrafts and tours must be fostered to better integrate the poor into the tourism value chain. Generating jobs for young people will require strong efforts to promote tourism and hospitality schools as well as vocational skills training, such as informal apprenticeship schemes. Boosting female participation in tourism and improving their working conditions can enhance tourism product diversification and the protection of local cultures and environments.

(c) **Tapping the potential of intraregional tourism through deepening regional integration**. A shift in focus is required to target African tourists who have more similar tastes and greater demand for local products than those from other continents, while their arrivals are less susceptible to seasonality. Further progress on free movement of persons and liberalization of air transport services within the regional economic communities and throughout the continent are instrumental to future expansion of intraregional tourism. In this connection, it is interesting to note that three years after abolishing visa requirements for East African Community nationals, Rwanda had registered a 70 per cent growth in the number of intraregional tourists. In addition, African States are invited to implement the Yamoussoukro Decision to deregulate air services and open regional air markets to competition within Africa, and to establish a single African air transport market. Furthermore, within the current negotiations for the establishment of a Continental Free Trade Area for goods and services covering all 54 African countries, special attention should be devoted to tourism, given its lion's share in Africa's services exports. Finally, although currency restrictions and the lack of currency convertibility hamper intraregional tourism, the report itself recognizes that the removal of these obstacles depends on broader macroeconomic policies.

(d) **Harnessing peace and stability for tourism**. One of the main messages of the report is that, while peace is essential for tourism, the development of tourism can foster peace. African countries with tourism potential are thus urged to implement policies strengthening the sector as they will contribute to both peace and development. Stronger regional efforts to achieve peace are important, as the effects of political unrest on tourism can reach beyond national borders. African Governments should consider implementing strategies that help address negative perceptions of the continent in global public media which adversely affect tourism development. At the national level, countries should design comprehensive planning and crisis management procedures involving the public and private sectors and include tourism in disaster management plans.

LOOKING AT TANZANIA'S SUSTAINABLE GROWTH. DEFINITION OF LAND RIGHTS AND EFFECTIVE PROPERTY TAXATION

by Giorgio Brosio, University of Turin and OEET, and Jelle Gerbrandy, Paratii Foundation Sihtasutus

Sintesi

Gli autori discutono in merito all'importanza che una corretta definizione dei diritti di proprietà sulla terra riveste al fine di sostenere i processi di sviluppo economico. Alla luce di tale considerazione, viene analizzato il caso della Tanzania. Il paese rientra infatti a pieno titolo nella categoria delle economie emergenti e, negli anni recenti, ha vantato tassi di crescita del PIL intorno al 6%-7%. Tuttavia, la performance dell'economia tanzaniana, largamente basata sul settore primario, rischia di essere frenata da un sistema di registrazione dei diritti di proprietà terriera inefficiente ed iniquo. Gli autori forniscono quindi una serie di suggerimenti per superare tali inefficienze, sottolineando in particolare la necessità di un'efficace tassazione della proprietà e della digitalizzazione dell'amministrazione fiscale.

Growth prospects

Tanzania is still a low income country, but has experienced high growth rates based on its vast agricultural and mineral resource wealth and tourism. GDP growth in 2009-16 averaged 6%-7% per year.

The primary sector accounts for more than one-quarter of GDP, provides 85% of exports, and employs two-thirds of the work force. Tanzania aims at achieving a middle income status at the end of the Second Development Plan (2016/17-2020/21). No fundamental transformation of the structure the economy is envisaged; growth is expected to stem from increase of agriculture productivity, from an ambitious infrastructure construction plan, and from expansion of access to public services. In the recent years Tanzania has performed an almost full transition to a market economy, although the government retains a presence in key sectors, such as telecommunications, banking, energy, and mining.

Registration of property titles, leading to the effective definition of rights on land, both in the rural and the urban areas, is essential for increasing agricultural productivity, for expanding delivery of basic services and for executing massive infrastructure investment programs. However, in Tanzania registration of titles is gravely delayed and also restrained to a small share of properties, due to lengthy, inefficient and also inequitable procedures. Making these procedures more efficient would remove a most important constraint to continuation of growth and would also help to provide much needed revenue, particularly by making taxation of property effective (Ahmad, Brosio, Gerbrandy, 2017). These are the main (and not frequently considered in a growth perspective) arguments developed in this contribution. It also suggests the need of radical innovations in procedures, such generalized use of digital mapping and block chain technology for registration of properties. Most of the arguments developed here apply, to a large degree, to most emerging economies, particularly in Sub Saharan Africa.

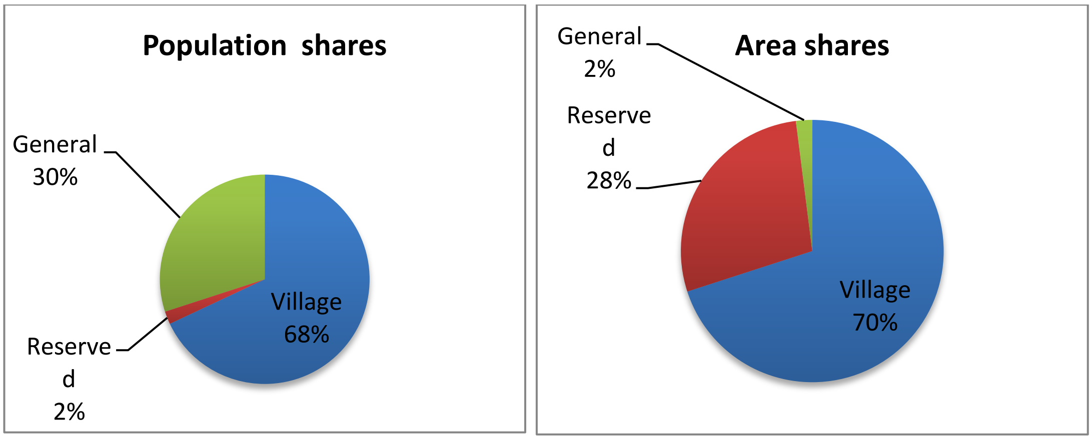
Impact of missing definition of property rights on land

Abysmal delays in registration and assignment of property titles characterize not only Tanzania, but the whole of Sub-Saharan Africa. In Tanzania, less than 15% of plots are registered, despite recent efforts to speed up the process. This is, however, a much higher share than that prevailing in Africa. According to Toulmin (2006) in West Africa only 2 to 3 per cent of land is held by written title and also this is being mostly confined to a few major cities and development areas, such as irrigation schemes. In Burundi, it is estimated that less than 1 per cent of land is registered. In East and Southern Africa, higher levels of registration exist, given the longstanding occupation of land by large commercial farmers. However, even the existence of paper titles is not a sufficient condition for tenure security, as experience in Zimbabwe in recent years has demonstrated.

Without defined property rights on agricultural land, investment by small farmers is discouraged. Having no principal to offer as guarantee, farmers are denied access to credit. On the other hand, the assignment without a clear and effective definition of property titles of occupancy rights to modern economic activities, such as mining, timber production, large-scale farming, tourism and conservation, has created growth in Tanzania, but also frequent opposition, when not harsh conflict, with the local population and village authorities, particularly on projects potentially endangering the environment. If conflicts about rights are not settled, they can impinge on the present approach to growth. As a matter of fact, the government of Tanzania is presently reconsidering the rationale of promoting the recognition of only private property rights and is thinking to revive, at least partially, the traditional conventions, in the framework of former President Nyerere's, *Ujamaa vision.*[1]

To give an idea of the relevance of the issue it is worth recalling that land in mainland Tanzania falls into three types: a) Village land; b) Reserved land; and c) General land. Village land covers approximately 70 per cent of mainland Tanzania and accommodates about 30 million people in 2012 (see Figure 1). Reserved land is set aside for natural parks, conservation areas, forest and game reserves. It amounts to 28.5 percent of mainland Tanzania and in principle cannot be occupied. However, despite the legal ban, it is estimated that 300,000 to one million people live on reserved land, mainly pastoralists, displaced people, or even small scale informal tourist ventures. General land is neither village nor reserved land. It covers only two percent of the national mainland areas and accommodated about 13 million people in 2012. Most of general land is situated in the urban areas, with a small portion of it located in the rural areas.

Figure 1. Land tenure in Tanzania



Registration of land plots is almost inexistent in village land, where most of the expected increase of agriculture productivity should take place, since almost three fourths of rural population inhabit this area. Registration of land plots is also largely missing in the urban areas, where most of the potential of property taxation is concentrated.

Delays in registration and assignment are due to procedures that, although derived from the best practices applied in the industrial countries, are completely unsuited to most emerging and developing economies. Registration of land starts with request from occupier, who has to provide evidence of this claim. If there is no opposition after a given time, the occupant has to hire a surveyor who will draw the map, make the measurement of the plot and provide all the required detailed information. The last step is the insertion of map and information on a register (the cadaster). As we can see, the process is quite

[1] According to Nyerere, an ideal, African, society, needed to be based on equality, because only on that basis will men work cooperatively; freedom, because the individual is not served by society unless it is his; and unity, because only when society is unified can its members live and work in peace, security and well being. Common, or communal, property of land was, according to Nyerere a kingpin of this society.

lengthy, especially if there is opposition to the claim of property by the occupant, it is costly for the poor and is subject to exactions by a corrupt bureaucracy.[2]

Urbanization as an asset rather than a burden

Tanzania is a rapidly urbanizing country, although the overall urbanization rate remains low (29.1% in 2012; see Wenban Smith, 2014). The growth of cities, especially Dar es Salaam, is driven by the construction and service sectors. Investment in real estate is massive, absorbing huge amounts of capital. Despite increase of housing stock, a large share of settlements is still informal. According to the World Bank (2002), 70% of Dar es Salaam's population lives in poor, unplanned settlements. Residents are usually too poor to pay for services or infrastructure and the authorities are too resource-constrained to maintain these; as a consequence health and environmental conditions are generally extremely poor (CollIer and Jones, 2016). Access to clean water and sanitation are major problems and contribute to widespread illness. Congestion and pollution are also extremely high in the urban areas. The relatively small size of the other main cities in Tanzania is reflected in lower, although growing, congestion and pollution. Continuation of rapid economic expansion requires also a more balanced spatial pattern of growth with the creation of new economic hubs, in addition to Dar es Salaam.

Urbanization does create growth by itself. At the same time there can't be growth in cities if they don't create growth-facilitating infrastructure. There can't also be growth, if basic services contributing to human capital, such as education and health, are not provided. Infrastructure and services are very costly and municipal finances could receive a decisive help from a properly working property tax, more precisely a tax on immobile property levied annually. This tax is the backbone of local finances around the word. In Tanzania it exists but its revenue is simply missing. Property taxation – that includes a rent fee on land (see below), contributes only roughly 0.16 percent of GDP. If we take for granted that the potential property tax revenue for a similar country is about one per cent of GDP, Tanzania is performing at one sixth of the benchmark for this group of countries.

Table 1. Highs and lows of property taxation around the world

Country	Year	Property tax % of GDP	Taxes on income % GDP	Total tax revenue % GDP
France	2014	4.1	11.5	28.9
Germany	2014	0.6	11.6	22.9
UK	2014	3.3	11.5	27.0
US	2014	2.8	12.4	19.7
Brazil	2014	1.2	6.9	24.2
Chile	2014	0.6	6.0	18.6
Colombia	2014	1.0	5.3	18.3
Senegal	2012	0.01	5.3	19.2
Mauritius	2014	0.2	4.4	18.8
Namibia	2011	0.2	8.1	22.1
South Africa	2014	1.6	14.6	27.8
Tanzania	2014	0.01	4.4	13.0

Source: compilation by the Authors. Original source, IMF, Government Financial Statistics Yearbook, 2015.

[2] As a matter of fact corruption is pervasive in Tanzania, affecting all levels of government and administration. According to the 2016 Corruption Perceptions Index by Transparency International, Tanzania is ranked 116th out of 175 countries (with 175 being the most corrupt). Tax officials are perceived as the most corrupt according to information provided by *Afrobarometer*.

This reflects huge problems in the structure of the tax and its administration, compounded by evasion or avoidance by the rich taxpayers, as well as political resistance.

Officially, only one instrument of taxation is recognized in Tanzania, the property tax. But an additional instrument is levied, the land rent fees. The property tax is levied on the improved value of land (meaning buildings), while land rent fees are based on (pure/non built) land. The property tax is assigned to be collected by local governments. The Ministry of Lands, Housing and Human Settlements Development is responsible for collecting the land rent fee. This assignment creates huge problems for the assessment of the tax base. In principle, the value of buildings and improvements must be deducted from the total value of property to determine the pure land value on which to set the rent fees (30% shared with local governments), while the value of pure land must be deducted from improved land to determine improvements to levy the property tax. The Minister of Land has resolved the problem by simplifying, quite appropriately, the method for determination of the tax base. More specifically, land fees are determined according to the size (square meters) of plot and to use of property.[3]

Local governments are still relying on the traditional (in fact a legacy of colonial times) method based on assessment of value made by surveyors. Since the method is lengthy [4]surveyors are in short supply it will take year to assess the properties that are presently registered. With no assessment no tax is levied. This suggests that a simplified method similar to that adopted for land fees should be used for the property tax. A good approximation of the tax base could be reached by weighing the size of property with location and use.

Digital technologies for innovating tax administration

If the property tax has to make a significant contribution to local revenue, radical innovations in registration of properties and of assessment of tax are needed, with use of digital, also cheap, technology starting with mapping of plots and properties.

Mapping is problematic, as in most cases street names and addresses of property are not available, while traditional methods (such the project on *adressage* in Dakar, see Ahmad, Brosio and Gerbrandy , 2017) are costly and problematic.

Use of satellite imagery together with a system of geographical coordinates to identify plots is available as a more convenient alternative.

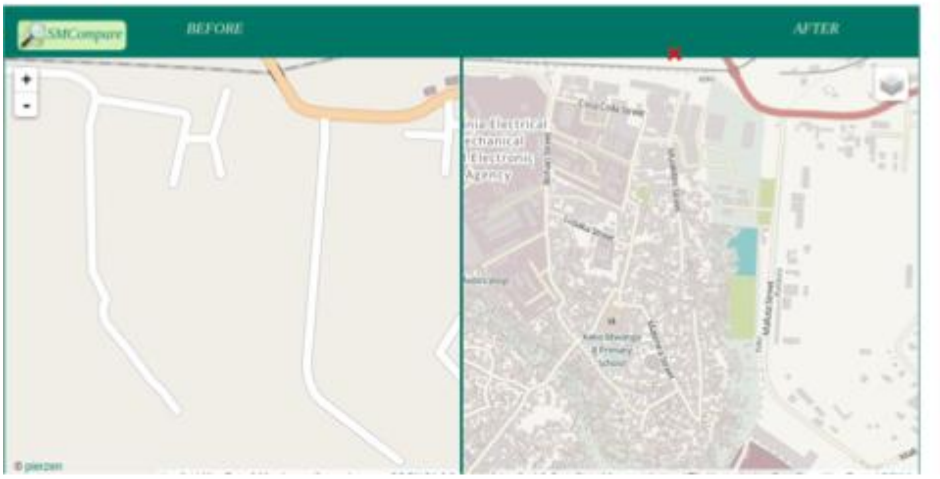
For example, Open Streep Map (https://www.openstreetmap.org) is an international collaborative mapping project where all data is freely available and reusable. Information from these sources can be increased locally at a reasonable cost. A small but quite interesting example, worth quoting, of the

[3] The total fee (*FT*) is determined by multiplying a unit, per meter, fee determined by the government (*F*), for example 5 shillings, by the number of square meters (*N*), and by a coefficient associated to use (U), for example, 1 if agricultural land, 1,5 for built land. In formula $TF = FxNxU$.

[4] Surveyors assess property values based on building costs, with deductions for depreciation of buildings. Values can be well below market values, and the comparison is not immediate, since market value includes necessarily the value of pure land. Taxpayers can object to their assessed value, in which case the case is brought to The District Land and Housing Tribunal. The whole process takes at least a year.

opportunity of using new technology is the Ramani Huria community-based mapping project began in Dar es Salaam. It trained university students and local community members to create highly accurate maps of the most flood-prone area. As we can observe in the graph below, the result of the project (map on the right) provides much more (and also apt for tax purposes) information than that on which the project started.

Figure 2. Building on Open Street Map in Dar-es-Salaam, before and after Satellite Imagery



An even larger innovation potential for the whole public sector derives from use of the block chain. This is a family of technologies and organizational principles aimed at creating a "trustless public ledger"; this is a register that does not depend on validation or control from above to be trusted by all stakeholders. (Nakamoto, 2008; Buterin, 2014, UK Government Chief Scientific Adviser, 2016).

Block chain technology is applicable where large numbers of people need to agree on who owns what: money, internet domain names, property registers. This is clearly the case of registers of property built for tax purposes and/or definition of property rights. These technologies promise to replace bureaucracy and centralized institutions with software code and decentralized consensus mechanisms.

There is already in fact a number of experiments in applying block chain technology for electronic property (both vehicles and buildings and land) registers in Baltics and the Former Soviet Union Republics, such Georgia and Estonia and Lithuania's s well as Sweden and by private firms (for example, Maersk and IBM).

Block chain technology could in principle allow emerging countries to "leapfrog" old and expensive technology (classical cadasters) with cheaper and more streamlined procedures, and crowdsourcing of data. The possibilities are quite exciting and could be developed further with experimentation. Ironically, in countries with weak institutions and procedures, the block chain options may be easier to introduce, as there is less that needs to be dismantled, and what is there does not work very well in any case.

References

Ahmad E, G. Brosio and J. Gerbrandy, *Property Taxation – Economic features, revenue potential and administrative issues in a development context*. EU.DEVCO. 2017.

Buterin, Vitalik, 2014. *A Next-Generation Smart Contract and Decentralized Application Platform*

Collier, Paul and Patricia Jones (2016). *Transforming Dar es Salaam into a City that Works*, https://urbanisation.econ.ox.ac.uk/materials/papers/73/collierjonesdaressalaam.pdf

Fjeldstad, Odd-Helge and Lucas Katera, 2017. *Taxing the urban boom in Tanzania: central-local government relations in property tax collection in Tanzania.* REPOA's 22nd Annual Research Workshop.

Nakamoto Satoshi, *Bitcoin: A Peer-to-Peer Electronic Cash System (PDF),* in bitcoin.org, 24 maggio 2009

Shkabatur, Jennifer; Kumagai, Saki, 2014. *Interactive community mapping: improving service delivery and empowering communities.*

Toulmin Camilla, 2006. *Securing land and property rights in sub-Saharan Africa: the role of local institutions*, in Securing Land and Property Rights in Africa: Improving the Investment Climate, Global Competitiveness Report, 2005-06. World Economic Forum, Switzerland.

UK Government Chief Scientific Adviser, 2016.*Distributed Ledger Technology: beyond block chain A report.* http://www.ameda.org.eg/files/gs-16-1-distributed-ledger-technology.pdf

Wenban Smith, H.B. 2014, *Population growth, internal migration and urbanization in Tanzania, 1967-2012. A Census based regional analysis.* International Growth Center, Working Paper.

World Bank, 2002. *Dar Es Salaam Case Study Overview Climate Change, Disaster RiskaAnd The Urban Poor:* Cities Building Resilience For A Changing World.

BEHIND THE MOBILE MONEY HYPE

by Gianluca Iazzolino, Centre of African Studies, University of Edinburgh

Sintesi

La diffusione dei servizi finanziari digitali e, in particolare, della moneta virtuale nelle economie emergenti africane è ampiamente documentata. L'autore fornisce infatti numerosi esempi concreti del loro utilizzo e discute i molteplici benefici che essi possono apportare. Tuttavia, sembra che i benefici di tali sistemi non siano stati omogeneamente distribuiti da un punto di vista sia territoriale che sociale. Di conseguenza, in alcuni paesi la moneta digitale si è largamente diffusa, mentre in altri stenta a decollare. Allo stesso tempo, stanno sorgendo dubbi sul grado di inclusione sociale che essa porta con sé. L' efficacia ed il grado di inclusione sociale dei sistemi finanziari digitali dipendono infatti dal contesto specifico ed è verso questi orizzonti che la ricerca futura dovrebbe dirigersi.

In the outskirts of Hargeisa, the capital of Somaliland, an unrecognised country in the Horn of Africa, livestock traders can purchase camels, cattle and goats by simply transferring the agreed amount from the mobile handset of the buyer to the one of the seller. The transactions are performed through the mobile money service Zaad, offered by the local mobile network operator (MNO) Telesom. On the other side of the continent, in Senegal, the beneficiaries of the national social protection programme, Bourse Familiale, are able to receive their social security allowance directly on the mobile wallets made available by Orange, a leading MNO in West Africa. In Eastern Uganda, initiatives are being rolled out to digitise the value chain of two major cash crops, coffee and tea, and enable farming cooperatives to do without, or at least reduce, using cash. Eventually, Kenyans with no access to the electric grid can pay for the lease of solar-powered appliances, and gradually move up the energy ladder, with small payments remotely performed through the mobile-based service M-Kopa.

These are just a few examples from Africa illustrating how mobile phones are being used to access a broad range of financial services. Since Safaricom, an MNO, first launched M-Pesa in Kenya in 2007 to allow the transfer of money via mobile handset, there has been a booming amount of interest in the development of mobile money and, more broadly, digital financial services (DFS) for people for which banks were physically far away (because living in rural areas, for instance) or considered out of their reach (because seen as 'only for the rich'). Today, it is hard to overestimate the popularity of DFS across emerging economies. Billboards advertising the services of MNOs (and typically depicting stashes of cash flying frictionless between mobile phones) punctuate urban and rural areas in Africa, South Asia and Latin America. Sub-Saharan Africa is leading the way, accounting for most of the 271 mobile money deployments tracked by the GSMA, the MNO industry association.

The GSMA is part of a constellation of organisations and think-tanks, including CGAP, the Better than Cash Alliance, and UNCDF MM4P, bringing together private and state actors to extend the reach of financial services to the world's unbanked population. This mission is driven by the assumption that accessing financial services like credit and insurance is a critical step to achieve a variety of developmental goals. A 'financial inclusion' narrative has thus emerged from the conversation of international organisations, central banks, banking institutions, MNOs, payment providers, and a new, and fast-growing, breed of financial technology companies (Fintech). Taking stock of the limits, and shortcomings, of microfinance, this perspective has gained traction by building upon the momentous diffusion of information and communication technologies (ICTs), and mobile phones in particular, across emerging economies, positing that mobile money would leapfrog brick-and-mortar banks in developing countries such as mobile phones did with fixed lines. This has led, on the one hand, to the design of products to cater to the needs of low-income customers, keen to transfer money at a cheaper price than they used to with traditional money transfer operators, or avoid carrying cash in unsafe places; on the other, to policies, regulations and programmes to facilitate the creation of a conducive environment for DFS.

Over the past ten years, this landscape has gone through profound changes. While M-Pesa had thrived in a regulatory loophole (an MNO providing financial services was uncharted waters for the Kenyan Central Bank), regulators have recently started catching up. Banks, initially caught by surprise by the foray of mobile money, have eventually entered the game, partnering with fintechs and leveraging the opportunities opened up by the diffusion of smartphones (which allow users to access financial services not only through a SIM card, but also through an app). Technological innovations, such as the blockchain, a technology based on distributed ledgers, are being integrated into the design of services to facilitate remittances.

Most assessments of DFS have hitherto focused on the positive implications for different segments of customers, highlighting benefits such as facilitating and reducing the costs of long-distance transactions, allowing greater privacy to women (who can thus keep their savings in their own mobile wallet), and enhancing the transparency of the payments (a particularly significant aspect in the case of cash transfers). Moreover, the diffusion of mobile money has contributed to the creation of local jobs, mostly in agent outlets (as of December 2014, there were 124,000 M-PESA agents in Kenya). However, as the hype around mobile money in emerging economies is gradually settling down, more nuanced evaluations of the long-term socioeconomic implications are emerging, vis-à-vis new evidence that is forcing DFS pundits to reconsider their assumptions and approaches.

An overarching lesson drawn in recent years is that context matters, and that a recipe that has proven successful in a place cannot be replicated elsewhere without adjustments. Take Kenya, where 25 million people (out of a population of 45 million) had performed at least an operation on M-Pesa as of December 2014. The Eastern African country is often touted as a successful example of the appeal of DFS for the unbanked, but it also shows that local specificities have to be accounted for to explain both adoption and resistance to mobile money. For instance, while East African mobile money users tend to perform operations from their mobile wallet, in French-speaking West Africa most transactions are performed over-the-counter (OTC), or through the help of an agent. In other countries, mobile money has struggled to take off (this is the case of Nigeria) or has failed altogether (such as in South Africa).

A particularly pressing topic that needs further investigation is whether the benefits brought about by DFS are evenly distributed or, instead of the win-win situation often portrayed, the digitisation of payment risks entrenching pre-existing inequalities and exclusion. Indeed, international regulations require financial providers to adopt strict Know-your-customer (KYC) policies, which entails that those who want to open a mobile money account should produce a formal piece of identification. However, in most emerging economies women lag behind men in ID ownership – a fact that contributes to explaining the strong gender imbalance in accessing financial services. The gap between urban and rural areas, although reduced, still exists, mostly because private actors need a solid business case to invest in physical and human infrastructures (such as agent networks), and this may be lower in hard-to-reach areas (such as mountainous or desertic areas) or among groups typically transacting amount too low to be captured electronically (such as subsistence farmers or small-scale pastoralists). The expectations that digital money will increasingly replace cash have so far proven misplaced: even in Kenya, most payments are still single-loop (which means that users tend to withdraw as soon as they receive a payment into their mobile wallet). Cash still dominates in settings in which gifts and contributions lubricate social interactions. Recent studies on frugal innovation (a category which refers to business models and services for the Bottom of the Pyramid, and encompassing also mobile money) and informal workers have emphasised the risk of adverse incorporation, in which control and value extraction are simply shifted from local informal intermediaries to corporate actors. Customer protection is bound to become an increasingly relevant topic as more advanced services are launched on the market. For instance, mobile-based lenders such as M-Shwari, Branch and First Access operate through apps that a prospective borrower would download on her mobile phone. The providers should be authorised to access data on social contacts (both on the mobile phone and on social media such as Facebook), financial practices (number of payments made and received, the average balance in the mobile wallet) and more general behaviours (the mobility of the user traced through the GPS). The data are thus analysed by algorithms that create a credit score and assess the level of risk of the user. The possibility to draw on the trails left behind by digital users enables financial providers, for the first time, to minimise the risk associated with lending to customers operating in the informal economy and with irregular income. However, algorithms ingrain some assumptions: for instance, having many friends on Facebook with a bad credit history would affect one's credit score and therefore the possibility to get a loan. Moreover, there appears to be a correlation between digital credit and reckless borrowing, as suggested by the news, appeared on Kenyan newspapers in November 2016 that a record number of Kenyans had been blacklisted for outstanding mobile loans of less than 200 KSh (1.6 euros). There is no lost irony that those who were just digitally 'included' had been shortly blacklisted (and thus unable, at least for a while, to keep borrowing).

A research agenda on the current state of mobile money, and on its future, should, therefore, revolve around the increasing *datafication* of financial inclusion at the bottom of the pyramid, intended as the extraction of value from the mining, the processing and the marketisation of personal data. To what extent poor financial consumers are aware of the data produced by their digital behaviours? How can policymakers design customer protection regulations that return to customers full control of their data? And what is the articulation, and the frictions, between social and financial inclusion?