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Recent advances in finance for inclusive development: a survey

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Abstract

The policy debate has been shifting from the finance-growth nexus to the finance-inequality relationship. In the transition from Millennium Development Goals (MDGs) to Sustainable Development Goals (SDGs), there has been an urgent policy challenge of putting some structure on recent advances in finance for more inclusiveness. The overarching question tackled in this paper is: to what degree has financial development contributed to providing opportunities of human development for those in the low-income strata and by what mechanisms? We survey about 170 recently published papers to provide recent advances in finance for inclusive development. The analytical approach consists of first, situating issues of exclusive growth in the context of the literature and then reviewing recent financial inclusion growth strategies. Developed and developing countries are separately engaged in some currents to account for heterogeneity in financial development benefits. Retained financial innovations are structured along three themes, notably: the rural/urban divide, women empowerment and human capital in terms of skills & training. The financial instruments are articulated with case studies, innovations and investment strategies with particular emphasis, inter alia on: informal finance, microfinance, mobile banking, crowdfunding , Islamic finance, remittances, Payment for Environmental Services (PES) and the Diaspora Investment in Agriculture (DIA) initiative.

JEL Classification: G20; I10; I20; I30; O10
Keywords: Finance; Inclusive Growth; Economic Development

1. Introduction

'*Output may be growing, and yet the mass of the people may be becoming poorer*' (Lewis, 1955). The celebrated '*capital in the 21st century*' (Piketty, 2014) has resurfaced the debate surrounding "immiserizing growth"[1] (Bhagwati, 1958) and debunked Kuznets' (1955, 1971) conjecture on an inverted U-shape nexus between inequality and industrialisation. The paradigm shift is consistent with a strand of the literature which underlines the need to clearly articulate income-inequality in poverty-growth relationships (Kalwij & Verschoor, 2007; Thorbecke, 2013; Fosu, 2015). This include, inter alia: the instrumentality of growth elasticities in policy making (Adam, 2004); the critical dimension of inequality in poverty alleviation (Datt & Ravallion, 1992; Kakwani, 1993; Ali & Thorbecke, 2000) and the importance of inequality in growth elasticities of poverty (Easterly, 2000; Fosu, 2015; Ravallion, 1997). Hence, Piketty's coverage of developed countries is broadly in lined with the narratives in African countries (Fosu, 2008, 2009, 2010a, 2010b) and a broad sample of developing economies (Fosu, 2010c).

The strand of studies from Fosu, inter alia, converges with the narratives of Lewis and Piketty on the conditionality of inequality in the poverty mitigating role of growth: "*The study finds that the responsiveness of poverty to income is a decreasing function of inequality*" (Fosu, 2010b, p. 818); "*The responsiveness of poverty to income is a decreasing function of inequality, and the inequality elasticity of poverty is actually larger than the income elasticity of poverty*" (Fosu, 2010c, p. 1432); and "*In general, high initial levels of inequality limit the effectiveness of growth in reducing poverty while growing inequality increases poverty directly for a given level of growth*" (Fosu, 2011, p. 11)[2]. Hence, in charting the course of industrialisation in developing countries and/or enhancing the process in more advanced nations, there is a common policy syndrome: the challenge of tailoring efforts in view of Kuznets and not with the guidance of Piketty (Asongu, 2015a).

With this background, a recent strand of the literature documents that the quest for industrialisation through globalisation has increased inequality in some respects. From a capital account perspective, the narrative sustains financial globalisation has increased

[1] Economic growth could be followed by considerable negative externalities and eventually produce disequalizing distribution in the fruits of economic prosperity. Such a scenario runs counters to Kuznets' (1955, 1971) conjectures on an n-shape nexus between inequality and industrialisation.

[2] The intersection among Fosu, Piketty and Lewis is also broadly in line with an evolving stream of literature on post-2015 sustainable development goals (Miller, 2014; Singh, 2014; Timmons et al., 2009; Ozgur et al., 2009; Bagnara, 2012; Monika & Bobbin, 2012).

inequality through public debt mechanisms (Azzimonti et al., 2014)[3]. Moreover, the recent global financial meltdown has substantially cast shadows over the appeals of financial globalisation. Discussions have included: less convincing gains of financial engineering (Rodrik & Subramanian, 2009), negative capital flow shocks in labor-rich economies (Kose et al., 2011) and need for certain country-specific features (Prasad & Rajan, 2008) or development thresholds (Asongu, 2014a).

While the debate on financial globalisation is still tensed as opposed to that on trade liberalisation which has reached some moderate consensus[4], two important trends have characterised the phenomenon of globalisation over the past three decades: growing inequality and increasing international financial liberalisation (Azzimonti et al., 2014). There is evidence of this narrative in both advanced and developing countries. For the former countries: (i) Piketty (2014) and Atkinson et al. (2011) have documented soaring inequality while (ii) Abiad et al. (2008) and Obstfeld & Taylor (2005) have provided evidence of growing capital mobility. As for the latter or developing economies: (i) the imposed structural adjustment policies promoted financial openness (Batuo et al., 2010; Batuo & Asongu, 2015) and (ii) there is consensus on growth inequality, with the exceptions of South East Asian and Latin American countries that have experienced low growth accompanied with lower inequality (Asongu, 2015a)[5]. A notable trend of how increasing globalisation is related to finance and poverty, is the liberalisation of the information and communication technology (ICT) sector, that has led to burgeoning pro-poor mobile phone penetration (Asongu, 2015b): a pro-poor nexus that is more significant in magnitude when mobile telephony is used for mobile

[3] "*To the extent that the increase in income inequality observed in some industrialized countries has been associated with higher idiosyncratic risk, the paper suggests another potential mechanism for the rise in public debt*" (p. 2267).

[4] Whereas, the theoretical underpinnings of financial globalisation sustain that the phenomenon is a means of efficient allocation of capital and international sharing of risks, there is a narrative in the literature not supporting the strand on more rewards in less-developed countries simply because they are rich in labour and scarce in capital (Kose et al., 2006; Henry, 2007; Kose et al., 2011). The counteracting strand attributes global financial instability to growing capital account openness (Stiglitz, 2000; Bhagwati, 1998; Rodrik, 1998; Motelle & Biekpe, 2015). Its anti-thesis questions the benefits of financial liberalisation in terms of stability in developed countries and economic prosperity in less developed nations (Fischer, 1998; Summers, 2000). It further claims that the whole idea of financial globalisation has obscure motivations of extending the benefits of international trade to those in assets (Asongu, 2014a).

[5] It should be noted that the comparison which is for the last three decades (1980-2010) may also contradict recent strands (1990-2010) on poverty reduction in Africa (Young, 2012) or the continent being on time for some Millennium poverty targets (Pinkivskiy & Sala-i-Martin, 2014). Accordingly, trends are contingent on sample periodicity: 1995-2010 versus 1980-2010 (see Fosu, 2015).

banking (Asongu, 2015c). Hence, there is an apparent policy challenge of structuring recent advances in financial development for inclusive growth.

To the best of our knowledge, recent literature on inclusive growth has focused on: gender equality (Elu, 2013; Anyanwu, 2013a; Baliamoune-Lutz, 2007; Anyanwu, 2014a; Baliamoune-Lutz, 2007 & McGillivray, 2009), eco-socialism (Singh, 2014), poverty correlates (Anyanwu, 2013b, 2014b), debates between relative pro-poor (Dollar & Kraay, 2003) and absolute pro-poor (Ravallion & Chen, 2003) growth, determinants and measurements of inclusive growth (Mlachila et al., 2014; Anand et al., 2013) and, inclusive finance. The present survey is an extension of the last strand.

Exclusive growth is fundamentally driven by irrational financial policies (Li et al., 2011, p. 109) and inequality remains the principal challenge of 21 century capitalism (Brada & Bah, 2014). These have consolidated a growing strand of literature on inclusive financial development. In essence, as we have seen above, the policy debate is fundamentally shifting away from the narrow focus of the finance-growth nexus as a course to poverty mitigation. Instead, there is concern in the development community about inequality and processes of distributing the rewards of the finance-growth nexus. This shift fundamentally questions the classical relationship between finance and growth and exposes a plethora of policy choices that influence the distributions of social and economic gains. Hence, the focus on income-distribution introduces a novel set of policy instruments, which may contravene the economic orthodoxy, due to more regulation and greater government intervention.

Access to finance contributes substantially to enabling individuals exploit new avenues and inclusive financial development has a great potential of creating such opportunities for low-income and/or marginalised groups. Hence, avenues that could be confined to certain social and economic elites are made more accessible. While these issues have been substantially articulated as of prime importance in the United Nation’s (UN’s) post-2015 Sustainable Development Goals (SDGs) which are replacing the Millennium Development Goals (MDGs), to the best of our knowledge, we are unaware of a study that has comprehensively provided a review on recent advances in financial development for inclusive growth (United Nations: UN, 2013, pp. 7-13). This represents a substantial gap in the literature. The present exposition provides a survey of financial development instruments for poverty reduction, reduction of inequalities and novel opportunities for growth.

This study therefore seeks to provide a comprehensive survey of the role of financial development in distributing the benefits of economic prosperity on the one hand and instruments by which some fundamental inequalities could be addressed or redressed on the other hand. Its key contribution to the literature is to identify some critical dimensions of disequalized income-distribution and document recent advances in ways financial development could potentially address them. Moreover, we also concurrently discuss policy choices in this regard that would benefit more equitable income distribution. In a nutshell, the overarching question tackled in this paper is: to what degree has financial development contributed to providing opportunities of human development for those in the low-income strata and by what mechanisms?

According to the World Bank (2014, pp. 6-7), theoretical underpinnings linking financial development to inclusive growth are very apparent. In essence, financial systems that are functioning well mitigate poverty and enhance economic prosperity. Consistent with the underlying economic theory, the distribution of opportunities in an economy is substantially shaped by finance. Accordingly, an economic opportunity to which a person is entitled is significantly affected by the existing financial system. In other words, it shapes the following, among others: which family can reside in what neighbourhood that improves the development of their children in terms of non-cognitive and cognitive abilities; who can afford for education; who can pursue his/her economic dreams and who can engage in a business start-up. It is also important to balance the debate by tailoring the theoretical underpinnings to various stages of economic development. In line with Xuelong (2012, p. 696), finance generally plays a significant role in mitigating income inequality at the early stage of economic growth because the engine of development is physical capital. Conversely, as an economy matures, financial development could fuel inequality owing to an increasing return of human capital.

The concept of inclusive growth employed in this survey embodies both relative pro-poor and absolute pro-poor versions of the phenomenon[6]. We resist the itch of engaging the debate over which version of inclusive growth is better and focus on a broader concept of pro-poor growth in the perspectives of Swamy (2010, p.56) and Ifzal (2007, p. 55) which entail, inter alia: economic well being and equal opportunities[7]. In the same vein, the conception of

[6] Put in simple terms, absolute pro-poor growth is growth that benefits the poor via poverty reduction, while relative pro-poor growth benefits the poor through income-inequality mitigation. The interested reader can find more on the debate in Mlachila et al. (2014, p. 3-4).

[7] According to Swanny (2010, p. 56), there are three fundamental pillars of inclusive growth, notably: (i) the maximisation of economic opportunities; (ii) insurance in economic well being and (iii) guarantee of equal economic opportunities. This line of definition is broadly consistent with the position of Ifzal (2007). "*To address these causes of inequalities, the paper advocates a strategy of inclusive growth. This strategy rests on*

finance in the survey is tailored towards a strategy of inclusive growth which according to Swanny consists of prioritising the development of inclusive financial systems that are socially and financially sustainable. This is consistent with the Levine (2011) conception of economic inclusiveness which entails: the rate at which economic opportunities are influenced by individual ideas, initiatives & skill rather than family relations, political influence, social connections and wealth. Hence, the considered relationship between financial development and economic inequality is articulated around three main themes, amongst others: the use of finance to create job opportunities and businesses for people in the low-income strata; distributional issues influencing investment in financial development; and financial channels via which access to existing economic and social opportunities are achieved.

We also devote some space to consolidating/motivating the line of inquiry with some interesting views and stylized facts. The World Hunger (2010) has argued that, the main cause of hunger and poverty in the world today is the underlying economic system, which encourages a minority to control a vast majority of global wealth while the bottom billion is just left to survive. Income inequality has risen sharply instead over the past decade (Milanovic, 2011). According to Joseph Stiglitz: "*There has been no improvement in well-being for the typical American family for 20 years. On the other side, the top one percent of the population gets 40 percent more in one week than the bottom fifth receive in a full year*". (Nabi, 2013, p.10). Some accounts sustain that the Top 1% have gained all the income from the recent economic recovery (Covert, 2015)[8] or that the income of the Top 1% of projected to surpass that of the Bottom 99% by 2016 (Oxfam, 2015). Hence, there is an urgent "*Need to design the right economic policies to enhance inclusiveness specially in the developing countries*" (Nabi, 2013, p. 13). It includes, inter alia: the restoration of finance as a fundamental force to inclusive and sustainable development (Freeman, 2010).

The structure of the survey is organised building on a fundamental understanding of how social and economic progress increase people's capabilities/possibilities for enhancing their material/non-material wellbeing. Issues like rural/urban divide, gender gap and human capital are discussed. Hence, there is a clear articulation of how financial development can

three anchors, i.e., expanding opportunities, broadening access to opportunities, and social protection that acts as a safety net and a springboard" (p. 55).

[8] Nabi (2013, p. 12) on the Global Housing crisis estimates that 100 million are homeless, 1.6 billion have substandard housing conditions and an estimated 3 billion people are expected to be live in slums by 2050.

fundamentally transform the nature of social, political and economic opportunities in societies.

The rest of the paper is organised as follows. Section 2 focuses on the urban/rural divide. New financial instruments for empowering women are discussed in Section 3, whereas human capital in terms of skills and training is reviewed in Section 4. New trends on financial informality, microfinance, crowdfunding and Islamic finance are covered in Section 5. Section 6 concludes.

2. Financial development in the urban/rural divide

This section looks at the challenges of managing rural/urban migration and sustainability of rural economies, with particular emphasis on, among others: employment, production and distribution of food, support of cooperatives and small & medium sized enterprises (SMEs) and demand- & supply-side constraints in agricultural productivity The analytical approach consists of first, situating issues of exclusive growth in the context of the literature and then reviewing recent advances in financial development for corresponding inclusive growth strategies.

Recent evidence suggests that traditional financial development would aggravate rural-urban inequality in the long-term in India (Tiwari et al., 2013, p. 151). This narrative is consistent with China because credit is available exclusively to the rich (Xuelong, 2012, p. 696). Hence, wider credit coverage is vital to reducing inequality. Aggregate poverty reduction substantially depends on rural-urban inequality in a broader sample of South Asian countries (Sehrawat & Giri, 2015). While the effect of financial deepening may not be clear-cut in Africa (Baliamoune & Lutz, 2005, p.1), in light of the conclusions of Xuelong, the relative concentration of financial institutions in urban areas of the African continent justifies a corresponding rural/urban income-inequality, owing to less credit access in rural areas.

In light of heterogeneity in the benefits of financial development between developed and developing countries discussed above (Xuelong, 2012, p. 696), we critically engage both set of countries. Section 2.1 discusses mobile/internet banking and rural development. Section 2.2 covers issues of coordinating rural-urban development and documents how the financial system can be improved to mitigate corresponding concerns. Section 2.3 provides financial keys to tackling rural/urban divide in developed countries.

2.1 Mobile/Internet banking for rural development

Motivated by prior exposition on the need for more research to establish the nexus between mobile phones and development (Mpogole et al., 2008, p.71), Kliner et al. (2013) have recently shown that mobile phones improve health services for poor communities. Kirui et al. (2013, p. 141) have also established the positive role of mobile banking in poverty mitigation in rural areas: '*We conclude that mobile phone-based money transfer services in rural areas help to resolve a market failure that farmers face; access to financial services*' (p. 141). Warren (2007) has noted that the underprivileged, especially those in rural communities stand to reap the highest benefits from technology. In some fast growing developing countries, in spite of efforts from mainstream financial establishments, '*Telecommunication infrastructure growth especially mobile phone penetration has created an opportunity for providing financial inclusion*' (Mishra & Bisht, 2013, p.503). Singh (2012, p. 466) within the same framework of India is more direct in crediting 'mobile banking' for positive trends in financial inclusion.

Consistent with the recent stream of literature (Asongu, 2013a; Demombynes & Thegeya, 2012), the revolution of the mobile phone has substantially transformed the lives of many in developing countries by enabling basic access to phone-based finance in addition to communication facilities. According to the narrative, the substantial growth in mobile telephony has transformed cell phones into pocket-banks; hence providing economic opportunities for a substantial part of the population which due to low-income status and rural geographic location, has been previously excluded from financial services. As noted by Warren, rural citizens have to benefit most from internet services because its availability substantially mitigates distance barriers in aspects like information acquisition and purchase of commodities. We articulate the interest of mobile/internet banking in mitigating the rural/urban divide in four main strands: employment, production & distribution of food; support of cooperative and small & medium sized enterprises (SMEs) and demand- & supply-side constraints in agricultural productivity.

First, employment, production and food distribution are some of the dire challenges confronting rural communities in many developing countries. Many youth are migrating to urban areas in search for employment because of substantial production and distribution constraints in the traditional agricultural sector. Hence, it is important to rethink new ways in which food is produced and distributed because the production of food locally creates jobs. Financial advances could help in storage, marketing and transportation. The absence of information on the highlighted issues represents a significant cost for rural farmers and studies in Ghana have shown that access to market information by means of mobile telephony/banking could increase revenue as much as by 10% (E-agriculture, 2012, p. 6-9). Other examples include current applications in: India (Digital Green, e-Arik, e-Choupal, Honey Bee Network, ICAAP, IKSL, Intelligent, LifeLines India & mKisan)[9], Kenya (iCow, KUZA Doctor & Ukulima.net)[10], Egypt (VERCON & RADCON)[11], Uganda (AgriNet Uganda Ltd)[12], the Middle East (CropLife,) and Africa (CropLife, ESOKO & Satadsl)[13].

Second, support for cooperatives and small & medium sized enterprises (SMEs) centres around how mobile banking applications stimulate agricultural finance. There is growing evidence of village banking institutions in Costa Rica using such a medium to create solidarity groups that are financially-sustainable (Perez et al., 2011, p. 316). Community Credit Enterprises (CCE) also enables members to generate capital and buy shares to ensure sustainable business and credit models. As far as we know, Chan & Jia (2011) have provided

[9] e-Arik is "*ICTs for Agriculture Extension. A research project to experiment the application of ICTs in agricultural extension services provision and also to measure its impact on the tribal farmers has been implemented in "Yagrung" village of East Siang District of Arunachal Pradesh State*" (p. 7). "*The e-Choupal model has been specifically designed to tackle the challenges posed by the unique features of Indian agriculture, characterised by fragmented farms, weak infrastructure and the involvement of numerous intermediaries, among others*" (p. 7). "*The Honey Bee Network for dissemination and documentation of local and farmer innovation processes*" (p. 8). ICAAP is a portal "*The portal aims to provide comprehensive and interactive agricultural information to stakeholders for better decision making on various agricultural enterprises across the world.*" (p. 8). "*The IKSL initiative has been documented by mFarmer in a case study as an example of a successful partnership. IKSL is a joint collaboration between the Indian Farmers Fertilizer Cooperative Ltd (IFFCO) -the largest farmer cooperative in India- and Airtel, a mobile network operator*" (p. 8). IASF is "*An advisory system, a hybrid system by integrating Expert System (ES) and Case-base Reasoning (CBR) for answering queries related to farming activities carried out in Northeast states of India*"(p. 8). "*LifeLines India-Agriculture brings agri-advisory right to the field of a farmer. LifeLines India-Education provides pedagogic support in rural and remote areas*" (p. 8). "*m-Kisan: Using mobile technologies to strengthen farmer-extension-expert linkages in India*" (p. 8). "*The Digital Green system combines technology and social organization to improve the cost-effectiveness and broaden the community participation of existing agricultural extension systems. An organization that works to increase agricultural productivity by training small and marginal farmers via short instructional videos.*" (p. 7).

[10] "*The iCow approach was developed in Kenya for small-holder dairy farmers and helps them manage their cows to have a greater profit*" (p.8). For KUZA Doctor, "*Using the most basic mobile phones, farmers receive critical knowledge to increase their rates of production and subsequent incomes while learning the value of local biodiversity and conservation farming. From BackPack Farms*" (p. 8). Ukulima.net is "*Pamoja Media's mobile web platform that allows farmers to connect and interact on topics of similar agriculture interests*" (p. 9).

[11] "*An institution based communication network first established in Egypt in 2002, VERCON Egypt was later expanded into the Rural and Agricultural Development Communication Network (RADCON)*" (p.9).

[12] "*The company works with real-time markets and links value chain players to marketing information, niche markets, market development and agribusiness development services including agricultural finance real time, customized agricultural market information on mobile phone, information boards and e-mails*" (p. 7).

[13] "*CropLife is testing a system in Uganda to validate that agro-inputs are genuine (not fakes)*" (p.7). "*Smallholder farmers can sign up to Esoko to receive a package of weekly advisory services. This typically consists of current market prices, matching bids and offers, weather forecasts, news and tips. In some countries, advisories may also be sent by voice messages, and a live call centre of agricultural experts can be available to complement data alerts with voice support*" (p. 7). "*Providers of low cost mini-VSAT Internet access* " (p. 8).

one of the most interesting accounts of the role of mobile banking in easing rural finance and mitigating inequality in financial services between rural and urban areas. According to the narrative, '*mobile banking is an ideal choice for meeting the rural financial needs*' (p. 3) and has led to substantial improvements in agricultural related loans (see Figure 1, p. 3) due to increasing '*rates for bank transfers through mobile cell phones at commercial banks*' (Table 2, p. 5). This is consistent with the World Bank's conclusions on mobile banking applications for rural and agricultural development (Qiang et al., 2011, pp. 14-26).

Third, the examples provided in the first and second strands principally target the mitigation of demand- and supply-side constraints. These entail specific measures that promote agricultural productivity and growth, such as mobile banking applications. In a nutshell, the fundamental question raised in this strand is whether mobile banking policies enable channels to markets of high growth which procure relatively higher returns to farmers in rural areas. In other words, the concern is how the rural population can escape the vicious cycle of reducing returns on agricultural capital and income growth. In summary, mobile phone/banking has enabled a better matching of demand and supply, especially among geographical markets. This matching exercise ultimately eliminates wastes (Muto & Yamano, 2009, p.1887; Aker & Fafchamps, 2010). In spite of above observations, Maurer (2008) has cautioned that policy has a very substantial role to play to rendering mobile banking services more inclusive.

2.2 Coordination of rural-urban development

While lack of proper rural-urban development coordination in certain developing countries results from many factors, it is fundamentally driven by irrational financial policies (Li et al., 2011, p. 109). Coordinating rural-urban development is important because, among others, it: elevates the living standard & quality of farmers while at the same time develops human resources; promotes healthy agricultural development and enhances rural-urban integration. Some issues in coordination (of balanced rural/urban progress and industrial structure) include: longstanding concerns of rural/urban gaps (of consumption, expenditure & income), unstable agricultural culture and worries about statistical data and social development. Some factors restricting rural/urban migration coordination include: insufficient input in rural education, low agricultural capital, and scanty investment in rural fixed assets. As far as we have reviewed, two financial development policy suggestions advanced to address the highlighted issues entail: the promotion of financial policies innovation and financial system innovation.

In the first strand, there are at least three main reasons motivating the promotion of financial policy innovation for better rural/urban coordination. First, a financial system should encourage and support funds for elementary schools by: providing guarantees for rural elementary education and providing more incentives for teachers to take positions in rural areas, amongst others. Second, consolidation of agricultural infrastructure with more financial inputs entail, inter alia: sound management of financial resources for poverty-alleviation and amelioration of a price-subsidy channel for agricultural commodities. Third, the establishment of a financial system that is sympathetic to bridging the rural/urban divide requires: innovation in supply models and improvement of management/supervisory practices.

For the second strand, it is important to promote the innovation of a financial system for proper coordination of rural/urban development because of lack of financial access to rural and agricultural communities. Most farmers are left to rely on unlicensed financial institutions offering credit facilities at very exorbitant interest rates (Li et al., 2011, p.114). Hence, it is essential to consider farmer-specific features in the allocation of financial products. The following are some policy measures. First, there is the need to reinvent rural financial institutions and adapt educational training to the corresponding innovations so that consistent services are delivered to the rural communities. Second, it is important to encourage new financial products which entail, inter alia: spreading of agricultural credit risks, encouraging the credit models that enhance industrialised management of agriculture and floating of joint bond SMEs focused on agriculture. Third, improvement in financial system patterns, like rural networked insurance, mobile banking & construction of village trust, inter alia. Fourth, enhancing channels via which agricultural credits are subsidised like: special poor-farmer loans and rural low interest policy funds, among others.

One of the most interesting accounts on recent financial development for 'leveraging the rural-urban nexus for development' has been provided by International Fund for Agricultural Development (IFAD, 2014a) in its first post-2015 policy brief. The report which begins by clearly articulating that "*The world cannot afford a future where rural areas are synonymous with social and economic marginalization*" (p.1), has documented three major advances in finance by which the objectives articulated in this Section can be achieved. These include: '*Key findings from an IFAD-World Bank study of international remittance flows to*

Asia' (p. 4), '*IFAD and payment for environmental services in Asia and Africa*' (p. 6) and '*The Diaspora Investment in Agriculture (DIA) initiative*' (p. 8).

On the first point, some crucial findings by the IFAD-World Bank study has revealed that a significant chunk of remittances sent to developing countries is destined to rural areas. Hence, remittances are playing a comparatively larger role in financial inclusion relative to Microfinance institutions. But the report cautions that for the inclusive benefits of such remittances to be fully exploited, remittance-receiving households should be provided with more options on how to use their money, in order to substantially leverage the inclusive development effects of such financial inflows in their communities (E.g see Uchenna et al. (2014) for the Nigerian experience). According to the recommendation, effective financial inclusion would require a substantial commitment to programmes of financial literacy support for recipient households. One of such externalities is the positive trend of food security by means of Diaspora remittances.

The second point on payment for environmental services (PES), which includes restoration of watershed and maintenance, constitutes a novel source of providing financing support for the management of assets by rural communities. The mechanism also provides some advantages to other communities and water users downstream. Recent advances of PES are evident in Africa (Guinea, Uganda, Kenya & Tanzania) and Asia (Indonesia, China, Vietnam, Philippines, Nepal & the Lao People Democratic Republic). The programmes are realised by the IFAD in conjunction with the World Agroforestry Center (ICRAF) for both continents, with the collaboration of the 'Pro-poor Rewards for Environmental Services in Africa' (PRESA) and the 'Reward the Upland Poor of Asia for the Environment Services' (RUPES).

The third point concerns the Diaspora Investment in Agriculture (DIA) initiative. According to the narrative, remittances from the Diaspora destined for agriculture represents about four times the amount of official development assistance (ODA) destined for the same purpose. The DIA has been launched by the IFAD and the USA in recognition of the increasing diaspora role. This partnership intends to encourage diaspora engagement in sustained and inclusive domestic economic growth via agricultural investment. Leveraging this contribution by migrant workers has positive externalities like: creation of local jobs, discouragement of outward migration intentions and poverty reduction. The DIA inclusive objectives of coordinating rural/urban development are achievable along three main channels: ''*encouraging the global diaspora to invest in sustainable agricultural projects with real* *potential to impact the lives of poor rural people*', '*enabling diaspora investors, diaspora organizations and actors on the ground to build the capacity necessary to undertake cross-border investments and gain access to markets for traditional products*', and '*stimulating agricultural production and reducing import dependency to enhance food security'* (IFAD, 2014a,p.8).

2.3 Financial keys to tackling rural/urban divide in developed countries

As highlighted in the introduction, the needs of rural areas are different in developed countries, relative to their developing counterparts. Accordingly, unlike rural areas in developing countries, those of developed nations are not assimilated with agriculture: '*The evidence that rural is no longer synonymous with agriculture has generated a common understanding that rural policy falls short if being conceived as agricultural policy'* (OECD, 2006, p.2). This is fundamentally because rural communities in the Organisation of Economic Co-operation & Development (OECD) have witnessed substantial structural changes driven by: globalisation, the emergence of significant niche markets and modification of public financing architecture, inter alia. As far as we know, the rural/urban divide in developed nations can be mitigated by investment priorities in rural development (OECD, 2006). The narrative is articulated along four main lines of financing strategies, notably: the importance of tackling the service needs in rural communities, the need to invest in rural innovation, the imperative of tailoring investments towards exploiting urban-rural nexuses and regional-based investment priorities.

Rural service needs that should be tackled in the first strand entail the following critical points. (1) Less consideration for uniformity as an action. With the exception of financial sustainability issues, 'convergence to the bottom' is often the outcome of equal services. (2) It is important to consider community-centred relationships by going beyond consumer-producer nexuses. (3) Broadband should be exploited to provide hitherto urban-exclusive services. (4) Place-based and innovative instruments for the delivery of services to rural communities are also essential. Some strategies include: public-private partnerships, cooperation & coordination across sectors & municipalities, mole service units, usage of knowledge economy in the delivery of service and, assistance & support for Non-governmental organisation & voluntary community work (OECD, 2006, p. 3).

The second strand focuses on investment needed to enhance rural innovation. The following can guide strategic and informed decisions on rural innovations. (1) Innovation should be conceived as processes as opposed to new products. (2) The phenomenon is also about government actions and her interaction with other players from various sectors. (3) In order to assess corresponding investment effects, distinctions between innovative 'production' and 'assimilation' should be clearly articulated. (4) The distinction between mature and emerging technologies should also be emphasised when discussing technology production.

In the third strand, investment should be tailored towards exploiting urban-rural nexuses. There is increasing recognition by policy markers that urban & rural strategies are interlinked and understanding the nexuses can result in new avenues of rural/urban development. Rural and urban collaboration can be articulated along the following areas. (1) Targeting peripheral regions in policy interventions because unlike the situation in England, rural communities do not often benefit from the economic dynamism of urban areas. (2) Strengthening and extending rural-urban nexuses, as in Norway. (3) Developing and consolidating shared perspectives of common assets, like with the 'Rural Indian Strategy for Excellence'.

The fourth strand is on regional-based investment priorities (OECD, 2006, pp. 5-6). The intuition underlying this stream is that, rural development is not a 'one fits all' kind of strategy. We highlight some practical examples to clearly articulate this stream of the literature. A common denominator of documented 'case studies' is that focusing on strategic investment and deviating from traditional subsidies have interesting outcomes in terms of improving the livelihoods for urban/urban dwellers, business development and job creation. The case studies include. (1) *Miyama* in Japan which has created new income and employment opportunities due to higher investment returns from 'bottom up' local initiatives focused on conserving rural amenities. (2) *Umbria* in Italy where within a holistic approach, child - & health-care services are provided to rural communities with particular recognition of concerns over quality of life, migration, female participation and nexuses with economic development. (3) *Extremadura* in Spain where technological investments are paying-off in terms of health and educational applications, increased savings & government quality. Accordingly, substantial investments in open source and broadband software connect about 383 municipalities. (4) In *Guerrero*, Mexico, investment decisions have been tailored towards demographic changes. Emigration (abroad & to urban areas) has been slowed-down because young people have been empowered to engage in new projects that foster tourism, forestry development and access to land by the young. (5) *Quebec* in Canada with an explicit government commitment in rural-development investments. A new fund of investment strategies and incentives to rural development from the government has mobilised about 30 000 people to design and implement a long-run vision of development for rural communities.

Other quasi-financial examples of advances in improving rural productivity in developed countries, include: Famers on Film, Pasture Promise TV, Sustaination & WeFarmit (Farm Cloud, HERDit) in the UK (E-agriculture, (2012, p. 6-9)[14].

3. Financial development and women empowerment

From a global perspective, in spite of a declining trend, women still generally have lower income than men (Weichselbaumer & Winter-Ebmer, 2005, p. 479). According to Demirguc-Kunt & Klapper (2013), access to formal financial institutions is 55% versus 47% for men and women respectively. While the issue of 'gender gap in financial access' is less apparent in developed countries (van Hulten, 2012, p. 266), women in developing countries face substantial constraints with unequal access to finance (GPFI, 2011, p. 34-46). Having documented evidence of differences between men and women in access to finance, it is interesting to engage how existing disparities can be mitigated. In what follows, we discuss the relevance of mobile/internet banking in developing countries and incentives that are instrumental for decreasing the gender gap.

3.1 Mobile/internet banking and women empowerment

There is growing evidence that mobile banking is increasing the social participation of women in marginalised societies. Corresponding channels of financial inclusion include, among others: strengthening of small businesses and household management. Consistent with Jonathan & Camilo (2008), Asongu (2015b) & Ondiege (2010, 2013), mobile banking has enabled women to have more access to finance, hence easing the mitigation of a gender-finance gap. The narrative sustains that mobile banking is providing previously unbanked women with more affordable mechanisms to financial access.

Accordingly, mobile banking could considerably help women in household budget management, especially when households are faced with unpredictable poverty-oriented

[14] 'Famers on Film' is "*An initiative to raise national awareness of farmers and their important role in society*" (p. 7). Pasture Promise entails "*Farmers post educational videos around pasture management*" (p.8). Sustaination is a "*A 'LinkedIn' for Local Food and Farmers: a professional food trade network with an emphasis on SME, sustainability, and relocalization*" and "*WeFarmit provides social networking platforms and cloud computing for the farming and food community. HERDit is an application for herd tracking* " (p. 9).

negative externalities. In line with Al Surikhi (2012) and Asongu (2015a), advantages include, among others: timely responses, more experience in coping with negative shocks and better financial management. In more elaborate terms, the authors sustain that mobile banking enables women to accomplish the following.

It reduces the probability of women to incur great losses because money can be easily transferred to timely respond to unforeseen negative shocks. Hence, potential costs associated with such negative externalities are mitigated. Some avenues of shock mitigation and better financial management entail: lower travelling cost, less trauma and more efficient responses. As an example, in situations where women are particularly vulnerable to concerns like death, illness, cost reduction and the saving of income, mobile banking could be very instrumental.

Another advantage is 'security amelioration' for women through cost-reduction. For instance, their timely ability to reduce overnight hospital days through the quick dial of a phone to send/receive money. This 'access to finance' is essentially instrumental in periods of desperation. Hence, mobile banking provides avenues for reduced surprises, multi-tasking and time required to solve crisis. In summary, some essential areas of gender equality are fostered with more positive signals in: economic empowerment, health, safety, education and social inclusion.

We invite the interested reader to refer to Mishra & Bisht (2013, p. 505) and Ondiege (2010, p. 11) for country-specific models of financial inclusions linked to mobile banking. What is important to note for their effectiveness in empowering women is that, appropriate governance mechanisms are needed. For example, Ojo et al. (2012) have analyzed the livelihoods of women with access to mobile phones in Ghana and concluded: "*Results show that three governance mechanisms enable the contribution of mobile technology to meeting the livelihood needs of this group: 1) updating financial and telecommunication regulations to enable the provision of mobile-based services e.g. mobile microfinance, to vulnerable groups; 2) mobilizing local communities in the production of local contents; and 3) engaging non-governmental organizations in building capacity of government agencies in mobile service delivery and in training vulnerable communities in effective use of mobile technology to access information and services critical to their needs*" (p. S30).

3.2 Other financial related incentives and policies for gender empowerment

Incentives that could bridge the gender gap with the channel of mobile banking may involve business-to-business interactions among women, articulated towards: mobile-health initiatives for children, fiscal incentives of specific nature, educational initiatives, targeted government rural/agricultural initiatives and more broad use of mobile transactions like payment to females for earnings as nurses or family health payments. There are a plethora of documented case studies supporting the effectiveness of mobile money in driving such financial inclusion. Some examples include: '*how mobile money can drive financial inclusion for women at the bottom of the pyramid (BOP) in Indian Urban Centers*' (Chavan et al., 2009, p. 475) and a review of '*mobile phone, livelihoods and the poor in Sub-Saharan Africa*' (Porter, 2012, p. 241).

The IFAD (2014b) second policy brief on post-2015 rural development has particularly focused on promoting rural women empowerment[15]. Projects to which finance can be channelled to empower women include: self-help groups that have boosted the power of women in South Asia (p. 5) and farmers' organisation in sub-Saharan Africa targeting sustainable agriculture (p. 7). More post-2015 insights can be found in IFAD (2014c) on sustainably boosting agricultural productivity & consolidating agricultural markets and, in IFAD (2014d) on strengthening risk management capacity and the resilience of rural households and smallholder farmers.

More targeted cases/studies through which gender financial inclusion can be enhanced include: '*measuring gender performance in micro finance*' (Iskenderian, 2013); '*adjustment of framework conditions by regulators and policy makers*' (Frickeinstein, 2013); '*going beyond expectations to gender analysis*' (Ghosh & Berfond, 2013) and '*banking on including women*' (Koning, 2013).

'*Valuing women's knowledge and experience creates opportunities for the whole community*' (IFAD, 2014e, p. 7). Hence, it is important to stimulate the demand-side for the success of policies towards increasing female 'access to finance'. The IFAD has documented the following conclusions from 'case studies' for mobilizing a 'gender advantage'. These are: '*Promoting equitable access to adaptation knowledge for women and men is a key practical step for inclusive adaptation*'; '*Building on women's knowledge and experience creates opportunities for the whole community*'; '*Investing in women brings economic returns for smallholder farmers*'; '*It is important to tackle women's workloads, which are often greater than that of men's and tend to increase as a result of climate change*'; '*Supporting women's equal voice in decision-making about adaptation strategies is needed in the home, in the*

[15] The interested reader can find more information on 'IFAD policy briefs on rural development in the post-2015 agenda' on the following link: http://www.un-ngls.org/spip.php?article4502

community and at the national and global levels' (p. 6). In light of Ojo et al. (2012), the above can be achieved through more gender-specific policies targeting the use of mobile banking.

Other interesting case studies that have been documented by IFAD (2014e) are: *'Nigeria: Dedicated support for women and young people*' (p.11); '*Mali: Unlocking the capacities of different generations' (p. 8);* '*Mauritania: Men and women working together*' (p. 10); '*Kyrgyzstan: Alternative income sources*' (p.12); '*Peru: Reduced workloads and transformed gender roles*' (p. 18); '*Bolivia: Building on indigenous women's knowledge*' (p. 7); '*Bangladesh: Early warning systems*' (p.9); '*Swaziland: Women, unity and water*' (p.13); 'China*: Access to clean energy*' (p. 17) and 'India*: Women's self-help groups heard at climate policy forum*' (p.15).

We also briefly engage some important actions and policy recommendations so far implemented in three main strands, namely: (1) establishment of a supportive environment to enable female entrepreneurs have access to financial services; (2) encouragement of efforts which identify, support and evaluate replication of referenced models aimed at consolidating financial services to female entrepreneurs and; (3) tailoring of efforts towards gathering SME finance gender-disaggregated data (GPFI, 2011, p. 48-61).

The first strand on a supportive environment for female entrepreneurs entail: (i) development of diagnostics and strategies of country-specific nature to integrate gender perspectives into the agenda of financial development; (ii) development of supportive regulatory and legal environmental framework; (iii) strengthening of the legal access of women to property because it augments assets control, ensure more oversight on collateral, strengthens their ability and incentives to develop businesses[16]; (iv) encouraging formalization; (v) expansion of financial infrastructure like collateral registries and credit bureaus that mitigate borrowing cost & augment access to finance; (vi) consolidate SMEs access to alternative dispute channels & minor court claims; (vii) capacity building of financial institutions to improve service to female entrepreneurs; (viii) expansion of research into more optimal ways of combining business training with financial access; (ix) designing effective channels for government support; (x) appointment of national reference models to champion/lead female SMEs ; (xi) construction of public-private dialogues that are inclusive

[16] The interested reader can find specific-steps needed to address gender differences in economic rights on pages 58-59 (IFAD, 2014).

by supporting women networks and (xii) providing specific goals and incentives for more procurement by the State of commodities for female-managed corporations.

In the second strand, we are concerned with efforts towards identifying, evaluating and supporting the replication of successful models previously used to consolidate financial access to female entrepreneurs (p. 61). According to the narrative, recent advances have shown that actively focusing on female entrepreneurs could be very rewarding for commercial banks. In addition, there is an increasing need for more data on female-owned SMEs. Efforts that have been devoted towards capturing and replicating these models are fundamental to enabling female-owned corporations' access to the finance that they require to expand their businesses. Moreover, providing incentives for commercial financial institutions to segment their clients (especially those managing SMEs) and tailoring additional financial efforts towards tackling very specific female needs, are important axes.

The third strand focuses on female disaggregated 'SME finance data', in a coordinated manner. Major advances include: (i) building reliable and consistent data on gender that is disaggregated and articulates female access to finance and businesses; (ii) national financial authorities need to distinguish among categories of financial services in the data collection process; (iii) facilitation of online registration and computerization of businesses and (iv) inclusion of gender disaggregated queries into the national survey on access to finance (p. 61-62).

4. Financing inclusive human capital: skills and training

Knowledge economy (KE) has been documented to be instrumental for inclusive development (Lustig, 2011; Asian Development Bank, 2014). Accordingly, KE is pro-poor because it reduces inequality (Asongu, 2014b), especially through the instrument of mobile telephony (Asongu, 2015b). But given the broad concept of KE, we resist the itch to engage all its four components, notably: education, information & communication technology (ICT), economic incentives & institutional regime and innovation. Hence, we restrict this section exclusively to education or human capital in terms of skills and training.

According to the Asian Development Bank (ADB, 2014, p. 68), inclusive education in terms of skills and training entail the following: (i) increasing avenues for skills & education in technology, sciences, mathematical & technology disciplines for the less advantaged; (ii) putting special focus on mitigating dropout and improving full-cycle senior secondary education completion to more equity in tertiary educational access; (iii) improving wage returns and prestige for technical qualification via associated degrees; (iv) in addition to scarce world-class institutes of higher learning, supporting investments destined for mass acquisition of educational minimum quality standards; (v) creation of business incubators and excellence centers in institutions of higher learning in smaller cities & towns and (vi) investment in enhancing entrepreneurial education in college, vocational, technical & university institutions.

In light of the above, this section investigates financial instruments that are used to deliver public commodities with particular emphasis on, inter alia: educational delivery to young people, resource inequalities, mitigating academic drop-out rates, mass education with particular references to the socio-economically disadvantaged and more education for citizens in smaller cities & towns.

First, there have been some significant financial advances towards providing more skills and education to the less advantaged, boosting mass acquisition of educational minimum standards with better focus on peripheral towns/cities. In accordance with recent literature, access to finance in a business environment has some influence on educational quality in the African society, which ultimately engenders growth-enhancing rewards that have positive inclusive human development externalities. This narrative is in line with the entrepreneurship current in which greater financial access exposure, including entrepreneurial-oriented studies, enhance students' entrepreneurial acumen, propensity, sharpness and literacy in finance (Oseifuah, 2010; Gerba, 2012; Tchamyou, 2014). On a specific note, Tchamyou (2014) has argued that providing financial access for entrepreneurial education has the potential of decreasing the cost/time of starting a business. Mensah & Benedict (2010) have shown the positive long-run effect of such entrepreneurial activity on poverty mitigation. This is consistent with: the Gerba (2012) position that business studies motivate entrepreneurial intentions and Oseifuah (2010) on the nexus between financial literacy and youth entrepreneurship.

Interestingly, the narrative above is broadly consistent with: recent '*trends in the crowdfunding of educational technology startups*' (Antonenko et al., 2014, p. 36); the benefits of crowdfunding for inclusive partnerships in Europe (Hollow, 2013); the use of crowdfunding for '*the development and production of an information literacy..*' (Walsh, 2014, p. 63); the use of *reciprocal-crowdfunding* in Rwanda to enhance the entrepreneurial skills of disadvantaged students (Elkuch et al., 2013), inter alia.

Africa and Asian nations like India are particularly relevant in the use of such financial mechanisms for acquisition of skills because they represent the fastest and largest burgeoning youth population among the world's poorest nations. On the urgent need for 'job creation, calls for employment avenues and the requirement of skills', mobile banking has been documented to be essential for the effectiveness of Massive Online Open Courses (MOOCs) (Trucano, 2013; Porter, 2014). This new avenues for the delivery of skills & training is creating novel opportunities for adaptation in the changing market structures, evolution of the business environment and mitigation of poverty.

Second, mobile banking has helped in delivering public health education; hence, extending access to previously limited public services and directly tackling concerns of existential inequality. Moreover, microcredit institutions are also being increasingly adapted to the provision of health education/service that ultimately address inequality. As a case in point, many microcredit establishments are increasingly bundling credit with education, health and other initiatives/programs (Smith, 2002, p. 707). In Honduras & Ecuador for instance, 'health-bank participation': (i) substantially increases future healthcare over 'credit-only participation' and (ii) mitigates a quick transition to bottle-feeding from breast-feeding with income growth. For brevity and lack of space we cannot engage the plethora of examples on mobile-related health services. The interested reader can find some of these recent mobile health educational innovations in Labrique et al. (2013).

We devote some space to apparent challenges of an aging population. '*Aging societies mean new era of banking*' (Moreno & Chan, 2014). According to the narrative, by 2025, 46 nations would have less young people than old, implying financial institutions need to rethink how their businesses are driven. In essence, an aging population will influence banking in three areas. First, the distribution of wealth is increasingly skewed towards this faction of the population. Second, customer behaviour and preferences in products as well as in demands are bound to change. Third, increasing life expectancy with a relative advantage of women implies women would accumulate larger chunks of wealth among the old (especially in nations like China & India). Financial institutions are currently integrating such social, demographic and economic changes into their business models, hence reinventing the banking world[17].

[17] The interested reader can find more information on: http://europe.chinadaily.com.cn/epaper/2014-12/19/content_19124583.htm

5. Informality, Microfinance, Crowdfudning and Islamic finance

5.1 Informal finance, Microfinance and Crowdfunding

There is a recent stream of literature on the nexuses among globalisation, informalisation and inclusiveness that should be articulated in two points. On the one hand, globalisation has boosted financial informalisation as opposed to formalisation (Asongu, 2014c). On the other hand, KE which we have covered in the preceding section, as having an appealing impact on inclusiveness has also been documented to be more positively linked with the informal financial sector, as opposed the formal economic sector (Asongu, 2014d, 2015d).

In light of the above, informality is playing a substantial role in decreasing inequality in less developed countries (Asongu, 2013, p. 301). The author has assessed how globalisation-driven reforms have affected inequality via various channels (informal, non-formal and formal)[18]. It is also important to note that, mobile telephony which is positively (negatively) correlated with the informal (formal) financial sector in view of Asongu (2013a) is pro-poor (Asongu, 2013c).

The imperative to lay more emphasis on the role of the informal financial sector draws from the International Financial Statistics (IFS, 2008) definition of the financial system which does not take the informal financial sector into account[19]. The plethora of examples on the instrumentality of the informal financial sector in poverty reduction have been discussed above and to be engaged below. Our motivation for highlighting the informal financial sector is because, in spite of liberalisation policies boosting the informal sector to the detriment of the formal sector (Adeusi et al., 2012) very few studies have focused on the externalities of the corresponding evolving trend of informality (Fugazza & Fiess, 2010; Bairagya, 2010; Asongu, 2014c).

As far as we know, other improvements in microfinance that merit emphasis can be articulated along three main lines. First, a strand on 'innovation in microfinance' which emphasises the need to focus beyond 'income poverty' or to 'social intermediation from financial intermediation'. Accordingly, it documents the need of exploring new frontiers of

[18] "*Hitherto, unexplored financial sector concepts of formalization, semi-formalization and informalization are introduced. Four main findings are established: (1) while formal financial development decreases inequality, financial sector formalization increases it; (2) whereas semi-formal financial development increases inequality, the effect of financial semi-formalization is unclear; (3) both informal financial development and financial informalization have an income equalizing effect and; (4) non-formal financial development is pro-poor. Policy implications are discussed*" (p. 401).

[19] The interested reader can refer to Lines 24, 25 and 45 of the IFS (2008).

social and economic development, which entail, among others, infrastructure for: skills, health, education and enterprise. Consistent with Hans (2009), this current recommends a symbiotic nexus between social intermediation and financial intermediation in order to break socio-cultural and economic barriers to inclusive development and employment.

Second, it has been established that microfinance is a significant driver of the Gross National Happiness (GNH) index (Sharma, 2014, p.73). The author argues the need to evaluate the effect of microfinance on happiness at an individual level.

Third, owing to the relatively low rate of mainstream bank financing for SMEs (e.g Abor & Biekpe (2007) for Ghana), there has been substantial recourse to microfinance which is still not without controversy in interest rate dynamics. Kar & Swan (2014, p. 87) have assessed if the interest rate charged by microfinance institutions (MFIs) has appealing effects on improving profitability, reducing repayments and leading to missing drift. The findings reveal that real yield positively impact on loan repayment rates and financial performance of MFIs[20]. The nexus between performance and 'rate of interest' well contrast with more recent evidence from Basharat et al. (2015): "*The results show that financial efficiency has a positive impact on interest rates, with more financially efficient MFIs having lower interest rates, while social efficiency has no impact on microcredit interest rates*" (p. 49).

One important innovation in microfinance is Crowdfunding which is increasingly taking the bank to the poor. A notable example is *Kiva* which has ambitions of facilitating financial access to the poor or Microfinance: '*Kiva's aim is to make microfinance, which is basically loans to some of the poorest people on the planet, easy*.' (Duncan, 2014). According to the World Bank (2013), the potential for this means of finance in developing countries is immense: '*Crowdfunding has emerged as a multi-billion dollar global industry*' (p.7) because '*The rate of growth of crowdfunding, and its emergence in developing and developed countries, suggests that this phenomenon can become a tool in the innovation ecosystems of most countries*' (p.8).

For brevity and lack of space, we summarise a recent stream of literature on the nexuses among microfinance, crowdfunding and inclusive growth with very specifically tailored and/or surgically precised sentences. While they are lifted verbatim, they are also self-explanatory in articulating the purpose of this survey. "*Microfinance institutions that use*

[20] They further find that methods of delivery exert substantial effects on financial performance. Moreover, individual-based lenders demonstrate higher profitability only at a given threshold level. The results also show that, compared to village banks, individual-based lenders are more inclined to mission drifts.

credit scoring increase the productivity of their loan officers, thus leading to an increase in the number of borrowers, higher growth in the number of loans, and expanding financial inclusion and developmental opportunities" (Bumacov et al., 2014, p. 401). "*Microfinancial institutions afford funding to the financially constrained and to the serious entrepreneur (of age and highly educated*" (Koubâa, 2014, p. 415). *"Fund-seeking entrepreneurs who are interested in reaping value-added benefits from their crowdfunders can positively influence their funders through the use of relationship marketing and trust-building techniques"* (Macht,2014, p. 439)*"Online lending groups are trying to replicate the group pressures exerted by offline microcredit groups"* (Assadi & Ashta, 2014, p. 461).

According to Caseau (2014),*"Ethno-banking and its related services foster recognition of the values and habits of immigrant communities, whereas microcredit may help Turkish entrepreneurs to better integrate into their host-country society by creating or pursuing their business activity"* (p. 481). Attuel-Mendés et al. (2014) conclude that *"Financial institutions, be they cooperatives and operating through crowdfunding, have to pay attention to the identity they create and disseminate through their communication"*(p. 493). *"Non-financial programs are being used by microfinance institutions to manage reputational risks and competitive pressures"* (Biosca et al., 2014, p. 507). "*Microfinance in Mali has a positive impact on poverty alleviation in total and higher on female than on male beneficiaries*" (Kolama & Alia, 2014, p. 517). "*A crowdfunding site in a developing country like India faces strategic challenges due to both supply-side and demand barriers in the social lending market*". (Ashta et al., 2015, p. 1). "*Since the microfinance sector is comparatively new relative to other sectors, MFIs follow an intuitive process (and not strategic) for any kind of innovation*" (Sinha, 2015, p. 15).

"*Alternative finance, which differs from traditional banks insofar as it serves developing societies' most disadvantaged populations, in many cases is merely a humanitarian gesture and not a base for sustainable development* ". (Gandja et al., 2015, p. 33). "*The credit and liquidity risks of most African MFIs are strongly affected by drought shocks and, even though some traditional asset–liability management strategies are somewhat useful for MFIs to deal with drought risk, innovative risk-transfer mechanisms are required*" (Castellani & Cincinelli, 2015, p. 67). Alia et al. (2015, p. 85) conclude that,
"*experimental incentive-compatible techniques bring unbiased evidence from the field about what is unique in the behavior of microfinance clients*". "*Crop insurance in the Sahel improves the access of insured farmers to resources*" (Koloma (2015, p.115). According to

Mori et al. (2015, p. 99), "*The attributes of microfinance's board members have an impact on attainment of their social objectives*". *"Crowdfunding could be the path to assist Nenasalas in the future, considering traditional financial institutions have largely ignored this grass-roots initiative"* (Royal & Windsor, 2014, p. 425). Despite some ongoing challenges, the above studies clearly articulate the burgeoning role of Crowdfunding in inclusive development.

5.2 Recent trends in Islamic finance

According to Forget (2009), the model of finance advanced by Islam is one of social responsibility that is more holistic relative to the version proposed by mainstream economic theories. Accordingly, "… *The goals of socio-economic justice and equitable distribution of income and wealth are an integral part of the moral philosophy of Islam and are based on its unflinching commitment to human brotherhood*" (Chapra, 1983, p.2). This narrative is consistent with Chapra (2008), more than two decades later. In accordance with the author, in order for a financial system to work towards advancing justice, in addition to the need for strength and stability, two more conditions need to be satisfied. First, it is necessary for financiers to take part in the sharing of risks and potential losses with entrepreneurs. Second, bank lending should not be exclusively devoted to the rich, but an equitable portion should also be tailored towards to the poor in order to contribute towards, expanding employment, mitigating poverty, improving economic opportunities and favouring positive redistribution in wealth & income. As we have noted in the preceding sections, the two conditions clearly articulate inclusive growth.

Recent trends reveal that the Islamic financial industry has advanced significantly in geography and size (Nabi, 2013, p. 21). According to the account, as of 2013, Islamic financial institutions were in the neighbourhood of 600 and working in about 75 jurisdictions. This narrative is consistent with an evolutionary tendency revealed by KFH Research (2012). According to KFH, Islamic finance has been on a continuous positive trend because of its inclusive appeal. In essence, from 150 billion USD in the mid-1990s, it was expected to reach 1.6 trillion by 2012 and projected to attain a 6.5 trillion mark by 2020. Nabi (2013, p. 22) further sustains that the Islamic financial service industry (IFSI) has grown at a Compound Annual Growth Rate (CAGR) of about 40.3% to an estimated 1.1 trillion USD in assets between 2004 and 2011. Some interesting tendencies that have contributed to the upward surge are noteworthy.

First, the *Sukuk*[21] segment (or issuance) has progressed at a 42.3% CAGR during the 2004-2011 period, to 85.1 billion USD from 7.2 billion USD. Interestingly, between January 1996 to September 2012, 396.4 billion USD of *Sukuk* was issued in global aggregate terms. Second, while the *Takaful*[22] segment may be small, its contribution has also been substantial: growing to an estimated 15.2 billion in 2012 and by a 23.1% CAGR during the period 2004 to 2011. Third, assets under some Islamic funds increased to 64 billion USD in October 2012 from 29 billion USD in 2004. Fourth, Islamic Microfinance is a very promising market niche: with 225 global providers of which 92% or 164 are in East Asia & Pacific and 72 providers in the Middle East & North Africa (MENA). Moreover, according to CGAP (2013), Sharia-compliant usage was estimated at 1.28 million in 2012. To the best of our knowledge, some of the most interesting accounts documenting the promising trend of Islamic Microfinance for financial inclusion are provided by CGAP (2013) and Karim et al. (2008)[23].

We briefly highlight the growing role of Islamic finance in the promotion in inclusive growth. Mohieldin et al. (2012) have concluded that it is one of the most promising mechanisms for lifting the poorest out of poverty. A good example is the Microfinance Development Program (MDP) which aims to boost the horizon of microfinance in order to better fight poverty. The program which aims at increasing the outreach of the Islamic Microfinance industry is tailored by the Islamic Development Bank (IDB). It can be summarised in two points: (1) a plethora of intervention modes designed to tackle a broad range of microfinance needs in the IDB member states in order to avoid the trap of one-fits-all strategy and (2) a leverage of partners and resources with well grounded Microfinance establishments such as the Department for International Development (DFID) & the Grameen Bank.

[21] Sukuk refers to an Arabic appellation of financial certificates, commonly known as the Islamic version of mainstream bonds.

[22] This is a repayment and reimbursement co-operative system that accounts for the following, inter alia: compensation from an agreed fund destined to small contributions and repayment in events of losses (by people & corporations) from hazards.

[23] *"Islamic microfinance represents the confluence of the two rapidly growing industries: Microfinance and Islamic finance. It has the potential to not only respond to unmet demand but also to combine the Islamic social principle of caring for the less fortunate with microfinance's power to provide financial access to the poor. Unlocking this potential could be the key to providing financial access to millions of Muslim poor who currently reject microfinance products that do not comply with Islamic law".* The interested reader can find more insights on the following link: http://www.cgap.org/publications/islamic-microfinance-emerging-market-niche (Accessed: 05/02/2015). More information on '"Trends in Sharia-Compliant Financial Inclusion" can be found in CGAP (2013).

Some measures towards consolidating the inclusiveness of Islamic banking include, inter alia: (1) fortification of growth infrastructure of capital for SMEs and creation of jobs for the youth; (2) consolidation of financial inclusion via microfinance and merging it with parallel Islamic financial products (like Endowments, Micro-Takaful & Zaqat); (3) boosting of private and public sector partnerships by means of Sukuk issuance for financing health, transport and education inclusiveness and (4) building of dedicated corporate governance & risk management and sound regulatory frameworks for various factions of the IFSI to ensure sustainability (Nabi, 2013, p. 33). Recent examples of partnerships with the poor within the framework of an Islamic financial inclusive model documented by Nabi (2013), include among others: local marketing and harvesting of rice in Indonesia; Livestock (goats & cows), rice and cotton growing in Pakistan; Olive orchards & oil mills in Palestine and the growing of greenhouse fruits & vegetables in Sudan. It should be noted that, harvesting- & marketing-support for 'local market' and export purposes are also provided to most of the beneficiaries (e.g Pakistan & Sudan).

6. Conclusion

The policy debate has been shifting from the finance-growth nexus to the finance-inequality relationship. In the transition from Millennium Development Goals (MDGs) to Sustainable Development Goals (SDGs), there has been an urgent policy challenge of putting some structure on recent advances in finance for more inclusiveness. The overarching question tackled in this paper has been: to what degree has financial development contributed to providing opportunities of human development for those in the low-income strata and by what mechanisms? We have surveyed about 170 recently published papers to provide recent advances in finance for inclusive development. The analytical approach has consisted of first, situating issues of exclusive growth in the context of the literature and then reviewing recent financial inclusion growth strategies. Developed and developing countries have been separately engaged in some currents to account for heterogeneity in financial development benefits. Retained financial innovations have been structured along three themes, notably: the rural/urban divide, women empowerment and human capital in terms of skills & training. The financial instruments have been articulated with case studies, innovations and investment strategies with particular emphasis, inter alia on: informal finance, microfinance, mobile banking, crowdfunding , Islamic finance, remittances, Payment for Environmental Services (PES) and the Diaspora Investment in Agriculture (DIA) initiative.

On this practical relevance of this paper, the survey would substantially benefit both scholars and practitioners in formulating and implementing policies that are friendly towards more inclusiveness. Financial instruments as well as best practices in some case studies can be translated to other countries with the same fundamental needs. The review is also relevant to corporations wishing to improve on their inclusiveness strategies. For example, there are reports underway (like the 'Vodafone SIM project') which are fundamentally motivated by ICT- development not featuring prominently in the current SDGs debates. Rising inequality has been a crucial item on the agenda of the Great 20 nations, less developed countries as well as emerging markets. All stakeholders can benefit from this survey by adopting financial instruments that are consistent with their development needs and relevant to their environmental challenges. Some instruments of reference may not provide expected results when implemented in the same development environments. Understanding why such policies might fail is an interesting future research direction.

References

1. Abiad, D., Detragiache, E., & Tressel, T., (2008). "A New Database on Financial Reform", *IMF Working Paper* No. 08/226.

2. Abor, J., & Biekpe, N., (2007). "Small Business Reliance on Bank Financing in Ghana", *Emerging Market Finance and Trade*, 43(4), pp. 93-102.

3. Adams, R. H., (2004). "Economic growth, inequality and poverty: Estimating the growth elasticity poverty", *World Development*, 32(12), pp. 1989-2014.

4. Adeusi, S. O., Azeez, B. A., & Olanrewaju, H. A., (2012). "The Effect of Financial Liberalization on the Performance of Informal Capital Market", *Research Journal of Finance and Accounting*, 3(6), pp. 1-16.

5. Aker, J. C., & Fafchamps, M., (2010). "How Does Mobile Phone Coverage Affect Farm-Gate Prices? Evidence from West Africa", Department of Economics and the Fletcher School, Tufts University.

6. Al Surikhi, H. F., (2012). "Knowledge and Financial Management in Households: An Examination of Married Women's Perspectives in Chadbourn, North Carolina", *Capstone Collection*, Paper No. 2489.

7. Ali, A. A., & Thorbecke , E., (2000). "The State and Path of Poverty in Sub Saharan Africa: Some Preliminary Result", *Journal of African Economies*, 29(Suppl. 1), pp. 9-40.
8. Alia, H., Mateu, G., & Sutan, A., (2015). "Behavioral Microfinance: Evidence from a Field Experiment in Cairo", *Strategic Change*, 24(1), pp. 85-97.

9. Anand, R., Mishra, S., & Peiris, S. J., (2013). "Inclusive Growth: Measurement and Determinants", *IMF Working Paper* 13/135.

10. Antonenko, P. D., Lee, B. R., & Kleinheksel, A. J., (2014). "Trends in the crowdfunding of educational technology start-ups, *TechTrends*, 58(6), pp. 36-41.

11. Anyanwu, J. C., (2014a). "Marital Status, Household Size and Poverty in Nigeria: Evidence from the 2009/2010 Survey Data", *African Development Review*, 26(1), pp. 118-137.

12. Anyanwu, J. C., (2014b). "Determining the correlates of poverty for inclusive growth in Africa", *European Economics Letters*, 3(1), pp. 12-17.

13. Anyanwu, J. C., (2013a). "Gender Equality in Employment in Africa: Empirical Analysis and Policy Implications", *African Development Review*, 25(4), pp. 400-420.

14. Anyanwu, J. C., (2013b). "The correlates of poverty in Nigeria and policy implications", *African Journal of Economic and Sustainable Development*, 2(1), pp. 23-52.
15. Ashta, A., Assadi, D., & Marakkath, N., (2015). "The Strategic Challenges of a Social Innovation: The Case of Rang De in Crowdfunding", *Strategic Change*, 24(1), pp. 1-14.

16. Asian Development Bank (2014). "Innovative Asia: Advancing the Knowledge-Based Economy", *The Next Policy Agenda, Asian Development Bank* http://adb.org/sites/default/files/pub/2014/innovative-asia-knowledge-based-economy.pdf (Accessed: 07/02/2015).

17. Asongu, S. A., (2015a). "Reinventing foreign aid for inclusive and sustainable development: Kuznets, Piketty and the great policy reversal", Revised and Resubmitted: *Journal of Economic Surveys*.

18. Asongu, S. A., (2015b). "The impact of mobile phone penetration on African inequality", *International Journal of Social Economics*, 42(8): Forthcoming.

19. Asongu, S. A., (2015c). "Mobile banking and mobile phone penetration: which is more pro-poor in Africa?", *African Finance Journal*: Forthcoming.

20. Asongu, S. A., (2015d). "Financial Sector Competition and Knowledge Economy: Evidence from SSA and MENA Countries", *Journal of the Knowledge Economy*; http://link.springer.com/article/10.1007/s13132-012-0141-4

21. Asongu, S. A., (2014a). "Financial development dynamic thresholds of financial globalisation: evidence from Africa", *Journal of Economics Studies*, 41(2), pp. 166-195.

22. Asongu, S. A., (2014b). "Software piracy, inequality and the poor: evidence from Africa", *Journal of Economic Studies*, 41(4), pp. 526-553.

23. Asongu, S. A., (2014c). "Liberalisation and financial sector competition: a critical contribution to the empirics with an African assessment", *South African Journal of Economics*; http://onlinelibrary.wiley.com/doi/10.1111/saje.12048/abstract

24. Asongu, S. A., (2014d). "Knowledge Economy and Financial Sector Competition in African Countries", *African Development Review*, 26(2), pp. 333-246.

25. Asongu, S. A., (2013a). "How has Mobile Phone Penetration Stimulated Financial Development in Africa?", *Journal of African Business*, 14(1), pp. 7-18.

26. Asongu, S. A., (2013b). "How do financial reforms affect inequality through financial sector competition? Evidence from Africa", *Economics Bulletin*, 33(1), pp. 401-414.

27. Asongu, S. A., (2013c). "How do institutions matter in the income-equalizing effect of mobile phone penetration?", *European Economics Letters*, 2(2), pp. 56-61.

28. Assadi, D., & Ashta, A., (2014). "Innovative Transposition of Trust Mechanisms in Social Lending Groups from Offline to Online", *Strategic Change*, 23(7-8), pp. 461-480.

29. Atkinson, A. B., Piketty, T., Saez, E., (2011). "Top Incomes in the Long Run of History", *Journal of Economics Literature*, 49(1), pp. 3-71.

30. Attuel-Mendés, L., & Caseau, C., & Bonescu, M., (2014). "Brand Identity Process of Financial Cooperatives: An Austrian Case", *Strategic Change*, 23(7-8), pp. 493-506.

31. Azzimonti, M., De Francisco, E., & Quadrini, V., (2014). "Financial Globalisation, Inequality and the Rising Public Debt", *American Economic Review*, 104(8), pp. 2267-2302.

32. Bagnara, A., (2012). "Aid Effectiveness: Effective Aid is Good Foreign Policy", *Partners in Research for Development*, (Summer Issue), pp. 4-6.

33. Bairagya, I., (2010). "Liberalization, Informal Sector and Formal-Informal Sectors' Relationship: A Study of India", *Institute for Social and Economic Change*, Nagarbhavi, Bangalore, India. http://www.iariw.org/papers/2010/3Indrajit.pdf (Accessed: 11/02/2015).

34. Baliamoune-Lutz, M., & McGillivray, M., (2009). "Does Gender Inequality Reduce Growth in Sub-Saharan Africa and Arab Countries?", *African Development Review*, 21(2), pp. 224-242.

35. Baliamoune-Lutz, M., (2007). "Globalisation and Gender Inequality: Is Africa Different?", *Journal of African Economies*, 16(2), pp. 301-348.

36. Baliamoune, M., & Lutz, S., (2005). "Rural-urban inequality in Africa: A panel study of the effects of trade liberalization and financial deepening", *Journal of African Development*, 7(1), 1-19.

37. Basharat, B., Hudon, M., & Nawaz, A., (2015). "Does Efficiency Lead to Lower Prices? A New Perspective from Microfinance Interest Rates", *Strategic Change*, 24(1), pp. 49-66.

38. Batuo, M. E., Guidi, F., & Mlambo, K., (2010, August). "Financial Development and Income Inequality: Evidence from African countries". *African Development Bank*, Tunis.

39. Batuo, M. E., & Asongu, S. A., (2015). "The impact of liberalisation policies on income inequality in African countries", *Journal of Economics Studies*, 41(2), pp. 68-100.

40. Bhagwati, J., (1998). "The Capital Myth. The Difference between Trade in Widgets and Dollars", *Foreign Affairs*, 7(3), pp. 7-12.

41. Bhagwati, J., (1958). "Immiserizing growth: A geometrical note", *Review of Economic Studies*, 25, pp. 201-205.

42. Biosca, O., Lenton, P., & Mosley, P., (2014). "Microfinance Non-Financial Services as a Competitive Advantage: The Mexican Case", *Strategic Change*, 23(7-8), pp. 507-516.

43. Brada, J. C., & Bah, E. M. (2014). "Growing Income Inequality as a Challenge to 21st Century Capitalism", Italian Association for the Study of Economic Asymmetries, *Working Paper* No. 1402.

44. Bumacov, V., Ashta, A., & Pritam, S., (2014). "The Use of Credit Scoring in Microfinance Institutions and Their Outreach", *Strategic Change*, 23(7-8), pp. 401-413.

45. Caseau, C., (2014). "Ethno-Banking, Microfinance, and Societal Integration in Lower Austria and Vienna", *Strategic Change*, 23(7-8), pp. 481-492.

46. Castellani, D., & Cincinelli, P., (2015). "You have free access to this contentDealing with Drought-Related Credit and Liquidity Risks in MFIs: Evidence from Africa", *Strategic Change*, 24(1), pp. 67-84.

47. CGAP (2013). "Trends in Sharia-Compliant Financial Inclusion", *Focus Note* No 84, March 2013.

48. Chan, A., & Jia, T., (2011). "The Role of Mobile Banking in Facilitating Rural Finance: Reducing Inequality in Financial Services between Urban and Rural Areas", *Accenture Banking Services*, http://www.accenture.com/SiteCollectionDocuments/PDF/PoV-Mobile-Banking-051611-EN.pdf (Accessed: 02/02/2015).

49. Chapra, M. U. (1983). "Monetary Policy in an Islamic Economy" in Ziauddin Ahmed, et. al. eds., "Money and Banking in Islam", *International Centre for Research in Islamic Economics*, Jeddah, KSA, 1983.

50. Chapra, M. U. (2008). "Innovation and Authenticity in Islamic Finance", paper presented in the "Eighth Harvard University Forum on Islamic Finance: Innovation and Authenticity", April 19-20, 2008.

51. Chavan, A. L., Arora, S., Kumar, A., & Koppula, P., (2009), "How Mobile Money Can Drive Financial Inclusion for Women at the Bottom of the Pyramid (BOP) in Indian Urban Centers", *Internationalization, Design and Global Development, Lecture Notes in Computer Science*, 5623 (2009), pp 475-484.

52. Covert, B., (2015). "The 1 Percent Have Gotten All The Income Gains From The Recovery", Think Progress, http://thinkprogress.org/economy/2015/01/28/3616308/income-inequality-2013/ (Accessed: 04/02/2015).

53. Datt, G., & Ravallion, M., (1992). "Growth and Redistribution Component of Changes in Poverty Decomposition to Brazil and India in the 1980s", *Journal of Development Economics*, 38 (2), pp. 275-295.

54. Demirguc-Kunt, A., & Klapper, L., (2013) "The Gender Gap in Access to Finance", The World Bank, http://blogs.worldbank.org/psd/the-gender-gap-in-access-to-finance (Accessed: 03/02/2015).

55. Demombynes, G., & Thegeya, A. (2012, March). "Kenya's Mobile Revolution and the Promise of Mobile Savings". *World Bank Policy Research Working Paper*, No. 5988.

56. Dollar, D., & Kraay, A., (2003), "Institutions, Trade, and Growth," *Journal of MonetaryEconomics*, 50, (1), pp. 133-162.

57. Duncan, N., (2014). "Crowdfunding development: 'Kiva's aim is to make microfinance easy'", theguardian, Impact and effectiveness View from the top,

http://www.theguardian.com/global-development-professionals-network/2014/jun/10/crowdfunding-for-development (Accessed: 05/02/2015).

58. E-agriculture (2012). “Using ICT to enable Agricultural Innovation Systems for Smallholders”, e-source book, ICT In Agriculture, Connecting Small Holders to Knowledge, Networks and Institutions, (Forum 4, September 2012). http://www.fao.org/docrep/018/ar130e/ar130e.pdf (Accessed: 02/02/2015).

59. Easterly, W., (2000). The Effect of IMF and World Bank Programs in Poverty, Washington DC: World Bank, Mimeo.

60. Elkuch, A., Brunner, C., & Marxt, C., (2013). “Reciprocal crowdfunding as means to enable student and graduate entrepreneurship in Africa – a case study of Rwanda”, International *Journal of Entrepreneurship and Small Business*, 19(4), pp. 498-516.

61. Elu J., (2013). “Earnings Inequality and the Intersectionality of Gender and Ethnicity In SubSaharan Africa: The Case of Tanzanian Manufacturing”, *American Economic Review*, *Papers and Proceedings* 04/2013, 103(103), pp. 289-292.

62. Fischer, S., (1998). “Capital Account Liberalization and the Role of the IMF”, in “Should the IMF Pursue Capital-Account Convertibility?”, Essays in International Finance, Department of Economics, Princeton University, 207, pp. 1-10.

63. Forget, E., (2009). “Le développement durable dans la finance éthique et la finance islamique“, *Cahier de la finance islamique*, No. 1 (June 2009), pp. 1-4.

64. Fosu, A. K., (2015). “Growth, Inequality and Poverty in Sub-Saharan Africa: Recent Progress in a Global Context”, *Oxford Development Studies,* 43(1), pp. 44-59.

65. Fosu, A. K., (2008). “Inequality and the Growth-Poverty Nexus: Specification Empirics Using African Data”, *Applied Economics Letters*, 15(7), pp. 563-566.

66. Fosu, A. K., (2009). “Inequality and the Impact of Growth on Poverty: Comparative Evidence for Sub-Saharan Africa”, *Journal of Development Studies*, 45(5), pp. 726-745.

67. Fosu, A. K., (2010a). “The Effect of Income Distribution on the Ability of Growth to Reduce Poverty: Evidence from Rural and Urban African Economies”, *American Journal of Economics and Sociology*, 69(3), pp. 1034-1053.

68. Fosu, A. K., (2010b). “Does Inequality Constrain Poverty Reduction Programs? Evidence from Africa”, *Journal of Policy Modeling*, 32(6), pp. 818-827.

69. Fosu, A. K., (2010c). “Inequality, Income and Poverty: Comparative Global Evidence”, *Social Sciences Quarterly*, 91(5), pp. 1432-1446.

70. Fosu, A. K., (2011). “Growth, Inequality and Poverty Reduction in Developing Countries: Recent Global Evidence”, *UNU WIDER Working Paper* 2011/01.

71. Freeman, R. B., (2010). “It’s financialization”, *International Labour Review*, 149(2), pp. 163-183.

72. Frickeinstein, J., (2013, December). "Advancing Financial Inclusion for Women in Africa", CGAP, Advancing financial inclusion to improve the lives of the poor http://www.cgap.org/blog/advancing-financial-inclusion-women-africa (Accessed: 03/02/2015).

73. Fugazza, M., & Fiess, N., (2010). "Trade liberalization and informality: new stylized facts", Policy Issues in International Trade and Commodities Study Series No. 43. http://unctad.org/en/docs/itcdtab44_en.pdf (Accessed: 11/02/2015).

74. Gandja, S. V., Estay, C., & Tchankam, J-P., (2015). "Alternative Finance for Micro-Enterprises: A Foundation for Sustainable Development or Just Humanitarian Aid?", *Strategic Change*, 24(1), pp. 33-47.

75. Gerba, D. T. (2012). "Impact of entrepreneurship education on entrepreneurial intentions of business and engineering students in Ethiopia", *African Journal of Economic and Management Studies*, 3(2), pp. 258-277.

76. GPFI (2011). "Strengthening Access to Finance for Women-Owned SMEs in Developing Countries", *Global Partnership for Financial Inclusion*, http://www.ifc.org/wps/wcm/connect/a4774a004a3f66539f0f9f8969adcc27/G20_Women_Report.pdf?MOD=AJPERES (Accessed: 03/02/2015).

77. Ghosh,, S., & Berfond, J., (2013, October). "Beyond Expectations: Application of Gender Analysis", CGAP, Advancing financial inclusion to improve the lives of the poor http://www.cgap.org/blog/beyond-expectations-applications-gender-analysis (Accessed: 03/02/2015).

78. Hans, V. B., (2009). "Innovations in Microfinance - Looking beyond Income Poverty", Department of Economics, St Aloysius Evening College, Mangalore, India. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1392623 (Accessed: 05/02/2015).

79. Henry, P. B., (2007). "Capital Account Liberalization: Theory, Evidence and Speculation", *Journal of Economic Literature*, XLV, pp. 887-935.

80. Hollow, M., (2013). "Crowdfunding and Civic Society in Europe: A Profitable Partnership?", *Open Citizenship*, 4,(1), pp. 68-73.

81. IFAD, (2014a). "Leveraging the rural-urban nexus for development", *IFAD POST-2015 POLICY BRIEF 1*, http://www.ifad.org/pub/post2015/english/1.pdf (Accessed: 11/02/2015).

82. IFAD, (2014b). "An empowerment agenda for rural livelihoods", *IFAD POST-2015 POLICY BRIEF 2*, http://www.ifad.org/pub/post2015/english/2.pdf (Accessed: 11/02/2015).

83. IFAD, (2014c). “Investing in small holder family agriculture for global food security and nutrition”, *IFAD POST-2015 POLICY BRIEF 3*, http://www.ifad.org/pub/post2015/english/3.pdf (Accessed: 11/02/2015).

84. IFAD, (2014d). “Promoting the resilience of poor rural households”, *IFAD POST-2015 POLICY BRIEF 4*, http://www.ifad.org/pub/post2015/english/04.pdf (Accessed: 11/02/2015).

85. IFAD, (2014e). “The Gender Advantage: Women on the front line of climate change”, *International Fund for Agricultural Development*. http://www.ifad.org/climate/resources/advantage/gender.pdf (Accessed: 03/02/2015).

86. Ifzal Ali, (2007), “Inequality and the Imperative for Inclusive Growth in Asia”, *Asian Development Review*, 24(2), pp.1-16.

87. IMF Statistics Department, (2008, October). “International Financial Statistics Yearbook, 2008”, IMF.

88. Iskenderian, M. E., (2013, October). “Prove It: Measuring Gender Performance in Microfinance”, CGAP, Advancing financial inclusion to improve the lives of the poor http://www.cgap.org/blog/prove-it-measuring-gender-performance-microfinance (Accessed: 03/02/2015).

89. Jonathan, D., & Camilo, T., (2008). “Mobile banking and economic development: Linking adoption, impact and use”, *Asian Journal of Communication*, 18(4), pp. 318-322.

90. Kakwani, N., (1993). “Poverty and Economic Growth with Application to Côte d’Ivoire”, *Review of Income and Wealth*, 39(2) pp. 121-139.

91. Kalwij, A., & Verschoor, A., (2007). “Not by Growth Alone: The Role of the Distribution of Income in Regional Diversity in Poverty Reduction”, *European Economic Review*, 51(4), pp. 805-829.

92. Kar, A. K., & Swan, R. B., (2014). “Interest Rates and Financial Performance of Microfinance Institutions: Recent Global Evidence”, *European Journal of Development Research,* (2014), 26, pp. 87-106.

93. Kolama Y., & Alia, H., (2014). “Gendered Impact of Microcredit in Mali: An Evaluation by Propensity Score Matching”, *Strategic Change*, 23(7-8), pp. 517-530.

94. Koloma,Y., (2015). “Crop Microinsurance for Maize Farmers in Burkina Faso: Access and Agriculture Performance in the Dandé Village” ”, *Strategic Change*, 24(1), pp. 115-129.

95. Labrique, A. B., Vasudevan, L., Kochi, E., Fabricant, R., & Mehl, G., (2013). “mHealth innovations as health system strengthening tools: 12 common applications and a visual framework”, *Global Health Science and Practice*, 1(2), pp. 160-171.

96. Levine, R., (2011). “Finance, Regulation, and Inclusive Growth" presentation in OECD-WB Conference on "Challenges and policies for promoting inclusive growth,” pp. 24-25 March 2011, Paris.

97. Karim, N., Tarazi, M., & Reille, X., (2008). “Islamic Microfinance: An Emerging Market Niche”, *CGAP: Advancing financial Inclusion to improve the lives of the poor* http://www.cgap.org/publications/islamic-microfinance-emerging-market-niche (Accessed: 05/02/2015).

98. Karippacheril, T. G., Nikayin, F., de Reuver, M., & Bouwman, H., (2013). “Serving the poor: Multisided mobile service platforms, openness, competition, collaboration and the struggle for leadership”, *Telecommunications Policy*, 37, pp. 24-34.

99. KFH Research (2012). “Global Islamic Assets & Wealth Management 2013”, *KFH Research* Ltd, 23 November 2012. http://www.kfhresearch.com/product/global-islamic-assets-wealth-management-2013 (Accessed: 04/02/2015).

100. Kliner, M., Knight, A., Mamvura, C., Wright, J., & Walley, J., (2013). “Using no-cost mobile phone reminders to improve attendance for HIV test results: a pilot study in rural Swaziland”, *Infectious Diseases of poverty*, 2(12), pp. 1-7.

101. Koning, A., (2013, December). “Banking on Including Women in Nigeria”, CGAP, Advancing financial inclusion to improve the lives of the poor http://www.cgap.org/blog/series/how-make-financial-inclusion-work-women (Accessed: 03/02/2015).

102. Kose, M. A., Prasad, E. S., & Taylor, A. D., (2011). “Threshold in the process of international financial integration”, *Journal of International Money and Finance* 30(1), pp.147-179.

103. Kose, M. A., Prasad, E. S., and Rogoff, K., Wei, S. J., (2006). “Financial globalization: a reappraisal”, *IMF Staff Papers* 56(1), pp. 8-62.

104. Koubâa, H. F., (2014). “Start-Up Informal Finance and Formal Microfinance: The Role of Human Capital”, *Strategic Change*, 23(7-8), pp. 415-423.

105. Kuznets, S. (1955). “Economic Growth and Income Inequality”. *American Economic Review* , 45, pp. 1–28.

106. Kuznets, S., (1971). *Economic Growth of Nations: Total Output and Production Structure*. Belknap Press/Harvard University Press: Cambridge (Mass).

107. Lewis, A., (1955). *Theory of Economic Growth*. Milton Park: Routledge.

108. Li, D., Guang-he, R., & Jie, L., (2011). “The Problem of Coordinating Urban-rural Development in Chongqing City and Corresponding Measures of Financial Development”, *Asian Agricultural Research*, 3(2), 109-115.

109. Liébana-Cabanillas, F., Sánchez-Fernández, J., & Munoz-Leiva, F., (2014). "The moderating effect of experience in the adoption of mobilepayment tools in Virtual Social Networks: The m-Payment AcceptanceModel in Virtual Social Networks (MPAM-VSN)", *International Journal of Information Management*, 34 (2014), pp. 151-166.

110. Lustig, N., (2011). "The Knowledge Bank and Poverty Reduction", *Working Papers 209*, ECINEQ, Society for the Study of Economic Inequality. Marglin, S. A. (2013).

111. Macht, S. A., (2014, p.439). "Reaping Value-Added Benefits from Crowdfunders: What Can We Learn from Relationship Marketing?", *Strategic Change*, 23(7-8), pp. 439-460.

112. Maurer, B., (2008, May). "Retail electronic payments systems for value transfers in the developing world", Department of Anthropology, University of California.

113. Mensah, S. N., & Benedict, E., (2010). "Entrepreneurship training and poverty alleviation: Empowering the poor in the Eastern Free State of South Africa", *African Journal of Economic and Management Studies*, 1(2), pp. 138-163.

114. Milanovic (2011) "More or Less ?" Finance & Development, 48(3), September 2011. http://www.imf.org/external/pubs/ft/fandd/2011/09/Milanovic.htm (Accessed: 04/02/2015).

115. Miller, D. C., (2014). "Explaining Global Patterns of International Aid of Linked Biodiversity Conservation and Development", *World Development*, 59, pp. 341-359.

116. Mishra, V., & Bisht, S. S., (2013). "Mobile banking in a developing economy: A customer-centric model for policy formulation", *Telecommunications Policy*, 37, pp. 503-514.

117. Mlachila, M., Tapsoba, R., & Tapsoba, S. J. A., (2014). "A Quality of Growth Index for Developing Countries: A Proposal", *IMF Working Paper* No. 14/172.

118. Mohieldin, M., Z. Iqbal, A, Rostom, and X. Fu (2012) "The Role of Islamic Finance in Enhancing Financial Inclusion in Organization of Islamic Cooperation (OIC) Countries", *Islamic Economic Studies*, 20(2), pp. 55-119.

119. Monika, A., & Bobbin, T., (2012). "The Billion Dollar Solution that Isnt: How systems modeling in foreign aid could save billions and serve the poor", *Development*, 55(1), pp. 71-80.

120. Moreno, J. P., & Chan, A., (2014). "Aging societies mean new era of banking", *ChinaDaily*, http://europe.chinadaily.com.cn/epaper/2014-12/19/content_19124583.htm (Accessed: 11/02/2015).

121. Mori, N., Golesorkhi, S., Randoy, T., & Hermes, N., (2015). "Board Composition and Outreach Performance of Microfinance Institutions: Evidence from East Africa", *Strategic Change*, 24(1), pp. 99-113.

122. Motelle, S., & Biekpe, N., (2015). "Financial Integration And Stability In The Southern African Development Community", *Journal of Economics and Business,* 79 (May-June), pp. 100-117.

123. Mpogole, H., Usanga, H., & Tedre, M., (2008). "Mobile phones and poverty alleviation: a survey study in rural Tanzania", *Proceedings of M4D 2008, Karlstad University, Sweden*, pp. 62-72.

124. Muto, M., & Yamano, T., (2009). "The Impact of Mobile Phone Coverage Expansion on Market Participation: Panel Data Evidence from Uganda", *World Development*, 37(12), pp. 1887-1896.

125. Nabi, M. S., (2013), "Role of Islamic Finance in Promoting Inclusive Economic Development", Global Sustainable Finance Conference 2013, Germany (4th to 5th July 2013), http://www.wfdfi.net/wp-content/uploads/2013/09/6-Mahmud_Nabi.pdf (Accessed: 04/02/2015).

126. Nasri, W., & Charfeddine, L., (2012). "Factors affecting the adoption of Internet banking in Tunisia: An integration theory of acceptance model and theory of planned behaviour", *Journal of High Technology Management Research*, 23, pp. 1-14.

127. Obstfeld, M., & Taylor, A. M., (2005). "Global Capital Markets Integration, Crisis and Growth", Cambridge University, New York.

128. OECD (2006). "Investment Priorities for Rural Development", The Hub, Edinburgh, Scotland, October 19-20, 2006. http://www.oecd.org/gov/regional-policy/Investment%20priorities.pdf (Accessed: 31/01/2015).

129. Ojo, A., Janowski, T., & Awotwi, J., (2012). "Enabling development through governance and mobile technology", *Government Information Quarterly*, 30 (2013), pp. S32-S45

130. Ondiege, P., (2013). "Fostering financial inclusion with mobile banking", *African Development Bank.* http://www.proparco.fr/webdav/site/proparco/shared/PORTAILS/Secteur_prive_developpement/PDF/SPD16/SPD16_Peter_Ondiege_UK.pdf (Accessed: 03/02/2015).

131. Ondiege, P., (2010). "Mobile Banking in Africa: Taking the Bank to the People", *Africa Economic Brief*, 1(8), pp. 1-16.

132. Oseifuah, E. K., (2010). "Financial literacy and youth entrepreurship in South Africa", *African Journal of Economic and Management Studies*, 1(2), pp. 164-182.

133. Oxfam (2015). "Richest 1% will own more than all the rest by 2016", *Oxfam International*, http://www.oxfam.org/en/pressroom/pressreleases/2015-01-19/richest-1-will-own-more-all-rest-2016 (Accessed: 04/02/2015).

134. Ozgur, K., Ilker, K., & Lewell, G., (2013). “Foreign Aid and the Quest for Poverty Reduction: Is Aid to Agriculture Effective?”, *Journal of Agricultural Economics*, 64(3), pp. 583-596.

135. Perez, F., Gonzalez, C. J., & Aaronson, X., (2011). “Village banking development model: FINCA Costa Rica”, *Journal of Business Research*, 64 (2011), pp. 316-324.

136. Piketty, T., (2014). “Capital in the Twenty First Century”, Harvard University Press.

137. Pinkivskiy, M., & Sala-i-Martin, X., (2014). “Africa is on time”, *Journal of Economic Growth*, 19(3), pp. 311-333.

138. Porteous, D., (2007). “Just how transformational is m-banking?”, *FinMark Trust*, http://www.microfinancegateway.org/sites/default/files/mfg-en-paper-just-how-transformational-is-m-banking-feb-2007.pdf (Accessed: 31/01/2015).

139. Porter, D., (2014). “MOOC on M4D”, Commonwealth of Learning, http://dspace.col.org/bitstream/123456789/519/1/M4DMOOC_Porter.pdf (Accessed: 08/02/2015).

140. Porter, G., (2012). “Mobile Phones, Livelihoods and the Poor in Sub-Saharan Africa: Review and Prospect”, *Geography Compass*, 6(5), pp. 241-259.

141. Prasad, E. S., and Rajan, R. G., (2008. “A pragmatic approach to capital account liberalization”, *Journal of Economic Perspectives*, 22(3), pp. 149-172.

142. Prasad, E. S., and Wei. S. J., (2007). “China’s Approach to Capital Inflows: Patterns and Possible Explanations”. In S. Edwards ed., *Capital Controls and Capital Flows in Emerging Economies: Policies, Practices, and Consequences.* Chicago: University of Chicago Press.

143. Qiang, C. Z., Kuek, S. C., Dymond, A., & Esselaar, S., (2011). “Mobile Applications for Agricultural and Rural Development”, ICT Sector Unit, World Bank http://siteresources.worldbank.org/INFORMATIONANDCOMMUNICATIONANDTECHNOLOGIES/Resources/MobileApplications_for_ARD.pdf (Accessed: 02/02/2015).

144. Ravallion, M., (1997). “Can High Inequality Developing Countries Escape Absolute Poverty”, *Economics Letters*, 56(1), pp. 51-57.

145. Ravallion, M., & Chen, S., (2003). “Measuring Pro-Poor Growth,” *Economics Letters*,78, pp. 93-99.

146. Rodrik, D., (1998). “Who Needs Capital-Account Convertibility?” Essays in International Finance, No. 207 (Princeton, New Jersey: Princeton University).

147. Rodrik, D., & Subramanian, A., (2009) “Why did financial globalization disappoint?” *IMF Staff Papers*, 56(1), pp. 112-138.

148. Royal, C., & Windsor, G. S. S., (2014). “Microfinance, Crowdfunding, and Sustainability: A Case Study of Telecenters in a South Asian Developing Country”, *Strategic Change*, 23(7-8), pp. 425-438.

149. Sehrawat, M., & Giri, A. K., (2015). “Financial development, poverty and rural-urban income inequality: evidence from South Asian countries”, *Quality and Quantity*, http://link.springer.com/article/10.1007/s11135-015-0164-6

150. Sharma, P. P., (2014). “Microfinance: The Catalyst of GNH Index”, *Parikalpana - KIIT Journal of Management*, 10(2), pp. 73-86.

151. Sinha, G., (2015). “You have free access to this content Innovations in Microfinance: Examining New Product Development Process in Indian MFIs”, *Strategic Change*, 24(1), pp. 15-32.

152. Singh, A. B., (2012). “Mobile banking based money order for India Post: Feasible model and assessing demand potential”, *Procedia - Social and Behavioral Sciences*, 37, pp. 466-481.

153. Singh, P., (2014, September). “Austerity, Welfare State and Eco-Socialism: With Special reference to the United Kingdom”, *Economic and Political Weekly*, XLIX(39), pp. 111-118.

154. Smith, S. C., (2002). “Village Banking and Maternal and Child Health: Evidence from Ecuador and Honduras”, *World Development*, 30(4), pp. 707-723.

155. Stiglitz, J., (2000). “Capital Market Liberalization, Economic Growth and Instability”, *World Development*, 28(6), pp. 1075-1086.

156. Summers, L. H., (2000). “International Financial Crises: Causes, Prevention and Cures”, *American Economic Review*, 90(2), pp. 1-16.

157. Swamy, V., (2010). “Financial Development and Inclusive Growth: Impact of Government Intervention in Prioritised Credit”, *Zagreb International Review of Economics & Business*, 13(2) pp. 55-72.

158. Tchamyou, S. V., (2014). “The role of Knowledge Economy in African Business”, HECManagement School, University of Liege.

159. Thorbecke, E., (2013). “The Interrelationship Linking Growth, Inequality and Poverty in Sub-Saharan Africa”, *Journal of African Economies*, 33, Suppl_1, pp. 15-48.

160. Timmons, R. J., Bradleyc, P., Tierney, M., & Hicks, R., (2009). “Has Foreign Aid Been Greened?”, *Environment: Science and Policy for Sustainable Development*, 51(1), pp. 8-21.

161. Tiwari, A. K., Shahbaz, M., & Islam, F., (2013) "Does financial development increase rural-urban income inequality?: Cointegration analysis in the case of Indian economy", *International Journal of Social Economics*, 40(2), pp.151-168.

162. Trucano, M., (2013). “MOOCs in Africa”, Working for a World Free of Poverty, the World Bank, http://blogs.worldbank.org/edutech/moocs-in-africa (Accessed: 08/02/2015).

163. Uchenna, E., Osabuohien, S. E., & Oluwatobi, S., (2014). “One Dollar, One Bank Account: Remittance and Bank Breadth in Nigeria”, *Journal of International Migration and Integration*, http://link.springer.com/article/10.1007%2Fs12134-014-0358-0

164. United Nations (2013). “A New Global Partnership: Eradicate Poverty and Transform Economies Through Sustainable Development”, The Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda. http://www.un.org/sg/management/pdf/HLP_P2015_Report.pdf (Accessed: 24/10/2014).

165. Van Hulten, A., (2012). “Women access to SME finance in Australia”, *International Journal of Gender and Entrepreneurship*, 4(3), pp. 266-288.

166. Walsh, A., (2014). “SEEK!: creating and crowdfunding a game-based open educational resource to improve information literacy”, *Insights: the UKSG journal*, 27(1), pp. 63-67.

167. Warren, M., (2007). “The digital vicious cycle: links between social disadvantage and digital exclusion in rural areas”. *Telecommunications Policy*, 31(6-7), pp. 374-388.

168. Weichselbaumer, D., & Winter-Ebmer, R., (2005). “A Meta-Analysis of the International Gender Wage Gap”, *Journal of Economic Surveys*, 19(3), pp. 479-511.

169. World Bank (2013). “Crowdfunding Potential for the Developing World”, infoDev, Finance and Private Sector Development Department. Washington, DC: World Bank.

170. World Bank (2014). “Financial development and inclusive growth: attaining shared and sustainable prosperity in Egypt”, *Main Report*, Volume 2, No. 91880, pp. 1-246.

171. World Hunger (2010). “the major barrier to people's welfare and development,” Hunger Notes, http://worldhunger.org/harmfuleconomicsystems.htm (Accessed: 04/02/2015).

172. Xuelong, W., (2012). “Financial development and rural-urban inequality: Evidence from China”, *Economics Bulletin*, 2012, 32(2), pp.1625-1639.

173. Young, A., (2012). “The African growth miracle”, *Journal of Political Economy*, 120 (4), pp. 696-739.

174. Zhang, X., (2010). “Income disparity and digital divide: The Internet Consumption Model and cross-country empirical research”, *Telecommunications Policy*, 37, pp. 515-529.