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CROWDFUNDING IN AFRICA:
AN EMPIRICAL STUDY OF KIVA PLATFORM USERS IN SUB-SAHARAN AFRICA

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Abstract

Over the past decade, researchers have paid attention to crowdfunding as a promising way to foster entrepreneurship and innovation. In this paper, we set out the state of the crowdfunding phenomenon in Africa, with a particular focus on sub-Saharan Africa. We review and summarize all the operating platforms in Africa. The study reveals that, while around 40 platforms are active, non-African-based platforms are able to collect more funds for projects in Africa.

We use the crowdfunding platform Kiva.org as our empirical setting. Kiva is the most important loan-based crowdfunding platform in sub-Saharan Africa in terms of the number of projects funded. More and more entrepreneurial ventures are using the power of the crowd to get financed. We look at the characteristics of the entrepreneurs as well as the types of ventures that are publicized the most on the Kiva platform. This study draws on the existing literature on entrepreneurship and is a contribution to the field of crowdfunding.

JEL Classification: M0

Keywords: Crowdfunding; Africa; Entrepreneurship; Peer-to-peer lending; Sociodemographics; Venture; Kiva.

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1. Introduction

Over the past decade, the crowdfunding phenomenon has received a great deal of attention from researchers, who have looked at many facets of this nascent field (Bajde, 2013; Burtch et al., 2015; Ordanini et al., 2011).

Crowdfunding has been defined by Agrawal et al. (2011) as a model enabling "users to make investments in various types of projects and ventures, often in small amounts, outside of a regulated exchange, using online social media platforms that facilitate direct interaction between investors as well as with the individual(s) raising funds." Thus, crowdfunding enables international microlenders to support projects and ventures by giving small loans to millions of borrowers (Bruton et al., 2011).

The crowdfunding model is therefore an Internet-based platform that uses the crowd as investors for personal, cultural or economic projects. Over the years, crowdfunding platforms have adopted different models of compensation for the contributions people put in, ranging from rewards and donations to equity:

- **Loan-based crowdfunding models**, also termed peer-to-peer lending, offer reimbursements for the contributions the crowd make. For every dollar invested on the platforms using a loan-based model, the investors are to be reimbursed at a certain interest rate by the borrower once the project has been carried out. There is still the risk of not being reimbursed, as the platforms do not guarantee the success of any venture that an investor might support (Lin et al., 2013).
- **Reward-based crowdfunding platforms** allow would-be borrowers to secure funds by offering, as compensation to the investors, some rewards other than money and shares. Rewards can be tangible, like a CD of a group needing funds to record his first album or a T-shirt signed by the singer; or intangible, like the name of the donor appearing in the credits of a videoclip in form of recognition (Agrawal et al., 2011). Along with the loan-based model, reward-based crowdfunding is the fastest-growing model of crowdfunding (Massolution CL, 2015).

- **Equity-based models** imply that the investors are rewarded with shares in the companies in which they invest. Here, the investors give small loans and receive dividends in addition to shares when the projects they financed are successful (Agrawal et al., 2011).
- Finally, **donation-based crowdfunding platforms** allow investors to give their money to charity projects without expecting or receiving anything in return. Donating is one of the oldest forms of crowdfunding known for financing projects in Africa. In fact, crowdfunding in its early stages has been used to ask for donations to charity projects or to finance artists (Agrawal et al., 2011).

In recent years, however, the dynamics of international aid to Africa have changed – instead of metaphorically giving people a fish, international institutions have advocated helping people learn how to fish. Many international institutions have put the emphasis on reducing poverty in the world by helping African populations achieve autonomy (World Bank, 2015). In fact, some have argued that aid by itself is not efficient in eradicating poverty in Africa (Banerjee and Duflo, 2011; Moyo, 2009). Thus, instead of charity, actions have been directed toward increasing the number of financial mechanisms with the final aim of bolstering African entrepreneurship. Crowdfunding has appeared as an innovative mechanism to that end, with loan-based crowdfunding being the most developed model of crowdfunding so far in Africa (World Bank, 2015).

Loan-based crowdfunding, as a new phenomenon, has been investigated in relation to more mature fields such as information systems (Burtch et al., 2014), financial decision-making in marketing (Galak et al., 2011), and economics (Allison et al., 2013; Liu et al., 2015). Moss et al. (2015) have established a relationship between the crowd's power to secure finance and the evolution of the entrepreneurial ventures.

Entrepreneurship has benefited from the emergence of the crowdfunding phenomenon, and many ventures nowadays rely more heavily on the power of the crowd (Allison et al., 2015; Ashta et al., 2015). However, while a lot of research on entrepreneurship has focused on the entrepreneurs' motivation (Belleflamme et al., 2014), few researchers have investigated the characteristics of the entrepreneurs using loan-based crowdfunding platforms, and even fewer in the sub-Saharan African context (George, Corbishley et al., 2016).

Following a recurrent tradition of exploratory studies of new phenomena in entrepreneurship (Mollick, 2014; Rice, 2002; Zahra, 1991), our aim in the present paper is to explore the characteristics of sub-Saharan African crowdfunding users of the online crowdfunding platform Kiva, which is the most important loan-based crowdfunding platform targeting African projects.

Kiva has been operating since 2005. From the beginning, its emphasis has been on helping entrepreneurs from developing countries raise funds for their projects (Agrawal et al., 2011). Since its creation, more than 60% of the loans have gone to Asian and African countries (Moleskis and Canela, 2016). Kiva has been very successful in directing thousands of lenders from all over the world toward projects created by people in sub-Saharan Africa. It is one of the most active platforms in terms of funds collected and, therefore, a good place to investigate in order to understand the characteristics of sub-Saharan African entrepreneurs. Through an analysis of Kiva's Africa database, we describe the characteristics of African entrepreneurs using loan-based crowdfunding and the nature of the ventures they present for funding.

This descriptive paper looks at the projects funded by Kiva in sub-Saharan Africa, considering the characteristics of the sub-Saharan African entrepreneurs using crowdfunding, whether as the sole way of funding their projects or to complement other financial tools for funding. In the first part of the paper, we briefly set out the theoretical background of the crowdfunding phenomenon in Africa, looking at the existing conditions and the contextual constraints on crowdfunding's development as well as the regional differences in the sub-Saharan African context that make it an interesting field of study. The second part is dedicated to understanding the Kiva platform and how it functions. The last two parts of the paper set out the data and the results of our analysis, showing the entrepreneurial activities funded by Kiva lenders in sub-Saharan Africa in general, and sorting through particular differences in the characteristics of entrepreneurship projects by regional bloc. Our analysis suggests that there are differences in the use of crowdfunding platforms across the continent and that these differences could be investigated further to gain a better understanding.

2. Theoretical Framework

In this section, we describe the foundations of entrepreneurial ventures that use peer-to-peer lending, by drawing from the literature on crowdfunding (Agrawal et al., 2015). The relationship we establish between crowdfunding – as a reconfiguration tool of the entrepreneurs in Africa – and entrepreneurship in the sub-Saharan African context is innovative, as studies up to now have looked at more structural aspects of entrepreneurship, such as its boundaries and institutional foundations, and the motivation of entrepreneurs (Aldrich and Cliff, 2003; Allison et al., 2013). Adding to the aforementioned fields, our study takes into account the ethnic, colonial and economic differences in sub-Saharan Africa, the context of our study.

2.1 Crowdfunding in Africa

In recent years, researchers have studied the crowdfunding phenomenon as an innovative way of providing resources for artists and entrepreneurs (Agrawal et al., 2011; Burtch et al., 2015). Among the requirements for entrepreneurial success is the existence of resources: human, procurement, marketing, and financial resources (Porter, 1991). While there is no hierarchy of resources to determine which one is most important, it is clear that they are all necessary ingredients for success. For any entrepreneur, gathering the initial resources is an exceptional and difficult experience (Brush et al., 2001). African countries, moreover, are characterized by a scarcity of resources (Rivera-Santos et al., 2015), all of which make entrepreneurship in Africa as a whole – and sub-Saharan Africa in particular – challenging.

More specifically, African entrepreneurs are faced with serious issues related to financial resources. There is an evident lack of economic means to foster credit for micro-, small and medium-sized enterprises (George, Kotha et al., 2016): formal financial institutions such as banks and funds (agricultural funds, commercial and development banks, etc.) still have a low penetration rate in many larger African economies (KPMG, 2015). In addition, the scant number of these institutions coupled with their risk aversion have triggered monopolistic behavior with high interest rates. Moreover, the guarantees asked of would-be borrowers are often above the actual means of those interested in entrepreneurial ventures, creating a "wide gap in lending". When attempts are made to fill this gap, informal financial solutions – such as those provided by microcredit agencies and community institutions (generally small loans given by the church or the village community) – provide loans in rural areas (George, Kotha et al., 2016). However, such informal resources have, so far, failed to provide an efficient solution to the gap in lending as their actions are limited in scope.

Bruton et al. (2015) have argued that new financial alternatives for funding entrepreneurial ventures can be adapted to many different contexts. They give as examples, microfinance, peer-to-peer lending and the crowdfunding phenomenon.

Microfinance began as a system where entrepreneurs were allowed to take out small loans without any guarantee (Galak et al., 2011) but it has evolved quickly to become a formal financing tool in African markets, with regulations and institutional support (Bruton et al., 2015; Khavul, 2010).

Peer-to-peer lending has also adapted to the dynamic environment where it has gone from physical one-to-one lending to become more generalized through the Internet (Duarte et al., 2012). Nowadays peer-to-peer lending through the Internet has taken the form of crowdfunding, providing thousands of African entrepreneurs with the opportunity to access an alternative means of financing through social media and Web platforms.

African entrepreneurs are now using crowdfunding, individually or in combination with microfinance and peer-to-peer innovations, in order to finance the opportunities they have but for which more formal financing is not accessible (Bruton et al., 2015). Crowdfunding is spreading rapidly across Africa, though at differing speeds for each compensation model – loan, equity, reward, and donation (World Bank, 2015).

2.1.1 The State of Crowdfunding in Africa

Crowdfunding platforms such as Kiva have increased the availability of capital for microenterprises (Moss et al., 2015). As a solution to financing needy entrepreneurs, charities and community projects, it had evolved into a $34.44 billion market in 2015 (Massolution CL, 2015). In this growing market, the developing world accounted for $317 million, less than 1% of the total market (World Bank, 2015). Africa represented $24.16 million, which is less than 0.1% of the total share (Massolution CL, 2015).

While it is true that the African continent is still lagging behind in this general trend toward crowdfunding (representing 0.06% of the global market and 7.6% of emerging markets), there is a rising awareness among entrepreneurs of the advantages of using crowdfunding along with other financing means.

In fact, it has been estimated in a report by the International Finance Corporation and McKinsey (Stein et al., 2010) that African small and medium enterprises need around $140 billion to $160 billion in funds that are not covered by formal institutions such as banks. Crowdfunding has escalated as a new opportunity for entrepreneurs to fill this funding gap. As mentioned by Agrawal et al. (2011), "crowdfunding may help reduce an important market failure."

Therefore, it is not surprising that there is an increasing number of platforms developing on the continent to make crowdfunding more accessible to African investors and entrepreneurs. The distribution of crowdfunding activities in Africa by compensation model is unclear. However, according to the World Bank (2015), 54% of the crowdfunding market in Africa is devoted to loan-based crowdfunding platforms, such as Kiva.org. These platform models are used to finance entrepreneurial ventures that are expected to have an economic impact, create jobs, and/or reduce poverty. Artistic, creative or technological projects are typically launched by entrepreneurs with higher growth potential using other types of crowdfunding platforms such as equity-based or reward-based platforms (Burtch et al., 2015). The fact that more than half of the crowdfunding platforms in Africa are loan-based demonstrates the eagerness and the increased number of African entrepreneurs who want to leverage this new funding opportunity to achieve their goals.

2.1.2 The Platforms in Africa

Although there is still a very limited amount of data about the situation of crowdfunding platforms, it is estimated that one-third of the funding volume received by African projects is raised on platforms based on the continent (more than 50 are said to be active), while the remainder is raised through foreign-based platforms such as Kiva.[1]

South Africa, Kenya and Nigeria are the sub-Saharan African countries with the most crowdfunding platforms. To get a clear picture of the crowdfunding landscape, we have undertaken extensive online research, resulting in Table 1 below, which is a summary of the platforms based in Africa as of September 2016. These platforms are at various stages of start-up and/or early-stage operation.

[1] "Crowdfunding in Africa Is Gaining Momentum" (2016). Appsafrica, September 25, https://www.appsafrica.com/crowdfunding-in-africa-is-gaining-momentum.

Table 1

Crowdfunding platforms based in Africa, in alphabetical order

No.	Crowdfunding platform	Webpage	Country base	Year founded	Amount raised up to Dec. 2015	No. of campaigns	Fees or monetary costs charged to users	Field	Special targets	Type of platform
1	**234GIVE**	No webpage as of June 2016	Nigeria	2013	0	0	NA	NA	NA	Debt
2	**AKABBO**	http://akabbo.ug/	Uganda	2014	$30	35 campaigns, one funded successfully	7% fees	Personal: weddings, health, etc.	Charity-oriented	Donation
3	**BABANDU**	www.onepercentclub.com/en/pp/babandu#	Kenya	2014	About $6,000	Eight projects, of which two fully funded	For local entrepreneurs	Mobile crowdfunding platform	Babandu hosted by the 1%Club site	Debt
4	**BACKABUDDY**	www.backabuddy.co.za	South Africa	2007	About $2 million	1,276 projects successfully funded	5% commission and 3% to 5% bank charges	Medical procedures and studies	Individual and NGO charity projects	Donation
5	**DIFFERENT.ORG**	https://different.org/us	South Africa	2014	About $3,000	15 campaigns, of which one fully funded	No fee. A foundation funds operational charges	Online philanthropy platform	Individuals and NGOs in South Africa only	Donation
6	**FARMABLE**	www.farmable.me	Ghana	2013	$1,585	64 campaigns, nine funded successfully	No fee	Smallholder farmers	Users can design cow images for sale in the shop	Donation
7	**FUNDA SOLVA**	www.fundasolva.com (no longer working)	Nigeria	2014	About $5,000	13 campaigns, one funded successfully	10% of the funded amount	Creative projects	Social enterprises, and small business loans	Hybrid: reward, equity, donation
8	**FUNDFIND**	www.fundfind.co.za	South Africa	2013	About $15,000	189 campaigns, nine funded successfully	5% to 9% fees on funded amount and 6% for processing	Creative projects	Musicians, entrepreneurs, publishers	Reward
9	**GOBIGHUB**	http://gobighub.com	Uganda	2015	About $30,000	More than 10 projects funded	No information available	NA	NA	Debt
10	**MALAIK**	http://www.malaik.com/ (no longer working)	South Africa	2015	About $250,000	One project fully funded	No information available	NA	NA	Equity
11	**M-CHANGA**	http://changa.co.ke/	Kenya	2012	$307,000	2,000 campaigns	Charge fee of 4.25%	Social and personal projects	Mobile-oriented: funding through SMS	Donation
12	**NEXT LEVEL AFRICA**	www.nextlevelafrica.com	South Africa	2014	0	1,280 projects, none fully funded	Annual fee of $15	Personal, start-ups, charity projects	Music, art	Reward

13	**ORANGE COLLECTE**	https://collecte.orange.com/	Côte d'Ivoire	2013	About $11,000	13 projects, with eight fully funded	3% to 4%.	Use of mobile money services	Individuals and groups	Donation
14	**RAINFIN**	https://www.rainfin.com	South Africa	2012	$7 million	20 campaigns, with 18 successful	Fees of 7% to 10%, with 2.85% processing rate. Fixed rates also	Part-owned by Barclays PLC	Peer-to-peer platform	Debt
15	**SHEKRA**	http://shekra.com/en	Egypt	2012	No amount mentioned	Three Arab start-ups get funded		Entrepreneurs	Middle East and North Africa	Equity
16	**SLICEBIZ**	No webpage found as of June 2016	Ghana	2013	NA	NA	NA	Internet-related projects	Individual ventures	Equity
17	**STARTCRUNCH**	www.startcrunch.com	Nigeria	2013	0	Two campaigns, neither successful	7% on funded amount and 3.99% for processing fee	Business, arts, fashion, film	NA	Donation
18	**STARTME**	www.startme.co.za	South Africa	2012	About $12,000	60 campaigns, 10 fully funded	5% fee for bank charges and other fees	Entrepreneurs, artists, charity	NA	Reward
19	**THUNDAFUND**	https://www.thundafund.com	South Africa	2013	$348,785	130 of 200 projects listed	Commission on funded amount of 5% for certified NGOs and 7% for individuals and firms	Entrepreneurs	Artists and moviemakers	Reward
20	**UCN (Uganda Crowdfunding Network)**	http://ucn.crowdfundhq.com	Uganda	2014	Around $30,000	Five campaigns, with one successful	No fee mentioned	Crowdfunding and counseling	Uganda	Equity
21	**USIZO**	http://secret.usizo.org/#/	South Africa	2016	No amount mentioned	NA	NA	Funds for state schools' electricity bills	Schools in South Africa	Donation
22	**VC4AFRICA (VENTURE CAPITAL FOR AFRICA)**	https://vc4a.com	Uganda and Netherlands	2008	Around $27 million	About 3,200 campaigns, with 315 funded	No fee	Entrepreneurs only	Africa	Hybrid of equity and debt
23	**WEALTH MIGRATE**	www.wealthmigrate.com	South Africa	2010	$1.34 billion on five continents	No number mentioned	Returns of around 12% for investors on the platform	Funds to invest in real estate	Works in other countries such as the United Kingdom and the United States	Equity
24	**YOMKEN**	www.yomken.com	Egypt	2012	Around $12,000	1,500 campaigns, with 41 successful	7% fees	Crowdsourcing and funding	Looking for solutions and capital	Debt

Source: Prepared by the authors based on https://zip.Kiva.org/, last accessed February 2017.

Our research revealed that some African-based platforms, such as SliceBiz and 234Give, were said to be functioning but had no existing webpage as of June 30, 2016. These platforms were mentioned on other webpages as operational African platforms, along with other platforms that have been working for many years and have a clear footprint on the Internet through their webpages.

Other platforms – such as StartCrunch, Akabbo, and Funda Solva – had a webpage at that time but with very few activities going on. In fact, in terms of funding activity success (where a 100% funded project is assumed to be successful), for the first two platforms mentioned, it can be seen that StartCrunch registered no successful funding projects and Akabbo only one of less than $50 since their creation. For Funda Solva the only successfully funded project totaled $30,000.

An important feature of crowdfunding in Africa is that it mostly involves non-African-based platforms. These contribute to more than 75% of all the crowdfunding activities. These platforms are mostly in the United States, France and the Arab world (United Arab Emirates and Lebanon). Table 2 sets out the best-known platforms in terms of their presence on the Internet when a search is done for crowdfunding in Africa.

Table 2

International crowdfunding platforms operating in Africa, in alphabetical order

No.	Crowdfunding platform	Webpage	Country base	Year founded	Amount raised up to Dec. 2015	No. of campaigns	Fees or monetary costs charged to users	Field	Special targets	Type of platform
1	**1%CLUB (The Cheetah Fund)**	https://onepercentclub.com/en/projects?category=cheetah	Netherlands	2008	Around $2.8 million raised	More than 1,200 projects carried out	No fee mentioned	The Cheetah Fund is an international crowdfunding campaign launched by the 1%Club for Africa	Social and environmental projects	Donation
2	**ABREC. FINANCEUTILE**	www.abrec.financeutile.com (dead link)	France	2015	More than $10 million invested	No number mentioned	NA	Small and medium enterprises operating in sub-Saharan Africa	Renewable energy sector	Equity
3	**AFLAMNAH**	www.aflamnah.com (no longer working)	United Arab Emirates	2012	About $260,000	90 campaigns, with two in Egypt. 26 successfully funded	$100 nonrefundable upload fee to idea owners for each project upload, plus additional fee of 6% on funded amount	Creative projects	Arab world	Reward
4	**AFRICA UNSIGNED**	https://africaunsigned.bandcamp.com/	Netherlands	2011	No amount mentioned	NA	NA	Attracting music fans to invest and empower unsigned artists	Music and related ventures	Reward
5	**CATAPULT**	http://catapult.org	United States	2012	More than $4 million	More than 400 projects funded	No fee	Platform for gender equality	Girls and women	Donation
6	**CHUFFED**	www.chuffed.org	Australia	2013	More than $10 million	More than 3,000 projects	No fee	Only charity	NGOs and individuals	Donation
7	**EUREECA**	http://eureeca.com	United Arab Emirates	2013	Around $91,000 invested	20 projects, with 16 fully funded	7.25% of the funds raised	Crowd-funding as well as more traditional angel investors and venture capital firms	Presence in 36 countries	Equity
8	**HELLOASSO**	www.helloasso.com	France	2013	Around $30 million collected	Around 21,000 associations	No fee	Platform for groups and associations in France	Donors give tips to platform	Donation

9	**HOMESTRINGS (renamed Movement Capital)**	https://www.homestrings.com/en (no longer working)	United Kingdom	2011	Around $25 million since launch	23 investments proposed	In partnership with USAid	Infra-structure, healthcare, education, ventures	Bonds and funds offered	Equity
10	**INDIEGOGO**	www.indiegogo.com	United States	2008	More than $50 million	More than 400 funded African projects	Fee of 9% for unsuccessful and 5% for successful projects	Creative projects, movies, photography	Artists	Reward
11	**JUMPSTART AFRICA**	www.jumpstartafrica.com/getinvite (no longer working)	United States	2014	No project funded as of June 2016	NA	10% of the funded amount; 3% for processing	Creative and business projects	Individual projects	Reward
12	**KICKSTARTER**	www.kickstarter.com	United States	2009	$1 billion	Of 67,000 funded projects, 300 are African	5% fee for successfully funded projects	Creative projects, movies, photography	Artists	Reward
13	**KIVA**	www.kiva.org	United States	2005	Around $152 million	More than 190,000 loans funded in Africa	No platform fee. Partners may charge fees	Farmers, artisans, students, shopkeepers, builders, etc.	Business more than charity	Debt
14	**LELAPAFUND**	www.lelapafund.com	France	2014	No project funded as of June 2016	NA	8% of the invested fund	African diaspora investors to fund projects in Africa	Consumer goods and technology	Equity
15	**MAWWELL**[2]	No webpage was found as of June 2016	United Kingdom	2013	NA	NA	NA	Music, film, arts, gaming, publishing	Focus on Middle East and North Africa	Reward
16	**POZIBLE**	https://pozible.com	Australia	2010	Some $34 million	More than 10,000 projects	Fees of 3% to 5%	Creative projects for crowd-funding and sourcing	Artists	Reward
17	**ZOOMAAL**	http://www.zoomaal.com	Lebanon	2012	Around $1.5 million	140 projects, with 39 in Africa, mostly Egypt and Tunisia. 112 funded	5% of amount funded and 2.9% processing fees and $0.30 per contribution	Entrepreneurs, arts, community, music, books	Arab world	Reward

Source: Prepared by the authors.

[2] J. D. Alois (2014). "Mawwell Announces Crowdfunding Platform Targeting the EMEA Markets," April 9, http://www.crowdfundinsider.com/2014/04/35585-mawwell-announces-crowdfunding-platform-targeting-emea-markets.

The two previous tables appear to indicate that non-African-based platforms are more successful at financing projects in Africa because, up to now, these platforms have financed more projects in Africa in terms of the number of projects and the amounts funded than the platforms based on the continent.

One reason that could explain this situation is the greater experience of the non-African-based, international platforms. African platforms are relatively young, with more than half of them founded in 2013 or 2014. In addition, international platforms, because of their scope, have a larger set of investors than African platforms. Finally, international platforms evolve in more developed environments and benefit from technological and financial advances that are not yet available to African-based platforms (such as credit card facilities and secure Internet-based payments). The use of mobile services as a way of reaching populations with no bank accounts is proving successful. In many African regions, mobile phones serve to tackle financial inclusion issues, providing access to money transfers, secure payments, low-cost savings options, etc. (GSMA, 2016).

2.1.3 The Constraints on Crowdfunding in Africa

Crowdfunding is a phenomenon that is strongly correlated with the Internet, social media and online payment methods. This makes its rise difficult in circumstances where the Internet and/or social media are underdeveloped or prohibited as crowdfunding platforms are hosted on the Internet and projects are advertised on social media.

> While Internet penetration in Africa remains low (28% compared with 50% worldwide), it is expected to enter the lives of Africans progressively. Africa has 9% of the world's Internet users but almost 16% of the world's population. Also, it has been estimated that Africa still has relatively few users of social media, with around 9% of Facebook users being in Africa. In South Africa, 8.5 million people use the Internet, with six million of them being on Facebook. However, out of Kenya's 12 million Internet users, less than two million use Facebook. The lowest rate of Facebook use is in Nigeria, where there are 48 million Internet users but only two million of them use Facebook (Internet World Stats, 2015; Rice-Oxley and Flood, 2016).

This low level of Internet penetration is an obstacle that has been taken into account by new platforms such as Ghana's M-Changa, which uses SMS via mobile phones to present projects, instead of the usual pitches and videos used on other platforms and in social media.

Another important factor that explains the slow adoption of crowdfunding is the use of international online payment methods such as PayPal and credit cards. Many African entrepreneurs are unable to open a bank account because their lack of a significant regular income excludes them from the official banking system.

Some platforms such as Kiva.org use field partners, which are institutions or NGOs, to tackle this issue by working through these intermediaries. However, this comes with additional costs to the entrepreneurs in many cases.

2.2 Regional Differences in Sub-Saharan Africa

Our study aims to analyze the entrepreneurial landscape in sub-Saharan Africa with the advent of crowdfunding, pointing out the characteristics of those entrepreneurs using crowdfunding as a new financing alternative – solely or in conjunction with other financial mechanisms – to fund their projects. We will analyze sub-Saharan Africa as a whole to be able to compare it with the rest of the world. However, it is important to recognize that there are regional particularities that might further enrich our analyses. In fact, we argue that there are many differences within sub-Saharan Africa in terms of colonial heritage and current economic development. Moreover, we take the view that, even before colonization, there were already important ethnic differences (Rivera-Santos et al., 2015), and nowadays these differences could affect crowdfunding users' profiles in sub-Saharan Africa (Michalopoulos and Papaioannou, 2015).

Sub-Saharan Africa, with a population of 1.01 billion, has more than 3,000 distinct ethnic groups distributed among the 50 countries that constitute this part of the African continent. By the year 1900, seven European powers had colonized the area, leaving different institutions that continue to have an impact on the countries' development (Acemoğlu et al., 2005, 2012; Acemoğlu and Robinson, 2001). These are unique attributes that make African countries different from other emerging economies. Also, according to Michalopoulos and Papaioannou (2015), sub-Saharan Africa is the most complex context in the world because of its ethnic diversity, its plural colonial heritage and the strong differences in the countries' economic development.

2.2.1 Ethnic Diversity

Michalopoulos and Papaioannou (2015) present evidence of the ethnic diversity in many parts of the continent: "Sub-Saharan Africa is by far the most ethnically and linguistically diverse region of the world with African ethnicities characterized by distinct cultural norms and economic traits." This diversity helps explain some of the economic and political differences that exist within African countries and the significant number of social issues faced by these countries. Opportunities born from the incessant social turmoil are met with stinging government failures and a lack of resources, which create a particularly challenging environment for entrepreneurs. Additionally, the low levels of support from formal financial institutions drive entrepreneurs to ask for financial aid from their families and friends, forcing risk sharing within extended families, clans, and tribal groups.

Differences among ethnic groups appear on many levels. At an organizational level, there are differences in governmental style. Centralized and hierarchized structures are preferred by the Songhai (an ethnic group in Mali, northern Côte d'Ivoire/Ivory Coast, Burkina Faso and Niger), and the Ankole and Ganda peoples in East Africa. The Konkomba in Ghana and southeastern Côte d'Ivoire rely on decentralized organizations, with the village chief being responsible for the small community he has in his charge and the tribal authorities meeting only once in a while at ceremonies (Michalopoulos and Papaioannou, 2013).

Centralized ethnic systems allow for a more community-centered society, with the community as a whole becoming involved in ventures led by a community member when it has been decided that the venture will have a significant impact on the community. That is generally the case when a member gets married and needs to buy land for agriculture or when someone has to travel to trade commodities. Some ethnic groups in Kenya, for example, are known for what they call "harambee," which is a pooling of resources by the whole community for one of its members (George, Kotha et al., 2016).

At a juridical level, ethnic groups differ in how they rule. The Ashanti group of Ghana and Côte d'Ivoire, for example, are known to be matriarchal. The property of a dead father goes to the sons of his sister – his nephews – and not to his own sons (Diop, 1987). Other ethnic groups, such as those in Sudan and Somalia, have patriarchal societies.

Ethnic diversity is an important feature of the sub-Saharan African context for understanding the differences between and within countries. In this study, ethnic diversity helps us understand the differences at a country level. It has been suggested that, in Africa more than anywhere else, there is a clear distinction between the power held by the national authorities and the local power of tribal chiefs (Michalopoulos and Papaioannou, 2013). In many sub-Saharan countries, there is evidence that policies endorsed by local chiefs have a greater effect and arouse more interest among the local population than policies enforced by national authorities (Ekeh, 1975). The poor level of participation in hospital health services, for example, has been attributed partly to nonenforcement by local chiefs, and some attribute the lower rate of Africans with a bank account to the same reason. Less than a quarter of the adult population in Africa has an account in a formal financial institution (Triki and Faye, 2013).

The link between ethnic diversity, economic development and financial innovation has been investigated to explain the poor performance of many sub-Saharan African countries. Alesina and Ferrara (2005), for example, argue that ethnic diversity negatively affects economic growth. When a country is ethnically very diverse, there are more obstacles to it reaching a consensus when adopting policies in general and, in particular, those related to creating an environment of trust, financial alternatives and business ease (Collier, 1998; Easterly, 2001). We therefore expect countries that are more ethnically diverse to have fewer policies to facilitate economic growth and accordingly to have fewer projects that need funding of any sort, as the population in this context does not feel encouraged to create ventures. Such countries with greater ethnic diversity are, as a result, less developed, with slower economic growth and consequently a lower number of project initiators (and so of borrowers of loans) compared with less ethnically diverse countries. Hence, we argue that there is a negative relationship between ethnic diversity and the number of borrowers attracted to loan-based crowdfunding.

2.2.2 Colonial Heritage

The history and evolution of political powers in sub-Saharan Africa add to its complexity. Its historicopolitical context is more complex than that of many other emerging economies (Michalopoulos and Papaioannou, 2015). Africa was colonized between 1880 and 1960 by seven European countries – namely, Portugal, Spain, Great Britain, France, Belgium, Germany and Italy. While it is unclear whether colonization has been a nightmare (with no further repercussion on countries' current situations) or a necessary shock in the history of humanity (with long-lasting effects), there is enough evidence to show that colonization had an impact on the structures that existed in the colonies at the time. Whether these structures continue to influence the economic and political development of these former colonies is a debate that remains unaddressed in this paper.

Looking at the experiences of Western countries with the rest of the world, and the subsequent successes of some East Asian countries, the mixed results in Latin America and the extreme poverty in almost all African countries, Landes (1998) concluded that "colonization in itself [...] does not dictate failure." For Landes, colonialism delayed and reduced opportunities for development while introducing foreign economic and political structures that were incompatible with the existing social norms and cultures.

Taking a step further in the argument about the impact of colonization, Acemoğlu et al. (2001, 2005) argue that European colonizers used a different set of institutions in the colonies depending on whether they planned to stay or not. These authors found that, during colonization, Europeans adopted very different institutional policies with long-lasting effects on the income levels of the colonialized countries. The study by Acemoğlu et al. (2001) shows that European colonizers settled in countries where the mortality risk was lower for them. In these countries, they put in place institutions that guaranteed property rights and controls against government expropriation. So-called extractive institutions, on the other hand, were put in countries with higher mortality risks for Europeans. These institutions were characterized by a very low level of property protection and a high focus on exploitation and repatriation of the goods with the lowest level of investment from the colonizers. In their paper, Acemoğlu et al. (2001) gave the colonization of Australia, New Zealand and the United States as examples where the colonizers put strong institutions in place, while Belgium's colonization of the Congo (and the colonization of other African countries, the paper suggests) was done using extractive institutions.

The nature of the institutions (strong or extractive) favored during colonization affected the economic and political development of the colonized countries and had long-lasting effects on the state of the institutions in the former colonies up to today (Young, 1994).

The colonial state persisted after independence. Countries where institutions protected property rights and provided checks against government abuses – such as Australia, the United States and Canada – are now countries with high income levels. These countries, with institutions protecting property rights and with less distortionary policies, tend to invest in infrastructure and human capital, which in turn leads to higher income levels (Acemoğlu and Robinson, 2001; Young, 1994).

It thus appears that differences in colonial experience have led to differences in institutions and these, according to institutional strategy theories, are the major determinants of current income per capita, with little or no effect from the geography, culture or size of the European population in these countries. According to Hayek (1960), British-led institutions were more efficient than their French counterparts in terms of property right protection and financial mechanisms during the colonization period. An empirical study by La Porta et al. (1999) has shown that poor countries that are near the equator and are ethnolinguistically heterogeneous tend to use French laws.

As we have made evident, many of the current institutions and governing structures were inherited from the colonizers, which suggests that the use of official languages, laws and economic models come from the same heritage of colonization. Ex-British colonies such as Kenya, Ghana, Nigeria and South Africa have English as an official language and maintain strong relationships – including important commercial and political relations – with Britain.

Former French colonies such as Mali, Burkina Faso and Côte d'Ivoire have strong political and trade relations with the French government and a lot of their laws and education systems have their origins in the French colonial heritage (AfDB, OECD and UNDP, 2015; World Bank, 2015).

As the crowdfunding phenomenon has found a strong anchor in English-speaking countries in the developed world (Mollick, 2014), we expect English-speaking countries in sub-Saharan Africa to draw more heavily on crowdfunding as a new financial alternative than their French-speaking counterparts.

2.2.3 Economic Development

There are huge economic disparities among sub-Saharan African countries, with more than 30 of the 50 states constituting this area being ranked among the poorest in the world (World Bank, 2015). The sub-Saharan African economies are split into two groups: the resource exporters such as Nigeria, Gabon and Angola, which rely mostly on trading natural resources such as oil, diamonds, and gold, and the nonresource exporters such as Côte d'Ivoire, Ethiopia, Kenya and Senegal, which depend on agriculture and industry. However, the largest economies in sub-

Saharan Africa (Nigeria, South Africa, and Angola) are to be found among the resource exporters (International Monetary Fund, 2016).

In addition, infrastructure across the region is at different stages of development. In fact, according to Beck and Cull (2014, p. 2), "there are enormous differences across the region, ranging from well-developed financial systems in middle-income countries, such as Mauritius and South Africa, to shallow banking systems offering only the most rudimentary financial services in impoverished countries like Central African Republic and South Sudan." Poor infrastructure makes it difficult to create and grow business opportunities, with it being easier in some countries than in others (World Bank, 2016). Countries such as Angola, the Democratic Republic of the Congo and South Sudan are known to be particularly challenging contexts for creating enterprises, because of their weak infrastructure, high level of informality and consequently corruption. We therefore expect less poor countries in sub-Saharan Africa to have more crowdfunding users than very poor ones.

As we have shown above, some of the differences among countries in sub-Saharan Africa have been accentuated by colonization, while other dissimilarities have appeared after independence. We therefore suggest that an analysis of the entrepreneurs acting on the Kiva platform, according to their regional blocs in sub-Saharan Africa, could shed some lights on the characteristics of those entrepreneurs and on the contextual dimension of the crowdfunding phenomenon in sub-Saharan Africa.

As mentioned previously, sub-Saharan Africa's characteristics can be appreciated in terms of ethnic diversity, colonial heritage and economic development, all of which are important features that provide additional and specific information about the environment and profiles of would-be borrowers on the Kiva platform. An analysis of ethnic diversity might shed light on the types of loans preferred by would-be borrowers. We expect those would-be borrowers living in an environment where there is a strong sense of community to prefer group loans but others from more decentralized societies to prefer individual loans. Looking at would-be borrowers from a colonial perspective, we would expect those from English-speaking countries to have more loan requests.

Finally, from an economic perspective, richer countries will tend to have business-friendlier environments than poorer ones, and we expect this to be translated into more loans on the Kiva crowdfunding platform.

3. Kiva.Org

Kiva Microfunds (commonly called Kiva.org) is a nonprofit, microfinance company founded by Matt Flannery, Jessica Jackley and Premal Shah in October 2005, and based in San Francisco, California. The choice of Kiva.org as the field of our analyses is based on the consideration that it is the biggest platform in Africa in terms of the number of loans: it has addressed hundreds of thousands of requests from Africans since its creation. Also, Kiva is the world's largest online loan-based platform, having funded more than one million loans since its inception, representing a total of more than $700 million[3]. Moreover, Kiva provides a good example of allowing

[3] Natasha Lomas (2013). "Kiva's Crowdfunded Loans Platform Chalks Up 1M Borrowers & $400M Lent, After Seven Years of Micro-Lending to Alleviate Poverty," TechCrunch, March 18, http://techcrunch.com/2013/03/18/Kiva-passes-one-million-borrowers/.

multicultural, peer-to-peer lending on a very wide scale with people from more than 190 countries intervening on the platform (Burtch et al., 2014).

In sub-Saharan Africa in particular, from January 2005 to March 2015, there were 196,057 loan requests from African entrepreneurs on the Kiva platform. This represented 27.78% of all the requests received by Kiva since its launch. Kiva has been financing projects in Africa for a total amount of $152,740,150 from entrepreneurs from 29 African countries (Moleskis and Canela, 2016).

The idea of Kiva, as explained by its founders, had its inspiration in a lecture given by the Nobel Peace Prize winner Muhammad Yunus in 2003 at Stanford University, California. After the lecture and taking into account their first-hand observations of entrepreneurs in Africa and the extreme poverty there, the founders decided to create Kiva, an Internet platform for crowdfunding entrepreneurial and social projects.

As its slogan says, Kiva aims to facilitate "loans that change lives." The organization's mission is "to connect people through lending to reduce poverty." As a business model, Kiva acts as a platform for people all around the world – those who are willing to lend and those who need to borrow. Kiva itself does not charge any commission on the transactions. For its management costs, Kiva relies on donations and support from foundations and other organizations. As such Kiva is considered a social venture.

Mair et al. (2012) define social ventures based on the types of capital that the ventures leverage: social, economic, human, and political. As such, these authors define social entrepreneurial ventures as involving "the provision of goods or services" but that provision "is not an end in itself, but an integral part of an intervention to achieve social objectives, thereby contributing to social change."

3.1 The Process on Kiva.Org

What happens when an entrepreneur needs money to finance his or her project and decides to use crowdfunding as a solution to fund the venture? As of June 2016, the process followed by an individual to fund a project can be summarized as direct or partner-related, according to whether the borrower is based in the United States or somewhere else.

3.1.1 Loan Request From U.S.-Based Would-Be Borrower: Direct Loan

U.S.-based borrowers can request a loan by going directly to the Kiva webpage. This direct way is a model available only in the United States. In this procedure, the applicant for a Kiva loan has to apply by accessing Kiva's website and registering as a would-be borrower, filling in the details of the proposed project, the amount needed and the reimbursement scheme.

The next step is validation or approval by a trustee, whereby the would-be borrower has to invite friends or family members onto the Kiva platform to vouch for him or her by lending a portion of the loan. Also, Kiva's approved trustees – who are individuals or organizations who have lent at least once on Kiva and are registered as trustees – can vouch for the borrower without knowing him or her personally. Once the loan has been endorsed by at least one trustee, the Kiva team reviews the request and publishes it on Kiva's webpage so that the funding can begin. Lenders will then be able to see and donate to the project.

When loans are fully funded, the amounts are transferred directly to the borrower's account. According to the reimbursement scheme chosen and the borrower's financial ability, the loan is repaid to the lenders' Kiva accounts without any interest.

3.1.2 Loan Request From Non-U.S.-Based Would-Be Borrower: Partner Related

As mentioned above, would-be borrowers in the United States can post loan requests directly on Kiva platforms. Another option available to would-be borrowers in the United States is to request loans through partners (also called field partners). However, outside the United States, loans can be requested only by going through field partners.

A field partner is a nongovernmental organization or a microcredit institution associated with Kiva that performs the task of collecting and processing loan requests. A would-be borrower is therefore required to contact the field partner closest to his or her own location. The partner will be in charge of reviewing the project and posting it on Kiva's platform for funding.

Once the partner is satisfied with the details of the loan, he or she makes it visible for crowdfunding by posting it on the website. The funded amount is transferred to the account of the partner, who is then responsible for making it available to the borrower. Repayments are collected by the partner, to be transferred to the lenders' Kiva accounts.

Lenders on the Kiva platform lend at a 0% interest rate. However, a field partner may charge the borrower interest.

3.1.3 The Differences Between the Direct and Partner-Related Models

Kiva charges borrowers no interest, regardless of the model used (direct or partner-related). There is therefore a lending risk, which Kiva tries to reduce by using trustees or partners. A trustee can be a friend or family member who registers as a Kiva lender and vouches for the would-be borrower. Individuals or institutions are also able to register with Kiva as trustees, which means they are willing to endorse loan requests. Trustees have no responsibility for the loans. However, their reputation is linked to the repayment rate of the would-be borrowers they choose to endorse.

Unlike trustees who have no contact with any money lent, field partners have to handle loans, playing the role of intermediaries between Kiva lenders and borrowers. They receive the funded amounts in their accounts, and have to manage the repayment rate of the borrowers they represent by collecting the reimbursements and transferring them to Kiva lenders.

3.1.4 The Kenyan Experiment of Kiva Zip

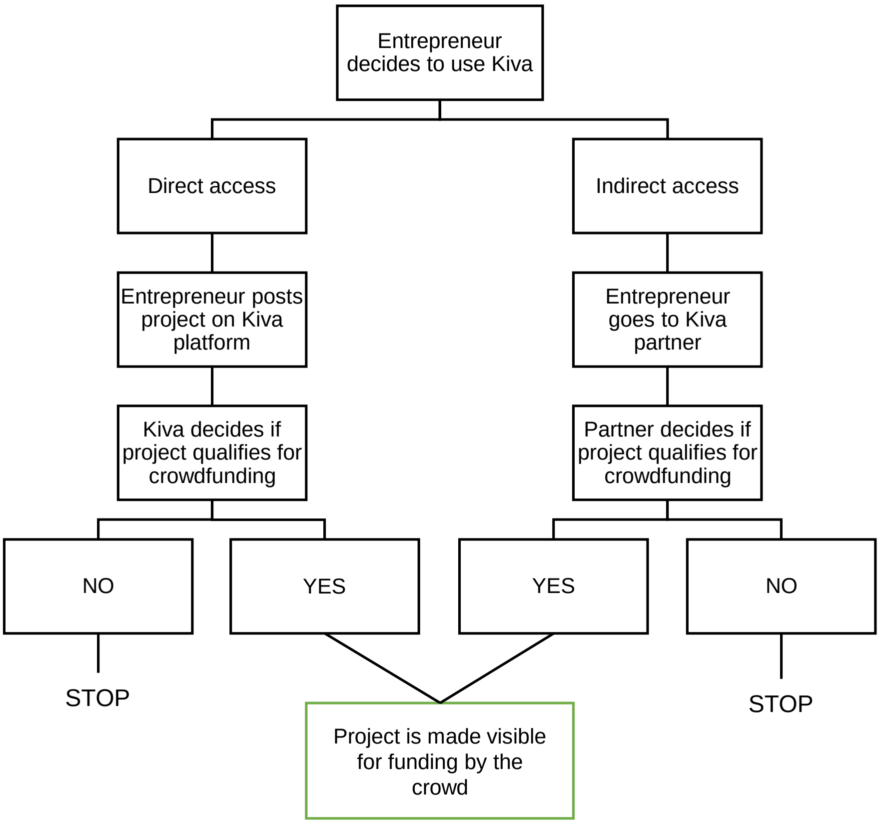
In 2011, Kiva decided to launch a pilot project using the direct model in Kenya and the United States under the name Kiva Zip. It was therefore possible for would-be borrowers in Kenya (or the United States) to post their loan requests directly on the Kiva Zip platform and rely on trustees to vouch for them.

Over its four years of existence, Kiva Zip in Kenya lent to more than 6,500 borrowers using mobile phone services. However, after four years, Kiva abandoned the Kiva Zip program in Kenya. The team explained: "While we still believe direct lending holds great promise for Kiva, it's become clear that in order for the Kiva direct model to be sustainable, borrowers themselves must be digitally included...” Therefore, since 2015[4], the only model for African entrepreneurs to borrow on the Kiva platform is through field partners.

Figure 1 below summarizes the flow of an entrepreneur’s actions through the Kiva platform, showing the two ways generally available to borrowers (direct and partner-related access). A U.S. borrower will be able to use both ways while a non-U.S. borrower will have access only to the indirect way, which is the partner-related option.

Figure 1

Kiva flowchart



Source: Prepared by the authors.

Once the project has been made visible on Kiva.org, the project may follow different routes as it goes through the fundraising process, with one outcome being that the project is fully funded, in which case the money is conveyed to the borrower. The fundraising phase can also end after a predetermined period of time without all of the requested loan being funded, in which case the would-be borrower can decide to accept the amount collected if he or she has other means to make up the shortfall. Otherwise, those who had subscribed as lenders will receive their money back. After the loan is given to the borrower, it has to be repaid based on a prearranged schedule.

[4] Jonny Price (2015). “Kiva Zip Pilot in Kenya Winding Down,” Kiva blog, September 16, https://borrow.kiva.org/blogs/200.

3.2 The Platform Kiva.Org

Kiva.org is the platform where Kiva manages its operations. On the website, lenders can create a profile, learn about projects to be financed, get an overview of the field partners and their reliability and finally contribute to projects through financing.

The platform also lets partners create their identities, ask for Kiva due diligence and, once approved, begin posting projects to be financed. The platform also acts as a screen for would-be borrowers, who can follow – from their different locations – the status of their projects, how much of them has been financed, and how many people have financed them.

The platform is managed by the Kiva team, which is led by a Board composed of the CEO and the president (Premal Shah) and some administrators. All the transactions done on the platform are under the responsibility of Kiva, who guarantees the transparency and accuracy of the posts published on the webpage concerning the loans.

3.2.1 The Actors on the Kiva Platform

In our case, the main actors on Kiva are the African project owners, who are the would-be borrowers and use the platform to request a loan; people from all around the world who are willing to lend small amounts of money; and the field partners, who act as intermediaries between the borrowers and the lenders.

a) The Lenders

Lenders are Internet users from all over the world, mostly from developed countries such as the United States, the United Kingdom, and Canada. They operate on Kiva through the platform, where they create a profile and find out about the projects to be financed. Once they have chosen a project they want to finance, they can make a minimum loan of $25 or any multiple of this amount.

All transactions on the platform are done using Internet-based payment methods (credit card, PayPal, etc.). Lenders have no physical contact with borrowers or the Kiva team. Therefore, transparency is an important requirement for lenders. Kiva tries to answer that need for information by publishing the interest rates requested by the field partners, the history of the partners' loans, and their funding rates.

On the lenders' side, little information is asked and it is not compulsory to give information (nationality, name, etc.) about them. Finally, platform users are able to see the number of projects financed by a certain lender, though the total amount funded by each lender is not available.

b) The Field Partners

Field partners are institutions around the world that act as Kiva's representatives in the field. They are mainly NGOs, nonprofit institutions, schools and microfinance institutions, which collect information about the projects in a certain geographic area and post it on the platform.

One of the characteristics of the field partners is that they can prefinance the loan requests they post on the platform so that, when an entrepreneur in need of funds goes to the field partner, the latter can collect all the information about the project and post it on the platform. The partner can then decide to advance the money requested by the would-be borrower from his or her own cashier at an interest rate that is usually higher than the rate charged by banks in the area or else the partner can wait for the project to be financed on Kiva.org and retrieve the funds from there for the entrepreneur.

In summary, the role of field partners in the Kiva ecosystem is to do the following:

- Collect information about projects in need of funding;
- Perform due diligence checks on projects;
- Elaborate on the project description to be put on the platform in order to make the project attractive;
- Take photos of would-be borrowers as evidence;
- Estimate, in conjunction with the would-be borrower, the amount of funding needed;
- Calculate, based on their knowledge, the particular area of business of the would-be borrower and the time required for the person to repay the loan;
- Finance the loan to the borrower before the loan has been funded completely on the platform;
- And finally, collect the money after the project has been completed and send it to Kiva to be repaid to the lenders.

c) The Borrowers and the Loans

The would-be borrowers are pictured on the platform on the webpages where their projects are posted. There is a relationship between the would-be borrowers and the loans sought. In fact, the would-be borrowers are referred to using the word "loans" because loans are what the other actors on the platform deal with: lenders are required to finance loans, while partners post loan requests on the platform for financing. Therefore, in the Kiva database, would-be borrowers are identified via the loans and are not identifiable personally.

Kiva loans are facilitated in two ways: when the project is posted directly on the platform by the would-be borrower, or through the field partner. The loan requests, either direct or through a partner, have to be approved before they are posted on the platform.

The approval process is different according to the approach used:

- For a direct loan request, friends and trustees have to vouch for the would-be borrower.
- For a loan requested via a partner, due diligence will be done by Kiva at the partner location, ensuring that all the loan requests posted by this partner are trustworthy.

These loans should be considered microfinance. (They are small amounts, mostly less than $5,000.) Once funded, the loans are collected by Kiva and transferred to the field partners (or directly to the borrower). Loans are used to start or develop businesses, for education, to access clean energy or to increase the quality of life. At the time of writing, more than 200,000 loans have been made in Africa.

Kiva borrowers could reasonably be considered social entrepreneurs. In fact, Rivera-Santos et al. (2015), in defining social entrepreneurs, combine two dimensions – the context and the choice of activity. They argue that these dimensions must be taken into account when defining social entrepreneurs in the sub-Saharan African context. They show that, in a context of extreme poverty, past colonial history and ethnic diversity, as is evident in many African countries, the choice of activities reflects the social goals pursued by the entrepreneurs and these activities become an interesting anchor when defining a venture as a social one. Social entrepreneurs therefore are driven by all activities that aim to create social advantages and whose final goal is to improve society. In that sense, borrowers on the Kiva platform might be justifiably classified as social entrepreneurs as they are individuals at the subsistence level – in a context of extreme poverty – who create ventures in order to gain revenue to improve the income of their families, which are usually large (George, Kotha et al., 2016).

d) Kiva Team

The Kiva team plays a control role, acting as a supervisor on the platform. It also publishes performance indicators about the partners and the would-be borrowers' level, in order to help lenders in their decision making. Moreover, the Kiva team acts as a transitional bank, collecting money from lenders and sending it to field partners (or to the borrower directly in the case of direct lending) at the end of the fundraising process, to finance the borrower's project. Finally, repayments that are collected by the field partner (or sent to Kiva by a direct borrower) are received by the team to be returned to the different lenders.

Martin Tschopp has been chief executive officer of Kiva since March 2015, leading a team of 109 employees with a focus on increasing Kiva's impact in the world. He replaced Matt Flannery, a cofounder of Kiva. Tschopp is helped in his work by a leadership team of 10 members and a Board of Directors comprising nine members including the CEO himself and Kiva's president, Premal Shah[5].

There are other leadership groups where the management of Kiva acts to ensure its activities are transparent and to increase the trust needed by the crowd of potential lenders and borrowers:

- A leadership council, composed of 20 members, including a city mayor, foundation managers, a CEO, and a human resources manager.
- A group of 13 advisers, including Kiva cofounder Jessica Jackley, PayPal cofounder Ken Howery, entrepreneurs, and a Facebook employee.

4. Description of the Database

The data used for the following study come from the Kiva API (application programming interface), made available on the Internet (http://build.kiva.org/api). There are 196,057 observations taken from Kiva.org for tracing Kiva activities involving African-based projects.

The following table briefly summarize the different fields in the database:

[5] "Leadership," Kiva, https://www.kiva.org/about/leadership.

Table 3

Data set variables

Variable name	Explanation	Value type
Variables related to the loan request		
id	The identification number for each loan. Each line of the data set has a unique ID.	Number
year	The year in which the loan request was posted on the Kiva platform in order to begin the funding process.	Date
month	The month of the year in which the loan request was posted. The values go from January to December.	String
posted_date	The date the loan was posted on the Kiva platform for fundraising.	Date
status	The status of the loan as of March 2015. The loan category can be "fundraising," "funded," "expired," "paid," "in repayment," "defaulted" or "refunded."	Category
loan_amount	The total loan amount funded by the crowdfunding process. The amount varies between $25 and $50,000 with a mean of $779.	Number
lender_count	The number of lenders who funded the loan.	Number
repayment_term	The number of months over which the loan is to be repaid.	Number
delinq	The delinquency rate – the percentage of each loan funded that has not been repaid by the agreed repayment date. The amount might be repaid afterward on the basis of new repayment installments. If not, the loan is said to be defaulted.	Percentage
label	Moleskis and Canela (2016) labeled the loans: "charity" (3.5% of the loans have this label), "venture" (96%), or "either" (0.5%).	Category
default	The percentage of each loan funded that has not been repaid thus far (after having been delinquent for more than six months) and will not be repaid as the borrower is unable to repay.	Percentage
no_countries	Number of countries impacted by the loan request.	Number
Variables related to the would-be borrower		
gender	The gender of the would-be borrower. In cases with many would-be borrowers, this refers to the gender of the principal would-be borrower. Would-be borrowers are 30% male and 70% female. The letters M and F are used.	Binary
country	The would-be borrower's country of origin. There are 29 African countries in the data set. Full country names are used.	String
activity	The activity for which the loan is to be used. The data list 149 activities.	String
sector	The sector to which the loan relates. This variable is linked to the previous one. There are at least two activities per sector. Fifteen sectors are listed.	String
group	Would-be borrowers can request loans individually (dummy 0) or in groups (dummy 1). Group loan requests represent 19% of all loan requests.	Binary
bonus_credit_eligibility	Would-be borrowers are rated by field partners. Bonus credit eligibility 1 means the would-be borrower is reliable while 0 means he or she is unreliable. Partners give a rating of reliable to 46% of loans requested.	Binary
repayment_interval	Borrowers choose from three interval options for repaying loans: at the end of the term, irregularly or monthly.	Category
Variables related to the field partner		
partner_id	The identification number of each partner.	Number
name	The partner's name.	String
charges	A dummy for a partner charging fees: 97.9% charge fees.	Binary
portfolio_yield[6]	The average interest rate and fees charged by a field partner. Fees are between 20% and 61% of the loan requested. The mean is 42%.	Percentage
partner_status	Partners are classed as "active," "inactive," "closed" or "paused." As of March 2015, 76% were active.	Category
profitability	The profitability of each partner as a percentage. The mean is −0.2%.	Percentage
rating	Partners are rated from 0 to 5 according to the probability of them dealing with defaulted loans. A five-star rating indicates the lowest risk, while one star indicates a high risk.	Category

Source: Prepared by the authors.

[6] "Borrowing Cost Comparison," Kiva, https://www.kiva.org/help/borrowingCostComparison.

In our data, 13,170 observation rows are missing rating information, whereas the information on profitability is not reported for 46,053 observation rows. The information on the variable portfolio_yield is not reported for 40,606 rows. The information on the loans being requested by a group or individually is missing for 5,731 observations.

Nevertheless, we have decided to work with the whole data set as we aim to use descriptive statistics to gain a better understanding of crowdfunding trends without removing the observation rows with missing data.

The status variable is an important feature of the data set that requires additional explanation. Once a project is posted on the Kiva platform and made visible by the Kiva team, its status is one of the following categories:

- **Fundraising:** this is the first stage of the crowdfunding process. A project is in the fundraising stage for a limited time (on average 30 days). During the fundraising process, the would-be borrower is asked to update information about his or her project. (Field partners, when used, are in charge of these updates.) Lenders can contribute to projects they find attractive.
- **Funded:** once the project has reached its target amount, it is closed and said to be funded. No more contributions can be added. The funds are transferred to the borrower in the case of direct loan requests or to the field partner, who will be in charge of giving the funds raised to the borrower.
- **Expired:** if a loan target amount is not achieved within 30 days of funding, the loan is said to have expired. The amount collected is returned to the contributors, who can choose whether to put their money in another project or get a refund.
- **Refunded:** a loan that has expired without reaching its objective is refunded to lenders.
- **In repayment:** once the borrower receives a funded loan and, after a certain amount of time as agreed with the Kiva team, the borrower begins to repay the loan. The status of the said loan is then “in repayment.”
- **Paid:** a loan’s status changes from “in repayment” to “paid” when the borrower has paid it off in full.
- **Defaulted:** if a borrower falls behind on loan repayments, the field partner or Kiva (in the case of a direct loan) first tries to reschedule the repayments. When this fails and the borrower is still unable to meet the deadline, the loan is said to be defaulted.

When borrowers are unable to repay loans and they end up in default, Kiva notifies all the contributing lenders by e-mail and lets them know that the amount outstanding on the defaulted loan is to be considered a loss. Field partners may decide, based on defaulted loans, not to lend anymore to the borrowers in question. In the case of direct loans, borrowers cannot apply for another loan on Kiva until they have repaid previous loans. Therefore, defaulted borrowers will not be able to apply again for loans directly on Kiva using the same ID.

5. Results

5.1 General Perspectives

From January 2005 to March 2015, there were 196,057 loan requests from African entrepreneurs on the Kiva platform, representing 27.78% of all the requests received by Kiva since its launch. As of March 2015, Kiva had financed projects for entrepreneurs in 29 African countries worth a total of $152,740,150 (Moleskis and Canela, 2016).

Of the variables explained previously, the numerical ones are described below in Table 4, which sets out the variables in the data set using the descriptive statistics of mean, median, standard deviation and min-max (10th and 90th percentiles):

Table 4

Numerical variables' statistics

Variable name	Mean	Median	Std. dev.	10th per.	90th per.
Variables related to the loan request					
loan_amount (in $)	779	500	999	200	1,400
lender_count (number of lenders)	23	16	29	5	43
repayment_term (in months)	12	11	8	6	15
delinq (percentage)	16.55	2.52	32.46	0	95.55
default (percentage)	2.01	0.34	6.73	0	4.87
Variables related to the would-be borrower					
group (percentage of group)	0.19	NA	NA	NA	NA
bonus_credit_eligibility (percentage of eligible loans)	0.46	NA	NA	NA	NA
Variables related to the field partner					
charges (percentage of partners charging a fee)	0.98	NA	NA	NA	NA
portfolio_yield (percentage)	42.14	41.00	14	23	61
profitability (percentage)	−0.17	0.2	7.12	−6.12	7.20

Source: Prepared by the authors.

An interesting observation is how the average loan amount of $779 compares with the average loan per partner, which is $796, according to Moleski and Canela (2016), who used the same data. The average loan amount in Africa is lower than the global average ($825 for the areas worldwide where Kiva operates). This suggests that, on average, loan requests in Africa are funded to a lesser extent than loan requests in other parts of the world. Also, the fact that the average loan per partner worldwide is slightly higher than the average loan in Africa suggests that partners in the rest of the world receive more contributions on average than those in Africa.

Group loans represent 19% of all loans, four times less than individual loans. Also, 46% of loans are said by field partners to be reliable. Finally, in 98% of cases, field partners charge interest on loans.

5.1.1 The Loans

Table 5 below summarizes the loan requests on the Kiva platform. Africa represents 28% of Kiva's activities. The average loan amount per year shows a tendency to grow.

Table 5

Evolution of loans per year

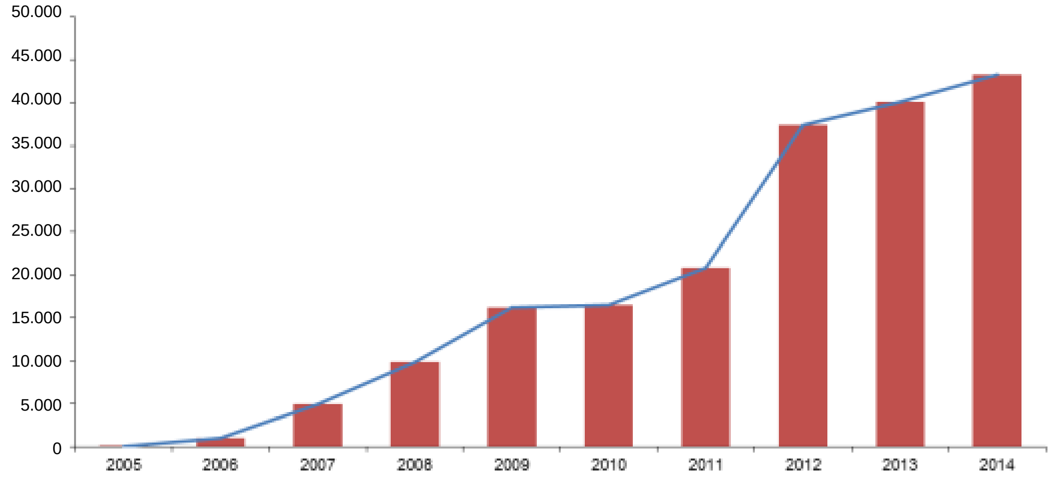
Year	Number of loan requests	Loan amount	Average loan amount per year	Number of loan requests rest of the world	Percentage in Africa
2005	38	18,900	497.37	—	100%
2006	988	658,225	666.22	1,042	49%
2007	4,894	3,143,000	642.21	12,070	29%
2008	9,834	7,343,975	746.79	23,380	30%
2009	16,180	11,572,650	715.24	37,696	30%
2010	16,462	12,011,420	729.65	44,537	27%
2011	20,834	15,595,500	748.56	53,217	28%
2012	37,438	28,173,800	752.55	93,882	29%
2013	40,162	31,708,270	789.51	99,362	29%
2014	43,353	36,867,570	850.40	123,302	26%
2015 (first quarter)	5,874	5,646,840	961.32	21,066	22%
Total	**196,057**	**152,740,150**	**736.35**	**509,554**	**28%**

Source: Prepared by the authors.

Figure 2 below displays the evolution of loans from 2005 to 2014, showing that the number of loan requests increases from one year to the next and confirming the upward trend previously observed.

Figure 2

Trend of loan requests per year



Source: Prepared by the authors.

Loan requests increased consistently throughout the years – by more than 100% per year over the first three years, and by around 10% for the last three full years under consideration. This increase is in line with the growth of the crowdfunding phenomenon in the rest of the world.

Table 6 sets out the distribution by sector of Kiva users' loan requests in Africa and worldwide.

Table 6

Loan requests by sector in Africa and worldwide

	Sector	Loan requests	Percentage		Sector	Loan requests	Percentage
No.	**Africa**			**No.**	**Worldwide**		
1	Food	63,455	32.37	1	Food	170,611	24.18
2	Retail	45,404	23.16	3	Retail	152,475	21.61
3	Agriculture	36,584	18.66	2	Agriculture	161,766	22.93
4	Clothing	17,523	8.94	5	Clothing	44,228	6.27
5	Services	13,074	6.67	4	Services	52,081	7.38
6	Transportation	3,459	1.76	7	Transportation	21,940	3.11
7	Education	3,092	1.58	8	Education	17,943	2.54
8	Housing	2,971	1.52	6	Housing	29,763	4.22
9	Construction	2,893	1.48	11	Construction	11,098	1.57
10	Health	2,463	1.26	13	Health	6,071	0.86
11	Personal use	1,967	1.00	10	Personal use	13,010	1.84
12	Manufacturing	1,449	0.74	12	Manufacturing	9,037	1.28
13	Arts	1,078	0.55	9	Arts	13,184	1.87
14	Wholesale	422	0.22	14	Wholesale	1,240	0.18
15	Entertainment	223	0.11	15	Entertainment	1,165	0.17

Source: Prepared by the authors.

The table indicates which sectors receive the most loan requests in Africa and worldwide. While agriculture, food and retail are the destinations of more than two-thirds of loans both worldwide and in Africa, health is number 10 in Africa with 1.26% compared with number 13 worldwide with only 0.86%. The arts account for only 0.55% of loan requests in Africa but 1.87% worldwide.

A further analysis of the sectors shows that widespread stereotypes about job preferences are entrenched in Africa. Table 7 below suggests that women request loans mainly for activities related to food, retail, agriculture and clothing while men request loans mainly for agricultural activities.

Table 7

Sector distribution by gender

Sector	Number of loan requests	
	Female	**Male**
Agriculture	18,920	17,664
Arts	785	293
Clothing	14,845	2,678
Construction	1,091	1,802
Education	1,347	1,745
Entertainment	55	168
Food	54,713	8,742
Health	1,590	873
Housing	1,337	1,634
Manufacturing	419	1,030
Personal use	905	1,062
Retail	33,575	11,829
Services	8,424	4,650
Transportation	428	3,031
Wholesale	232	190
Total	**138,666**	**57,391**

Source: Prepared by the authors.

Moleskis and Canela (2016) sorted the Kiva data based on how the would-be borrowers intended to use the loans, as indicated on the platform. As such, the purpose of loan requests was categorized as charity or entrepreneurial ventures, with 96% of the requests dedicated to entrepreneurship. We therefore consider Kiva to be a suitable platform for analyzing entrepreneurial ventures. Table 8 below shows the percentage of loan requests by project type (charity or entrepreneurial venture) and by gender. Women make more loan requests for ventures. Charity is preferred equally by men and women but represents only 4% of all requests.

Table 8

Percentage of loan requests by project type and gender

Type/label	Female	Male
Charity	2%	2%
Venture	69%	27%
Total	**71%**	**29%**

Source: Prepared by the authors.

5.1.2 The Lenders

The data provided by the Kiva platform allow for an analysis of those who lent money for projects in Africa. Based on the field lender_count in the data, we drew up a table counting all the lenders who have helped finance projects in Africa. (See Table 9.) We then compared this table with the evolution of the total number of lenders provided by Moleskis and Canela (2016).

This analysis shows that more and more lenders have been financing projects in Africa. Table 9 suggests that there is a genuine interest in African projects, which are increasingly attractive. For example, in 2012, out of more than a million lenders active on the Kiva platform, 83% had contributed to projects in Africa. By active lenders, we mean those lenders who have taken part in at least one lending activity on the platform. On average, around 60% of lenders on the platform fund African projects. This finding is in line with the mission defined by Kiva, which has a specific focus on Africa.

Table 9

Comparative evolution of number of lenders per year

Year	Number of lenders per year for Africa	Number of lenders per year worldwide	Percentage of lenders for Africa
2005	223	223	100%
2006	14,155	19,035	74%
2007	80,162	178,208	45%
2008	201,892	351,862	57%
2009	355,600	553,199	64%
2010	370,546	728,285	51%
2011	502,761	908,865	55%
2012	902,725	1,087,234	83%
2013	973,628	1,209,739	80%
2014	1,009,717	1,476,773	68%
2015 (first quarter)	128,932	1,629,867	8%

Source: Prepared by the authors.

The evolution of the number of active lenders financing African projects every year is even more impressive compared with the number of new members on the platform every year. From 2011 to 2015, more than eight in 10 new members financed African projects. Table 10 below shows that the number of new members getting involved in African projects has gone from 51% to 85% in five years, confirming the attractiveness of the continent to crowdfunding.

Table 10

Accumulated number of new active lenders

	Accumulated number of new lenders		
Years	**Worldwide**	**Of which Africa**	**Percentage in Africa**
2006 to 2010	728,285	370,323	51%
2011 to 2015	901,516	768,103	85%
Total	**1,629,801**	**1,138,426**	**70%**

Source: Prepared by the authors.

Lending activity is growing on Kiva. The data illustrate that there is an increase in the number of both loans and lenders.

5.1.3 The Partners

The entrepreneurs go through partners to submit their loan requests on the Kiva platform.

The partners' status can be active if they are submitting loan requests or inactive if they no longer work with Kiva. Table 11 shows the evolution of the number of partners.

Table 11

Number of partners per year

Year	Number of new partners	Average number of loans per new partner	Number of inactive partners from previous year	Total number of partners in the year	Average number of loans per partner
2005	1	38	—	1	38
2006	12	82	1	12	82
2007	22	72	1	33	148
2008	8	217	8	33	298
2009	5	226	7	31	522
2010	11	182	2	40	412
2011	7	222	8	39	534
2012	19	72	2	56	669
2013	28	50	7	77	522
2014	28	50	15	90	482
2015	6	21	36	60	98
Total	**147**	**1232**	**87**	**471**	**3,767**

Source: Prepared by the authors.

The table suggests that new partners are less active than more established ones in the year they join Kiva. Also, the total number of partners has continued to increase consistently over the years. (As mentioned before, only the first three months of the year are taken into account for 2015.)

Partners are based in one country but may serve would-be borrowers from neighboring countries as well. However, generally, partners work only on loan requests from one country. Table 12 below shows the distribution of partners per country.

Table 12

Distribution of partners per country in 2015

Country	Number of partners	Average number of loans per partner	Country	Number of partners	Average number of loans per partner
Kenya	40	1,589	Benin	3	1,580
Uganda	19	1,212	Burkina Faso	3	361
Ghana	12	1,150	Liberia	3	2,599
Tanzania	10	331	Mozambique	3	970
Rwanda	7	530	South Sudan	3	1,422
Zambia	6	76	Cameroon	2	1,084
Nigeria	5	1,142	Côte d'Ivoire	2	99
South Africa	5	53	Madagascar	2	10
Togo	5	1,650	Somalia	2	73
Congo (Dem. Rep.)	4	518	Botswana	1	1
Malawi	4	41	Burundi	1	1,201
Mali	4	2,103	Chad	1	38
Senegal	4	1,964	Congo (Republic)	1	770
Sierra Leone	4	1,696	Mauritania	1	1
Zimbabwe	4	473	**Total**	**161**	**1,333**

Source: Prepared by the authors.

Of the 161 partners reported in the table, 147 were active as of March 2015. Kenya and Uganda had the highest number of partners. Some partners served in more than one country, as shown in Table 13 below.

Table 13

Partners per number of countries served

Partners serving in:	Number of active partners
One country	140
Two countries	5
Three countries	1
More than three countries	1
Total	**147**

Source: Prepared by the authors.

There was only one partner serving in three countries and one serving in more than three countries. The latter partner (ID 212), called Barefoot Power, was actually serving in eight countries (Nigeria, Tanzania, South Africa, Kenya, Uganda, Rwanda, Botswana, and Malawi). With a default rate of 14.71%, Barefoot Power had a delinquency rate of 32.5% and was acting mainly for would-be borrowers in the renewable energy business, raising loans of around $400,000 in total from 2012 to 2014.

5.1.4 The Borrowers

An analysis of the gender of would-be borrowers shows that, as in the rest of the world, more women than men use the Kiva crowdfunding platform in Africa. Many partners, especially those with a more social orientation, fund only women or give a certain priority to women. Therefore, there are more women than men in our database, as shown in Table 14.

Table 14

Gender analysis of would-be borrowers

Gender	Loan amount	Number of loan requests	Percentage
Female	106,002,175	138,666	69.40%
Male	46,737,975	57,391	30.60%
Total	**152,740,150**	**196,057**	**100%**

Source: Prepared by the authors.

In terms of loan amounts, almost 70% of the projects are headed by women in Africa, compared with 74% on the whole Kiva platform. This ratio shows an important characteristic of entrepreneurship in many African countries – that it is the role of women in the informal sector. Many of the small projects on the Kiva platform have the characteristics of informal microbusinesses. These businesses require low levels of capital and employ two to five people. They are generally family businesses with more than two family members working full-time in the business.

Because of the institutional void in many African countries, these businesses generally have no legal status and operate in the black market, the informal sector. Most of them do not appear in their country's national trade registry.

Table 15 shows that, of all the loan requests on the platform, 19% are group projects. The overall share of group projects of Kiva worldwide is 14%. Thus it seems that African entrepreneurs have a greater preference to set up their projects in groups compared with those elsewhere in the world. This finding supports what is generally known about Africans and the importance they give to clans and family. A study by George, Kotha et al. (2016) has shown that, in Kenya and other east African countries, family ties are strong motivational factors, leading individuals toward entrepreneurship in order to give jobs and financial means to family members.

Because Africans live in communities and decide in communities, they also do business in communities, at least more so than people elsewhere in the world. African entrepreneurs have a strong sense of community and of the impact of their ventures on their communities.

Table 15 below sets out the distribution of loan requests according to gender and whether the projects are individual or group projects.

Table 15

Loan requests based on gender and number of borrowers

	Individual	Group	Total	Percentage
Female	108,871	29,795	**138,666**	**71%**
Male	50,195	7,196	**57,391**	**29%**
Total	**159,066**	**36,991**	**196,057**	**100%**
Percentage	**81%**	**19%**	**100%**	

Source: Prepared by the authors.

The loans requested by a group are requested mostly by women. This is also the case with individual loans.

Entrepreneurial Activities

An analysis of the activities preferred by entrepreneurs in Africa (Table 16) shows that agriculture is not the most favored type of venture, even if the national economy of most African countries is based on agriculture.

Entrepreneurs in Africa have been developing other avenues apart from the traditional ones. The most-financed projects have been related to retail and food, with growing investment in services and clothing. Education and health are also sparking the interest of African entrepreneurs, though their share of the total investment is still small.

Table 16

Entrepreneurs' ventures

Sector	Loan amount	Percentage
Food	$46,707,675	30.58%
Retail	$37,039,250	24.25%
Agriculture	$28,432,725	18.62%
Clothing	$14,422,800	9.44%
Services	$9,522,150	6.23%
Education	$3,286,975	2.15%
Health	$2,662,000	1.74%
Construction	$2,621,125	1.72%
Housing	$2,384,575	1.56%
Transportation	$2,248,325	1.47%
Manufacturing	$1,088,500	0.71%
Arts	$838,325	0.55%
Personal use	$781,150	0.51%
Wholesale	$516,925	0.34%
Entertainment	$187,650	0.12%
Total	**$152,740,150**	**100%**

Source: Prepared by the authors.

An interesting analysis is that of the preferences of men and women in terms of venture type. As shown in Table 17 below, overall, entrepreneurs prefer to invest in food, retail, agriculture and services. Women, however, have stronger preferences than men for retail and clothing, while men invest mainly in agriculture and transportation.

Table 17

Most popular types of venture, based on gender

	Female	Loan requests		Male	Loan requests
1	Food	54,713	1	Agriculture	17,664
2	Retail	33,575	2	Retail	11,829
3	Agriculture	18,920	3	Food	8,742
4	Clothing	14,845	4	Services	4,650
5	Services	8,424	5	Transportation	3,031
	Percentage of top five activities	**94%**		**Percentage of top five activities**	**80%**

Source: Prepared by the authors.

The analysis done so far has been focused on the big picture presented by Africa as a whole. The authors believed there might be a general trend among entrepreneurs in the continent. While this might be true for some characteristics such as women's preference for setting up a business or the greater propensity of African entrepreneurs to create ventures in groups, it is reasonable to think that there might be other characteristics that are not shared by all entrepreneurs and are either local or regional characteristics.

5.2 Regional Analysis

This section will use entrepreneurs' regional clusters as the unit of analysis. Using the Internet World Stats classification[7], we regrouped the countries and deepened our analyses based on the following five regional clusters: northern, eastern, western, southern and central African countries. In the northern African region, the data on the Kiva platform relate only to South Sudan. Therefore the data for this region are really the data for this single country. No other northern African country participates in the Kiva platform. This suggests that Kiva deals only with sub-Saharan African countries.

However, loans have not been distributed equally in the continent. More than 40% of the loans have gone to fund projects in three countries (Kenya, Uganda and Tanzania) out of the 29 using the Kiva platform.

Plausible explanations for the unequal distribution of loans can be found mostly in the colonial backgrounds of these countries, language barriers and the operational and logistical facilities of the Kiva platform (such as the use of partners).

Kiva uses English as its working language. Thus, loan requests and would-be borrowers' pleas have to be translated when they are in another language. The language barrier or advantage (depending on the language spoken by borrowers) might account for the differences in the volume of loans across regional clusters in sub-Saharan Africa.

Another reason, as mentioned above, is the ties between Kiva and former British colonies such as Kenya, Uganda and Tanzania. Because these African countries and the United States were former British colonies and because Kiva is U.S.-based, there are more commercial and political relationships among these countries. This facilitates the use of the platform by partners in English-speaking countries and makes projects from these countries more attractive to U.S. lenders.

[7] "Country Lists," Internet World Stats, http://www.internetworldstats.com/list1.htm, accessed March 8, 2017.

Finally, Kiva has strong links with Kenya, where it launched Kiva Zip, as mentioned earlier. It is therefore reasonable to assume that Kiva's executives have visited the country many times and carried out marketing activities there to increase entrepreneurs' awareness of the Kiva platform.

The map below shows the countries where Kiva was active, with the number of field partners per country.

Figure 3

Number of partners per sub-Saharan country

Source: Prepared by the authors.

A regional analysis of the evolution of loan requests from 2005 to 2015 shows – as in Table 18 – that Kiva's activities were carried out progressively in Africa, beginning in the eastern region.

Table 18

Evolution of loan requests per year per region

Year	Central Africa	Eastern Africa	Northern Africa	Southern Africa	Western Africa	Total
2005		38				**38**
2006		715			273	**988**
2007	203	2,362			2,329	**4,894**
2008	153	4,290	110		5,281	**9,834**
2009	230	4,558	817		10,575	**16,180**
2010	304	7,824	885	3	7,446	**16,462**
2011	436	14,149	779	60	5,410	**20,834**
2012	1,295	24,181	1,325	71	10,566	**37,438**
2013	1,151	24,606	274	76	14,055	**40,162**
2014	1,088	28,120	49	52	14,044	**43,353**
2015	187	4,704	27	20	936	**5,874**
Total	**5,047**	**115,547**	**4,266**	**282**	**70,915**	**196,057**

Source: Prepared by the authors.

Another analysis at the regional level reveals interesting insights about the distribution of partners, as of 2015. The result can be seen in Table 19 below. Eastern countries such as Kenya and Uganda show a higher number of partners compared with other countries. However, this analysis failed to take into account the status of these partners – that is, whether they were still active, were temporarily inactive or had stopped working with Kiva entirely.

Table 19

Partners by country

Country	Number of partners	Average number of loans per partner	Loan amount per partner	Average loan per partner
Kenya	40	1,589.28	$33,271,025	$831,776
Uganda	19	1,212.42	$22,242,925	$1,170,680
Ghana	12	1,150.08	$8,305,925	$692,160
Tanzania	10	331.10	$11,332,500	$1,133,250
Rwanda*	7	530.00	$10,034,675	$1,433,525
Zambia	6	76.17	$818,075	$136,346
Togo*	5	1,649.60	$6,243,275	$1,248,655
Nigeria	5	1,142.00	$3,975,975	$795,195
South Africa	5	52.60	$453,225	$90,645
Senegal*	4	1,963.75	$10,397,050	$2,599,263
Congo (Dem. Rep.)*	4	518.00	$9,273,300	$2,318,325
Mali*	4	2,102.75	$8,226,525	$2,056,631
Sierra Leone	4	1,695.75	$7,317,375	$1,829,344
Zimbabwe	4	473.25	$2,849,375	$712,344
Malawi	4	40.50	$312,625	$78,156
Benin*	3	1,580.33	$3,231,325	$1,077,108
Liberia	3	2,598.67	$2,587,575	$862,525
Mozambique*	3	970.33	$1,890,875	$630,292
South Sudan	3	1,422.00	$1,728,450	$576,150
Burkina Faso*	3	361.00	$1,234,500	$411,500
Cameroon*	2	1,083.50	$976,825	$488,413
Côte d'Ivoire*	2	98.50	$210,425	$105,213
Somalia*	2	72.50	$145,375	$72,688
Madagascar*	2	9.50	$7,925	$3,963
Burundi*	1	1,201.00	$3,595,175	$3,595,175
Congo (Republic)*	1	770.00	$2,042,600	$2,042,600
Mauritania*	1	1.00	$15,000	$15,000
Chad*	1	38.00	$12,250	$12,250
Botswana	1	1.00	$8,000	$8,000

Source: Prepared by the authors.

The countries marked with an asterisk are non-English-speaking countries. There seems to be a positive relationship between the number of partners in English-speaking countries and the number of loans requested.

Table 20 below, from Moleskis and Canela (2016), shows that the main lenders are also from English-speaking countries.

Table 20

Lenders by country

Country	Number of loans	Country	Number of loans
United States	455,088	Netherlands	10,051
Canada	65,736	Sweden	8,936
Australia	32,632	Norway	6,535
United Kingdom	26,137	France	5,272
Germany	14,142	India	4,812

Source: Prepared by the authors.

Comparing Table 20 with Table 21 below, we can make some interesting propositions about lenders' behavior. Most loans so far have gone to English-speaking countries, as shown in Table 21.

Table 21 is divided into two blocs based on the destination country for the loan: the first bloc contains destination countries of loans where English is an official language. The English-speaking countries in this bloc are all former British colonies.

The other bloc contains the countries on the Kiva platform that do not have English as an official language or, in the case of Cameroon, where English is not widely spoken.

The percentages shown next to the loan amounts are calculated based on the total loan amounts collected by all African countries on the platform. Each percentage therefore relates to the total amount of loans funded in Africa by Kiva since it started out in 2005.

Table 21

Loan request distribution by use of English

English-speaking countries			Non-English-speaking countries		
Countries	**Loan amount**	**Percentage**	**Countries**	**Loan amount**	**Percentage**
Kenya	$33,271,025	21.78%	Senegal	$10,397,050	6.81%
Uganda	$22,242,925	14.56%	Rwanda	$10,034,675	6.57%
Tanzania	$11,332,500	7.42%	Congo (Dem. Rep.)	$9,273,300	6.07%
Ghana	$8,305,925	5.44%	Mali	$8,226,525	5.39%
Sierra Leone	$7,317,375	4.79%	Togo	$6,243,275	4.09%
Nigeria	$3,975,975	2.60%	Burundi	$3,595,175	2.35%
Zimbabwe	$2,849,375	1.87%	Benin	$3,231,325	2.12%
Liberia	$2,587,575	1.69%	Congo (Republic)	$2,042,600	1.34%
South Sudan	$1,728,450	1.13%	Mozambique	$1,890,875	1.24%
Zambia	$818,075	0.54%	Burkina Faso	$1,234,500	0.81%
South Africa	$453,225	0.30%	Cameroon	$976,825	0.64%
Malawi	$312,625	0.20%	Côte d'Ivoire	$210,425	0.14%
Botswana	$8,000	0.01%	Somalia	$145,375	0.10%
			Mauritania	$15,000	0.01%
			Chad	$12,250	0.01%
			Madagascar	$7,925	0.01%
Total	**$95,203,050**	**62%**	**Total**	**$57,537,100**	**38%**

Source: Prepared by the authors.

Table 21 suggests that there is a relationship between the lenders' nationality and the destinations of their loans. Just over 62% of the loans have been sent to finance entrepreneurs in former British colonies and, according to Moleskis and Canela (2016), 88% of the main lenders are from the United States, Canada and Australia – developed countries that are also former British colonies.

We could assume that lenders, when making their investment decisions, try to evaluate the risk attached to projects and regard countries they are familiar with or have heard a lot about as being less of a risk. Thus U.S. and British lenders will, for example, be attracted by projects in Kenya, while French lenders will go for projects in Senegal. This lender-bias argument was proposed by Burtch et al. (2014) and can be supported by the data we have.

We therefore suggest that colonial ties could help explain and predict the success of fundraising projects in Africa based on the nationalities of the main lenders and those of the would-be borrowers.

5.2.1 Gender Analysis

The analysis of entrepreneurs' gender by region shows that, in southern African countries, there are almost as many male as female entrepreneurs while, in western Africa, more than 80% of the loans were requested by women.

Table 22

Gender of entrepreneurs by region

	Central Africa	Eastern Africa	Northern Africa	Southern Africa	Western Africa	Africa overall
Female	75.01%	64.04%	92.19%	54.61%	80.10%	70.73%
Male	24.99%	35.96%	7.81%	45.39%	19.90%	29.27%

Source: Prepared by the authors.

Table 22 sets out the distribution of loan requests from 2005 to 2015 by region and gender, showing there are regional differences in distribution by gender.

5.2.2 Community Loans

Table 23

Type of entrepreneurial venture by region

	Central Africa	Eastern Africa	Northern Africa	Southern Africa	Western Africa	Africa overall
Individual	53.91%	85.51%	98.38%	78.72%	74.91%	81.13%
Group	46.09%	14.49%	1.62%	21.28%	25.09%	18.87%

Source: Prepared by the authors.

In central African countries, almost half of the loans were requested by groups. On the other hand, less than 15% of the loans in eastern Africa were requested by groups. Table 23 shows that, for all the regional clusters except for northern Africa, the percentage of loans that are group loans is higher than the platform's worldwide rate of 14%. However, some regions seem to have a stronger sense of community-based entrepreneurship than others.

5.2.3 Lenders by Region

As seen previously, lenders seem to prefer to lend to certain entrepreneurs. Table 24 below illustrates that more lenders invest in projects from eastern and western Africa.

Table 24

Distribution of lenders by region

	Central Africa	Eastern Africa	Northern Africa	Southern Africa	Western Africa	Africa overall
Lender count	301,866	2,594,063	57,394	15,885	1,571,133	4,540,341
Percentage	6.60%	57.10%	1.30%	0.30%	34.60%	100.00%

Source: Prepared by the authors.

5.2.4 Venture Preferences by Region

Looking at the different ventures financed by Kiva (Table 25), we can see that there are significant differences among entrepreneurs' venture preferences by region. Central and western African entrepreneurs, for example, create businesses mainly related to food and retail.

Southern African entrepreneurs, on the other hand, seem to be more interested in education (which accounts for 70% of the loans requested). Entrepreneurs in eastern Africa have a more or less equal interest in agriculture, food and retail.

Table 25

Distribution of loan requests by venture type and region

Sector	Central Africa	Eastern Africa	Northern Africa	Southern Africa	Western Africa	Africa overall
Agriculture	9%	25%	1%	2%	10%	19%
Arts	1%	0%	0%	2%	1%	1%
Clothing	12%	9%	6%	5%	8%	9%
Construction	2%	2%	1%	0%	1%	1%
Education	1%	2%	0%	70%	1%	2%
Entertainment	0%	0%	0%	0%	0%	0%
Food	38%	25%	60%	5%	42%	32%
Health	1%	1%	1%	1%	1%	1%
Housing	0%	2%	0%	0%	0%	2%
Manufacturing	1%	1%	0%	1%	1%	1%
Personal use	0%	1%	0%	0%	1%	1%
Retail	25%	20%	30%	11%	28%	23%
Services	8%	8%	2%	4%	5%	7%
Transportation	1%	3%	0%	0%	1%	2%
Wholesale	0%	0%	0%	0%	0%	0%
Total loan requests	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: Prepared by the authors.

Loans in western Africa were requested mostly to finance projects related to food, retail, clothing and agriculture. Combined, the aforementioned preferences represent 88% of the loan requests in this regional cluster. The same four preferences represent 84% of loan requests in central Africa, 79% in eastern Africa and 23% in southern Africa.

Education and services account for 74% of all loan requests in southern Africa, 10% in eastern Africa, 9% in central Africa and 6% in western Africa. Western and central African countries' would-be borrowers request loans mostly to fund projects that address basic needs such as food and clothing. However, would-be borrowers from countries in eastern and southern Africa – which are also more developed in terms of GDP per capita on average – request loans mostly to address needs beyond the basic ones, preferring in this case services and education to food and clothing.

6. Conclusions

The descriptive analysis of the data on Kiva's activities in Africa suggests that sub-Saharan African entrepreneurs have diverse features that can be seen in their crowdfunding activities. It has been shown that these features are linked to the entrepreneurs' environment and also to their personal circumstances.

This study opens the door to interesting research streams in the future:

- Loans on Kiva in general are headed mostly by women. Group loans are also requested mostly by women. This finding is consistent with the belief that many entrepreneurial activities in Africa begin as a last-resort option, when the family has lost the father in a crisis or disaster (George, Kotha et al., 2016). Alternative explanations might be that some partners decide to take on projects only when they are led by women or that lenders are generally more sensitive to women.

- Further evidence about the traits and distinguishing features of entrepreneurs in sub-Saharan Africa is the importance of trust (Mair and Martí, 2006). Social entrepreneurs are expected to demonstrate that they can be trusted. In this sense, groups are more likely to be trusted than individual social entrepreneurs as they have a previously built network of relationships and knowledge. Crowdfunding lenders, like any investors, are also interested in seeing their resources used for a social good. Our analyses of Kiva suggest that entrepreneurs in sub-Saharan Africa (more than elsewhere in the world) prefer to create a business as a group because the sense of community is stronger in certain parts of the continent and groups tend to create trust among the lenders.

- Lender bias, as suggested by Burtch et al. (2014), also presents an avenue for investigation. The Kiva data suggest that entrepreneurs from former British colonies tend to request more loans on the Kiva platform and to receive loans from lenders with the same historical background. There seems to be a lender bias with projects from former colonies. Further research on lender bias might help explain this finding.

- Finally, it is argued that, because communication is important in building trust (Giffin, 1967; Mayer et al., 1995), language as a communication tool will affect crowdfunding activities in Africa. On many platforms, English is the working language. That is the case on Kiva. We therefore expect countries with English as an official language to enjoy a higher level of crowdfunding activities. Also, from the analysis we have performed, it appears that the partners play an essential intermediary role and, in many countries, they have to work around the language barrier that is English. However, it is not clear whether these partners help entrepreneurs to borrow more. Our findings suggest that entrepreneurs in English-speaking countries borrow more and that lenders tend to give more to borrowers directly than through partners. More in-depth research would be required to confirm these findings and to identify the role of partners in the crowdfunding process on Kiva.

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