

Equity Crowdfunding: An Alternative Source of Financing Entrepreneurship in the Greater Accra Region of Ghana

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Abstract

Entrepreneurship is globally seen as a tool for job creation, contributing to the stability and economic development of nations. This is why the governments of many nations, including Ghana, put up initiatives to promote entrepreneurial activities. This paper focuses on assessing equity crowdfunding as an alternative source of generating fund for entrepreneurial projects in Ghana. A combination of qualitative and quantitative approaches were used in conducting this study in the Tema Municipality of the Greater Accra Region. A sample size of 149 entrepreneurs in various industries, 118 investors, and 90 respondents acting as both entrepreneurs and investors were chosen through purposive sampling method. Data were collected through the use of questionnaires and analyzed using descriptive statistics, employing tables and graphs. The results of the study showed that most entrepreneurs and investors had heard of equity crowdfunding but very few understood the operations of this type of funding. Also, it became evident that the investors and entrepreneurs had inadequate knowledge and understanding about crowdfunding adoption in Ghana. The study showed that equity crowdfunding is capable of bridging the funding gap and, therefore, is a suitable alternative

in generating funds for entrepreneurship in Ghana. It is recommended that equity crowdfunding should be included as a source of funding in entrepreneurship curriculum. Also, policies should be made by government to establish regulations that will protect all the parties involved in equity crowdfunding.

Keywords: Equity, Equity-Crowdfunding, Crowdfunding, Financing, Entrepreneurship, Ghana

Introduction

The most significant growth constraint for young and innovative ventures is access to finance (De Prijcker *et al.*, 2019; Manigart & Sapienza, 2017). New ventures and projects require resources to succeed, and one of the most difficult challenges is locating sources of funding that extend beyond family, friends, or personal savings (Goli, 2014). Schwienbacher and Larralde (2010) identified the problem faced by entrepreneurs at the outset of their entrepreneurial ventures, such as how to secure external sources of funding in the absence of collateral, insufficient cash flows, and greater information asymmetry with investors. This is why Belleflamme, Lambert, and Schwienbacher (2013) argue that many entrepreneurial ventures go unfunded, whether through bank loans or equity capital. This is partly due to lack of sufficient value that could be pledged to investors and unsuccessful attempt to convince investors of the project/venture's success.

Since the positions of traditional financial institutions are deteriorating, alternative financing is a means of avoiding funding sources such as banks, charitable institutions, or the state, where obtaining funds requires a lengthy preparatory process (Wierzbicka, 2018; Wachira, 2022). Alternative finance (AF) is a new financial market segment that aims to provide consumer loans, finance start-ups, and capital to the SME sector. The main channels through which new technologies and innovations spread are internet platforms and social networks (Wierzbicka, 2018).

Alternative financing began with online crowdfunding platforms (Fukuhara, 2020) but has since expanded rapidly with the development of new online capital raising activities, such as peer-to-peer lending and initial coin offerings (Yasar, 2021). Individuals, institutions, and professional investors come together on online crowdfunding platforms to fund creative projects, social projects, and businesses. Equity crowdfunding is a market where founders can get money from their family, friends, customers, and current shareholders, as well as from large number of investors, in exchange for a share of the business (Ralcheva & Roosenboom, 2019; Wachira, 2022).

During the COVID-19 lockdowns, several equity crowdfunding platforms collaborated with governments and numerous debt crowdfunding

platforms to provide crucial funding to small and medium-sized enterprises (Kraemer-Eis *et al.*, 2020). However, crowdfunding platforms, like the rest of the financial sector, may be negatively impacted by the uncertainty the pandemic has created. As a result, investors may refrain from making new investments. Several equity crowdfunding platforms have already reported investment declines and losses (Mason, 2020). Conversely, social distancing and the shift to online communication during COVID-19 may increase interest in crowdfunding platforms relative to traditional channels.

The growth of equity crowdfunding (ECF) deserves special attention. According to industry observers (European Business Angel Network, 2018), early-stage capital providers in Europe invested approximately 11 billion euros in 2017. Equity crowdfunding accounts for more than 5% of the market in Europe, with a volume of approximately EUR 630 million in 2017, and it is expected to grow rapidly (European Business Angel Network, 2018). According to industry research, based on data collected from over a thousand platforms, global alternative finance volumes (including all crowdfunding models) reached USD 371 billion in 2017, a 42% increase over 2016 volumes (Ziegler et al., 2021). Furthermore, global volumes increased by 28% from USD 47 billion in 2016 to USD 60 billion in 2017, and by 48% to USD 89 billion in 2018 (Ziegler et al., 2021). According to Wachira (2022), the UK is currently the leader in equity-based crowdfunding as a source of business funding, with majority drawn from the real estate and SMEs industry, accounting for 11.4%. Crowdfunding activities in the Middle East and Africa remain domestic due to a lack of economic and infrastructure development, with no cross-border transactions, internationalization, or R&D investment, resulting in low volumes (Berndt & Mbassana, 2016).

Despite the number of years of growth and economic stability, the quality of economic growth, particularly in terms of employment, inequality, and general improvement in livelihoods of Ghanaians, have been a source of concern (Alagidede, 2013). According to a survey conducted by the Institute of Economic Affairs between November and December 2015, the biggest challenge facing the Ghanaian economy is unemployment. As a result, both previous and current governments have proposed initiatives that promote entrepreneurship as an alternative source of employment.

According to data from the Registrar General Department in Ghana, 90% of registered businesses are micro, small, and medium enterprises (MSMEs). As a major source of income and employment, small and medium-sized enterprises (SMEs) have been identified as the engine of economic growth (Mensah, 2004). Despite the government's efforts to create a conducive environment for entrepreneurship in Ghana, Ghanaian business owners continue to struggle to launch or sustain growth. Also, inadequate financial systems pose the greatest obstacle.

According to a study done in 2005, the biggest problem for small and medium-sized businesses (SMEs) in Ghana is getting credit at a reasonable rate (Robson & Obeng, 2008). Banks, which should have been a source of funding for most businesses in Ghana, typically view start-up companies as high-risk ventures. The establishment of micro-finance institutions (MFIs) was intended to meet the financial needs of SMEs, but the majority of these organizations have proven ineffective. The government's effort to clean up the banking sector resulted in the closure of many MFIs, limiting the options for funding small businesses even further. Securing long-term financing in the form of equity capital in Ghana is nearly impossible for entrepreneurs. The few venture capital firms in Ghana are looking for start-ups that can break even in the shortest possible time, which disqualifies the majority of the companies that needed their assistance.

Therefore, this paper focuses on investigating and capitalizing on the availability of alternative sources of funding for entrepreneurship in Ghana. The research evaluates equity crowdfunding as a viable alternative for financing entrepreneurship in the country, with equity crowdfunding being the primary focus.

Problem Statement

The frustration caused by unemployment in any country wreaks havoc on the economy and the social fabric is distorted (Mensah, 2004). Due to the problem of unemployment, many universities have revised their curricula and made entrepreneurship a required course in all fields of study. Entrepreneurship has been viewed as a key driver of economic growth and stability, as well as a vital instrument for job creation (Mensah, 2004). This is why the Government of Ghana (GoG) has proposed a number of policies to encourage entrepreneurial endeavors in the country. For example, the most recent policy launched in 2017 is the National Entrepreneurship and Innovative Plan (NEIP), a 100 million dollar government fund established to support start-ups and small businesses in the nation.

Despite the government's efforts, the greatest obstacle to entrepreneurship in Ghana remains access to capital (Agyapong & Mordi, 2020). The various sources of startup and small business funding appear inadequate or inaccessible to the nation's entrepreneurs, especially for recently created ones which have no credit history or guarantees, alongside with an insufficient cash fund to cover future debts (Ferreira & Felipe, 2020). Traditional banks require documentation and assurances that entrepreneurs cannot provide; hence, they are denied funding (Robson & Obeng, 2008). The few venture capital firms in the country prioritize investments with quick returns, and that disqualifies many entrepreneurs (Robson & Obeng, 2008). This has resulted in the demise of the majority of good ideas and the

perpetuation of small businesses even after years of operation. The questions that arise are whether the necessary financial avenues to support entrepreneurship in the country are operating effectively and whether traditional financial sources are the only avenues for obtaining funds for entrepreneurial ventures in the country. However, non-traditional sources exist in the country to provide the necessary financial support for entrepreneurship. Equity crowdfunding has become a new wave in global entrepreneurship financing, with many start-ups in Europe, America, and parts of Africa obtaining seed capital through this channel (Yasar, 2021; Blaseg, Cumming, & Koetter, 2021). Statista (2020) reported that in 2019, the global crowdfunding market was \$13.9 billion in value and forecasted to be tripled by 2026. Ziegler et al. (2018) reported that crowdfunding models volumes in Africa rose and regional perspective indicated 41% of these volumes in West Africa, Southern Africa recorded 28%, Eastern Africa 24%, and North and Central Africa recorded the remaining 7%. In Ghana, crowdfunding has become a daily topic for discussion among entrepreneurs since the Bank of Ghana has provided policy to support it. According to Bank of Ghana (2021), Ghana exhibits one of the greatest potentials for crowdfunding growth because of Ghana's adoption of digital finance and mobile money.

Entrepreneurship has been proven to be an important tool in job creation and economic stability in Ghana, but it lacks the necessary financial resources to thrive (Robson & Obeng, 2008). As a result, the following questions arise: Are there innovative ways for entrepreneurs and investors to collaborate to address the issue of financial constraints in entrepreneurship? Can equity crowdfunding help the Ghanaian entrepreneurship community bridge this funding gap? Hence, the purpose of this study is to investigate the viability of equity crowdfunding as an alternative source of financing for entrepreneurship in Ghana.

Objectives of the Study

The main goal of this research is to explore the viability of equity crowdfunding as an alternative source of financing entrepreneurship in Ghana. To achieve the main goal, the various specific objectives were outlined;

- 1. To explore the knowledge base of Ghanaian entrepreneurs and investors on equity crowdfunding.
- 2. To determine whether equity crowdfunding can be a good alternative in bridging the financing gap in entrepreneurship in Ghana.
- 3. To identify the potential challenges to equity crowdfunding in the entrepreneurial setting in Ghana.

Research Questions

The research is intended to answer the following questions:

- 1. What is the level of awareness to equity crowdfunding in Ghana?
- 2. Is equity crowdfunding a good alternative to bridge the financing gap in entrepreneurship in Ghana?

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3. What are the potential challenges to equity crowdfunding in Ghana?

Literature Review

The Concept of Crowdfunding

Although the concept of crowdfunding has been used numerous times throughout history, the term "crowdfunding" did not exist until recently. Many sources attribute the term's origin to the concept of crowdsourcing. According to Howe (2006) and Hermer (2011), crowdsourcing is the act of generating contributions to a project from a large number of people or outsourcing an institution's functions to an undefined large group of people who are not directly related to the institution. Furthermore, crowdsourcing is primarily used to generate ideas and information.

Crowdfunding is also thought to have evolved from the concept of microcredit. Microcredit is a loan system that provides loans to entrepreneurs and business owners who do not meet the requirements for bank capital to start their ventures. Mohammed Yunus, who won the Nobel Peace Prize in 2006, was the first person to come up with the idea of microcredit (Yunus, 2007). In modern times, crowdfunding is a method by which individuals or organizations obtain capital to fund their projects from a large group of people (the crowd) via an online platform (Mollick, 2013). A crowdfunding platform, Fundable, defines it as a method of raising capital through the combined efforts of friends, family, customers, and the general public. Kirby and Worner define crowdfunding as the use of small amounts of money from a large number of people or organizations to fund a project, a business or personal loan, or other needs through an online web-based platform (Kirby, 2014).

Crowdfunding as an Effective Means of Raising Funds

In order to ascertain the viability of crowdfunding as a source of providing funding for entrepreneurship, it is necessary to determine the stability of the crowdfunding industry. The concept of crowdfunding is a nascent concept in Ghana and much work has not been done to accurately measure the stability of this industry in the country (Owusu & Owusu-Ansah, 2020). However, secondary data exists on the performance of the industry in other regions of the world. Since the inception of crowdfunding as means of generating funds, the industry has seen an upward rise in the number of crowdfunding platforms and the amount of money raised each year.

The Massolution (2015) reports indicates an increasing growth in the crowdfunding industry, with a total number of 100 crowdfunding platforms in 2007. In addition, the industry registered an approximate number of 1250 platforms in 2014 with an increase in the number each year. The industry recorded an increase in the funding volume from \$2.7 billion in 2012 to \$34.4 billion in 2015 and an increase in the amount each year from 2012 to 2015. This indicates that more money is being generated by crowdfunding to finance projects and, as such, it is an effective means of raising capital.

Risks Involved in Equity Crowdfunding

Literature reviewed already reveals many benefits and a lot of promise in equity crowdfunding as a financing source for entrepreneurship. However, there are challenges that have been outlined in other sources. Some of the risks listed as relating to equity crowdfunding are the risk of platform failure, risk of fraud, risk of default, illiquidity, lack of transparency, and disclosure of risk (Kirby, 2014; Ferreira & Felipe, 2020). The operations of crowdfunding are highly dependent on the crowdfunding platforms as they serve as the grounds on which the process takes place. In the event of platform failure, the whole system will be put on halt. Also, poor management of platform by platform owners will put investors and entrepreneurs at the risk of losing funds because the operations of crowdfunding are based on the internet. However, the risk of cyber-attack is another challenge that could cause platform failure (Shneor, Zhao & Flåten, 2020). The risk of fraud and default are some of the risks that investors of equity crowdfunding are bound to face. Illiquidity is another challenge as equity crowdfunded companies are usually start-ups and carries a lot of risks. As a result, selling of a stake in a company like that will pose a serious challenge (Kirby, 2014). Venture capital firms are usually the ones interested in buying stakes in start-ups but because of the large number of investors, they usually do not engage in equity crowdfunded companies (Ari, Aladdasi & Koc. 2021).

Wilson and Testoni (2014) indicate that information asymmetry problems are common with start-up firms. Therefore, this makes it riskier for investors who put their money in such firms. Most entrepreneurs do not disclose the risks and challenges encountered in the course of operations to investors. Usually, crowdfunders are not professional financiers and so are not able to properly assess the risk involve in a venture before investing in them (Esmaeilpourmotlagh, 2018). The estimated default risk of equity crowdfunding according to Wilson and Testoni (2014) is 50%, and their study reveals that the success rate of crowdfunded firms and return on investment has not been properly estimated. Another challenge associated with equity crowdfunding for entrepreneurs is the difficulty in managing investors due to the number of investors involved in funding the venture. Investors also faces

the risk of having their shares in a business diluted as a result of the number of investors involved if proper follow ups are not made (Wilson, 2014).

Motivation to Choose Equity Crowdfunding

Brown *et al.* (2017) presents lack of financial alternative as the motivation for most entrepreneurs to enter into equity crowdfunding campaigns. This platform presents the opportunity to access capital without going through the stressful requirements of other sources of funds. In order to escape the conditions attached to securing bank loans and the clauses attached to venture capital financing, entrepreneurs opt for equity crowdfunding (Esmaeilpourmotlagh, 2018). Hermer *et al.* (2011) states that companies are driven by the desire to generate funds to fill the funding gap encountered in the life cycle of firms.

Although generating capital is the primary incentive to crowdfund, Lukkarinen *et al.* (2016) suggests that companies enter into crowdfunding campaigns for other reasons like testing the adoption of the product/service on the market, establishing new business relationships, generating constructive feedback on their business model and product as well as market the products to the crowd. Lukkarinen *et al.* (2016) and Moritz (2014) confirms that factors like product testing on the market and access to "wisdom of the crowd" encourages firms to seek funding through equity crowdfunding platforms. In order to gain control of the management and operations of their enterprises, entrepreneurs choose equity crowdfunding instead of funds from business angels and venture capital firm, especially since these sources play active roles in the management of the firms they invest in (Esmaeilpourmotlagh, 2018).

Theoretical Review

Since the introduction of the concept of crowdfunding, numerous theories have been proposed to explain its various forms. Amongst these theories are:

Donation Model: This model provides support to patients, as well as artistic projects, sporting events, cultural events, and social campaigns (Schwienbacher *et al.*, 2012; Kirby, 2014). In a traditional donation model, participants are not rewarded; in a modified (sponsor) model, they receive CDs or books for their support (Mollick, 2014). In this model, one can differentiate between the non-rewards model and the reward-based model (also known as a bonus model) (Wierzbicka, 2018; Shneor, Zhao & Flten, 2020).

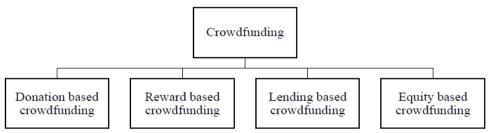
The Lending Model: This model consists of granting small loans between individuals, one of whom is interested in cash investments (lender, investor) and the other of whom is typically seeking short-term capital from outside sources (borrower, beneficiary) (Mollick, 2014; Kirby, 2014).

Transactions can happen on websites without the help of financial institutions (Shneor, Zhao, & Flten, 2020).

Investment Model (Equity-based): In this case, funds are transferred in exchange for the promise of a stake in the company or profits (Mollick, 2014). Furthermore, the beneficiaries and funders receive participation units in the share capital of the beneficiary company, currently only accredited investors, and debt, where the beneficiaries' financing is repayable, i.e., the beneficiary is required to return the funds provided by the funders (Kirby, 2014; Shneor, Zhao & Flten, 2020).

Invoice Trading Model: This is a more recent addition to the crowdfunding models. Thus, this model is regarded as a "quick and easy way for small and medium-sized enterprises (SMEs) to raise short-term debt by pre-financing their outstanding invoices through individual or institutional investors" (Dorfleitner *et al.*, 2017). Such a short-term supply of financing, in which companies sell their accounts receivable at a discount in exchange for immediate cash, aids in the alleviation of cash-flow issues that frequently plague SMEs (Shneor, Zhao & Flten, 2020). Unlike other crowdfunding models, this one focuses more on managing cash flow, which is paid for by crowd investments.

Kirby and Worner (2014) classify crowdfunding into two models: community-based crowdfunding and crowdfunding for financial returns. Community-based crowdfunding does not guarantee financial returns to donors but is viewed as a charitable act, whereas financial return-based crowdfunding generates financial returns for investors.



Community based crowdfunding, Financial return based crowdfunding Source: (Kirby, 2014)

Figure 1. Crowdfunding Classifications

Empirical Review

Although there has not been much research on the topic of crowdfunding in Ghana, researchers are interested in it because of the benefits it provides to entrepreneurs and investors.

Equity crowdfunding, according to Ralcheva and Roosenboom (2019), has emerged as a market for founders where they can raise money from their close network, including family, friends, customers, and current shareholders,

as well as from a large number of investors in exchange for an equity share in the business. However, Berndt and Mbassana's (2016) exploratory study in equity crowdfunding revealed that there is little understanding of crowdfunding as a phenomenon and the specifics of how it works. Their participants expressed an interest in using crowdfunding, though clarification of the entrepreneurs' and investors' expectations would be required prior to its use.

Using a typology-based methodology, Owusu and Owusu-Ansah (2020) investigated "Understanding Crowdfunding Ecosystem as an Alternative Source of Entrepreneurial Finance for SMEs in Ghana." Four models of crowdfunding were identified by the study: peer-to-peer lending, equity, rewards, and donation. The study concluded that Small and Medium Enterprises (SMEs) in Ghana can benefit significantly from crowdfunding. Using descriptive and comparative research methods in foreign countries and Poland, Wierzbicka (2018) emphasized the lack of knowledge regarding this type of institution and, consequently, the significance and role that social financing plays in the financial market.

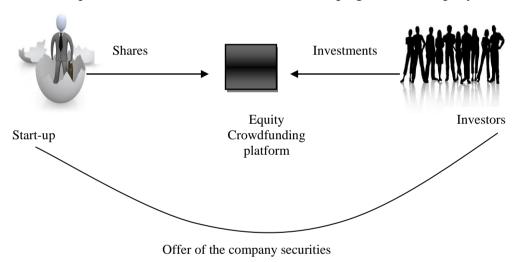
Wachira (2022) explored what influences the amount of money raised which can either lead to the success or failure of equity-based crowdfunding using Crowdcube, Pearson correlations, and multiple regression analysis. According to the findings, the number of investors, target amount, and premoney valuation strongly and positively influence the success of equity-based crowdfunding campaigns. Also, equity, display of share price information, and online social media presence are other factors that influence the success of equity-based crowdfunding campaigns.

Djimesah *et al.* (2022) studied the influential factors of the Technology Acceptance Model (TAM) for crowdfunding stakeholders' behaviors and intention used. However the mixed-method approach using quantitative data of 538 respondents and a qualitative data collection process of interview and questionnaire in eight regional capitals of Ghana were adopted. According to the study, the ease of use influences perceived usefulness while the ease of use affects intention. However, the study reveals that perceived usefulness influences its intention.

In their paper, Blaseg, Cumming, and Koetter (2021) constructed a sample of equity crowdfunding and non-equity crowdfunding ventures that meet the organizational criteria for using crowdfunding in Germany. According to their findings, entrepreneurs who have access to other forms of equity are less likely to use equity crowdfunding, and entrepreneurs who use equity crowdfunding are more likely to fail.

Conceptual Framework

The ultimate goal of the crowdfunding process is to provide funding for a promising project, be it a business venture, a non-profit social project or building a scientific prototype. In achieving this goal of crowdfunding, there are basically three players involved; the creator/entrepreneur, the intermediary/platform, and the crowd or the investor who provides the needed funding (Scholz, 2015) as presented in Figure 2 below. In the crowdfunding process, the key party that holds everything together is the online platform. However, these platforms serves both as the field for the event and the referee that mediates the transaction. The crowdfunding platform dictates the rules by which the process is enacted and, usually, most platforms set a maximum and minimum amount for each crowdfunding campaign. The success of the campaign is determined by the ability to reach the minimum target, upon which the platform transfers the returns of the campaign to the company.



Source: Author's Construct (2024) **Figure 2.** How crowdfunding Operates

The other party involved is the creator of the project who is seeking funding. These people are not only entrepreneurs seeking to finance their ventures but individuals seeking personal loans or NGOs seeking to finance a charity project. Entrepreneurs who wish to have their ideas funded sends their application to the crowdfunding platform, usually a short video, which as a pitch to the potential investors (the crowd) on the prospects of the venture. The application is thoroughly screened by the crowdfunding platform and decides if it fits to be hosted on the site (Collins, 2012).

The crowd is the next party involved in the execution of the crowdfunding process. The success and failure of any campaign rests on the

interest of the crowd to support the campaign. It is the participation of the crowd in a project that invites other funders on the internet to participate in a particular campaign (Belleflamme, 2013). Crowdfunders get an opportunity to directly interact with entrepreneurs to give their input on how to start up the project.

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Research Gap

Based on the studies reviewed, equity crowdfunding is very important in providing a major alternative for investors and entrepreneurs to raise funds for their ventures. It is also true that literature on the subject in Ghana is very scanty (Djimesah et al., 2022; Kuma et al., 2022; Agyapong & Mordi, 2020; Owusua & Owusu-Ansahb, 2020), with most of the studies focused on literature review because of the novelty of the subject in Ghana. Hence, there are risks threatening the expansion of this financing option. As a result, it is a topic worth researching for the benefit of both academia and industry.

Methodology

This section entails the research design, the population, and the sampling procedure adopted for the study.

Research Design

According to Kumar, research design is a procedural plan that is adopted by a researcher to properly answer research questions (Kumar, 2011). In this study, a mixed method approach was used. Furthermore, a combination of both quantitative and qualitative methods according to Creswell provides a better understanding of research problem than using one approach alone (Creswell, 2011). The type of data collection from the existing crowdfunding platforms in Ghana is qualitative and exploratory, which is aimed at providing an accurate representation of the platforms' efforts in financing entrepreneurship. On the other hand, the quantitative examines the quantitative properties and phenomena and their relationships exclusively.

Population of the Study

The study was carried out in the Tema Metropolis in the Greater Accra Region of Ghana. Therefore, the target population are the entrepreneurs and investors in the Tema Metropolis. The geographic setting chosen for the research was adequate because it is a highly commercial part of the country which house both established and upcoming ventures. It is also a good place to find young professionals that may be interested in investment opportunities. Again, Tema Municipality was chosen as the scope of the study because it has a high density of entrepreneurs in different industries including technology, agriculture, manufacturing, etc. Also, the selected communities were Kpone,

Dohwenya, Prampram, Afienya, and Golf Estate which contains approximately 10,000 entrepreneurs and investors. The population included all the crowdfunding platforms operating in this metropolis.

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Sampling

In getting to understand the operations and results of the crowdfunding platforms in Ghana, purposive sampling method was adopted. The purposive sampling were applied by targeting only entrepreneurs and investors living in the Tema metropolis. The purposive sampling method was applied to solicit information from respondents who have knowledge on crowdfunding or alternative source of funding for entrepreneurs.

A sample size of 357 respondents were chosen within the Tema Metropolis. However, the researcher visited companies located in the study area, interacted with workers in the various companies and through that, respondents were identified. As such, 149 entrepreneurs in various industries and 118 investors as well as 90 respondents acting as both entrepreneurs and investors were chosen. These numbers were chosen purely based on respondents' availability and willingness to be part of the study. The entrepreneurs were made up of those who are yet to start operating their ventures and those who are already in operation. There were 9 crowdfunding platform identified whose operations extended to Ghana.

The instrument used for gathering the data was a questionnaire. The crowdfunding platforms were contacted via email and the objectives of the study were explained to the platforms. Additionally, telephone information was requested for a telephone interview with representatives of the platforms.

Data Analysis

Mainly, descriptive analysis was applied. This involves converting the raw data into a manageable form, developing summaries and applying statistical inferences, and presenting them using longitudinal tables, bar charts, and pie charts. The Google forms application tabulated the response from the questionnaires and converted it into a spreadsheet format.

Research Findings and Discussion

This section explains the analysis of the data, findings, and discussion of this study as follows:

Background Information of Respondents

The research was conducted to study the viability of equity crowdfunding as an alternative source of financing entrepreneurship in Ghana. Respondents were chosen at random within the Tema metropolis to answer the questionnaires for the research. The table below shows a distribution of

categories respondents belonged to; 41.7% (n=149) of respondents were entrepreneurs operating in varying industries, 33.1% (n=118) were investors, and 25.2% (n=90) fell in both categories.

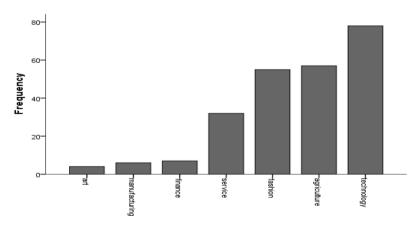
Entrepreneurs represent respondents who have started their own businesses or in the process of setting up. Investors represent respondents who are engaged in putting funds in ventures for future financial gain.

Table 1. Distribution of respondents

Categories	Frequency	Percentage	
Entrepreneur	149	41.7%	
Investor	118	33.1%	
Both	90	25.2%	
Total	357	100%	

Source: Field Survey, 2021

Industries Entrepreneurs Operate: Figure 3 provides the distribution of the various industries the entrepreneurs who participated in the survey operates in. In all, entrepreneurs were grouped into 7 different fields of operation, namely; IT, Agriculture, Finance, Service, Fashion, Art, and Manufacturing. Majority of respondents 32.6% operated in the field of technology, 23.8% were into agriculture, 2.9% in finance, 13.4% operated in the service industry, 23.8% of entrepreneurs surveyed were operating in the fashion industry, and 1.7% and 2.5% did business in the fields of art and manufacturing respectively.



Industries Entrepreneurs operate in

Source: Field Survey, 2021 **Figure 3.** Industry of Operation

Years in Entrepreneurship: Entrepreneurs were further grouped according to years of being in business and Table 2 provides a summary of the years respondents had spent in business. Years of operation were categorized into three; from zero to three years (0-3) which was 83.8% (n=299) of total entrepreneurs surveyed. This indicates that majority of entrepreneurs were still in the formative stage of the business; they had just started operations or yet to start. It could be inferred from the data that entrepreneurship is gradually becoming a career option for graduates in Ghana. This could be as a result of the inadequate job opportunities for the number graduating every year. It could also be in agreement to the findings of Owusu Ansah that interest in entrepreneurship is rising because universities in the country have added entrepreneurship to their curriculum (Owusu Ansah, 2012). 12.6% (n=45) of respondents had been operating their ventures from four to seven years (4-7) and 3.6% (n=13) had been in business from eight to ten years (8-10).

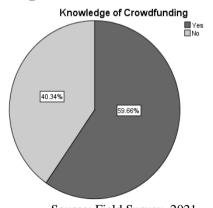
Table 2. Years in Entrepreneurship

Years	Frequency	Percentage	
0 - 3	299	83.8%	
4 - 7	45	12.6%	
8 - 10	13	3.6%	
Total	239	100%	

Source: Field Survey, 2021

Objective One: To explore the knowledge base of Ghanaian entrepreneurs and investors on equity crowdfunding.

Knowledge of Crowdfunding: Respondents of the study were asked if they had heard anything about crowdfunding, to which they were required to respond "Yes" or "No". Figure 4 below shows that 59.7% of respondents had heard about crowdfunding and possessed some knowledge about the concept of crowdfunding. 40.3% had no idea what crowdfunding meant.



Source: Field Survey, 2021 **Figure 4.** Knowledge of Crowdfunding

Participation in Crowdfunded Project: In order to explore the knowledge level of crowdfunding among the entrepreneurship community in Ghana, respondents who had heard about crowdfunding were further asked to indicate if they had participated in a crowd funded project before, either as an entrepreneur seeking funding or an investor providing funds. Figure 5 summarizes the response received from respondents. 15.5% of respondents affirmed they had been involved in a crowdfunding campaign, while 84.5% of respondents had never been part of any crowdfunding campaign.

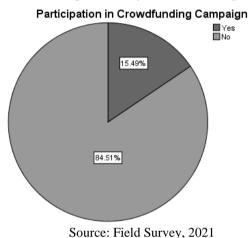


Figure 5. Participation in Crowdfunding Campaign

Reasons for not considering Equity Crowdfunding as an Investment Option: When asked why they will not consider crowdfunding as an investment option, 31.9% of survey respondents said crowdfunding is not an established form of investment in Ghana. 52.4% of respondents confessed they do not have enough knowledge about the operations of equity crowdfunding and crowdfunding in general. This indicates that even though majority of respondents had heard about crowdfunding, a huge percentage of them were oblivious to the details of its operations. 5.0% said IT literacy was their challenge, 7.6% just did not like the idea of funding entrepreneurship with equity crowdfunding, and 3.1% cited the credibility of crowdfunding platform managers as the reason they will not opt for crowdfunding as an investment option.

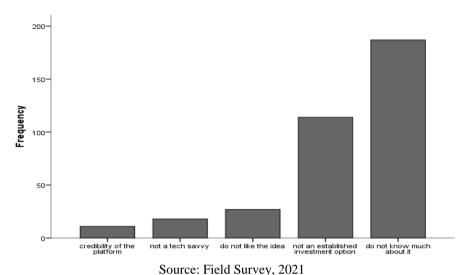


Figure 6. Reasons for not Choosing Equity Crowdfunding

Objective Two: To determine whether equity crowdfunding can be a good alternative in bridging the financing gap in entrepreneurship

Source of Starting Capital: As shown in the table below, majority of entrepreneurs who took part in the survey used personal savings as the source of their starting capital, 56.3% (n=201). Again, it is evident from the data that very few entrepreneurs start their businesses with capital obtained from formal banking institutions as stated in the report of the International Growth Centre in Ghana. In this case, 4.2% (n=15) of respondents of the survey received their starting capital from banks. It is also seen in the data that next to personal savings, most Ghanaian entrepreneurs used money obtained from family and friends as starting capital, 36.7% (n=131) of respondents confirmed this in the survey. The remainder of the respondents received assistance from venture capitalists and angel investors, which represents 2.8% (n=10) of entrepreneurs from the survey.

Table 3. Source of starting capital

Source	Frequency	Percent	
Friends and Family	131	36.7%	
Personal Savings	201	56.3%	
Bank Loan	15	4.2%	
Venture Capital	5	1.4%	
Angel Investors	5	1.4%	
Total	357	100%	

Source: Field Survey, 2021

Filling the Funding Gap in Entrepreneurship: The survey respondents were asked to state if equity crowdfunding can bridge the funding gap in entrepreneurship in Ghana. They were required to respond "Yes", "No" or 'Maybe". 54.1% (n=193) of respondents said that equity crowdfunding will be a suitable alternative source in financing entrepreneurship in Ghana. 3.6% (n= 13) of the respondents were not convinced that equity crowdfunding can bridge funding gap in entrepreneurship and 42.3% (n= 151) of the respondents were not certain if it will be a good alternative source of financing entrepreneurship or not. Hence, they responded "Maybe". The table below provides a summary of responses.

Table 4. Crowdfunding ability to bridge financial gap according to respondents

Response	Frequency	Percent	
Yes	193	54.1%	
No	13	3.6%	
Maybe	151	42.3%	
Total	357	100%	

Source: Field Survey, 2021

Objective Three: Challenges to Equity Crowdfunding in Ghana

As part of the objectives of the study, respondents were asked to give their opinion on what they think could be the potential challenges of equity crowdfunding in the country. In answering this, 39.5% (n=141) were of the view that the biggest challenge will be its adoption. Ghanaians might not openly accept it as a means of investment or accessing funding. Thus, this could be because equity crowdfunding is not an established form of investment in the country, or majority of entrepreneurs and investor has little or no knowledge about it. 24.4% (n=87) of respondents said the only challenge they see is people's ability to use the technology owing to the fact that most Ghanaians have little IT literacy. 34.7% (n=124) of participants said regulatory issues will be the major challenge of equity crowdfunding in Ghana. It is evident in literature that the issue of regulations has been a challenge in other countries. 1.4% (n=5) of respondents said all the above mentioned challenges could prevent the successful operation of equity crowdfunding in Ghana. Thus, the table below shows a summary of the responses received.

Table 5. Potential Challenges to Equity Crowdfunding Adoption

Challenge	Frequency	Percent	
Adoption	141	39.5%	
IT literacy	87	24.4%	
Regulatory Issues	124	34.7%	
All the above	5	1.4%	
Total	357	100%	

Source: Field Survey, 2021

Other Perceived Challenges

Respondents were given a list of other possible challenges and indicate whether they were MOST LIKELY, LIKELY, and UNLIKELY. The table below provides a summary of the results obtained.

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Table 6. Other Challenges Related to Equity Crowdfunding

Challenges	Frequencies		
	Most Likely	Likely	Unlikely
Projects from certain industries will get more attention than others	142	185	24
Only known brands will be funded	163	164	25
Unclear rules makes it inconvenient	182	141	29
Business idea might be stolen	151	163	36

Source: Field Survey, 2021

Disscusion

To achieve the first objective, the study asked participants on a number of issues to solicit their understanding. Respondents were asked if they had heard anything about crowdfunding. Majority of respondents had heard about crowdfunding and possessed some knowledge about the concept of crowdfunding. Also, respondents who had heard about crowdfunding were further asked to indicate if they had participated in a crowdfunded project before, either as an entrepreneur seeking funding or an investor providing funds. To this question, most of the respondents had never been part of any crowdfunding campaign. These groups were further quizzed on why they will not consider crowdfunding as an investment option. Thus, a resounding number confessed that they do not have enough knowledge about the operations of equity crowdfunding and crowdfunding in general, while more people also stated that crowdfunding is not an established form of investment in Ghana. This is interesting to know but not surprising because business owners are always in the lookout for new ways of funding their ventures. Mazzocchini and Lucarelli (2023) thus agreed with this finding by demonstrating that the field of research on Equity Crowdfunding is recent and fast-growing, and so it is easier to access information on the subject. Again, Wierzbicka (2018) emphasized the lack of knowledge regarding this type of institution which is also in consonance with this study. Berndt and Mbassana (2016) confirmed this in their exploratory study in equity crowdfunding where they revealed that there is little understanding of crowdfunding as a phenomenon and the specifics of how it works.

The second objective from the results also showed that majority of entrepreneurs who took part in the survey used personal savings as the source of their starting capital. Again, it is evident from the data that very few entrepreneurs start their businesses with capital obtained from formal banking institutions as stated in the report of the International Growth Centre in Ghana. Few respondents received assistance from venture capitalists and angel investors. However, when respondents were asked if equity crowdfunding can bridge the funding gap in entrepreneurship in Ghana, majority of respondents answered in affirmation. Kuma et al. (2022) suggest that though crowdfunding is a fairly new concept in Ghana, it is similar to Susu, which is a Ghanaian traditional microfinancing concept and, therefore, has a high acceptability rate. According to Berndt and Mbassana's (2016) study, their participants expressed an interest in using crowdfunding, though clarification of the entrepreneurs' and investors' expectations would be required prior to its use.

Respondents were also asked to give their opinion on what they think could be the potential challenges of equity crowdfunding in the country. Majority of the respondents were of the view that the biggest challenge was adoption. Ghanaians might not openly accept it as a means of investment or accessing funding. Therefore, this could be because equity crowdfunding is not an established form of investment in the country, or majority of entrepreneurs and investor has little or no knowledge about it. Some respondents said the ability to use the technology owing to the fact that most Ghanaians have little IT literacy is a challenge. Regulatory issues were also mentioned as a major challenge of equity crowdfunding in Ghana. It is evident in literature that the issue of regulations has been a challenge in other countries (Ari et al., 2021; Berndt & Mbassana, 2016; Eckhardt, 2016). Blaseg, Cumming, and Koetter (2021) constructed a sample of equity crowdfunding and non-equity crowdfunding ventures that meet the organizational criteria for using crowdfunding in Germany. According to their findings, entrepreneurs who have access to other forms of equity are less likely to use equity crowdfunding, while entrepreneurs who use equity crowdfunding are more likely to fail. Similarly, the findings of Kuma et al. (2022) suggest that information asymmetric plague the smooth operations of the crowdfunding concept in Ghana.

Conclusion

The research was conducted to assess equity crowdfunding as an alternative source of financing entrepreneurship in Ghana. The survey was conducted in the Tema Metropolis of the Greater Accra region. A total of 357 entrepreneurs and investors participated in the study.

The first objective sought to explore the level of knowledge Ghanaian entrepreneurs and investors possess on equity crowdfunding. It was discovered that although most respondents had heard about it, very few understood the operations of this phenomenon to exploit it as a funding source or investment avenue.

The second objective of the study was aimed at determining the viability of equity crowdfunding as an alternative source of financing entrepreneurship and whether it will be in the position to bridge the funding gap in the country. In pursuing this objective, it was observed that majority of entrepreneurs in Ghana start their ventures with funds that were either secured from personal savings or family and friends. This is because of their inability to provide detailed financial records and the unavailability of suitable collateral to acquire loans from the formal banking sector. The study therefore shows that equity crowdfunding could bridge gap left by banks' tighter restrictions on entrepreneurs seeking funding.

The final objective of the research was to explore the possible challenges that could militate the successful implementation of equity crowdfunding as a source of financing entrepreneurship in the country. Adoption of equity crowdfunding as an alternative source of funding was the biggest challenge identified from the study because of the knowledge deficiency on the part of entrepreneurs and investors on the concept and operations of equity crowdfunding. The study further showed that the issue of regulation, if not properly handled, could cripple every benefit that could be generated from equity crowdfunding.

Recommendations

Based on the findings, the following recommendations were made;

- 1. The findings indicated that investors are not familiar with the operations of crowdfunding, do not even know how to adopt its concept, and do not know how to take advantage of this fundraising opportunity. It is therefore recommended that government set up initiatives to educate the general entrepreneurship community in the country on the equity crowdfunding. These initiatives could be geared towards encouraging investors to set up local crowdfunding platforms to meet the funding needs of Ghanaian entrepreneurs.
- 2. The study showed that equity crowdfunding has the potential of being an alternative financial source. However, it was revealed that if the issue of regulation is not properly handled, it could cripple every benefit that could be generated from equity crowdfunding. Therefore, regulatory institutions should be equipped by the government with policies that will ensure a safe and fair playing field for all parties involved.

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References:

- 1. Agyapong, G. T. & Mordi, C. (2020). Entrepreneurship and Entrepreneurial Finance in Ghana. *Entrepreneurial Finance in Emerging Markets: Exploring Tools, Techniques, and Innovative Technologies*, 345-360.
- 2. Alagidede, P., Baah-Boateng, W., & Nketiah-Amponsah, E. (2013). The Ghanaian economy: an overview. *Ghanaian Journal of Economics*, *I*(1), 4-34.
- 3. Ari, I., Aladdasi, M., & Koc, M. (2021). Equity crowdfunding and venture capital as complementary financing models for sustainable entrepreneurs: A comprehensive review. *Available at SSRN 4023847*.
- 4. Bank of Ghana (2021). Bank of Ghana issues policy on crowdfunding. NOTICE NO. BG/GOV/SEC/2021/01 Retrieved from NOTICE-CROWDFUNDING-POLICY.pdf (bog.gov.gh) (on 1/12/2023)
- 5. Belleflamme, P., Lambert, T., & Schwienbacher, A. (2013). Crowdfunding: Tapping the right crowd. *Journal of Business Venturing*, 29(5), 585.
- 6. Berndt, A. & Mbassana, M. (2016). Crowdfunding: The Beliefs of Rwandan Entrepreneurs, *East Africa Research Papers in Business, Entrepreneurship and Management*, EARP-BEM No. 2016:05.
- 7. Blaseg, D., Cumming, D., & Koetter, M. (2021). Equity Crowdfunding: High-Quality or Low Quality Entrepreneurs?, *Entrepreneurship Theory and Practice* 2021, Vol. 45(3) 505–530
- 8. Brown, R., Mawson, S., Rowe, A., & Mason, C. (2018). Working the crowd: Improvisational entrepreneurship and equity crowdfunding in nascent entrepreneurial ventures. *International Small Business Journal*, *36*(2), 169-193.
- 9. Creswell, J. W., Klassen, A. C., Plano Clark, V. L., & Smith, K. C. (2011). Best practices for mixed methods research in the health sciences. *Bethesda (Maryland): National Institutes of Health*, 2013, 541-545.

- 10. CIA World Fact book (2020) from www.cia.gov/the-world-factbook/countries/ghana/
- 11. De Prijcker, S., Manigart, S., Collewaert, V., & Vanacker, T. (2019). Relocation to get venture capital: a resource dependence perspective. *Entrepreneurship Theory and Practice*, 43(4), 697-724.
- 12. Djimesah, I. E., Zhao, H., Okine, A. N. D., Li, Y., Duah, E., & Mireku, K. K. (2022). Analyzing the technology of acceptance model of Ghanaian crowdfunding stakeholders. *Technological Forecasting and Social Change*, 175, 121323.
- 13. Dorfleitner, G., Hornuf, L., & Weber, M. (2018). Dynamics of investor communication in equity crowdfunding. *Electronic Markets*, 28(4), 523-540.
- 14. Eckhardt, M. (2016). Equity Crowdfunding in Finland: An alternative investment option.
- 15. Esmaeilpourmotlagh, H. (2018). Why startup entrepreneurs acquire capital through equity crowdfunding?.
- 16. European Business Angel Network (2018). European early stage market statistics 2017. http://www.eban. org/wp-content/uploads/2018/07/EBAN-Statistics-Compendium-2017.pdf
- 17. Ferreira, B. C. F. & Felipe, I. J. D. S. (2020). Determinants of the success of equity crowdfunding campaigns.
- 18. Fukuhara, M. (2020). An overview of online alternative finance. *Public Policy Review* 16 (4), 1e19
- 19. Gierczak, M.M., Bretschneider, U., Haas, P., Blohm, I. & Leimeister, J.M. (2015). Crowdfunding Outlining the New Era of Fundraising. In: Gajda, O. & Brüntje, D. (Eds.), Crowdfunding in Europe State of The Art in Theory And Practice; FGF Studies in Small Business and Entrepreneurship (pp. 7-23). Cham: Springer Science + Business Media.
- 20. Golic, Z. (2014). Advantages of Crowdfunding as an Alternative Source of Financing of Small and Medium-Sized Enterprises, *Proceedings of the Faculty of Economics in East Sarajevo Year 2014*, Issue 8, pp. 39-48
- 21. Hemer, J. (2011). A snapshot on crowdfunding (Working Papers Firms and Region, No. R2/2011). Karlsruhe: Fraunhofer Institute for Systems and Innovation Research ISI.
- 22. Hemer, J., Schneider, U., Dornbusch, F., & Frey, S. (2011). Crowdfunding und andere Formen informeller Mikrofinanzierung in der Projekt und Innovations finanzierung. Stuttgart: Fraunhofer Verlag
- 23. Herawati, L. L. & Wibowo, B. (2022, August). Factors Influencing Participation in Equity Crowdfunding Indonesia. In *Proceedings of*

- International Conference on Economics Business and Government Challenges (Vol. 1, No. 1, pp. 45-55).
- 24. Howe, J. (2006). The rise of crowdsourcing. from http://archive.wired.com/wired/archive/14.06/crowds.html
- 25. Kirby, E. & Worner, S. (2014). Crowd-funding: An infant industry growing fast. *IOSCO Research Department*, 1-63.
- 26. Kraemer-Eis, H., Botsari, A., Gvetadze, S., Lang, F., & Torfs, W. (2020). European Small Business Finance Outlook 2020: the Impact of COVID-19 on SME Financing Markets EIF Working Paper.
- 27. Kuma, F. K., Yusoff, M. E. B., & Apreku-Djan, P. K. (2022). A Synthesis of Crowdfunding Concepts in the Ghanaian Context: Crowdfunding Information Challenges in Ghana. *Journal of the Knowledge Economy*, 1-26.
- 28. Lukkarinen, A., Teich, J.E., Wallenius, H., & Wallenius, J. (2016). Success drivers of online equity crowdfunding campaigns. Decis. Support Syst. 87, 26e38. https://doi.org/10.1016/j.dss.2016.04.006.
- 29. Manigart, S. & Sapienza, H. (2017). Venture capital and growth. In D. Sexton & H. Landström (Eds.), The blackwell handbook of entrepreneurship (pp. 240–258). Blackwell Publisher
- 30. Mason, C. (2020). The coronavirus economic crisis: its impact on venture capital and high growth enterprises. European Commission Research Centre (Issue April). https://doi.org/10.2760/408017
- 31. Massolution (2013). The Crowdfunding Industry Report: Market Trends Composition and Crowdfunding Platforms.
- 32. Massolution, C.L. (2015). Crowd funding industry report, available at: http://reports.crowdsourcing.org/index.php? route product/product&product_id_54
- 33. Mazzocchini, F. J. & Lucarelli, C. (2023). Success or failure in equity crowdfunding? A systematic literature review and research perspectives. *Management Research Review*, 46(6), 790-831.
- 34. Mensah, S. (2004, March). A review of SME financing schemes in Ghana. In *A Presentation at the UNIDO Regional Workshop of Financing SMEs* (pp. 15-16). Ghana: Accra.
- 35. Mollick, E.R. (2013). "The Dynamics of Crowdfunding: An Exploratory Study". *Journal of Business Venturing* 29 (1), 1e16. https://doi.org/10.1016/j.jbusvent.2013.06.005
- 36. Moritz, A. & Block, J. H. (2014). Crowdfunding und Crowdinvesting: State of the Art der wissenschaftlichen Literatur [Crowdfunding and Crowdinvesting: A Review of the Literature]. ZfKE Zeitschrift für KMU und Entrepreneurship, 62 €, 57 89. doi:10.2139/ssrn.2274141

- 37. Nugroho, B. Y. (2020). Challenges Equity Crowdfunding Company Business Model. *SSRG International Journal of Economics and Management Studies (IJEMS)*, 7(12), 147-151.
- 38. Owusua, J. & Owusu-Ansah, W.A. (2020). Understanding Crowdfunding Ecosystem as Alternative Source of Entrepreneurial Finance for SMEs in Ghana, *International Journal of Innovation, Creativity and Change*, 13(11).
- 39. Ralcheva, A. & Roosenboom, P. (2020). Forecasting success in equity crowdfunding. *Small Business Economics*, 55(1), 39-56.
- 40. Robson, P.J. & Obeng, B.A. (2008). The barriers to growth in Ghana. *Small Business Economics*, 30(4), 385-403.
- 41. Schwienbacher, A. (2010). Crowdfunding of small entrepreneurial venture. *The Oxford Handbook of Entrepreneurial Finance*
- 42. Schwienbacher, A. & Larralde, B. (2010). Crowdfunding of small entrepreneurial ventures. *Handbook of entrepreneurial finance, Oxford University Press, Forthcoming*.
- 43. Schwienbacher, A. & Larralde, B. (2012). Crowdfunding of Small Entrepreneurial Ventures. In D. Cumming (Ed.), The Oxford Handbook of Entrepreneurial Finance. New York, NY: Oxford University Press.
- 44. Shneor, R., Zhao, L., & Flåten, B.T. (2020). *Advances in Crowdfunding, Research and Practice*, ISBN 978-3-030-46309-0, Palgrave Macmillan
- 45. Wierzbicka, K. (2018). Crowdfunding as an Alternative Method of Raising Capital, *Financial Internet Quarterly "e-Finanse"* 2018, vol. 14/ no. 4, s. 56-66
- 46. Wilson, K. & Testoni, M. (2014). Improving the role of equity crowdfunding in Europe's capital markets. Bruegel Policy Contribution, 1–14.
- 47. Wilson, K. T. (2014). Improving the role of equity crowdfunding in Europe's capital markets.
- 48. Yasar, B. (2021). The new investment landscape: Equity crowdfunding, *Central Bank Review* 21 (2021) 1-16.
- 49. Yunus (2007). A billion bootstraps: microcredit, barefoot banking and business solution for ending poverty.
- 50. Ziegler, T., Shneor, R., Wenzlaff, K., Wang, B., Kim, J., Paes, F. F. D. C., ... & Adams, N. (2021). The global alternative finance market benchmarking report. *Available at SSRN 3771509*.