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DIGITAL FINANCE, GREEN FINANCE AND SOCIAL FINANCE: IS THERE A LINK?

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Abstract

Identifying the intersection between digital finance, green finance and social finance is important for promoting sustainable financial, social and environmental development. This paper suggests a link between digital finance, green finance and social finance. Using a simple conceptual model, I show that digital finance offers a smooth, efficient and seamless channel for individuals and corporations to fund social projects that deliver a social dividend, and green projects lead to a sustainable environment. The implication is that digital finance is both an enabler and a channel for efficient green financing and social financing.

JEL classification: G20, G30, O30, O31, O33, O35, Q01
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Introduction

This paper analyses the link between digital finance, green finance and social finance. Recently, some proponents of digital finance have argued that the transfer of funds for all types of expenditure should be achieved using digital finance channels and products, while proponents of social finance want funds to be channeled to all activities or projects that deliver a social dividend to members of society.

Proponents of green finance are promoting green finance as a permanent solution for environmental sustainability. They have two major arguments. The first argument is that if policy makers enforce policies that prevent financial institutions and investors from financing firms whose activities or projects harm the environment, then such firms will discontinue harmful activities and projects that harm the environment and pursue activities and projects that protect the environment for the greater good of society. The second argument is one that does not require government policy intervention. Rather, it encourages investors to divest from firms whose activities harm the environment and channel their equity capital to firms whose activities or projects protect the environment in a sustainable way, which acts as a way for investors to show their support for green investing and environmental sustainable.

Various types of funds transfer are performed on a day-to-day basis through digital finance products and channels. But the extent to which green finance and social finance can benefit from the recent proliferation of digital finance have not been explored in the literature. Also, the extent to which digital finance can help to increase or reduce the volume of funding that goes to social projects and green projects – is another question yet to be explored. So far, the finance literature has not examined the link between digital finance, green finance and social finance. This paper attempts to fill these gaps in the literature.

Given the relatively large array of literature on digital finance and the relatively low level of literature on green finance and social finance, it is important to understand the link between digital finance, social finance and green finance because it can offer some insights to synthesize the three literatures into one, and can help us determine whether there are synergistic benefits associated with promoting digital finance, social finance and green finance all at the same time.

This paper argues that digital finance products, proxy by financial innovations such as bank apps, crowd funding apps, online banking and other financial innovations, can act as effective conduits to facilitate the financing of social projects or green projects through voluntary donations or private funding commitments.

This study makes two contributions to the literature. One, this paper contributes to the literature by proposing a simple framework that links digital, green and social finance together for sustainable development. It contributes to the conceptual understanding of financial innovations by developing a framework that links digital finance, social finance and green finance. Two, this study extends the recent literature on green finance by identifying another important factor that encourages investment in green projects. In this paper, based on the conceptual model, I argue that digital finance can be used to channel funds to social projects and green projects, which in turn leads to greater social dividends and environmental sustainability.

The rest of the paper is structured as follows. Section 2 presents the literature review on digital finance, green finance and social finance. Section 3 discuss the conceptual model. Section 4 concludes.

Literature review

This section reviews the literature on digital finance, social finance and green finance in relation to sustainable development. It begins with the definition of each concept, and then reviews the literature.

Digital finance

Digital finance is defined as 'financial services delivered through mobile phones, personal computers, the internet or cards linked to a reliable digital payment system' (Ozili, 2018, p. 330). The goal of digital finance is to contribute to efficient financial intermediation (Motsi-Omoijiade, 2018; Ozili, 2019), greater financial inclusion (Ozili, 2018; Arabehety et al., 2016), poverty reduction (Wang & He, 2020; Ozili, 2020a), financial stability and sustainable development (Nguyen, 2016; Afzal, 2017).

The benefits of digital finance are enormous. They include: greater financial inclusion, expansion of formal financial services to non-financial sectors, the provision of affordable, convenient and secure banking services to poor individuals in developing countries, increase in gross domestic product (GDP) and greater macroeconomic stability (see Ketterer, 2017; Ozili, 2018; Parada

& Bull, 2018; Ozili, 2020b). Many studies document poor communities and poor economies (e.g., Ozili, 2018; Ryu, 2018; Karlan et al., 2016; Zachariadis & Ozcan, 2017). Other studies focus on the critical success factors of digital finance. They show that financial literacy (Shen et al., 2018), digital literacy (Morgan et al., 2019), access to a mobile phone (Sapovadia, 2018), and access to the internet (Zhu et al., 2016) are major determinants of the use of digital finance products and channels.

Some challenges to digital finance have been identified in the literature. They include: its excessive focus on transaction accounts (Ozili, 2020a), weak and untimely regulation (Hu & Zheng, 2016; Ketterer, 2017), poor quality and non-affordable digital connectivity or broadband access (Ketterer, 2017; Ozili, 2018), increase in financial risk (Ozili, 2020a), and unexpected disruption in the payment system (Vives, 2019).

Social finance

Social finance is the deliberate and intentional application of tools, instruments, and strategies to channel capital to activities that deliver a social dividend to society. Social finance can also be viewed as an approach to managing money that combines economic profits with a social dividend. Social financing is a concept used to describe lending to companies and investment into companies who consider themselves social enterprises, charities, co-operatives and non-profit. Social finance is a term used to describe the phenomenon where corporate profits are used for lending or investment in companies who consider themselves social enterprises, and non-profit organisations.

Cornée et al., (2018) show how the social contribution made by financial institutions depends on their funders' return requirements. They show that funders will sacrifice their financial return to achieve a much higher social return, and that social screening is necessary to attract social funders that will trade their financial benefits for greater social return or outcomes. Cooper et al., (2016) state that investors with varying degree of interest in social return will adjust their portfolio in ways that maximizes both the financial and social return expectations of investors. In relation to poverty, Rexhepi (2016) argue that the best way to deal with poverty is through 'social finance' which is designed to help economies create situations where everybody will benefit financially. Rexhepi further suggest that social finance can help decrease unemployment levels, reduce income disparities in the long run, help to better manage poverty, encourage taking care of the environment, and redirect societal effort towards social innovation. Moore et al (2012) show that significant barriers and disincentives exist within the current mainstream, economic system that limit the channeling of private capital into innovative social projects, products or processes while Myers and Conte (2013) state that a major challenge to social finance is the need to balance social and financial goals and manage this tradeoff effectively.

Green finance

Green finance is an approach to managing money that combines economic profits with environmental protection. It emphasizes financing or investing in projects that yield economic benefits while promoting a sustainable environment. The motivation for green finance is either financial incentive, or a desire to preserve the planet, or a combination of both (Wang & Zhi, 2016). Green finance has attracted a lot of attention in the recent policy literature while gaining only limited attention in mainstream finance journals (see, Zhang et al., 2019; Ehlers & Packer, 2017; Falcone & Sica, 2019).

Sachs et al. (2019) emphasize the need for greater investment in green project financing, particularly those that provide environmental benefits for sustainable development, and this can be achieved using new financial instruments and new policies such as green bonds, green banks, carbon market instruments, fiscal policy, green central banking, financial technologies and community-based green funds, which are collectively known as green finance. To encourage private investors to participate in green financing, Taghizadeh-Hesary and Yoshino (2019) suggest that green credit guarantee schemes (GCGSs) and some type of tax rebate should be granted to investors that participate in green investment.

A major challenge to green financing is its inability to attract private participation from investors. Investors have little interest in green projects due to the low rate of return on green investments. Sachs et al. (2019) argue that financial institutions show more interest in financing fossil fuel projects than green projects mainly because there are several risks associated with green projects and they offer a low rate of return. The difficulty in attracting private investors green projects has led to calls for the government, and its agencies, to get directly involved in promoting green finance such as the Central Bank and other public investment agencies.

Volz (2017) suggests ways in which governments, through the Central Bank, can influence the investment and credit allocation decisions of financial institutions towards green investments. They suggest that the Central Bank can enforce additional disclosure requirements, climate-related stress testing and differential capital requirements for climate change.

Conceptual model: Linking digital, social and green finance

A Foundation

In recent years, 'mainstream finance' has been overtaken by 'digital finance'. Digital finance exists through financial innovations such as the use of artificial intelligence in finance, web-based fintech platforms, mobile phone platforms, block chain or distributed ledger technology and the Internet of Things (IoT). Another emerging theme is 'sustainable finance' which emphasizes the use of finance for activities that promote sustainability in the environment and society. Intuitively, social and environmental sustainability can be achieved through digital finance. But for this to happen, the three major areas of finance need to be connected: namely, mainstream finance, digital finance and sustainable finance. This proposed connection, as shown in Figure 1, is important because it is the only way by which digital finance can promote investment and funding for green projects and social projects. Although digital finance has its risk and may create new risks and unintended consequences, there is some optimism that the benefits of digital finance will outweigh the associated risks.

Figure 1: Conceptual framework

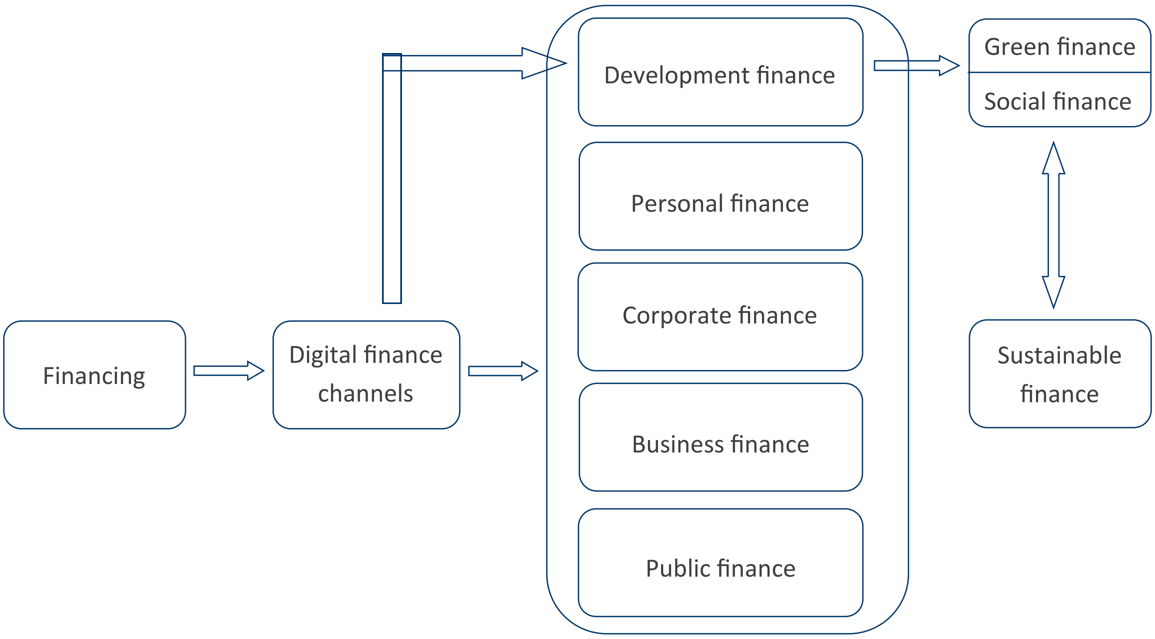
Source: Author's elaboration

Linking digital, social and green finance

The conceptual framework for the relationship between digital finance, green finance and social finance is presented in Figure 2. To summarize, the framework shows that social finance and green finance are a component of development finance while digital finance innovations can facilitate the funding of development projects such as green projects and social projects.

Let's turn now to a more detailed analysis of the relationship between digital finance, social finance and green finance. Corporations, individuals and government snow have better alternatives to channel funds for business purposes. Digital finance channels offer an efficient, seamless and suitable alternative for transactions involving business finance, corporate finance, public finance and development finance. Regarding development finance, the framework considers green finance and social finance as a component of development finance because the endgame of green and social financing is to improve development outcomes for the benefit of society and the environment. In a nutshell, the conceptual framework proposes that digital finance acts as an enabler of green finance and social finance.

Figure 2: Conceptual framework linking digital, green and social finance



Source: Author's elaboration

Conclusion

The paper presented a conceptual framework, and suggests a simple interaction between digital finance and green finance and social finance. These three finance concepts – digital finance, social finance and green finance – are hot topics in the international development community. A clear implication of the proposed conceptual framework is that more research is needed to explore how digital finance innovations affect development outcomes. Such research can help to disentangle some more important research and policy questions.

Future studies can offer additional insights about digital finance, social finance and green finance from the perspective of investors, corporation and individuals. Future studies can assess the differences in expectations and the willingness of various stakeholders to engage and collaborate in green and social financing for the purpose of generating higher return and greater social and environmental dividends.

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