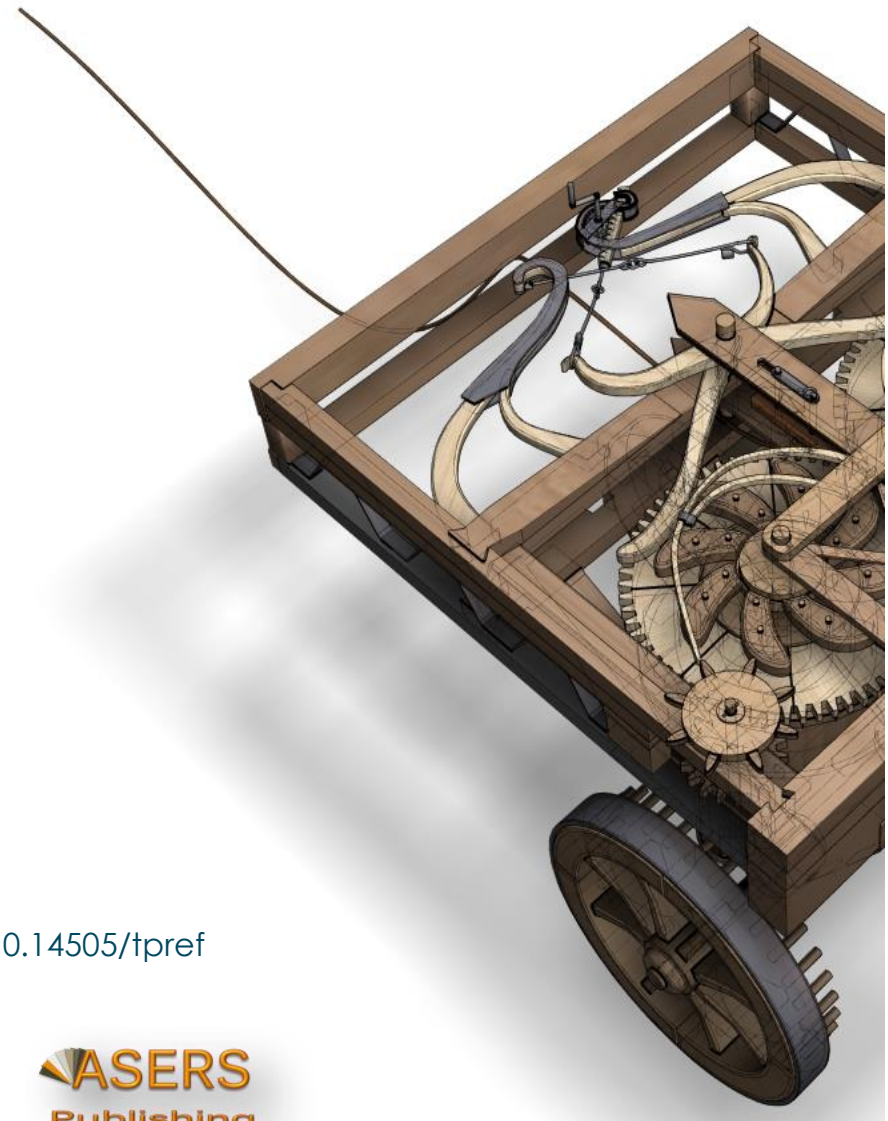
Theoretical and Practical Research in Economic Fields



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Does Digital Financial Literacy Matter for Current and Future Saving Behavior among Rural SME Entrepreneurs? Government Regulations Awareness as a Moderator

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Abstract: Digital financial literacy (DFL) is a game changer in a digital environment. This study examines the impact of DFL on saving behavior among rural small and medium enterprise (SME) entrepreneurs in a developing country. It also explores the effect of government regulations awareness on the association between current and future saving behavior. The study examined rural SME entrepreneurs in Uganda who engaged in financial transactions through mobile phones and retail financial agents. The study employed purposive and snowball sampling procedures to identify rural SME entrepreneurs. Data from 215 rural SMEs entrepreneurs was obtained and analyzed using structural equation modelling and Hayes PROCESS macro. The results indicated that knowledge of digital financial services and products, digital financial risks and control, and consumer rights and reporting procedures significantly impact SME entrepreneurs' current saving behavior. The current saving behavior has a significant positive impact on future saving foresight. Government regulations awareness significantly impacts the indirect path of DFL on future saving foresight via current saving. This study provides insights for academicians, policymakers, owners of rural SMEs, policymakers, and financial institutions' top and middle-level managers interested in improving the financial situation of rural SMEs in developing countries. The originality of this study is established in rural SMEs entrepreneurs' awareness of government regulations in a digital environment that moderates the association between current and future saving behavior with DFL as a primary construct.

Keywords: digital financial literacy; rural SMEs entrepreneurs; current saving behavior; future saving foresight; government regulations awareness.

JEL Classification: D83; G53; M10; C10; G40.

Introduction

Nations progressively focus on individuals' saving habits to enhance welfare. Savings habits are crucial to eliminating poverty throughout the community. Savings behavior pertains to an individual's financial habit of amassing funds to address unforeseen circumstances and future financial needs (Aryan *et al.* 2024). This can be at a personal level or from a business perspective. Individuals who cultivate positive saving habits tend to optimize their spending habits by allocating a portion of their income towards a savings account, enhancing their overall financial standing (Setiawan *et al.* 2022). In doing so, their savings and that of their business improve. However, individuals residing in low-income nations with conventional branch banking systems often find themselves without access to financial services or with limited access (Tomasi and Ilankadhir, 2024a). Individuals regard these channels for saving as expensive to utilize, because of the transport costs involved, which diminishes their capacity to save (Abdallah *et al.* 2024). On that note, the widespread use of financial technology

has the potential to successfully change this paradigm and improve the saving behavior of individuals in developing nations. The COVID-19 outbreak revealed the real value of digitalization (Ferilli *et al.* 2024). Financial technology platforms like mobile banking are easily accessible, quick, cost-effective, and offer secure services that can improve personal and business savings. For financial technology services to successfully impact developing economies, it is crucial to establish a foundation of digital financial literacy (DFL).

Financial technology Institutions view DFL as transformative. Setiawan *et al.* (2022) define DFL as the capacity of an individual to initiate, oversee, and successfully conclude a digital transaction. The primary components of DFL include 1) knowledge of digital financial products and services, 2) knowledge of financial risks and control, and 3) knowledge of consumer rights and reporting procedures (Morgan, 2019; Setiawan *et al.* 2022; Abdallah *et al.* 2024; Aryan *et al.* 2024; Ferilli *et al.* 2024; He *et al.* 2024). DFL entails digital and financial literacy (Widyastuti *et al.* 2024). Individuals must acquire proficiency in digital technologies and a comprehensive understanding of financial matters. For instance, the knowledge of using a telephone or any other computing device, the ability to perform financial calculations and comprehend account balances. Liew *et al.* (2020) argued that financial literacy alone is inadequate in the present period of the 4.0 industrial revolution. As such, regulating digital financial services is needed to safeguard consumers. Promoting awareness of government regulations on digital financial operations would improve financial institutions' credibility and shape peoples' current and future saving behavior (Deng *et al.* 2024; Zhu *et al.* 2024). Awareness of government regulations helps build confidence among individuals for consistent savings (Mensah and Khan, 2024). For example, rural SME entrepreneurs will feel secure using digital financial services regulated by the government. The level of awareness of government regulations by rural SME entrepreneurs in a digital environment is of concern today. Too, the pace of DFL is slower than financial technology adoption among rural SMEs in developing countries (Hasan *et al.* 2023).

The Statista (2023) global report showed that the number of SMEs reached 332.99 million in 2021, implying growth compared to 328.5 million in 2019. The majority of SMEs are in rural and distant regions. As such, branch banks find it challenging to extend financial services. Additionally, because of the informal nature of many rural SMEs, it is difficult for them to obtain a savings account with branch banks for their businesses. This creates opportunities for cutting-edge financial technology to provide equitable financial services to communities globally (Bongomin and Ntayi, 2020; Mpofu and Mhlanga, 2022). Financial technology not only aids SMEs in overcoming obstacles to personal and business savings but also serves as a substitute for bureaucratic branch banking (Yao and Yang, 2022; Lu *et al.* 2022). Through financial technologies, rural SMEs can easily set aside funds for the next fiscal year's activities to address deficits. Nevertheless, the extent to which rural SMEs are prepared to adopt financial technology is still uncertain, especially in low-income nations.

Moreover, a notable literature gap exists in DFL and government regulations awareness for current and future savings behavior among rural SMEs in developing countries like Uganda. The study purposed to address this literature gap by exploring how DFL and government regulation awareness affect rural SME entrepreneurs' access to and usage of digital financial products and services to improve their current saving behavior and future foresight. In addition, the study aimed at creating an understanding of how DFL and government regulation awareness help rural SME entrepreneurs build confidence in digital financial products and services to improve savings behavior. By doing so, the study seeks to provide practical evidence of how DFL and government regulation awareness can mitigate digital financial risks and other related challenges that limit rural SME entrepreneurs from adopting and using digital financial products and services to transform their current and future savings behavior. Generally, the goal is to provide valuable information on improving rural SME entrepreneurs' saving behavior as a footprint for future saving foresight. This provides fundamental insights for academicians, policymakers and other stakeholders interested in improving the financial situation of rural SMEs in developing countries. This study is informative to owners of rural SMEs, policymakers, and financial institutions' top and middle-level managers, in developing countries on how rural business communities can improve their current and future saving behavior through DFL and awareness of government regulations, a field that academicians have not explored to full potential. The originality of this study is established in rural SME entrepreneurs' awareness of government regulations in a digital environment that moderates the association between current and future saving behavior with DFL as a primary construct. The study utilizes the theory of planned behavior (Ajzen, 1991), a psychological theory, to establish a connection between SME entrepreneurs' DFL and their saving behavior.

1. Review of Related Literature

1.1. SMEs and Digital Finance

Recent studies have found that digital finance positively impacts SMEs in various regions. Yao and Yang's (2022) research on electronic finance and SMEs in China, using data from the Chinese growth enterprise market from

2011–2020, showed that digital finance can improve SME innovation and credit processing time. Lu *et al.* (2022) also found that digital finance can substitute bank branches to address the financial constraints of SMEs in China, based on data from 2007–2017. Similarly, Thathsarani and Jiangno's (2022) study on 366 managers of SMEs in Sri Lanka revealed that digital finance provides low-risk, secure, and affordable services to SMEs, allowing them to operate at a low cost. Frimpong et al.'s (2022) study on 400 SMEs in Cape Coast, Ghana, indicated that SMEs prefer and use digital financial services platforms. Bongomin and Ntayi's (2020) research on 379 MSMEs in Gulu-Uganda also revealed that digital financial services contributed to financial inclusion. Finally, Xie and Liu's (2022) study on 581 SMEs in China, using data from 2011–2020, showed that digital finance promotes quality SMEs. Despite such a strong literature base, limited evidence exists exploring how DFL and awareness of government regulations impact rural SME entrepreneurs' current and future saving behavior in low-income economies. Yet, developing countries experience a high pace of digital financial services distribution (Tomasi, 2020; World Bank, 2022). Given the complexity and fragility of financial technology, rural SME entrepreneurs require DFL to thrive with savings.

1.2 Digital Financial Literacy and Saving

DFL is central to an individual's financial management in a digital environment (Setiawan *et al.* 2022; Ferilli *et al.* 2024). The key dimensions of DFL include knowledge of digital financial products and services, knowledge of financial risks and control, and knowledge of customer rights and reporting procedures (Morgan, 2019; Setiawan *et al.* 2022; Abdallah *et al.* 2024; Aryan *et al.* 2024; Ferilli *et al.* 2024; He *et al.* 2024). The idea that financial literacy alone is inadequate in the current period of industrial transformation implies that DFL is a significant resource in the quest for financial stability. Setiawan *et al.* (2022) research underscores the increasing importance of the DFL concept, incorporating digital and financial literacy, in our contemporary, technologically advanced society. According to Lyons and Kass-Hanna (2021), financial literacy is limited in the present 4.0 industrial revolution due to the complexity and fragility of financial technology. According to Ozil (2018), digital literacy can provide low-income families access to beneficial and less expensive saving services than traditional branch banking. Prior research has established a correlation between DFL and saving habits (Moenjak *et al.* 2020; Morgan and Trinh, 2019). According to Setiawan's (2022) study, the findings indicate that DFL significantly impacts the saving behavior of Indonesian millennials aged 5 to 40. This means that people with a better understanding of digital financial concepts are more likely to save money both in the present and the future. Garcia and Villa's (2020) research in Spain corroborates this, demonstrating that financial literacy positively influences individuals' inclination to save money independently. Conversely, Lewis *et al.* (2020) discovered that there was just a moderate level of comprehension of digital financials among a rural population located in Sarawak, Malaysia. Andreou and Anyfantaki's (2021) survey revealed an inadequate level of financial literacy among Cypriot individuals, with a rate of 33.7%. However, Zou and Deng's (2019) research in China suggests that financial literacy can empower families to participate in financial markets, thereby refuting the belief that financial literacy is insufficient in the current era of the Industrial Revolution. This is inconsistent with the rest of the prior studies emphasizing the need for DFL among rural SMEs in developing countries, making this study a necessity.

1.3 Dynamics of Rural SME Entrepreneurs

Rural SMEs have a limited population and poor education system compared with urban areas (Sabel *et al.* 2024). They are not greatly exposed to digital finance due to geographical location. This undermines opportunities for rural SME entrepreneurs' savings behavior to improve financial planning and budgeting practices. As such, rural entrepreneurs face challenges using digital financial services (Udimal *et al.* 2019, Tomasi and Ilankadhir, 2024b). Additionally, the digital ecosystem has put limited emphasis on how the current education system can be linked to financial literacy to improve SMEs in rural communities. Moreover, financial institutions are limited in rural areas to fill the gaps where education and research institutions have not incorporated financial literacy course programs in rural communities (Aka and Enagogo, 2024). As a result, rural SMEs lack managerial strategies to address current and long-term goals (Sabel *et al.* 2024). Rural entrepreneurs are biased towards digital platforms due to a lack of understanding of digital financial products and services, digital financial risk control, and redress procedures. Strong DFL would help rural SME farmers improve access to and use digital financial products and services to grow savings.

2. Theoretical Background

The study is underpinned by the theory of planned behavior (Ajzen, 1991), a psychological theory that establishes a connection between individuals' beliefs and actions. The study used reasoned action theory (Fishbein and Ajzen, 1980) by integrating behavioral control to address the existing gap. It has been shown that when a person does not have complete control over their actions, their desire to behave in a certain way does not necessarily translate into actual behavior. The planned behavior hypothesis emphasizes the individual's perception, social connection, behavioral control, and intentions. Previous studies have employed the planned behavior theory to examine financial behavior and literacy (Normawati *et al.* 2021; Daragmeh *et al.* 2021; Rahayu *et al.* 2022). According to Normawati (2021), the employees, family members, or friends of rural SME owners influence their attitude towards saving. Consequently, this fosters economic stability and assurance. DFL dimensions are factors that shape individual current saving behavior and plans for the future (Figure 1). Awareness of government regulations by the SME community impacts current and future saving behaviors (Figure 1). DFL and awareness of government regulations enhance understanding of saving money for current and long-term financial stability (Panos and Wilson, 2020).

2.1 Hypothesis Development

Abad-Segura and Gonzalez-Zamar (2019) performed a bibliometric investigation from 1990 to 2018, demonstrating that people with financial literacy understand money and its mathematical complexities. Knowledge of electronic commerce is crucial in the digital domain (Morgan and Trinh, 2019; Setiawan *et al.* 2022). According to Bongomin and Ntayi (2020), Daragmeh *et al.* (2021), and Mpofu and Mhlanga (2022), it is widely accepted that having a strong ability to identify and understand commonly used modern financial products and services, such as insurance and mobile banking, is crucial for achieving success in the field of digital finance. Hasan *et al.* (2022) studied female entrepreneurs from 144 countries, utilizing the World Bank Global Findex Database. They found that a strong understanding of digital finance allows for easy and efficient engagement with formal banking institutions. According to Liew *et al.* (2020) study on 252 people living in rural Sarawak, Malaysia, findings indicate that understanding electronic products and services is an important aspect of digital literacy, particularly in the financial sector. Therefore, individuals who utilize such services will exhibit wise financial habits, causing effects on current saving behavior (Figure 1). Thus, we hypothesize that:

H1: Knowledge of digital financial products and services impacts Current Saving Behavior among Rural SMEs Entrepreneurs.

Acquiring digital literacy, which includes understanding financial risks and management methods, is crucial. Xie and Liu, (2022) and Normawati *et al.* (2021) conducted a study on millennials and found that financial technology developments are associated with risks. According to Panos and Wilson (2019), online fraud has destabilized consumers. Therefore, knowledge of these risks is important to guarantee financial stability. Convenience in a financial product or service is contingent upon consumers having complete awareness of the risks involved and the corresponding management mechanisms. These services depend significantly on consumers' understanding of the associated risks due to their intricate nature and vulnerability (Setiawan *et al.* 2022; Frimpong *et al.* 2022). Consumers can cultivate financial assurance and promote responsible financial conduct by educating themselves about digital financial fraud and cyber dangers such as hacking, phishing, and SIM card swaps. Thathsarani and Jiangno (2022) found that individuals with a strong comprehension of financial risks can efficiently utilize online financial apps and mitigate the dangers of fraud and cybercrime. This understanding helps individuals protect personal identification numbers and other financial information, resulting in prudent savings. Therefore, we hypothesize that:

H2: Knowledge of digital financial risks and control impacts the current saving behavior of rural SMEs entrepreneurs.

Financial fraud is a prevalent occurrence, with individuals becoming victims daily. According to Morgan and Trinh (2019), digital transaction users should understand the established channels for resolving concerns. Prior studies have highlighted the need for DFL to understand consumer rights and the procedures for resolving disputes (Abdallah *et al.* 2024; Aryan *et al.* 2024; Ferilli *et al.* 2024). According to Setiawan *et al.* (2022), understanding consumer rights and the redress mechanisms implemented by financial regulatory agencies is crucial in mitigating financial risks faced by victims, especially as financial technology continues to improve. The lack of efficient financial crime redress facilities might potentially leave individuals vulnerable to criminal activity

(Hasan *et al.* 2022). According to Morgan and Trinh (2019), personal data rights and understanding the means to seek remedy are important components in a digital era. Hence the study hypothesizes that:

H3: Knowledge of consumer rights and redress procedures impacts current saving behavior among rural SMEs entrepreneurs.

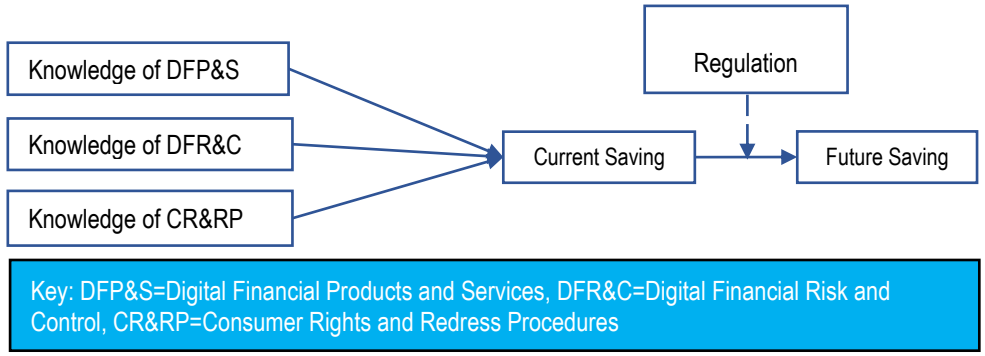
Furthermore, electronic transactions have fundamentally changed how individuals save money and establish long-term goals. Quelhas *et al.* (2023) conducted research among adult Portuguese individuals and found that a significant majority, specifically 65.9% of 311 participants, used mobile phones for savings and other financial transactions. Gilanko and Chemova (2021) researched Russian high school students and found that financial literacy is crucial for fostering responsible saving habits and preserving financial stability in a digital environment. Abad-Segura and Gonzalez-Zamar (2019) argue that while investing in financial literacy may not solve all financial difficulties, it motivates individuals to save and strategize for their financial future. Setiawan *et al.* (2022) found a noteworthy association between individuals' present saving habits and their future saving habits. Therefore, failing to consider the existing saving habits of rural SME enterprises may result in future financial instability. Enhancing present saving habits guarantees financial stability and predicts more favorable future earnings as shown in Figure 1. Based on that discussion, the study hypothesizes that:

H4: Current saving behavior impacts future saving foresight among rural SMEs entrepreneurs.

Government regulations are behavioral measures that set boundaries followed in a country. The government institutes policies to regulate business practices (Zhu *et al.* 2024). Central banks monitor financial institutions to ensure policy compliance (Mensah and Khan, 2024). This creates a transparent and trustworthy environment for financial products and services offered. Adhering to government regulations creates consumer data safety and consistent reporting procedures (Meng *et al.* 2022). The government regulations are designed for long-term strategic performance (Deng *et al.* 2024). Previous studies have found government regulations to affect behavior (Meng *et al.* 2022; Deng *et al.* 2024; Zhu *et al.* 2024; Mensah and Khan, 2024). With great awareness of government regulations, rural SME entrepreneurs can develop confidence and use digital financial products and services to foster their future saving behavior. Therefore, we hypothesize that:

H5: Government regulations awareness affect the association between current saving behavior and future saving foresight.

Figure 1. Study model



Source: Setiawan *et al.* (2022) modified by Authors

3. Methodology

SME enterprises account for the largest contribution towards the gross domestic product of developing countries like Uganda. People earn their living through SME activities in rural communities. The study examined rural SME entrepreneurs in Uganda who engaged in financial transactions through mobile phones and retail financial agents. According to Bongomin and Ntayi (2020), the availability of cheap mobile phones and easily accessible retail financial agents has greatly improved the use of digital finance among rural SME entrepreneurs.

The study utilized printed paper questionnaires for data collection. The participants were SME rural entrepreneurs in three districts of eastern Uganda: Mbale, Sironko, and Manafa. We selected these regions due to their significant user base in digital financial transactions (Uganda Investment Authority, 2022) and a high rural SME setup. The study employed purposive and snowball sampling procedures to identify rural SME entrepreneurs. Purposive sampling facilitated the identification of respondents who aligned with the study's aims

(Guarte and Barrios, 2006). Additionally, snowball sampling facilitated the acquisition of referrals to possible respondents who were difficult to access (Noy, 2008). We provided each rural SME entrepreneur with a one-week timeframe to complete the questionnaire. We then collected physical copies to ensure the respondents' convenience. The data collection lasted for two months, December 2023 and January 2024. The researchers considered 215 of the 270 questionnaires as valid for further research. This was a 79.6% response rate, indicating an acceptable level of appropriateness.

The study employed structural equation modelling (using AMOS 23) to assess the influence of the dimensions of DFL on saving behavior. Hayes PROCESS macro was used to analyze the moderating role of government regulations awareness in the association between current and future saving behavior. The measuring items utilised in this study were adopted from prior research conducted on digital financial literacy and financial behavior (Setiawan *et al.* 2022; Rahayu *et al.* 2022; Widyastuti *et al.* 2024; Ferilli *et al.* 2024; Abdallah *et al.* 2024; Amnas *et al.* 2024; Aryan *et al.* 2024), and Mensah & Khan, (2024) on government regulations awareness. The items were modified to meet the purpose of the study. These items were measured using a five-point Likert scale (Strongly agree 5, agree 4, neutral 3, disagree 2, strongly disagree 1).

3.1 Common Method Bias

In this study, data was collected at the same time, demographic variables, independent variables, and dependent variables on a printed single questionnaire. As such there is a high likelihood that common method bias could exist. Against such a backdrop, common bias analysis was undertaken to understand whether the data was free from biases. Harman single factor results showed a variance inflation factor of less than 3, fitting the acceptable level (Podsakoff *et al.* 2012). In addition, we eliminated ambiguity in the scale items to avoid respondents' reliance on their systematic responses. This kept questions simple and specific to understand to avoid common method bias (Podsakoff *et al.* 2012).

3.2 Study Results

Table 1. Demographic data

Category	Number	Percentage
Gender: Female (F)	71	33
Male(M)	144	67
Age: 20-30 years	43	20
30-40 years	44	20.5
40-50 years	31	14.4
50-60 years	63	29.3
60 years and above	34	15.8
Education: Primary	25	11.6
Secondary	98	45.6
Bachelor degree	85	39.5
Master degree	07	3.3
Experience: Less than 5 years	26	12.1
5-10 years	50	23.3
10-15 years	58	27
15-20 years	40	18.6
20 years and above	41	19.1

Source: Authors compilation

Table 1 above shows more male (67%) rural entrepreneurs compared to females (33%), 84.2% were below 60 years representing an active workforce, 85.1% reached secondary education, indicating a high literacy level, and at least 87.9% had more than 5 years of experience.

AMOS 23 was utilized to perform confirmatory factor analysis to understand the validity and reliability of the measurement scale. The Cronbach alpha values for all constructs, as shown in Table 2, are greater than 0.7. the measurement model indices are greater than 0.9, RMSEA and RMR less than 0.08, and CMIN/DF less than 3. This indicates a high level of scale reliability (Hair *et al.* 2021). The data from Table 2 also shows average variance extracted values over 0.6 and composite reliability above 0.7, which indicates convergent validity (Hair *et al.* 2020).

Table 2. Measurement model summary

Constructs	Items	Factor Loading
Knowledge of digital financial products and services α (.933), CR (.952), AVE (.831)	I possess digital financial products	.906
	I understand digital financial services	.920
	I can initiate digital transactions effectively	.919
	I understand digital financial Insurance	.902
Knowledge of digital financial risks and control α (.928), CR (.948), AVE (.820)	I understand digital financial risks	.896
	I have experience using digital financial payments	.902
	I can manage financial risks	.916
	I have control of my digital financial activities	.909
Knowledge of consumer rights and redress procedures α (.919), CR (.912), AVE (.779)	I understand digital consumer rights	.844
	I understand the digital consumer protection system	.900
	I understand complaint procedures against providers	.902
Current Saving Behavior α (.843), CR (.823), AVE (.609)	I am motivated to save on digital financial products and services	.769
	I make regular savings on digital financial platforms	.865
	I drive satisfaction saving on digital financial platforms	.699
Future Saving Foresight α (.882), CR (.871), AVE (.692)	I will experience freedom saving in digital financial products and services	.830
	I will continue saving on digital financial platforms	.862
	I will have increased satisfaction saving on digital financial platforms	.803
Government Regulations Awareness α (.850), CR (.853), AVE (.658)	Am aware of government policy on digital financial services	.822
	I know regulations protect my interaction with digital financial services	.783
	Am aware of government supervision on digital financial operations	.827

Model Fit: CMIN /DF (1.804), CFI (.973), NFI (.942), GFI (.907, IFI (.973), RMSEA (.061), TLI (.964), RMR (.063).
Source: Authors compilation

Table 3. Mean, Standard deviation, and Correlation Matrix

	Mean	Std D	1	2	3	4	5	6
Knowledge of Digital Financial Services and Products (1)	4.095	1.049	.871[a]					
Awareness of Digital Financial Risks and Controls (2)	3.805	1.213	.431**	.878[a]				
Knowledge of Customer Rights and the Redress Procedures (3)	3.842	1.213	.405**	.46**	.892[a]			
Current Saving Behavior (4)	4.248	0.799	.516**	.466**	.496**	.775[a]		
Future Saving Foresight (5)	4.154	0.926	.411**	.335**	.355**	.665**	.845[a]	
Government Regulation Awareness (6)	3.785	0.881	.361	.443	.402	.332	0.517**	.811[a]

Note: ** Correlation is significant at .01 level, [a] AVE Square root of latent construct. Std D= Standard deviation.
Source: Authors compilation

Table 3 shows the square root of Average Variance Extracted (AVE) greater than all construct correlation coefficients, demonstrating the discriminative validity of the scale. In addition, the correlation coefficient values

varied from 0.335 to 0.665, indicating that the constructs in the study were not multi-collinear (Lindner *et al.* (2020).

Table 4. Construct path analysis

Hypothesis relationship	(β)	SE
Knowledge of Digital Financial Services and Products → Current Saving Behavior	.40***	0.06
Awareness of Digital Financial Risks and Controls → Current Saving Behavior	.22*	0.05
Knowledge of Customer Rights and the Redress Procedures → Current Saving Behavior	.28**	0.047
Current Saving Behavior → Future Saving Foresight	.79***	0.09

Note: ***p<.001, **p<.01, *p<.05, Model Fit; CMIN /DF (2.000) (p<.001), CFI (.967), NFI (.936), GFI (.899), IFI (.955), RMSEA (.068), TLI (.955), RMR (.065)
Source: Author compilation

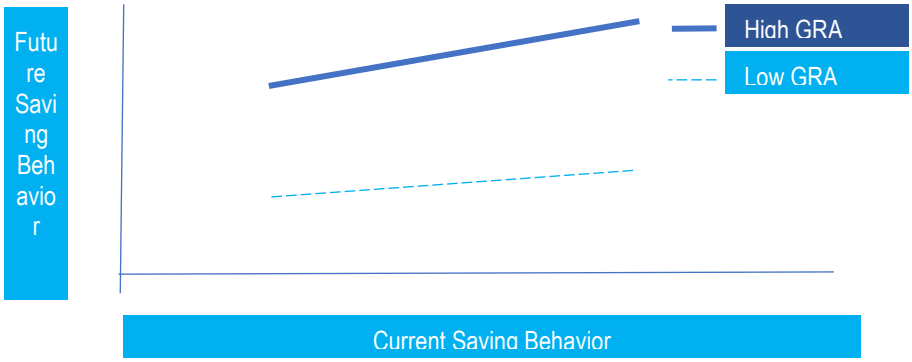
The study used the structural equation model AMOS 23 to assess the study hypotheses. A model is considered fitting and acceptable if the values of CMIN/DF are less than 5 and if CFI, NFI, GFI, IFI, and TLI are greater than 0.90. In addition, RMSEA and RMR values were less than 0.08 (Hair *et al.* 2020). In this study, the model fit was assessed using the following criteria: CMIN/DF (2.000) (p<.001), CFI (.967), NFI (.936), GFI (.899), IFI (.955), RMSEA (.068), TLI (.955), and RMR (.065), indicating a good fit model. The findings of the path model (Table 4) revealed that H1 (β=.40, p<.001), H2 (β=.22, p<.05), and H3 (β=0.28, p<.01) suggest that all dimensions of DFL have a positive impact on current saving behavior. Moreover, the significant beta coefficient of H4 (β=.79, p<.001) indicates that current savings impacts future saving foresight. Therefore, all theories were confirmed. In addition, the R2 score for present saving conduct was 0.51, while for future saving foresight, it was 0.62. This indicates that the research model accounted for 51% and 62% of the differences in the current saving behavior of rural SME owners and their ability to predict future savings, respectively.

Table 5. Moderation effect of Government regulations awareness

Path	Effect	SE	t-value	Lower Bootstraps 95% CIs	Upper bootstraps 95% CIs
DFL→CSB→FSF	.1758	.0844	2.0828	.0098	.3418

Note: CSB=Current Saving Behavior, FSF=Future Saving Foresight
Source: Authors compilation

Figure 2. Visualizing the moderating effect



Source: Authors. Note: GRA=Government Regulation Awareness

The moderation effect was analyzed using Hayes and Andrew's PROCESS macro. The moderating effect of government regulations awareness on the indirect impact of DFL on future saving foresight via current saving behavior was analyzed based on 5000 bootstraps (Hayes, 2013). The study results (Table 5) indicate that indirect effect (.1758; SE=.0844; t-value=2.0828; LLCI=.0098 and ULCI=.3418), on future saving foresight via current saving behavior had a significant effect at low and high government regulations awareness. Thus, hypothesis (H5) was supported (Figure 2).

4. Discussion

Multiple agencies, including the World Bank, the OECD, and the United Nations, are allocating resources to improve people's saving habits. SME entrepreneurs are not exceptional. Many studies (Morgan and Trinh, 2019; Lewis *et al.* 2023; Lu *et al.* 2022; He *et al.* 2024; Setiawan *et al.* 2022; Widyastuti *et al.* 2024; Ferilli *et al.* 2024; Abdallah *et al.* 2024; Amnas *et al.* 2024) have found that knowing about digital financial services and products, risks and ways to control them, as well as customer rights and how to report them, are important factors of DFL.

Therefore, it is crucial to examine the impact of DFL characteristics on the current and future saving behaviors of rural SME entrepreneurs. The study results indicated that all three factors had a noteworthy influence on the present saving behavior of rural SME entrepreneurs in a developing country. Knowledge of digital financial products and services had the greatest impact.

Notebly, the current saving behavior of rural SME entrepreneurs was found to have a significant effect on future saving behavior (Table 4). This result is consistent with Setiawan *et al.* (2022) and Lewis *et al.* (2023). These results are significant given that developing countries have low technology adoption rates. Providing rural SME entrepreneurs with knowledge about peer-to-peer lending, mobile phone wallets, and Internet banking promotes existing saving practices and also ensures long-term financial stability. Unlike the traditional method of teaching financial literacy, DFL offers individuals a range of options to engage in saving. Additionally, the results indicate that understanding digital financial risk and effectively managing it may greatly enhance an individual's saving behavior. The outcome aligns with previous studies conducted by Morgan and Trinh (2019), Normawati *et al.* (2021), and Abdallah *et al.* (2024). The emergence of financial technology has led to an increase in online financial fraud and cyber risks. Increasing awareness of these concerns may motivate individuals to increase their savings. Due to limited information and the increasing occurrence of digital fraud, rural SME entrepreneurs face the possibility of being highly susceptible and experiencing substantial financial losses. Therefore, rural SME entrepreneurs may avoid SIM card swaps, profiling, hacking, pharming, and phishing by acquiring knowledge about appropriate computer usage and implementing data protection measures such as personal identification numbers (Ferilli *et al.* 2024; Abdallah *et al.* 2024; Amnas *et al.* 2024).

Additionally, the results suggest that rural SME entrepreneurs' understanding of their rights and the procedure for resolving disputes greatly enhances their saving behavior. The findings of Morgan and Trinh (2019), Setiawan *et al.* (2022), Hasan *et al.* (2022), and Ferilli *et al.* (2024) are consistent with the study results. Given the proliferation of various financial technologies, it is logical to expect that SME entrepreneurs may face adverse consequences due to the multitude of digital financial hazards that already exist. Understanding your legal entitlements is necessary when prompt reporting is required for challenging and uncontrollable circumstances in digital finance. Thus, rural SME entrepreneurs must possess knowledge about the financial regulatory agencies at both local and national levels. Furthermore, the results indicated that current saving behaviors significantly impact future saving behaviors. This finding aligns with Setiawan *et al.* (2022), Lu *et al.* (2022), and He *et al.* (2024). Given the prediction that financial technology will play a crucial role in future economies, it is important to strengthen the existing saving behavior of rural SME entrepreneurs by promoting DFL. This will increase people's likelihood of saving in the future.

Furthermore, the findings show that the moderating effect of government regulation awareness in the association between current saving behavior and future saving foresight varies at low and high levels of government regulation awareness. Rural SME entrepreneurs with high government regulation awareness of digital financial services display improved current saving behaviors such as planning and budgeting compared to rural SME entrepreneurs with less government regulations awareness in developing countries. To our understanding, this is a novel investigation as there is no evidence of studies in previous literature exploring the moderating effect of government regulation awareness in the interaction between current saving behavior and future saving foresight among rural entrepreneurs in developing countries like Uganda.

4.1 Theoretical Implications

This study examines the impact of DFL on the current and future saving behavior of SMEs in a developing country. It provides original insights and adds to the existing body of literature on this topic (Lu *et al.* 2022; He *et al.* 2024; Setiawan *et al.* 2022; Widyastuti *et al.* 2024; Ferilli *et al.* 2024; Abdallah *et al.* 2024; Amnas *et al.* 2024). Prior research has focused on analyzing the influence of DFL on financial behavior. In contrast, there have been few investigations into the effects of DFL on current saving behavior and future saving foresight under the framework of planned behavioral theory. Furthermore, it is crucial to study how government regulations awareness among rural SME entrepreneurs in a developing nation such as Uganda can improve saving behavior. Understanding DFL dimensions from a developing country perspective among rural SMEs broadens the geographical range of the investigation of DFL.

4.2 Managerial Implications

The study provides a practical understanding of measures to be adopted by financial institutions and the government to enable rural SME entrepreneurs to use novel technology to improve current and future savings. It is important to involve all stakeholders in the digital financial inclusion process in rural communities. Additionally,

the study provides detailed practical insights into digital financial literacy dimensions that should be considered to promote digital financial products and services usage among rural SME entrepreneurs. DFL information sharing by financial and non-financial institutions through in-person visits to rural areas. This convenient exposure enables rural SME entrepreneurs to comprehend digital financial products and services. With DFL, information asymmetries can be addressed to avoid fraud practices and promote financial inclusion in rural communities.

Similarly, policymakers should collaborate closely with universities and other educational institutions to create tailored DFL short courses for rural SMEs. By doing this, SME entrepreneurs would gain tailored expertise that would assist them in fulfilling market requirements in the digital age. Furthermore, financial institutions can hold community or social activities in rural communities, such as athletics, football, and festival celebrations, to enhance public knowledge of the risks involved with financial technology and demonstrate their risk management strategies.

Equally, financial institutions and policymakers should establish agents in rural communities equipped with round-the-clock toll-free helpline numbers to assist rural SME entrepreneurs encountering unfamiliar digital signals. These agents would provide valuable information to rural SME entrepreneurs which helps them build confidence when handling digital financial services. Furthermore, government and financial institutions should disseminate digital finance protection guidelines to rural communities through agents and other platforms. Enhancing awareness of government regulations on digital financial services through rural community gatherings, radios, periodicals, billboards, and television would help rural SME entrepreneurs improve their current saving behavior and future saving foresight.

Limitations and Future Research

Given the restricted scope of Uganda, more investigations can be conducted in different economies to ensure the accurate generalization of the findings. Financial technology is dynamic and complex. This necessitates a longitudinal study for the causal relationship between DFL and saving behavior. Furthermore, the study methodology solely focuses on DFL. Future research has the potential to broaden it by incorporating financial education and empowerment. In addition, future research might employ spending and investment behavior as the dependent variables rather than the saving behavior utilized in this study. Moreover, this study exclusively focused on rural SME entrepreneurs. Subsequent research should aim to investigate this topic among urban SME entrepreneurs and across industries. Despite these minor limitations, this study stands out and significantly benefits rural SME entrepreneurs in developing countries.

Conclusion

The financial security of rural SME entrepreneurs in developing countries relies on their saving habits. Consistent implementation of DFL can transform the saving behavior of rural SME entrepreneurs. While there have been studies on the influence of DFL on financial conduct, there is less empirical data on how knowledge of digital financial services and products, digital financial risks and control measures, and customer rights and reporting procedures affect savings behaviors under the framework of planned behavior theory. Governments and financial institutions must prioritize customer understanding of digital financial services and products, digital financial risks and control measures, and customer rights and reporting procedures in a digital environment. Additionally, an individual's current saving behaviors impact their future behavior. Promoting government regulation awareness among rural communities would foster inclusive digital finance. Thus, studying rural SME entrepreneurs' awareness of government regulations in a digital environment that moderates the association between current and future saving behavior with DFL as a primary construct represents the originality of this study.

Credit Authorship Contribution Statement

Mutya Tomasi: Conceptualization, Investigation, Methodology, Project administration, Software, Formal analysis, Writing –original draft, Data curation, Writing and review
Ilankadhir M.: Software, Supervision, Validation, editing and Visualization.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Declaration of AI and AI-assisted Technologies

The authors declare that they did not use generative AI and AI-assisted technologies during the preparation of this work.

Reference

[1] Abad-Segura, E., & González-Zamar, M. D. (2019). Effects of financial education and financial literacy on creative entrepreneurship: A worldwide research. *Education Sciences*, 9(3): 238. DOI:https://doi.org/10.3390/educsci9030238

[2] Abdallah, W., Tfaily, F., & Harraf, A. (2024). The impact of digital financial literacy on financial behavior: customers' perspective. *Competitiveness Review: An International Business Journal*. DOI:https://doi.org/10.1108/CR-11-2023-0297

[3] Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2): 179-211. DOI: https://doi.org/10.1016/0749-5978(91)90020-T

[4] Aka, K. G., & Enagogo, C. A. (2024). Collaborations in innovation activities of rural SMEs: a configurational analysis. *Journal of Small Business & Entrepreneurship*, *36*(3): 358-382. DOI: https://doi.org/10.1080/08276331.2021.2004072

[5] Amnas, M. B., Selvam, M., & Parayitam, S. (2024). FinTech and Financial Inclusion: Exploring the Mediating Role of Digital Financial Literacy and the Moderating Influence of Perceived Regulatory Support. *Journal of Risk and Financial Management*, *17*(3): 108. DOI: https://doi.org/10.3390/jrfm17030108

[6] Andreou, P. C., & Anyfantaki, S. (2021). Financial literacy and its influence on internet banking behavior. *European Management Journal*, 39(5): 658-674. DOI: https://doi.org/10.1016/j.emj.2020.12.001

[7] Aryan, L., Alsharif, A., Alquqa, E., Ebbini, M., Alzboun, N., Alshurideh, M., & Al-Hawary, S. (2024). How digital financial literacy impacts financial behavior in Jordanian millennial generation. *International Journal of Data and Network Science*, *8*(1): 117-124. DOI: http://dx.doi.org/10.5267/j.ijdns.2023.10.011

[8] Bednarik, Z., & Marshall, M. I. (2024). Personal relationships of rural small businesses with community banks in times of crisis. *Journal of Small Business and Enterprise Development*. Available at: http://creativecommons.org/licences/by/4.0/legalcode

[9] Bongomin, G. O. C., & Ntayi, J. M. (2020). Mobile money adoption and usage and financial inclusion: mediating effect of digital consumer protection. *Digital Policy, Regulation and Governance*, 22(3): 157-176. DOI: https://doi.org/10.1108/DPRG-01-2019-0005

[10] Bongomin, G. O. C., Munene, J. C., Ntayi, J. M., & Malinga, C. A. (2017). Financial literacy in emerging economies: Do all components matter for financial inclusion of poor households in rural Uganda?. *Managerial Finance*. DOI: https://doi.org/10.1108/MF-04-2017-0117

[11] Daragmeh, A., Lentner, C., & Sági, J. (2021). FinTech payments in the era of COVID-19: Factors influencing behavioral intentions of "Generation X" in Hungary to use mobile payment. *Journal of Behavioral and Experimental Finance*, 32, 100574. DOI: https://doi.org/10.1016/j.jbef.2021.100574

[12] Deng, W., Zhang, Z., & Guo, B. (2024). Firm-level carbon risk awareness and Green transformation: A research on the motivation and consequences from government regulation and regional development perspective. *International Review of Financial Analysis*, *91*, 103026. DOI: 10.1016/j.irfa.2023.103026

[13] Feng, X., Lu, B., Song, X., & Ma, S. (2019). Financial literacy and household finances: A Bayesian two-part latent variable modeling approach. *Journal of Empirical Finance*, 51: 119-137. DOI:https://doi.org/10.1016/j.jempfin.2019.02.002

[14] Ferilli, G. B., Palmieri, E., Miani, S., & Stefanelli, V. (2024). The impact of FinTech innovation on digital financial literacy in Europe: Insights from the banking industry. *Research in International Business and Finance*, *69*, 102218. DOI: https://doi.org/10.1016/j.ribaf.2024.102218

[15] Frimpong, S. E., Agyapong, G., & Agyapong, D. (2022). Financial literacy, access to digital finance and performance of SMEs: Evidence From Central region of Ghana. *Cogent Economics & Finance*, 10(1), 2121356. DOI: https://doi.org/10.1080/23322039.2022.2121356

[16] Gilenko, E., & Chernova, A. (2021). Saving behavior and financial literacy of Russian high school students: An application of a copula-based bivariate probit-regression approach. *Children and Youth Services Review*, 127, 106122. DOI: https://doi.org/10.1016/j.childyouth.2021.106122

[17] Guarte, J. M., & Barrios, E. B. (2006). Estimation under purposive sampling. *Communications in Statistics-Simulation and Computation*, 35(2): 277-284. DOI: https://doi.org/10.1080/03610910600591610

[18] Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of business research*, *109*. DOI: 10.1016/j.jbusres.2019.11.069

[19] Hair Jr, J. F., *et al.* (2021). An introduction to structural equation modeling. *Partial least squares structural equation modeling (PLS-SEM) using R: a workbook*, 1-29. Available at: https://link.springer.com/chapter/10.1007/978-3-030-80519-7_1

[20] Hasan, R., Ashfaq, M., Parveen, T., & Gunardi, A. (2022). Financial inclusion–does digital financial literacy matter for women entrepreneurs? *International Journal of Social Economics*. DOI:https://doi.org/10.1108/IJSE-04-2022-0277

[21] Hasan, R., Ashfaq, M., Parveen, T., & Gunardi, A. (2023). Financial inclusion–does digital financial literacy matter for women entrepreneurs?. *International Journal of Social Economics*, *50*(8): 1085-1104. DOI:https://doi.org/10.1108/IJSE-04-2022-0277

[22] Hayes, A.F., 2013. Methodology in the Social Sciences. Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach Available at: https://onlinelibrary.wiley.com/doi/10.1111/jedm.12050

[23] He, H., Luo, W., Gong, Y., Berson, I. R., & Berson, M. J. (2024). Digital financial literacy of young Chinese children in Shanghai: A mixed method study. *Early Education and Development*, *35*(1): 57-76. DOI:https://doi.org/10.1080/10409289.2023.2208011

[24] Koomson, I., Ansong, D., Okumu, M., & Achulo, S. (2022). Effect of financial literacy on poverty reduction across Kenya, Tanzania, and Uganda. *Global Social Welfare*, 1-11. Available at: https://link.springer.com/article/10.1007/s40609-022-00259-2

[25] Kurnia Rahayu, S., Budiarti, I., Waluya Firdaus, D., & Onegina, V. (2023). Digitalization and informal MSME: Digital financial inclusion for MSME development in the formal economy. *Journal of Eastern European and Central Asian Research*, 10(1). Available at: https://ieeca.org/journal/index.php/JEECAR/article/view/1056

[26] Liew, T. P., Lim, P. W., & Liu, Y. C. (2020). Digital Financial Literacy: A case study of farmers from rural areas in Sarawak. *International Journal of Education and Pedagogy*, 2(4): 245-251. Available at: https://myjms.mohe.gov.my/index.php/ijeap/article/view/11612

[27] Lindner, T., Puck, J., & Verbeke, A. (2020). Misconceptions about multicollinearity in international business research: Identification, consequences, and remedies. *Journal of International Business Studies*, 51: 283-298. Available at: https://link.springer.com/article/10.1057/s41267-019-00257-1

[28] Meng, L., Liu, K., He, J., Han, C., & Liu, P. (2022). Carbon emission reduction behavior strategies in the shipping industry under government regulation: A tripartite evolutionary game analysis. *Journal of Cleaner Production*, 378: 1–18. DOI: http://dx.doi.org/10.1016/j.jclepro.2022.134556

[29] Mensah, I. K., & Khan, M. K. (2024). Unified Theory of Acceptance and Use of Technology (UTAUT) Model: Factors Influencing Mobile Banking Services' Adoption in China. *SAGE Open*, *14*(1). DOI:10.1177/21582440241234230

[30] Moenjak, T., A. Kongprajya, and C. Monchaitrakul. (2020). "Fintech, Financial Literacy, and Consumer Saving and Borrowing: The Case of Thailand." ADBI Working Paper Series No. 1100. Available at: https://www.econstor.eu/handle/10419/238457

[31] Morgan, P. J., and L. Q. Trinh. (2019). "Fintech and Financial Literacy in the Lao PDR." DBI Working Paper No. 933. Tokyo: Asian Development Bank. DOI: https://dx.doi.org/10.2139/ssrn.3398235

[32] Mpofu, F. Y., & Mhlanga, D. (2022). Digital financial inclusion, digital financial services tax and financial inclusion in the fourth industrial revolution era in Africa. *Economies*, 10(8), 184. DOI:https://doi.org/10.3390/economies10080184

[33] Normawati, R., Rahayu, S., & Worokinasih, S. (2021). Financial Knowledge, Digital Financial Knowledge, Financial Attitude, Financial Behavior and Financial Satisfaction on Millennials. Proceedings of the 1st International Conference on Law, Social Science, Economics, and Education.

[34] Noy, C. (2008). Sampling knowledge: The hermeneutics of snowball sampling in qualitative research. *International Journal of social research methodology*, 11(4): 327-344. DOI:https://doi.org/10.1080/13645570701401305

[35] Ozili, P. K. (2018). "Impact of Digital Finance on Financial Inclusion and Stability." *Borsa Istanbul Review*, 18 (4): 329–340. DOI: https://doi.org/10.1016/j.bir.2017.12.003

[36] Panos, G. A., & Wilson, J. O. S. (2020). Financial literacy and responsible finance in the FinTech era: capabilities and challenges. *The European Journal of Finance*, 26(4-5): 297–301 DOI:10.1080/1351847X.2020.1717569

[37] Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual review of psychology*, *63*: 539-569. DOI:https://doi.org/10.1146/annurev-psych-120710-100452

[38] Sabel, K., Kallmuenzer, A., & Von Friedrichs, Y. (2024). Exploring the impact of family and organisational values on competence diversity reluctance in rural family SMEs. *International Journal of Entrepreneurial Behavior & Research*, *30*(6): 1425-1447. DOI: https://doi.org/10.1108/IJEBR-07-2023-0682

[39] Setiawan, M., Effendi, N., Santoso, T., Dewi, V. I., & Sapulette, M. S. (2022). Digital Financial Literacy, Current Behavior of saving and spending and its future foresight. *Economics of Innovation and New Technology*, 31(4): 320-338. DOI: https://doi.org/10.1080/10438599.2020.1799142

[40] Thathsarani, U. S., & Jianguo, W. (2022). Do Digital Finance and the Technology Acceptance Model Strengthen Financial Inclusion and SME Performance? *Information*, 13(8). DOI:10.3390/info13080390

[41] Tomasi, M. (2020). Perspective of Financial Literacy on Agribusiness Performance in Uganda; A Close Look at Farmers' Attitude and Social Media Platforms. DOI: https://doi.org/10.36348/sjbms.2020.v05i01.010

[42] Tomasi, M., & Ilankadhir, M. (2024a). Mobile Banking Adoption: A Closer Look at the Role of Online Convenience Dimensions. *Int. Journal of Business Science and Applied Management*, *19*(1).

[43] Tomasi, M., & Ilankadhir, M. (2024b). Determinants of Digital Insurance Adoption among Micro-Entrepreneurs in Uganda. *Financial Engineering*, *2:* 104-115. DOI: https://doi.org/10.37394/232032.2024.2.9

[44] Udimal, T. B., Jincai, Z., & Gumah, I. A. (2019). Dynamics in rural entrepreneurship–the role of knowledge acquisition, entrepreneurial orientation, and emotional intelligence in network reliance and performance relationship. *Asia Pacific Journal of Innovation and Entrepreneurship*, *13*(2): 247-262. Available at: https://www.semanticscholar.org/reader/8bc11e101c7ed2805b8fb82cc7f4b167ece2b21f

[45] Widyastuti, U., Respati, D. K., Dewi, V. I., & Soma, A. M. (2024). The nexus of digital financial inclusion, digital financial literacy and demographic factors: lesson from Indonesia. *Cogent Business & Management*, *11*(1), 2322778. DOI: https://doi.org/10.1080/23311975.2024.2322778

[46] Xie, C., & Liu, C. (2022). The nexus between digital finance and high-quality development of SMEs: evidence from China. Sustainability, 14(12), 7410. DOI: https://doi.org/10.3390/su14127410

[47] Yao, L., & Yang, X. (2022). Can digital finance boost SME innovation by easing financing constraints? Evidence from Chinese GEM-listed companies. PLoS One, 17(3), e0264647. DOI:https://doi.org/10.1371/journal.pone.0264647

[48] Zhu, W., Chen, J., Liang, X., Li, D., & Chen, K. (2024). Government regulations, benefit perceptions, and safe production behaviors of family farms - a survey based on Jiangxi Province, China. *Journal of Cleaner Production*, 141824. DOI: https://doi.org/10.1016/j.jclepro.2024.141824

[49] Zou, J., & Deng, X. (2019). Financial literacy, housing value and household financial market participation: Evidence from urban China. *China Economic Review*, 55: 52-66. DOI:https://doi.org/10.1016/j.chieco.2019.03.008

[50] OECD (2019). OECD SME and Entrepreneurship Outlook 2019, OECD Publishing, Paris. Available at: https://www.oecd-ilibrary.org/economics/understanding-sme-heterogeneity_c7074049-en

[51] Uganda Investment Authority (2022) Small and Medium Enterprises. https://www.ugandainvest.go.ug/sme/

[52] World Bank (2022). Financial services in a digital era for developing countries. https://www.worldbank.org

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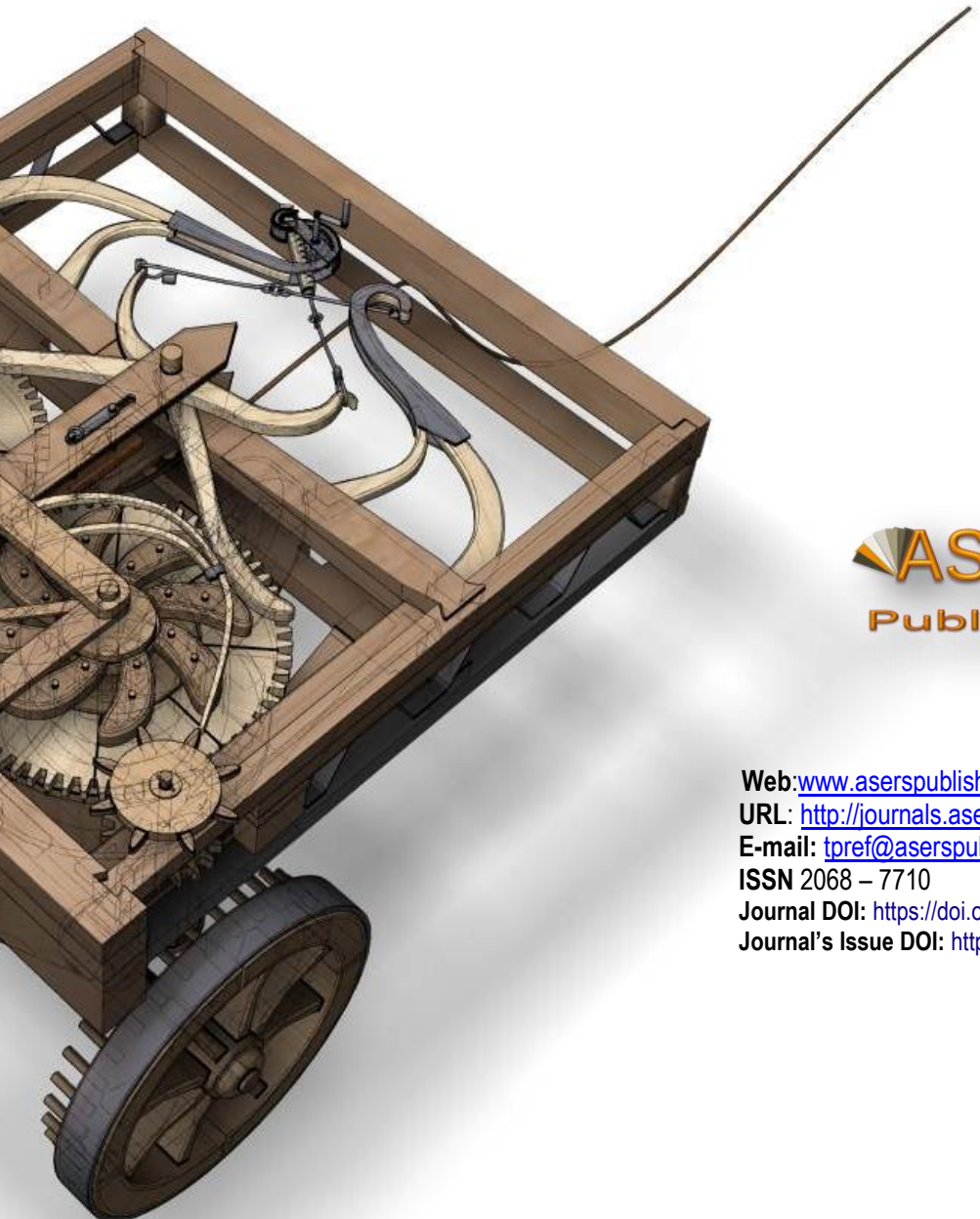

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