

The Effect of Financial Literacy on the Adoption of FinTech Services in the Mfoundi Division, Cameroon

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Abstract

This study investigates the effect of financial literacy on the adoption of FinTech services within the Mfoundi Division of the Centre region of Cameroon. A quantitative research approach was employed, using a questionnaire to collect data from a total of three hundred individuals were purposively sampled and data was collected through the use of structured questionnaires guided by parameters as observed in the Technology Adoption Model (TAM). Hypotheses were tested using the CB-SEM technique with analytical packages including SPSS 24 and AMOS 23. The findings revealed limited utilization of online banking and peer-to-peer lending platforms, with cryptocurrency exchanges and crowd-funding platforms ranking as the least utilized instruments. Additionally, the study establishes a significant influence of both financial knowledge and financial behaviour on the adoption of FinTech services. Individuals who comprehend the financial benefits of FinTech and perceive these services as innovative solutions are more likely to adopt them. This positive attitude is driven by the perceived ease of use, transaction tracking, and the potential to generate income through FinTech solutions. However, this paper did not find any statistically significant effect of financial skills on the adoption of FinTech services. Therefore, financial knowledge and a positive attitude toward FinTech services emerged as pivotal factors positively influencing financial services adoption in the Mfoundi Division, Cameroon. The study therefore recommends that policy makers and fintech service providers should prioritized financial literacy programs aim at improving financial knowledge and a positive attitude to enhance the adoption of FinTech services in Cameroon.

Keywords: financial literacy, financial technology, financial knowledge, financial skills, adoption

1. Introduction

Financial Technology (FinTech) has revolutionized the financial landscape globally, offering innovative solutions for financial inclusion, payments, and investments (Gomber et al., 2018). However, the adoption of FinTech services remains a challenge in many developing countries, including Cameroon (Demirgüç-Kunt et al., 2018). Financial literacy is a critical factor influencing the adoption of FinTech services (Lusardi & Mitchell, 2014). This study aims to investigate the effect of financial literacy on the adoption of FinTech services in Mfoundi Division, Cameroon.

Despite the increasing popularity of Financial Technology (FinTech), a substantial number of individuals still lean towards traditional financial services, and in some cases, are not even aware of the existence of FinTech (Moufakkir & Mohammed, 2021). Given the escalating demand for financial services in both developed and developing economies, the adoption of FinTech is crucial for enhancing financial inclusion and promoting financial literacy (Bernards, 2019). FinTech is a notable invention within the finance industry. As highlighted by Hosen et al. (2023), the potential of FinTech to revolutionize the financial sector by offering convenience and

security in financial transactions has garnered significant recognition. Bernards (2019) suggests a growing trend of household activities migrating to FinTech platforms, where a few mobile apps can provide the facilitation and convenience that replace traditionally time-consuming and high-qualification financial services, effectively meeting consumers' economic needs. FinTech is a broad term and applies to many innovations such as Insurance Technology (InsurTech), Regulation Technology (RegTech), Robo Advisers and Advertising Technology (AdTech). FinTech has emerged as a buzzword in the financial sector, propelled by several factors such as technological advancements, market-driven business innovation, cost-efficiency needs, and evolving customer requirements. Murinde et al. (2022) stated that FinTech has become a key investment focus for many leading financial institutions.

According to Gai et al. (2018), FinTech is a novel technology used in the financial services industry. Meanwhile Bureshaid et al. (2021) opined that FinTech is the marriage of finance and information technology. These FinTech technologies are rapidly changing the operandi of how clients of financial institutions and the general population shop, save, borrow, and make other financial decisions (Feyen et al., 2021). Payment technologies like debit cards and mobile money which enable consumers to make retail payments and transfers through a bank account or mobile phone can benefit both the demand and supply sides of the market (Demirguc-Kunt et al., 2015). These changes have significant advantages for both the demand and supply sides of the market. With these changes, consumers are benefiting in terms of greater convenience, security, and affordability unlike in the traditional banking approach. These FinTech services bring more financial inclusion to all (Demirguc-Kunt et al., 2017). For example, consumers can use digital payments to make purchases online or in stores without having to carry cash around. Digital payments are also often more secure than traditional methods of payment, such as cash or checks. Additionally, many digital payment providers offer low or no fees for transactions (Barroso & Laborda, 2022).

According to the World Bank (2022), digital payments can help businesses process transactions more quickly and easily. The World Bank (2022) also states businesses can sell digital products or services through their websites or mobile apps, generating new revenue streams. Bachas et al. (2021) added that consumers benefit from financial technologies through lower transaction costs, such as the costs of traveling to a bank branch or ATM to withdraw cash. Irrefutably, FinTech services, particularly Mobile Money technology, have revolutionized the financial landscape in sub-Saharan African countries, triggering socio-economic transformations. In 2021, the region saw a 12% year-over-year increase in registered mobile money users, reaching a staggering 548 million. These users conducted transactions worth US\$490 billion, totaling 27.4 billion transactions (GSM Association, 2021). According to Talom & Tengeh (2020), in Cameroon, apart from households, Small and Medium-sized Enterprises (SMEs) have greatly benefited from FinTech services like mobile money transfer and receipt services. They stated that these services have accounted for approximately 73% of the total variance in the turnover of SMEs in Douala since they adopted the technology. The 2019 GSMA Mobile Connectivity Index reported that a vast majority (96%) of Cameroon's population has access to a mobile GSM network (2G and above). This widespread access positions Cameroon as a strong contender for continuous exploration of Financial Innovation services like Mobile Money to further accelerate financial inclusion (Ndassi et al., 2023).

However, with the increase in the number of available financial products and their growing complexity, there is a corresponding need for clients to enhance their knowledge, attitudes, and skills to utilize these FinTech services and make informed financial decisions effectively (Vlaev et al., 2007). This underscores the necessity for adequate financial literacy. Financial literacy plays a key role in adopting FinTech services like MoMo, crowd lending, digital wallets, blockchain and savings using apps and virtual currency such as cryptocurrencies (Meiryani et al., 2022). It equips individuals with the necessary knowledge and skills to understand and effectively utilize these innovative financial services. The different dimensions of financial literacy — knowledge, attitudes, and behaviours — are all critical in this context. The Mfoundi Division of the Centre region of Cameroon has witnessed a surge in the introduction of FinTech applications (Findex Database, 2017). Also, companies like Orange and MTN have seen consistent growth in the usage of their Mobile Money (MoMo) apps. That notwithstanding, the effects of financial literacy on the adoption of FinTech services is a pressing issue that warrants attention and research. Unfortunately, there exists scanty scientific evidence of the availability of literature on this subject in Cameroon specifically in Mfoundi Division. There is a need to develop and implement targeted financial literacy programs that are specifically designed to meet the needs of the inhabitants of Mfoundi Division. Despite the potential benefits of FinTech services, many individuals in Cameroon lack the financial literacy to effectively utilize these services. This study seeks to address the problem of low FinTech adoption in Mfoundi Division, Cameroon, by investigating the relationship between financial literacy and FinTech adoption.

Based on the aforementioned, this study is guided by the following specific objectives: to assess the effect of Financial knowledge on the adoption of FinTech services in Mfoundi Division of the Centre region of

Cameroon, to examine the extent to which Financial attitude/behaviour influences the adoption of FinTech services, to investigate the effect of financial skills on the adoption of FinTech services in the Mfoundi Division of the Centre region of Cameroon. The study is significant in the areas of policy formulation regarding financial literacy programs to facilitate the adoption of financial technology in Cameroon.

2. Literature Review

2.1 The Concept of Financial Literacy

Literature on financial literacy is still limited and still growing given that much interest in this topic has been developed using modern and sophisticated financial instruments which are constantly changing and with different attributes. In this section, we review the concept of financial literacy, by representing the different definition and benefits of financial literacy, measurement of financial literacy, conceptualization of Financial Literacy in Cameroon. It should be noted that financial literacy just like the concept of social capital and financial inclusion is a multidimensional and relative concept (Akyuwen & Waskito, 2019).

According to Organization for Economic Co-operation and Development (2017), financial literacy refers to the process by which financial consumers/investors improve their understanding of financial products, concepts and risks, and through education develop the skills, knowledge and behaviors to be more informed to make rational financial decisions. It is the ability to gain knowledge and effectively use various financial skills, including personal financial management, budgeting and investing. Financial literacy is the ability to become familiar and knowledgeable with financial markets products such that individuals can make informed decisions. According to Remund (2010) who develop a definition of financial literacy, “it is the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial wellbeing”, talk of the need for a more consistent conceptual definition and provided the following: “financial literacy is the measure of the degree one understand free financial and processes the ability to manage finance through short term decision making, and sound, long rang financial planning, while mindful of life event and chancing economic condition.”

According to Alessie (2011), financial literacy is “a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions necessary to achieve individual financial well-being” (INFE 2011). Previous research work on FI and its relationship with economic activities agree with the fact that financial literacy is very necessary for any meaningful growth and development of a country. It helps people to understand the various financial products and services and their implications. It helps entrepreneurs to acquire knowledge that helps them select and use financial products that meet their financial requirements profitably.

Financial literacy has a close relationship with the field of personal finance. Garman and Fogue (2008) said that in personal finance, financial literacy refers to tools that are the basis for making someone smart about money. Financial literacy is often considered the same and can be exchanged with financial knowledge (Grohmann, et al., 2015; Titko, et al., 2015; Yuan & Yang, 2014; Rooij et al., 2011). However, the OECD (2012) defines broader financial literacy as a combination of awareness, knowledge, skills, attitudes, and behaviors needed to make financial decisions that ultimately achieve economic prosperity. There are several levels of financial literacy which include: well literate, sufficient literate, less literate, and not literate (Fukuyama, 2012).

Financial literacy is very important for entrepreneurs because financial literacy can empower entrepreneurs with funding sources and skills that will equip them to weigh their options in finding financing to optimize their financial structure. Financial literacy will also help institutions to avoid offering financing that indicates fraud. (OECD, 2016) Financial literacy is knowledge, skills and beliefs, which influence attitudes and behavior to enhance the quality of decision making and financial management in order to achieve prosperity. Financial literacy, just like financial inclusion, can mean different things to different people. Table 7 summarizes some definitions of financial literacy.

Table 1. Overview of the meaning of financial literacy

Author	Year	Definition of financial literacy
PISA, Organization for Economic Co-operation and Development	2017	[In young people] knowledge and understanding of financial concepts and the various risks associated with different sources of funding, and the techniques, skills and tools needed to apply such knowledge in order to make relevant financial decisions to improve the financial well-being of individuals and society, and to enable participation in economic activities.
Xiao	2016	Financial literacy is directly linked to how households make rational decisions to choose among different kinds of assets.
Lusardi and Mitchell	2014	Financial literacy is people's ability to process economic information and

		knowledge needed to make informed decisions about financial planning, wealth accumulation, debt, and pensions. Financial literacy refers to the level of financial knowledge and the ability to apply the knowledge to improve financial status.
Delgadillo	2014	Financial literacy refers to as knowledge of financial concepts and how knowledge is used to make financial decisions, taking into account available resources and the unique situation for each individual or family.
OECD/INFE	2012	Financial literacy refers to as a combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial well-being.
Gale and Levine	2010	Financial literacy refers to as the ability to make informed judgments and effective decisions regarding the use and management of money and wealth. Financially illiterate households make poor choices that affect not only the decision-makers themselves, but also their families and the public at large, making the improvement of financial literacy a first order concern for public policy.
Bernheim and Garrett	2003	Financial literacy is not an isolated category, but it is a specialized part of economic literacy which is related to the ability to ensure income, to move on the labor market, to make decisions about own payments and the ability to realize the possible consequences of their own decisions on the current and future income.
Noctor, Stoney and Stradling	1992	Financial literacy refers to an ability to make informed judgments and to take effective decisions regarding the use and management of money.

Source: Author's collection from Kempson et al. (2017), Xiao (2016) and Noctor et al. (1992).

2.1.1 Elements of Financial Literacy

It consists of what skills an individual needs to acquire in order to become financial literate just like generally someone has to be educated to become literate (OECD, 2017). To become financially literate, an individual must learn about budgeting, investment, financial planning, interest rates, price levels, hedging risk and diversification. This is to enable an individual gain knowledge about effective management of money and debt. In this regard, an individual has to acquire financial knowledge that is knowledge on how to operate and effectively use money in the economy. Financial skills which have to do with using the acquired financial knowledge in financial decisions (analyzes, evaluations, choices). Financial attitudes are the motivation and wiliness to use financial knowledge and skills in various economic situations. Lastly all these must produce a desired change in behavior. Financial education is an input of financial literacy. It helps to enhance financial skills and knowledge, ensuring rational, effective and efficient financial decisions in order to achieve desired financial objectives. It is a process that can begin at every stage of life and last a lifetime.

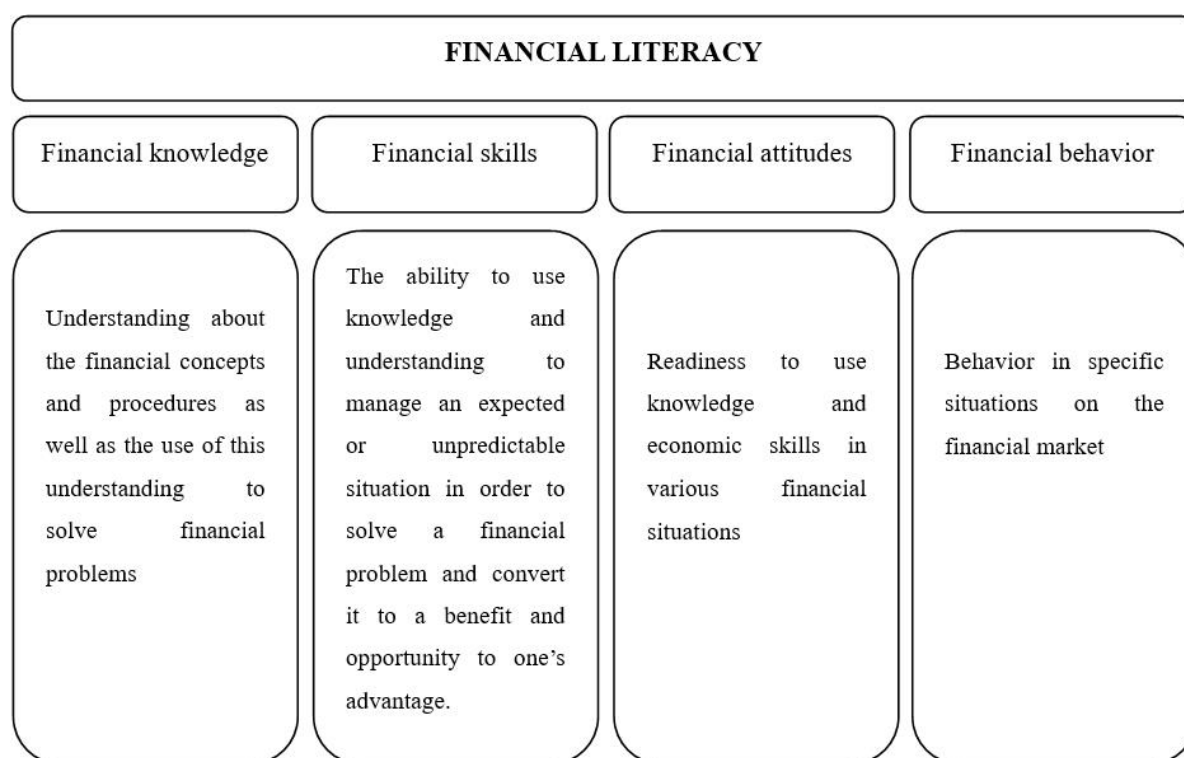


Figure 1. Elements of financial literacy

Source: Author (2024).

At the APEC Workshop held in September 2013, representatives of the APEC Economies and financial literacy experts reached consensus on a basic framework outlining the common themes on financial literacy (see Table 2).

Table 2. Financial literacy learning outcomes

Dimension	Learning outcomes
Knowledge	<ol style="list-style-type: none"> 1. Saving and Spending – distinguishing needs from wants, knowing how savings can help in achieving an individual's goal, options for saving, barriers to saving and overcoming these barriers; practicing the habit of saving is also covered. 2. Planning and Budgeting – the skill of developing an action plan towards a goal or dream. 3. Informed decision-making – involves choosing among alternatives in order to achieve a given goal.
Skills	<ol style="list-style-type: none"> 1. Earning money – covers various topics around making a livelihood, employment and entrepreneurship. 2. Managing money – ability to save and spend, practicing the habit of planning and budgeting and acting upon those plans. 3. Investing Money – exploring options of investing money. 4. Understanding cost of borrowing – knowing options for credit and understanding the consequences.
Attitude	<ol style="list-style-type: none"> 1. Attaining a long-term focus or view into the future – reflecting/considering actions and having sensitivity to risk. 2. Taking into consideration the well-being of others – reflecting on the impact on others; having a sense of responsibility towards others; sense of empathy and compassion. 3. Developed sense of self-worth with an ongoing interest in continuous learning. 4. Passion for the projects that one is involved in, as well as passion towards one's own

	self-development.
Behavior	<ol style="list-style-type: none"> 1. Enacting habits of saving, budgeting and prioritizing. 2. Exhibiting entrepreneurial behavior and work ethics – making responsible choices. 3. Exercising focus on making an effort with an emphasis on “grit”. 4. Demonstrating charitable, empathetic and compassionate behavior.

Source: Adapted from APEC (2014).

Financial literacy, as defined by the OECD (Organisation for Economic Co-operation and Development, 2020), is a multifaceted concept that comprises awareness, knowledge, skills, attitudes, and behaviours that are essential for making wise financial decisions and achieving personal financial well-being. This concept aligns with Huston's (2010) view that financial literacy is an individual's ability to comprehend and apply financial information effectively. This includes the capacity for both short-term and long-term financial planning, taking into account life events and economic fluctuations.

Financial knowledge encompasses several aspects that vary by profession. Hasler and Lusardi (2017) opined that basic aspects such as simple and compound interest, risk diversification, risk and return, and inflation form the basis of financial knowledge that are necessary to handle money efficiently and make informed choices about finance. Sanderson (2015) posited that financial knowledge is necessary for managing financial resources. He said that these skills should be taught in schools to provide understanding to students and adolescents. Stolper and Walter (2017) emphasize the role of financial knowledge as a significant indicator of positive predictor of future financial results or outcomes. Hence, enhancing financial literacy is crucial for individuals to navigate the increasing complex financial landscape effectively. Braunstein & Welch (2002) in their study noted that modern financial services, bank deposits, loans and credit products as well as retirement products are essential tools to understand which only comes from financial knowledge. In addition, the correct usage of credit cards is a basic component of financial knowledge (Lyons et al., 2007). Elsewhere, the Jumstart Coalition for Personal Financial Literacy stated that K–12 students should acquire financial knowledge, learn financial responsibility and decision making. This included but not limited to decisions concerning income and occupation money management and planning, credit and loans, risk management, insurance, savings as well as investment. (Jumstart, 2007) Also, Hasan et al. (2023) further supported the relevance of Fintech services adoption as they found that traditional market returns during war are far lower compared to Fintech markets the case of Russia-Ukraine war than before the war. This further supports the need for Fintech adoption in Buea Silicon Community that has suffered from the Anglophone crisis for over 6 years.

2.2 Theoretical Literature Review

This research uses two theories that guided the study which are:

2.2.1 Theory of Reasoned Action (Fishbein & Ajzen, 1975)

The Theory of Reasoned Action (TRA) was first introduced by Fishbein in 1967. TRA asserts that the most important determinant of a person's behaviour is that person's behavioural intention. According to the theory, this behavioural intention is comprised of subjective norms and attitude associated with the behaviour. Fishbein & Ajzen (1975) and Ajzen & Fishbein (1980) extended TRA to suggest that a person's behaviour is determined by their intention to perform the behaviour and that; this intention is in turn a function of their attitude toward the behaviour and subjective norms. This theory aims to explain the relation between attitude and behaviour within human action.

2.2.2 Technology Acceptance Model (TAM) (Davis, 1986)

The TAM as proposed by Davis in 1986, is an adaptation of TRA. According to Lai (2017), TAM is tailored for modelling users' acceptance of information systems or technologies. To investigate King & He, (2006) & Weng et al., (2018), the relevance of TAM to this study is that it helps explain the effects of financial literacy on FinTech adoption. The model is a good foundation for creating a new web portal, especially in the B2B area of services industries.

2.3 Empirical Review and Hypotheses Development

2.3.1 The Effects of Financial Knowledge on FinTech Adoption

Literature on financial literacy through financial knowledge acquisition generally supports the notion that higher financial knowledge increases adoption of financial services (Hsaio & Tsai, 2018; Grohmann et al., 2018). This view manifests through studies that investigate several constructs or determinants of financial literacy and how they relate to individual financial behavior. Financial knowledge, for instance, influences personal attributes such

as attitudes, awareness, and cognitive abilities, which in turn affect how individuals' budget or manage their finances (Atkinson & Messy, 2011: 659). Similarly, enhanced financial knowledge is essential for behavioral change since increased financial literacy training leads to enhanced financial behavior and the greater use of financial services (Sayinzoga, et al., 2016). Conversely, the lack of financial awareness negatively impacts market participation (Guiso & Jappelli, 2005). This underpins the importance of financial literacy on financial inclusion.

Also, study by Lusardi & Mitchell (2011) found that people with a high level of financial knowledge are more likely to have access to and use FinTech services. Arun & Kamath (2015) observe that besides providing access, financial inclusion should address factors that enable individuals to better manage their financial resources and build financial capabilities. They recognize financial literacy and consumer education as critical drivers of the broader focus on financial exclusion and the meeting of needs of the currently unbanked (Arun & Kamath, 2015). Similarly, strategic approaches at the national level reflect the international policy interest in financial inclusion, financial education, financial consumer protection and evidence that financial literacy and financial inclusion are associated. Issues related to financial literacy and financial inclusion are top in the policy agenda of most countries and international organizations in the World today since the ultimate intention of financial education is for financial inclusion and to support behavior change (Atkinson & Messy, 2013).

World Bank (2008) stated that financial knowledge helps to improve efficiency and quality of financial services. This is supported by Lusardi (2009) and Greenspan (2002) who suggests that financial literacy helps in empowering and educating the poor so that they are knowledgeable and capable of evaluating different financial products and services to make informed financial decisions, so as to derive maximum utility. Therefore, the poor more than ever need a certain level of financial understanding to evaluate and compare financial products, such as bank accounts, saving products, credit and loan options and payment instruments. Scholars like Campbell (2006) and Grable & Joo (1998) argue that financial learning increases financial knowledge and affects financial decisions, choices, attitudes and behaviors of the poor. Indeed, OECD (2013a, 2013b) confirms that financial literacy facilitates access and encourages widening use of relevant financial products and services for the benefit of poor individuals.

Furthermore, Braunstein & Welch (2002) also observed that financial knowledge can offer a better understanding of mainstream financial services and encourages the unbanked to avoid non-standard services. Financial literacy facilitates decision making processes, which improve the savings rates, credit worthiness of potential borrowers, therefore resulting into improved access and use of financial services by the poor (World Bank, 2009; OECD, 2009). Therefore, financial knowledge facilitates effective product use by helping poor households to develop skills to compare and select the best financial products, which suits their needs hence leading to increased financial inclusion. However, Atkinson & Messy (2013) argue that lack of knowledge, awareness, confidence and certain attitudes and behaviors that inhibit use of, and trust in, formal financial products create barriers to access, by preventing poor individuals from making full use of existing products. Wilkins et al. (2022) stated that lack of financial knowledge by households contributed significantly to the 2008 financial crisis, this suggests that awareness and understanding of financial products will affect decisions about whether or not to use that product.

The results of Pulungan & Ndruru (2019) demonstrate how adoption of financial services is positively and significantly impacted by financial knowledge, with higher access and used of FinTech services being associated with higher financial knowledge levels. This is in line with research by Grohmann, Klühs, & Menkhoff, (2018), which states that there is a positive and significant effect between financial knowledge and financial inclusion. Thus, the following hypothesis was developed based on the explanation.

I. H1: Financial knowledge has a significant influence on the adoption of Fintech services in the Mfoundi Division of the Centre Region of Cameroon.

2.3.2 The Effect of Financial Behaviour and FinTech Adoption

This was further supported by Cupák et al. (2020) who stated that financial behaviour is positively influenced by the level of financial knowledge. The study examined consumer finance micro-data and evaluated the influence of self-assuredness in personal financial knowledge, confidence in the economy, and objective financial literacy on investments in risky financial assets like equity and bonds, across both broad and narrow margins. This was done while considering a wide range of covariates, including risk aversion. The findings revealed a positive link between financial literacy and investments in risky assets and debt securities. Additionally, confidence in one's financial skills increases the chances of holding risky assets and bonds. These relationships were quite strong for the broad margin, but they fell apart when considering the conditional proportion of financial wealth in risky assets among those who own them. The importance of financial literacy and confidence varied greatly with wealth distribution and across different socio-economic dimensions such as age, education, and race. Individuals with higher financial literacy may have lower fixed costs associated with acquiring and processing financial

information than those with lower financial literacy, which would make it easier for the former to participate in risky financial activities. Van Rooij et al. (2011) show that financial literacy has a positive correlation with investment in stocks. According to Morgan, Huang, and Trinh (2019), in addition to the traditional risks of using financial services, there are additional risks when one uses digital financial services. Such risks are more diverse and harder to spot than those associated with traditional financial products and services, including phishing, pharming, spyware, and SIM card swaps. Digital footprints may also be a source of risk. This suggests that higher financial literacy could also facilitate the use of Fintech products and services, although we are not aware of any studies on this topic.

Findings from Van Rooij et al. (2011) and Xiao and O'Neil (2018) uncovered the place of behavioural attitudes in shaping an individual's financial decisions. Concurrently, Hsiao and Tsai (2018) argued that the decision to partake in financially risky behaviours hinges predominantly on the perceived costs and benefits of information acquisition. Another study by Ernst & Young (2017) using FinTech Adoption Index found that nearly one-third of consumers in the 20 surveyed clients use at least two FinTech services, with 84% of those surveyed being aware of such services. They concluded that the FinTech innovators have already documented the potential of financial innovation, as evidenced by the rapid increase in FinTech start-ups how users adopt FinTech services. Hu et al. (2019) proposed an improved TAM that includes: user innovativeness, government support, brand image, and perceived risk as determinants of trust. They proved that users' trust in FinTech services has a very significant influence on attitudes toward adoption, while perceived ease of use and perceived risk do not affect it. Nangin et al. (2020) found that perceived ease of use had a positive effect on customer trust. This suggests an increase in the adoption of FinTech services. Based on the above literature, the study, therefore, hypothesizes that:

II. H2: Financial behaviour has a significant effect on the adoption of FinTech services in the Mfoundi Division of the Centre region of Cameroon.

2.3.3 The Effect of Financial Skills and FinTech Adoption

Most of studies highlight the significance of financial literacy on financial inclusion (Barro et al., 2022; Khan et al., 2022a; Khan et al., 2022b; Zhao et al., 2024). Tu et al. (2010) suggest that financial literacy is essential for financial resources of a firm. Bongomin et al. (2016) stated that financial literacy can aid in the improvement of the efficiency and quality of financial services. Financial inclusion facilitates access to and encourages the widespread use of financial products and services relevant to poor people's interests. Financial literacy can help the unbanked understand mainstream financial services and encourage them to avoid subpar services.

Financial literacy empowers and educates the public to gain a broader understanding of and evaluate various financial products and services to make informed financial decisions that maximize utility. Financial learning can improve financial knowledge while influencing financial decisions, choices, attitudes, and behavior (Bongomin et al., 2016). Another study states that the higher the knowledge about financial literacy, the higher the knowledge about financial inclusion about Fintech services so that people with high financial literacy can better access existing funding sources (Nuryani & Israfiani, 2021; Guan, 2020).

According to Rangarajan (2008), financial literacy has levels in the following order: First and foremost, be well-literate. This means that you should be confident in your understanding of financial service organizations and products, including their features, benefits, and hazards, as well as your rights and obligations. You should also be adept at using these goods and services. Second, have sufficient literacy and confidence in their knowledge of financial service providers, financial goods, and services, including their characteristics, advantages, and hazards, as well as their rights and responsibilities. Third, less literate, with a limited understanding of financial services, goods, and institutions. Fourth, lack of literacy, lack of understanding and trust in financial service providers, financial services and products, and a lack of proficiency in using financial services and products. According to the (OECD, 2018), indicators that can be used to measure financial literacy are, First, Financial Knowledge. Second, Financial Behavior, and Third, Financial skills. This indicator is used to measure the performance of financial literacy on financial inclusion of Fintech services. This suggests an increase in the adoption of FinTech services. Based on the above literature, the study, therefore, hypothesizes that:

III. H3: Financial skills have a significant effect on the adoption of FinTech services in the Mfoundi Division, Cameroon.

2.4 Conceptual Framework

The conceptual framework for this study is based on the literature review on the impact of financial literacy on Fintech adoption, as well as the Technology Acceptance Model (TAM) and the theory of Reasoned Action (TRA). The framework proposes that financial literacy, which is the independent variable break down to financial knowledge, financial behavior and financial skills influences FinTech services adoption. Indicators of

FinTech services adoption can be understood through various factors that influence user behavior and intention to adopt these services like intention, use, trust, affordability, access. The proposed conceptual framework is illustrated in the diagram below:

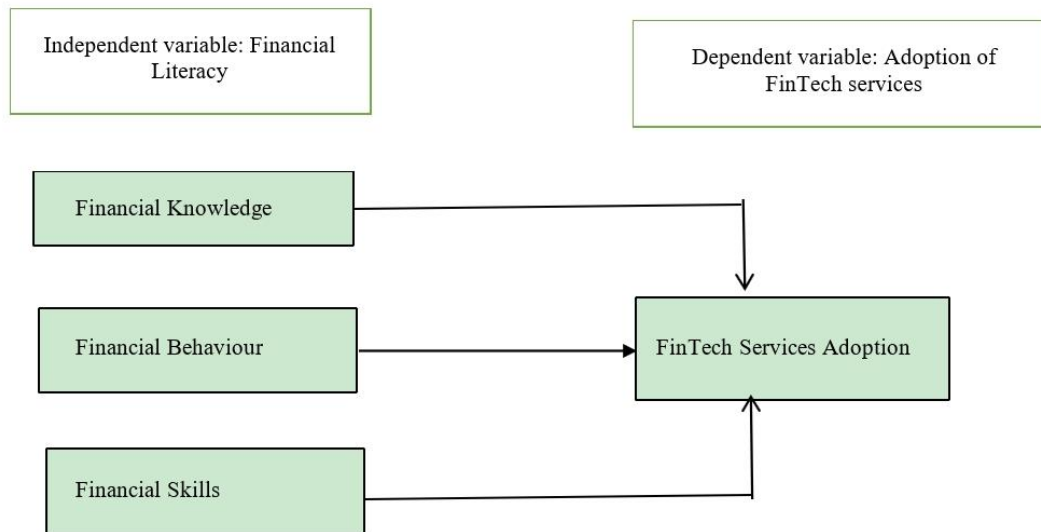


Figure 2. Conceptual Framework

Sources: Adopted from literature by authors (2025).

The theoretical framework and hypotheses suggest that financial literacy plays a critical role in promoting FinTech adoption among households Mfoundi Division. By understanding the factors that influence individuals' attitudes towards FinTech adoption, financial institutions and policymakers can develop effective strategies to promote financial literacy and FinTech adoption.

3. Methodology

This study adopted a quantitative approach, and data was collected using structured questionnaires and analysed using descriptive and inferential research techniques. The study used a 5- Likert-item structured questionnaire to collect data established from extant literature. The study employed the positivist research philosophy, which assumed that social phenomena can be studied objectively and that empirical methods can be used to generate valid and reliable data (Ryan, 2018). The population for this study was the general population of the Mfoundi Division and the study sampled men and women from the age of 20. The sample size for the study was 385 and the final analyzed data constituted 300 respondents after through data cleaning. A larger sample size generally leads to more precise estimates and narrower confidence intervals and given that exact population was unknown, a minimum acceptable sample size of 385 was deemed sufficient for the desired level of precision in in this study. This was done in cognizant that it may limit generalization to population that may be slightly different from the current. The sample technique employed was principally convenience and to an extent purpose as only those above 20 years were selected. The study participants were recruited from universities, workplaces, and public places. The use of convenient sampling was motivated by time and cost efficiency as well the most feasible method for quick data collection.

The instrument for data collection was a structured Likert scale questionnaire. The questionnaire consisted of three sections: participants' consent, demographics, and core variable sections. Data was collected using a self-administered questionnaire. The questionnaires were distributed to participants using trained data collectors who took 2 weeks to collect the data.

The data analysis for this study was conducted using Covariance-based Structural Equation Modeling (CB-SEM), a multivariate statistical technique that allows for the examination of relationships among multiple variables simultaneously. The model assessed the model Fit Indices. Model fit indices are used to assess how well the proposed model fits the observed data. The fit indices included were the Chi-square statistic, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA). The Chi-square statistic tests the null hypothesis that the model fits the data perfectly.

3.1 Model Specification

This study adopts three endogenous variables namely: financial knowledge, financial behaviour and financial skills. K is Financial knowledge, P is Financial behaviour or attitude, FK is Financial Skills and AD is Fintech Adoption.

$$AD = f(K, P, FK)$$

$$AD = \alpha + \beta_1 K + \beta_2 P + \beta_3 FK +$$

$$e_1 \dots\dots\dots 1$$

$$\text{PATH 1} \rightarrow AD = \alpha + \beta_1 K +$$

$$e_1 \dots\dots\dots 1.1$$

$$\text{PATH 2} \rightarrow AD = P + \beta_2 P +$$

$$e_2 \dots\dots\dots 1.2$$

$$\text{PATH 3} \rightarrow AD = FK + \beta_3 FK +$$

$$e_3 \dots\dots\dots 1.3$$

Where: { AD → FINTECH ADOPTION } { K → FINANCIAL KNOWLEDGE } { P → FINANCIAL BEHAVIOUR } { FK → FINANCIAL SKILLS } , e₁, e₂, and e₃ → error terms for paths (1), (2), and (3) while (β₁, β₂ and β₃ → path coefficients). The Apriori expectation → β₁ > 0; β₂ > 0; β₃ > 0 as shown below:

Table 3. Measurement of Variables and expected relationships

N	Variables	Measurement	Expected impact	A priori
	Dependent Variable: Fintech Adoption (AD)	Five Likert Scale points with coding grading from strongly agree to strongly disagree		
	Independent Variables			
1.	Financial Knowledge (K)	Five Likert Scale points with coding grading from strongly agree to strongly disagree	+	β>0
2.	Financial behaviour (P)	Five Likert Scale points with coding grading from strongly agree to strongly disagree	+	β>0
3.	Financial Skills (FK)	Five Likert Scale points with coding grading from strongly agree to strongly disagree	+	β>0

Source: Author (2025).

4. Results

The sample participants were fairly evenly distributed between males and females, with males making up 51.2% and females making up 48.8%. The age range of participants was: between 21-30 years 50.5%, 0-20 years 24.1%, 31-40 years 20.7%, and above 40 years old 4.7%. In terms of education level, most of the respondents have completed advanced level education 30.2% or hold a first degree 31.9%. A significant proportion indicated postgraduate studies, with 13.2% holding a master's degree and 2.7% holding a PhD.

Table 4. Demographic Distribution of Participants

Variable	Category	Frequency	Per cent
Gender	Male	151	51.2
	Female	144	48.8
Age	0-20 years	71	24.1
	21-30 years	149	50.5
	31-40 years	61	20.7
	41-50 years	13	4.4
	Above 50 years	1	0.3
Education Level	FSLC (First School Leaving Certificate)	23	7.8
	Ordinary levels (O-levels)	36	12.2

Advanced level (A-levels)	89	30.2
First Degree(B.Sc)	94	31.9
Master's degree (MSc, MA, MBA, etc.)	39	13.2
Doctor of Philosophy (PhD)	8	2.7
Others	6	2.0

Source: Field work (2025).

Table 4 revealed the participants' level of familiarity with different digital financial platforms. The majority of participants 271 (91.1%) reported being familiar with mobile payment apps such as mobile money and PayPal, indicating a high level of awareness and usage. Apart from this, most of the findings show a low level of awareness and familiarity with other FINTECH services. Online banking platforms showed a moderate level of familiarity, with 82 (27.8%) of participants indicating their familiarity. Peer-to-peer lending platforms and cryptocurrency exchanges were less familiar to the participants, with 23.7% and 28.8% reporting familiarity, respectively. The lowest level of familiarity was observed with crowdfunding platforms, with only 7.8% of participants indicating their familiarity.

Table 5. Familiarity with Digital Financial Platforms among Participants

Digital Financial Platform	Familiarity	Frequency	Per cent
Mobile payment Apps (e.g. mobile money, PayPal)	Familiar	271	91.1
	Not familiar	26	8.8
Online banking platforms	Familiar	82	27.8
	Not familiar	213	72.2
Peer-to-Peer lending platforms	Familiar	70	23.7
	Not familiar	225	76.3
Cryptocurrency exchange (e.g. Bitcoin, Ethereum)	Familiar	85	28.8
	Not familiar	210	71.2
Crowdfunding platforms	Familiar	23	7.8
	Not familiar	272	92.2

Source: Author (2025).

4.1 Usage of FinTech Services in the Mfoundi Division

Mobile payment apps are the most commonly used digital financial platform, with 47.8% of people using them daily and 31.5% using them weekly. On the contrary, online banking had only 4.1% of daily usage. Peer-to-peer lending platforms, cryptocurrency exchanges, and crowdfunding platforms have lower daily usage percentages, ranging from 3.7% to 1.7%. The findings indicated that online banking platforms and peer-to-peer lending platforms are used less frequently, with the majority of users using them rarely or never. Cryptocurrency exchanges and crowdfunding platforms are the least frequently used, with the majority of users never using them.

Table 6. Frequency of Usage of fintech services in Mfoundi Division

Digital Financial Platform	Usage Frequency	Frequency	Per cent
Mobile Payment Apps	Daily	141	47.8
	Weekly	93	31.5
	Monthly	22	7.5
	Rarely	30	10.2
	Never	9	3.1
Online Banking Platforms	Daily	12	4.1

	Weekly	30	10.2
	Monthly	54	18.3
	Rarely	77	26.1
	Never	122	41.4
Peer-to-Peer Lending Platforms	Daily	11	3.7
	Weekly	18	6.1
	Monthly	40	13.6
	Rarely	103	34.9
	Never	123	41.7
Cryptocurrency Exchange (e.g. Bitcoin, Ethereum)	Daily	8	2.7
	Weekly	13	4.4
	Monthly	34	11.5
	Rarely	79	26.8
	Never	161	54.6
Crowdfunding Platforms	Daily	5	1.7
Crowdfunding Platforms	Daily	5	1.7
	Weekly	12	4.1
	Monthly	26	8.8
	Rarely	60	25.4
	Never	177	60.0

Table 7. KMO and Bartlett's Test

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.935
Bartlett's Test of Sphericity Approx. Chi-Square	6453.705
Df	325
Sig.	.000

The study adopted the KMO and Bartlett's test results to ascertain the data suitability for factor analysis. Based on the analysis of data, it was observed that the Kaiser-Myer-Olkin Measure (KMO) of Sampling adequacy was 0.935 which is greater than 0.5 ($KMO = 0.935 > 0.5$) implying that the study meets the minimum requirement of sampling adequacy for EFA to be conducted. Equally, we observed that Bartlett's Test of Sphericity with Approx, Chi-Square (X^2) = 6453.705, and degree of freedom [df] = 325 revealed significant evidence that there exists at least 1 correlation in the data set Sig. [P_value = 0.000 < 0.01]. Based on these conditions, EFA was conducted.

The Principal Component Analysis (PCA) was employed varimax. Four new components were extracted with 73.782% of the total variance explained as shown in Table 5.

Table 8. Principal Component Analysis (PCA)

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.158	39.069	39.069	10.158	39.069	39.069	6.045	23.250	23.250
2	3.501	13.465	52.535	3.501	13.465	52.535	5.186	19.948	43.198

3	2.903	11.166	63.700	2.903	11.166	63.700	4.893	18.818	62.016
4	2.621	10.081	73.782	2.621	10.081	73.782	3.059	11.766	73.782
5	.845	3.250	77.031						
6	.583	2.241	79.273						
7	.476	1.830	81.103						
8	.453	1.742	82.845						
9	.405	1.558	84.403						
10	.362	1.393	85.796						
11	.340	1.309	87.106						
12	.336	1.294	88.400						
13	.296	1.139	89.539						
14	.293	1.126	90.665						
15	.280	1.077	91.742						
16	.267	1.025	92.768						
17	.253	.972	93.739						
18	.239	.918	94.658						
19	.226	.869	95.527						
20	.208	.798	96.325						
21	.178	.686	97.011						
22	.171	.658	97.668						
23	.164	.633	98.301						
24	.161	.618	98.919						
25	.141	.542	99.461						
26	.140	.539	100.000						

Extraction Method: Principal Component Analysis.

The PCA extracted four components, which together explained approximately 73.782% % of the total variance and the variation was distributed across the different four dimensions. The highest variation was from component 1 which accounted for 39.069% of the variance, the second for 13.465%, the third for 11.166%, and the fourth for 10.081%. The structure matrix revealed high loadings of the financial education variables on the first component of financial literacy (knowledge), followed by financial attitude/behaviour and skills in using financial technology tools. Thus, the framework suggests that each component represents a distinct construct within the data (see Table 9).

Table 9. Rotated Component Matrix

Rotated Component Matrix	Component			
	1	2	3	4
K4: My knowledge of Financial services is that they are fast	.851			
K5: I know financial services foster Innovation	.851			
K6: Financial knowledge Increase user experience	.846			
K3: I know Financial services are accessible	.845			
K7: Financial services are secured	.835			
K1: Financial services are convenient	.815			
K2: Financial services are cost-effective	.808			

K8: Financial services are reliable	.807			
AD6: The importance of fintech overwhelms the challenges for me		.877		
AD5: I am aware of fintech and its challenges		.860		
AD4: My knowledge of Fintech has helped me to avoid financial pitfalls		.859		
AD7: I can minimize the insecurity in fintech		.858		
AD2: I still prefer holding physical cash than momo		.855		
AD3: I am knowledgeable about fintech but I feel reluctant due risks		.843		
AD1: My fintech knowledge has encouraged me to use Momo		.545		
P4: Financial education made me feel positive about Fintech services			.855	
P2: I prefer to send money into my account through MoMo			.830	
P3: I detest fintech because of the potential			.802	
P7: Financial education positively influenced the way I considerations			.799	
P6: My behaviour towards financial technology has greatly improved			.772	
P1: I prefer holding money in my mobile telephone account than cash			.751	
P5: I prefer making payments through my MoMo account than cash			.707	
FK3: I own an account that keeps track of my finances				.886
FK2: Since I know how to do mobile banking, I sit at home for all the deals				.871
FK1: I desire to engage in fintech but I am limited by financial literacy				.856
FK4: I have subscribed to financial services that yield some income				.854
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 6 iterations.				

From the findings, AD1 gave a low loading of .545 which is below the threshold (Radloff, 1977) but was maintained given that the entire factor had a high reliability and removing it did not significantly improve the model.

Table 10. Reliability and validity

	Cronbach's alpha	Average variance extracted (AVE)
Financial Adoption	0.923	0.735
Financial Behaviour	0.925	0.689
Financial Knowledge	0.954	0.755
Financial Skills	0.893	0.751

Source: SPSS generated.

The study examined the reliability using Cronbach's alpha and all of the Cronbach's alpha values were above 0.90, which shows the results are reliable. To assess convergent validity, Average variance extracted (AVE) was used. Each construct in this study measured a high AVE (AVE > 0.50) which indicates that the constructs are reliable.

To assess the discriminant validity, the study employed the criteria given by Fornell and Larcker (Farrell & Rudd, 2009). Table 8 below shows that the model in this study yielded reliability given that the square roots of AVE were all greater than the values of their corresponding correlation (Latif et al., 2023).

Table 11. The discriminant validity using Fornell and Larcker

Financial	Financial	Financial	Financial
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	Adoption	Behaviour	Knowledge	Skills
Financial Adoption	0.857			
Financial Behaviour/attitude	0.46	0.83		
Financial Knowledge	0.423	0.455	0.869	
Financial Skills	-0.047	-0.014	-0.14	0.866

Table 12. Confirmatory Factor Analysis (CFA)

Fit Indices	Standard for Good Fit	Calculated Value	Interpretation
CMIN/DF	< 3	1.618	Good fit
SRMR	Close to 0	0.037	Good fit
GFI	> 0.90	0.890	Acceptable fit
NFI	> 0.90	0.929	Good fit
IFI	> 0.90	0.972	Good fit
TLI	> 0.90	0.968	Good fit
CFI	> 0.90	0.971	Good fit
RMSEA	< 0.06 for a good fit	0.046	Good fit

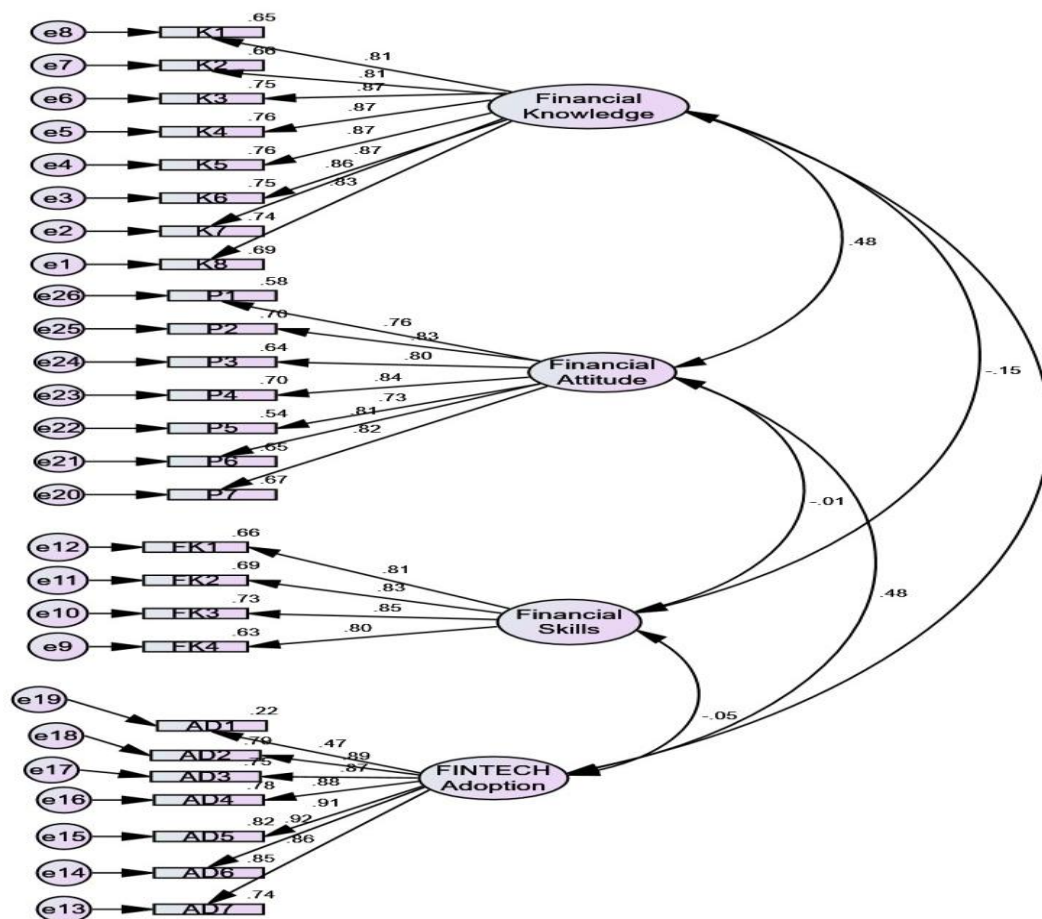


Figure 3. The Measurement Model

4.2 The Structural Model

The structural equation model was assessed to assess the relationships in the model and to verify the study hypotheses. First, the model was assessed for fitness using the different modification indices before hypotheses

verifications. The chi-square statistic was significant, $\chi^2(114) = 454.737$, $p < 0.0001$, but the relative chi-square (CMIN/DF) was 1.690, revealing a good model. A good-fitting model is accepted if the value of the CMIN/df is < 5 , the goodness-of-fit (GFI) indices (Hair et al., 2010); the Tucker and Lewis (1973) index (TLI); the Confirmatory fit index (CFT) (Bentler, 1990h) is > 0.90 (Hair et al., 2010). For this study, the study found that an adequate-fitting model and all the indices recommended good results. For instance, the standardized root means square residual (SRMR) was 0.038 which is less than 0.05, and the root mean square error approximation (RMSEA) was 0.046 which is less than 0.08 (Hair et al., 2010). Also, the goodness-of-fit (GFI) = .900, TLI = 0.965, GFI = .9000.890, CFI = 0.969.

Table 13. Assessment of Structural Model

Fit Indices	Standard for Good Fit	Calculated Value	Interpretation
CMIN/DF	< 3	1.690	Good fit
RMR	Close to 0	0.038	Good fit
GFI	> 0.90	0.890	Acceptable fit
NFI	> 0.90	0.929	Good fit
IFI	> 0.90	0.969	Good fit
TLI	> 0.90	0.965	Good fit
CFI	> 0.90	0.969	Good fit
RMSEA	< 0.06 for a good fit	0.046	Good fit

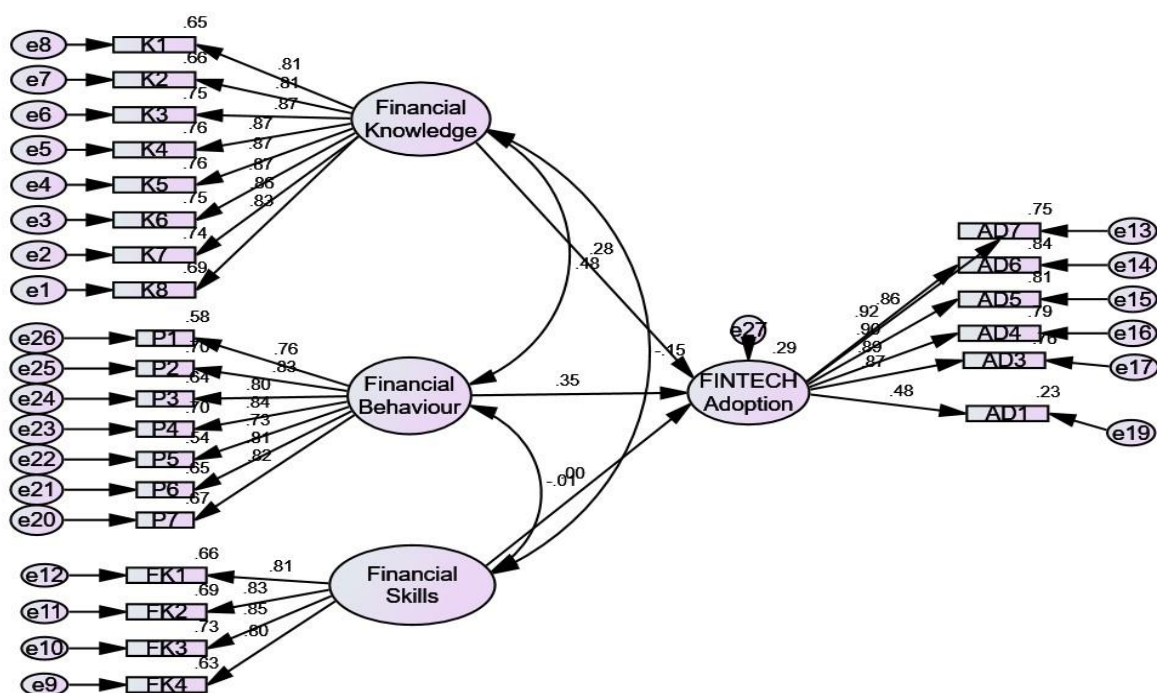


Figure 4. Confirmatory Factor Analysis

The combined effect was assessed for the variables using the squared multiple correlation. The study found a combined effect of .294, which implies that 29.4% variation in Fintech service adoption in Mfoundi Division is accounted for by the level of financial literacy measured using Financial Knowledge, Attitude and Financial skills.

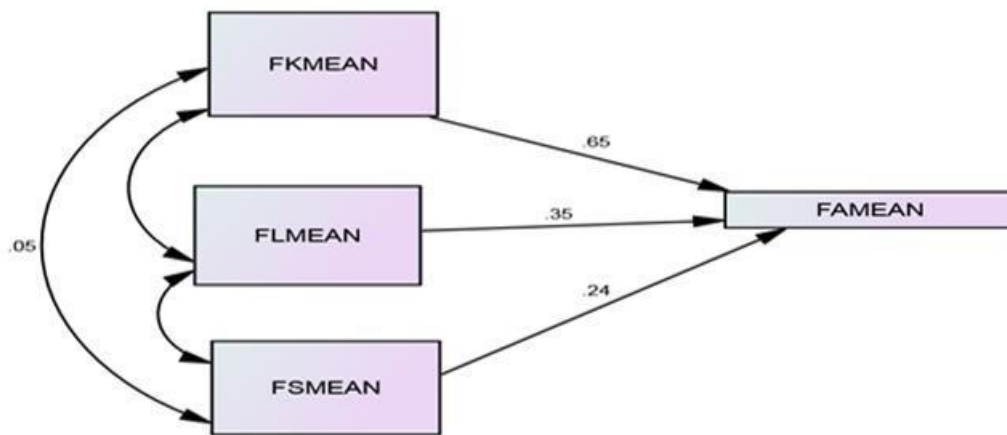


Figure 5. Structural Equation Model

CMIN/DF = 1.690; GFI = 0.890; IFI = 0.969; CFI = 0.969; RMSEA = 0.046; RMR = 0.038.

Table 14. Relationships between independent and FinTech service adoption

	Unstandardized estimates	Standardized estimates	T	P-Value	Decision
Financial knowledge has a significant influence on Fintech services adoption	.330	.283	4.487	***	Reject the null hypothesis
Financial behaviour has a significant effect on Fintech services adoption and usage in Buea	.378	.346	5.391	***	Reject the null hypothesis
Financial skills have a significant effect on Fintech services adoption and usage in Mfoundi Division	-.004	-.003	-.056	.955	Refuse to reject the null hypothesis

In this study, the effect of financial education (Financial Knowledge, Financial Behaviour, Financial skills) on the fintech service adoption was assessed among inhabitants of Mfoundi Division. The results in Table 11 revealed that financial knowledge has a positive and significant effect on the level of adoption of fintech services in Mfoundi Division ($\beta = .330$, $t = 4.487$, $p < 0.001$). The findings suggested that convenience, cost-effectiveness, easy accessibility, and security among others significantly impact the level of adoption of fintech services.

Also, the study assessed the influence of financial perceived attitudes towards fintech services and the study uncovered that there is a positive and significant influence ($b = .378$, $t = 5.391$, $p < 0.001$). The findings showed that a more positive attitude towards fintech services, that is the perceived belief that fintech offers innovation solutions, better to send more to the bank via fintech solutions like the use of Mobile Money, ease of tracking transactions and desire to yield income was positively related with adoption of services. The last dimension was the effect of fintech skills (usage) on adoption. The findings did not find enough evidence that financial skills significantly impact the fintech service adoption rate ($b = -.004$, $t = -.045$, $p = .955$).

5. Conclusion

This study aimed to investigate the effect of financial literacy on the adoption of Fintech services among residents of Mfoundi Division. Surveys were distributed to 300 participants, revealing a notably low level of fintech services adoption, with a predominant reliance on mobile money payments and transfers. Online banking platforms and peer-to-peer lending platforms were found to be less frequently utilized, while cryptocurrency exchanges and crowdfunding platforms were the least commonly used, with a majority of users reporting non-usage.

The study concluded that financial literacy, particularly financial knowledge and financial behaviour, significantly influences Fintech services adoption in Mfoundi Division. Notably, financial behaviour emerged as

the most impactful factor. The results suggest that individuals with elevated levels of financial knowledge are more inclined to adopt Fintech services. Moreover, a sound understanding of the financial benefits of Fintech, including convenience, secure transactions, cost-effectiveness, and easy accessibility, positively impacts adoption.

Furthermore, the research revealed that individuals with a positive attitude towards Fintech services, perceiving them as innovative solutions, are more likely to adopt them. This favourable attitude may stem from the ease of sending and tracking transactions, as well as the aspiration to generate income through Fintech solutions such as mobile money.

However, the study did not uncover sufficient evidence to support the hypothesis that financial skills significantly impact the adoption of Fintech services. This suggests that individuals' proficiency in using Fintech services, or their level of financial skills, does not exert a significant influence on their adoption rate.

This study recommends that financial literacy policy should be instituted and encouraged by the government of Cameroon to help improve and consolidate Fintech adoption not only in Mfoundi Division but in the whole country. We also recommend the promotion of positive perceptions and beliefs about Fintech, as well as highlighting its benefits.

This study provides evidence that financial literacy is a critical factor influencing the adoption of FinTech services in Mfoundi Division, Cameroon. Policymakers and FinTech providers should prioritize financial education and literacy programs to enhance the adoption of FinTech services (Lusardi & Mitchell, 2014). Additionally, FinTech providers should design user-friendly and accessible services that cater to the needs of individuals with varying levels of financial literacy. This study has implications on financial industry and the consumers in that it has revealed the need for increased financial literacy to help improve competition, financial inclusion, and the provision of a wider range of products and services to the consumers.

6. Recommendations

Based on the study, findings that financial literacy, particularly financial knowledge and financial behaviour, significantly affect Fintech services adoption in Mfoundi Division. We therefore recommend the following:

- 1) Policymakers should integrate financial literacy into school curricula to enhance financial literacy among young people (Lusardi & Mitchell, 2014).
- 2) FinTech providers should offer financial literacy programs and workshops to educate users about FinTech services (Kim et al., 2018).
- 3) FinTech services should be designed to be user-friendly and accessible to individuals with varying levels of financial literacy (Gomber et al., 2018).

7. Limitations

This study has some limitations. The sample size was limited to 300 respondents, and the study focused on Mfoundi Division, Cameroon. Future studies should consider larger sample sizes and broader geographic areas.

8. Future Research Directions

However, the study was limited to the Mfoundi Division of the Centre region of Cameroon. A more extensive study of the effects of financial literacy on the adoption of financial technology services in Cameroon as a whole is necessary. Future studies should investigate the effect of financial literacy on FinTech adoption in other regions of Cameroon and explore the role of other factors influencing FinTech adoption, such as digital literacy and trust in FinTech services (Kim et al., 2018).

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Author Contributions

Ayuk Takemeyang conceived the topic and did the draft of the Manuscript, Henry Jong Ketuma and Tambi Andison Akpor reviewed the manuscript. Henry Jong Ketuma further reviewed and revised the Manuscript, enhancing its content, clarity and accuracy met the highest standards.

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Data Availability

The datasets generated during and/or analyzed during the current study are available from the corresponding

author on reasonable request.

Declarations Competing Interests

The authors declare no competing interests.

Clinical Trial Number

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Not applicable.

References

- Accenture, (2016). Fintech and the Evolving Landscape: Landing Points for the Industry. Accenture. https://www.accenture.com/t20161011T031409Z_w_/pl-en/_acnmedia/PDF-15/Accenture-Fintech-Evolving-Landscape.pdf [Google Scholar]
- Ajzen, I., & Fishbein, M., (1980). Understanding Attitudes and Predicting Social Behavior Englewood Cliffs, NJ: Prentice-Hall. http://scholar.google.com/scholar_lookup?hl=en&publication_year=1980&author=I.+Ajzen&author=M.+Fishbein&title=%0AUnderstanding+Attitudes+and+Predicting+Social+Behavior%0A
- Ajzen, I., & Fishbein, M., (2000). Attitudes and the Attitude-Behavior Relation: Reasoned and Automatic Processes. *European Review of Social Psychology*, 11(1), 1-33. <https://doi.org/10.1080/14792779943000116>
- Aren, S., & Dinç Aydemir, S., (2014). A Literature Review on Financial Literacy. *Finansal Araştırmalar ve Çalışmalar Dergisi*, 6(11), 33-50. <https://doi.org/10.14784/JFRS.2014117326>
- Bachas, P., Gertler, P., Higgins, S., & Seira, E., (2021). How Debit Cards Enable the Poor to Save More. *Journal of Finance*, 76(4), 1913-1957. <https://doi.org/10.1111/jofi.13021>
- Barroso, M., & Laborda, J., (2022). Digital transformation and the emergence of the Fintech sector: Systematic literature review. *Digital Business*, 2(2), 100028. <https://doi.org/10.1016/j.digbus.2022.100028>
- Bashir, I., & Qureshi, I. H., (2022). A Systematic Literature Review on Personal Financial Well-Being: The Link to Key Sustainable Development Goals 2030. *FIIB Business Review*, 12(1), 31-48. <https://doi.org/10.1177/23197145221106862>
- Bentler, P. M., (1990). Comparative fit indexes in structural models. *Psychological bulletin*, 107(2), 238. <https://doi.org/10.1037/0033-2909.107.2.238>
- Bernards, N., (2019). 'Fintech' and Financial Inclusion BT — *The Palgrave Handbook of Contemporary International Political Economy* (T. M. Shaw, L. C. Mahrenbach, R. Modi, & X. Yi-chong (eds.), pp. 317–329). Palgrave Macmillan UK. https://doi.org/10.1057/978-1-137-45443-0_20
- Boyce, L., & Danes, S. M., (1998). Evaluation of the NEFE High School Financial Planning. Program. Englewood, CO: National Endowment for Financial Education.
- Braunstein, S., & Welch, C., (2002). Financial literacy: An overview of practice, research, and policy. *Fed. Res. Bull.*, 88, 445. <https://doi.org/10.17016/bulletin.2002.88-11>
- Bureshaid, N., Lu, K., & Sarea, A., (2021). *Adoption of FinTech Services in the Banking Industry BT — Applications of Artificial Intelligence in Business, Education and Healthcare* (A. Hamdan, A. E., Hassanien, R., Khamis, B., Alareeni, A., Razzaque, & B. Awwad (eds.), pp. 125-138). Springer International Publishing. https://doi.org/10.1007/978-3-030-72080-3_7
- CBInsights., (2018). The Fintech 250: The top fintech startups of 2018. Research Briefs, October 22. <https://www.cbinsights.com/research/fintech-250-startups-most-promising/>
- Cupák, A., Fessler, P., Hsu, J. W., & Paradowski, P. R., (2020). Confidence, Financial Literacy and Investment in Risky Assets: Evidence from the Survey of Consumer Finances. *Finance and Economics Discussion Series*, 2020(004). <https://doi.org/10.17016/feds.2020.004>
- Demirguc-Kunt, A., Klapper, L., & Singer, D., (2017, April). Financial Inclusion and Inclusive Growth: A Review of Recent Empirical Evidence. *Financial Inclusion and Inclusive Growth: A Review of Recent Empirical Evidence*. <https://doi.org/10.1596/1813-9450-8040>
- Demirguc-Kunt, A., Klapper, L., Singer, D., & Van Oudheusden, P., (2015, April 11). The Global Findex Database: Measuring financial inclusion around the world. *Policy Research Working Paper 7255*. <https://doi.org/10.1596/1813-9450-7255>

- Dwivedi, P., Alabdooli, J. I., & Dwivedi, R. (2021). Role of FinTech Adoption for Competitiveness and Performance of the Bank: A Study of Banking Industry in UAE. *International Journal of Global Business and Competitiveness*, 16(2), 130-138. <https://doi.org/10.1007/s42943-021-00033-9>
- Ernst & Young, (2017, June 28). EY FinTech Adoption Index: Fintech Services Poised for Mainstream Adoption in the US With 1 in 3 Digitally Active Consumers Using Fintech. Press release. <https://www.ey.com/us/en/newsroom/news-releases/news-ey-fintech-adoption-index>
- Feyen, E., Frost, J., Gambacorta, L., Natarajan, H., & Saal, M., (2021). Fintech and the digital transformation of financial services: implications for market structure and public policy. In *BIS Papers*, 117(117).
- Fishbein, M. and Ajzen, I., (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research* Reading, MA: Addison-Wesley.
- Gai, K., Qiu, M., & Sun, X., (2018). A survey on FinTech. *Journal of Network and Computer Applications*, 103, 262-273. <https://doi.org/10.1016/j.jnca.2017.10.011>
- GSM Association, (2021). State of the Industry Report on Mobile Money. *Gsma*, 1-75. https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2021/03/GSMA_State-of-the-Industry-Report-on-Mobile-Money-2021_Full-report.pdf.com/mobilemoney
- Guiso, L., & Jappelli, T., (2005). Awareness and stock market participation. *Review of Finance*, 9(4), 537-567. <https://doi.org/10.1007/s10679-005-5000-8>
- Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E., (2010). *Multivariate Data Analysis* (7th Edition). NJ: Prentice-Hall Publication.
- Hasan, F., Al-Okaily, M., Choudhury, T., & Kayani, U., (2023). A comparative analysis between FinTech and traditional stock markets: using Russia and Ukraine war data. *Electronic Commerce Research*. <https://doi.org/10.1007/s10660-023-09734-0>
- Hogarth, J. M., & Hilgert, M. M., (2002) Financial knowledge, Experience and Learning Preferences: Preliminary Results from a New Survey on Financial Literacy. *Consumer Interest Annual*, 48, 1-7. <https://consumerinterest.org/files/public/FinancialLiteracy-02.pdf>
- Hosen, M., Cham, T. H., Eaw, H. C., Subramaniam, V., & Thaker, H. M. T., (2023). *The Influence of FinTech on Financial Sector and Economic Growth: An Analysis of Recent Literature BT — Proceedings of the 2nd International Conference on Emerging Technologies and Intelligent Systems* (M. A. Al-Sharafi, M. Al-Emran, M. N. Al-Kabi, & K. Shaalan (eds.); pp. 251-263). Springer International Publishing. https://doi.org/10.1007/978-3-031-25274-7_21
- Hsiao, Y. J., & Tsai, W. C., (2018). Financial literacy and participation in the derivatives markets. *Journal of Banking & finance*, 88, 15-29. <https://doi.org/10.1016/j.jbankfin.2017.11.006>
- Hu, Z., Ding, S., Li, S., Chen, L., & Yang, S., (2019). Adoption intention of fintech services for bank users: An empirical examination with an extended technology acceptance model. *Symmetry*, 11(3), 340. <https://doi.org/10.3390/sym11030340>
- Huston, S. J., (2010). Measuring Financial Literacy. *The Journal of Consumer Affairs*, 44(2), The American Council on Consumer Interest. <https://doi.org/10.1111/j.1745-6606.2010.01170.x>
- Jumpstart, (2007). Jumpstart Coalition for Personal Financial Literacy.
- King, W. R., & He, J., (2006). A meta-analysis of the technology acceptance model. *Information & management*, 43(6), 740-755. <https://doi.org/10.1016/j.im.2006.05.003>
- KPMG., (2018, April). The Pulse of Fintech 2018: Global Report on Fintech Investment Trends. KPMG. <https://home.kpmg/au/en/home/insights/2017/04/pulse-of-fintech.html>
- Lai, P. C., (2017). The literature review of technology adoption models and theories for the novelty technology. *JISTEM-Journal of Information Systems and Technology Management*, 14, 21-38. <https://doi.org/10.4301/S1807-17752017000100002>
- Latif, F., Mas-Machuca, M., Marimon, F., & Sahibzada, U., (2023). Direct and configurational paths of servant leadership to career and life satisfaction in higher education: Cross-cultural study of Spain, China, and Pakistan. *Journal of Human Behavior in the Social Environment*, 1-24. <https://doi.org/10.1080/10911359.2023.2218439>
- Lusardi, A., (2019). Financial literacy and the need for financial education: evidence and implications. *Swiss Journal of Economics and Statistics*, 155(1), 1. <https://doi.org/10.1186/s41937-019-0027-5>
- Meiryani, M., Delvin Tandyopranoto, C., Emanuel, J., Lindawati, A. S. L., Fahlevi, M., Aljuaid, M., & Hasan, F.,

- (2022). The effect of global price movements on the energy sector commodity on bitcoin price movement during the COVID-19 pandemic. *Heliyon*, 8(10), e10820. <https://doi.org/10.1016/j.heliyon.2022.e10820>
- Morgan, P. J., Huang, B., & Trinh, L. Q., (2019). The need to promote digital financial literacy for the digital age. *IN THE DIGITAL AGE*.
- Moufakkir, M., & Mohammed, Q., (2021). The Nexus Between FinTech Adoption and Financial Inclusion. *Research Anthology on Personal Finance and Improving Financial Literacy*, 175-191. <https://doi.org/10.4018/978-1-7998-8049-3.ch011>
- Murinde, V., Rizopoulos, E., & Zachariadis, M., (2022). The impact of the FinTech revolution on the future of banking: Opportunities and risks. *International Review of Financial Analysis*, 81(March), 102103. <https://doi.org/10.1016/j.irfa.2022.102103>
- Nangin, M. A., Barus, I. R. G., & Wahyoedi, S., (2020). The effects of perceived ease of use, security, and promotion on trust and its implications on fintech adoption. *Journal of Consumer Sciences*, 5(2), 124-138. <https://doi.org/10.29244/jcs.5.2.124-138>
- Ndassi Teutio, A. O., Kala Kamdjoug, J. R., & Gueyie, J. P., (2023). Mobile money, bank deposit and perceived financial inclusion in Cameroon. *Journal of Small Business & Entrepreneurship*, 35(1), 14-32. <https://doi.org/10.1080/08276331.2021.1953908>
- Organisation for Economic Co-operation and Development, (2020). OECD/INFE 2020 International Survey of Adult Financial Literacy. *OECD/INFE 2020 International Survey of Adult Financial Literacy*, 78. www.oecd.org/financial/education/launchoftheoecdinfeglobalfinancialliteracysurveyreport.htm
- Radloff, L. S., (1977). The CES-D Scale: A Self-Report Depression Scale for Research in the General Population. *Applied Psychological Measurement*, 1(3), 385-401. <https://doi.org/10.1177/014662167700100306>
- Ramachandran, R., (2013). Financial Innovation and Regulation. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2336477>
- Rothwell, D. W., & Wu, S., (2017). The Impact of Financial Education Participation on Financial Knowledge and Efficacy. *Journal of Chemical Information and Modeling*, 53(9), 287. <https://doi.org/10.31235/osf.io/mpz4v>
- Ryan, G., (2018). Introduction to positivism, interpretivism and critical theory. *Nurse Researcher*, 25(4), 14-20. <https://doi.org/10.7748/nr.2018.e1466>
- Sconti, A., (2022). Having Trouble Making Ends Meet? Financial Literacy Makes the Difference. In *Italian Economic Journal*. Springer International Publishing. <https://doi.org/10.1007/s40797-022-00212-4>
- Stolper, O. A., & Walter, A., (2017). Financial literacy, financial advice, and financial behaviour. *Journal of Business Economics*, 87(5), 581-643. <https://doi.org/10.1007/s11573-017-0853-9>
- Talom, F. S. G., & Tengeh, R. K., (2020). The impact of mobile money on the financial performance of the SMEs in Douala, Cameroon. *Sustainability (Switzerland)*, 12(1). <https://doi.org/10.3390/su12010183>
- Tucker, L. R., & Lewis, C., (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika*, 38(1), 1-10. <https://doi.org/10.1007/BF02291170>
- Van Rooij, M., Lusardi, A., & Alessie, R., (2011). Financial literacy and stock market participation. *Journal of Financial economics*, 101(2), 449-472. <https://doi.org/10.1016/j.jfineco.2011.03.006>
- Vissing-Jorgensen, A., (2003). Perspectives on behavioral finance: Does “irrationality” disappear with wealth? Evidence from expectations and actions. *NBER macroeconomics annual*, 18, 139-194. <https://doi.org/10.1086/ma.18.3585252>
- Vlaev, I., Chater, N., & Stewart, N., (2007). Relativistic financial decisions: Context effects on retirement saving and investment risk preferences. *Judgment and Decision Making*, 2(5), 292-311. <https://doi.org/10.1017/s1930297500000619>
- Weng, F., Yang, R. J., Ho, H. J., & Su, H. M., (2018). A TAM-based study of the attitude towards use intention of multimedia among school teachers. *Applied system innovation*, 1(3), 36. <https://doi.org/10.3390/asi1030036>
- Wilkins, R., Vera-Toscano, E., Wooden, F. B. M., & Trinh, T. A., (2022). The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 20 The 17th Annual Statistical Report of the HILDA Survey. 1-168. https://melbourneinstitute.unimelb.edu.au/__data/assets/pdf_file/0009/3537441/HILDA-Statistical-report-2020.pdf

- World Bank, (2022). Finance, Competitiveness, and Innovation Global Practice Fintech and the Digital Transformation of Financial Services: Implications for Market Structure and Public Policy Fintech and the Future of Finance Flagship Technical Note. <https://documents1.worldbank.org/curated/en/099735304212236910/pdf/P17300608cded602c0a6190f4b8caaa97a1.pdf>
- Xiao, J. J., & O'Neill, B., (2018). Mental accounting and behavioural hierarchy: Understanding consumer budgeting behaviour. *International Journal of Consumer Studies*, 42(4), 448-459. <https://doi.org/10.1111/ijcs.12445>
- Xiao, J. J., Shim, S., Barber, B., & Lyons, A. C., (2007). Financial behavior and quality of life of college students: Implications for college financial education.
- Zequiraj, V., Sohag, K., & Hammoudeh, S., (2022). Financial inclusion in developing countries: Do quality institutions matter? *Journal of International Financial Markets, Institutions and Money*, 81, 101677. <https://doi.org/10.1016/j.intfin.2022.101677>

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