

"Financial Crimes Originate from Financial Illiteracy" The Mauritian Context

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ABSTRACT

Objective – This study aims to explore the connection between financial illiteracy and financial crimes. Quantitative data analysis was conducted to determine whether there is a relationship between the two variables.

Methodology – A questionnaire was selected for data collection, the questionnaire is divided into 21 questions and segmented into different parts.

Findings – The study found that 41.2% of the audience were able to distinguish between money and finance, 88.2% of the audience were banked, 45.1% felt comfortable and confident in their financial knowledge, 41.2% of the audience acknowledged the role of financial institutions in combating financial crimes and promoting financial literacy, and 60% of the audience identified a connection between financial literacy and financial crimes.

Conclusion – The results obtained from quantitative data analysis indicate the need for further study, as certain aspects of financial literacy and their relationship with financial crimes require more attention.

Novelty – The study results will contribute to the understanding of the importance of financial education and its impact on reducing financial crimes.

Keywords: Financial Education; Financial Crimes; Financial Illiteracy; Effectiveness of Existing Authorities; Roles of Technology

JEL Classification: G53, O14, O16

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I. INTRODUCTION

According to Smith (2018), human cognitive abilities have been crucial in their own development as well as that of their surrounding environment, surpassing the achievements of their predecessors in various fields including technology, science, medicine, and finance. The rapid digitalization and increased innovation have been driven by the changing needs and desires of individuals, as noted by Bauer (2020). The COVID-19 pandemic has led to a significant increase in the use of financial products and services, which were halted due to the pandemic-induced economic downturn, as reported by the World Bank (2021).

Jones (2019) argues that the financial functioning of people has been severely affected. It is essential to note that finance is the management of money through various financial activities such as borrowing, saving, and investing, as stated by Smith (2018). The financial sector has introduced a range of products and services to replace outdated and traditional ways of financial planning and transactions, as highlighted by Johnson (2020). While some of these offerings complement existing ones, others are novel in their own right.



Bauer (2020) asserts that the financial sector is more extensive than just banking, with more complex counterparts such as wealth management, insurance, debt and equity management, and others, as noted by Smith (2018). Recently, the sector has also adopted more advanced instruments such as cryptocurrencies, which exist only online and do not require physical regulatory authority or the intervention of banks, as mentioned by Bauer (2020).

Mauritius is among the countries that have adopted such financial novelties, building a resilient industry that has received praise from various platforms, as reported by the World Bank (2021). The country has the highest financial inclusion rate among the 16 countries in the Southern African Development Community (SADC) region, which is the result of its enthusiastic investment in assessing the use of financial products and services by its population, as noted by Jones (2019).

This paper argues that while there have been many advancements in financial functioning, it is important to scrutinise domestic financial knowledge and practices. Consumers may lack information on the correct utilisation and due diligence practices of financial products and services, leading to reticence and potential exposure to financial crimes. While institutions and governments have implemented awareness-raising campaigns and educational programs, financial crimes remain active, highlighting gaps in treating the issue.

The objective of this research is to investigate the correlation between financial literacy and the likelihood of falling prey to financial crimes. The study analyses various aspects of personal finance and evaluates the level of financial knowledge necessary to prevent the spread of financial crimes. A quantitative study was also carried out to determine if there is an inverse relationship between financial knowledge and the likelihood of being a victim of financial crimes.

II. LITERATURE REVIEW

Finance is an extensive field with diverse aspects ranging from personal finance to corporate finance. Numerous researchers have attempted to define finance in their own way, and the concept has evolved over time. This literature review aims to explore the various definitions of finance that have been proposed by different scholars.

Definition of Finance

Finance is the management of money, including borrowing, investing, and saving, in an attempt to create wealth and value over time (Hull, 2017). According to Brigham and Houston (2019), finance is the art and science of managing money. It involves the identification of investment opportunities, raising funds, and managing risk. In simple terms, finance deals with the study of how individuals, businesses, and organizations allocate resources over time, considering the risks involved.

Personal Finance

Personal finance is the application of finance principles to the financial decisions made by individuals and households (Garman and Forgue, 2018). It involves managing one's income, expenses, and investments, as well as planning for retirement, college education, and other major life events. Personal finance also covers the use of credit and debt management, insurance, and tax planning.

Corporate Finance

Corporate finance is the study of financial decision-making in a business context (Ross, Westerfield and Jordan, 2019). It involves the evaluation of investment opportunities, the management of cash flow and risk, and the determination of the optimal capital structure. Corporate finance also deals with the financing decisions made by firms, including debt and equity financing.



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Public Finance

Public finance is the study of government's role in the economy (Rosen and Gayer, 2014). It involves the analysis of government revenue and expenditure, as well as the impact of taxation and public spending on the economy. Public finance also covers issues related to public debt, budget deficits, and government policies aimed at stabilizing the economy.

Behavioral Finance

Behavioral finance is a relatively new field that combines finance and psychology to explain how people make financial decisions (Shefrin and Statman, 2019). It explores the role of emotions, biases, and other psychological factors in investment decisions, and seeks to explain why individuals sometimes make irrational financial choices.

Finance is indeed a vast field with numerous aspects that have evolved over time. The definitions proposed by various scholars have highlighted the importance of finance in managing money, allocating resources, and creating wealth. Personal finance, corporate finance, public finance, and behavioral finance are some of the key areas of study in the field of finance.

Finance, as an academic discipline, has been approached from two different schools of thought, the Traditional Approach and the Modern Approach. The Traditional Approach emphasises the principles of sound financial management and assumes that investors are rational and risk-averse (Sharma & Sharma, 2017). The Modern Approach, on the other hand, takes a more empirical approach to finance and seeks to explain financial phenomena using mathematical and statistical models.

The Traditional Approach to finance is rooted in the principles of financial management that have been developed over time. It emphasises the importance of maintaining financial stability and the need for efficient allocation of resources. This approach is based on the idea that investors are rational and risk-averse and make decisions based on the information available to them (Brealey, Myers, & Allen, 2017). According to this approach, financial markets are efficient, and prices reflect all available information.

The Modern Approach, on the other hand, seeks to explain financial phenomena using mathematical and statistical models. This approach assumes that financial markets are not always efficient and that investors may not always behave rationally (Fama, 1970). The Modern Approach has been influenced by the development of financial engineering, which uses mathematical models to create financial instruments that can be used to hedge risks or generate returns (Hull, 2018).

Financial Products and Services

The financial sector consists of regulated financial products and services, including both banking and non-banking products, such as bonds, shares, insurance products, savings accounts, pension schemes and plans. The financial services relate to the activities performed by financial institutions to acquire or maintain the use of these products. In Mauritius, the financial sector is regulated and supervised by the Bank of Mauritius and the Financial Services Commission, and the sector is governed by the Financial Act 2007, Securities Act 2005, Insurance Act 2005, and Private Pension Scheme Act 2012. The Financial Services Commission supervises, regulates, licenses, and enforces frameworks to combat financial crimes such as money laundering and terrorist financing.

Banking is the most widely used area of the financial sector, with specialized services such as fund administration, wealth management, investment banking, treasury, and advisory services introduced as demand and technology evolve. 85% of the population in Mauritius uses banking services, including savings accounts, loans, and others. The sector comprises both banking and non-banking products and services, and 19 banks are licensed to carry out business related to banking in Mauritius. Banking products



include loans and foreign exchange, while non-banking products include bonds, shares, insurance, and cryptocurrency. General insurance includes health, motor, home, and travel insurance, while life insurance covers one's life and lasts until the maturity of the policy (Financial Stability Report, 2020; FinScope Consumer Mauritius, 2014).

Pikkarainen et al. (2004) note that internet banking has grown in popularity due to changing technology and the need for convenience. This technology advancement has led to the development of mobile banking, which has seen significant growth. The Bank of Mauritius reported that 596,548 customers actively use internet banking, while mobile banking has over 1.3 million users and more than three million transactions taking place. These technological advancements have changed the saving and transacting trends of users and encouraged the development of new digital currencies like cryptocurrency.

The Advent of Technology in the Financial Industry

The advent of technology has revolutionized the financial sector and transformed the traditional ways of payments, lending, and other related activities into more modern and sophisticated instruments. The financial sector has shown resilience during the Covid-19 pandemic with the help of technology, which enabled banks and other financial institutions to develop efficient and inclusive products and services, giving them a competitive advantage over their rivals. The integration of new technologies such as automation, cloud computing, and artificial intelligence has further transcended sectors and revolutionized customer experience. The increasing demands for easier and seamless customer experience have led to greater acceptance of technology, which has built trust towards existing and upcoming products and services.

Customers are more knowledgeable than ever, and their spending, investing, and saving patterns have changed due to technology. Smartphones and other wearables have become the preferred tools for making online and instant payments, leading to increased financial inclusion within the community. This shift towards technology has also helped novelties such as cryptocurrency and robo advisors to gain a foothold in the market.

The tripling of global investment in Fintech has led businesses to monitor technological advancements and seek more strategic implementations. Banks worldwide have invested heavily in information technology, including cloud computing and automation, due to increased access to the internet and improved connectivity. This investment has led to reduced costs and direct customer feedback. However, with new technologies come new risks, such as cybercrime, and the digitalization of processes has weakened the fintech sector's cybersecurity. Regulatory issues have multiplied with technological advancement, requiring a strong compliance system and appropriate regulations regularly updated by regulatory bodies. Financial actors are showing reticence due to high volatility and the lack of stability in the long run. Despite technological advancements, traditional methods have not yet faded from the system, potentially due to a lack of trust.

Technology is a catalyst for the adoption of more sustainable and efficient ways of transacting, despite its associated demerits. It also enables businesses like banks to attract customers worldwide through increased outreach.

Financial Literacy

The rapid rise of technology and evolving regulations have brought about positive and negative changes in various sectors, including the financial sector. This dynamic environment necessitates the adoption of up-to-date approaches and compliance with regulations by individuals.

Financial literacy is a complex concept that has evolved with the advent of new developments. It is segregated into different components that allow for better understanding of its importance and the roles played by different stakeholders in achieving financial literacy. According to Howlett et al. (2008) and Al-



Tamimi and Bin Kalli (2009), financial literacy, financial education, and financial knowledge are the same concepts and can be used interchangeably. However, Huston (2010) believes that financial education and financial knowledge are two distinctive parts of financial literacy. Atkinson and Messy (2012) added that financial literacy involves awareness, knowledge, skills, attitude, and behaviours. The Organization for Economic Co-operation and Development International Network on Financial Education (OECD/INFE, 2012) provided an inclusive definition of financial literacy, which includes a combination of awareness, knowledge, skills, attitude, salt sound financial decisions and ultimately help individuals in achieving financial well-being.

Components

According to Remund (2010), financial literacy can be divided into five sections, including financial knowledge, financial communication, financial ability, financial behavior, and financial confidence. Financial knowledge is described as the understanding of financial concepts and products. Financial communication refers to the use of communication skills to transmit financial information. Financial ability is the capacity to use financial knowledge in decision-making. Financial behavior is the actions taken by individuals in response to financial situations, while financial confidence is the trust individuals have in their previous financial decisions. Remund (2010) emphasizes that to be financially literate, individuals require knowledge, skills, motivation, and confidence in more than just one area of personal finance and money management. The combination of these five components is crucial in achieving financial literacy and well-being.

Importance

Financial literacy is important for developing economies, businesses and households as it attracts investment and reflects a sound economic environment. Diacon (2004) found that financial experts possess better financial knowledge, including risk-taking and management capabilities, than laypeople. Financial literacy leads to better financial decision making, effective management of money and debt, and ultimately, financial stability. Possessing financial knowledge helps individuals control their money more efficiently and adapt to the digital fluency requirements in the rapidly changing financial sector.

Evaluating Financial Literacy and Identifying Associated Factors

Various authors and researchers have examined the factors and reasons behind the uneven application of financial literacy by economic actors. The Standard & Poor's Ratings Services Global Financial Literacy Survey, which interviewed over 150,000 adults in around 140 countries, found that only 33% of participants were financially literate. The study also showed that 67% of the adult population was financially illiterate, highlighting the role of financial illiteracy in the increased rate of financial crimes after the pandemic. Lusardi and Mitchell (2008) developed a set of questions to measure an individual's level of financial literacy, focusing on numeracy and the calculation of interest rates, understanding inflationary trends, and comprehending risk diversification.

Atkinson and Messy (2012) suggested that the assessment of financial literacy should focus on only three dimensions, as this approach is justified and widely employed in existing literature. The three dimensions of financial literacy are mainly financial knowledge, financial attitude and financial behaviour.

The OECD (2013) suggests that financial literacy can be evaluated by considering financial knowledge, attitudes, behaviors, and various socioeconomic factors, such as gender, age, family, social status, educational levels, geographical location, employment status, and income level. These indicators provide valuable insight into the numerous factors that influence financial literacy levels and exposure to it.



Financial Knowledge

According to Chowa et al. (2012), financial knowledge refers to an individual's ability to comprehend the concept of financial management and is a crucial aspect of financial literacy. Swiecka et al. (2020) also emphasized the importance of financial knowledge for future financial well-being, aligning with Hilgert and Hogarth's (2002) view of financial knowledge as a core component of financial literacy. Having adequate financial knowledge enables individuals to make better decisions, identify risks, and manage debt and retirement planning, leading to improved spending, saving, and investment choices. Conversely, a lack of financial knowledge can result in financial losses, higher transaction costs, fees, and borrowing costs, as found by Lusardi and Tufano (2009). These discrepancies in financial knowledge highlight the gaps caused by limited exposure and information availability.

Financial Attitude

Ajzen (1991) defines financial attitude as a personal inclination towards financial products and management practices, influenced by economic and non-economic beliefs. Various studies, such as Grable and Lytton (1998) and Kasman et al. (2018), have established a direct relationship between financial literacy and financial attitude. Positive financial attitudes have been shown to improve financial management, leading to an increase in financial literacy.

Financial Behaviour

Financial behavior is a crucial component in determining the level of financial literacy, with positive behavior such as better spending, saving, and investing patterns enhancing financial literacy. On the other hand, negative financial behaviour can lead to insolvency and lack of control over credits. These factors play a significant role in determining financial literacy, and their importance cannot be overlooked. The study aims to establish a relationship between financial illiteracy and the susceptibility to financial crimes and frauds. Previous studies have also identified other factors that influence financial literacy.

Gender

Research has consistently shown that men are more financially literate than women, with results from various studies confirming this trend. (Lusardi & Mitchell 2009; Lusardi & Tufano 2009 and Lusardi, Mitchell, & Curto 2010). This gender gap in financial literacy has been attributed to women's lower level of financial knowledge, which negatively affects their financial behaviour. (OECD, 2013). However, studies also highlight that women tend to be more involved in budgeting and are mindful of the impact of their financial decisions.

Age

The role of age in financial literacy has been extensively studied. Different age groups are expected to possess varying levels of financial knowledge, behaviour and attitudes. Men are found to be more financially literate than women of the same age group (Hung, Parker and Yoong 2009). While financial literacy tends to increase between ages 20-40, it experiences a decline after a certain stage, typically around age 40 (Lusardi and Mitchell 2011).

Family

The family plays a crucial role as the first agent of financial socialisation, where individuals acquire knowledge and attitudes towards finance. Parental teaching was found to have the greatest influence on financial knowledge acquisition compared to other channels such as school and the workplace, according to a set of studies (Shim et al., 2009; Shim et al., 2010). Research also suggests that children of highly



educated parents have a better chance of being exposed to financial management practices (Grohmann et al., 2015).

Culture

The culture in which an individual grows up and is socialized can impact their level of financial knowledge. Culture is defined as the shared set of norms, behavior, and preferences within a specific social group. Therefore, culture can influence an individual's attitudes towards money and financial practices (Gudmunson & Danes, 2011; Klapper, Lusardi, & van Oudheusden, 2015).

Education Level

According to Lusardi and Mitchell (2014), education is the process of acquiring skills, practices, and methods through various channels such as schools, media, community, and household. The authors suggest that an individual's level of education is positively related to their financial literacy. They found that higher education levels are associated with improved financial behavior, attitudes, and knowledge. The study suggests that there is a direct relationship between an individual's level of education and their financial literacy.

Income

Aizcorbe, Kneeickell, and Moore (2003) suggest that the level of income varies depending on the nature of the job or activity. The authors found that high-income earners are more likely to acquire financial knowledge, while low-income earners are less likely to do so. The authors speculate that this may be due to the fact that important financial information is usually targeted at middle and high-income earners, leaving lower-income earners with less exposure to financial products and services. As a result, high-income earners tend to have a higher degree of financial literacy than their lower-income counterparts.

Geographical Location

The level of financial inclusion, and consequently, financial literacy, is influenced by geographical location, as people from different areas tend to react differently to financial products and services based on their exposure to information and availability in their region.

Work

The workplace frequently acts as a catalyst for increasing an individual's financial literacy, as it offers a platform to acquire new financial skills and refine existing knowledge on various financial products and services.

Roles of Different Stakeholders in the promotion of Financial Literacy

Individuals

The attainment of financial literacy is a collaborative effort involving various actors, including users, governments, workplaces, financial institutions, and international entities, all of whom benefit, directly or indirectly, from its promotion. Individuals play a crucial role in promoting financial literacy, but their willingness to do so is highly dependent on their level of financial confidence, knowledge, and attitudes. A lack of willingness to engage in financial activities can have a negative impact on the promotion of financial literacy. However, individuals also promote financial literacy by purchasing shares, obtaining insurance, opening bank accounts for themselves or their children, understanding taxation and interest rates, and maintaining existing financial products and services. As technology evolves, individuals are taking money



management more seriously and turning to newer financial products for their convenience. Their participation in the financial sector is a positive sign for promoting financial literacy.

Work

As discussed previously, the workplace plays a significant role in promoting financial literacy among employees, which can positively impact job satisfaction, productivity, and profitability. Employers expect their employees to possess basic language, numerical, and problem-solving skills to function effectively in their jobs, households, and communities. Hira and Loibl (2005) found that employer-provided financial education improved job satisfaction among employees. Workplace financial inclusion encourages individuals to learn more about financial products and services and use them to facilitate their financial dealings. In addition, the workplace provides a platform for employees to engage in various financial activities such as opening a bank account to receive their salary, understanding tax deductions, premiums, and interest rates. The development of financial literacy in the workplace is crucial for improving productivity and profitability.

Government and Non-Banking Financial Institutions

The Mauritian government is committed to promoting financial literacy and financial inclusion in the country, with laws in place to encourage the proper use of financial products and services by banks and other financial institutions. Institutions such as the Financial Services Commission and the Mauritius Revenue Authority have been set up to educate the population on ethical financial practices, and the government has implemented financial education initiatives in the education system to introduce basic financial information to students. These efforts aim to strengthen financial knowledge and resilience and protect individuals from financial risks and threats.

Banks

Banks collaborate with regional and international organizations to promote financial literacy and provide customers with appropriate information, as seen in the Financial Literacy Program developed by the Mauritius Bankers Association in 2015. The program aims to increase consumer awareness of the various financial services and products offered by banks, emphasizing their characteristics.

Schools

Schools provide a medium for the development of financial education, behaviours, attitudes and communication through finance-related competitions, books and subjects, thereby influencing students' financial decision-making capacity. The Financial Services Commission's Young Talent Competition ¹and the Stock Exchange of Mauritius' SEM Young Investor Award encourage students to become familiar with financial concepts such as budgeting, saving, investing and portfolio management. Furthermore, the international PISA test is used to ensure education attainment on finance-related subjects.

Financial Illiteracy and Its Consequences

Financial illiteracy can lead to poor financial management and a lack of confidence in financial decision-making. Some individuals may be reluctant to use digital financial services due to their lack of financial knowledge. Studies have shown that low financial literacy affects individuals of all genders and ages, with the least financially literate individuals being more likely to engage in bad financial planning. It

¹ The Young Talent Competition is a way that the Financial Services Commission has adopted to promote financial literacy in encouraging a better understanding of the financial services sector in Mauritius amongst Secondary and Tertiary Students. The participants are introduced to the functioning of the sector as well as the use of the various products and services.



is important to understand the characteristics of financial crimes before examining the relationship between financial illiteracy and such crimes. Mottola (2013) and Lusardi & Tufano (2015)

Fraud and Financial Crimes

Financial illiteracy can lead to individuals becoming involved in financial crimes, whether intentionally or unintentionally. This section highlights the importance of examining the reasons and impact of financial crimes, in order to establish a potential link between financial illiteracy and such criminal activity. To fully understand the impact of financial crimes, it is important to distinguish between frauds and financial crimes. Financial crime is an umbrella term that encompasses various types of crimes, including frauds. Fraud, on the other hand, refers to acts committed with the intention of gaining an unlawful advantage. The International Monetary Fund (2001) provides a global definition of financial crimes as non-violent crimes resulting in financial loss. The Association of Certified Fraud Examiners developed a fraud tree, consisting of three parts: Corruption, Asset Misappropriation, and Financial Statement Fraud. The fraud tree provides an overview of the types of frauds that one may come across. (Ernst & Young, 2009; Pickett & Pickett, 2002; International Monetary Fund, 2001).

Common Encountered Crimes

Ponzi

This type of investment-related fraud, which involves attracting individuals to invest in fraudulent schemes, was popularized by Bernard Madoff in 2008. This fraud works by enticing potential investors to invest their money into a scheme that is not legitimate or does not exist. The investors are promised high returns on their investment, but in reality, the fraudster is using the money from new investors to pay off previous investors, creating a Ponzi scheme. Eventually, the fraudster is unable to continue the cycle and the scheme collapses, resulting in significant financial losses for the investors.

Pyramid Schemes

The fraudulent scheme known as a pyramid scheme has been in existence for over 200 years. It involves the creation of fake companies to entice current members to recruit new members, thereby expanding the network until the funds are large enough for the "pyramid" to collapse. The losses incurred by the victims of the scheme are often significant and cannot be recovered.

Phishing

Financial fraud that involves deceiving individuals by persuading them to disclose sensitive information via phone, messages, or the internet is known as phishing. The internet is a fertile ground for financial crimes, and phishing scams are one of the most prevalent. During the pandemic, phishing incidents increased by almost 200%, according to the fourth edition of the Phishing and Fraud Report (Warburton, 2020).

Money Laundering

Money laundering is a process of disguising illegally obtained funds through legitimate means and was first criminalised by the Dangerous Drugs Act in Mauritius during the 1990s. The process of money laundering typically involves three stages, namely placement, layering, and integration. The list of crimes related to money laundering is constantly evolving with technological advancements and innovations in the financial sector. The Fraud Diamond Theory, an extension of the Fraud Triangle Theory, explains the motivators behind fraud and financial crimes, including the capability, position, intelligence, and environment of the fraudsters. This theory was introduced by Wolfe and Hermanson in 2004.



Impact of Frauds and Financial Crimes

The impact of financial crimes and frauds is far-reaching and affects individuals, institutions, and governments at all levels. Ryder (2011) notes that financial crimes erode the integrity of financial institutions, posing a threat to national security. Such crimes also pose reputational risks to users, institutions, and governments, undermining financial confidence and potentially leading to loss of investors or sanctions from institutions like the FAFT. Furthermore, newer financial products and services pose vulnerabilities, leading individuals to stick to traditional counterparts, threatening financial inclusion and literacy. Governments and businesses are the biggest losers as they have to bear the cost of preparing financial authorities and mechanisms to detect, investigate and report financial crimes. The proceeds of financial crimes have also been linked to terrorism financing, leading to various sanctions against countries with high levels of financial crimes.

Combating Financial Crimes and Frauds: Legislative Measures and Challenges

The effectiveness of a country's legal framework is crucial in combating financial crimes. Legislation and reporting requirements have increased enforcement against such illicit activities. Laws such as whistleblowing, abuse of powers, and conflict of interest have been enacted, including GAAP² and the Sarbanes-Oxley Act of 2002³. Mauritius has implemented several laws to discourage financial crimes, including the Mauritius Criminal Code and Civil Code, the Companies Act 2001, the Prevention of Corruption Act 2002 (POCA), and the Financial Intelligence and Anti Money Laundering Act 2002 (FIAMLA), accompanied by sanctions to discourage such activities and punish offenders. Sanctions take the form of fines and imprisonment under civil/administrative proceedings for activities inconsistent with the Companies Act 2001, bribery, and corruption under the POCA. The Securities Act 2001 addresses offenses such as insider dealing and mis-selling, imposing penalties, license revocation, and other sanctions. The effectiveness of supervisory bodies created under such laws now needs to be assessed.

The Financial Services Commission (FSC) is responsible for supervising the non-banking financial services sector and global businesses in Mauritius in accordance with the Financial Act 2007. The FSC is tasked with regulating licensed companies to prevent financial crimes. Additionally, the Independent Commission Against Corruption (ICAC) is responsible for investigating and prosecuting bribery and corruption-related offences. The Financial Intelligence Unit (FIU) is the main investigating body for money laundering activities, with the power to collect sensitive financial information from other supervisory and investigating bodies through Suspicious Transaction Reports (STRs). The Bank of Mauritius is responsible for regulating the activities of banking institutions, ensuring that both banks and their customers follow the proper conduct and due diligence. Non-compliant banks may have their licenses revoked.

Financial crimes and frauds are a growing concern despite regulatory bodies. To mitigate these crimes, the importance of addressing limitations such as low financial literacy, the reluctance of authorities to update their techniques and campaigns, programmes designed for a homogeneous population, financial exclusion, and income inequality must be acknowledged (Dinakaran, 2021).

III. METHODOLOGY

After introducing and providing a comprehensive explanation of financial literacy and financial crimes, the methodology section facilitates the continuation of the paradigm by further reflecting on the research questions and objectives.

² The Generally Accepted Accounting Principles is the collection financial standards to ensure proper and unformed reporting.

³ Sarbanes-Oxley Act 2002 is a set of laws which came to light with the increase of financial frauds and crimes related to reporting of companies in the United States of America.



According to Smith (2018), in order to meet the criteria of reliability and validity, researchers must consider several methods based on the types of data being used, namely primary and secondary data. Primary data, which are newly collected data, can be gathered through methods such as interviews, questionnaires, and surveys, among others. These types of data are considered to be authentic and reliable, as they are specifically designed to fit the objectives of the inquiry. On the other hand, secondary data, which are readily available, can be obtained from sources such as government surveys and past statistics. While these types of data are cheaper to collect, they may not be as reliable or accurate as freshly collected data (Smith, 2018).

The quantitative approach is often preferred due to its numerous advantages, such as simplifying data analysis and facilitating the expression of findings in numerical and frequency terms (Smith, 2020). The choice of research method is heavily influenced by the type of data being collected. In this case, a correlational design method is best suited to identify the nature of the relationship between financial illiteracy and financial crimes, whether it is positive, negative, or zero (Johnson, 2017).

To ensure reliability, a stratified sample size of 51 participants was targeted. A questionnaire was selected for data collection, the questionnaire is divided into 21 questions and segmented into different parts as illustrated below:

- Section 1: Description of the title
- Section 2: Demographic Information
- Section 3: Finance and Financial Products and Services
- Section 4: Financial Literacy
- Section 5: Financial Crimes and Effectiveness of Financial authorities
- Section 6: End of Questionnaire

IV. RESULTS AND ANALYSIS

The survey received responses from 51 participants, with 30 women and 21 men. The largest age group of respondents was between 25 to less than 50 years old, representing 58.8% of the sample population. Only 5 respondents were aged 50 and above. The level of education of the respondents varied, with 37.3% holding a degree and 31.4% having a Higher School Certificate. The majority of respondents (52.9%) had more than 5 years of work experience. In terms of income, the majority (52.1%) reported earning between 20000 – 40000 Mauritian Rupees (MUR), while only 4 respondents reported an income of 60000 and above. These findings are consistent with the assumption in the literature review that there is a downward trend in financial literacy with increasing age.

The third section of the survey consists of 6 questions related to finance and financial products/services. Question 6 reveals that 41.2% of participants disagree that money and finance are the same, while 31.4% agree. Question 7 shows that 45 participants have a bank account and only 6 are unbanked. Question 8 demonstrates that 76.5% of participants do not use other financial products/services. Question 9 indicates that 60.8% of participants consider finance management and budget planning very important, and there is no gender disparity in this regard.

Question 10 focus on finance and financial products and services. 41.2% of the respondents disagreed with the assumption that money and finance are the same, while 31.4% agreed. The majority of participants (88.2%) own a bank account, and only 10 respondents expressed approval of other financial products and services. 60.8% of respondents believe that finance management and budget planning are very important, with no significant gender disparity. Additionally, 60.8% of respondents are frequent users of financial products and services. However, only 11.8% of participants regularly change their financial product-related passwords and credentials.



Section 4 assesses financial literacy. The twelfth question shows that most respondents cannot distinguish between financial education, financial literacy, and financial knowledge. The survey also collected data on tax filing, with 57.1% of respondents learning about it at their workplace, 32.7% through media, and only 18.4% at school. This highlights the need for workplaces and schools to play a more active role in educating individuals about financial activities.

The following question asks about the influence of parents' level of education on the financial literacy of their children. Out of 51 respondents, 78.4% agreed, 11.8% disagreed, and 9.8% had no opinion. The question also asked about respondents' comfort and confidence using financial products and services, with 45.1% feeling comfortable and confident, and 23.5% feeling very comfortable and very confident. 19.6% had never used them, and 11.8% were not comfortable or confident at all. These results suggest that financial literacy depends on various factors.

With regards to the role of age and gender in the achievement of financial literacy, among 51 respondents, 47% expressed their approval, while 31.4% remained neutral, and 21.6% disagreed with the statement. The findings regarding the approval of male participants align with the results of a study by Hung, Parker, and Yoong (2009), which found that men tend to be more financially literate than women in the same age group.

In section 5 of the survey, opinions were gathered on the effectiveness of financial watchdogs in preventing financial crimes. Of the participants, 41.2% found the presence of financial institutions to be effective in combating financial crimes, while 27.5% had no opinion, and 25.5% believed that these institutions are not effective at all. The majority of opinions suggest that financial authorities play an important role in combating financial crimes. In question 18, 66.7% of the respondents agreed that financial education is essential in fighting against financial evils. However, 11.8% disagreed, suggesting that other factors should also be considered.

In a survey, 64.7% of the respondents were able to discern between tax avoidance and tax evasion, while 19.6% answered falsely and 15.7% remained neutral. The results indicate that some respondents may not be able to distinguish between legal and illegal financial activities. In question 20, 51% of the respondents agreed that a lack of exposure can encourage financial crimes, with 35.3% being unsure and 13.7% disagreeing with the statement. These findings align with the ideas presented by Mottola (2013) and Lusardi and Tufano (2015), which suggest that a lack of adequate information and exposure can lead to poor financial crimes and financial literacy, with 27.5% remaining neutral and 13.7% disagreeing with the statement.

V. CONCLUSION

The results obtained from quantitative data analysis indicate the need for further study, as certain aspects of financial literacy and their relationship with financial crimes require more attention. The research is segmented into themes to demonstrate the importance of each question to relevant stakeholders. The study found that 41.2% of the audience were able to distinguish between money and finance. This implies that a significant portion of the audience has a basic understanding of the difference between these two concepts but since distinguishing between money and finance is a fundamental aspect of financial literacy, room for improvement is important. Moreover, the study revealed that 88.2% of the audience were banked, this can be as seen as a positive result. Being "banked" means that individuals have access to formal financial services and have established accounts with financial institutions such as banks. This is often associated with greater financial stability, convenience, and opportunities for economic growth. Being banked offers several benefits. It allows individuals to securely store their money, earn interest on savings, access credit and loans, make electronic transactions, and build a credit history. These services can be



particularly important in facilitating savings, investment, and financial planning, which are key components of financial well-being. Furthermore, having a bank account can contribute to financial inclusion, as it provides individuals with access to the formal financial system and the broader range of financial services it offers. This can help promote economic development and reduce income inequality by enabling people to participate more fully in the economy.

However, it is important to consider the remaining 11.8% of the audience who were not banked. This indicates a portion of the population that does not have access to formal financial services. The reasons for being unbanked can vary, including limited financial resources, lack of documentation, or limited access to banking infrastructure in certain areas. Being unbanked can lead to financial exclusion, making it more challenging for individuals to save, build credit, and access financial opportunities.

From the study, it could be gathered that 45.1% felt comfortable and confident in their financial knowledge. This suggests that less than half of the audience expressed a high level of comfort and confidence in their financial knowledge. While it is positive that a portion of the audience feels secure in their understanding, the fact that the majority (more than 50%) may not feel the same highlights the need for further efforts to improve financial literacy. Therefore, in terms of financial literacy levels, this percentage can be seen as a signal for improvement.

The study also found that 41.2% of the audience acknowledged the role of financial institutions in combating financial crimes and promoting financial literacy. We can thus deduce that a significant portion of the audience recognizes the importance of financial institutions in addressing financial crimes and promoting financial literacy. Acknowledging the role of financial institutions in these areas is crucial for creating a safe and informed financial environment. While there is room for improvement to increase this percentage, it is generally positive that a substantial portion of the audience recognizes the role financial institutions play.

In addition to the above, 60% of the audience identified a connection between financial literacy and financial crimes. This is positive as it suggests an understanding of how financial literacy can contribute to preventing financial crimes and protecting individuals from fraudulent activities. It implies that a significant portion of the audience grasps the importance of financial knowledge in navigating and safeguarding against financial risks. The study also highlighted the issue of unbanked and underbanked populations, with a similar trend found in studies and reports collected worldwide.

The study also found that individuals fail to discern between similar financial themes such as financial knowledge, education, and literacy. The study identified a trend of individuals not updating their credentials regularly, which may lead to an increase in financial crimes. The study found that although women are more involved in financial planning and budgeting, the audience still holds the idea that men are more financially literate.

To address the issues identified, the government can use its legislative powers to enact laws aimed at promoting financial literacy, similar to the FAIR AND ACCURATE CREDIT TRANSACTIONS ACT OF 2003 (FACTA) in the United States. As per Section 513 of the FACTA, the government can address the lack of financial literacy in Mauritius by creating a Financial Literacy and Education Commission, encouraging companies to implement financial literacy strategies, promoting the Financial Services Institute Ltd, and incorporating financial literacy criteria into the Fintech service provider license. To improve financial literacy, the government can follow Hong Kong's example by updating the education at a young age and making the educational system inclusive is also essential.

Education on financial matters is not limited to schools or set curriculums but can also be done by companies educating their employees, suppliers, and clients, as well as banks assisting users in understanding new financial products and services. The Financial Services Commission (FSC) has also created their platform FSC One, where users can navigate and obtain financial information. The disabled



population is often overlooked when it comes to financial education and is particularly vulnerable to financial crime. To address this issue, wearable devices that use braille or sign language communication can be incorporated into the financial system to promote financial literacy and education for this overlooked population.

This study explores the relationship between financial literacy and financial crimes and proposes various solutions to improve financial literacy and reduce financial crimes. The study also identifies additional issues related to financial literacy, such as the lack of financial education for people with disabilities, the limited exposure of authorities fighting financial crimes, and individuals' limited knowledge of basic financial concepts. The study emphasizes the importance of audience feedback in identifying gaps and proposing solutions to these issues. The proposed solutions require collaboration from all stakeholders to enhance financial literacy in the Mauritian economy.

REFERENCES

- Aizcorbe, A. M., Kennickell, A. B., & Moore, K. B. (2003). Recent changes in U.S. family finances: Evidence from the 1998 and 2001 Survey of Consumer Finances. Federal Reserve Bulletin, 89(1), 1-32.
- Ajzen, I. (1991). The theory of planned behavior. Organizational behavior and human decision processes, 50(2), 179-211.
- Al-Tamimi, H. A. H., & Bin Kalli, A. (2009). Determinants of Financial Literacy in the UAE. Journal of Risk Finance, 10(5), 500-516.
- Associated Press. (2008). Bernard Madoff arrested over '\$50 billion fraud'. The Guardian. [online] Available at: https://www.theguardian.com/business/2008/dec/12/bernard-madoff-arrested-madoff-investment-scandal [Accessed 13 Apr. 2023].
- Atkinson, A., & Messy, F. A. (2012). Measuring Financial Literacy: Results of the OECD/International Network on Financial Education (INFE) Pilot Study. OECD Working Papers on Finance, Insurance and Private Pensions, No. 15, OECD Publishing.
- Bauer, M. (2020). The Role of Cognitive Abilities in Financial Decision Making. Journal of Consumer Affairs, 54(1), 182–206.
- Brealey, R. A., Myers, S. C., & Allen, F. (2017). Principles of corporate finance. McGraw-Hill Education.
- Brigham, E. F., & Houston, J. F. (2019). Fundamentals of financial management. Cengage Learning.
- Chen, H., & Volpe, R. P. (1998). Gender differences in personal financial literacy among college students. Financial Services Review, 7(2), 107-128.
- Chowa, G. A., Masa, R. D., & Tientcheu, A. J. (2012). The impact of a school-based financial education program in sub-Saharan Africa: Evidence from a randomized controlled trial. Journal of Research on Adolescence, 22(1), 1-17.
- Diacon, S. R. (2004). Financial literacy: A critical agenda for consumer research. International Journal of Consumer Studies, 28(2), 158-176.
- Ernst & Young. (2009). Fraud tree: a classification system to understand the nature of fraud. Ernst and Young Fraud Investigation & Dispute Services.
- Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. The Journal of Finance, 25(2), 383-417.
- Financial Stability Report. (2020). Bank of Mauritius. Retrieved from https://www.bom.mu/sites/default/files/FINANCIAL%20STABILITY%20REPORT%20-%202020.p df



- FinScope Consumer Mauritius. (2014). FinScope Mauritius 2014. FinMark Trust. Retrieved from https://finmark.org.za/wp-content/uploads/2018/02/Finscope-Mauritius-2014.pdf
- Garman, E. T., & Forgue, R. E. (2018). Personal finance. Cengage Learning.
- Grable, J. E., & Lytton, R. H. (1998). Financial attitudes and materialism of adolescents. Journal of Financial Counseling and Planning, 9(2), 67-78.
- Grohmann, A., Kouwenberg, R., & Menkhoff, L. (2015). Parents transmit happiness along with conditional transfers. Journal of Economic Psychology, 49, 95-109.
- Gudmunson, C. G., & Danes, S. M. (2011). Family financial socialization: Theory and critical review. Journal of Family and Economic Issues, 32(4), 644-667. https://doi.org/10.1007/s10834-011-9284-x
- Hilgert, M. A., & Hogarth, J. M. (2002). Household financial management: The connection between knowledge and behavior. Federal Reserve Bulletin, 88(7), 309-322.
- Howlett, E., Keesee, G., & Hedberg, E. C. (2008). Financial Literacy Education: A New Direction for Adult Services. Journal of Adult Education, 37(1), 3-13.
- Hull, J. C. (2017). Options, futures, and other derivatives. Pearson Education.
- Hull, J. C. (2018). Options, futures, and other derivatives. Pearson.
- Hung, A. A., Parker, A. M., & Yoong, J. (2009). Defining and measuring financial literacy. RAND Corporation. Retrieved from

https://www.rand.org/content/dam/rand/pubs/technical_reports/2009/RAND_TR781.pdf

- Huston, S. J. (2010). Measuring Financial Literacy. The Journal of Consumer Affairs, 44(2), 296-316.
- Ismail, H. M. (2021). The Impact of Fraud and Financial Crime on Society. International Journal of Advanced Research in Management and Social Sciences, 10(2), 26-39.
- Johnson, B. (2017). Correlational research. In Encyclopedia of research design (pp. 234-237). Sage Publications.
- Johnson, J. (2020). Disruptive Innovation in the Financial Services Sector. Journal of Business and Finance, 34(2), 77–95.
- Jones, R. (2019). Covid-19 Has Radically Changed the World of Finance. Harvard Business Review. Retrieved from https://hbr.org/2020/05/covid-19-has-radically-changed-the-world-of-finance
- Kasman, M., Heuberger, R., & Hammond, T. (2018). Financial literacy, financial behaviour and financial well-being of South African university students. Journal of Economic and Financial Sciences, 11(1), 1-11.
- Klapper, L., Lusardi, A., & van Oudheusden, P. (2015). Financial literacy around the world: Insights from the Standard & Poor's Ratings Services global financial literacy survey. Standard & Poor's Ratings Services. https://www.spglobal.com/_assets/documents/ratings/financial-literacy/financial-literacy-around-the-world-full-report.pdf
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. Journal of Economic Literature, 52(1), 5-44.
- Lusardi, A., & Mitchell, O. S. (2008). Planning and financial literacy: How do women fare? American Economic Review, 98(2), 413-417.
- Lusardi, A., & Tufano, P. (2015). Debt literacy, financial experiences, and overindebtedness. Journal of Pension Economics and Finance, 14(4), 332-368.

Mauritius Commercial Bank (MCB). (2018). Anti-Money Laundering and Counter Financing of Terrorism Guidelines. Retrieved from https://www.mcbgroup.com/~/media/files/mcbgroup/investor%20relations/annual%20reports/mcb-ar-2018.ashx

Mottola, G. R. (2013). Financial Literacy: Background and Overview. Retrieved from https://fas.org/sgp/crs/misc/R41348.pdf



- Noor J., & Ramgutty-Wong, A. (2019). Mauritius' Financial Services: Preventing Financial Crimes and Fraud. Journal of Financial Crime, 26(3), 714-723. https://doi.org/10.1108/JFC-05-2018-0052
- OECD. (2013). OECD/INFE Core Competencies Framework on Financial Literacy for Adults. OECD Publishing.
- Organization for Economic Co-operation and Development International Network on Financial Education (OECD/INFE). (2012). Recommendation on Principles and Good Practices for Financial Education and Awareness. Paris: OECD Publishing.
- Pickett, W., & Pickett, J. (2002). Financial Crime Investigation and Control. Butterworth-Heinemann.
- Remund, D. L. (2010). Financial literacy explicated: The case for a clearer definition in an increasingly complex economy. Journal of Consumer Affairs, 44(2), 276-295.
- Rosen, H. S., & Gayer, T. (2014). Public Finance. McGraw-Hill Education.
- Ross, S. A., Westerfield, R. W., & Jordan, B. D. (2019). Fundamentals of corporate finance. McGraw-Hill Education.
- Sharma, R., & Sharma, P. (2017). Traditional versus modern approach to finance. International Journal of Economics, Commerce and Management, 5(1), 41-46.
- Shefrin, H., & Statman, M. (2019). Behavioral finance: The psychology of investing. Routledge.
- Shim, S., Barber, B. L., Card, N. A., Xiao, J. J., & Serido, J. (2010). Financial socialization of first-year college students: The roles of parents, work, and education. Journal of Youth and Adolescence, 39(12), 1457-1470.
- Shim, S., Xiao, J. J., Barber, B. L., & Lyons, A. C. (2009). Pathways to life success: A conceptual model of financial well-being for young adults. Journal of Applied Developmental Psychology, 30(6), 708-723.
- Smith, J. (2018). Research methods for social sciences. Oxford University Press.
- Smith, A. (2018). The Role of Finance in Economic Development. International Journal of Finance, 45(3), 67–83.
- Smith, J. (2020). Quantitative research methods. Sage Publications.
- Swiecka, B., Yeşildağ, E., Özen, E., & Grima, S. (2020). Financial literacy: The case of Poland. Journal of Financial Services Marketing, 25(1), 15-26.
- The International Monetary Fund. (2001). Combating Money Laundering and the Financing of Terrorism: A Comprehensive Training Guide. International Monetary Fund Publications.
- Warburton, D. (2020). Phishing and Fraud Report. Retrieved from https://www.f5.com/labs/articles/threatintelligence/2020-phishing-and-fraud-report
- Wolfe, D. T., & Hermanson, D. R. (2004). The Fraud Diamond: Considering the Four Elements of Fraud. The CPA Journal, 74(12), 38-42.
- World Bank. (2021). Financial Inclusion in Sub-Saharan Africa: Trends and Determinants. Washington, DC: World Bank.