

"Do Financial Literacy and Capability always matter? Determinants and Consequences of Financial Literacy and Capability and their application to Tokelau."

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A dissertation submitted to
Auckland University of Technology
in fulfillment of the requirements for the degree of
Master of Business (MBus)
Finance Major

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ABSTRACT

Financial literacy is recognised as essential in navigating complex financial issues and making informed financial decisions. While extensive research has been conducted on financial literacy globally, there are no studies on small developing island nations in the Pacific region, particularly those with limited financial infrastructure. This dissertation aims to address this gap by exploring the importance and relevance of financial literacy and capability within the context of Tokelau, a small Pacific Island nation.

The study utilises a scoping review methodology to examine the determinants of financial literacy and capability and their impact on financial decision-making. The findings from the existing literature suggest that factors such as age, gender, education, income, and cultural influences influence financial literacy levels. Moreover, financial literacy and capability are associated with positive financial behaviours and outcomes, while low levels of financial literacy can lead to poor financial decision-making and negative consequences.

The unique characteristics of Tokelau, including limited access to financial services and a subsistence-based economy, however, may influence the relevance and applicability of financial literacy and capability concepts. The study concludes that while financial literacy remains important for basic financial management skills, the need for complex financial knowledge and investment strategies may be diminished in the Tokelauan context. The findings contribute to the literature by offering insights into the role and implications of financial literacy and capability for financial decision-making in a small developing island nation, Tokelau.

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Attestation of Authorship

“I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.”

Acknowledgements

First and foremost, I am deeply grateful to my esteemed supervisors, Dr Olga Dodd and Professor Aaron Gilbert. Their guidance, expertise, and unwavering commitment to my academic studies have been instrumental in shaping this research; their valuable insights, constructive feedback, and constant encouragement propelled me forward and have contributed immensely to the quality of this work. Their dedication, patience, and commitment to my academic development have been truly inspiring, and I am truly fortunate to have had the opportunity to work under their mentorship.

I am also acknowledging the kind support of the staff at the BEL Postgraduate office.

Lastly, to my son, Amanaki Sean-Pierre Puka, who has been the driving force behind my determination and perseverance. Your presence, encouragement and belief inspired me to overcome the challenges and pursue this academic endeavour.

Thank you all so much!

CHAPTER 1: INTRODUCTION

In a world where financial complexity is constantly rising, there is a growing requirement for fundamental financial knowledge (Lusardi & Mitchell, 2014). In that regard, financial literacy is being advanced globally by governments and organisations, such as the World Bank and OECD, as a solution to complex financial issues. Financial literacy, due to its potential to empower individuals with the knowledge and skills needed to make informed financial decisions, enhances a consumer's ability to navigate complex financial issues (Atkinson & Messy, 2012; Hastings et al., 2013; Fernandes et al., 2014) resulting in improved financial outcomes and financial well-being (Huston, 2010a; Lusardi & Mitchell, 2014). As a result, financial literacy and capability have been a topic of extensive discussion in the literature and have gained increasing attention in recent years.

However, there is no specific research on financial literacy and capability in Pacific region countries, especially in smaller developing island nations with less sophisticated financial infrastructures. As such, there is a lack of evidence of the role of financial literacy and capability and understanding of their importance and impacts on financial decision-making within these small island countries. Therefore, this dissertation attempts to investigate the importance and relevancy of financial literacy and capability within the context of these small island nations based on applying the existing literature within one such example, Tokelau.

Firstly, the existing literature documents many positive behavioural outcomes from greater financial literacy and capability. For instance, financially literate individuals make better-informed decisions regarding financial management (Klapper & Lusardi, 2020), borrowings, and wealth accumulation conducive to future financial security (Huston, 2012; Lusardi & Mitchell, 2014; Lusardi & Tufano, 2015; Pomeroy et al., 2020). In addition, individuals are more effective at planning and saving for retirement (Behrman et al., 2012; Lusardi & Mitchell, 2014) and more inclined to participate in financial markets and invest in stocks (van Rooij et al., 2011; Zou & Deng, 2019; Yamori & Ueyama, 2022). Furthermore, according to Klapper et al. (2013), financially literate individuals possess superior knowledge of investment risks and returns, are more self-assured in making prudent investment choices, and have greater access to financial data and investment possibilities, which can lead to higher financial resilience and less risky behaviour, such as taking on excessive debt (Huston, 2012; Lusardi & Tufano, 2015).

Conversely, the consequences of being financially illiterate can be significant and harmful to consumers (Disney & Gathergood, 2013; Huang et al., 2015). Low financial literacy has been linked to poor borrowing decisions leading to debt accumulation and overindebtedness (Hastings et al., 2013; Lusardi & Tufano, 2015), limited retirement preparedness (Lusardi & Mitchell, 2011b), poor investment decisions and potential losses when participating in stock markets including the lack of understanding

of investment risks and returns can lead to (Christelis et al., 2010; van Rooij et al., 2011), income inequality and lower wealth accumulation (Hastings et al., 2013; Fernandes et al., 2014; Lusardi & Mitchell, 2014).

Furthermore, the consequences of poor financial literacy can also have social effects, such as housing insecurity and poor food choices, leading to adverse health outcomes and mental health. Financial stress resulting from inadequate financial capability may lead to anxiety, depression, and other mental health issues (Anderson et al., 2015).

Interestingly, while we generally acknowledge that low financial literacy has significant adverse outcomes, these findings may not hold in the context of small developing island nations in the Pacific region. Specifically, financial literacy may not be as relevant within the settings of a small subsistence economy where the consequences of making financial mistakes are negligible at best, and the ability to invest in more than the most basic financial products is non-existent.

Moreover, due to the absence of such research, there is uncertainty about the levels of financial literacy and capability among individuals within the Pacific region, particularly in small developing island nations, and by extension, how it may affect their financial decision-making. As such, this dissertation attempts to address this gap in the literature by using Tokelau as a case study. It considers Tokelau's remote location, basic financial infrastructure with limited access to financial services and products, and cultural and social practices to provide a nuanced understanding of the limitations and opportunities in promoting financial literacy and capability in the region.

The dissertation focuses on identifying the determinants of financial literacy and capability and evaluating how they affect financial decision-making. It then assesses the application and impacts of these concepts in the context of Tokelau as a small, developing Pacific island nation.

The Tokelau Islands is a group of three coral atolls in the Pacific, located about 500km north of Samoa, and has been a dependent territory of New Zealand since 1926. The southernmost atoll closest to Samoa is Fakaofu, with Nukunonu 64km northwest and Atafu 92km northwest of Nukunonu. The most recent official population count (2019 Tokelau Population Count, n.d.) shows a resident population of 1,647 individuals, with an almost equal distribution of 813 males and 834 females.

Tokelau is very isolated. It is the only country in the Pacific region, and possibly the world, without an airport or access to air services. As a result, the only means of transport to and from Tokelau is by sea from Samoa via a ferry that runs fortnightly from Samoa, taking 26-30 hours to reach the first atoll and 48 hours to complete the trip across all atolls. In addition to its physical isolation, the telecommunications system is often intermittent and sub-standard as it relies on satellite links.

Consequently, residents of Tokelau are limited in their access to anything beyond basic banking and financial services provided by the government through the village public service officials.

The approach for this dissertation is to conduct a scoping review of the existing empirical research on financial literacy and capability. The primary focus is to examine the conceptual frameworks of financial literacy and capability to identify the determinants and driving factors of financial literacy and capability. Secondly, I will identify and examine the impacts of financial literacy and capability on financial decision-making as covered within the existing literature. Finally, I will examine these concepts within the context of Tokelau to assess their relevancy, particularly for financial decision-making in this small, developing Pacific island nation, given the opportunities and typical financial decisions people make.

In that regard, this dissertation adopts the scoping review methodology framework proposed by Arksey and O'Malley (2005) and advanced by Levac et al. (2010). The scoping framework is designed to quickly identify the central concepts of a research field and the primary sources and forms of evidence accessible. The framework promotes a multi-phased approach that involves determining the research questions, identifying the relevant studies, study selection, charting the data, and collating, summarising and reporting the results. I apply this approach to address the following research questions –

- RQ1: What are the determinants of financial literacy and capability?
- RQ2: How do financial literacy and capability affect financial decision-making?
- RQ3: Examine the appropriateness and relevancy of financial literacy and capability for financial decision-making in Tokelau as a small developing Pacific island nation.

In following through with the above methodology, the existing literature has identified a range of sociodemographic factors, such as age and gender (Atkinson & Messy, 2012; Lusardi & Mitchell, 2014; Kim & Xiao, 2021), in addition to socioeconomic factors, such as education, income and employment, that determine an individual's financial literacy (Xue et al., 2019; Klapper & Lusardi, 2020). In addition, financial education, financial socialisation, local contexts, culture and neighbourhood effects are also proposed as influential drivers of financial literacy and capability (Guiso et al., 2008; Bucher-Koenen & Lusardi, 2011; Grohmann et al., 2015; Rothwell & Wu, 2019). The literature also argues that financial access and literacy are interdependent and critical components of financial capability (Nam et al., 2022). Similarly, financial experience is promoted as a fundamental concept for increasing financial literacy and capability through learning by doing (Frijns et al., 2014; Mandell & Klein, 2009). Furthermore, some studies promote financial behaviour as a component of financial literacy (Riitsalu & Põder, 2016b), while other researchers argue that financial behaviour is an outcome of financial literacy (Allgood & Walstad, 2016).

In addition, the literature argues that high financial literacy and capability levels are conducive to sound financial decision-making (Lusardi & Mitchell, 2014; Brown et al., 2018). Therefore, financial literacy and capability are critical toolsets that can help consumers improve their financial decision-making on important financial matters such as savings, planning for retirement, debt undertaking, and investments (van Rooij et al., 2012; Disney & Gathergood, 2013; Corsini & Spataro, 2015; Murendo & Mutsonziwa, 2017; Klapper & Lusardi, 2020). In contrast, low levels of financial literacy and capability can be detrimental to consumers - for instance, financially illiterate people are more likely to make poor borrowing decisions (Disney & Gathergood, 2013; Huang et al., 2015) and are prone to making mistakes in financial markets investment decisions (van Rooij et al., 2011; Lusardi & Tufano, 2015).

The difficulty in accessing readily available and verifiable information and data on Tokelau online to address RQ3 is acknowledged. As such, I have relied on my personal experience and intimate knowledge of Tokelau as a former Tokelauan senior public servant within the Tokelau Finance Department for 21 years (1996 – 2017) to provide background information on the context of Tokelau and to make assertions on the appropriateness and relevancy of the financial literacy and capability concepts within that context.

As such, when we apply the Tokelauan context to the determinants of financial literacy and capability, we would expect that the residents would have low financial literacy and capability levels if we surveyed Tokelauans. This is because the island residents have restricted access to education and financial education, key determinants of financial literacy. Compounding the lack of education is the limited access to financial products and the substandard quality of banking and financial services available on-island due primarily to the lack of proper infrastructure and financial systems. The result is that residents have extremely limited financial experiences, mainly savings and some minimal use of simple debt products. Given that financial experience is associated with financial literacy, the lack of financial experience would limit understanding of financial concepts like diversification and risk and return.

Furthermore, I would expect that the general findings from the literature on demographic factors worldwide would be consistent within the context of Tokelau. For example, in relation to age, research evidence consistently shows that older individuals have higher financial literacy and capability compared to younger age groups (Lusardi & Mitchell, 2014; Xiao et al., 2015). This trend is expected to hold in Tokelau as the accumulated knowledge and experience of older individuals managing limited resources and adapting to the island's economic constraints and community norms contribute to their increased financial knowledge. Furthermore, their financial experiences and ability to learn from mistakes further enhance their ability to make informed financial decisions and manage money more effectively in Tokelau's unique financial environment compared to younger adults.

Higher income levels and stable employment are also found to have a positive impact on financial literacy, as they provide individuals with more exposure to financial concepts through employment and financial experiences (Disney & Gathergood, 2013; Knoll & Houts, 2012). Therefore, although income levels in Tokelau may not be comparable to those in other regional countries, it is reasonable to expect that individuals with higher incomes, especially those residing and working at the national office in Samoa, would demonstrate higher levels of financial literacy in the Tokelauan context.

Furthermore, research consistently indicates that men tend to have higher levels of financial literacy than women (Atkinson & Messy, 2012). In Tokelau, this gender disparity is contentious due to societal factors, including traditional gender roles and men's involvement in public service and community work. For example, men historically have held leadership positions, granting them more exposure to financial matters related to community governance and decision-making. In addition, their consistent engagement in public service and community work also provided opportunities to develop financial knowledge, skills, and experience. Consequently, it is reasonable to expect that men in Tokelau generally possess higher levels of financial literacy than women. However, in the villages, women traditionally manage household finances. This responsibility for women aligns with their traditional role in ensuring the overall financial well-being of the family and is consistent with the gender dynamics and division of labour within the Tokelauan culture. As such, considering women's roles as household financial managers while men are more involved in financial decision-making at the community level, it is ambiguous who would have higher financial literacy.

Conversely, while the literature promotes financial socialisation as a critical determinant of financial literacy worldwide (Grohmann et al., 2015), this may not hold within the Tokelauan context as the effectiveness of financial socialisation is constrained by the limited financial literacy among socialisation agents, primarily parents whose knowledge and experiences are confined to Tokelau's financial environment. Therefore, improving financial literacy through financial socialisation in Tokelau may face challenges and have a limited impact, given the limited financial experiences beyond basic savings and simple debt products of older Tokelauans.

The literature also promotes that financial literacy and capability are highly valuable for savings and investment decisions (Gerrans et al., 2022; Hastings et al., 2013). However, in the context of Tokelau, the relevance of financial literacy is significantly diminished due to limited options available to residents and village institutions. This is primarily due to the savings landscape in Tokelau, which revolves around a single banking institution; that is, residents can only deposit their money into savings accounts provided by the Tokelau Savings Bank (TSB). As a result, the need for comprehensive financial literacy specifically focused on savings options becomes less prominent, thus narrowing the required financial literacy to basic account features, such as account opening, deposits, access, and interest rates.

The limited access to capital markets and a lack of diverse investment options, combined with limited exposure to financial experiences, hinder the improvement of financial literacy in Tokelau in this area. However, establishing the 'Tokelau International Trust Fund' with a capital base of NZ\$101.5M has increased the relevance of financial literacy. The fund, governed by a Trust Deed, aims to promote intergenerational growth and benefits for the people of Tokelau. Previously, the fund primarily invested in term deposits, generating minimal revenue. However, a new investment strategy with a diversified portfolio, including cash, bonds, and shares through ETFs, is being implemented and is due to be complete by the end of 2023. Consequently, despite the islands' poor infrastructure and remoteness, the government should look to provide the residents with alternative investment vehicles to access investment opportunities in the capital markets, such as those offered by neighbouring Pacific countries like Samoa (*Unit Trust of Samoa (UTOS)*, n.d.) and Fiji (*Investment | Unittrust Of Fiji*, n.d.). Access to such investment platforms could improve residential financial experiences, thus increasing financial literacy levels, especially regarding capital market investments.

In addition, to promote Tokelau's aspirations for self-determination and economic growth, the people of Tokelau should be encouraged to explore investment opportunities in capital markets. Furthermore, as a small developing island nation, they should shift their focus towards personal growth and wealth creation opportunities instead of relying solely on external aid. Tokelau's natural beauty and resources, including pristine beaches and calm waters, offer great potential for the tourism industry and private business ventures. However, substantial investment in critical infrastructure, such as air transportation services, is necessary to unlock these opportunities and facilitate economic development for the people and the country. Enhanced financial literacy can help improve financial decision-making in these areas.

Financial literacy concerning debt undertaking is perhaps also irrelevant. While the government provides commercial loans through the Tokelau Development Bank (TDB), the uptake of this assistance has been low, with only a handful of people taking up the opportunity within the first decade of operation. Moreover, mortgage debt is non-existent. While the use of debt is rife and a significant part of the island communities, in Tokelau, it is restricted to the 'fees-free' pay-day loans scheme provided by the Tokelau government, allowing individuals to borrow up to a maximum of three months of wages in advance at zero interest. Notably, payday loans in other countries are often associated with high interest rates and strict terms and conditions, making them risky. However, in Tokelau, the financial implications of the pay-day loan scheme are relatively moderate and not as severe, primarily due to the advantages of subsistence living on a tropical island.

In conclusion, the relevance of financial literacy and capability to financial decision-making in Tokelau may differ significantly from that in other countries. This argument is exemplified by the fact that Tokelau is more or less operating in a welfare state model – that is, everyone is well looked after by the government through various schemes and grants to support the residents for housing, free healthcare,

employment, old-age pensions schemes, etc. As a result, there is limited unemployment on the island, and savings and investments for long-term financial well-being are unnecessary as people are financially supported well beyond retirement age. In addition, residents can still meet basic needs through subsistence living irrespective of income or financial situation, and borrowing is relatively benign and fee-free with minimal consequences.

Therefore, considering this context, arguably, perhaps there is little need for the financial infrastructure to administer and provide advanced banking and financial services as demanded in other countries. Nevertheless, financial literacy is crucial in Tokelau for essential financial management skills like budgeting, responsible spending, and understanding government support systems rather than complex banking and financial products.

In addition, enhanced financial literacy and capability are crucial for Tokelau's financial decision-making, particularly as it strives for self-government and self-determination. This includes decisions on capital infrastructure investments, budgeting, trust fund investments, strategic planning, capital markets investments, private sector development, wealth creation, and financial resilience. Moreover, developing financial literacy and capability empowers individuals and households to transition from aid-dependent to building internal capacities for economic growth and financial well-being, contributing to sustainable economic development.

Finally, the findings of this dissertation provide an exciting opportunity to contribute to the existing knowledge by extending the literature on financial literacy and capability to small developing island nations within the Pacific region. These findings were observed by examining the appropriateness and relevancy of financial literacy concepts and capability for financial decision-making within the context of a small developing island nation using Tokelau as a case study.

More specifically, the research findings provide an opportunity to develop effective policies and interventions that enhance financial literacy and capability, leading to improved financial decision-making in Tokelau. This can promote a shift in mindset towards better budgeting, resource allocation, and prioritisation of sustainable economic development and critical infrastructure. Moreover, significant improvements in financial literacy and capability in Tokelau can advance the territory's political aspirations for self-government and self-determination, aligning with the desires of its people, New Zealand, the United Nations, and the global community. By improving financial planning, prudent budget management, and perspectives on financial decision-making, financial literacy, and capability can support the achievement of these political milestones, particularly concerning required capital infrastructure.

CHAPTER 2: METHODOLOGY – SCOPING REVIEW

To address the research questions, I conducted a scoping review of the current literature on financial literacy and capability. The main focus was to analyse the relevant literature to identify the determinants and driving factors of financial literacy and capability and evaluate the effects of financial literacy and capability on financial decision-making. Once the main determinants and effects of financial literacy have been identified, their suitability and significance can be applied within the context of Tokelau.

The dissertation uses the scoping review methodology proposed by Arksey and O'Malley (2005) and advanced by Levac et al. (2010, p. 2), which 'aims to rapidly map the key concepts underpinning a research area and the main sources and types of evidence available.' In addition, it examines the extent, range, and nature of the research activity, summarising and disseminating the research findings and identifying research gaps within the literature (Levac et al., 2010). Furthermore, Davis et al. (2009, p. 1) suggest that 'scoping involves synthesising and analysing a wide range of research and non-research material to provide a greater conceptual clarity about a specific topic or field of evidence.'

Consequently, the scoping literature review is a structured process that incorporates five stages:

- Stage 1: *identifying the research question*
- Stage 2: *identifying relevant studies*
- Stage 3: *study selection*
- Stage 4: *charting the data*
- Stage 5: *collating, summarising, and reporting the results*

Accordingly, the following activities and processes were carried out in alignment with the various stages of the methodology:

Stage 1: The research questions are as stated below –

- RQ1: What are the determinants of financial literacy and capability?
- RQ2: How do financial literacy and capability affect financial decision-making?
- RQ3: Examine the appropriateness and relevancy of financial literacy and capability for financial decision-making in Tokelau as a small developing Pacific island nation.

Stage 2: Identifying the relevant studies

I employ the Scopus database to conduct searches for articles on financial literacy and financial capability. Specifically, I used a "multi-phased" search based on keywords related to financial literacy

and financial capability and a number of screens to identify the most relevant articles. This multi-phased process employed eligibility criteria and search parameters (keywords, language, document types, subject area, etc.) to identify specific articles relevant to the research questions (RQ1 and RQ2).

In addition, based on finding extensive literature on financial literacy and capability and needing to narrow the studies to a manageable number of articles, I employed the ABDC journals ranking list to classify and identify the top-ranked journals (A and A* ranked journals). Top-ranked journal articles are those that make the most substantive contribution to our knowledge on a subject and, therefore, are the most important to include in my literature review. This approach maximises the opportunities to capture the most relevant articles at this early stage and put them through the screening and analysis process in the later stages of the methodology.

Accordingly, using the Scopus database search functionality, the following search procedure was executed within the primary search field and the search filters with the reported results:

- (i) In the primary SEARCH field, the search string “financ* literacy” OR “financ* capability” was entered to search for all documents within the ARTICLE TITLE, ABSTRACT, KEYWORDS database and returned a total of 4,208 papers.
- (ii) The results were then filtered using the SUBJECT AREA filter to limit the search results to “Economics, Econometrics and Finance” OR “Business, Management, and Accounting” OR “Social Sciences” followed by the DOCUMENT TYPE filter for “Articles” returning a total of 2,709 documents.
- (iii) The resulting documents were further filtered again using the EXACT KEYWORDS filter to limit the search-selected keywords listed in Appendix 1, followed by the LANGUAGE filter for “English,” narrowing the results to 1,708 articles.

With the Scopus database search completed, the resulting articles (1,708) were then evaluated against the ABDC ranking list¹, and only those published in A or A* ranking were kept, resulting in 254 articles.

On examining the final resultant articles, it was discovered that some critical articles in top-tiered journals' financial literacy and capability space were missing owing to some articles not having keywords loaded in the Scopus database. As a result, exact keyword searches missed them. Therefore, to ensure that quality articles with missing keywords are included in the literature review, a second search procedure was executed on the Scopus database using the primary search field and the search filters with the reported results:

¹ https://abdc.edu.au/wp-content/uploads/2019/01/abdc_journal_list_05122018-csv.xls

- (i) In the primary SEARCH field, the search string “financ* literacy” OR “financ* capability” to search for all documents within the ARTICLE TITLE-only database and returned a total of 1,672 papers.
- (ii) The results were then filtered using the SUBJECT AREA filter to limit the search to “Economics, Econometrics and Finance” AND “Business, Management, and Accounting” AND “Social Sciences” followed by the DOCUMENT TYPE filter for “Articles” only returning a total of 1,187 documents.
- (iii) The EXACT KEYWORDS filter was avoided at this stage. Instead, the Search within results field was used to enter and filter the documents using the string keywords (determin* OR factor* OR driv* OR decision* OR "financ*knowledge" OR "financ*behaviour" OR "financ*behaviour" OR "financ*education" OR attitude* OR "financ*inclusion" OR "financ*access" OR "debt*literacy" OR “income”) followed by the filter for “English” narrowing the results down to 1,143 articles.

The results were again filtered based on journal ranking and also to remove studies already identified in the first search procedure. This second search procedure identified 110 new relevant articles. As a result, the total number of articles reviewed for this dissertation was 354.

Stage 3: Study selection

This part of the process focuses on further refining and narrowing down the literature relevant to the research questions outlined in Stage 1. This involves manually screening the identified articles in a two-stage approach where initially, only the abstracts of the relevant articles were reviewed to confirm their relevance to the research questions and were classified as relating to either RQ 1 or RQ2. Studies deemed irrelevant (14 articles) were excluded at this stage. Then, the second stage reviewed the full text of the articles to ensure that they were relevant to the research questions.

Stage 4: Charting the data

This stage focuses on conducting a classification exercise on the selected articles based on their thematic characteristics for analysis and ease of referencing. I used Zotero reference management software to organise the articles into the appropriate research question and to group the studies based on the subject themes for ease of reference and bibliographic data referencing. Zotero allows the articles to be stored and referenced along with recording details such as the objectives of the study, study location, methodology, study coverage, findings, outcomes, etc.

Each article was initially categorised into a folder relating to either RQ1 or RQ2. Within these folders, articles were then sorted based on thematic classifications, RQ1 articles were sorted based on

sociodemographic and socioeconomic factors such as age, gender, financial socialisation, neighbourhood effects, local context and culture, financial education, financial inclusion and access, financial attitudes and behaviours. For RQ2, the identified themes were borrowing decisions, savings decisions, investment decisions and participation in financial markets, financial planning and management, retirement planning, etc.

Stage 5: Collating, summarising, and reporting the results

This final stage of the methodology involves collating and summarising the key findings from the relevant articles, which are then synthesised to answer the research questions.

Firstly, to answer Research Question 1, the research evidence on financial literacy and capability determinants are reported and structured by the various components of the conceptual framework as outlined in Section 1 of the report.

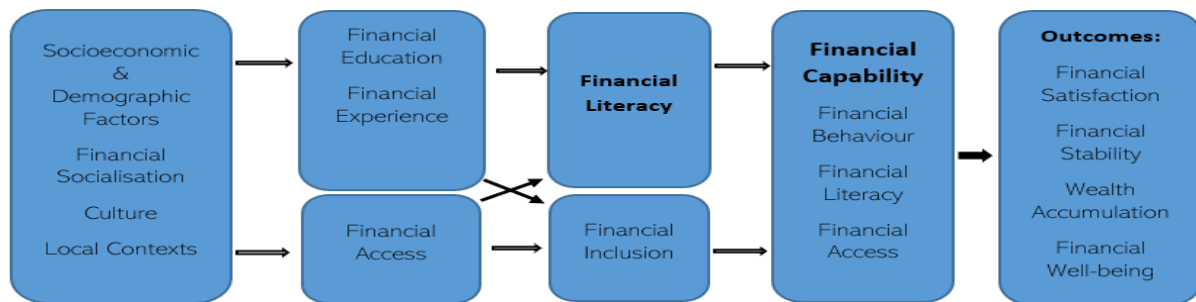
Next, for Research Question 2, the research findings from the journal articles relating to the effects of financial literacy and capability on financial decision-making are reported in Section 3 of the dissertation report.

Finally, for Research Question 3, I map out the concepts and reported findings from RQ1 and RQ2 (Sections 1 & 2) to assess the appropriateness of these concepts to a small developing Pacific Island nation such as Tokelau, as per Section 4 of the report. This also includes identifying research limitations and gaps in the existing literature on Pacific Island nations, including potential implications for financial decision-making at the governance institutions level in Tokelau.

CHAPTER 3: DETERMINANTS OF FINANCIAL LITERACY AND CAPABILITY?

Financial literacy and financial capability are two distinct yet interrelated and interconnected concepts. Financial literacy generally refers to an individual's knowledge and understanding of financial concepts, which enables them to make informed financial decisions, such as budgeting, saving, investing, borrowing, etc. (Lusardi & Mitchell, 2014; Klapper & Lusardi, 2020). On the other hand, financial capability includes not only understanding financial concepts but also having the ability and confidence to apply that knowledge in practical circumstances, for instance, planning and budgeting, savings decisions, debt management, and making well-informed investment decisions. As such, financial capability is considered a broader concept that encompasses financial literacy, skills, attitudes, and good financial behaviours necessary to make sound financial decisions conducive to achieving individual economic well-being (Atkinson & Messy, 2012; Sherraden, 2013).

Fig 1: Conceptual Framework for Financial Literacy and Financial Capability



The key determinants of financial literacy and capability were identified from the scoping review of the literature and are illustrated within the above combined conceptual framework.

In essence, the key determinants and driving factors of financial literacy are (1) socioeconomic and demographic factors such as age (Lusardi & Mitchell, 2014), gender (Atkinson & Messy, 2012), income and employment (Disney & Gathergood, 2013), education (Klapper & Lusardi, 2020), financial socialisation (Grohmann et al., 2015), culture and local contexts (Guiso et al., 2008), (2) financial education (Rothwell & Wu, 2019) and financial experience (Frijns et al., 2014). In turn, financial literacy and financial inclusion (Nam et al., 2022) determine financial capability. In addition to financial literacy, financial capability encompasses financial behaviours and attitudes (Riitsalu & Pöder, 2016b) and financial access (Sherraden, 2013). The outcomes of financial literacy and financial capability include financial satisfaction and stability, wealth accumulation and financial well-being.

In this section, I will provide an overview and detailed discussion of the determinants of financial literacy and capability to address the first research question (RQ1).

3.1 Socioeconomic and demographic factors

3.1.1 Age

The literature has extensively documented the importance of age as a determinant of financial literacy and capability (Lusardi & Mitchell, 2014; Xiao et al., 2015). Most studies find that younger adults consistently demonstrate lower levels of objective and subjective financial literacy, perceived financial capability, and overall financial capability than older adults. Subjective knowledge, also known as perceived or self-assessed knowledge (self-efficacy of financial confidence), pertains to the extent to which an individual believes they possess knowledge on a particular subject. In contrast, objective knowledge refers to the actual depth of knowledge an individual possesses on a given topic (Taylor, 2011; Xiao et al., 2014; Xiao & Porto, 2017; Rothwell & Wu, 2019).

Xiao et al. (2015) suggest that individuals' perceived financial capability (financial self-efficacy) is developed throughout their lifetime by gradually collating information and knowledge through their life experiences. The idea that experience builds financial literacy is supported by (Frijns et al., 2014) and explains why young adults with fewer financial experiences have lower financial literacy.

The literature findings particularly concern young adults going through the financial identity discovery phase of their lives and taking on personal financial responsibility (Shim et al., 2013). As a result, young adults are prone to making poor financial decisions. As a result, they are vulnerable to adverse and long-term consequences, such as unfavourable credit scores, insolvency, and restricted access to premium credit options (Rothwell & Wu, 2019; Czar et al., 2021).

While young adults have low financial literacy, studies have also found that individuals over 65 also demonstrate low financial literacy (Klapper & Lusardi, 2020; Lusardi et al., 2017). Jappelli & Padula (2013) emphasised this point and argued that financial literacy depreciates over time. Financial literacy and wealth have a positive relationship, increasing until retirement age when both begin to decrease (Jappelli & Padula, 2013; Cupák et al., 2021). Notably, the decreasing financial literacy scores observed in old age align with studies on cognitive abilities showing a decline in intelligence as people age, potentially contributing to decreased financial literacy (Finke et al., 2017).

To summarise, age plays a significant role in determining financial literacy and capability, especially for young adults who lack financial experience and face long-term consequences for their financial decisions. Research consistently shows that younger adults have lower financial capability than older adults, with financial literacy increasing with age—however, financial literacy and capability decline in old age, particularly after retirement. Therefore, as young adults take on personal financial responsibility for the first time, they need support to avoid financial pitfalls.

3.1.2 Gender

Gender is a significant determinant of financial literacy, proclaiming a worldwide gender gap phenomenon, with evidence that women have lower levels of financial literacy and are less capable of performing financial calculations than men (Atkinson & Messy, 2012; Sekita, 2011; Agarwalla et al., 2015; Fonseca et al., 2012; Bucher-Koenen et al., 2017; Rothwell & Wu, 2019). Research evidence also suggests that gender-based inequalities in financial literacy and capability are closely linked to established gender-based inequalities in financial well-being (Tinghög et al., 2021).

On a global scale, women consistently have lower levels of financial literacy than men across different countries, including the United States, China, Uruguay, Turkey, Mexico, Colombia, Lebanon, and Brazil (Lusardi & Mitchell, 2008a; Chen et al., 2018; Potrich et al., 2018; Jin & Yuan, 2019; Karakurum-Ozdemir et al., 2019). Interestingly, the gender gap in financial literacy is more pronounced in developed countries like the UK, Germany, and the Netherlands but insignificant in post-communist states like Croatia and Russia owing to women's higher participation in the labour market and the propensity for women to invest in financial literacy anticipating sole financial responsibility due to higher life-expectancy than men (Cupák et al., 2018).

The gender gap is conjectured to be the most reliable finding in the research on financial literacy (Robson & Peetz, 2020). As such, extensive research has been conducted into its existence and cause (Almenberg & Dreber, 2015; Cupák et al., 2018). Subsequently, multiple factors have been identified that influence the gender gap in financial literacy and capability, including education, income, and cultural and societal norms. In particular, education and income have a significant influence on the gender gap in financial literacy and capability since financial literacy rates positively correlate with education and income (Fonseca et al., 2012; Lusardi & Mitchell, 2014; Karakurum-Ozdemir et al., 2019; Robson & Peetz, 2020).

Research evidence also suggests that the gender gap in financial literacy is shaped by cultural and societal norms (Agnew & Cameron-Agnew, 2015; Lusardi & Mitchell, 2008b; Bucher-Koenen et al., 2017). For instance, Bottazzi & Lusardi (2021) contend that the gender gap in financial literacy is linked to women's societal role, established during adolescence when girls and boys are encouraged to conform to culturally prescribed gender identities. Furthermore, Robson & Peetz (2020) argue that gender-based variations in the allocation of household responsibilities between heterosexual couples are conducive to creating gender disparities in opportunities to engage in specific financial behaviours. In both developed and developing countries, women tend to rate their financial literacy more conservatively than men (Potrich et al., 2018).

In addition, Tinghög et al. (2021) find that financial anxiety is related to financial literacy irrespective of gender but that women have greater financial anxiety than men. Therefore, they argued that gender

influences financial literacy indirectly through financial anxiety. Adult women perform worse on financial literacy tests, express less confidence in managing their finances, report less financial satisfaction, are less likely to have emergency savings (Xiao et al., 2014; Rothwell & Wu, 2019), and are less capable of succeeding in the financial markets (Tinghög et al., 2021), and only acquire financial knowledge if necessary (Hsu, 2016).

In conclusion, the literature strongly consented to a gender gap in financial literacy. Women generally have lower levels of financial literacy and capability than men. This gap is evident worldwide, with the extent of the gap varying across countries and economies. The documented gender gap highlights the need to promote gender equality in financial literacy and capability.

3.1.3 Income and Employment

Income and employment are other important socioeconomic factors determining an individual's financial literacy and capability. The evidence suggests that financial literacy rates have a significant positive correlation with the income levels of individuals, indicating that those with higher incomes and stable employment tend to have higher levels of financial literacy and capability (Knoll & Houts, 2012; Disney & Gathergood, 2013; Grohmann et al., 2018; Potocki & Cierpiat-Wolan, 2019; Klapper & Lusardi, 2020).

A possible explanation for the relationship between income and financial literacy is that higher-income individuals are more educated and often have more extensive financial experiences (Guiso & Jappelli, 2005; van Rooij et al., 2011; Almenberg & Dreber, 2015). Moreover, individuals with higher income levels have unspent income conducive to having adequate savings and engaging in investments (Klapper et al., 2013; Jappelli & Padula, 2013; Ćumurović & Hyll, 2019; Karakurum-Ozdemir et al., 2019). As such, higher-income people participate in the stock market, enhancing their financial literacy and capability (van Rooij et al., 2011). In addition, financially literate consumers with higher incomes tend to know more about secured loan options than unsecured and costly alternatives (Bialowolski et al., 2022).

Conversely, the financial constraints of low-income individuals impede their financial literacy and capability as they restrict access to opportunities, financial products, and services necessary for financial decision-making and efficient financial planning (Nam et al., 2022). This lack of access for low-income individuals can include quality banking services and financial products, including access to credit (Disney & Gathergood, 2013; Malan et al., 2020; Nam et al., 2022).

Employment is also crucial to financial literacy and capability (Klapper & Lusardi, 2020). Employment status impacts financial literacy, with evidence suggesting that employed and self-employed individuals exhibit higher levels of financial literacy compared to non-employed individuals (Lusardi & Mitchell,

2011c; Karakurum-Ozdemir et al., 2019). In addition, employed individuals are more likely to access financial resources, such as retirement plans and employer-sponsored financial education programs, which can increase their financial knowledge and skills (Lusardi & Mitchell, 2011).

Notably, Morgan & Trinh (2019) and Cupák et al. (2021) report that self-employed individuals have marginally higher financial literacy than those in traditional employment. In addition, self-employed individuals are more engaged in making financial decisions related to their businesses (Frijns et al., 2014). Struckell et al. (2022) also observed how technological advancements drove a shift in the workforce from traditional employment to self-employment. Their study in the US reported that 46% of Generation Z individuals opt for independent work.

In summary, income and employment are significant determinants of an individual's financial literacy and capability. Individuals with higher incomes and stable employment tend to have higher financial literacy and capability levels due to, among other things, greater access to financial resources and financial experiences and workplace-based financial education programs.

3.1.4 Education

Education is crucial to financial literacy and capability (Cupák et al., 2021). Furthermore, financial literacy and capability levels tend to be positively correlated with education and educational attainment (Xue et al., 2019; Asbi et al., 2020; Klapper & Lusardi, 2020). This is due to the cognitive skills education imparts and the specific financial content that might be included in a curriculum (Lusardi & Mitchell, 2014).

Individuals without a college education would likely have lower financial literacy and are unlikely to comprehend investment concepts like portfolio diversification (Christelis et al., 2010; French & McKillop, 2016), interest rates and stock investments (Disney & Gathergood, 2013; van Rooij et al., 2011). Furthermore, consumers with higher education levels are more knowledgeable about secured loan options than unsecured and costly alternatives (Bialowolski et al., 2022).

There is also evidence that higher education increases people's financial literacy levels conducive to greater wealth creation (Banner & Schwarz, 2018). Moreover, higher education has a significant positive relationship with good financial behaviours, although other researchers have pointed out that there is limited empirical evidence showing that financially educated individuals would exhibit better financial behaviours (West, 2012; Alsemgeest, 2015; Yoshino et al., 2017; Morgan & Trinh, 2019; Potocki & Cierpień-Wolan, 2019).

In summary, education plays a significant role in shaping financial literacy, with higher education levels associated with greater financial knowledge and potentially increased wealth. It also shows a positive relationship with desirable financial behaviours, although limited empirical evidence shows that

financially educated individuals would exhibit better financial behaviours. However, limited empirical evidence suggests that education alone may not guarantee improved financial behaviours. While education remains important, arguments highlight the relationship's complexity and the potential limitations of school-based financial education; financial experiences are considered influential in shaping financial knowledge and behaviour. Therefore, effective teaching methods, reinforcement mechanisms, and integrating practical experiences through learning by doing, financial socialisation and inter-alia are necessary for enhancing financial literacy and capability.

3.1.5 Financial Socialisation

Socio-demographic variables such as better education, higher age, or higher incomes are linked to individuals' higher levels of financial literacy through increased knowledge and experiences. Financial socialisation is another crucial factor that needs to be considered in this context (Grohmann et al., 2015). Financial socialisation refers to a process in which people learn about financial knowledge, skills, and attitudes from their environment - e.g., family, friends, peers, and social networks (Jin & Chen, 2020). For instance, children and teenagers develop an understanding of financial issues, form attitudes, develop habits, and acquire competencies by observing and learning from their families and peers as they transition into adulthood, primarily through the parents and guardians as primary socialising agents (Lusardi et al., 2010; Van Campenhout, 2015; Tang, 2017; Hanson & Olson, 2018; Mancebón et al., 2019; Marchant & Harrison, 2020; Utkarsh et al., 2020).

Evidence from international studies also corroborates the family's importance on financial literacy. For instance, in Spain, the family's role in fostering the financial skills of 15-year-old students is crucial, comparable to its impact on reading, science, and math scores (Mancebón et al., 2019). In India, young working adults who grow up in a family with an open conversation orientation possess better financial literacy skills, while those who grow up in an environment with a conformity orientation exhibit less financial knowledge (Hanson & Olson, 2018). A study in Italy finds that parental background, particularly the role of mothers, matters in the financial knowledge of young women (Bottazzi & Lusardi, 2021).

Furthermore, Agnew & Cameron-Agnew (2015) argue that parents have an immensely more significant influence on their children's financial literacy and capability during their early adulthood compared to the influence of employment or educational environments. For example, parents who provided budgeting instruction and promoted savings enhanced their children's financial literacy by approximately 14% (Grohmann et al., 2015). Furthermore, parents who offer financial resources to their children and the freedom to make their own financial choices can lead to a stronger sense of independence among young people. As a result, they are more likely to acquire self-discipline and money management skills, ultimately leading to a deeper understanding of financial security and overall well-being (Marchant & Harrison, 2020).

In summary, financial socialisation is a determinant of financial literacy and capability. Research suggests that early exposure to financial discussions, role modelling, and involvement in family financial matters positively influences financial literacy and capability. As such, parents are encouraged to be vigilant and assiduous when imparting financial instructions and knowledge as their behaviour exerts substantial influence and lays the foundation for young adults' sound financial attitudes and behaviour (Shim et al., 2013).

3.1.6 Culture and Local Contexts (Neighbourhood Effects)

The literature also asserts that financial literacy is embedded in local contexts and cultures. The underlying concept is that an individual's environment provides opportunities to obtain financial information, understand financial topics, interact with others regarding finances, and evaluate financing options for decision-making (Cucinelli et al., 2019).

The cultural influences on financial literacy vary worldwide. For example, in India, the negative impact of culture on financial literacy can be observed within family environments where it is customary for the head of a joint family to make all major financial decisions, which often leads to other family members, especially the young, feeling less motivated to enhance their financial literacy and thus remain illiterate (Agarwalla et al., 2015). Furthermore, a study of secondary students along the French and German border in Switzerland indicates cultural influences driven by systemic differences in their cultural environments and financial socialisation (Brown et al., 2018).

De Becker et al. (2020) conducted a global study exploring the impact of national culture on individual financial literacy. The study encompassed 24,512 participants from 12 countries across Europe, the Middle East, Southeast Asia, North America, and New Zealand. Their results indicate that individuals residing in countries with a greater emphasis on uncertainty avoidance tend to exhibit higher financial literacy. Conversely, individuals in countries with solid individualistic cultures tend to have lower financial literacy.

Furthermore, the impact of one's surroundings, known as the neighbourhood effect, is also viewed as an influential factor in financial literacy and capability. Research indicates that individuals living in neighbourhoods with higher levels of education and income tend to have better financial literacy due to social interactions and exposure to financial knowledge from others in their community (Bucher-Koenen & Lusardi, 2011; van Rooij et al., 2011; Peng et al., 2018).

The neighbourhood effect can also influence the accessibility of financial resources and institutions, impacting financial capability and the ability to access financial services (Lachance, 2014). Bucher-Koenen and Lusardi (2011) show that individuals residing in better-educated neighbourhoods tend to utilise a more significant number of banking products, save more for the future, and engage in less

expensive credit activities. The results suggest that individuals do not operate in a vacuum and are affected by their environment regarding financial behaviour.

In conclusion, financial literacy and capability are influenced by an individual's environment and cultural factors and exposure to financially knowledgeable individuals. Cultural influences on financial literacy vary globally, with different cultures exhibiting different levels of self-discipline and risk-taking tendencies. The neighbourhood effect can also impact financial capability and the accessibility of financial services, affecting financial behaviour and investment decisions.

3.2 Financial Access and Inclusion

The literature suggests that financial access and inclusion can significantly affect financial capability. People with access to these resources may have more opportunities to learn about and use financial products and services. The underlying concept is that financial experiences through practical access and participation can significantly improve financial capability - that is, people can be motivated to learn by doing (Frijns et al., 2014; Mandell & Klein, 2009).

In addition, the literature also argues that financial literacy, as a component of financial capability, requires consumers to access suitable financial products and services, financial infrastructure, institutional characteristics, and systems (Huang et al., 2013). Financial literacy alone is insufficient for effective financial management; individuals must also have access to appropriate financial products and services to use their financial knowledge (Sherraden, 2013). Having access to financial services is a crucial element that can boost an individual's confidence and belief in their ability to manage their finances, thus enhancing their management skills and financial capabilities (Nam et al., 2022).

Financial inclusion is also essential to ensure that vulnerable members of society, including low-income households and individuals, have access to critical banking services and financial products, such as savings and investment opportunities, as well as small debt instruments (Sherraden, 2013; Potocki & Cierpiał-Wolan, 2019). Lacking access to essential banking products and services often forces people to resort to costly alternative financial products and services (Sherraden, 2013) or unregulated and informal financial services (Kodongo, 2018).

The literature highlights various factors that hinder the efficient use of financial services, such as high transaction costs, ambiguity, information asymmetry, and a lack of practical access. These factors are identified as barriers to financial inclusion (Grohmann et al., 2018). As such, Sherraden (2013) argues that financial inclusion necessitates providing financial products suitable for meeting vulnerable populations' diverse needs. Furthermore, these products should be accessible, affordable, financially rewarding, user-friendly, and secure.

3.3 Financial Education and Financial Experience

3.3.1 Financial Education

According to Rothwell & Wu (2019), financial education refers to any program aimed at modifying people's financial knowledge, attitudes, and behaviours pertaining to their finances. Several findings in the existing literature assert a statistically positive correlation between financial education and financial literacy and capability through increased financial knowledge, skills, financial attitude, desired financial behaviours and financial self-efficacy (Xiao & O'Neill, 2016; Rothwell & Wu, 2019; Kaiser & Menkhoff, 2020; Xiao et al., 2020).

The concerted efforts in recent years to integrate financial education programs into school curricula across many countries emphasise that financial education is considered an influential government policy tool to increase the financial knowledge of children and youth (Frijns et al., 2014; Frisanchó, 2020). The argument posit that financial education interventions targeted at younger ages, when they are still teachable, adaptable and receptive to learning, have the potential to enhance their financial knowledge and increase their financial literacy (Kaiser & Menkhoff, 2017; Gill & Bhattacharya, 2015; Batty et al., 2020; Frisanchó, 2020).

Notably, although research on financial education highlights its benefits, certain studies indicate that the influence of financial education initiatives is only modest and tends to be somewhat limited (Fernandes et al., 2014; Jin & Chen, 2020). Moreover, research findings have questioned the long-term effectiveness of financial education at the high school level, particularly the impacts on subsequent financial behaviours (Mandell & Klein, 2009; Lührmann et al., 2015; Luukkanen & Uusitalo, 2019).

Consequently, some contend that the effectiveness of each financial education intervention differs significantly based on the intended audience and objectives and that the outcomes must be assessed in light of the economic situation of the individuals involved in the study (Lusardi & Mitchell, 2014; Rothwell & Wu, 2019). In addition, while some researchers have identified financial education as the pathway to increasing financial knowledge (Kaiser & Menkhoff, 2020; Xiao et al., 2020; Kaiser & Menkhoff, 2022), others have pointed out that outside the classroom, financial experiences can be more effective in improving financial capability - that is, people can be motivated to learn by doing (Frijns et al., 2014; Mandell & Klein, 2009).

Furthermore, while the consensus in the literature suggests a positive relationship between education and financial literacy, some studies suggest that the relationship is not as straightforward or as significant as it might seem - that is, school-based financial education has low efficacy and a low impact on financial literacy, particularly in the long-term. For instance, Mandell and Klein (2009) found that high school students who took a personal finance class did not perform better on a financial literacy test compared to those who did not take the course. This suggests that conventional financial education in

schools may not effectively improve financial literacy or influence long-term financial behaviours. Similarly, Fernandes et al. (2014) suggest that the impact of financial education diminishes over time, indicating limited long-term effects. Willis (2008) argues that financial education may not enhance financial capability due to a disconnect between educational context and real-world decision-making. The classroom scenarios may not adequately reflect the complexities of daily financial choices.

The literature also points out that high-school-level financial education typically concentrates on imparting theoretical knowledge without offering avenues for learners to use this knowledge in practical, real-life situations. This lack of application can impede the effectiveness of education in fostering financial capability. Consequentially, credible arguments are being made for the impacts of financial experience through learning by doing as prevalent over education (Frijns et al., 2014). Furthermore, there is growing interest in the literature advocating for the concept of "just-in-time" financial education, highlighting the significance of the timing and applicability of financial education. This perspective proposes that financial education is most beneficial when offered right before a specific financial decision or occurrence instead of being embedded in a standard educational syllabus (Fernandes et al., 2014; Lusardi & Mitchell, 2014; Hoffmann & Otteby, 2018; Marchant & Harrison, 2020).

Conversely, researchers note that acquiring financial capability through experience may pose risks of poor financial decisions and outcomes, such as indebtedness, which may take years to resolve. In that regard, identifying "teachable moments" and developing effective targeted interventions may be fundamental and practical in increasing financial knowledge (Kaiser & Menkhoff, 2017).

In conclusion, financial education has a notable impact on financial literacy; however, while it remains important, arguments highlight the relationship's complexity and the potential limitations of school-based financial education. As such, financial experiences are considered to be more influential in shaping financial knowledge and behaviour through learning by doing; financial socialisation and inter-alia are necessary for enhancing financial literacy and capability.

3.3.2 Financial Experience

Financial experience is also considered a determinant of financial literacy and capability. The fundamental concept is that financial experiences through learning by doing, participation, and practical and hands-on experiences can significantly enhance financial literacy and capability (Frijns et al., 2014; Mandell & Klein, 2009).

Research evidence asserts that by engaging in financial activities and learning from their experiences, individuals can improve their financial literacy and enhance their financial capability. For instance, practical financial experiences, such as owning and managing bank accounts, paying bills, accessing

banking services and credit, making investments, or engaging in financial decision-making, are conducive to developing financial knowledge and skills (Huston, 2010b; Xu & Zia, 2012; Hastings et al., 2013; Frijns et al., 2014; Fernandes et al., 2014).

Furthermore, financial experience influences financial behaviours by shaping attitudes and habits. For example, regular exposure to financial activities cultivates responsible financial behaviours, such as budgeting, saving, and managing debt (Remund, 2010; van Rooij et al., 2012). Furthermore, real-world experiences provide individuals with opportunities to apply and enhance their financial knowledge, understand the consequences of their decisions, and gain a deeper understanding of financial concepts and strategies (Mandell & Klein, 2009; Hastings et al., 2013).

Finally, financial experience exposes individuals to financial systems, products, and services complexities. Dealing with real-life financial situations helps individuals navigate the intricacies of financial transactions, understand the implications of various options, and make informed choices. For instance, financial experience from participating in the stock market and owning stock shapes investors' positive financial behaviours and enhances their levels of financial literacy and exhibits higher levels of financial capability (Christelis et al., 2010; van Rooij et al., 2012; Lusardi & Mitchell, 2014).

Conversely, researchers note that acquiring financial capability through experience may pose risks of poor financial decisions and outcomes, such as indebtedness, which may take years to resolve. In that regard, identifying “teachable moments” and developing effective targeted interventions may be fundamental and practical in increasing financial knowledge (Kaiser & Menkhoff, 2017).

In addition, financial experiences allow individuals to experience successes and failures in their financial decisions. Mistakes serve as valuable learning experiences, allowing individuals to grasp the repercussions of their actions, learn from their errors, and make more informed financial decisions moving forward (Lusardi & Tufano, 2015).

In summary, the literature indicates that financial experiences obtained through practical engagement significantly increase an individual's financial literacy and capability. Activities like owning a bank account, budgeting, saving, investing, and managing credit provide individuals with practical knowledge and ultimately enhance financial literacy and capability.

3.4 Financial Behaviours and Attitudes

The literature promotes the interconnected relationship between financial attitudes and financial behaviours with financial literacy and capability. According to Riitsalu & Pöder (2016b), financial behaviour is a financial literacy component. However, other researchers contend financial behaviour

results from financial literacy (Allgood & Walstad, 2016; Bellofatto et al., 2018; Liu & Zhang, 2021). Both arguments have merits, and it is challenging to separate financial knowledge, skills, and attitudes from actual behaviour and financial decision-making - one precedes the other and vice versa. Good knowledge brings about intelligent behaviour, which can also shape knowledge (Monticone, 2010; Riitsalu & Pöder, 2016b).

Desirable financial behaviours and a high financial literacy level translate to higher financial capability (Xiao et al., 2014). Also, people's economic attitudes are significantly related to financial behaviours (Aydin & Akben, 2019). For instance, if people have a negative attitude toward savings or have the propensity to satisfy their immediate needs, they are unlikely to save (Atkinson & Messy, 2012).

Riitsalu & Pöder (2016b) emphasise that it is indispensable to understand the effects of financial behaviour on financial literacy. The positive consequences of being financially literate are driven by effective money management and long-term financial planning conducive to maintaining financial security and well-being. However, individuals with negative attitudes towards saving may save less and rely more on credit or loans. For instance, some behaviours, such as excessive spending and the continual use of debt instruments, may be detrimental to consumers' financial well-being (Atkinson & Messy, 2012; Potrich et al., 2018).

The existing literature further reports that consumer behaviours are influenced by the consumers' levels of financial confidence. For instance, consumers who lack financial confidence are not likely to seek advice on investment options or mortgages (Porto & Xiao, 2016) and are less likely to participate in the stock market (Xia et al., 2014). Moreover, consumers who lack confidence may be more susceptible to vulnerability, such as scams or fraudulent schemes, than those who are more self-assured when making financial decisions and dealing with the associated consequences (Xiao & Porto, 2022).

In conclusion, financial literacy and capability are interconnected with financial attitudes and behaviours. Research findings suggest that financial behaviour is both a component and an outcome of financial literacy. The literature stresses the importance of understanding the impacts of financial behaviour on financial literacy. Furthermore, understanding the relationships between financial attitudes, behaviours, and literacy is crucial in designing interventions to enhance financial capability and well-being.

CHAPTER 4 – IMPACTS ON FINANCIAL DECISION MAKING

The overarching consensus in the extant literature is that financial literacy and capability are influential and critical toolsets that help individuals and households make sound and optimal financial decisions (Huang et al., 2013; De Beckker et al., 2020; Klapper & Lusardi, 2020).

Financially literate people understand financial concepts like budgeting, saving, investing, and managing debt (Huston, 2010b; Taylor, 2011; Lusardi & Mitchell, 2014). They can also access and use financial products and services more effectively (Mahmood-ur-Rahman, 2022). They are more likely to invest in the stock market and are also more likely to plan for retirement, which is conducive to wealth accumulation (Lusardi & Mitchell, 2008b; van Rooij et al., 2011).

In addition, being financially capable means people possess the skills, behaviours, and self-efficacy necessary to put their financial knowledge into practice. This includes setting financial goals, planning and budgeting effectively, controlling impulsive spending, and making informed financial decisions based on their values and financial goals (Taylor, 2011; Atkinson & Messy, 2012; Fernandes et al., 2014; Hamid & Loke, 2021).

Conversely, lower levels of financial literacy and capability have been associated with problematic financial behaviours such as high-cost borrowing, leading to poor financial decisions with long-term consequences and failure to plan for the future (Taylor, 2011; Lusardi & Mitchell, 2011c; Lusardi & Tufano, 2015). In addition, financial literacy and capability are not static but change over time initially increasing before they decline with old age, potentially influencing the quality of financial decision-making later in life (Jappelli & Padula, 2013; Cupák et al., 2021).

Ultimately, financial literacy and capability enable individuals to adapt and navigate complex and changing economic environment challenges. Accordingly, this section discusses specific areas of financial decision-making where financial literacy and capability are most effective, as promoted within the existing literature.

4.1 Financial Planning and Management

Financial planning and good management behaviours are essential to making sound financial decisions (Lusardi & Mitchell, 2007). Good financial planning and management behaviours are exemplified through careful budgeting, savings and investing, and debt management. For instance, budgeting helps individuals track their income and expenses enabling better control over their finances, whereas saving and investing are crucial behaviours for building wealth and achieving long-term financial goals. In addition, managing debt responsibly is also a critical financial management behaviour necessary to

avoid excessive debts and maintain financial stability (Taylor, 2011; Fernandes et al., 2014; Hamid & Loke, 2021). Effective financial planning and management help individuals to mitigate risks, reduce financial stress, and build wealth over time. Furthermore, individuals with sound financial planning and desirable management behaviours can ensure that they make better financial decisions that lead to better financial outcomes (Bird et al., 2014) and are more likely to attain financial stability and establish a solid financial foundation for their future (Xiao et al., 2014, 2015; Xiao & O'Neill, 2016; Xiao & Porto, 2017; Xiao & O'Neill, 2018).

Xiao & O'Neill (2018) argue that the propensity to plan is a significant indicator of financial capability contributing to consumer financial well-being. The study findings confirm that the propensity to plan is positively associated with financial capability factors such as subjective financial knowledge and desirable financial behaviours. In addition, Bird et al. (2014) examined the relationships between planning, financial management decisions, and daily household financial well-being. They argued that planning is a key motivational factor for consumers to save. The study findings suggest that maintaining a stable income and implementing effective financial management practices, such as financial planning, would improve economic and financial well-being by reducing the chances of incurring and retaining consumer debt. In addition, this study highlighted the importance of financial capability in planning and promoting saving, budgeting, and using credit wisely at the household level. Furthermore, the study by Bialowolski et al. (2020) confirms the positive correlation between individuals' financial literacy and their involvement in household financial management.

Hamid and Loke (2021) investigated how socioeconomic factors, including financial literacy and money management skills, excessive spending and impulsiveness, influence credit card repayment decisions. The findings confirmed the critical role socio-economic factors influence an individual's financial management behaviour. It affirms that age, education, ethnicity, and marital status play a substantial role in determining whether credit cardholders choose to settle their outstanding balance fully or partially, surpassing the minimum payment requirement. The study identifies a connection between financial literacy, practical money management skills, and improved credit card repayments. It further indicates that cardholders with strong money management skills have a reduced risk of not fully settling their payments compared to those lacking such skills.

In summary, financial literacy and capability significantly impact an individual's financial management decisions. With adequate financial literacy and capability, individuals can make responsible financial decisions, execute financial management practices effectively, and necessary for achieving financial goals. Overall, having strong financial literacy and capability is essential in facilitating sound financial planning and management decisions, enabling individuals to make informed choices consistent with their values and, thus, achieve their long-term financial objectives.

4.2 Retirement Planning and Savings Decisions

According to the literature, governments in many countries face the challenge of providing robust retirement schemes for their ageing population and are transferring these responsibilities onto individuals (García, 2021; Gallego-Losada et al., 2022). However, although workers nearing retirement face many significant and irreversible choices, many do not possess enough basic financial knowledge to make optimal choices confidently (Clark et al., 2012). Therefore, the existing literature suggests that financially literate individuals are more likely to plan for retirement (Lusardi & Mitchell, 2007). Furthermore, individuals with advanced financial knowledge are more likely to be retirement-ready (van Rooij et al., 2012; Lusardi & Mitchell, 2017). Conversely, a lack of financial knowledge is negatively associated with retirement planning (Lusardi & Mitchell, 2011a). Therefore, financially illiterate individuals are less likely to plan for retirement (Lusardi & Mitchell, 2007).

4.2.1 Retirement Planning

Research findings suggest that employees with higher financial literacy demonstrate a greater likelihood of actively participating in their retirement saving plan, contributing a higher proportion of their salaries, and having a higher equity share in their defined contribution retirement accounts (Clark et al., 2017). Conversely, individuals with limited financial knowledge are less inclined to engage in retirement planning, leading to a decreased awareness of the consequences and action taken to address the retirement income gap resulting from government reforms (Lusardi & Mitchell, 2007; Bucher-Koenen & Lusardi, 2011).

Financial literacy and capability influence the way individuals decide their retirement plan strategy. More recently, García (2021) studied the impact of financial literacy on retirement planning among young adults in Mexico, finding that individuals with higher financial knowledge have less intention to pursue passive retirement strategies. The research findings by Fang et al. (2022) also find that financial literacy and advice play distinct roles in enhancing retirement saving decisions and working together to achieve favourable outcomes.

Financial literacy also influences how tax-deductible savings plans are utilised in some countries. For example, a study in Canada examined how governments in industrialised nations frequently employ tax deductions as a means to incentivise retirement savings through registered savings plans. However, these plans generally do not restrict access to the funds, allowing savers to withdraw them before retirement when their tax rates are still elevated and thus forfeit the tax advantage. The findings reveal a negative correlation between savings withdrawals and the effective marginal tax rate among individuals with higher financial literacy. However, this relationship is considerably weaker and occasionally lacks statistical significance for those with lower financial literacy (Laurin et al., 2021).

4.2.2 Savings Decisions

In relation to saving decisions, Brown et al. (2018) and Deuflhard et al. (2019) both find that better financial literacy is associated with higher yields on deposit accounts and a higher tendency to withdraw deposits from distressed banks. Furthermore, individuals with greater financial capability in terms of self-efficacy in managing their finances and having a bank account at their disposal are more inclined to possess contingency funds than those with limited financial skills (Reyers, 2019).

Murendo & Mutsonziwa (2017) studied the determinants of financial literacy and its impact on savings decisions using survey data from 4000 adult financial consumers in Zimbabwe. Their findings indicate that financial literacy positively influences savings decisions for both rural and urban individuals. Additionally, the study suggests that financial literacy positively influences informal and formal savings and concludes that policy interventions that promote financial literacy are necessary to improve individuals' savings behaviour.

In a related study in the US, Bhutta et al. (2022) research indicates that despite expert advice to maintain three to six months' worth of expenses in liquid assets for emergencies, over half of American households lack sufficient liquid savings. Their study found a strong correlation between financial literacy and maintaining three months of liquid savings, even accounting for income, income volatility, and parental resources. Notably, they find that financial literacy influences liquid savings even in households with less liquid wealth. This suggests that ignoring financial literacy concerning contingency savings could lead to wealthy families living paycheck to paycheck rather than optimal portfolio management. Their findings underscore the importance of financial literacy in preparing households to handle unexpected expenses or income disruptions.

In conclusion, governments and employers are increasingly transferring the responsibility of saving and investing for retirement to individuals. Furthermore, as state-supported pensions decrease and life expectancies increase, individuals must save for their financial security during extended retirement periods. However, many individuals lack the necessary knowledge and skills to manage this increased individual responsibility. Nevertheless, extensive research suggests that financial literacy and capability can empower individuals and households to make informed savings and retirement planning decisions.

4.3 Borrowing Decisions – Loan, Debt Instruments, and Mortgages

Financial literacy and capability are critical in individuals' borrowing behaviour and financial decision-making. Financially literate people can evaluate the cost and benefits of different types of debt instruments and understand the risk factors, such as interest rates and repayment terms associated with each (Pak, 2018). Likewise, those with enhanced financial capability are more inclined to make

informed borrowing decisions based on their capacity to fully comprehend and analyse the relevant information and compare borrowing options, including assessing the risks and benefits of different borrowing strategies (Allgood & Walstad, 2016). As a result, enhanced financial literacy can strengthen financial resilience and reduce risks associated with excessive debt accumulation (Klapper & Lusardi, 2020).

Huston (2012) emphasises the importance of understanding credit terms and markets in making informed borrowing decisions aligned with credit preferences. They used data from the Consumer Finance Monthly (CFM) survey, which provided information on US consumer credit and explored the impact of financial literacy on credit card and mortgage interest rates. Their findings revealed that individuals with higher financial literacy were roughly twice as likely to secure lower interest rates for credit card and mortgage loans compared to those with lower financial literacy after accounting for other financial skills.

Conversely, individuals lacking financial literacy and capability may encounter challenges in comprehending the intricacies of borrowing, including interest rates, fees, and repayment terms associated with different loan types (Disney & Gathergood, 2013). Consequently, they are more prone to making ill-advised borrowing choices, such as opting for high-interest loans or unfavourable terms, leading to financial hardship and adverse effects on their credit score (Huang et al., 2015).

Moreover, they may be susceptible to predatory lending practices like payday loans or high-interest instalment loans, trapping them in cycles of debt. Difficulties in making loan payments and mortgage delinquency may also arise (Chhatwani, 2022). These circumstances can result in financial difficulties, credit score deterioration, and future credit challenges. Therefore, sound financial literacy and good financial behaviours can help individuals make informed borrowing decisions that align with their financial goals and improve their overall financial well-being (Huang et al., 2015).

The existing literature offers evidence on the impacts of financial capability, as a combination of financial literacy and financial behaviours, on financial decision-making around debt undertaking. For example, in the US, Xiao et al. (2014) examined the relationship between financial literacy in college students and their subsequent financial behaviours. Financial literacy was assessed using subjective knowledge (perceived or self-assessed knowledge) and objective knowledge (how much an individual knows), while financial behaviours were classified into risky payment and borrowing behaviours. Risky payment behaviour was assessed using three indicators: timely bill payments, full credit card balance payments, and timely credit card bill payments. They found that subjective knowledge had a more substantial impact on risky paying and borrowing behaviours than objective knowledge.

Similar findings were obtained from studies in China and Turkey, where consumers' varying levels of financial literacy affects their borrowing behaviours. Furthermore, subjective financial literacy had a more significant influence than objective financial literacy, and financial self-efficacy partially mediated this relationship. The studies assert that enhancing consumers' financial literacy can help prevent excessive borrowing (Sevim et al., 2012; Liu & Zhang, 2021).

Interestingly, the literature also points out a downside to subjective knowledge, suggesting that those who perceive themselves to have a higher level of financial literacy may be more confident in managing debt and repaying loans, leading them to borrow more frequently or take on more significant amounts of debt. However, this confidence may not necessarily reflect their actual financial knowledge, potentially resulting in overborrowing and difficulties in loan repayment. Conversely, individuals who perceive themselves to have lower levels of financial literacy may be more cautious about borrowing or limit their debt to amounts they can handle, even if borrowing is necessary for their financial goals (Allgood & Walstad, 2016).

One of the most critical choices faced by consumers or households involving borrowing is purchasing a home. The evidence suggests that individuals and households would utilise mortgage financing for such a purpose. However, mortgages are complex financial instruments, which may be problematic for ingenuous households becoming homeowners (Gathergood & Weber, 2017b; Pak, 2018). Accordingly, Bialowolski et al. (2022) confirmed that households with higher financial literacy were more likely to refinance their mortgage and secure lower interest rates, with the average reduction being almost 0.7 percentage points. This study provides evidence of the positive impact of financial literacy in obtaining improved mortgage terms (Gathergood & Weber, 2017b; Pak, 2018; Bialowolski et al., 2022).

Furthermore, Gathergood and Weber (2017a) examined the financial literacy of households in England and Wales in relation to mortgages. The study focused on a loan duration, interest compounding, and amortisation concepts. Findings revealed low overall mortgage financial literacy, with renters having lower levels than homeowners. Younger households were more influenced by mortgage financial literacy, impacting homeownership. Less financially literate young homeowners had higher mortgage debts and were likelier to use costly alternative mortgage products.

In conclusion, financial literacy and capability play a crucial role in borrowing decisions. Financially literate and capable consumers make more informed borrowing choices, manage debt more effectively, and are more likely to avoid overindebtedness. Conversely, individuals with low financial literacy and capability may face challenges in understanding loan terms and may end up with unmanageable debt. Therefore, enhancing financial literacy and capability can empower individuals to make sound borrowing decisions, safeguard their financial well-being, and work towards their long-term financial objectives.

4.4 Investment Decisions

General

Financial literacy and capability positively correlate with investment decisions (Abreu & Mendes, 2010; Klapper & Lusardi, 2020; Yamori & Ueyama, 2022). Financially literate individuals are more likely to make informed investment decisions and better understand the risks and returns associated with various investment options (Hastings et al., 2013). In contrast, financial illiteracy can lead to poor investment decisions and a lack of understanding of investment risks and returns. This can result in missed investment opportunities, low returns, and potentially significant financial losses. For instance, several studies argue that investors who are less financially literate make more financial mistakes (Christelis et al., 2010; Lusardi & Tufano, 2015).

Risk Perception

The existing literature documents the relationships between financial literacy, risk perception, and investment decisions. There is a positive correlation between financial literacy and risk preferences, where individuals with higher levels of financial literacy tend to exhibit greater risk tolerance. On the other hand, respondents with lower financial literacy display more irrational tendencies and inconsistencies in their risk choices (Aren & Zengin, 2016; Chen et al., 2018).

Korkmaz et al. (2021) examined the correlation between risk preference and risk-taking behaviour using the China Household Finance Survey (CHFS). Their study revealed a divergence between risk preference and actual behaviour, but it found that financial literacy can mitigate this disparity and encourage appropriate risk-taking. This study also indicates that financial literacy's effect varies among households with different risk responsiveness levels. Specifically, financial literacy increases this disparity for risk-averse households but decreases it for risk-seeking households by promoting risk-taking behaviour.

In addition, Liao et al. (2017) investigated the link between financial literacy and the propensity of Chinese households to hold risky assets in an emerging financial market with unique institutional characteristics. The researchers highlighted the importance of financial literacy for market participation while noting that Chinese consumers exhibit lower levels of financial literacy than individuals in developed countries. Furthermore, the study reports that individuals with higher financial literacy are more inclined to hold risky financial assets than those with lower financial literacy levels.

Participation in Financial Markets

The existing literature reports a positive relationship between financial literacy and stock market participation. Research has shown that consumers with higher levels of financial literacy and capability are more likely to invest in stocks and other financial markets (Almenberg & Dreber, 2015; van Rooij et al., 2011a; Yamori and Ueyama, (2022)). The evidence also suggests that high-literacy investors are better at timing the market (Guiso & Viviano, 2015), have a better understanding of investment risks and returns, are more confident in making investment decisions and have greater access to financial information and investment opportunities (Klapper et al., 2013). In contrast, low financial literacy compounded by the complexities of the stock market can make the investment process overwhelming and intimidating for these individuals, resulting in their avoidance of stock market participation (van Rooij et al., 2011).

Bellofatto et al. (2018) find that personal financial literacy is positively associated with stock trading behaviour, suggesting that individuals with higher financial literacy engage in more informed investment practices., the study reports that retail investors with more significant financial literacy trade more effectively, controlling for age, gender, education, trading experience, and portfolio value. Such investors demonstrate lower susceptibility to the disposition effect and tend to focus their portfolios on small stocks while diversifying through investment funds. Consequently, these investors achieve higher gross and net returns and excess Sharpe ratios.

Furthermore, Sivaramakrishnan et al. (2017) examined the impact of financial literacy on investment decisions in the stock market. The study observed that investment intention serves as a predictor of actual investments, reflecting behaviour. Financial literacy, encompassing subjective and objective knowledge, emerged as an important factor influencing intention, while only objective financial literacy was identified as affecting behaviour.

In addition, individuals with greater financial literacy are more likely to actively engage in the derivatives market, driven by their comprehension of the market's complexities (Hsiao & Tsai, 2018). Their study in Taiwan explores the relationship between financial literacy and active participation in the derivatives market. Given the assumption that general consumers possess limited knowledge and skills regarding complex derivative products, which can be seen as a barrier to entry, their nonparticipation in such markets can be attributed to this factor. As a result, they propose that improved financial literacy can significantly reduce entry barriers, facilitating greater participation of individuals in complex derivatives markets.

The existing literature also corroborates that individuals with enhanced financial capability are inclined to invest in mutual funds (Guiso & Jappelli, 2005). Mutual funds are popular investment options due to their benefits, such as diversification, professional management, and liquidity. Moreover, financially

literate and capable investors possess the skills and knowledge to research and comprehend various types of mutual funds and their investment strategies (Chu et al., 2017).

Portfolio Diversification

Portfolio diversification is a critical element in investment decision-making as it spreads investments across different asset classes and securities, reducing risk. As a result, investors can capitalise on growth potential by including various investments like stocks and bonds while mitigating risks. Diversification also helps mitigate the impact of unexpected events, such as economic downturns or geopolitical crises. Mouna and Jarboui (2015) studied the Tunisian stock market, focusing on the relationship between financial literacy and portfolio diversification of individual investors. They identified financial literacy as a potential explanation for low levels of diversification and considered factors such as experience, age, cognitive biases, and portfolio size. The results highlight the significant impact of financial literacy, experience, and behavioural factors on the diversity of investors' portfolios. The study emphasises the importance of making investment decisions based on financial capability and experience while avoiding reliance on sentiment-driven choices.

Similarly, Abreu and Mendes (2010) conducted a study in Portugal, investigating how different levels of financial literacy among investors influence portfolio diversification. The study examined various aspects of financial literacy while controlling for socioeconomic and behavioural differences among investor groups. The findings indicate that investors' educational levels and financial knowledge have a positive effect on portfolio diversification.

Research evidence also posits that financial literacy influences investment options and stock market participation. For instance, Chu et al. (2017) findings revealed that households with higher financial literacy, particularly those with advanced financial literacy, were more inclined to entrust a portion of their portfolio to experts and invest in mutual funds. Conversely, overconfident households in their financial literacy tended to handle their investments independently and were likelier to hold only stocks in their portfolios. Moreover, the results indicated that households with higher financial literacy had a higher probability of achieving positive investment returns, suggesting a potential link between higher financial literacy and improved financial outcomes.

In summary, financial literacy and capability are vital in encouraging individuals to participate in capital markets and make informed investment decisions. Those with higher levels of financial literacy possess the knowledge and skills to understand market dynamics, assess risks and returns, and align investments with their financial goals. In addition, they can effectively manage their portfolios, monitor performance, and adjust strategies. Furthermore, individuals with greater financial literacy are more confident investing in diverse financial markets, such as stocks, bonds, mutual funds, and ETFs. As a

result, financial literacy and capability promote wealth accumulation and the achievement of long-term financial objectives, avoiding common pitfalls and maintaining a well-diversified portfolio. Therefore, financial literacy and capability are critical to making informed investment decisions and achieving financial success.

4.5 Financial Advice

Many individual investors often seek professional advice to make optimal investment decisions. This is because financial markets can be complex, and investors may not have the knowledge and skills to navigate them successfully. Seeking professional advice from financial advisors can help investors to make informed decisions that align with their financial goals and risk tolerance (Xue et al., 2021). Additionally, financial advisors can provide information about investment products and strategies, help investors create diversified portfolios, and offer guidance on adjusting their investment strategies as their financial circumstances change. However, the quality of advice can vary, and investors should be aware of potential biases and conflicts of interest (Calcagno & Monticone, 2015a; Calcagno et al., 2017).

Research findings also suggest that investors with higher financial literacy are more likely to consult financial advisors. In contrast, those with lower financial literacy are less likely to seek advice from a financial advisor and may invest less in risky assets (Calcagno & Monticone, 2015b; Zou & Deng, 2019). They also find that some advisors may be biased and non-independent when providing expert advice. Furthermore, Calcagno et al. (2017) report that investors with greater self-reported financial competence exert more control over their advisors. However, the extent of control varies based on the investor's levels of financial literacy. For example, high-literacy investors directly monitor their advisors, while low-literacy investors seek a second professional opinion.

In addition, Chauhan & Dey (2020) examined the determinants of investors' willingness to pay (WTP) for financial advice in India. They found that financial literacy is a crucial determinant of investors' WTP for financial advice, with financially literate investors having a higher WTP for helpful advice. However, they also found that financially literate investors are unlikely to seek financial advice if the advisory fee exceeds their maximum WTP. The study highlights the importance of financial literacy in recognising the value of financial advice and making informed decisions about seeking such advice.

In summary, financial literacy and capability play a crucial role in the context of financial advice. Individuals with higher financial literacy are likely to seek financial advice and are better equipped to understand and evaluate the advice provided by financial professionals. Additionally, the financial capability allows individuals to implement and follow through on the advice received. Therefore, financial literacy and capability are essential factors in ensuring the effectiveness and success of financial advice.

CHAPTER 5 - DISCUSSION ON TOKELAU CONTEXTUALISING FINANCIAL LITERACY AND CAPABILITY ON A SMALL DEVELOPING PACIFIC ISLAND NATION

5.1 Background

Tokelau is a small country with a population of around 1,600 people that is located in the South Pacific. Tokelau has a USD6,275 GDP per capita, as reported in 2016 (*Tokelau's Gross Domestic Product Determined for First Time This Century*, n.d.). This falls roughly within the average for all Pacific Islands and Territories. However, it operates a cash economy as it lacks the financial and banking infrastructure to operate efficient cashless and electronic transactions through debit cards, credit cards, direct debit, electronic clearing, and other electronic payment systems.

Tokelau is currently governed by NZ, having been declared part of NZ under the Tokelau Act of 1948, and uses the NZ dollar as its currency. Tokelauans hold NZ citizenship under the Citizenship Act 1977, and NZ has a sizeable number of Tokelauans living within NZ - 8,676 as of the NZ 2018 census. As Tokelau is a NZ-administered territory, NZ provides general financial budget support to deliver essential government services consistent with its constitutional and UN Charter obligations. This budget support has enabled Tokelau to transition from a largely self-sufficient subsistence economy in the late 1970s to a predominantly aid-driven economy today. In addition, in recent years, Tokelau has received significant increases in revenues from the fisheries undertaken within its Economic Exclusive Zone (EEZ). These revenues have enabled Tokelau to make more active decisions on its capital infrastructure development requirements.

Under Article 73 of the UN Charter, NZ has an obligation, as the administering power, to develop Tokelau's aspirations for self-government and self-determination. In 2016, to strengthen Tokelau's aspirations for self-determination, the Tokelau Parliament (General Fono) endorsed a policy supported by the NZ government, designed primarily to drive Tokelau's capital infrastructural program. The policy enables Tokelau to exercise its rights to determine its development priorities and NZ to determine its investment interests and contribution levels towards these development priorities. At the time, Tokelau identified *Connectivity* as the priority focus in transport and telecommunications. As such, the NZ government, where necessary, provides additional aid for these infrastructural development initiatives. Connectivity was identified as a priority focus as Tokelau has poor connections with the rest of the world. Regarding physical isolation, Tokelau lacks an airport, meaning the only way to travel to Tokelau is to fly to Samoa and take a ferry that takes between 26 and 30 hours one-way. Additionally, all imported items also have to be shipped in. Compounding the physical isolation, Tokelau also suffers from poor communications, relying heavily on satellite communications, which can be extremely patchy. For these reasons, Tokelau has sought to improve its connectivity; however, while significant

progress has been made in the telecommunications sector, the territory continues to be plagued by poor transportation and continued reliance on shipping for passenger travel.

5.1.1 Political Governance Structure: Government the Tokelauan Way

NZ appoints an Administrator of Tokelau, an NZ senior public servant based in Wellington NZ, who is primarily responsible for managing the constitutional relationship between NZ and Tokelau. However, while NZ provides budget support and an Administrator, much of the decision-making for Tokelau is done by Tokelauans.

Tokelau's written constitution clearly outlines its governance structure and functions. Its governance system recognises the role of the traditional village governance institution (Taupulega). The Taupulegas are viewed as the guardians of cultural authority on the land. Every three years, each village elects a Faipule (Village Head) and a Pulenuku (village Mayor) as leaders of the respective Taupulegas who oversee village activities. In the 1990s, the roles of the Faipules and Pulenukus were expanded. Specifically, the three Faipule and Pulenuku now form the six-member Council of Ongoing Government of Tokelau (Council), akin to the Executive branch of government, and by default, become Ministers of government with allocated portfolios for their three-year terms. Furthermore, the Faipules take turns each year to hold the title *Ulu O Tokelau*, effectively acting as the titular head of government, albeit without any powers to act unilaterally.

In addition to Council members, each village must select additional representatives to the Legislative branch (*General Fono*). The General Fono has law-making responsibilities and addresses matters of national importance. The General Fono has one representative member per 100 people based on the latest census and rounded to the nearest 100 inhabitants (*Constitution of Tokelau*, n.d.). Currently, there are 22 members of the General Fono.

The existing governance structure in Tokelau was established by New Zealand in the early 1990s and emanated from actions taken by the NZ Administrator, B. Absolum, in the 1980s to promote equality among the villages (Hoëm, 2021).

5.1.2 Government Public Services

The Tokelau government prioritises the well-being of all residents and households on the island through its social and employment policies delivered through community public services. This creates a situation for residents markedly different from those experienced in most countries.

- Unemployment is non-existent as the government provides remunerated employment opportunities for everyone within the public services or village workforce, ensuring all individuals have an income. To the best of my knowledge, in 2016, around 90% of the men partook in the village workforce and were paid between wages of \$2.80 - \$3.20 per hour (\$224

- \$256 fortnightly), contributing to total household income, on average \$28,150 per annum (*Statistics*, n.d.). This remuneration policy integrates the cultural context where individuals are remunerated for their roles within the village governance institution (Taupulega). As a result, however, private-sector employment opportunities are non-existent due to economic limitations such as tourism business-related opportunities, the lack of appropriate infrastructure for access (air services, etc.), and the unique nature of small and remote island communities.

- In addition, the government also provides a range of social welfare programs, including subsidised housing and utility grants for households, covering essential services like water, sanitation, and electricity. These initiatives aim to enhance residents' living standards and overall quality of life within the communities by ensuring they access vital resources and services necessary for their well-being.
- As with most countries, residents have access to education from early childhood to Year 13. The national curriculum is offered up to Year 11 with basic subjects like Maths, English, Science, etc., with additional transition courses and USP Foundation courses (University of South Pacific) available for Years 12 and 13 (*Department of Education*, n.d.). Notably, since the 1960s, the New Zealand government has implemented a scholarship scheme for the Tokelau Islands, enabling residents to pursue further studies abroad via government sponsorship. However, many who benefited from the scholarship scheme have remained overseas, resulting in a significant diaspora to New Zealand and Australia. Consequently, most island residents have had a secondary school education. Furthermore, the few individuals who return to Tokelau often have qualifications and training in sectors other than finance-oriented professions.
- Medical clinics are also established on each island to ensure that healthcare is accessible to everyone. These clinics provide primary healthcare services, including preventive care, treatment of minor illnesses and injuries, and routine check-ups. In addition, Tokelau facilitates transferring individuals needing critical medical assessments or surgery to New Zealand for specialised treatment. This helps to improve health outcomes, increase the chances of successful treatment, and enhance the overall quality of healthcare available to residents.
- The government's shipping service is heavily subsidised to ensure affordability and accessibility for residents, despite its sub-standard quality for passenger travel. By keeping transportation costs affordable, the government facilitates the movement of goods and supplies, providing access to necessary resources and essential commodities. These subsidies help mitigate the challenges of geographical isolation and limited resources and reflect the transportation difficulties in small and remote island communities, enabling residents to access essential services and maintain vital connections and access with the outside world.

The outcome is that via the variety of methods by which the Tokelauan government supports residents, the basic needs of Tokelauans are being met. They have paid employment that offers enough to survive,

housing, healthcare, education, and access to affordable resources and commodities. This contrasts with many countries where meeting the cost of living falls less on the state and more on the individual, including the ability to afford housing, healthcare, and basic utility costs.

5.1.3 Banking and Financial Services

The challenges posed by the geographical remoteness of Tokelau from the rest of the world, aggravated by the lack of quality telecommunications and information technology infrastructure, limit the island residents' access to modernised banking services and financial products.

Tokelauans have access to a minimal range of financial products. In terms of banking, the Tokelau Department of Finance (DoF) audits and oversees the Tokelau Savings Bank (TSB) and Tokelau Development Bank (TDB). These operate within the villages using village-based finance staff under the management and oversight of the Taupulega and village authorities in coordination with the DoF. The banking services on the island are limited to bare deposit and transactional withdrawal services. The lack of modern infrastructure means that the banking system on the island still relies on using passbooks introduced in the mid-1970s when the TSB (Tokelau Savings Bank) was established. As a result, the atolls continue to operate transactions on a cash basis only.

Regarding investment options for consumers and households, people can only deposit their savings in the banks in savings accounts. Account holders yield a fixed 3.5% p.a. interest revenue and are not required to pay any transactional fees or withholding tax obligations.

Regarding other financial services, residents can access a remittance system that enables residents to send money into and out of Tokelau with service fee charges regulated by the general fono. This service accounts for about 20 percent of annual financial transactions, as island residents constantly send money to Samoa to purchase personal goods and supplies unavailable within Tokelau.

The primary borrowing option available and easily accessible to the general population is the government's pay-day loan scheme, which requires the applicant to repay the entire amount within three months. Unlike typical day-to-day loans, which are associated with high interest charges, there are no interest charges for Tokelauans accessing these loans. In addition, the TDB (Tokelau Development Bank) provides a borrowing facility for small business loans available to a maximum of NZ\$10,000 at 4.75% per annum. The facility aims to encourage small business development within the communities. However, within the first decade since its inception in 2010, there was a low demand for this loan facility due to limited interest from Tokelauans in pursuing business opportunities or sustainable commercial activities. A possible explanation for the lack of interest is the nature of the social support Tokelauans experience, which provides all resident's needs, undermining the motivation to start private enterprises.

The lack of modern infrastructure has proven highly challenging in developing a more sophisticated financial infrastructure. For instance, efforts to implement a robust financial information management system based in the DoF's offices in Apia, Samoa, have been undermined by inconsistent and unreliable satellite links, frequently disrupting the connection with village-based finance offices. As a result, the department's efforts to improve financial and banking services across villages and sectors have been significantly hindered.

In addition, the influence of the Taupulega and village politics has posed additional challenges. For example, in 2016, during the implementation of its banking software for the Tokelau Savings Bank operations, the department aimed to ensure real-time banking transaction recordings to prevent errors. However, in one village, village authorities, including the Faipule, who also served as the Minister of Finance, obstructed these efforts, stating that the procedures were time-consuming and inconvenient for residents. In summary, Tokelau's relationship and dependency on New Zealand as the administrative power significantly influence how Tokelau sustains itself financially, thus giving people a sense of financial security, albeit based on a constant flow of external aid funding from New Zealand. Combined with a lack of financial services, residents are restricted to simple bank deposits or interest-free loans. As a result of poor communication infrastructure and interference from local authorities, there has been little demand for more significant investment or lending opportunities and limited economic development as a result.

An interesting consequence of the situation in Tokelau is that there have been limited opportunities for Tokelauans to gain financial experience or financial literacy. Combined with a traditional leadership model based on local village representatives and central government financial services that are geographically isolated from decision-makers in a different country, accessible only via a long boat ride, and connected via intermittent communications, there are limited opportunities for individuals and especially leaders in Tokelau to become financially capable. This highlights a rather interesting situation whereby poor financial literacy at the household level could well be problematic in terms of government decision-making, something we consider unlikely in most countries.

5.2 DISCUSSION

The majority of the studies within the existing literature on financial literacy and capability employed survey questionnaires to evaluate the people's knowledge of fundamental financial concepts essential to financial decision-making, such as inflation, risk diversification, interest compounding and basic numeracy (Hastings et al., 2013; Klapper & Lusardi, 2020). This standard methodology is commonly used to assess the respondent's levels of objective financial literacy (Lusardi & Mitchell, 2014; Allgood & Walstad, 2016).

Unfortunately, this dissertation could not use such a method due to transportation and access issues owing to the Covid-19 border restrictions. Therefore, I rely on my intimate knowledge of Tokelau and my personal experiences as a former senior public servant within the Tokelau Department of Finance for 20+ years to contextualise financial literacy and capability frameworks to Tokelau. If a financial literacy and capability survey were conducted in Tokelau, I expect the residents' financial literacy and capability levels would be low. The estimated low levels of financial literacy and capability can be attributed to several factors specific to the island context, remoteness, and isolation conducive to a basic infrastructure with limited basic banking and financial services.

In that regard, according to existing evidence in the literature, older individuals tend to have higher levels of financial literacy than younger age groups (Lusardi & Mitchell, 2014; Xiao et al., 2015). The initial increases in financial literacy can be attributed to accumulated knowledge and experience over time. As a result, the understanding of financial concepts, the ability to make informed financial decisions, and the experience of managing personal finances generally improve with age. In the case of Tokelau, it is reasonable to expect that this trend holds. This is because older people, particularly those in leadership institutions, have had more opportunities to engage with money matters, acquiring more practical knowledge. Furthermore, they may have encountered more financial challenges, such as managing limited resources, making financial decisions within the constraints of the island's economy, and adapting to the community's specific financial practices and norms. Moreover, Klapper and Lusardi (2020) suggest that financial literacy rates are higher for the 36 – 50 age group than any other age group. However, the research evidence also suggests that financial literacy in older people starts to decline, mostly at retirement age, and is likely influenced by health issues, diminishing confidence, and interest in money matters, including risk aversion, digital literacy, etc. In Tokelau, the retirement age is 65+, representing 6.7% of the population, which is relatively low compared to New Zealand at 15.9% (*New Zealand - Age Structure 2021*, n.d.).

Income and employment are other critical demographic factors. Typically, higher income levels and stable employment can positively influence financial literacy, as individuals may have more exposure to financial concepts through financial experiences and employment (Knoll & Houts, 2012; Disney & Gathergood, 2013). While income levels may be incomparable to other regional countries, it is reasonable to expect that individuals with higher incomes would also demonstrate higher financial literacy levels in the Tokelauan context. This finding in the literature would hold, particularly with those who reside and work at the national government office in Samoa.

Furthermore, a recurring finding in various research studies suggests that men tend to have higher levels of financial literacy than women (Atkinson & Messy, 2012). In Tokelau, this gender disparity can be attributed to societal factors, including traditional gender roles and men's involvement in public service and community work. For example, men have historically occupied leadership positions, granting them

greater exposure to financial matters related to community governance and decision-making. In addition, their consistent engagement in public service and community work provides more opportunities to develop financial knowledge and skills and gain more experience in financial matters than women. Consequently, it is reasonable to expect that men in Tokelau generally possess higher levels of financial literacy than women. However, in the villages, women traditionally manage household finances. This responsibility for women aligns with their traditional role in ensuring the overall financial well-being of the family and is consistent with the gender dynamics and division of labour within the Tokelauan culture. As such, considering women's roles as household financial managers while men are more involved in financial decision-making at the community level, it is ambiguous who would have higher financial literacy.

Regarding education, the residents of Tokelau have limited access to education within the island. Education and financial education specifically are crucial in developing financial literacy, equipping individuals with the knowledge and skills needed to make informed financial decisions (Lusardi & Mitchell, 2014). However, education on Tokelau is limited to secondary school learning. Furthermore, the absence of financial education programs, essential in enhancing people's understanding of financial concepts like budgeting, savings, and investment, would contribute to low levels of financial literacy and provide no opportunity to improve financial literacy for island residents.

Notably, Tokelau lacks opportunities to improve financial literacy through financial experiences (Frijns et al., 2014). The restricted availability of financial products and the inadequate quality of banking and financial services on the island compound the situation. Tokelau's inadequate infrastructure and financial systems hinder the development and improvement of financial services, restricting residents' access to various financial products and experiences. Consequently, their financial experiences are limited to basic savings and minimal use of uncomplicated debt, impairing their understanding of complex financial concepts like diversification and risk-return relationships.

Similarly, in the Tokelauan context, the effectiveness of financial socialisation is likely to be limited due to restricted financial literacy among socialisation agents, typically parents whose knowledge and experiences are confined to Tokelau's financial environment. Given the limited financial experiences beyond basic savings and simple debt products, improving financial literacy through financial socialisation in Tokelau may face challenges and have a limited impact (Grohmann et al., 2015).

Furthermore, cultural factors (Agarwalla et al., 2015) significantly influence financial management at Tokelau's individual and household levels. Tokelau's cultural practices and values, rooted in traditional communal living and resource-sharing, influence financial attitudes and behaviours. The small population and subsistence economy allow individuals to meet basic needs through traditional means and communal support, reducing reliance on financial resources and sophisticated financial knowledge.

Consequently, the importance of advanced financial knowledge, investment strategies, and complex banking services may be less pronounced in this context.

While we have every reason to expect that Tokelauan's financial literacy would be low based on prior findings and their application to the Tokelauan context, there is a question regarding the importance of financial literacy in this context. Several studies, as documented in Chapter 4, have highlighted the impact of low financial literacy on financial decision-making and outcomes. For instance, those with better financial literacy are better at assessing the costs and benefits of different debt products (Pak, 2018) and avoid making poor borrowing decisions, including over-indebtedness (Allgood & Walstad, 2016; Klapper & Lusardi, 2020). Likewise, financial literacy and capability are also valuable in relation to savings and investment decisions (Gerrans et al., 2022; Hastings et al., 2013); Abreu & Mendes, 2010; Klapper & Lusardi, 2020; Yamori & Ueyama, 2022). Individuals with higher financial literacy are likelier to make informed investment decisions and better comprehend the risks and returns associated with different investment options (Hastings et al., 2013). Conversely, less financially literate investors tend to make more financial mistakes (Christelis et al., 2010; Lusardi & Tufano, 2015).

However, the opportunities to make borrowing or investing decisions are limited within the context of Tokelau. Few debt products are available on the island, and even globally common things like mortgage debt do not exist in Tokelau. Although debt undertaking is prevalent in Tokelau, it is mainly limited to the government's "fees-free" pay-day loans scheme, allowing individuals to borrow up to three months of wages in advance. Compared to pay-day loans in other countries are hazardous, with high interest rates and strict terms and conditions. In contrast, the financial implications for the pay-day loan scheme in Tokelau are moderate and not disastrous.

Additionally, there are limited opportunities to invest. For example, the only savings and investment avenue accessible to Tokelau residents is depositing their money into savings accounts provided by the Tokelau Savings Bank (TSB) at a fixed interest rate. This significantly limits the need for financial literacy. For instance, this only involves familiarising oneself with the savings accounts' features, such as opening accounts, depositing funds, accessing their savings, and any associated fees or interest rates. Furthermore, due to the challenges posed by the island's remoteness and poor financial and communication infrastructure, there is limited access to capital markets. As a result, residents are unable to participate in more complex opportunities such as stock or bond markets or ETFs that would be available in markets globally.

Another factor that raises doubts about the necessity of financial literacy relates to the point raised by Jappelli and Padula (2013), who note that in countries with generous social security benefits, the incentives for consumers to save or invest are negligible, seriously undermining the importance of financial literacy. While financial literacy is associated with retirement planning and preparedness

(Clark et al., 2017; Lusardi & Mitchell, 2007; Bucher-Koenen & Lusardi, 2011), however, this may be less relevant in Tokelau, considering that the government provides full financial support for its residents beyond retirement age. These support systems are, in addition to old age pensions and other entitlements received for participatory roles in the community. Additionally, as a result, given the near complete social security system, supplemented by the ability to utilise subsistence living methods to acquire food even in the absence of financial resources, even poor financial decisions are unlikely to have the dire consequences typically seen in more developed countries.

While this suggests that financial literacy is of little importance in Tokelau, there are reasons to suggest it remains a critical skill set even in the absence of sophisticated financial decisions and the need to plan for retirement. Due to its governance system, Tokelau places considerable decision-making in the hands of the executive branch, comprised of six tribal leaders and the 16 members of the General Fono. Part of that decision-making relates to the '*Tokelau International Trust Fund*,'. The trust, with a reported capital base of NZ\$101.5M (30 June 2021), was formally established in 2000 with initial contributions from developed countries such as the United Kingdom, Australia, and New Zealand, keen to support Tokelau's aspirations for self-government. The Fund is governed by a Trust Deed, which outlines the purpose of the Fund as to "...*promote intergenerational growth and benefits for the people of Tokelau ...*" The Ulu O Tokelau, which typically rotates yearly, is the Government of Tokelau trustee and representative on the Trust Board. The fund has been subject to slow growth and low-risk strategies as the local decision-making at the General Fono and Council has primarily influenced its investment strategy.

Until now, the fund investments were primarily invested in term deposits within commercial banks in New Zealand (100% cash portfolio), generating low but sustainable returns. However, in 2022, General Fono supported the recommendation of the Board of Trustees for a new investment strategy with diversified portfolio investments – Cash 5%, Bonds 15%, and the rest (80%) in share ETFs. The transition from the previously existing 100% cash portfolio to the new investment strategy is anticipated to be fully implemented by 31 December 2023. The General Fono has also now supported an annual distribution to the Government of Tokelau, set at 3.5% of the capital base amount at the start of the year.

Against that backdrop, the importance of financial literacy within the governance institutions of Tokelau cannot be overstated. Elected leaders ought to have sufficient financial literacy and capability to understand the range of investment options within the capital markets and to effectively endorse investment strategies for the Trust Fund. Trust fund investment decisions will have a direct impact on the community's socio-economic development by ensuring adequate funds for community development, social welfare, and infrastructure projects. In addition, the government could consider developing investment initiatives similar to those offered by neighbouring Pacific countries, which

provide investment opportunities to the general population in the capital markets like Samoa (*Unit Trust of Samoa (UTOS)*, n.d.) and Fiji (*Investment | Unittrust Of Fiji*, n.d.). This can be useful as an alternative savings and investment option for the island residents of Tokelau.

Furthermore, as a small developing island nation, Tokelauans should be encouraged to shift their mindset onto personal growth and wealth development initiatives rather than continued reliance on external aid. Like every island nation in the region, Tokelau is an untouched paradise, enriched with natural beauty and tranquillity, calm, serene waters, and white sandy beaches, which are natural resources ripe for developing tourism industry. However, that requires significant priority investment into the critical infrastructure, such as air services transportation necessary to allow Tokelau to shift into this space, facilitating economic opportunities for the people and country. Arguably, the lack of such development has resulted partly from low financial literacy, which has prevented appropriate exploitation of Tokelau's financial resources, such as the Trust, to provide the necessary capital to fund such expansion.

5.2.1 Potential Implications and Limitations

Considering the small population size and governance traditions in Tokelau, the likely low levels of financial literacy and capability among the general population can significantly impact the financial decision-making processes of governance institutions. This is because island residents directly participate in and influence the decision-making functions of the government institutions.

As such, adequate levels of financial literacy and capability in financial management, planning, and budgeting are highly relevant at the governance institution levels in Tokelau. Knowledge of financial concepts enables leaders and village authorities to make informed decisions regarding resource allocation, prioritise development projects, and ensure efficient and transparent use of funds for the overall progress and well-being of the island.

Notably, the financial literacy levels in Tokelau are heavily influenced by the island's limited financial infrastructure, systems, and services, which shape its economic and financial landscape. As a result, several concepts related to financial literacy and its impact on decision-making, commonly discussed in literature worldwide, are irrelevant in the current Tokelau context. For instance, the importance of financial literacy and capability in investment decisions, particularly in capital markets, where specific knowledge and skills are required to understand portfolio diversification and the risks and returns of different investment options, are not currently relevant as these investments are not available in Tokelau (Abreu & Mendes, 2010; van Rooij et al., 2011; Hastings et al., 2013).

While this has been the case up until now due to the poor communications infrastructure, this is changing. The recent investment by the New Zealand government in the telecommunications

infrastructure of Tokelau through the S-Next submarine internet cable and private household subscriptions to the Starlink satellite network could potentially transform the landscape of banking and financial services in Tokelau. Access to robust communications may make investing in more sophisticated products possible. However, it may take years for Tokelauans to embrace these opportunities, especially if they are unaware of the possibilities or unfamiliar with how to make such investments. Furthermore, as stated above, the Department of Finance has made numerous attempts to implement systemic improvements within the villages; however, it has often been rejected or failed due to village political interferences and conflicting interests between the national government and the local institutions.

CONCLUSION

In Tokelau, the relevance of financial literacy significantly differs from that of other countries due to its unique social and economic context. Tokelau operates under a welfare state model, where the government provides a comprehensive support system to residents through various schemes, grants, and services, covering areas such as housing, healthcare, secure employment, and pensions, significantly reducing the need for advanced financial knowledge and skills.

Firstly, the prevalence of government support schemes and the limited unemployment rate in Tokelau negates individuals' need to have personal or retirement savings. Furthermore, the government's provisions ensure that residents can access essential resources and services irrespective of their financial acumen. Consequently, the significance of financial literacy is diminished in this context. Nevertheless, despite government-provided benefits, individuals need adequate financial literacy and the capability to make informed financial decisions. Tokelau's context offers opportunities for individuals to benefit from subsistence living and gradually increase their savings. This responsible financial behaviour would reflect sound money management and long-term financial planning, aligning with the literature's findings on the advantages of financial literacy in achieving financial security and well-being (Riitsalu & Pöder, 2016a).

Moreover, borrowing in Tokelau carries minimal consequences and is fee-free, further mitigating the need for in-depth financial literacy related to borrowing and debt management. This lenient borrowing environment reduces the importance of understanding complex financial instruments and interest rates commonly found in other countries.

In light of these factors, arguably, it is fair to conclude that the high levels of financial literacy and capability may not be as necessary or relevant for Tokelau in its current state. The unique context, combination of the welfare state model, subsistence living practices, and the reduced emphasis on personal savings and investments shape the financial landscape of Tokelau. Accordingly, financial literacy in Tokelau may be more necessary for basic financial management skills, such as budgeting, prudent spending, and understanding the available government support systems rather than complex financial products or investment strategies.

However, to the extent that Tokelau seriously pursues its political aspirations for self-government and self-determination, enhanced financial literacy and capability would be significantly crucial and relevant to its financial decision-making around inter-alia, capital infrastructure investments, planning and resource appropriations (budgeting), trust fund investment strategies, strategic planning, capital markets investments, private sector development for wealth creation opportunities and building financial resilience, which ultimately contributes to the sustainable economic well-being of individuals,

households, and country. In addition, it will empower people to shift their mindsets from aid dependency to building internal capacities for economic growth and financial well-being.

Finally, the existing literature shows that countries and governments globally have implemented policy interventions, such as financial education programs, to improve financial literacy, knowledge, behaviour, and outcomes. Investments in infrastructure open up multitudes of economic opportunities, including financial access, enabling residents to enhance their financial literacy through financial experiences. Therefore, Tokelau should prioritise financial education initiatives to develop financial literacy and capability. Financial education, experiences, and access are crucial determinants for improving financial literacy and capability despite the associated costs and risks.

A starting point for Tokelau in such initiatives is to consider the work conducted by Kempson (2009) for the OECD (Framework for the development of financial literacy baseline surveys: a first international comparative analysis). This framework can facilitate designing a specific survey for Tokelau targeted at measuring the financial literacy levels of its population. The results from such a survey would then assist in designing appropriate government interventions, both immediate and long-term, to address the gaps in financial literacy and capability on Tokelau.

This is particularly important for individuals and households in Tokelau, aligning with the country's long-held aspirations for self-determination. Financial literacy and capability can enhance knowledge and prevent poor investment decisions, missed opportunities, low returns, and potential financial losses. Moreover, improved financial experiences, literacy, and capability can benefit individuals within governance institutions, leading to better financial decision-making, budgeting, investment choices, and resource allocation for sustainable economic development. Therefore, policymakers in Tokelau should prioritise investing in financial literacy and capability for individuals in governance institutions.

APPENDIX 1: Primary Keywords

“Financial Literacy”, ”Financial Education”, “Financial Capability”, “Financial Knowledge”, “Financial Inclusion”, “Financial Behaviour”, “Financial Services”, “Financial System”, “Financial Attitude”, “Financial Socialisation”, “Financial Access”, “Financial Literacy Education”, “Financial Attitudes”, "Decision Making", "Financial Investment", "Financial Planning", "Financial Attitude", "Financial Socialisation", “Culture”, "Financial Market", "Financial Advice", “Demography”, "Economic Growth", "Financial Access", "Stock Market Participation", "Financial Decisions", "Financial Literacy Education", "Money Management", "Investment Decisions", "Financial Decision-making", "Financial Performance", "Financial Skills", "Financial Well-being"

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