Tides of Difference:

Financial Practices of Fishermen Households Across Region, Religion, Economic Status, and Technology

– a Behavioural Perspective.

- Across Regions
- Across Religions
- Across Economic Status
- Across Technology
- A Behavioural Perspective

AUTHORS

Dr. Sanu F

Dr. Biju Terrence

Kerala Fishing Industry Research Series – Vol-IV

TIDES OF DIFFERENCE

Financial Practices of Fishermen Households Across Region, Religion, Economic Status, and Technology: a Behavioural Perspective

Volume IV

Kerala Fishing Industry Research Series

Dr. Sanu F

Assistant Professor, PG & Research Department of Commerce
Fatima Mata National College (Autonomous), Kollam, Kerala

&

Dr. Biju Terrence

Professor & Head, Department of Commerce
School of Business Management and Legal Studies
University of Kerala, Thiruvananthapuram

Tides of Difference: Financial Practices of Fishermen Households Across Region, Religion, Economic Status, and Technology: a Behavioural Perspective.

(Kerala Fishing Industry Research Series)

Volume I - Waves of Change: Mechanisation and the Transformation of Kerala's Fishing Communities

Volume II - Tides of Trade: Problems and Prospects of the Seafood Processing Industry in Kerala

Volume III - Shores of Savings: Personal Financial Planning of Fisherwomen in Kerala (Present Volume)

Volume IV - Tides of Difference: Financial Practices of Fishermen Households Across Region, Religion, Economic Status, and Technology: a Behavioural Perspective

Volume V - Horizons of Hope: Sustainability, Climate Adaptation, and the Future of Kerala's Fisheries

---

Authors: Dr Sanu F, Dr. Biju Terrence

© 2026 All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means — electronic, mechanical, photocopying, recording, or otherwise — without the prior written permission of the publisher and authors, except in the case of brief quotations embodied in critical reviews and certain other non-commercial uses permitted by copyright law.

First Published: 2026

Prize: ₹500

ISBN: 978-93-47890-06-2 (P), 978-93-47890-07-9 (EB)

DoI: https://www.doi.org/10.37298/abpl978-81.44

Cover Design: AI

Category: Research Monograph

First published on: 13/08/2026

Published by:

Ambitious Books, Kerala | https://abplpublications.co.in/

Contents

About the Series vii

About This Volume viii

Authors' Note ix

Dedication x

Chapter 1

Setting the Scene: Kerala's Fisherfolk, Financial Practices, and the Behavioural Lens 1

1.1 Introduction 2

1.2 The Research Problem 3

1.3 Research Objectives and Hypotheses 4

1.4 The Sample 5

1.5 The Six Dimensions of Financial Practice 7

1.6 The Behavioural Perspective: Why It Matters 8

1.7 Structure of the Volume 9

1.8 Methodological Notes 9

Chapter 2

Behavioural Economics, Culture, and Financial Practices: A Review of the Literature 12

2.1 Introduction 13

2.2 Behavioural Economics and Financial Decision-Making 14

2.2.1 Foundations: Heuristics, Biases, and Prospect Theory 14

2.2.2 Present Bias and Savings Behaviour 15

2.2.3 Social Influences on Financial Behaviour 17

2.3 Geography, Regional Context, and Financial Behaviour 18

2.4 Religious Affiliation, Culture, and Financial Behaviour 20

2.5 Economic Status, Poverty, and Financial Behaviour 22

2.6 Technology, Capital, and Financial Behaviour 24

2.7 Financial Practices in Kerala's Fishing Communities: Prior Research 25

2.8 Theoretical Integration: A Behavioural Framework for Fishing Community Financial Practices 27

2.9 Summary 29

Chapter 3

The Aggregate Portrait: Financial Practices of Kerala's Fishermen Households 31

3.1 Introduction 32

3.2 Core Financial Practices 32

3.3 Savings Motivations: The Behavioural Hierarchy of Financial Goals ... 35

3.4 Sources of Credit: The Persistent Pull of Informal Finance 36

3.5 Sources of Information: The Bounded Informational World of Financial Decisions 38

3.6 Obstructions to Savings: The Structural Behavioural Traps 39

3.7 Savings Inducing Factors: What Catalyses Savings Behaviour 40

3.8 The Aggregate Behavioural Portrait: Summary 41

Chapter 4

The Geography of Financial Behaviour: Regional Variations in Financial Practices 42

4.1 Introduction 43

4.2 Regional Differences in Core Financial Practices 44

4.3 Regional Differences in Savings Motives 48

4.4 Regional Differences in Savings Barriers 50

4.5 Regional Differences in Savings Inducing Factors 51

4.6 Regional Differences in Sources of Information 53

4.7 Regional Differences in Sources of Credit 54

4.8 Regional Financial Profiles: A Synthesis 56

4.9 Detailed Regional Behavioural Analysis 57

Chapter 5

Faith, Culture, and Financial Behaviour: Religious Affiliation and Financial Practices 59

5.1 Introduction 60

5.2 Religious Differences in Core Financial Practices 61

5.3 Religious Differences in Savings Motives 64

5.4 Religious Differences in Savings Barriers 66

5.5 Religious Differences in Savings Inducing Factors 68

5.6 Religious Differences in Information Sources 69

5.7 Religious Differences in Sources of Credit 71
5.8 Implications of the Religious Dimension 73
5.9 The Institutional Mediation of Religious Financial Behaviour 74
Chapter 6
Poverty's Paradoxes: Economic Status and Financial Behaviour 76
6.1 Introduction 77
6.2 Economic Status and Core Financial Practices 78
6.3 Economic Status and Savings Motives 82
6.4 Economic Status and Savings Barriers 84
6.5 Economic Status and Savings Inducing Factors 86
6.6 Economic Status and Information Sources 87
6.7 Economic Status and Sources of Credit 89
6.8 Policy Implications of the Economic Status Dimension 92
6.9 Operationalising the Paradox: Design Principles for Poverty-Responsive Finance 92
Chapter 7
Technology, Capital, and Thrift: Boat Type and Financial Behaviour 95
7.1 Introduction 96
7.2 Boat Type and Core Financial Practices 97
7.3 Boat Type and Savings Motives 100
7.4 Boat Type and Savings Barriers 102
7.5 Boat Type and Savings Inducing Factors 104
7.6 Boat Type and Information Sources 105
7.7 Boat Type and Sources of Credit 106
7.8 Implications of the Technological Dimension 109
7.9 Technology as a Financial Behaviour Lever: Policy Design Implications 109
Chapter 8
Convergences and Contrasts: A Cross-Dimensional Behavioural Synthesis . 112
8.1 Introduction 113
8.2 Cross-Dimensional Summary 113
8.3 Cross-Cutting Behavioural Themes 115

8.3.1 The Survival Discipline Paradox — Consistent Across All Dimensions 115
8.3.2 The Trust-Access Paradox — Structurally Persistent 116
8.3.3 Informal Credit's Structural Grip 116
8.3.4 The Digital Information Vulnerability 117
8.4 A Behavioural Typology of Kerala's Fishing Households 117
8.5 Hypothesis Summary 119
8.6 Limitations and Directions for Refinement 122
Chapter 9
Casting the Net Wider: Policy Recommendations and Future Directions 124
9.1 Introduction 125
9.2 Policy Recommendations Matrix 125
9.3 Cross-Cutting Behavioural Policy Principles 127
9.3.1 Design for the Irregular Income Cycle 127
9.3.2 Harness the Survival Discipline Paradox 128
9.3.3 Bridge the Trust-Access Gap 128
9.3.4 Leverage Religious and Community Infrastructure 129
9.3.5 Address Health Expenditure as a Systemic Savings Barrier 129
9.3.6 Regulate Digital Financial Information Environments 129
9.4 Directions for Future Research 130
9.5 Concluding Reflections 131
References 133
Appendix A: Summary of Research Instrument 139
A.1 Overview of the Survey Questionnaire 139
A.2 Sampling Methodology 140
A.3 Data Analysis Approach 141
Appendix B: Comparative Descriptive Statistics by Demographic Group ... 142
B.1 Core Financial Practice Means by Region 142
B.2 Core Financial Practice Means by Religious Affiliation 143
B.3 Core Financial Practice Means by Economic Status 144
B.4 Summary Statistics: Savings Motives by All Demographic Groups ... 145
B.5 Index of Financial Inclusion Indicators by Demographic Sub-Group . 145

— About the Series —

The Kerala Fishing Industry Research Series is a multi-volume academic publication dedicated to the empirical study of fishing communities along Kerala's coastline. Each volume draws on doctoral and post-doctoral field research, primary surveys, and mixed-method analyses rooted in behavioural, sociological, and economic frameworks. The series examines the economic lives, financial practices, behavioural orientations, social structures, and developmental trajectories of Kerala's marine fisherfolk — a community that is simultaneously central to the state's food economy and persistently marginalised in its development discourse.

Volume I: Waves of Change (February 2026) introduced the foundational landscape of Kerala's fishing economy. Volume II: Tides of Trade examined the seafood processing sector with a focus on women processors. Volume III: Shores of Savings explored the financial planning behaviours of fisherwomen households. The present volume, Tides of Difference, addresses a central empirical question: how do the financial practices of fishermen households vary systematically across the demographic axes of region, religion, economic status, and fishing technology — and what do these variations reveal about the behavioural underpinnings of financial decision-making in a traditional livelihood sector?

— About This Volume —

This book is rooted in doctoral field research covering 474 fishermen households across Kerala's coastal districts, with primary data drawn from Thiruvananthapuram (South), Alappuzha (Central), and Kozhikode (North). The survey employed structured questionnaires administered through trained community enumerators, and all comparative analyses were conducted using non-parametric Kruskal-Wallis H tests — the appropriate choice for ordinal Likert-scale data with heterogeneous distributions across three or more groups.

The findings presented here correspond exclusively to the examination of differences in financial practices across demographic categories — the descriptive and analytical bedrock on which more complex behavioural modelling necessarily rests. The patterns documented — the geography of thrift, the faith dimensions of credit behaviour, the economic paradoxes of poverty, and the technological stratification of financial planning — are not merely statistical observations. They are windows into the behavioural worlds of communities whose financial decisions are shaped by forces far more complex than income alone.

— Authors' Note —

The impetus for this volume emerges from a paradox that has long preoccupied scholars of Kerala's development story. Kerala has achieved human development indicators that rival middle-income nations, yet within its coastal belt, a community that provides both food security and cultural identity to the state continues to live in conditions of chronic economic vulnerability. Approximately 60 per cent of Kerala's marine fisherfolk families remain below the poverty line even as the state's Human Development Index stands among the highest in India.

What conventional poverty analyses have missed is that the financial behaviour of fishing households is not simply a product of income deficiency. It is also shaped by where they live along Kerala's coast, which faith community they belong to, how deep their economic deprivation runs, and what kind of fishing vessel they operate. These demographic axes create systematically different financial worlds and, beneath those worlds, different behavioural orientations — different attitudes towards risk, different temporal preferences in saving and spending, different social norms around debt, different heuristics for navigating financial decisions under uncertainty — within what outsiders might homogenise as 'the fishing community'. This volume charts those differences empirically and with granularity.

Dr Sanu F & Biju T

Kollam / Thiruvananthapuram, 2025

— Dedication —

To the fishermen of Kerala's coast —

who navigate uncertainty with tools that no textbook has yet fully described,

and whose daily economic choices are acts of courage as much as calculation.

Chapter 1

Setting the Scene: Kerala's Fisherfolk, Financial Practices, and the Behavioural Lens

1.1 Introduction 2

1.2 The Research Problem 3

1.3 Research Objectives and Hypotheses 4

1.4 The Sample 5

1.5 The Six Dimensions of Financial Practice 7

1.6 The Behavioural Perspective: Why It Matters 8

1.7 Structure of the Volume 9

1.8 Methodological Notes 9

1.1 Introduction

On any given morning along the Kerala coast — from the rock-sheltered coves of Vizhinjam in Thiruvananthapuram to the backwater-edged harbours of Alappuzha and the open-sea anchorages of Kozhikode — fishermen return from the sea carrying not merely fish but also the financial consequences of everything that happened while they were away. Catches that vary with weather and season, fuel costs that fluctuate with global oil markets, and market prices that shift before the boat reaches shore — these are the elemental financial uncertainties that define the economic life of Kerala's marine fisherfolk.

These uncertainties are not merely economic. They are behavioural. They shape how fishing households think about risk, time, and money. They determine whether a windfall catch is saved or spent, whether a loan from a moneylender is taken or refused, whether a child's education fund is started or perpetually deferred. The financial practices of fishing households are, in the deepest sense, behavioural practices — products of cognitive orientations, social norms, cultural values, and lived experiences accumulated across generations of navigating an uncertain livelihood environment.

Kerala's marine fisheries sector contributes approximately 3 per cent to the Gross State Domestic Product and provides direct employment to over 800,000 people in capture and allied activities. Behind these aggregate figures lie 222 fishing villages distributed across nine coastal districts, inhabited by communities internally differentiated by geography, faith, material condition, and technology. Understanding the financial practices of these households requires acknowledging and empirically mapping these

internal differences. The present volume undertakes precisely that mapping, tracing the contours of behavioural financial difference across four demographic axes: region, religion, economic status, and fishing vessel type.

> *Despite Kerala's impressive Human Development Index of 0.782 (2021), approximately 60% of marine fishermen families continue to live below the poverty line — a stark paradox that underscores the urgency of community-specific, behaviourally sensitive research and policy design.*

The behavioural perspective adopted throughout this volume is both a conceptual orientation and an analytical posture. It holds that financial practices are not determined by income constraints alone but co-determined by psychological tendencies, social influences, cultural frameworks, and the heuristics that individuals use to navigate financial decisions under uncertainty. When fishermen in South Kerala consult extensively before taking loans, that is a behavioural pattern shaped by culture and lived experience. When fishermen in North Kerala save habitually regardless of immediate income, that is a behavioural disposition with deep social roots. When households in utter poverty maintain emergency funds that better-off households neglect, that is a behavioural adaptation to existential necessity. This volume names and examines these patterns, even as it confines itself strictly to the demographic dimension of the analysis.

1.2 The Research Problem

Kerala's fishing communities present a complex financial landscape that resists simple characterisation. They are neither uniformly imprudent nor uniformly prudent; neither uniformly excluded from

formal finance nor uniformly embedded within it. What they are, this volume argues, is internally differentiated — structured into distinct financial sub-worlds by the demographic characteristics of region, religion, economic status, and technology.

Previous research on Kerala's fisherfolk has documented the financial vulnerability of the community in aggregate terms: high moneylender dependence, inadequate savings, limited formal credit access, and persistent debt traps (Parappurathu et al., 2019; Kurien, 2000; Shyam et al., 2017). What this research has not adequately done is to map the internal variation in these patterns — to ask not simply whether fishing households have poor financial practices but which fishing households, of what region, religion, economic status, and technological category, have what kinds of financial practices, and with what behavioural logic.

This gap has direct policy consequences. Financial inclusion programmes designed for a homogeneous 'fishing community' inevitably miss the mark for large segments of that community. A savings product calibrated for the northern coastal belt's habit-driven savings culture may be irrelevant to the debt-driven priorities of the southern belt. A financial literacy programme designed for Christian fishermen's consultative decision-making may not resonate with Hindu fishermen's stronger self-reliance orientation. Mapping the differences is not an academic luxury — it is a prerequisite for effective, behaviourally calibrated intervention.

1.3 Research Objectives and Hypotheses

This volume addresses the following primary research objective drawn from the doctoral research that underpins it:

> ***Primary Objective: To examine the differences in financial practices and related financial aspects of fishermen households across various demographic categories including regional variations, religious differences, technological categories, and economic status distinctions.***

The objective is operationalised through four major hypotheses, each subdivided into six sub-hypotheses corresponding to the six financial practice dimensions examined:

> ***H1: Financial practices, savings motives, credit sources, savings obstacles, savings inducing factors, and information sources vary significantly by region. H2: The same dimensions vary significantly by religious affiliation. H3: The same dimensions vary significantly by type of fishing boat. H4: The same dimensions vary significantly by economic status.***

Each hypothesis is tested at $p < .05$ using the Kruskal-Wallis H test — the appropriate non-parametric equivalent of one-way ANOVA for ordinal Likert-scale data across three or more groups. Results are reported as mean ranks, H-statistics, degrees of freedom, and significance levels. The behavioural interpretation of these statistical patterns forms the substantive contribution of each chapter.

1.4 The Sample

Data were collected from 474 fishermen households across three strategically selected coastal districts: Thiruvananthapuram (South, n=163), Alappuzha (Central, n=144), and Kozhikode (North,

n=166). Sampling combined purposive and quota techniques to ensure proportionate representation across regional, religious, economic, and technological categories. The data collection process employed a community-embedded enumeration strategy, with trained student enumerators from fishing households serving as data collectors — a methodological choice that significantly improved response rates and data authenticity.

Table 1.1: Demographic Profile of the Sample (N = 474)

Demographic Variable	Category	N	Percent (%)
Region	South (Thiruvananthapuram)	163	34.4
	Central (Alappuzha)	144	30.4
	North (Kozhikode)	166	35.0
	Total	**474**	**100.0**
Religion	Hindu	110	23.2
	Christian	207	43.7
	Muslim	156	32.9
	Total	**474**	**100.0**
Economic Status	Utter Poverty – Yellow Card (AAY)	79	16.7
	Below Poverty Line – Pink Card	337	71.1
	Above Poverty Line – Blue Card	50	10.5
	Affluent – White Card	8	1.7
	Total	**474**	**100.0**
	Mechanised Boat	84	17.7

Demographic Variable	Category	N	Percent (%)
Type of Fishing Vessel	Motorised Boat	311	65.6
	Traditional Boat	79	16.7
	Total	**474**	**100.0**

Source: Primary Data

The demographic composition reveals several features that contextualise the analysis throughout this volume. Christians form the largest religious group (43.7%), followed by Muslims (32.9%) and Hindus (23.2%), approximating the actual religious composition of Kerala's marine fishing communities. An overwhelming 87.8% of the sample falls within poverty categories, underscoring the economic vulnerability that contextualises all financial behaviour documented here. Motorised boats dominate at 65.6%, reflecting ongoing but uneven modernisation of Kerala's fishing fleet.

1.5 The Six Dimensions of Financial Practice

Financial practices, as operationalised in this study, encompass six behavioural dimensions. The first — core financial practices — covers sixteen indicators of day-to-day financial management, including savings regularity, debt management, institutional trust, and investment behaviour, all measured on five-point Likert scales. The second dimension — savings motivations — captures the underlying purposes driving savings behaviour. The third — sources of credit — maps the landscape of borrowing across formal and informal channels. The fourth — sources of information — examines the informational inputs into financial decisions. The fifth

— obstructions to savings — identifies the structural and behavioural barriers that prevent savings accumulation. The sixth — savings inducing factors — captures the conditions and incentives that catalyse savings behaviour.

Together, these six dimensions provide a portrait of financial behaviour substantially richer than any single indicator. Their demographic variation — documented in Chapters 3 through 6 — reveals the structured diversity of financial life within Kerala's fishing communities and illuminates the behavioural mechanisms that produce that diversity.

1.6 The Behavioural Perspective: Why It Matters

The adoption of a behavioural perspective in this volume reflects a substantive claim: that financial practices in traditional livelihood communities cannot be adequately explained by income and access constraints alone, and that psychological orientations, social norms, cultural frameworks, and contextually shaped heuristics are constitutive elements of financial behaviour. Behavioural economics has established that individuals consistently deviate from rational-choice predictions in systematic, predictable ways. Loss aversion makes people more sensitive to potential losses than equivalent gains. Status quo bias inclines people to stick with existing arrangements. Herding behaviour leads individuals to follow community peers in financial decisions. Anchoring causes past experiences to exert disproportionate influence on current choices.

These tendencies are not absent in fishing communities — they are amplified by the high-uncertainty, low-resource environments in which fisherfolk operate. The demographic patterns documented in

this volume — the fact that northern fishermen save differently from southern fishermen, that Hindu households maintain emergency funds differently from Christian households, that utter-poverty households display savings orientations that contradict rational-choice predictions — are all, at one level, behavioural phenomena. They reflect the interaction of demographic context with psychological tendencies and social norms shaped by livelihood histories. Mapping these patterns is the first, necessary step towards understanding the full behavioural architecture of financial decision-making in Kerala's fishing communities.

1.7 Structure of the Volume

Chapter 2 presents the aggregate financial practices across all six dimensions. Chapter 3 examines regional variation in depth. Chapter 4 analyses religious variation with full statistical tables and behavioural interpretation. Chapter 5 investigates the economic status dimension, with particular attention to the paradoxical financial discipline of utter poverty households. Chapter 6 explores how fishing technology shapes financial behaviour. Chapter 7 synthesises findings into a cross-dimensional analysis and a behavioural typology. Chapter 8 translates findings into policy recommendations and future research directions.

1.8 Methodological Notes

The Kruskal-Wallis H test was selected for all comparative analyses in this study because of its suitability for ordinal Likert-scale data across three or more independent groups. Unlike one-way ANOVA, the Kruskal-Wallis test does not assume normality of the underlying distribution or homogeneity of variances — assumptions that are routinely violated by Likert-scale data in behavioural research. The

test operates on ranked values rather than raw scores, making it robust to the skewed distributions and ceiling effects that characterise financial practice data in communities with strong social norms around specific financial behaviours. Throughout this volume, mean ranks are reported as the primary group-level descriptive statistic; H-statistics with degrees of freedom and p-values are reported as the primary inferential statistics. A p-value of .05 is used as the threshold for statistical significance, and significant results are marked with [sig] while non-significant results are marked with [ns] in the summary tables.

The primary data were collected during 2022–2023 through a structured questionnaire administered in Malayalam by trained enumerators. The questionnaire covered six financial practice dimensions — core financial practices (16 indicators), savings motives (8 items), sources of credit (10–11 items), information sources (5 items), savings barriers (7 items), and savings inducing factors (5 items) — all measured on five-point Likert scales anchored at 1 (Never/Strongly Disagree) and 5 (Always/Strongly Agree). The questionnaire was pre-tested with 30 fishing households not included in the main sample and revised to improve clarity of item wording and cultural appropriateness. Inter-rater reliability for questionnaire administration was established through regular supervisory visits and enumerator calibration sessions. Missing data were minimal (less than 1% across all items) and were addressed through item-wise exclusion in the Kruskal-Wallis analyses.

The ethical dimensions of research with fishing communities deserve explicit acknowledgement. Fishing communities are both economically vulnerable and socially cohesive — characteristics

that create both ethical responsibilities and logistical challenges for research. The research team obtained informed consent from all participating households, assured confidentiality of individual responses, and shared preliminary findings with community representatives before publication. The study did not directly observe financial transactions but relied on self-reported financial practices, introducing the possibility of social desirability bias — the tendency for respondents to report behaviours that conform to perceived social expectations. The direction of social desirability bias in financial practice research is typically towards over-reporting of socially valued behaviours (saving, avoiding moneylenders) and under-reporting of stigmatised behaviours (not repaying loans). The absolute levels of financial practice reported in this study should be interpreted with this possibility in mind, though demographic comparisons are less affected by uniform social desirability bias than absolute level estimates.

Chapter 2

Behavioural Economics, Culture, and Financial Practices: A Review of the Literature

2.1 Introduction 13

2.2 Behavioural Economics and Financial Decision-Making 14

2.2.1 Foundations: Heuristics, Biases, and Prospect Theory 14

2.2.2 Present Bias and Savings Behaviour 15

2.2.3 Social Influences on Financial Behaviour 17

2.3 Geography, Regional Context, and Financial Behaviour 18

2.4 Religious Affiliation, Culture, and Financial Behaviour 20

2.5 Economic Status, Poverty, and Financial Behaviour 22

2.6 Technology, Capital, and Financial Behaviour 24

2.7 Financial Practices in Kerala's Fishing Communities: Prior Research 25

2.8 Theoretical Integration: A Behavioural Framework for Fishing Community Financial Practices 27

2.9 Summary 29

2.1 Introduction

The emergence of behavioural economics as a sub-discipline of economics has fundamentally transformed how scholars understand financial decision-making in marginalised communities. Beginning with Kahneman and Tversky's (1979) foundational work on Prospect Theory — which demonstrated that individuals systematically deviate from expected utility maximisation in their responses to gains and losses — and extending through decades of experimental and field-based research, behavioural economics has established that psychological tendencies, social norms, and environmental contexts are constitutive rather than incidental elements of financial behaviour. This chapter reviews the theoretical and empirical literature that informs the analytical framework adopted in this volume, drawing on behavioural economics, the sociology of finance, the economics of religion, and the specific literature on fishing community financial practices in South and Southeast Asia.

The review is organised around the four demographic dimensions that structure the empirical analysis of this volume: region and geography, religious affiliation, economic status, and technology. For each dimension, the review traces the theoretical mechanisms through which the dimension influences financial behaviour and the empirical evidence that has documented those influences in comparable settings. The review concludes with a synthesis of the behavioural economic framework that integrates these multiple influences into a coherent analytical perspective on financial practices in traditional livelihood communities.

2.2 Behavioural Economics and Financial Decision-Making

2.2.1 Foundations: Heuristics, Biases, and Prospect Theory

The standard neo-classical economic model of financial behaviour assumes that economic agents are rational, self-interested, and fully informed — that they maximise expected utility, discount future payoffs at a constant rate, and make decisions that are consistent and independent of contextual framing. Four decades of empirical research have systematically demonstrated that these assumptions fail to describe actual human behaviour, including in domains as fundamental as saving, borrowing, and investment. Tversky and Kahneman (1974) were among the first to document the systematic heuristics — availability, representativeness, and anchoring — that lead individuals to make predictable errors in probability judgments that violate the assumptions of the rational model. Their subsequent development of Prospect Theory (1979) provided a formal theoretical framework that replaces expected utility with a value function that is concave in gains, convex in losses, and steeper in the loss domain than in the gain domain — capturing the empirically robust finding that losses loom larger than equivalent gains for most people most of the time.

The implications of Prospect Theory for financial behaviour are profound. Loss aversion — the tendency to weight potential losses more heavily than equivalent gains — has been documented in savings behaviour (where the potential loss of committed savings creates anxiety that reduces voluntary saving), credit behaviour (where the fear of default generates conservative borrowing even when credit would be economically beneficial), and investment behaviour (where the emotional impact of portfolio losses leads to

premature selling). For fishing communities operating with thin financial margins, where any financial loss can have catastrophic consequences, loss aversion is likely to be particularly intense — creating strong risk-avoidance tendencies that may manifest as conservatism in credit behaviour and a preference for liquid savings over committed long-term savings instruments.

Thaler's (1985) concept of mental accounting adds another dimension to the behavioural analysis of financial practices. Mental accounting describes the tendency of individuals to categorise income and expenditure into separate cognitive accounts — a 'home repair fund', a 'children's education account', a 'daily expenditure budget' — and to treat transfers between these accounts as psychologically costly even when they are financially costless. For fishing households, mental accounting helps explain the simultaneity of high-rate borrowing and low-return saving that standard economic theory finds paradoxical: the savings 'account' and the debt 'account' are maintained as separate mental categories, and the possibility of repaying debt with accumulated savings is not cognitively obvious without financial literacy intervention.

2.2.2 Present Bias and Savings Behaviour

One of the most robustly documented behavioural phenomena in the economics of financial decision-making is present bias — the tendency to give disproportionate weight to immediate rewards relative to future rewards, in a way that produces time-inconsistent preferences. Individuals who are present-biased prefer a smaller immediate payoff over a larger delayed payoff even when, for a distant future comparison, they prefer the larger delayed payoff. In practical terms, this means that people who genuinely intend to save

for the future consistently fail to follow through on this intention when the moment of decision arrives, because the immediate temptation to consume displaces the future-oriented savings intention.

Present bias has particular relevance for understanding savings behaviour in fishing communities. The irregular income cycle of fishing — with periods of high income during good fishing seasons followed by periods of low income during monsoon closures or lean catch periods — creates a structural context in which the temptation to consume windfall income during high-catch periods is behaviorally powerful. The fishing household that knows it should save part of today's bumper catch for the lean season ahead, but finds itself consuming most of the windfall on household needs and social obligations, is experiencing present bias in its most economically consequential form. Ashraf, Karlan, and Yin (2006) demonstrated in a Philippine banking context that savings commitment products — which allow individuals to voluntarily restrict their access to savings for a defined period — can significantly increase savings rates among present-biased individuals by providing a pre-commitment device against future self that removes the temptation opportunity.

The practical implication for the design of savings products for fishing communities is significant: conventional savings accounts, which allow unlimited withdrawal at any time, provide no protection against present bias. Savings products that incorporate commitment features — restricted access during lean seasons, or goal-linked savings with early withdrawal penalties — would be more effective for the segments of the fishing population that are most susceptible to present bias. The demographic variation in savings behaviour

documented in this volume — particularly the contrast between the North's habit-driven savings culture (less susceptible to present bias because the savings norm substitutes for individual willpower) and the South's opportunity-driven savings behaviour (more susceptible to present bias in the absence of strong savings norms) — suggests that commitment product design would be most valuable in southern coastal belt communities.

2.2.3 Social Influences on Financial Behaviour

The social dimensions of financial behaviour have been extensively documented across multiple disciplinary traditions. In sociology, DiMaggio and Powell (1983) demonstrated that institutional isomorphism — the tendency for organisations and individuals to adopt practices that conform to their institutional environment — shapes financial behaviour at the community level. In behavioural economics, Shiller (2019) and others have documented the role of social proof — the tendency to look to others in one's reference group for cues about appropriate behaviour — in driving financial decisions from savings rates to investment choices. In the anthropology of money, Zelizer (1994) demonstrated that money is not a fungible medium of exchange but a culturally specific object whose meaning and use are governed by social norms that vary across communities and contexts.

For fishing communities in Kerala, the social dimensions of financial behaviour are particularly salient. Financial decisions — whether to save, how much to borrow, from whom to seek credit, and for what purposes — are made not in private but in social contexts where community norms, religious expectations, and family obligations actively constrain the range of acceptable

choices. The documented pattern of high consultation before financial decisions (documented across all demographic groups in this study, but particularly among Christian households) reflects the social embeddedness of financial decision-making in a community where the consequences of bad financial decisions extend beyond the individual household to affect the social standing and community relationships of the entire family.

2.3 Geography, Regional Context, and Financial Behaviour

The influence of geographic context on financial behaviour has been documented in a diverse range of settings. At the macro-level, Hofstede's (2001, 2011) dimensions of cultural variation — including uncertainty avoidance, individualism-collectivism, and long-term orientation — have been shown to correlate with financial behaviours ranging from savings rates to insurance purchase at the national level. At the regional level within countries, Guiso, Sapienza, and Zingales (2006) demonstrated that regional culture — measured by trust, civic capital, and economic attitudes — significantly predicts household financial behaviour in Italy, with regions of high civic capital showing higher financial market participation and lower credit costs. At the local level, Dupas and Robinson (2013) and Field et al. (2013) have documented how local financial infrastructure — the presence and accessibility of banks, cooperatives, and mobile banking — shapes the financial behaviour of households that are ostensibly similar in income and other observable characteristics.

In the Indian context, the regional variation in financial behaviour is extensively documented at the state level but much less so at the sub-state, district, or community level. The National Family Health

Survey and the All India Debt and Investment Survey document significant state-level variation in savings rates, credit utilisation, and formal financial inclusion, but do not provide the community-level granularity necessary to understand the within-state variation that this study documents for Kerala's fishing communities. The present study contributes to this literature by providing sub-district level evidence of regional financial behaviour variation within a single occupational community — variation that is substantial enough to warrant differentiated policy responses but that would be invisible to analyses conducted at the state or district level.

The ecological dimensions of regional variation in fishing community financial behaviour deserve specific attention. Fishing ecology — the type of fish targeted, the fishing season, the distance from shore, the technology used, and the market structure for fish landing — varies significantly across Kerala's three coastal zones. The deep-sea fishing ecology of North Kerala, the backwater and near-shore ecology of Central Kerala, and the rocky near-shore ecology of South Kerala create fundamentally different income patterns, risk exposures, and livelihood rhythms for fishing households in each region. These ecological differences are not merely background context but active determinants of the financial behaviour patterns documented in this study: the North's savings culture reflects the higher and more regular income of deep-sea mechanised fishing; the South's debt-driven savings motivation reflects the more volatile income and higher credit dependency of rocky near-shore fishing.

2.4 Religious Affiliation, Culture, and Financial Behaviour

The relationship between religious affiliation and economic behaviour has a long intellectual history, beginning with Weber's (2002/1905) thesis that Protestant values — particularly the concept of the 'calling' and the valorisation of thrift, diligence, and rational economic conduct — provided the cultural foundation for the development of capitalism. While Weber's specific historical argument about Protestantism and capitalism has been extensively critiqued and revised, the broader claim that religious values shape economic behaviour has been supported by a substantial body of empirical evidence across diverse religious traditions and cultural contexts.

Iannaccone (1998) provided one of the first systematic economic treatments of religion, arguing that religious participation generates social capital — networks of trust, reciprocal obligation, and information sharing — that has significant economic consequences. Guiso, Sapienza, and Zingales (2003) empirically demonstrated, using World Values Survey data, that religious beliefs are associated with economic attitudes including trust, attitudes toward legal institutions, and beliefs about the market economy in ways that differ systematically across major world religions. Renneboog and Spaenjers (2012) demonstrated, using Dutch household data, that religious affiliation predicts savings behaviour, risk taking, and financial market participation — with Protestant households showing higher savings rates and greater financial market participation than Catholic households.

The Islamic dimension of financial behaviour has attracted particular attention in recent years, driven by the rapid growth of

Islamic finance as a global industry and by the growing body of evidence that Islamic financial principles — including the prohibition of riba (interest), the requirement of asset-backing for financial transactions, and the emphasis on risk-sharing rather than risk-transfer — generate distinctive financial behaviours among Muslim populations even in contexts where formal Islamic financial products are not widely available. Iqbal and Mirakhor (2011) provide a comprehensive account of the theoretical foundations of Islamic finance and its behavioural implications. Khan (2010) documents how Islamic principles moderate credit behaviour among Muslim households in mixed-religion settings, reducing reliance on interest-bearing credit even when formal halal alternatives are not available. The data from this study — showing selectively lower moneylender utilisation among Muslim fishing households — provides partial evidence for this moderation effect in the Kerala coastal context.

The economics of religion in the Indian context has been explored by several scholars. Iyer (2002) demonstrated that religious affiliation significantly predicts demographic behaviour in south India. Basu and De (2020) documented differences in savings behaviour and financial market participation across Hindu, Muslim, and Christian households in India using National Sample Survey data, finding that Hindu households show higher formal savings rates and Christian households show higher formal credit utilisation — patterns broadly consistent with the findings of this study. The contribution of this volume to this literature is the specific fishing community context, which allows the religious dimension of financial behaviour to be observed in a controlled occupational

setting where income, ecology, and technology are similar across religious groups, reducing confounding.

2.5 Economic Status, Poverty, and Financial Behaviour

The relationship between poverty and financial behaviour has been transformed conceptually by the behavioural economics of scarcity. The traditional view — that poverty produces poor financial behaviour through income constraints alone — has been replaced by a more complex account in which poverty creates specific cognitive and behavioural states that both impair and enhance financial management in different domains. Mullainathan and Shafir (2013) provide the most comprehensive account of this dual effect in their 'Scarcity' framework. Scarcity — the subjective experience of having too little — creates a 'bandwidth' effect in which cognitive resources are diverted to the management of the scarce resource, improving performance in domains directly relevant to the scarcity while degrading performance in domains that require cognitive resources beyond the narrowed focus. Poor households, in this framework, are cognitively tunnelled by financial scarcity: they are better at managing immediate financial emergencies and worse at planning for long-term financial goals.

The prediction of the scarcity framework that is most directly tested by the data in this volume is that the most economically vulnerable households will show heightened financial attention in precautionary domains — emergency funds, regular saving, and institutional trust — precisely because their economic vulnerability makes these domains salient and their absence catastrophic. The finding that utter poverty households in Kerala's fishing communities rank highest on multiple savings indicators, including

old age saving and emergency fund maintenance, is exactly what the scarcity framework predicts. It is a tribute to the strength of the scarcity mechanism that it produces this pattern even in households that are classified as utter poverty and that one might expect to have no financial resources to save.

Collins et al. (2009), in their landmark 'Portfolios of the Poor' study, provided detailed financial diary evidence of the financial sophistication of poor households in Bangladesh, India, and South Africa. Their finding that poor households maintain complex, active financial portfolios — using a wide range of informal financial instruments, managing multiple simultaneous credit relationships, and responding opportunistically to income variation — fundamentally challenged the deficit model of poor households as financially passive and unsophisticated. The Kerala fishing community data in this volume are consistent with this finding: the aggregate descriptive analysis in Chapter 3 documents a community that is actively managing complex financial situations with the tools available to it, even if those tools fall short of the formal financial products that would serve their needs more efficiently.

Banerjee and Duflo (2007) provided a global synthesis of evidence on poor household economic lives, documenting remarkable consistency across diverse cultural and economic contexts in the patterns of income diversification, risk management, and financial behaviour that characterise poverty. Their finding that poor households across the world show similar patterns of precautionary saving, social insurance utilisation, and informal credit dependence provides a global backdrop against which the Kerala fishing community findings can be contextualised. What is distinctive about

the Kerala data is the fine-grained demographic variation in these patterns — the fact that even within a single occupational community defined by shared poverty, different demographic sub-groups exhibit systematically different behavioural profiles that demand differentiated policy responses.

2.6 Technology, Capital, and Financial Behaviour

The relationship between productive technology and household financial behaviour has been extensively studied in the agricultural economics literature, with results that are directly applicable to the fishing context. Binswanger (1980) demonstrated in a pioneering study that the adoption of Green Revolution agricultural technology in India's farming communities was simultaneously a financial decision — requiring capital investment and accepting the risk of debt — and a behavioural decision — requiring willingness to abandon established agricultural practices for uncertain new ones. His finding that risk aversion was a major barrier to technology adoption, and that risk aversion was itself partly a function of wealth and credit access, established the bidirectional relationship between technology and financial behaviour that is directly relevant to the Kerala fishing context.

In the fishing economy specifically, Pollnac and Poggie (2008) documented that fishing technology is a significant predictor of psychological well-being and occupational satisfaction among fishermen in multiple cultural contexts, with mechanised boat users showing higher well-being and lower occupational stress than traditional boat users despite — or perhaps because of — their higher capital commitment. Coulthard (2012) argued that fishing technology shapes not only income outcomes but also the cognitive

and social dimensions of fishermen's lives, including their financial planning horizons and risk tolerances. The implications for financial behaviour are direct: fishermen who operate with higher-value capital assets, longer planning horizons, and stronger institutional relationships will develop financial behaviours that are more oriented towards formal financial services and systematic savings planning.

The digital technology dimension of financial behaviour deserves specific attention in this review. The rapid expansion of mobile and digital financial services across India — driven by the Pradhan Mantri Jan Dhan Yojana, the Unified Payments Interface, and the growth of mobile banking — has created new opportunities for financial inclusion in communities that were previously excluded from formal financial services by geographic distance and documentation barriers. Research on digital financial services in fishing communities is still nascent, but evidence from comparable rural and fishing communities in Kenya (Suri & Jack, 2016) and Bangladesh (Aker et al., 2016) suggests that mobile money significantly increases formal savings and credit access when it is appropriately designed for irregular income cycles. The growing social media reliance for financial information among Kerala's fishing communities — documented in this study — creates both an opportunity for digital financial literacy delivery and a risk of digital financial misinformation that requires regulatory attention.

2.7 Financial Practices in Kerala's Fishing Communities: Prior Research

The specific literature on financial practices in Kerala's fishing communities provides the most directly relevant empirical context

for this volume. Kurien (2000, 2001) and Kurien and Vijayan (1995) documented the socioeconomic conditions of Kerala's marine fisherfolk, including the moneylender dependence and credit vulnerability that characterise the sector. Santha (2008) provided a comprehensive account of livelihood vulnerability in Kerala's fishing communities, including a detailed analysis of financial management strategies. Shyam et al. (2017) provided updated socioeconomic data on Kerala's fishing communities through CMFRI's survey infrastructure, documenting persistent poverty and limited formal financial inclusion despite Kerala's high Human Development Index.

Parappurathu et al. (2019) provided the most directly comparable study to the present volume — an analysis of financial inclusion among marine fishers of India that documented the extent, patterns, and determinants of formal financial service use across multiple Indian coastal states. Their finding that Kerala's fishing communities show higher formal financial participation than the national average for fishing communities, but still substantially below the levels of comparable non-fishing populations, is consistent with the trust-access paradox documented in this volume. Their analysis, however, does not examine the sub-community demographic variation that is the central contribution of this study.

Samuel (2007) and Abraham (2007) provided earlier community-specific studies of financial behaviour in Kerala's fishing communities. Samuel's analysis of Thiruvananthapuram district fishing households documented the dominance of moneylender credit and the limited formal savings among southern coastal fishing communities — findings consistent with the regional pattern

documented in this volume, where southern fisherfolk show the highest moneylender dependence and the lowest formal banking credit utilisation. Abraham's work on information dissemination in fishing communities documented the dominance of personal and social network information sources in financial decision-making, providing a historical baseline for the social media and advertisement reliance documented in this study as a more recent development.

The gap in the prior literature that this volume directly addresses is the systematic, multi-dimensional demographic analysis of financial practice variation. Previous studies have either treated Kerala's fishing community as a homogeneous unit (in macro-level studies) or have examined individual communities in qualitative depth without statistical analysis of demographic variation (in community case studies). The present study is, to the authors' knowledge, the first to apply systematic non-parametric statistical analysis to six dimensions of financial practice across four demographic dimensions simultaneously within Kerala's marine fishing community — providing the demographic granularity that effective policy targeting requires.

2.8 Theoretical Integration: A Behavioural Framework for Fishing Community Financial Practices

The theoretical insights reviewed in this chapter can be integrated into a coherent behavioural framework for understanding financial practices in Kerala's fishing communities. The framework has four components. First, the structural economic context — the income level, income regularity, and asset endowment of the household — sets the material parameters within which financial decisions are

made. Second, the demographic context — the regional location, religious affiliation, economic status, and fishing technology of the household — creates the cultural, social, and institutional environment that shapes behavioural responses to the structural economic context. Third, the psychological mechanisms — present bias, loss aversion, mental accounting, social proof, and scarcity focus — determine how individuals respond to the interaction of structural and demographic context in making specific financial decisions. Fourth, the institutional environment — the availability, accessibility, and cultural fit of formal financial products and services — determines whether psychological inclinations translate into financially productive behaviours or are diverted into informal and often less efficient financial alternatives.

This framework makes several specific predictions that are tested by the empirical analysis in this volume. It predicts that demographic context will produce systematic variation in financial practices beyond what can be explained by income differences alone — a prediction confirmed by the Kruskal-Wallis analysis across all four demographic dimensions. It predicts that scarcity focus will be most pronounced among the most economically vulnerable sub-groups — confirmed by the survival discipline paradox documented for utter poverty households. It predicts that the trust-access gap will be structural rather than attitudinal — confirmed by the uniform high trust combined with differentially low formal credit utilisation across all demographic groups. And it predicts that different demographic sub-groups will require different financial products, communication strategies, and institutional partnerships to achieve comparable financial inclusion outcomes — the central normative conclusion of this volume.

The framework also identifies the limits of what the demographic analysis of this volume can establish on its own. The identification of demographic patterns in financial practice is descriptive, not causal: it establishes that different demographic groups behave differently but does not directly establish why. The causal mechanisms — the specific psychological biases, cultural values, and institutional constraints that produce the observed behavioural differences — require additional analytical methods, including experimental designs, qualitative fieldwork, and structural modelling that go beyond the scope of this volume but constitute the natural next steps in the research programme of which this volume is a part.

2.9 Summary

This chapter has reviewed the theoretical and empirical literature that informs the analysis of this volume. The behavioural economics literature has established that financial decision-making is systematically influenced by psychological tendencies — present bias, loss aversion, mental accounting, and scarcity focus — that produce predictable deviations from rational choice models. The economics of religion literature has documented that faith traditions shape financial behaviour through doctrinal, institutional, and social norm channels. The regional economics literature has established that geographic and ecological context produces persistent variation in financial behaviour independent of income effects. The poverty and financial behaviour literature has documented the survival discipline paradox and the 'Portfolios of the Poor' finding that challenges deficit models of poor household financial management. The technology and finance literature has established that productive technology is a constitutive rather than merely

correlational determinant of financial behaviour. And the specific literature on Kerala's fishing communities provides the directly relevant empirical context and prior findings against which this study's contributions are assessed. Together, these literatures constitute the theoretical and empirical scaffolding for the demographic analysis of financial practices that follows in Chapters 3 through 8.

Chapter 3

The Aggregate Portrait: Financial Practices of Kerala's Fishermen Households

3.1 Introduction.....32

3.2 Core Financial Practices.....32

3.3 Savings Motivations: The Behavioural Hierarchy of Financial Goals.....35

3.4 Sources of Credit: The Persistent Pull of Informal Finance 36

3.5 Sources of Information: The Bounded Informational World of Financial Decisions.....38

3.6 Obstructions to Savings: The Structural Behavioural Traps.....39

3.7 Savings Inducing Factors: What Catalyses Savings Behaviour....40

3.8 The Aggregate Behavioural Portrait: Summary.....41

3.1 Introduction

Before demographic disaggregation can reveal how fishing households differ from one another, it is necessary to establish what they look like in aggregate — the behavioural financial profile of Kerala's fisherfolk as a whole. This chapter presents descriptive analysis of all six financial practice dimensions for the full sample of 474 households. The aggregate portrait reveals a community navigating chronic financial uncertainty with a complex mix of behavioural strengths and structural vulnerabilities: high institutional trust without corresponding institutional access; strong savings aspiration without adequate savings realisation; prudent debt attitudes coexisting with heavy informal borrowing; and information-seeking anchored in personal judgment and social networks rather than structured financial guidance.

3.2 Core Financial Practices

Table 3.1 presents mean scores and standard deviations for sixteen core financial practice indicators. The Likert scale runs from 1 (never / strongly disagree) to 5 (always / strongly agree). These indicators capture the behavioural repertoire of financial management — the habitual and attitudinal dimensions of how fishing households relate to saving, spending, borrowing, and investing.

Table 3.1: Key Indicators of Financial Practices Among Fishermen Households (N = 474)

Financial Practice Indicator	N	Mean	Std. Dev.
Trust in banking institutions	474	4.32	1.08
Minimal spending	474	3.39	1.23

Financial Practice Indicator	N	Mean	Std. Dev.
Regular saving	474	2.89	1.39
Old age saving	474	2.32	1.46
Timely debt repayment	474	3.42	1.22
Long-term goal saving	474	3.01	1.41
Financial record keeping	474	3.08	1.41
Consult before taking loans	474	3.57	1.27
Consult before investing	474	3.59	1.29
Avoid debt	474	3.53	1.29
Diversify investments	474	2.99	1.57
Avoid daily money lenders	474	3.25	1.36
Maintain emergency fund	474	2.08	1.30
Spending money management	474	2.74	1.41
Secure loans only	474	2.13	1.43
Lend money securely	474	1.72	1.20

Source: Primary Data

The highest scoring indicator is trust in banking institutions (M = 4.32) — a strongly positive attitudinal orientation towards the formal financial sector that is, paradoxically, not matched by commensurate formal banking behaviour. This trust-behaviour gap is one of the most significant behavioural findings of the aggregate analysis. It suggests that the barriers to formal financial engagement are not attitudinal but structural: distance from branches, documentation requirements, the mismatch between fixed repayment schedules and irregular fishing incomes, and the social

networks of informal lenders who offer immediacy and flexibility that formal banks cannot.

Regular saving scores only 2.89, emergency fund maintenance 2.08, and old age saving 2.32 — all well below the midpoint. These low scores for precautionary and long-term savings practices are consistent with the behavioural phenomena of present bias (over-weighting immediate consumption relative to future security) and the situational pressures of irregular income cycles. The fishing livelihood, with its feast-or-famine income dynamics, creates powerful situational incentives towards present consumption and away from systematic saving.

> *The trust-behaviour gap: fishing households score 4.32 on banking trust but only 2.08 on emergency fund maintenance and 2.32 on old age saving — a divergence that points to structural access barriers rather than motivational deficits, and calls for behaviourally informed financial product design that meets households where they are.*

Debt management indicators paint a more encouraging behavioural picture. Timely debt repayment (3.42), avoidance of debt (3.53), and consultation before loans (3.57) and investments (3.59) all score above the midpoint. These patterns suggest a community that is not reckless in its financial behaviour but cautious and socially anchored — they consult, they deliberate, and they value repayment. The behavioural challenge lies in matching this debt-management discipline with accessible formal credit that respects it. The lowest score of all — lend securely (1.72) — indicates that when fishing households lend money to others (as community social norms

regularly require), they rarely do so with documentation or collateral, creating vulnerability when loans go unrepaid.

3.3 Savings Motivations: The Behavioural Hierarchy of Financial Goals

Understanding why fishing households save illuminates the motivational architecture of their financial behaviour. Table 3.2 reveals a hierarchy of financial goals shaped by family orientation, social obligation, and precautionary instinct.

Table 3.2: Savings Motives Among Fishermen Households (N = 474)

Savings Motive	N	Mean	Std. Dev.
Save for unexpected matters	474	3.78	1.24
Debt repayment	474	4.20	1.11
House purchase / renovation	474	3.89	1.14
Celebrations and social emergencies	474	3.44	1.21
Children's education	474	4.47	0.95
Old age savings	474	3.35	1.32
Children's marriage	474	4.22	1.01
Social service / community contribution	474	3.01	1.34

Source: Primary Data

Children's education (M = 4.47) and children's marriage (M = 4.22) emerge as the dominant savings motives — a finding with deep behavioural significance. These are not merely financial goals but socially and culturally mandated obligations: in Kerala's fishing communities, the failure to educate one's children or provide for

their marriage is experienced not as a financial shortfall but as a social failure. The motivational force of these obligations is therefore much greater than income-based savings models would predict, creating what this volume terms 'obligatory aspirational savings' that mobilise effort regardless of income level.

Debt repayment (M = 4.20) ranks third, reflecting the pervasive role of borrowing in fishing household finance and the strong cultural premium on repayment as a mark of honour and social standing. The behavioural economics of debt salience — the tendency to mentally categorise debt as a priority commitment that must be settled before other goals are pursued — is clearly operative in this community. Old age savings (M = 3.35) scores relatively low, partially explained by the intergenerational social insurance logic of fishing families: children are expected to care for ageing parents, substituting family-based social capital for formal retirement savings.

3.4 Sources of Credit: The Persistent Pull of Informal Finance

The credit landscape reflects decades of formal financial exclusion and the adaptive behavioural responses that have developed in its absence. Table 3.3 documents mean utilisation scores for ten credit sources, revealing a credit ecology still dominated by informal channels.

Table 3.3: Sources of Credit Among Fishermen Households (N = 474)

Source of Credit	N	Mean	Std. Dev.
Private money lenders	474	3.84	1.25
Kudumbasree / Ayalkootam groups	474	3.09	1.40
Shopkeepers and merchants	474	2.52	1.52

Source of Credit	N	Mean	Std. Dev.
Friends and relatives	474	3.73	1.21
Commercial banks	474	2.62	1.48
Co-operative societies	474	3.01	1.44
Department of Fisheries	474	2.77	1.50
Landlords	474	2.16	1.37
Sale of assets (distress)	474	2.55	1.48
Temple / Church / Mosque authorities	474	2.17	1.47

Source: Primary Data

Money lenders rank highest (M = 3.84) — a finding that, while consistent with existing literature, acquires additional salience when placed alongside the high banking trust documented in Table 2.1. The behavioural explanation lies in transactional accessibility: moneylenders offer immediacy (funds within hours), flexibility (repayment calibrated to catch cycles), social familiarity (operating within the community), and no documentation barrier. Commercial banks, despite being trusted, are behaviourally inaccessible in practice — a distinction that financial inclusion policy must directly address. Friends and relatives (M = 3.73) constitute the second most-used credit source, reflecting the social capital dimensions of credit access in collectivist communities governed by norms of reciprocity.

3.5 Sources of Information: The Bounded Informational World of Financial Decisions

The information landscape within which fishing households make financial decisions is narrow, socially bounded, and dominated by personal judgment and trusted relationships.

Table 3.4: Sources of Information for Financial Decisions (N = 474)

Source of Information	N	Mean	Std. Dev.
Own personal judgment / self-decision	474	4.46	0.99
Family members	474	4.03	1.06
Friends and relatives	474	3.86	1.06
Advertisements (print, radio, TV)	474	2.99	1.29
Social media platforms	474	3.22	1.30

Source: Primary Data

Own personal judgment (M = 4.46) ranks first — reflecting not just self-confidence but the absence of accessible, trustworthy alternatives. Family members (M = 4.03) and friends and relatives (M = 3.86) complete the social information triad, confirming that financial decisions in fishing communities are made within the boundaries of immediate social networks. Social media (M = 3.22) has a growing but secondary presence. The behavioural susceptibility to social proof — the tendency to be influenced by what others in one's social network are doing — makes social media a vector for both financial learning and financial misinformation.

3.6 Obstructions to Savings: The Structural Behavioural Traps

Savings barriers are not merely income constraints — they are behavioural traps in which the combination of financial pressure, social obligation, and inadequate financial products creates self-reinforcing cycles that prevent savings accumulation even when households are motivated to save.

Table 3.5: Obstructions to Savings Among Fishermen Households (N = 474)

Obstruction to Savings	N	Mean	Std. Dev.
High cost of living	474	4.10	1.13
Medical expenses	474	4.13	1.09
Inadequate financial resources	474	3.55	1.14
Loan repayment obligations	474	4.01	1.13
Lack of financial awareness	474	3.26	1.22
Education and marriage expenses	474	4.15	1.08
Loans given to friends / relatives	474	3.35	1.36

Source: Primary Data

Education and marriage expenses (M = 4.15), medical expenses (M = 4.13), and high cost of living (M = 4.10) form the triple structural barrier that overwhelms savings capacity. These are not discretionary expenditures — they are socially obligatory and structurally unavoidable costs that consume resources before savings can accumulate. The behavioural economics of mental accounting helps explain why these expenditures take priority: they are categorised as non-negotiable commitments rather than competing uses of discretionary income. Loan repayment (M = 4.01) confirms the debt-trap dynamic in which borrowing to meet

immediate needs creates repayment obligations that crowd out future savings capacity.

3.7 Savings Inducing Factors: What Catalyses Savings Behaviour

When conditions are favourable, what leads fishing households to save? Table 3.6 documents the factors that catalyse savings accumulation.

Table 3.6: Savings Inducing Factors Among Fishermen Households (N = 474)

Savings Inducing Factor	N	Mean	Std. Dev.
Availability of surplus funds	474	4.41	1.04
High interest rates on deposits	474	3.96	1.08
Income growth / capital appreciation	474	4.12	1.09
Tax benefits	474	3.57	1.44
Risk mitigation / financial security	474	3.74	1.33

Source: Primary Data

Fund availability (M = 4.41) is the most powerful inducing factor — fishing households save when they have surplus income. This has profound design implications: savings products for this population must be calibrated to irregular income cycles, allowing contributions during peak catch seasons and withdrawals during lean periods. The behavioural principle at work is 'savings opportunity creation': the motivation to save is present, but the structural window of opportunity must be opened at the right moment in the income cycle. Income and capital appreciation (M = 4.12) and high interest rates

(M = 3.96) suggest that the community is behaviourally responsive to returns-based incentives when these are made accessible.

3.8 The Aggregate Behavioural Portrait: Summary

The aggregate financial portrait of Kerala's fishermen households reveals a community with a distinctive behavioural financial profile: high institutional aspiration but limited institutional access; strong social-obligation-driven savings motivation but weak systematic savings behaviour; cautious debt attitudes but high informal credit dependence; income-contingent savings responsiveness but structure-contingent savings realisation. These patterns are not random. They reflect the systematic influence of a high-uncertainty livelihood environment on financial behaviour — the behavioural footprint of fishing as a way of life. Critically, these aggregate patterns mask profound internal variation. The chapters that follow demonstrate that every dimension of financial practice documented above varies significantly across regional, religious, economic, and technological boundaries within the fishing community.

Chapter 4

The Geography of Financial Behaviour: Regional Variations in Financial Practices

4.1 Introduction....43
4.2 Regional Differences in Core Financial Practices....44
4.3 Regional Differences in Savings Motives....48
4.4 Regional Differences in Savings Barriers....50
4.5 Regional Differences in Savings Inducing Factors....51
4.6 Regional Differences in Sources of Information....53
4.7 Regional Differences in Sources of Credit....54
4.8 Regional Financial Profiles: A Synthesis....56
4.9 Detailed Regional Behavioural Analysis....57

4.1 Introduction

Kerala's 590-kilometre coastline is not a uniform financial geography. The northern coast, anchored by Kozhikode, carries a heritage of deep-sea fishing traditions, strong cooperative networks, and a historically significant trading culture that has shaped the commercial and savings orientation of its fishing communities. The central coast around Alappuzha is defined by the unique ecology of the backwaters — where sea fishing meets inland fisheries and where the coir and tourism industries create adjacent livelihoods introducing a more institutionally mediated economic culture. The southern coast, led by Thiruvananthapuram, is rocky; its fishing communities have historically operated at smaller scales with strong family, church, and moneylender networks providing social and financial insurance.

These structural differences in ecology, livelihood history, infrastructure endowment, and social organisation create conditions for systematically different financial behaviours and, beneath those behaviours, different behavioural orientations. The North saves habitually; the Centre banks formally; the South deliberates carefully. These are not caricatures but statistically documented patterns. The present chapter demonstrates this empirically through Kruskal-Wallis H tests on all six financial practice dimensions across the three coastal regions.

> ***H1: The financial practices, savings motives, credit sources, savings obstacles, savings inducing factors, and information sources of fishermen households vary significantly based on their region (South, Central, and North).***

4.2 Regional Differences in Core Financial Practices

Table 4.1 presents the full Kruskal-Wallis H test results for all sixteen core financial practice indicators across the three regions. Significant differences ($p < .05$) are observed in fifteen of sixteen indicators — only investment diversification shows no significant regional variation ($H = 2.138$, $p = .343$), suggesting that the practice of spreading investments across multiple asset classes is uniformly limited across the coastal belt due to the low level of investable surplus throughout the community.

Table 4.1: Core Financial Practices Across Coastal Regions — Kruskal-Wallis H Test Results

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
Trust in banking	South	175.70	77.083	2	<0.001	✓
	Centre	292.10				
	North	249.40				
Minimal spending	South	170.20	70.102	2	<0.001	✓
	Centre	255.37				
	North	286.66				
Regular saving	South	148.82	126.138	2	<0.001	✓
	Centre	250.13				
	North	312.20				
Old age saving	South	121.73	247.800	2	<0.001	✓
	Centre	242.70				
	North	345.24				
Timely debt repayment	South	199.20	23.083	2	<0.001	✓

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
	Centre	270.28				
	North	245.24				
Long-term goal saving	South	180.00	45.484	2	<0.001	✓
	Centre	263.74				
	North	269.77				
Financial record keeping	South	205.32	14.011	2	0.001	✓
	Centre	253.87				
	North	253.47				
Consult before loans	South	273.88	35.813	2	<0.001	✓
	Centre	250.51				
	North	189.07				
Consult before investing	South	276.40	33.776	2	<0.001	✓
	Centre	243.97				
	North	192.27				
Avoid debt	South	264.58	17.767	2	<0.001	✓
	Centre	243.89				
	North	203.94				
Diversify investments	South	228.68	2.138	2	0.343	✗
	Centre	250.16				
	North	233.75				

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
Avoid daily lenders	South	235.25	16.248	2	<0.001	✓
	Centre	270.72				
	North	209.47				
Emergency fund	South	163.19	96.530	2	<0.001	✓
	Centre	248.90				
	North	299.16				
Spending money	South	209.83	30.804	2	<0.001	✓
	Centre	288.19				
	North	219.28				
Secure loans	South	134.75	173.878	2	<0.001	✓
	Centre	313.69				
	North	270.88				
Lend securely	South	166.49	115.381	2	<0.001	✓
	Centre	243.43				
	North	300.66				

Source: Primary Data

Note: ✓ = statistically significant ($p < .05$); ✗ = not significant. Shading groups the three-region rows per indicator.

The Northern region (Kozhikode) consistently records the highest mean ranks for savings-related practices: regular saving (312.20), old age saving (345.24), and emergency fund maintenance (299.16). The old age saving difference is particularly dramatic — the North outranks the South by 223 mean-rank points (345.24 vs. 121.73).

This behavioural savings culture in the North likely reflects multiple reinforcing factors: the cooperative tradition of Kozhikode's fishing economy, the influence of precautionary wealth-management values among the large Muslim population, and the higher income capacity of mechanised deep-sea fishing operations that are more prevalent in the region.

The Central region (Alappuzha) leads on formal banking engagement — trust in banking (292.10) and secure loans (313.69) — reflecting better financial infrastructure and the historical influence of the Alappuzha cooperative banking movement. The behavioural implication is that Central fisherfolk have developed a more institutionally habituated financial orientation, where formal banks and cooperatives are normalised rather than unfamiliar or intimidating. The Southern region (Thiruvananthapuram) consistently exhibits the highest mean ranks for consultation-based practices: consulting before loans (273.88), consulting before investing (276.40), and avoiding debt (264.58). This behavioural pattern of deliberative caution likely reflects higher debt burdens that generate a learned behavioural response — greater care in the conditions under which one borrows, because the consequences of a bad loan are immediately experienced.

> *Three regional behavioural financial personalities emerge: the North Saves (habitual, long-term savings culture), the Centre Banks (formal institution engagement, cooperative credit integration), and the South Deliberates (consultative caution, debt-aversion, high vulnerability to medical and debt barriers). Each demands distinct policy responses.*

4.3 Regional Differences in Savings Motives

Even the reasons for which fishing households save are shaped by regional behavioural context. Table 4.2 shows that all eight savings motives show significant regional variation — confirming that the motivational architecture of savings behaviour is geographically structured.

Table 4.2: Savings Motives Across Coastal Regions — Kruskal-Wallis H Test Results

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
Unexpected matters	South	247.43	12.019	2	0.002	✓
	Centre	257.33				
	North	209.12				
Debt repayment	South	321.64	187.992	2	<0.001	✓
	Centre	253.30				
	North	139.75				
House purchase/ renovation	South	264.91	29.929	2	<0.001	✓
	Centre	256.51				
	North	192.67				
Celebrations/ emergencies	South	210.39	10.238	2	0.006	✓
	Centre	247.95				
	North	253.63				
Children's education	South	268.03	104.807	2	<0.001	✓
	Centre	281.59				
	North	167.85				
Old age savings	South	163.14	108.409	2	<0.001	✓
	Centre	230.18				

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
	North	315.44				
Children's marriage	South	216.46	14.562	2	0.001	✓
	Centre	268.60				
	North	229.75				
Social service	South	151.17	132.288	2	<0.001	✓
	Centre	237.90				
	North	320.50				

Source: Primary Data

Debt repayment as a savings motive shows the most dramatic regional gradient: the South ranks highest (321.64) and the North lowest (139.75) — a difference of 182 mean-rank points ($H = 187.992$, $p < .001$). This finding has important behavioural implications: the savings behaviour of southern fisherfolk is disproportionately reactive — driven by the need to service existing debt — rather than proactive. The psychological mechanism is debt salience: the constant presence of debt obligations makes repayment the dominant financial goal, crowding out other savings motivations. Old age savings motivation shows the reverse regional pattern: the North ranks highest (315.44) and the South lowest (163.14), consistent with the northern savings culture documented in Table 3.1. Social service as a savings motive is strongest in the North (320.50), reflecting the community cooperative traditions of Kozhikode.

4.4 Regional Differences in Savings Barriers

The behavioural barriers that prevent savings accumulation differ significantly by region, pointing to geographically specific challenges that demand location-targeted policy responses. Table 4.3 presents the analysis.

Table 4.3: Obstructions to Savings Across Coastal Regions — Kruskal-Wallis H Test Results

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
High cost of living	South	251.96	62.346	2	<0.001	✓
	Centre	288.21				
	North	177.89				
Medical expenses	South	326.23	152.828	2	<0.001	✓
	Centre	230.37				
	North	155.13				
Inadequate resources	South	200.41	20.348	2	<0.001	✓
	Centre	265.01				
	North	248.62				
Loan repayment	South	285.75	59.133	2	<0.001	✓
	Centre	248.44				
	North	179.20				
Lack of awareness	South	194.33	32.478	2	<0.001	✓
	Centre	238.26				
	North	277.81				
Education/marriage	South	248.32	35.683	2	<0.001	✓
	Centre	274.99				
	North	192.93				

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
Loans to friends/relatives	South	201.46	33.781	2	<0.001	✓
	Centre	223.03				
	North	284.02				

Source: Primary Data

Medical expenses constitute the most regionally differentiated savings barrier (H = 152.828, p < .001): the South ranks highest (326.23) and the North lowest (155.13) — a difference of 171 mean-rank points. This suggests that healthcare expenditure functions as a specific behavioural poverty trap in the southern coastal belt, consuming resources that would otherwise be available for savings. High cost of living is most burdensome in the Centre (288.21). Loan repayment as a savings barrier is most pronounced in the South (285.75), consistent with the debt-driven savings motivation. Lack of financial awareness is most prominent in the North (277.81) — a striking finding given that the North displays the strongest savings culture, suggesting that savings behaviour there is more tradition-driven than knowledge-driven: a behavioural opportunity awaiting financial literacy investment.

4.5 Regional Differences in Savings Inducing Factors

Table 4.4: Savings Inducing Factors Across Coastal Regions — Kruskal-Wallis H Test Results

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
Fund availability	South	295.26	194.003	2	<0.001	✓
	Centre	280.00				

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
	North	142.49				
High interest rate	South	297.05	95.531	2	<0.001	✓
	Centre	256.88				
	North	160.80				
Income/capital appreciation	South	275.37	57.167	2	<0.001	✓
	Centre	261.16				
	North	178.36				
Tax benefits	South	251.22	3.850	2	0.146	✗
	Centre	221.69				
	North	236.31				
Risk factors	South	264.43	11.355	2	0.003	✓
	Centre	217.59				
	North	226.90				

Source: Primary Data

Fund availability demonstrates the sharpest regional divide ($H = 194.003$, $p < .001$): the South (295.26) and Centre (280.00) respond far more strongly to income surplus as a savings trigger than the North (142.49). This reveals a fundamental difference in the behavioural architecture of savings across regions. In the North, savings behaviour is habit-driven and relatively autonomous from immediate income availability — people save as a matter of routine. In the South, savings are opportunity-driven — they happen when surplus income creates the behavioural space for saving, but not otherwise. This distinction has profound product design implications: northern fisherfolk need formal containers to channel

existing savings habits, while southern fisherfolk need savings mechanisms triggered by income events (peak catch seasons) rather than scheduled commitments.

4.6 Regional Differences in Sources of Information

Table 4.5: Sources of Information Across Coastal Regions — Kruskal-Wallis H Test Results

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
Own decision	South	294.53	208.644	2	<0.001	✓
	Centre	282.63				
	North	140.92				
Family members	South	276.42	58.571	2	<0.001	✓
	Centre	262.66				
	North	176.03				
Friends/relatives	South	254.45	4.504	2	0.105	✗
	Centre	229.77				
	North	226.14				
Advertisements	South	179.47	81.385	2	<0.001	✓
	Centre	219.09				
	North	309.03				
Social media	South	190.17	44.655	2	<0.001	✓
	Centre	231.35				
	North	287.89				

Source: Primary Data

Own decision-making shows the largest regional disparity among information sources ($H = 208.644$, $p < .001$): South (294.53) and

Centre (282.63) far outrank the North (140.92). The North, by contrast, relies far more heavily on advertisements (309.03) and social media (287.89) — a finding with important implications for digital financial literacy strategy in the northern coastal belt. Friends and relatives as an information source show no significant regional variation (p = .105), suggesting that social-network-based financial guidance is a universal feature across all three regions.

4.7 Regional Differences in Sources of Credit

Credit source preferences are among the most dramatically differentiated dimensions of financial practice across regions. Table 4.6 presents the full analysis.

Table 4.6: Sources of Credit Across Coastal Regions — Kruskal-Wallis H Test Results

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
Money lenders	South	264.30	11.208	2	<0.001	✓
	Centre	218.85				
	North	225.94				
Kudumbasree/Ayalkootams	South	163.24	77.465	2	<0.001	✓
	Centre	282.55				
	North	269.91				
Shopkeepers/merchants	South	178.27	93.559	2	<0.001	✓
	Centre	214.97				
	North	313.78				
Friends/relatives	South	268.26	14.132	2	<0.001	✓
	Centre	222.10				
	North	219.23				

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
Commercial banks	South	162.26	86.904	2	<0.001	✓
	Centre	253.82				
	North	295.80				
Co-operatives	South	200.99	19.512	2	<0.001	✓
	Centre	265.61				
	North	247.54				
Fisheries dept.	South	163.41	76.047	2	<0.001	✓
	Centre	278.31				
	North	273.42				
Landlords	South	126.19	208.503	2	<0.001	✓
	Centre	259.46				
	North	326.32				
Selling assets	South	172.44	71.610	2	<0.001	✓
	Centre	243.49				
	North	294.77				
Not repaying	South	174.22	80.635	2	<0.001	✓
	Centre	230.39				
	North	304.38				
Religious authorities	South	133.73	221.272	2	<0.001	✓
	Centre	235.60				
	North	339.62				

Source: Primary Data

Religious institutions as credit sources show the largest gap ($H = 221.272$, $p < .001$): the North leads (339.62) and the South trails

(133.73). This reflects the active role of religious institutions as financial intermediaries in the North — a form of faith-embedded community finance that operates within the trust-laden context of religious community membership. Commercial banks show substantial regional differentiation ($H = 86.904$, $p < .001$): the North (295.80) and Centre (253.82) utilise formal banking credit far more than the South (162.26). Moneylenders show the opposite pattern — most utilised in the South (264.30), creating a distinct financial vulnerability gradient: southern fisherfolk face the highest exposure to exploitative informal credit simultaneously with the highest savings barriers and heaviest debt burdens.

4.8 Regional Financial Profiles: A Synthesis

The North Kerala profile is characterised by habitual long-term savings behaviour; a diversified credit portfolio including formal banks, cooperatives, and religious institutions; social media and advertisement-reliant financial information habits; and savings barriers concentrated in lack of awareness rather than medical or debt costs. The behavioural core of the North is savings-by-norm: financial discipline maintained through social rather than individual motivation. The Central Kerala profile exhibits the strongest formal banking engagement, moderate savings orientation across all dimensions, a cooperative credit tradition, and transitional positions between North and South on most indicators. The South Kerala profile is defined by debt-driven savings motivation, high medical expense vulnerability, heavy moneylender dependence, a strong preference for personal judgment in financial decisions, and the most cautious approach to financial commitments. The behavioural signature of the South is defensive financial management: the management of constrained resources under pressure.

4.9 Detailed Regional Behavioural Analysis

The regional variation in financial practices documented in this chapter is not merely a product of observable demographic differences between the three coastal regions. The North has a higher proportion of Muslim households (who show different savings patterns than Christian households) and more mechanised boat users (who show stronger savings behaviours). Statistical controls for religion and boat type would be necessary to establish the independent effect of region on financial practices — a decomposition analysis that goes beyond the scope of this volume but is addressed in the parent doctoral research. The regional patterns documented here should therefore be understood as composite effects of the intersection of geography, ecology, religious community, and technology rather than as purely geographic effects. This composite nature of the regional patterns does not reduce their policy relevance — the composite regional profile is precisely what policymakers designing region-specific interventions need to understand.

The southern coastal belt's distinctive financial profile — characterised by high debt burdens, heavy moneylender dependence, and strong consultation behaviour — has historical roots that the cross-sectional data of this study cannot fully illuminate. Qualitative historical research on Thiruvananthapuram's fishing communities suggests that the current moneylender dominance reflects decades of patron-client relationships between boat owners, fish merchants, and fisherfolk that were institutionalised during the pre-cooperative period and have proven resistant to disruption by formal financial inclusion initiatives. The social norms around debt in southern fishing communities — where

borrowing from a known moneylender is a social relationship as much as a financial transaction — create path dependencies that formal financial products must account for in their design. The fact that consultation behaviour is highest in the South despite the absence of formal financial advisory infrastructure suggests that southern fisherfolk are seeking the social and relational assurance that formal consultation would provide through informal network channels.

The policy implications of the regional analysis are geographically specific in a way that standard financial inclusion policy — typically designed at the state or national level — cannot accommodate. A northern coastal belt strategy should prioritise: expansion of cooperative savings infrastructure to formalise existing savings habits; targeted financial literacy around product options (rather than savings motivation, which is already high); and digital financial service deployment that leverages the northern communities' existing comfort with social media and advertisement channels. A central coastal belt strategy should build on the existing cooperative and formal banking infrastructure to scale formal credit products and deepen digital banking penetration. A southern coastal belt strategy requires a more fundamental intervention: addressing the structural causes of moneylender dependence (through concessional formal credit products with flexible repayment), the medical expense vulnerability (through health microinsurance), and the debt trap (through debt restructuring programmes) before expecting financial literacy interventions to produce their intended effects.

Chapter 5

Faith, Culture, and Financial Behaviour: Religious Affiliation and Financial Practices

5.1 Introduction.....60

5.2 Religious Differences in Core Financial Practices 61

5.3 Religious Differences in Savings Motives.....64

5.4 Religious Differences in Savings Barriers.....66

5.5 Religious Differences in Savings Inducing Factors.....68

5.6 Religious Differences in Information Sources.....69

5.7 Religious Differences in Sources of Credit.....71

5.8 Implications of the Religious Dimension 73

5.9 The Institutional Mediation of Religious Financial Behaviour 74

5.1 Introduction

Religion in Kerala is not merely a private spiritual matter. It is a structuring social force that organises community life, regulates economic exchange, shapes value orientations towards money, debt, and obligation, and creates institutional frameworks — churches, mosques, temples, and their associated welfare organisations — that directly mediate access to credit, social insurance, and financial information. In Kerala's coastal fishing communities, the three major faith communities — Christians, Muslims, and Hindus — live in interleaved settlements, often fishing from the same waters but organising their financial lives in behaviourally distinct ways.

The behavioural influence of religion on financial decision-making operates through multiple channels. At the doctrinal level, faith traditions embody different orientations towards wealth, debt, risk, and intergenerational obligation. At the community level, religious institutions provide social insurance mechanisms, credit channels, and information networks that shape the informational environment of financial decisions. At the psychological level, religious identity activates in-group trust and community norms that influence how individuals evaluate financial options and risks. This chapter examines each of these channels empirically, documenting the systematic financial practice differences that religious affiliation produces across all six behavioural dimensions.

> ***H2: The financial practices, savings motives, credit sources, savings obstacles, savings inducing factors, and information sources for financial decisions of fishermen households vary significantly based on their religious affiliation (Hindu, Christian, and Muslim).***

5.2 Religious Differences in Core Financial Practices

Table 5.1 presents the full Kruskal-Wallis H test results for all sixteen core financial practice indicators across Hindu, Christian, and Muslim fishermen households. Significant differences are observed in fourteen of sixteen indicators; only timely debt repayment (H = 1.124, p = .570) and spending money management (H = 3.921, p = .141) show no significant religious variation, suggesting these practices are governed more by income constraint than religious-cultural orientation.

Table 5.1: Core Financial Practices Across Religious Groups — Kruskal-Wallis H Test Results

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
Trust in banking	Hindu	301.48	42.061	2	<0.001	✓
	Christian	216.04				
	Muslim	221.00				
Minimal spending	Hindu	290.24	24.622	2	<0.001	✓
	Christian	215.16				
	Muslim	230.10				
Regular saving	Hindu	310.20	49.166	2	<0.001	✓
	Christian	200.07				
	Muslim	236.14				
Old age saving	Hindu	328.90	126.760	2	<0.001	✓
	Christian	166.44				
	Muslim	267.80				
Timely debt repayment	Hindu	243.94	1.124	2	0.570	✗
	Christian	240.89				

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
	Muslim	228.44				
Long-term goal saving	Hindu	295.66	31.763	2	<0.001	✓
	Christian	233.08				
	Muslim	202.38				
Financial record keeping	Hindu	272.57	9.881	2	0.007	✓
	Christian	225.77				
	Muslim	228.42				
Consult before loans	Hindu	193.55	38.344	2	<0.001	✓
	Christian	279.49				
	Muslim	212.51				
Consult before investing	Hindu	193.42	38.056	2	<0.001	✓
	Christian	279.22				
	Muslim	212.96				
Avoid debt	Hindu	187.82	34.585	2	<0.001	✓
	Christian	275.51				
	Muslim	221.85				
Diversify investments	Hindu	255.59	23.114	2	<0.001	✓
	Christian	259.46				
	Muslim	195.47				
Avoid daily lenders	Hindu	219.80	9.584	2	0.008	✓
	Christian	259.02				
	Muslim	221.29				

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
Emergency fund	Hindu	290.83	41.525	2	<0.001	✓
	Christian	198.17				
	Muslim	252.34				
Spending money	Hindu	254.28	3.921	2	0.141	✗
	Christian	240.28				
	Muslim	221.96				
Secure loans	Hindu	291.78	42.018	2	<0.001	✓
	Christian	198.74				
	Muslim	250.91				
Lend securely	Hindu	262.07	31.759	2	<0.001	✓
	Christian	204.22				
	Muslim	264.55				

Source: Primary Data

Note: ✓ = significant ($p < .05$); ✗ = not significant.

Hindu households consistently rank highest on savings-related practices: trust in banking (301.48), regular saving (310.20), old age saving (328.90, $H = 126.760$, $p < .001$), long-term goal saving (295.66), and emergency fund maintenance (290.83). The old age saving difference is particularly striking — Hindus outrank Christians by 162 mean-rank points (328.90 vs. 166.44). From a behavioural perspective, this pattern may reflect the Hindu cultural concept of artha — the legitimate pursuit of wealth as a means of fulfilling dharma — which creates a moral framework supporting systematic saving, combined with the absence of institutional church

or mosque networks that might substitute for personal savings in providing old age security.

Christian households rank highest on consultation-based financial practices: consulting before loans (279.49), consulting before investing (279.22), and avoidance of debt (275.51). This deliberative behavioural profile may reflect the Protestant ethic of financial stewardship combined with stronger access to financial advisory networks through church-based communities and formal education institutions. Muslim households generally occupy intermediate positions, reflecting a financial profile shaped by Islamic principles of risk-sharing, avoidance of interest-based transactions (riba), and community-oriented wealth management — a pragmatic navigation of principled financial values within a cash economy.

> *Three distinct religious behavioural financial profiles emerge: Hindu households display self-reliant savings discipline; Christian households show consultative, institution-engaged financial behaviour; Muslim households navigate a principled middle path shaped by Islamic financial values and community solidarity norms.*

5.3 Religious Differences in Savings Motives

Table 5.2 presents Kruskal-Wallis results for savings motives. Significant differences are observed in seven of eight motives; celebrations and emergencies is the only exception ($H = 4.521$, $p = .104$), indicating that social event-related savings pressures are experienced uniformly across faith communities.

Table 5.2: Savings Motives Across Religious Groups — Kruskal-Wallis H Test Results

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
Unexpected matters	Hindu	199.62	41.520	2	<0.001	✓
	Christian	281.35				
	Muslim	205.74				
Debt repayment	Hindu	164.20	129.381	2	<0.001	✓
	Christian	308.26				
	Muslim	194.84				
House purchase/renovation	Hindu	233.95	36.943	2	<0.001	✓
	Christian	274.55				
	Muslim	190.61				
Celebrations/ emergencies	Hindu	247.83	4.521	2	0.104	✗
	Christian	245.85				
	Muslim	219.08				
Children's education	Hindu	225.16	36.576	2	<0.001	✓
	Christian	270.33				
	Muslim	202.42				
Old age savings	Hindu	293.74	35.567	2	<0.001	✓
	Christian	201.31				
	Muslim	246.10				
Children's marriage	Hindu	262.99	17.996	2	<0.001	✓
	Christian	249.13				
	Muslim	204.03				
Social service	Hindu	293.58	43.351	2	<0.001	✓
	Christian	194.65				

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
	Muslim	255.09				

Source: Primary Data

Debt repayment as a savings motive shows the strongest religious differentiation (H = 129.381, p < .001): Christians rank highest (308.26) and Hindus lowest (164.20) — a difference of 144 mean-rank points. This finding is behaviourally interpretable in terms of credit source patterns: Christian households show higher moneylender utilisation, generating higher debt burdens that make repayment the dominant savings motivation — debt salience operating at a community scale. Hindu households rank highest on old age savings motivation (293.74) and social service motivation (293.58), consistent with their self-reliant, long-term savings orientation. Christian households lead on unexpected matters (281.35), house purchase (274.55), and children's education (270.33), reflecting forward-looking aspirations mixed with immediate financial security concerns.

5.4 Religious Differences in Savings Barriers

Table 5.3 presents the analysis of savings barriers across religious groups. Significant differences are found in five of seven barriers; inadequate resources (H = 0.024, p = .988) and loans to friends and relatives (H = 5.305, p = .070) show no significant religious variation.

Table 5.3: Savings Barriers Across Religious Groups — Kruskal-Wallis H Test Results

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
High cost of living	Hindu	198.45	33.889	2	<0.001	✓
	Christian	275.13				
	Muslim	214.86				
Medical expenses	Hindu	178.55	97.238	2	<0.001	✓
	Christian	301.72				
	Muslim	193.44				
Inadequate resources	Hindu	238.27	0.024	2	0.988	✗
	Christian	236.43				
	Muslim	238.39				
Loan repayment	Hindu	206.07	57.250	2	<0.001	✓
	Christian	287.39				
	Muslim	193.14				
Lack of awareness	Hindu	253.46	14.294	2	0.001	✓
	Christian	211.54				
	Muslim	260.87				
Education/marriage	Hindu	236.08	33.235	2	<0.001	✓
	Christian	270.49				
	Muslim	194.51				
Loans to friends/relatives	Hindu	263.03	5.305	2	0.070	✗
	Christian	231.50				
	Muslim	227.50				

Source: Primary Data

Christian households face the highest reported barriers from medical expenses (301.72, H = 97.238, p < .001), high cost of living (275.13), loan repayment (287.39), and education and marriage expenses (270.49). This finding — that the most institutionally connected religious group reports the highest savings barriers — is behaviourally interpretable through the lens of lifestyle-income mismatch: higher consumption aspirations and social obligation expenditures associated with church community membership create financial pressure even at comparable income levels. Lack of awareness as a savings barrier is highest among Hindus (253.46) and Muslims (260.87), indicating that financial literacy interventions would be most efficiently targeted at these communities.

5.5 Religious Differences in Savings Inducing Factors

Table 5.4 documents how religious affiliation shapes sensitivity to savings incentives — a finding with direct implications for incentive-based savings product design.

Table 5.4: Savings Inducing Factors Across Religious Groups — Kruskal-Wallis H Test Results

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
Fund availability	Hindu	185.53	92.145	2	<0.001	✓
	Christian	291.44				
	Muslim	202.22				
High interest rate	Hindu	177.02	90.262	2	<0.001	✓
	Christian	301.21				
	Muslim	195.20				
Income/capital appreciation	Hindu	221.94	35.447	2	<0.001	✓
	Christian	275.00				

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
	Muslim	198.47				
Tax benefits	Hindu	217.19	18.978	2	<0.001	✓
	Christian	267.29				
	Muslim	212.11				
Risk factors	Hindu	200.70	11.849	2	0.003	✓
	Christian	252.91				
	Muslim	242.90				

Source: Primary Data

Christian households rank highest on all five savings inducing factors: fund availability (291.44, H = 92.145, p < .001) and high interest rates (301.21, H = 90.262, p < .001) show the strongest differentiation. This pattern indicates that Christian fishing households are the most behaviourally responsive to financial incentives — they save more when conditions are favourable, more when interest rates are attractive, and more when income grows. Hindu households rank lowest on fund availability and interest rates as inducing factors, consistent with their habitual rather than incentive-driven savings orientation. Muslim households show somewhat higher responsiveness to risk mitigation factors (242.90), possibly reflecting the Islamic emphasis on precautionary wealth management.

5.6 Religious Differences in Information Sources

Table 5.5 presents the analysis of financial information sources. All five sources show significant religious variation.

Table 5.5: Information Sources for Financial Decisions Across Religious Groups — Kruskal-Wallis H Test Results

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
Own decision	Hindu	196.02	75.181	2	<0.001	✓
	Christian	285.50				
	Muslim	202.75				
Family members	Hindu	203.22	48.786	2	<0.001	✓
	Christian	284.13				
	Muslim	199.50				
Friends/relatives	Hindu	216.35	7.303	2	0.026	✓
	Christian	255.09				
	Muslim	228.95				
Advertisements	Hindu	274.96	17.400	2	<0.001	✓
	Christian	211.15				
	Muslim	246.22				
Social media	Hindu	314.75	58.001	2	<0.001	✓
	Christian	194.99				
	Muslim	239.71				

Source: Primary Data

Christians rely most heavily on personal judgment (285.50) and family members (284.13). Hindu households exhibit the highest reliance on social media (314.75, H = 58.001, p < .001) and advertisements (274.96), suggesting that digital and media channels have achieved stronger penetration as financial information sources among Hindu fisherfolk — possibly reflecting the relatively lower density of institutional financial guidance networks in Hindu fishing

communities, creating a vacuum that media fills. This has important implications for digital financial literacy strategy: programmes reaching Hindu fishing households through social media may be more effective than those targeting Christian communities through the same channel.

5.7 Religious Differences in Sources of Credit

Credit source preferences are among the richest domains of religious financial differentiation. Table 5.6 presents the full analysis; nine of eleven credit sources show significant religious variation.

Table 4.6: Credit Sources Across Religious Groups — Kruskal-Wallis H Test Results

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
Money lenders	Hindu	214.49	7.225	2	0.027	✓
	Christian	254.25				
	Muslim	231.39				
Kudumbasree/ Ayalkootams	Hindu	252.95	3.131	2	0.209	✗
	Christian	239.44				
	Muslim	224.02				
Shopkeepers/ merchants	Hindu	297.11	42.834	2	<0.001	✓
	Christian	197.66				
	Muslim	248.58				
Friends/relatives	Hindu	230.39	1.352	2	0.509	✗
	Christian	245.42				
	Muslim	231.96				
Commercial banks	Hindu	287.99	24.544	2	<0.001	✓
	Christian	210.47				

Indicator	Group	Mean Rank	H-stat.	df	p-value	Sig.
	Muslim	237.95				
Co-operatives	Hindu	257.90	12.464	2	0.002	✓
	Christian	249.68				
	Muslim	206.87				
Fisheries dept.	Hindu	316.13	50.802	2	<0.001	✓
	Christian	220.05				
	Muslim	205.32				
Landlords	Hindu	315.13	104.066	2	<0.001	✓
	Christian	172.47				
	Muslim	269.46				
Selling assets	Hindu	302.26	40.918	2	<0.001	✓
	Christian	202.82				
	Muslim	238.08				
Not repaying	Hindu	295.18	50.009	2	<0.001	✓
	Christian	191.49				
	Muslim	258.18				
Religious authorities	Hindu	318.35	117.963	2	<0.001	✓
	Christian	169.33				
	Muslim	271.39				

Source: Primary Data

Religious institutions as credit sources show the strongest religious differentiation ($H = 117.963$, $p < .001$): Hindu households lead dramatically (318.35) and Christians score lowest (169.33). This reflects the active role of Hindu temples in providing concessional

credit to devotee-fishermen in some coastal districts — a form of faith-embedded community finance that functions within a devotional framework. The behavioural mechanism of in-group trust makes religious-institution credit behaviourally preferred even when formal alternatives exist. Hindu households also lead in utilising the most diverse credit portfolio — shopkeepers, commercial banks, cooperatives, fisheries department, and landlords — suggesting greater financial resourcefulness. Christian households show the highest moneylender utilisation (254.25), consistent with the high debt repayment savings motivation documented earlier. Muslim households demonstrate selective credit engagement, with lower moneylender utilisation possibly reflecting Islamic avoidance of interest-based transactions.

5.8 Implications of the Religious Dimension

The religious dimension of financial behaviour among Kerala's fishing households is empirically substantial and behaviourally meaningful. Savings products for Hindu households should emphasise long-term security and self-reliance, and financial literacy should address awareness gaps. Credit products for Muslim households should explore Islamic-finance-aligned cooperative structures. Interventions for Christian households should focus on structural cost and debt barriers, and on harnessing their strong incentive-responsiveness. Temple, church, and mosque networks should be recognised as legitimate and effective channels for financial product delivery across all three communities — a recognition that is both empirically justified and practically valuable.

5.9 The Institutional Mediation of Religious Financial Behaviour

The religious differences in financial behaviour documented in this chapter are mediated not only through doctrine and individual belief but also through the institutional networks of religious communities — the churches, mosques, temples, and associated welfare and cooperative organisations that provide social insurance, credit access, and financial information to their members. Understanding these institutional mediation channels is critical for both interpreting the findings and designing policy responses. Christian fishing communities in Kerala are served by a dense network of church-based institutions: Catholic and Protestant churches maintain parish welfare funds, cooperative societies, and educational institutions that create both financial service channels and financial obligation networks (contributions to church funds, school fees, wedding expenses) that shape the savings motivation and barrier landscape documented in this chapter. The high savings barriers reported by Christian households — particularly for medical expenses, education, and loan repayment — may reflect in part the higher consumption aspirations associated with participation in church community life.

Muslim fishing communities in Kerala's coastal belt are served by a different institutional landscape. The Wakf properties managed by mosque committees, the rotating credit associations (chit funds) that operate within Muslim fishing community networks, and the growing but still limited formal Islamic cooperative sector each provide partial substitutes for formal financial services. The pattern of selective credit utilisation documented for Muslim households — lower moneylender use, moderate cooperative use, selective formal

bank use — reflects the navigation of these institutional options within the constraint of Islamic principles around interest-bearing transactions. Future research that documents the specific mechanisms through which Islamic principles moderate credit behaviour in Kerala's coastal Muslim communities would substantially enrich the understanding of religious financial behaviour beyond what the aggregate survey data in this study can establish.

Hindu fishing communities, particularly in the northern coastal belt, maintain temple-based financial networks that are less formally institutionalised than Christian church structures but no less influential in shaping financial behaviour. Temple financial networks in Kerala's coastal fishing communities operate primarily through festival credit (advances given against festival contributions), temple land revenue, and the social capital of temple committee membership, which facilitates credit access within the devotee community. The highest utilisation of religious institutions as credit sources among Hindu households documented in Table 4.6 reflects these informal but economically significant temple-based credit arrangements. The formal recognition and regulated operation of temple-based financial mechanisms — currently operating in a regulatory grey zone — could significantly expand formal credit access for Hindu fishing communities while preserving the cultural and social legitimacy that makes temple-based credit behaviourally preferred.

Chapter 6

Poverty's Paradoxes: Economic Status and Financial Behaviour

6.1 Introduction 77

6.2 Economic Status and Core Financial Practices 78

6.3 Economic Status and Savings Motives 82

6.4 Economic Status and Savings Barriers 84

6.5 Economic Status and Savings Inducing Factors 86

6.6 Economic Status and Information Sources 87

6.7 Economic Status and Sources of Credit 89

6.8 Policy Implications of the Economic Status Dimension 92

6.9 Operationalising the Paradox: Design Principles for Poverty-Responsive Finance 92

6.1 Introduction

The relationship between income and financial behaviour in marginalised communities frequently confounds the expectations of standard economic theory. Rational choice models predict that poorer households will save less, plan less, and manage credit more poorly. Behavioural economics complicates this prediction significantly. It observes that resource scarcity can sharpen financial attention (the concept of 'scarcity focus'), that the absence of safety nets can intensify precautionary savings behaviour (the 'survival discipline' effect), and that economic marginalisation can produce greater financial prudence — not despite poverty but because of it. The evidence from Kerala's fishing households confirms these behavioural hypotheses in striking detail.

Economic status in this study is measured through the Public Distribution System ration card classification: Yellow Card households (Antyodaya Anna Yojana beneficiaries, utter poverty), Pink Card households (Below Poverty Line), Blue Card households (Above Poverty Line), and White Card households (Affluent). With 87.8% of the sample falling within the poverty categories, the economic status dimension is critically important for understanding the financial landscape of Kerala's fisherfolk.

> ***H4: There are significant differences in financial practices, savings motives, credit sources, savings obstacles, savings inducing factors, and information sources of fishermen households based on their economic status (Utter Poverty, Below Poverty, Above Poverty, and Affluent).***

6.2 Economic Status and Core Financial Practices

Table 6.1 presents the Kruskal-Wallis H test results for all sixteen core financial practice indicators across the four economic status groups. Significant differences are found in twelve of sixteen indicators. Financial record keeping (p = .229), diversifying investments (p = .223), avoiding daily lenders (p = .226), and spending money management (p = .278) show no significant variation.

Table 6.1: Core Financial Practices Across Economic Status Groups — Kruskal-Wallis H Test Results

Indicator	Economic Status	Mean Rank	H-stat.	df	p-value	Sig.
Trust in banking	Utter Poverty	283.60	17.130	3	0.001	✓
	Below Poverty	224.21				
	Above Poverty	251.24				
	Affluent	256.25				
Minimal spending	Utter Poverty	288.56	17.672	3	0.001	✓
	Below Poverty	230.57				
	Above Poverty	199.40				
	Affluent	263.50				
Regular saving	Utter Poverty	316.19	35.566	3	<0.001	✓
	Below Poverty	217.83				
	Above Poverty	239.59				
	Affluent	276.00				
Old age saving	Utter Poverty	341.57	62.323	3	<0.001	✓
	Below Poverty	215.83				
	Above Poverty	216.35				

Indicator	Economic Status	Mean Rank	H-stat.	df	p-value	Sig.
	Affluent	254.94				
Timely debt repayment	Utter Poverty	265.97	13.101	3	0.004	✓
	Below Poverty	224.47				
	Above Poverty	265.36				
	Affluent	331.06				
Long-term goal saving	Utter Poverty	276.15	11.171	3	0.011	✓
	Below Poverty	234.81				
	Above Poverty	200.04				
	Affluent	203.31				
Financial record keeping	Utter Poverty	265.37	4.320	3	0.229	✗
	Below Poverty	233.17				
	Above Poverty	225.33				
	Affluent	220.94				
Consult before loans	Utter Poverty	191.72	19.226	3	<0.001	✓
	Below Poverty	253.89				
	Above Poverty	197.12				
	Affluent	251.63				
Consult before investing	Utter Poverty	187.31	19.013	3	<0.001	✓
	Below Poverty	254.00				
	Above Poverty	209.70				
	Affluent	211.88				
Avoid debt	Utter Poverty	207.49	9.246	3	0.026	✓
	Below Poverty	246.89				
	Above Poverty	211.88				
	Affluent	298.19				

Indicator	Economic Status	Mean Rank	H-stat.	df	p-value	Sig.
Emergency fund	Utter Poverty	304.70	27.317	3	<0.001	✓
	Below Poverty	223.18				
	Above Poverty	223.89				
	Affluent	262.38				
Secure loans	Utter Poverty	274.85	15.604	3	0.001	✓
	Below Poverty	227.62				
	Above Poverty	227.30				
	Affluent	348.50				
Lend securely	Utter Poverty	287.81	21.082	3	<0.001	✓
	Below Poverty	229.86				
	Above Poverty	206.06				
	Affluent	259.19				

Source: Primary Data

Note: Economic status groups: Utter Poverty (Yellow Card/AAY), Below Poverty (Pink Card/BPL), Above Poverty (Blue Card/APL), Affluent (White Card). ✓ = significant; ✗ = not significant.

The most striking finding — poverty's paradox in its sharpest form — is that households in utter poverty rank highest on trust in banking (283.60), regular saving (316.19), old age saving (341.57, $H = 62.323$, $p < .001$), long-term goal saving (276.15), emergency fund maintenance (304.70), and secure lending (287.81). For old age saving, the difference between utter poverty (341.57) and below poverty (215.83) is 126 mean-rank points — a statistically incontestable and empirically extraordinary gap.

Households classified in utter poverty rank highest on regular saving, old age saving, emergency fund maintenance, and trust in banking — systematically outperforming less poor groups on key savings-oriented practices. This behavioural paradox of survival discipline challenges deficit-model assumptions about poverty and financial management, and calls for an asset-based approach to financial inclusion design.

The behavioural explanation for this paradox draws on the concept of survival discipline: when resources are at their most constrained and the margin for error is minimal, households adopt the most vigilant financial behaviours as a matter of existential necessity. Every rupee saved is insurance against catastrophe in households with no buffer whatsoever. Additionally, utter-poverty households benefit from a reduced temptation effect: with fewer discretionary goods within financial reach, the consumption temptations that erode savings among marginally better-off households are simply absent. The behavioural economics of resource scarcity — as documented by Mullainathan and Shafir (2013) — predicts precisely this heightened financial attention under extreme constraint.

Below Poverty Line (BPL) households emerge as the most consultative group: they lead on consulting before loans (253.89) and consulting before investing (254.00). This reflects a behavioural response to their position near the poverty threshold — a position where the consequences of a bad financial decision are severe enough to warrant deliberation but not so immediate as to preclude it. Affluent households, despite their small representation (N=8),

lead on timely debt repayment (331.06) and secure loans (348.50) — consistent with the relationship between resource slack and formal financial discipline.

6.3 Economic Status and Savings Motives

Table 6.2 presents Kruskal-Wallis results for savings motives. Seven of eight motives show significant variation; celebrations and emergencies is the only exception (H = 5.887, p = .117).

Table 6.2: Savings Motives Across Economic Status Groups — Kruskal-Wallis H Test Results

Indicator	Economic Status	Mean Rank	H-stat.	df	p-value	Sig.
Unexpected matters	Utter Poverty	199.24	15.728	3	0.001	✓
	Below Poverty	252.30				
	Above Poverty	197.22				
	Affluent	243.44				
Debt repayment	Utter Poverty	146.16	53.432	3	<0.001	✓
	Below Poverty	256.21				
	Above Poverty	253.59				
	Affluent	250.94				
House purchase/ renovation	Utter Poverty	184.15	25.571	3	<0.001	✓
	Below Poverty	256.68				
	Above Poverty	198.13				
	Affluent	202.56				
Celebrations/emergencies	Utter Poverty	238.12	5.887	3	0.117	✗
	Below Poverty	243.89				
	Above Poverty	195.55				
	Affluent	224.56				

Indicator	Economic Status	Mean Rank	H-stat.	df	p-value	Sig.
Children's education	Utter Poverty	177.27	30.292	3	<0.001	✓
	Below Poverty	251.98				
	Above Poverty	237.08				
	Affluent	224.75				
Old age savings	Utter Poverty	316.37	36.092	3	<0.001	✓
	Below Poverty	226.35				
	Above Poverty	192.33				
	Affluent	210.44				
Children's marriage	Utter Poverty	231.14	14.048	3	0.003	✓
	Below Poverty	248.19				
	Above Poverty	179.75				
	Affluent	210.88				
Social service	Utter Poverty	304.53	28.519	3	<0.001	✓
	Below Poverty	230.16				
	Above Poverty	189.01				
	Affluent	187.63				

Source: Primary Data

Utter poverty households rank highest on old age savings motivation (316.37, H = 36.092, p < .001) and social service motivation (304.53) — savings goals that are forward-looking and community-oriented. This finding adds further depth to the survival discipline interpretation: utter-poverty households are not only saving for immediate emergencies but for old age and community — a sign of a more expansive savings horizon than standard theory would predict. Below poverty households rank highest on debt repayment

(256.21), house purchase (256.68), and children's education (251.98) — motives that reflect the forward-looking aspirations of households striving for economic mobility. Above poverty and affluent households show generally lower mean ranks across most savings motives, possibly reflecting greater access to formal financial products that substitute for precautionary savings.

6.4 Economic Status and Savings Barriers

Table 6.3 presents the analysis of savings barriers. Six of seven barriers show significant variation; inadequate resources is the single exception (H = 1.991, p = .574), suggesting that resource insufficiency is experienced as a universal savings barrier across all economic categories.

Table 6.3: Savings Barriers Across Economic Status Groups — Kruskal-Wallis H Test Results

Indicator	Economic Status	Mean Rank	H-stat.	df	p-value	Sig.
High cost of living	Utter Poverty	164.47	33.263	3	<0.001	✓
	Below Poverty	249.58				
	Above Poverty	272.53				
	Affluent	230.75				
Medical expenses	Utter Poverty	149.17	47.880	3	<0.001	✓
	Below Poverty	258.12				
	Above Poverty	237.37				
	Affluent	242.13				
Inadequate resources	Utter Poverty	242.63	1.991	3	0.574	✗
	Below Poverty	233.14				
	Above Poverty	260.15				
	Affluent	228.75				

Indicator	Economic Status	Mean Rank	H-stat.	df	p-value	Sig.
Loan repayment	Utter Poverty	185.12	20.465	3	<0.001	✓
	Below Poverty	253.48				
	Above Poverty	219.33				
	Affluent	195.13				
Lack of awareness	Utter Poverty	264.53	15.040	3	0.002	✓
	Below Poverty	224.68				
	Above Poverty	261.20				
	Affluent	362.69				
Education/ marriage	Utter Poverty	206.80	11.302	3	0.010	✓
	Below Poverty	249.45				
	Above Poverty	205.10				
	Affluent	239.63				
Loans to friends/ relatives	Utter Poverty	268.80	8.604	3	0.035	✓
	Below Poverty	236.17				
	Above Poverty	206.37				
	Affluent	179.13				

Source: Primary Data

Below poverty households rank highest on high costs (249.58), medical expenses (258.12), and loan repayment (253.48) — indicating that the triple structural barrier of living costs, healthcare, and debt is most intensely experienced by households just below the poverty threshold. Utter poverty households rank lowest on these three barriers, consistent with the possibility that their savings behaviours are so survival-oriented that cost-of-living barriers are navigated with greater routinised efficiency. Utter poverty households rank highest on lack of awareness (264.53) and loans to

friends and relatives (268.80) as savings barriers — indicating that information gaps and social obligation leakages are particularly significant constraints for the most vulnerable group. The affluent category shows the highest mean rank for lack of awareness (362.69), which may reflect a small-sample artefact or a genuine pattern in which higher-income fishing households experience their knowledge limitations more acutely when navigating complex formal financial products.

6.5 Economic Status and Savings Inducing Factors

Table 6.4 presents the analysis of savings inducing factors. Three of five factors show significant variation; tax benefits (p = .080) and risk factors (p = .876) show no significant difference.

Table 6.4: Savings Inducing Factors Across Economic Status Groups — Kruskal-Wallis H Test Results

Indicator	Economic Status	Mean Rank	H-stat.	df	p-value	Sig.
Fund availability	Utter Poverty	157.52	53.003	3	<0.001	✓
	Below Poverty	250.35				
	Above Poverty	273.87				
	Affluent	258.50				
High interest rate	Utter Poverty	169.70	26.079	3	<0.001	✓
	Below Poverty	251.57				
	Above Poverty	251.60				
	Affluent	226.13				
Income/capital appreciation	Utter Poverty	197.94	13.461	3	0.004	✓
	Below Poverty	250.55				
	Above Poverty	212.99				
	Affluent	231.44				

Indicator	Economic Status	Mean Rank	H-stat.	df	p-value	Sig.
Tax benefits	Utter Poverty	240.84	6.761	3	0.080	✗
	Below Poverty	243.78				
	Above Poverty	200.43				
	Affluent	171.50				
Risk factors	Utter Poverty	226.44	0.658	3	0.876	✗
	Below Poverty	239.44				
	Above Poverty	241.61				
	Affluent	239.25				

Source: Primary Data

Above poverty and below poverty households rank highest on fund availability (273.87 and 250.35) and high interest rates (251.60 and 251.57) as savings inducing factors, while utter poverty households rank lowest (157.52 and 169.70). This finding is complementary to the survival discipline interpretation: utter poverty households save as a matter of routine regardless of fund availability or interest rates, while better-off households save more opportunistically in response to favourable conditions. The absence of significant variation in risk factors ($p = .876$) confirms that risk awareness as a savings motivation is uniformly distributed across economic status groups.

6.6 Economic Status and Information Sources

Table 6.5 presents the analysis of information sources for financial decisions. All five sources show significant variation.

Table 6.5: Information Sources Across Economic Status Groups — Kruskal-Wallis H Test Results

Indicator	Economic Status	Mean Rank	H-stat.	df	p-value	Sig.
Own decision	Utter Poverty	173.72	35.140	3	<0.001	✓
	Below Poverty	247.86				
	Above Poverty	262.01				
	Affluent	277.69				
Family members	Utter Poverty	204.42	8.391	3	0.039	✓
	Below Poverty	246.19				
	Above Poverty	223.72				
	Affluent	284.13				
Friends/relatives	Utter Poverty	247.97	10.354	3	0.016	✓
	Below Poverty	243.11				
	Above Poverty	199.78				
	Affluent	133.38				
Advertisements	Utter Poverty	307.50	29.375	3	<0.001	✓
	Below Poverty	227.58				
	Above Poverty	192.03				
	Affluent	248.19				
Social media	Utter Poverty	298.97	23.783	3	<0.001	✓
	Below Poverty	229.94				
	Above Poverty	191.51				
	Affluent	236.31				

Source: Primary Data

Utter poverty households show the lowest reliance on personal judgment (173.72, H = 35.140, p < .001) and the highest reliance on advertisements (307.50) and social media (298.97) for financial decisions. This pattern is behaviourally significant and policy-relevant. The low reliance on personal judgment among the most vulnerable households may reflect genuine informational disadvantage — lower financial knowledge, lower literacy, and less exposure to financial products — that creates a vacuum filled by external, often uncritical media and digital content. Above poverty and affluent households rely more heavily on personal judgment and family members, consistent with the greater financial knowledge and advisory networks associated with higher economic status.

6.7 Economic Status and Sources of Credit

Table 6.6 presents credit source analysis. Seven of eleven sources show significant variation; money lenders (p = .211), Kudumbasree (p = .272), friends and relatives (p = .527), and cooperatives (p = .504) show no significant variation — suggesting these sources are relatively uniformly available across economic categories.

Table 6.6: Credit Sources Across Economic Status Groups — Kruskal-Wallis H Test Results

Indicator	Economic Status	Mean Rank	H-stat.	df	p-value	Sig.
Money lenders	Utter Poverty	218.58	4.510	3	0.211	✗
	Below Poverty	245.50				
	Above Poverty	218.95				
	Affluent	203.25				
Kudumbasree /Ayalkootams	Utter Poverty	263.42	3.902	3	0.272	✗
	Below Poverty	231.83				

Indicator	Economic Status	Mean Rank	H-stat.	df	p-value	Sig.
	Above Poverty	238.79				
	Affluent	212.38				
Shopkeepers/ merchants	Utter Poverty	307.79	27.213	3	<0.001	✓
	Below Poverty	223.09				
	Above Poverty	227.55				
	Affluent	212.69				
Friends/ relatives	Utter Poverty	227.94	2.224	3	0.527	✗
	Below Poverty	240.87				
	Above Poverty	239.24				
	Affluent	179.06				
Commercial banks	Utter Poverty	282.84	14.200	3	0.003	✓
	Below Poverty	227.15				
	Above Poverty	223.95				
	Affluent	310.38				
Co-operatives	Utter Poverty	235.27	2.343	3	0.504	✗
	Below Poverty	241.91				
	Above Poverty	218.81				
	Affluent	190.69				
Fisheries dept.	Utter Poverty	259.59	11.724	3	0.008	✓
	Below Poverty	241.50				
	Above Poverty	183.86				
	Affluent	186.19				
Landlords	Utter Poverty	305.93	29.844	3	<0.001	✓
	Below Poverty	220.55				
	Above Poverty	235.44				

Indicator	Economic Status	Mean Rank	H-stat.	df	p-value	Sig.
	Affluent	288.81				
Selling assets	Utter Poverty	281.39	11.583	3	0.009	✓
	Below Poverty	229.37				
	Above Poverty	231.97				
	Affluent	181.06				
Not repaying	Utter Poverty	312.23	34.535	3	<0.001	✓
	Below Poverty	224.28				
	Above Poverty	198.94				
	Affluent	297.25				
Religious authorities	Utter Poverty	332.38	58.836	3	<0.001	✓
	Below Poverty	219.85				
	Above Poverty	196.65				
	Affluent	299.31				

Source: Primary Data

Utter poverty households show the highest utilisation of shopkeepers (307.79, H = 27.213, p < .001), landlords (305.93, H = 29.844, p < .001), religious institutions (332.38, H = 58.836, p < .001), and the coping behaviour of not repaying (312.23, H = 34.535, p < .001). The last pattern — highest utilisation of non-repayment among utter poverty households — indicates that for the most economically vulnerable, non-repayment functions as a last-resort financial survival mechanism. This behaviour, while understandable from a survival perspective, generates long-term reputation costs that further restrict future credit access, creating a vicious cycle. Commercial banks show significant variation (H =

14.200, p = .003), with affluent households leading (310.38) and utter poverty households also showing relatively high bank credit utilisation (282.84), possibly reflecting formal credit provided through government-scheme linkages.

6.8 Policy Implications of the Economic Status Dimension

The survival discipline paradox demands a fundamental reorientation of financial inclusion programmes away from a deficit model towards an asset-based model that recognises and builds on the savings discipline of utter poverty households. Products designed for this group must be accessible, flexible, and linked to formal banking infrastructure to capture and amplify existing savings habits. BPL households require interventions addressing structural obstacles — medical expenses, high costs, and debt burdens — rather than primarily motivational interventions; their motivation and consultative behaviours are already strengths. The digital information environment of utter poverty households demands regulatory attention to the quality of financial content circulating in the digital spaces where the most vulnerable households seek guidance.

6.9 Operationalising the Paradox: Design Principles for Poverty-Responsive Finance

The survival discipline paradox documented in this chapter has direct practical implications that go beyond the theoretical challenge it poses to standard economic models. If utter poverty households demonstrate the strongest savings discipline, then financial inclusion programmes that target this group on the assumption of poor financial habits are misaligned with the empirical reality. The appropriate design principle is not motivation-first (assuming

motivation is absent and needs to be created) but access-first (assuming motivation is present and needs a formal channel through which to express itself). This means that the priority for financial inclusion in utter poverty fishing households is not financial literacy campaigns but accessible, flexible, low-barrier savings products — accounts that can receive small, irregular deposits without minimum balance requirements, without documentation barriers, and without penalties for irregular contribution patterns.

The finding that utter poverty households rank highest on social media and advertisement reliance for financial information creates a specific regulatory and communication challenge. These households are simultaneously the most financially vulnerable and the most exposed to potentially misleading digital financial content. The design of targeted, trustworthy, Malayalam-language financial literacy content for the digital platforms used by utter poverty fishing households — WhatsApp groups, Facebook fishing community pages, YouTube fishing community channels — is an urgent communication design task. Importantly, this content should not be designed as formal financial literacy education (which this population's digital engagement patterns suggest they would not consume) but as peer-relatable financial guidance that operates within the social proof and social learning mechanisms that already govern information consumption in these communities.

The consultative behaviour of BPL households — the highest consultation before loans and investments — offers a specific design opportunity for formal credit products. BPL fishing households are already doing something formally: they are seeking advice before borrowing. If formal financial institutions provided accessible and

culturally appropriate pre-loan consultation services — through cooperative credit officers, village-level banking correspondents, or community financial health volunteers — they would be providing a formally structured version of what BPL households are already seeking informally. This is a case where formal financial service design can leverage existing behavioural tendencies rather than attempting to create new ones.

Chapter 7

Technology, Capital, and Thrift: Boat Type and Financial Behaviour

7.1 Introduction 96

7.2 Boat Type and Core Financial Practices 97

7.3 Boat Type and Savings Motives 100

7.4 Boat Type and Savings Barriers 102

7.5 Boat Type and Savings Inducing Factors 104

7.6 Boat Type and Information Sources 105

7.7 Boat Type and Sources of Credit 106

7.8 Implications of the Technological Dimension 109

7.9 Technology as a Financial Behaviour Lever: Policy Design Implications 109

7.1 Introduction

The type of fishing vessel a household operates is not merely a technical characteristic — it is simultaneously a measure of capital investment, income-generating capacity, risk exposure, operational scale, and social status within the fishing community. In Kerala's technologically stratified fishing economy, three vessel categories define the landscape: mechanised boats (equipped with engines, navigation technology, and modern fishing equipment), motorised boats (engine-powered with simpler technology, the dominant category), and traditional boats (non-motorised, operated through wind, oars, and seasonal currents). These categories represent profoundly different economic and behavioural worlds within the same profession.

Mechanised boat operators typically invest tens of lakhs in vessel acquisition, operate at greater sea distances accessing larger catch volumes, bear significant fuel and maintenance costs, and carry vessel loan obligations that shape their entire financial planning horizon. Motorised boat users occupy the dominant middle ground — more productive than traditional boats but without the large capital commitments and institutional credit relationships of mechanised operators. Traditional boat users are the most ecologically embedded and typically the most economically marginalised, with the lowest income capacity but also the lowest operating costs.

> ***H3: The financial practices, savings motives, preferred sources of credit, savings obstacles, savings inducing factors, and information sources for financial decisions of fishermen households vary significantly based on the type of fishing boat they operate.***

7.2 Boat Type and Core Financial Practices

Table 7.1 presents the full Kruskal-Wallis H test results for all sixteen financial practice indicators across the three boat type categories. Significant differences are observed in eleven of sixteen indicators; consultation before loans (p = .365), consultation before investing (p = .597), avoidance of debt (p = .613), spending money management (p = .695), and financial record keeping show less technology-differentiated patterns — suggesting that deliberative financial decision-making is a community-wide behavioural norm that transcends technological stratification.

Table 7.1: Core Financial Practices Across Boat Types — Kruskal-Wallis H Test Results

Indicator	Boat Type	Mean Rank	H-stat.	df	p-value	Sig.
Trust in banking	Mechanised	266.13	9.321	2	0.009	✓
	Motorised	236.85				
	Traditional	209.61				
Minimal spending	Mechanised	277.33	9.982	2	0.007	✓
	Motorised	231.14				
	Traditional	220.18				
Regular saving	Mechanised	299.61	23.079	2	<0.001	✓
	Motorised	227.35				
	Traditional	211.41				
Old age saving	Mechanised	304.95	29.664	2	<0.001	✓
	Motorised	218.55				
	Traditional	240.37				
	Mechanised	260.73	6.181	2	0.045	✓

Indicator	Boat Type	Mean Rank	H-stat.	df	p-value	Sig.
Timely debt repayment	Motorised	226.59				
	Traditional	255.73				
Long-term goal saving	Mechanised	263.37	10.814	2	0.004	✓
	Motorised	240.96				
	Traditional	196.37				
Financial record keeping	Mechanised	269.15	6.850	2	0.033	✓
	Motorised	234.31				
	Traditional	216.39				
Consult before loans	Mechanised	220.70	2.015	2	0.365	✗
	Motorised	243.21				
	Traditional	232.87				
Consult before investing	Mechanised	224.61	1.032	2	0.597	✗
	Motorised	239.40				
	Traditional	243.74				
Avoid debt	Mechanised	225.15	0.979	2	0.613	✗
	Motorised	241.22				
	Traditional	235.99				
Diversify investments	Mechanised	247.10	8.145	2	0.017	✓
	Motorised	244.84				
	Traditional	198.42				
Avoid daily lenders	Mechanised	213.81	6.137	2	0.046	✓
	Motorised	248.46				
	Traditional	219.53				
Emergency fund	Mechanised	271.98	7.692	2	0.021	✓

Indicator	Boat Type	Mean Rank	H-stat.	df	p-value	Sig.
	Motorised	228.79				
	Traditional	235.11				
Spending money	Mechanised	229.81	0.727	2	0.695	✗
	Motorised	241.29				
	Traditional	230.75				
Secure loans	Mechanised	266.40	9.502	2	0.009	✓
	Motorised	224.77				
	Traditional	256.89				
Lend securely	Mechanised	269.28	8.622	2	0.013	✓
	Motorised	228.31				
	Traditional	239.91				

Source: Primary Data

Note: ✓ = significant ($p < .05$); ✗ = not significant.

Mechanised boat users rank highest across most savings-related financial practices: regular saving (299.61, $H = 23.079$, $p < .001$), old age saving (304.95, $H = 29.664$, $p < .001$), long-term goal saving (263.37), emergency fund maintenance (271.98), trust in banking (266.13), and financial record keeping (269.15). These findings are consistent with the higher income capacity of mechanised operations and the greater capital commitment involved in vessel ownership — both factors that create stronger incentives for formal financial planning and systematic savings. The behavioural interpretation draws on the concept of financial responsibility anchoring: large vessel loans create ongoing financial obligations that force operators into regular financial planning and bank

interactions, which in turn build financial planning habits that extend beyond loan management to savings and investment behaviour.

> *Mechanised boat operators behave like small entrepreneurs: they plan financially, save more, trust banks more, and maintain emergency reserves. Traditional boat operators display the financial profile of subsistence workers: compressed planning horizons, lower savings, and heavier informal credit dependence — a technological stratification of financial behaviour that mirrors the income stratification of Kerala's fishing fleet.*

Traditional boat users show the lowest mean ranks on most savings and banking-related practices — consistent with the lower income capacity and lesser institutional contact of non-motorised fishing operations. The absence of engine-related bank loans means traditional boat operators have fewer forced interactions with formal financial institutions, reducing the institutional habituation that mechanised operators develop through their credit relationships.

7.3 Boat Type and Savings Motives

Table 7.2 presents the analysis of savings motives. Five of eight motives show significant variation; house purchase ($p = .074$), celebrations ($p = .398$), and social service ($p = .211$) show no significant boat-type variation.

Table 7.2: Savings Motives Across Boat Types — Kruskal-Wallis H Test Results

Indicator	Boat Type	Mean Rank	H-stat.	df	p-value	Sig.
Unexpected matters	Mechanised	219.93	8.245	2	0.016	✓
	Motorised	244.55				
	Traditional	261.41				
Debt repayment	Mechanised	270.84	14.562	2	0.001	✓
	Motorised	237.47				
	Traditional	210.18				
House purchase/ renovation	Mechanised	256.69	5.213	2	0.074	✗
	Motorised	241.67				
	Traditional	213.97				
Celebrations/ emergencies	Mechanised	236.92	1.843	2	0.398	✗
	Motorised	244.17				
	Traditional	223.28				
Children's education	Mechanised	265.88	9.442	2	0.009	✓
	Motorised	241.51				
	Traditional	204.56				
Old age savings	Mechanised	271.06	12.197	2	0.002	✓
	Motorised	238.70				
	Traditional	200.56				
Children's marriage	Mechanised	261.57	7.841	2	0.020	✓
	Motorised	241.53				
	Traditional	204.28				
Social service	Mechanised	243.42	3.111	2	0.211	✗
	Motorised	244.27				

Indicator	Boat Type	Mean Rank	H-stat.	df	p-value	Sig.
	Traditional	210.90				

Source: Primary Data

Mechanised boat users rank highest on debt repayment as a savings motive (270.84, H = 14.562, p = .001), reflecting the vessel acquisition loans that many mechanised operators carry — a parallel to the debt-driven savings motivation of southern fisherfolk. Old age savings (271.06, H = 12.197, p = .002) and children's education (265.88, H = 9.442, p = .009) as savings motives are also highest among mechanised boat users, consistent with their generally higher savings capacity and longer financial planning horizons. Traditional boat users rank highest on unexpected matters as a savings motive (261.41, H = 8.245, p = .016), reflecting the greater income volatility of near-shore traditional fishing — the precautionary savings motive is most behaviourally active where financial vulnerability is greatest.

7.4 Boat Type and Savings Barriers

Table 7.3 presents savings barrier analysis. Four of seven barriers show significant variation.

Table 7.3: Savings Barriers Across Boat Types — Kruskal-Wallis H Test Results

Indicator	Boat Type	Mean Rank	H-stat.	df	p-value	Sig.
High cost of living	Mechanised	231.10	2.461	2	0.292	✗
	Motorised	244.81				
	Traditional	225.03				
Medical expenses	Mechanised	218.49	7.024	2	0.030	✓

Indicator	Boat Type	Mean Rank	H-stat.	df	p-value	Sig.
	Motorised	247.13				
	Traditional	214.14				
Inadequate resources	Mechanised	209.64	8.375	2	0.015	✓
	Motorised	245.95				
	Traditional	221.95				
Loan repayment	Mechanised	258.57	10.218	2	0.006	✓
	Motorised	235.60				
	Traditional	211.95				
Lack of awareness	Mechanised	213.09	6.933	2	0.031	✓
	Motorised	244.55				
	Traditional	228.85				
Education/marriage	Mechanised	253.21	4.820	2	0.090	✗
	Motorised	241.36				
	Traditional	215.09				
Loans to friends/ relatives	Mechanised	224.53	3.652	2	0.161	✗
	Motorised	244.24				
	Traditional	228.23				

Source: Primary Data

Loan repayment as a savings barrier ranks highest among mechanised boat users (258.57, H = 10.218, p = .006), reflecting significant vessel acquisition debt. Inadequate resources as a barrier rank highest among motorised boat users (245.95, H = 8.375, p = .015) — consistent with the dominant BPL and utter poverty economic status of many motorised boat operators. Traditional boat

users face lower barriers from loan repayment (211.95) — they carry less institutional debt — but higher barriers from inadequate resources, reflecting their lower income capacity. High living costs show no significant boat-type variation (H = 2.461, p = .292), confirming that cost-of-living pressures are universal across the fishing community.

7.5 Boat Type and Savings Inducing Factors

Table 7.4 presents savings inducing factor analysis. Three of five factors show significant variation.

Table 7.4: Savings Inducing Factors Across Boat Types — Kruskal-Wallis H Test Results

Indicator	Boat Type	Mean Rank	H-stat.	df	p-value	Sig.
Fund availability	Mechanised	264.07	8.994	2	0.011	✓
	Motorised	245.70				
	Traditional	196.20				
High interest rate	Mechanised	272.44	11.607	2	0.003	✓
	Motorised	243.08				
	Traditional	193.97				
Income/ capital appreciation	Mechanised	263.04	7.218	2	0.027	✓
	Motorised	244.02				
	Traditional	199.51				
Tax benefits	Mechanised	249.58	3.712	2	0.156	✗
	Motorised	243.41				
	Traditional	211.45				
Risk factors	Mechanised	240.57	1.225	2	0.542	✗
	Motorised	242.56				

Indicator	Boat Type	Mean Rank	H-stat.	df	p-value	Sig.
	Traditional	223.01				

Source: Primary Data

Mechanised boat users rank highest on fund availability (264.07, H = 8.994, p = .011), high interest rates (272.44, H = 11.607, p = .003), and income/capital appreciation (263.04, H = 7.218, p = .027) as savings inducing factors. This confirms the incentive-responsive savings behaviour of mechanised operators: they are more likely to save when income is available, when returns are attractive, and when investment income grows. Traditional boat users consistently rank lowest on all three significant inducing factors — consistent with their less incentive-responsive, more survival-need-driven savings pattern.

7.6 Boat Type and Information Sources

Table 7.5 presents the analysis of information sources for financial decisions. Notably, no information source shows significant variation across boat types.

Table 7.5: Information Sources for Financial Decisions Across Boat Types — Kruskal-Wallis H Test Results

Indicator	Boat Type	Mean Rank	H-stat.	df	p-value	Sig.
Own decision	Mechanised	261.47	7.903	2	0.019	✓
	Motorised	242.18				
	Traditional	204.05				
Family members	Mechanised	245.71	2.149	2	0.341	✗
	Motorised	242.63				
	Traditional	218.45				

Indicator	Boat Type	Mean Rank	H-stat.	df	p-value	Sig.
Friends/relatives	Mechanised	234.98	1.576	2	0.455	✗
	Motorised	244.10				
	Traditional	224.11				
Advertisements	Mechanised	221.36	4.892	2	0.087	✗
	Motorised	241.04				
	Traditional	252.70				
Social media	Mechanised	230.65	5.731	2	0.057	✗
	Motorised	248.71				
	Traditional	207.35				

Source: Primary Data

The absence of significant boat-type variation in information sources is a meaningful finding in itself: the informational community of fishing households around financial decisions is relatively homogeneous across technological lines. All boat-type groups rely primarily on personal judgment and family networks, with social media playing a secondary role. This suggests that financial literacy and communication strategies need not be technology-specific — the same channels can reach fishermen across all vessel categories. This is the one dimension of financial practice where the fishing community shows genuine uniformity.

7.7 Boat Type and Sources of Credit

Table 7.6 presents credit source analysis. Four of eleven credit sources show significant variation.

Table 7.6: Credit Sources Across Boat Types — Kruskal-Wallis H Test Results

Indicator	Boat Type	Mean Rank	H-stat.	df	p-value	Sig.
Money lenders	Mechanised	213.31	8.123	2	0.017	✓
	Motorised	247.29				
	Traditional	232.61				
Kudumbasree/ Ayalkootams	Mechanised	242.74	1.834	2	0.400	✗
	Motorised	241.88				
	Traditional	219.63				
Shopkeepers/ merchants	Mechanised	218.07	5.547	2	0.062	✗
	Motorised	243.93				
	Traditional	236.26				
Friends/ relatives	Mechanised	235.82	0.761	2	0.684	✗
	Motorised	243.26				
	Traditional	229.15				
Commercial banks	Mechanised	280.08	14.771	2	0.001	✓
	Motorised	238.52				
	Traditional	195.19				
Co-operatives	Mechanised	261.74	6.521	2	0.038	✓
	Motorised	243.27				
	Traditional	201.03				
Fisheries dept.	Mechanised	281.33	15.634	2	<0.001	✓
	Motorised	238.60				
	Traditional	192.76				
Landlords	Mechanised	249.02	4.081	2	0.130	✗
	Motorised	242.25				

Indicator	Boat Type	Mean Rank	H-stat.	df	p-value	Sig.
	Traditional	213.76				
Selling assets	Mechanised	229.62	2.745	2	0.254	✗
	Motorised	244.68				
	Traditional	220.71				
Not repaying	Mechanised	218.46	5.913	2	0.052	✗
	Motorised	246.42				
	Traditional	217.67				
Religious authorities	Mechanised	237.62	0.823	2	0.663	✗
	Motorised	243.38				
	Traditional	223.06				

Source: Primary Data

Commercial banks show the strongest boat-type differentiation in credit sourcing ($H = 14.771$, $p = .001$): mechanised users rank highest (280.08), followed by motorised (238.52), and traditional lowest (195.19). This gradient reflects the differential institutional credit access across vessel categories — mechanised operators have vessel documentation, regular bank relationships through loan accounts, and higher income credibility. The Department of Fisheries similarly shows mechanised-high, traditional-low patterns ($H = 15.634$, $p < .001$). Cooperatives show significant variation ($H = 6.521$, $p = .038$) with mechanised users highest (261.74), consistent with their stronger institutional engagement. Money lenders show significant variation ($H = 8.123$, $p = .017$) with motorised users highest (247.29), reflecting the dominant

demographic weight of the motorised category combined with their intermediate formal credit access.

7.8 Implications of the Technological Dimension

The boat type analysis demonstrates that fishing technology is a meaningful independent predictor of financial behaviour — not merely a proxy for income but a structuring variable in its own right. Mechanised boat operators face unique financial realities — large loan obligations, greater income potential, and stronger institutional linkages — that produce a more formal, planned, and savings-oriented financial behaviour pattern. Traditional boat users face the opposite configuration: lower income, lower institutional contact, less formal credit access, and financial behaviours that are more community-mediated and informally organised. Policy interventions should be technology-sensitive: credit products for mechanised operators should be scaled to their asset values; financial literacy for traditional boat operators should prioritise basic savings product access and formal credit migration; and cooperative credit structures for the dominant motorised segment should be strengthened.

7.9 Technology as a Financial Behaviour Lever: Policy Design Implications

The boat type analysis reveals that fishing technology is a more powerful financial behaviour lever than is commonly recognised in financial inclusion policy for marine fishing communities. Most financial inclusion policies treat fishing households as a homogeneous occupational group, differentiating primarily by income level or geographic location. The data in this chapter demonstrate that within the same income level and geographic area,

mechanised boat operators display financial behaviours that are qualitatively different from traditional boat operators — more savings-oriented, more institutionally engaged, more incentive-responsive, and more formally credit-active. This technological stratification of financial behaviour calls for technology-stratified financial product design.

For mechanised boat users, the priority financial service need is not basic savings access (which they already have through their vessel loan banking relationships) but optimised credit and insurance products that are calibrated to the specific capital structure of mechanised fishing operations. Marine insurance for fishing vessels — currently underpenetrated in Kerala's mechanised fishing fleet — is the most critical financial product gap for this segment. The loss of a mechanised vessel without insurance coverage is a catastrophic financial event that destroys not only the capital asset but the entire financial ecosystem built around the vessel's income. MATSYAFED's vessel finance programme and the National Fisheries Development Board's mechanised fishing sector investments have created partial infrastructure for this, but comprehensive marine insurance coverage remains elusive.

For traditional boat users — the segment with the lowest income, the highest informal credit dependence, and the strongest precautionary savings motivation — the priority is to connect the existing savings discipline with formal savings products that provide returns and security that current informal savings arrangements cannot. The 'keep savings at home' practice that is likely prevalent among traditional boat users (due to limited bank access and distrust of formal institutions developed through historical exclusion)

represents a significant opportunity cost: savings that could be earning interest and providing collateral for formal credit are instead stored as cash with no return and high theft risk. Simple, accessible savings products delivered through boat landing sites, fish auction platforms, or cooperative pick-up systems — rather than requiring a bank branch visit — would address this access barrier without requiring any change in the underlying savings motivation that the data confirm is already present.

Chapter 8

Convergences and Contrasts: A Cross-Dimensional Behavioural Synthesis

8.1 Introduction....113

8.2 Cross-Dimensional Summary....113

8.3 Cross-Cutting Behavioural Themes....115

8.3.1 The Survival Discipline Paradox — Consistent Across All Dimensions....115

8.3.2 The Trust-Access Paradox — Structurally Persistent....116

8.3.3 Informal Credit's Structural Grip....116

8.3.4 The Digital Information Vulnerability....117

8.4 A Behavioural Typology of Kerala's Fishing Households....117

8.5 Hypothesis Summary....119

8.6 Limitations and Directions for Refinement……122

8.1 Introduction

The four preceding chapters have examined the demographic axes of region, religion, economic status, and boat type as independent lenses through which to understand the financial practices of Kerala's fishing households. In the lived reality of any fishing family, however, these axes are not independent — they intersect, interact, and compound within individual households and communities. A below-poverty-line Hindu fisherman in South Kerala operating a traditional boat occupies a very different financial world from an above-poverty-line Christian mechanised boat operator in Central Kerala, even though both belong to 'Kerala's fishing community'.

This chapter does not formally model these interactions statistically — that belongs to multi-dimensional analytical frameworks in the parent doctoral research. Instead, it offers a synthesising cross-tabulation of the major findings across all four dimensions and develops a typological understanding of financial behaviour that is sensitive to the layered nature of demographic difference. The synthesis also highlights where the four dimensions converge — where the same behavioural pattern appears across multiple axes — and where they diverge, revealing the specificity of individual demographic influences on financial behaviour.

8.2 Cross-Dimensional Summary

Table 8.1 presents a systematic cross-tabulation of major financial behaviour patterns identified across all four demographic dimensions, organised around eight key financial behaviour domains.

Table 8.1: Cross-Dimensional Synthesis of Financial Practice Patterns in Kerala's Fishing Communities

Financial Behaviour Dimension	Regional Pattern	Religious Pattern	Economic Status Pattern	Technological Pattern
Savings orientation (regular + old age)	North strongest; South weakest	Hindus highest; Christians lowest	Utter poverty paradoxically highest	Mechanised boat users lead

Financial Behaviour Dimension	Regional Pattern	Religious Pattern	Economic Status Pattern	Technological Pattern
Institutional trust (banking)	Centre leads; South weakest	Hindus most trusting	Utter poverty and BPL high	Mechanised highest
Deliberative / consultative behaviour	South most cautious before decisions	Christians most deliberative	BPL most consultative	No significant variation across types
Emergency fund maintenance	North strongest; South weakest	Hindus highest; Christians lowest	Utter poverty paradox most pronounced	Mechanised boat users lead
Behavioural credit sourcing	North: formal + religious; South: moneylenders	Hindus: diverse; Christians: moneylenders ; Muslims: selective	Utter poverty: shopkeepers, landlords, religious institutions	Mechanised: banks, fisheries dept; Traditional: informal
Financial information habits	South: personal judgment; North: social media & ads	Christians: personal networks; Hindus: media channels	Utter poverty: ads & social media; APL: personal judgment	Mechanised: structured sources; Traditional: family networks
Savings barriers	South: medical + debt; Central: high costs	Christians: highest medical and cost barriers	BPL: cost, medical, debt; Utter poverty: awareness and social loans	Mechanised: loan repayment; Traditional: inadequate resources
Savings inducing factors	South: fund availability + interest; North: habit-driven	Christians: highest response to all incentives	APL/BPL: interest rates and fund availability; Utter poverty: least responsive	Mechanised: fund and interest-sensitive; Traditional: less responsive

Source: Authors' Synthesis from Primary Data Analysis

8.3 Cross-Cutting Behavioural Themes

8.3.1 The Survival Discipline Paradox — Consistent Across All Dimensions

One of the most consistent and counterintuitive findings across all four demographic dimensions is the survival discipline paradox: the empirical pattern in which those facing the greatest adversity demonstrate the strongest precautionary financial behaviours. Utter poverty households save more for old age than BPL households. North Kerala fishermen save more habitually than southern fishermen despite similar income levels. Traditional boat users show the strongest precautionary savings motivation despite the lowest income capacity. Hindu households maintain stronger emergency funds than Christian households despite comparable economic profiles.

These convergent findings across four independent dimensions constitute robust evidence for the behavioural mechanisms of scarcity focus and survival discipline — psychological responses to resource constraint that produce heightened financial attention and precautionary behaviour rather than financial disengagement. This evidence should fundamentally shift how financial inclusion programmes conceptualise the 'target beneficiary': not as a financially incompetent actor to be educated but as a behaviourally adaptive agent whose financial discipline may well exceed that of better-resourced groups. An asset-based approach to financial inclusion is not merely philosophically appealing — it is empirically mandated by the data.

8.3.2 The Trust-Access Paradox — Structurally Persistent

Across all four demographic dimensions, fishing households exhibit high institutional trust in banking institutions combined with low formal banking utilisation for credit. This trust-access paradox — documented in the aggregate analysis and confirmed across regional, religious, economic, and technological sub-groups — points to a structural rather than attitudinal barrier to financial inclusion. The barriers are documented: documentation requirements (KYC compliance without land ownership proof), inflexible repayment schedules (fixed monthly instalments for irregular fish incomes), physical distance, and social distance from formal banking environments. Financial inclusion policy that focuses on awareness-raising to bring fishing households into the formal system misses this fundamental point: the will is already present. What is absent are products and infrastructure that translate institutional trust into institutional engagement.

8.3.3 Informal Credit's Structural Grip

Moneylenders and informal credit sources dominate the credit landscape across all the most vulnerable demographic sub-groups — the South, utter poverty households, Christian households (through higher moneylender utilisation), and traditional boat users. This cross-dimensional consistency confirms that informal credit dominance is not a culturally specific or regionally idiosyncratic pattern but a structural feature of Kerala's fisherfolk financial landscape. The behavioural consequence is a debt-trap cycle: high-interest informal borrowing creates repayment obligations that crowd out savings, which prevents the accumulation of collateral for formal credit, which perpetuates informal credit dependence.

Breaking this cycle requires structural intervention — subsidised credit products, catch-based income documentation, and cooperative credit scaling — not just financial literacy.

8.3.4 The Digital Information Vulnerability

Utter poverty households, North Kerala fishermen (for advertisements and social media), and Hindu households (for social media) all show elevated reliance on digital and media channels for financial information. This cross-dimensional pattern — appearing across economic, regional, and religious dimensions — indicates that digital financial information environments are a space in which vulnerable households seek guidance and in which predatory financial products and misinformation are actively circulated. Regulatory frameworks for digital financial advertising must specifically protect fishing community consumers, and investment in quality Malayalam-language financial literacy content for social media platforms is urgently needed.

8.4 A Behavioural Typology of Kerala's Fishing Households

Based on the cross-dimensional analysis, the authors propose a preliminary behavioural typology of four financial behaviour profiles:

Profile 1: The Disciplined Survivor

Most characteristic of utter poverty households in North Kerala, Hindu fishermen, and traditional boat users. The Disciplined Survivor exhibits high institutional trust, strong savings orientation driven by survival necessity, heavy informal credit dependence, social and media-based financial information reliance, and the strongest precautionary savings behaviours in the sample. The behavioural core is scarcity discipline — financial vigilance born of

existential necessity. Policy should harness this existing discipline through accessible formal savings products and formal credit migration pathways.

Profile 2: The Cautious Planner

Most characteristic of BPL households in South Kerala, Christian fishermen, and motorised boat users. The Cautious Planner exhibits strong consultative decision-making, moderate savings with high motivation, heavy savings obstacle burden from costs and debt, debt-driven savings priorities, and moneylender-dominated credit sourcing. The behavioural core is defensive financial management — managing constrained resources under pressure, with careful rather than ambitious planning. Policy should address structural barriers (health insurance, debt relief) and provide formal credit alternatives to moneylenders.

Profile 3: The Institutional Engager

Most characteristic of Central Kerala households, mixed Christian and Muslim communities with institutional access, and mechanised boat operators. The Institutional Engager exhibits the strongest formal banking engagement, cooperative credit integration, moderate savings motivation across all dimensions, incentive-responsive savings behaviour, and balanced information-seeking across personal and institutional channels. The behavioural core is institutional habituation — comfort with and reliance on formal and cooperative financial institutions. Policy should scale formal credit products and deepen institutional engagement through digital banking.

Profile 4: The Aspiring Accumulator

Most characteristic of Above Poverty and Affluent households, mechanised boat operators with higher income capacity, and some Central Kerala households. The Aspiring Accumulator exhibits the strongest incentive-responsiveness to interest rates and fund availability, formal credit ability, the longest financial planning horizon, and diverse savings motivations extending beyond debt repayment to investment and old age security. Policy should offer investment-linked savings products and wealth management guidance calibrated to fishing income cycles.

8.5 Hypothesis Summary

Table 8.2 presents a comprehensive summary of hypothesis test results across all four demographic dimensions and six financial practice sub-dimensions. The table confirms that demographic variation in financial practices is the empirical norm, not the exception: 22 of 24 sub-hypotheses are accepted, one is rejected (boat type and information sources), and one is partially accepted (boat type and credit sources).

Table 8.2: Comprehensive Summary of Hypothesis Test Results

H No.	Hypothesis (Financial Practices Vary by…)	Test	Indicators Significant	Result	Decision
H1a	Region — Core financial practices	KW-H	15 of 16	Significant	**Accepted**
H1b	Region — Savings motives	KW-H	8 of 8	Significant	**Accepted**
H1c	Region — Savings barriers	KW-H	7 of 7	Significant	**Accepted**
H1d	Region — Savings inducing factors	KW-H	4 of 5	Significant	**Accepted**

H No.	Hypothesis (Financial Practices Vary by…)	Test	Indicators Significant	Result	Decision
H1e	Region — Information sources	KW-H	4 of 5	Significant	**Accepted**
H1f	Region — Credit sources	KW-H	11 of 11	Significant	**Accepted**
H2a	Religion — Core financial practices	KW-H	14 of 16	Significant	**Accepted**
H2b	Religion — Savings motives	KW-H	7 of 8	Significant	**Accepted**
H2c	Religion — Savings barriers	KW-H	5 of 7	Significant	**Accepted**
H2d	Religion — Savings inducing factors	KW-H	5 of 5	Significant	**Accepted**
H2e	Religion — Information sources	KW-H	5 of 5	Significant	**Accepted**
H2f	Religion — Credit sources	KW-H	9 of 11	Significant	**Accepted**
H3a	Boat type — Core financial practices	KW-H	11 of 16	Significant	**Accepted**
H3b	Boat type — Savings motives	KW-H	5 of 8	Significant	**Accepted**
H3c	Boat type — Savings barriers	KW-H	4 of 7	Significant	**Accepted**
H3d	Boat type — Savings inducing factors	KW-H	3 of 5	Significant	**Accepted**
H3e	Boat type — Information sources	KW-H	1 of 5	Not significant	Rejected
H3f	Boat type — Credit sources	KW-H	4 of 11	Partial	Partially Accepted
H4a	Economic status — Core financial practices	KW-H	12 of 16	Significant	**Accepted**

H No.	Hypothesis (Financial Practices Vary by…)	Test	Indicators Significant	Result	Decision
H4b	Economic status — Savings motives	KW-H	7 of 8	Significant	**Accepted**
H4c	Economic status — Savings barriers	KW-H	6 of 7	Significant	**Accepted**
H4d	Economic status — Savings inducing factors	KW-H	3 of 5	Significant	**Accepted**
H4e	Economic status — Information sources	KW-H	5 of 5	Significant	**Accepted**
H4f	Economic status — Credit sources	KW-H	7 of 11	Significant	**Accepted**

Source: Primary Data; Kruskal-Wallis H Test

Note: ✓ = accepted (significant variation); ✗ = rejected (no significant variation); KW-H = Kruskal-Wallis H test.

The pervasiveness of significant variation across all demographic dimensions and most financial practice domains provides strong empirical justification for the fundamental claim of this volume: that Kerala's fishing community is not homogeneous in its financial practices but internally differentiated in structured, statistically robust, and behaviourally meaningful ways. The one rejected hypothesis — boat type does not significantly differentiate information sources — is itself a meaningful finding: the informational community of financial decision-making in Kerala's fishing households is behaviourally uniform across technological lines, a confirmation that information-seeking patterns are culturally and economically determined rather than technologically determined.

8.6 Limitations and Directions for Refinement

The cross-dimensional synthesis presented in this chapter is based on statistical analysis of survey data and is subject to the inherent limitations of this methodological approach. The Kruskal-Wallis test identifies differences in the distribution of financial practice scores across demographic groups but does not establish the causal mechanisms that produce those differences. The interpretation of the statistical patterns in behavioural terms — as reflecting specific cognitive tendencies, social norms, and institutional effects — is theoretically grounded but not directly empirically verified through the survey data alone. Experimental designs, qualitative fieldwork, and longitudinal panel data would each provide additional evidence for or against the behavioural interpretations offered in this volume.

The behavioural typology proposed in Section 7.4 is a heuristic analytical tool rather than a data-derived clustering result. The four profiles — Disciplined Survivor, Cautious Planner, Institutional Engager, and Aspiring Accumulator — are constructed from the dominant patterns in the demographic analysis, but they do not exhaust the variation within the fishing community, and many individual households will exhibit hybrid characteristics across multiple profiles. A formal statistical clustering analysis — applying k-means, hierarchical clustering, or latent class analysis to the full matrix of financial practice indicators — would provide a more rigorous empirical basis for typological classification. Such analysis is conducted in the parent doctoral research and constitutes a natural complement to the demographic analysis presented in this volume.

The cross-sectional nature of the data limits the causal inferences that can be drawn about the relationship between demographic

characteristics and financial behaviours. The observation that mechanised boat users save more and have stronger formal credit relationships than traditional boat users is consistent with the interpretation that boat type shapes financial behaviour through the mechanisms outlined in Chapter 6. But it is also consistent with the reverse interpretation — that households with stronger financial behaviours and greater access to formal credit are more likely to acquire mechanised vessels. Disentangling the direction of causality requires panel data that tracks households across vessel upgrades, or instrumental variable approaches that exploit exogenous variation in vessel acquisition decisions. These methodological refinements are identified as priorities for future research in Chapter 9.

Chapter 9

Casting the Net Wider: Policy Recommendations and Future Directions

9.1 Introduction 125

9.2 Policy Recommendations Matrix 125

9.3 Cross-Cutting Behavioural Policy Principles 127

9.3.1 Design for the Irregular Income Cycle 127

9.3.2 Harness the Survival Discipline Paradox 128

9.3.3 Bridge the Trust-Access Gap 128

9.3.4 Leverage Religious and Community Infrastructure 129

9.3.5 Address Health Expenditure as a Systemic Savings Barrier 129

9.3.6 Regulate Digital Financial Information Environments 129

9.4 Directions for Future Research 130

9.5 Concluding Reflections 131

9.1 Introduction

The empirical findings documented across the preceding chapters — systematic, statistically robust, and frequently counterintuitive — have concrete implications for the design of financial services, financial literacy programmes, credit products, savings instruments, and developmental interventions targeting Kerala's fishing communities. This concluding chapter translates those findings into actionable policy recommendations structured around the four demographic dimensions, and identifies the research directions that the present study opens up for future investigation. The overarching principle guiding all recommendations is behavioural differentiation: financial products, communications, and interventions must be calibrated to the specific behavioural profiles of different demographic sub-groups within the fishing community, not to an imaginary average.

9.2 Policy Recommendations Matrix

Table 9.1 presents a policy recommendations matrix spanning all eleven demographic sub-groups identified in this volume, summarising the key behavioural insight from the empirical findings and translating it into actionable intervention recommendations with implementing agency identification.

Table 9.1: Policy Recommendations Matrix Across Demographic Dimensions

Demographic Segment	Key Behavioural Insight	Recommended Intervention	Implementing Agency
North Kerala	Habit-driven savings culture; formal and religious credit use;	Formalise savings through bank-linked products; cooperative credit	MATSYAFED, Scheduled banks, NABARD

Demographic Segment	Key Behavioural Insight	Recommended Intervention	Implementing Agency
	awareness gap despite strong savings	expansion; awareness campaigns	
Central Kerala	Highest formal banking engagement; cooperative credit tradition	Expand digital banking; leverage cooperative networks; scale formal credit products	District Cooperative Banks, MATSYAFED
South Kerala	Debt-driven savings; high medical barriers; moneylender dependence; cautious deliberation	Health micro-insurance; debt restructuring; moneylender regulation; accessible formal credit	Dept. of Fisheries, State Fisheries Corp., State Insurance Dept.
Hindu households	Self-reliant savings orientation; high institutional trust; social media reliant for information	Pension-linked fishermen savings schemes; temple-network delivery; social media literacy outreach	PMSBY, LIC, PMSMY, temple welfare boards
Christian households	Deliberative decision-making; high consumption-driven barriers; incentive-responsive savings	Financial planning workshops; education-linked savings products; church-SHG integration; debt relief	Church welfare societies, NBFCs, cooperative banks
Muslim households	Principled credit selectivity; Islamic finance applicability; moderate savings profile	Cooperative and Sukuk-aligned credit products; mosque-based financial literacy; risk-sharing instruments	Islamic cooperative societies, Waqf boards, MATSYAFED

Demographic Segment	Key Behavioural Insight	Recommended Intervention	Implementing Agency
Utter poverty households	Survival savings discipline; digital information dependence; informal credit use; awareness gap	Direct Benefit Transfer linkage; formal savings product access; digital financial literacy	NABARD, CSOs, State Government, PMJDY
Below poverty line	Consultative but structurally constrained; medical and debt traps dominant	Cost-of-living subsidies; health insurance; debt relief; formal credit access	Aarogyakerala m, PMJAY, Dept. of Fisheries
Mechanised boat users	Higher income; formal credit awareness; vessel-loan creates savings urgency	Scale formal credit; MATSYAFED-backed marine insurance; vessel-linked savings products	Fisheries banks, MATSYAFED , Commercial banks
Motorised boat users	Dominant segment; cooperative-engaged; moderate savings orientation	Strengthen cooperative credit; fleet insurance; digital financial services	Cooperative sector, MATSYAFED , SHGs
Traditional boat users	Lowest income; informal credit dependent; highest precautionary savings motivation	Livelihood support; boat upgrade subsidies; formal savings product access; targeted literacy	MATSYAFED , CMFRI, State Fisheries Dept.

Source: Authors' Synthesis from Primary Data Analysis

9.3 Cross-Cutting Behavioural Policy Principles

9.3.1 Design for the Irregular Income Cycle

The most fundamental design principle for financial products targeting fishing households is calibration to the seasonal and weather-dependent income cycle. Savings products must allow

flexible contributions during peak catch seasons and liquid withdrawals during lean periods — a design requirement that standard fixed-instalment savings plans fail to meet. Credit products must offer repayment schedules that accommodate catch-cycle irregularity rather than imposing calendar-month payment obligations designed for salaried workers. The behavioural principle is time-consistent incentive alignment: matching savings and repayment opportunities to the moments in the income cycle when they are behaviourally feasible.

9.3.2 Harness the Survival Discipline Paradox

Financial inclusion programmes should begin from the empirically documented fact that the most economically vulnerable fishing households demonstrate strong savings behaviours. Rather than approaching utter-poverty fishing households as financial literacy deficits, programmes should create formal containers — accessible, flexible, catch-linked savings accounts — that channel the existing savings discipline of these households into formal financial infrastructure. This reorientation from deficit to asset thinking would fundamentally change the approach, the messaging, and the likely effectiveness of financial inclusion efforts in coastal fishing communities.

9.3.3 Bridge the Trust-Access Gap

Across all demographic dimensions, fishing households trust banks but do not use them for credit. Bridging this gap requires supply-side interventions: simplified KYC processes that accept community-based identity verification for fisherfolk, catch-receipt-based income documentation systems for credit scoring, cooperative credit scaling, and mobile banking infrastructure in coastal villages.

The demand is present — the supply has not been configured to meet it.

9.3.4 Leverage Religious and Community Infrastructure

Temples, churches, mosques, Kudumbasree groups, SHGs, and cooperatives constitute the existing social infrastructure through which financial products can be delivered to fishing communities with minimal transactional friction and maximum cultural fit. Financial institutions and government agencies should systematically partner with these networks — calibrated to the specific credit and savings behaviours documented for each religious community — rather than building parallel delivery mechanisms that lack community trust and behavioural legitimacy.

9.3.5 Address Health Expenditure as a Systemic Savings Barrier

Medical expenses emerge as the second-highest savings barrier across the full sample and the highest barrier for the South and Christian communities. Any financial inclusion programme that does not address health expenditure vulnerability is treating symptoms while leaving a major structural cause untouched. Universal health coverage specifically designed for marine fisherfolk households — building on the Pradhan Mantri Suraksha Bima Yojana framework but with fishing-specific coverage terms and premium structures — is an essential complement to savings promotion programmes.

9.3.6 Regulate Digital Financial Information Environments

The high social media and advertisement reliance for financial information among the most vulnerable demographic groups — utter poverty households, northern fisherfolk, traditional boat users, Hindu communities — creates significant exposure to predatory

financial marketing and misinformation. Regulatory frameworks for digital financial advertising must specifically protect fishing community consumers. Investment in high-quality, community-specific, Malayalam-language financial literacy content for social media platforms is urgently needed. Partnerships between financial regulators, community organisations, and digital platforms should be actively pursued.

9.4 Directions for Future Research

This volume confines itself to the examination of demographic variation in financial practices. Several important research directions flow naturally from the findings presented. First, the cross-dimensional interactions documented in the typology in Chapter 7 deserve formal statistical modelling — examining, for instance, how the combination of utter poverty status and traditional boat use compounds or mitigates savings behaviours relative to either characteristic alone. Multi-way interaction analysis within a structural equation modelling framework would be particularly informative.

Second, the digital financial behaviour of fishing communities — their exposure to financial advertising on social media, their susceptibility to predatory financial marketing, and the potential of fintech products to serve them — constitutes an entirely under-researched domain in the Indian coastal economy literature. Given the pace of digital penetration in coastal Kerala and the vulnerability of the most marginalised groups to digital misinformation, this is a research agenda with immediate policy urgency.

Third, the informal credit ecosystem that dominates across the most vulnerable demographic sub-groups warrants dedicated qualitative

investigation: how moneylender interest rates are negotiated, what social mechanisms enforce repayment, and how informal credit relationships interact with formal credit access decisions. Ethnographic field research within the typological profiles developed in Chapter 7 would substantially deepen the behavioural understanding of credit behaviour in fishing communities.

Fourth, longitudinal panel studies tracking the same fishing households across multiple years would allow assessment of whether and how demographic position interacts with financial behaviour change over time — the dynamic behavioural dimension that this cross-sectional study cannot capture. The savings-discipline paradox observed in utter poverty households raises the question of whether it persists as households move out of extreme poverty or whether it is specifically and exclusively a survival-context phenomenon.

Fifth, the behavioural typology proposed in this volume should be empirically tested in field contexts: do financial products designed specifically for the Disciplined Survivor profile achieve better uptake and retention than generic fishing community products? Randomised controlled trial designs implementing differentiated product and communication strategies across the four profiles would provide rigorous evidence for the policy value of behavioural demographic differentiation in financial service design.

9.5 Concluding Reflections

The title of this volume — Tides of Difference — is both literal and metaphorical. The tides that shape the fishing harvest also shape the financial world of fishing households. And within that financial world, there are tides of difference — systematic variations by

region, religion, economic status, and technology — that create the complex, internally differentiated financial landscape documented in these pages.

The central contribution of this volume is empirical: it demonstrates, with statistical rigour and interpretive depth grounded in a behavioural perspective, that the financial practices of Kerala's fishing households cannot be understood, addressed, or improved through policies that treat the community as homogeneous. The differences are real, they are large, they are behaviourally meaningful, and they are consequential for the design of effective financial inclusion programmes. Behind every mean rank reported in the tables of this volume is a fishing household making decisions — about whether to save or spend today's catch, about whether to borrow from the moneylender or the cooperative, about whether to trust the bank with tomorrow's security — decisions shaped not only by the income available but by the region in which the household lives, the faith it practices, the poverty it navigates, and the vessel from which it harvests the sea.

> *Difference is not a defect to be corrected. It is empirical information to be understood and acted upon. The financial diversity of Kerala's fishing communities is not an obstacle to financial inclusion — it is the map that financial inclusion must follow if it is to reach those who need it most.*

References

Abdin, M. J., Karim, M., & Hossain, M. (2022). Behavioural biases in investment decisions: A systematic review. Journal of Behavioral Finance, 23(2), 145–162.

Abraham, A. (2007). Information dissemination and fishing community behaviour: A Kerala perspective. Journal of Development Studies in India, 14(3), 55–71.

Antonides, G., Groot, I. M., & Van Raaij, W. F. (2011). Mental budgeting and the management of household finance. Journal of Economic Psychology, 32(4), 546–555.

Aruga, K. (2003). A comparative study of savings and borrowing behaviour across religious communities in rural India. Asian Economic Review, 18(1), 33–49.

Biju, T. (2006). Fishing communities and financial exclusion in Kerala. Unpublished doctoral dissertation, University of Kerala.

Brounen, D., Koedijk, K. G., & Pownall, R. A. J. (2016). Household financial planning and savings behaviour. Journal of International Money and Finance, 69, 95–107.

Central Marine Fisheries Research Institute (CMFRI). (2020). Annual report 2019–2020. CMFRI, Kochi.

Chakravarthy, S. (2019). Determinants of household savings behaviour in coastal Kerala. Indian Journal of Economics and Business, 18(1), 45–58.

Chin, W. W. (1998). The partial least squares approach for structural equation modeling. In G. A. Marcoulides (Ed.), Modern methods for business research (pp. 295–336). Lawrence Erlbaum Associates.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Lawrence Erlbaum Associates.

Comptour, M., Sylvestre, S., & Oliveau, S. (2016). Religion and savings behaviour in rural South Asia. World Development, 78, 87–101.

Copur, Z., & Gutter, M. S. (2019). Economic, sociological, and psychological factors of the savings behaviour and saving adequacy. Journal of Family and Economic Issues, 40(1), 305–322.

Coulthard, S. (2012). Can we be both resilient and well, and what choices do people have? Incorporating agency into the resilience debate from a fisheries perspective. Ecology and Society, 17(1), 4.

Fernandes, D., Lynch, J. G., Jr., & Netemeyer, R. G. (2014). Financial literacy, financial education, and downstream financial behaviors. Management Science, 60(8), 1861–1883.

Gautam, A., Sinha, A., & Kumar, M. (2022). Vulnerability and resilience of fishing communities in India: A systematic review. Marine Policy, 138, 104991.

Gopal, N. G., Meenakumari, B., & Jayasankar, J. (2014). Status of fisheries in India. Marine Fisheries Information Service Technical & Extension Series, 220, 3–11.

Gudmunson, C. G., & Danes, S. M. (2011). Family financial socialization: Theory and critical review. Journal of Family and Economic Issues, 32(4), 644–667.

Guiso, L., Sapienza, P., & Zingales, L. (2006). Does culture affect economic outcomes? Journal of Economic Perspectives, 20(2), 23–48.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. Journal of Marketing Theory and Practice, 19(2), 139–151.

Hapke, H. M. (2001). Petty traders, gender, and development in a Kerala fishing community. Economic Geography, 77(3), 225–249.

Hofstede, G. (2001). Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations (2nd ed.). Sage Publications.

Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. Online Readings in Psychology and Culture, 2(1). https://doi.org/10.9707/2307-0919.1014

Iannaccone, L. R. (1998). Introduction to the economics of religion. Journal of Economic Literature, 36(3), 1465–1496.

Iqbal, Z., & Mirakhor, A. (2011). An introduction to Islamic finance: Theory and practice (2nd ed.). Wiley Finance.

Iyer, S. (2002). Religion and the decision to use family planning evidence from southern India. Demography, 39(2), 463–478.

Joseph, J. (2015). Marine fisheries in Kerala: Challenges and opportunities. CMFRI Special Publication, 110.

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. Econometrica, 47(2), 263–292.

Kao, Y., & Velupillai, K. V. (2015). Behavioural economics: Classical and modern. European Journal of Economics, Finance and Administrative Sciences, 32, 37–50.

Kerala Model. (2025). Human Development Reports — Kerala. Government of Kerala Planning Board. https://www.keralaplanning.gov.in

Kurien, J. (2000). The Kerala model: Its central tendency and the outlier. Social Scientist, 28(11/12), 70–101.

Kurien, J. (2001). Devolving institutions for development: The evolution of fish workers' organisations. International Social Science Journal, 53(168), 277–295.

Kurien, J., & Vijayan, P. K. (1995). Income spreading mechanisms in common property resource: Karanila system in Kerala's fishery. Economic and Political Weekly, 30(28), 1780–1786.

León, A. K. (2013). Religion and economic outcomes: Evidence from the World Values Survey. Working Paper, University of Cologne.

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. Journal of Economic Literature, 52(1), 5–44.

Malakar, K., Mishra, T., & Patwardhan, A. (2018). Estimation of vulnerability of the Indian coastal districts to climate variability. Natural Hazards and Earth System Sciences, 18(6), 1713–1726.

Miñarro, S., Forero, M. G., Restrepo, V., & Barreto, G. (2016). Fishing communities in Pacific Colombia: Socio-ecological analysis using mixed methods. Ocean & Coastal Management, 125, 22–32.

Mohanty, A. (2013). Poverty and vulnerability of fishing communities in India: A review. International Journal of Fisheries and Aquatic Studies, 1(1), 29–36.

Mullainathan, S., & Shafir, E. (2013). Scarcity: Why having too little means so much. Times Books / Henry Holt and Company.

Parappurathu, S., Ramachandran, C., Krishnan, M., Divu, D., & Sathiadhas, R. (2019). Financial inclusion among marine fishers of India: An analysis of the extent, patterns and determinants. IIFET, Morocco.

Poddar, S., Sahu, P. K., & Khanna, A. (2023). Religious orientations and financial behaviours in India. Journal of Religious Economics, 7(1), 1–24.

Pollnac, R. B., & Poggie, J. J. (2008). Happiness, well-being and psychocultural adaptation to the stresses associated with marine fishing. Human Ecology Review, 15(2), 194–200.

Pradeep Kumar, P. V., Sankar, T. V., Ravishankar, C. N., & Gopal, N. (2022). Kerala fisheries statistics. CMFRI Special Publication, 131.

Rajan, K. B. (2022). Poverty and livelihoods in Kerala's marine fisheries sector. Centre for Development Studies Occasional Paper.

Renneboog, L., & Spaenjers, C. (2012). Religion, economic attitudes, and household finance. Oxford Economic Papers, 64(1), 103–127.

Sabu, M., Philip, B. J., & Thomas, A. (2017). Digital financial literacy in Kerala. Journal of Commerce and Business Studies, 3(2), 78–91.

Salim, S. S., Lipton, A. P., Mohanraj, P., & Laxmilatha, P. (2019). Marine fisherwomen in Kerala: Issues of social security. CMFRI Special Publication, 118.

Samuel, D. (2007). Financial behaviour of fishermen households in Thiruvananthapuram district. Unpublished M.Phil. thesis, University of Kerala.

Santha, A. M. (2008). Fishing communities and livelihood vulnerability in Kerala. Rawat Publications.

Sato, G., Lopes, P. F. M., & Silvano, R. A. M. (2019). Economic value of artisanal fish production in Brazil: A case study. Marine Policy, 109, 103699.

Shefrin, H. (2007). Beyond greed and fear: Understanding behavioral finance and the psychology of investing. Oxford University Press.

Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J.-H., Ting, H., Vaithilingam, S., & Ringle, C. M. (2019). Predictive model assessment in PLS-SEM. European Journal of Marketing, 53(11), 2322–2347.

Shyam, S. S., Zacharia, P. U., Safeena, P. K., Unnikrishnan, C., & Rosy, S. (2017). Socioeconomic conditions of the fishermen community in Kerala. CMFRI Special Publication, 116.

Thaler, R. H. (1985). Mental accounting and consumer choice. Marketing Science, 4(3), 199–214.

Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. Science, 185(4157), 1124–1131.

Vivekanandan, V. (2022). Fisherfolk welfare and social protection in India: Challenges and opportunities. Food and Agriculture Organization.

Weber, M., & Hsee, C. (1998). Cross-cultural differences in risk perception, but cross-cultural similarities in attitudes towards perceived risk. Management Science, 44(9), 1205–1217.

Wieczorek, T., Jodlowska, A., & Sawicki, M. (2021). Behavioural biases in personal finance decisions: A systematic literature review. Behavioural Sciences, 11(11), 155.

Young, D., Young, I., & Fairbrother, M. (2016). Trust, risk, and financial decision-making in artisanal fishing households: A Sri Lankan case study. Development Policy Review, 34(6), 889–908.

Appendix A:

Summary of Research Instrument

A.1 Overview of the Survey Questionnaire

The primary data for this study were collected using a structured questionnaire developed in both English and Malayalam. The questionnaire consists of seven sections: (1) demographic and background information; (2) core financial practices (16 items); (3) savings motivations (8 items); (4) sources of credit (10–11 items); (5) sources of information for financial decisions (5 items); (6) obstructions to savings (7 items); and (7) savings inducing factors (5 items). Sections 2 through 7 use five-point Likert scales anchored at 1 (Never / Strongly Disagree) and 5 (Always / Strongly Agree). The demographic section collects data on region, religion, economic status (ration card type), type of fishing vessel, fishing experience, household size, annual household income, and educational attainment.

The questionnaire was developed through a systematic process of item generation (from the literature review and exploratory interviews with 15 fishing community members), expert review (by five academic economists and two fishing community development practitioners), pre-testing (with 30 fishing households in a community not included in the main sample), and revision. The final instrument achieved satisfactory content validity and face validity as assessed through the expert review process. Reliability analysis conducted on the main sample data indicated satisfactory internal consistency for each of the six financial practice sub-scales (Cronbach's alpha values ranging from 0.74 to 0.89).

Table A.1: Financial Practice Dimensions and Indicator Items

Dimension	Number of Items	Sample Indicators	Alpha (α)
Core Financial Practices	16 items	Trust in banking; Regular saving; Old age saving; Emergency fund; Avoid debt	0.82
Savings Motives	8 items	Children's education; Debt repayment; Children's marriage; Old age savings	0.78
Sources of Credit	10–11 items	Money lenders; Kudumbasree; Commercial banks; Friends/relatives	0.74
Information Sources	5 items	Own decision; Family members; Social media; Advertisements	0.79
Savings Barriers	7 items	Medical expenses; Education/marriage; High cost of living; Loan repayment	0.83
Savings Inducing Factors	5 items	Fund availability; High interest rates; Income appreciation; Tax benefits	0.89

Source: Primary Research; Cronbach's Alpha computed from main sample data (N=474)

A.2 Sampling Methodology

The sampling frame for this study consisted of registered marine fishing households in three coastal districts of Kerala: Thiruvananthapuram, Alappuzha, and Kozhikode. Registered household lists were obtained from the respective District Fisheries Offices. A stratified purposive sampling approach was used to ensure proportionate representation of the major demographic sub-groups within each district: religious groups (Hindu, Christian, Muslim), economic status categories (Yellow Card, Pink Card, Blue Card, White Card), and boat type categories (Mechanised, Motorised, Traditional). Within each stratum, households were selected using systematic random sampling from the registered household list. The final sample of 474 households was distributed as 163 from Thiruvananthapuram, 144 from Alappuzha, and 166 from Kozhikode — proportions that broadly reflect the distribution of registered fishing households across the three districts.

Data collection was conducted by trained enumerators who were themselves from fishing community backgrounds. This community-embedded enumeration approach was selected to improve response rates, reduce social desirability bias, and ensure cultural appropriateness of questionnaire

administration. Enumerators received three days of training before data collection, including instrument familiarisation, interview technique practice, and mock data collection exercises. Supervisory oversight was provided throughout the data collection period through regular field visits and data quality checks. Data entry was performed using structured digital forms and verified against paper questionnaires for accuracy.

A.3 Data Analysis Approach

All data analysis was conducted using IBM SPSS Statistics Version 28. Descriptive statistics (means, standard deviations, and frequencies) were computed for all demographic and financial practice variables. The Kruskal-Wallis H test was used for all non-parametric group comparisons across three or more demographic categories, with post-hoc pairwise comparisons conducted using Dunn's test with Bonferroni correction where the overall Kruskal-Wallis result was significant. Mean ranks were computed as the primary group-level descriptive statistic for Kruskal-Wallis analysis. Statistical significance was evaluated at the $p < .05$ level throughout. Hypothesis testing results are summarised in the comprehensive hypothesis table presented in Chapter 7.

Appendix B:

Comparative Descriptive Statistics by Demographic Group

B.1 Core Financial Practice Means by Region

Table B.1 presents the mean scores on all sixteen core financial practice indicators, disaggregated by the three regional groups. These descriptive means complement the Kruskal-Wallis mean ranks reported in Chapter 3 and provide an intuitive sense of the magnitude of regional differences in absolute scoring terms.

Table B.1: Mean Scores on Core Financial Practice Indicators by Region

Financial Practice Indicator	South Mean	Central Mean	North Mean	Overall Mean
Trust in banking institutions	3.94	4.58	4.42	4.32
Minimal spending	3.14	3.52	3.58	3.39
Regular saving	2.47	2.97	3.21	2.89
Old age saving	1.72	2.34	3.11	2.32
Timely debt repayment	3.28	3.56	3.43	3.42
Long-term goal saving	2.74	3.18	3.10	3.01
Financial record keeping	2.99	3.18	3.07	3.08
Consult before loans	3.79	3.54	3.37	3.57
Consult before investing	3.81	3.56	3.39	3.59
Avoid debt	3.68	3.53	3.37	3.53
Diversify investments	2.97	3.04	2.96	2.99
Avoid daily money lenders	3.28	3.35	3.11	3.25
Maintain emergency fund	1.78	2.16	2.32	2.08
Spending money management	2.85	2.90	2.48	2.74

Financial Practice Indicator	South Mean	Central Mean	North Mean	Overall Mean
Secure loans only	1.66	2.53	2.21	2.13
Lend money securely	1.44	1.81	1.93	1.72

Source: Primary Data; N=474 (South n=163, Central n=144, North n=166)

B.2 Core Financial Practice Means by Religious Affiliation

Table B.2 presents mean scores on all sixteen core financial practice indicators disaggregated by religious affiliation. These descriptive means complement the Kruskal-Wallis results in Chapter 4 and illustrate the direction and approximate magnitude of religious differences in financial practice scoring.

Table B.2: Mean Scores on Core Financial Practice Indicators by Religion

Financial Practice Indicator	Hindu Mean	Christian Mean	Muslim Mean	Overall Mean
Trust in banking institutions	4.57	4.18	4.27	4.32
Minimal spending	3.56	3.25	3.36	3.39
Regular saving	3.17	2.68	2.87	2.89
Old age saving	2.79	1.88	2.41	2.32
Timely debt repayment	3.43	3.42	3.40	3.42
Long-term goal saving	3.18	2.87	2.97	3.01
Financial record keeping	3.18	2.96	3.12	3.08
Consult before loans	3.26	3.79	3.50	3.57
Consult before investing	3.28	3.80	3.51	3.59
Avoid debt	3.22	3.75	3.46	3.53
Diversify investments	3.12	3.07	2.77	2.99
Avoid daily money lenders	3.11	3.38	3.22	3.25
Maintain emergency fund	2.34	1.89	2.06	2.08

Financial Practice Indicator	Hindu Mean	Christian Mean	Muslim Mean	Overall Mean
Spending money management	2.76	2.74	2.71	2.74
Secure loans only	2.34	1.97	2.10	2.13
Lend money securely	1.87	1.60	1.75	1.72

Source: Primary Data; N=474 (Hindu n=110, Christian n=207, Muslim n=156)

B.3 Core Financial Practice Means by Economic Status

Table B.3 presents mean scores on core financial practice indicators disaggregated by economic status category. The paradoxical pattern — utter poverty households scoring highest on savings-related indicators — is clearly visible in the absolute mean score comparisons.

Table B.3: Mean Scores on Core Financial Practice Indicators by Economic Status

Financial Practice Indicator	Utter Poverty	Below Poverty	Above Poverty	Affluent
Trust in banking institutions	4.47	4.27	4.34	4.50
Minimal spending	3.57	3.34	3.30	3.63
Regular saving	3.32	2.78	2.96	3.25
Old age saving	2.82	2.20	2.22	2.63
Timely debt repayment	3.53	3.37	3.52	4.13
Long-term goal saving	3.21	2.95	2.78	2.63
Financial record keeping	3.21	3.04	2.94	2.88
Consult before loans	3.39	3.62	3.40	3.63
Consult before investing	3.33	3.64	3.48	3.38
Avoid debt	3.42	3.58	3.42	4.00
Emergency fund	2.30	2.02	2.00	2.25
Secure loans only	2.30	2.07	2.06	3.38

Financial Practice Indicator	Utter Poverty	Below Poverty	Above Poverty	Affluent
Lend money securely	1.91	1.67	1.64	1.75

Source: Primary Data; N=474 (Utter Poverty n=79, Below Poverty n=337, Above Poverty n=50, Affluent n=8)

B.4 Summary Statistics: Savings Motives by All Demographic Groups

Table B.4 presents the overall mean scores for savings motivations and disaggregates them across all four demographic dimensions to provide a consolidated comparative view.

Table B.4: Savings Motive Mean Scores — Comparative Summary Across All Demographic Groups

Savings Motive	Overall	South	Centre	North	Hindu	Christian	Muslim
Unexpected matters	3.78	3.86	3.82	3.65	3.53	3.96	3.72
Debt repayment	4.20	4.72	4.19	3.68	3.73	4.55	4.16
House purchase/ renovation	3.89	4.09	3.91	3.65	3.78	4.05	3.72
Celebrations/ emergencies	3.44	3.38	3.49	3.45	3.47	3.47	3.37
Children's education	4.47	4.60	4.60	4.21	4.30	4.60	4.43
Old age savings	3.35	2.94	3.22	3.87	3.66	2.96	3.42
Children's marriage	4.22	4.19	4.35	4.12	4.28	4.29	4.09
Social service	3.01	2.71	2.94	3.39	3.37	2.69	3.08

Source: Primary Data; N=474

B.5 Index of Financial Inclusion Indicators by Demographic Sub-Group

Table B.5 presents a composite financial inclusion index computed as the mean of the three formal banking indicators (trust in banking, secure loans only, and avoiding daily money lenders) and three savings indicators (regular

saving, old age saving, and emergency fund), providing a summary picture of formal financial engagement across all demographic sub-groups. Higher scores indicate higher formal financial inclusion and savings orientation.

Table B.5: Composite Financial Inclusion and Savings Orientation by Demographic Sub-Group

Demographic Sub-Group	Formal Banking Index	Savings Orientation Index	Combined Index	Rank
South — Thiruvananthapuram	3.29	2.32	2.81	9th
Central — Alappuzha	3.55	2.82	3.19	4th
North — Kozhikode	3.58	3.21	3.40	2nd
Hindu	3.61	2.77	3.19	4th
Christian	3.18	2.15	2.67	11th
Muslim	3.19	2.45	2.82	8th
Utter Poverty (Yellow Card)	3.69	2.81	3.25	3rd
Below Poverty (Pink Card)	3.20	2.33	2.77	10th
Above Poverty (Blue Card)	3.23	2.39	2.81	9th
Affluent (White Card)	3.71	3.04	3.38	2nd
Mechanised Boat	3.57	2.77	3.17	6th
Motorised Boat	3.22	2.46	2.84	7th
Traditional Boat	3.10	2.32	2.71	10th

Source: Authors' Computation from Primary Data; indices are means of constituent items on a 1–5 scale

Note: Formal Banking Index = mean of (trust in banking, secure loans, avoid daily lenders); Savings Orientation Index = mean of (regular saving, old age saving, emergency fund). Tied ranks indicate near-equal scores.



Prof. (Dr.) Biju Terrence is a seasoned academic leader currently serving as Professor and HOD of Commerce at the School of Business Management and Legal Studies at the University of Kerala. With 21 years of experience across various higher education institutions in Kerala, he has also worked as Research Officer at the Kerala State Higher Education Council and as District Coordinator for the Kerala State Poverty Eradication Mission, where he received the Best District Coordinator Award in 2015. He is an active academic contributor, serving on the Board of Faculty and Board of Studies of several universities, including the University of Kerala, Calicut University, and SNG Open University, and numerous autonomous colleges. A dedicated researcher, he has guided 18 Ph.D. scholars and specializes in Local Economic Development, Entrepreneurship Development, Behavioral Finance, Accounting, and Finance. He also serves as Secretary of the Kerala Chapter of the Indian Accounting Association and was the Organizing Secretary of the 45th All India Accounting Conference.



Fr. Sanu F is Assistant Professor in the Post Graduate and Research Department of Commerce at Fatima Mata National College (Autonomous), Kollam, Kerala, specializing in Behavioural Finance with emphasis on local community perspectives and financial management. He holds an MA in Philosophy and has submitted his doctoral thesis in Commerce. His research portfolio includes publications in Scopus-indexed journals examining employee engagement, monetary policy impacts, sustainable development goals, and regional economic development. With extensive fieldwork in Kerala's coastal communities, he has developed particular expertise in the socio-economic dynamics of the fishing industry, mechanization impacts, and livelihood transformation. Currently engaged in a comprehensive book series on fishermen livelihoods in Kerala, his work integrates rigorous empirical analysis with grassroots development practices, contributing to both theoretical discourse and practical policy insights in behavioural finance and sustainable livelihoods.

Published By

AMBITIOUS BOOKS

978-93-47890-06-2