



Financial Capability Tanzania Baseline Survey Findings



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List of Abbreviations

AMPS	All Media and Product Survey
ATL	Above-the-line media
A-V	Audio-visual
Avg	Average
Baseline	National financial capability baseline survey
BoT	Bank of Tanzania
EA	Enumerator Area
FES	Financial Education Secretariat
FinCap	Financial Capability
FIKA	Financial Knowledge for Africa
FSDT	Financial Sector Deepening Trust
FGD	Focus group discussion
HH	Household
HoH	Head of Household
IDI	In-depth interview
LSI	Lifestyle index
LSM	Living standards measure
MoEVT	Ministry of Education and Vocational Training
NBS	National Bureau of Statistics
NGO	Non-government organisations
OECD	Organisation for Economic Development and Cooperation
ROSCA	Rotating Savings and Credit Association
SACCOS	Savings and Credit Cooperative Society
TAMPS	Tanzanian All Media and Product Survey
TSh	Tanzanian shilling
UNDP	The United Nations Development Programme
US\$	US dollar

Introduction and background

A National Financial Education Framework was developed and approved by the Government of Tanzania in 2011. The development of the Framework was commissioned by the Bank of Tanzania with support from the Financial Sector Deepening Trust (FSDT), Tanzania. The Framework comprised several components, namely: an organisational structure and stakeholder strategy; a high-level public financial education consumer strategy; an implementation plan and a monitoring and evaluation framework. It also identified the need for setting a national financial capability baseline against which progress in the levels of financial capability could be measured over time.

The Bank of Tanzania therefore commissioned a national financial capability baseline survey (hereafter called “Baseline”) with support from the FSDT. This report contains the key findings of the Baseline and sets out implications for financial education in Tanzania.

Defining financial capability, objectives of the survey and research hypothesis

Financial capability is defined as: *“The ability of an individual to act with confidence in making optimal choices in the management of his or her money matters.”*

But what defines this ability of an individual? What are the underlying motivators, drivers and indicators that enable an individual to make optimal financial decisions? What types of decisions would this entail?

The objectives of the Baseline were to answer these questions and to:

- Define indicators of financial capability in Tanzania.
- Measure levels of financial capability against these indicators.
- Segment the population based on these levels of financial capability to enable targeted financial education interventions.
- Identify other key factors which could impact on financial behaviour and negate the impact of financial education interventions.
- Refine the National Financial Education Framework of 2011, based on the findings of the Baseline.

A hypothesis was developed that financial capability comprises a set of dimensions and competencies. Focus group discussions (FGDs) and in-depth-interviews (IDIs) were undertaken to identify these **dimensions** and **competencies**, as well as exogenous factors that might impact on the extent to which a change in the levels of financial capability would manifest in a change in behaviour. Other Tanzanian surveys (notably FinScope Tanzania) and international examples of financial capability baselines were also reviewed in the design of the questionnaire.

On completion of the survey, financial capability segments were developed through statistical modelling and interrogation of the data. Firstly, the main discriminating financial capability dimensions were identified. Secondly, the main competencies associated with these dimensions were identified. Finally, socio-demographic variables were identified which held a strong statistical relationship with these dimensions and competencies. Based on the combination of dimensions, competencies and socio-demographic variables, five distinct financial capability segments were developed, which demonstrated similar levels of financial capability and a similar socio-economic profile within each segment.

Sampling approach

The sampling approach (stratified probability sampling) was developed with assistance from the National Bureau of Statistics (NBS). To allow for comparative analysis, we followed the same approach used in FinScope Tanzania. A total of 3,320 adults aged 16 and above were interviewed to provide a nationally representative sample. The findings were weighted to the national population based on the 2012 Census data. This yielded a total of 24,043,237 adults aged 16 and above.

Demographic profile of respondents

The demographic profile of the weighted database is in line with that of FinScope Tanzania, and is summarised in Table 1.

Table 1: Demographics of respondents

Age	Percentage
16-24	31%
25-34	23%
35-49	26%
50+	18%

Location	Percentage
Mainland	97%
Zanzibar	3%
Urban	36%
Rural	64%

Gender ratio	Percentage
Male	46%
Female	54%

Socio-economic profile of respondents

The main findings are summarised below:

- Levels of education are found to be low, with 76% of respondents having completed only primary education or less. Only 1.3% has completed tertiary education.
- While 83.8% of respondents are capable of reading and writing Kiswahili, only 19.4% of respondents are capable of reading and writing English. This holds important implications for client communication by financial service providers and for future financial education initiatives.
- 63.5% of the respondents are married/living together and 25% are single. The remainder is separated/divorced (5.3%) or widowed (2.8%).
- 34% of women and 9% of men rely on family and friends for their main source of income; and 75% of men generate an income from their own enterprises (including farming), compared with 57% of women. Only 4% of the population generates an income from the formal sector. This implies that financial education initiatives through employee-based programmes will have limited reach and that innovative forms of communication must be considered to reach the less organised informal sector, notably farmers, fishermen and owners of small enterprises.
- Most households have more than one source of income and 77% have more than one income earner. However, incomes remain low and more than half of the population earns less than TSh 50,000 (US\$ 30) per month.

- A Lifestyle Index (LSI) was developed in which the population was divided into five segments based on the household's socio-economic profile. Almost 44% of the households fall into the lowest LSI (i.e. lowest socio-economic profile) and only 2.4% of the population falls into the highest LSI.

Figure 1: Population by Lifestyle Index (LSI)

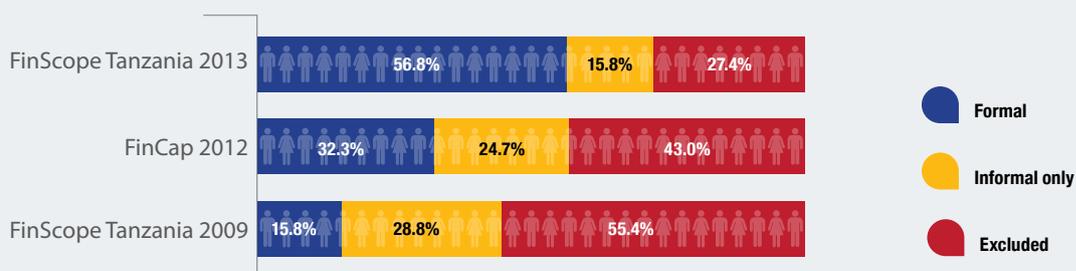


- Financial vulnerability was further underscored by 52% of respondents indicating that they sometimes or always run short of money for necessary expenses. Also, 71% of respondents indicated that they are “keeping up with necessary payments, although it is sometimes a struggle”; while 16% indicated that “it is always a struggle”; and 5% indicated that they have serious financial problems.
- Poverty was found to be one of the main barriers to financial intermediation. It negatively impacts on people’s ability to stick to their budgets, save and plan for retirement and their children’s future.

Financial context of respondents

An Access Strand was developed for the Financial Capability Baseline, based on savings and credit only. This Access Strand fits well between those of the FinScope Tanzania surveys of 2009 and 2013. These levels of financial inclusion provide an indication of the relevant financial education messaging for the financial capability market segments, as well as pointing to the financial sector stakeholders through which they can be reached.

Figure 2: FinCap and FinScope Tanzania Access Strands - usage of financial products and services¹



- Around one third of financial decisions are made by the head of household and partner together, with around one quarter of decisions made by the respondent only. Men make most of the decisions relating to large, long-term expenses.

¹ Date of fieldwork.

- Unlike developed countries, where people are often subjected to information overload, Tanzanians have limited exposure to media and other sources of information. The main source of information is above-the-line (ATL) media, primarily radio (41%), followed by TV (16%) and newspapers (5%). However, these media forms provide primarily marketing messages, rather than objective information on financial matters.
- Two thirds of respondents indicated that the information available on financial matters is not adequate; while 52% felt that the information was not reliable. Credibility of the source of information is critical for successful financial education interventions.

Financial capability dimensions, competencies and segments

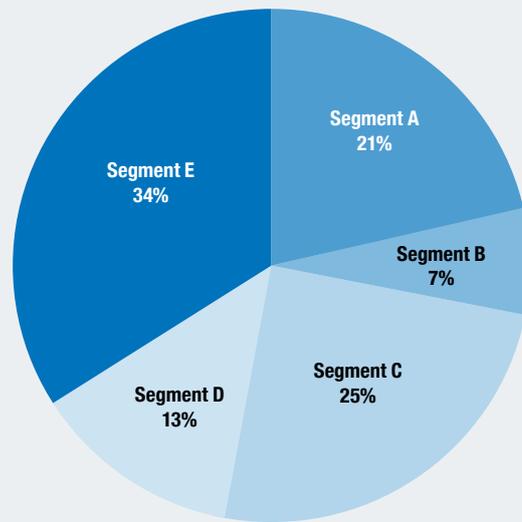
As mentioned earlier, the financial capability segments were identified through statistical modelling and interrogation of the data. Five distinct financial capability segments were identified. These demonstrate similar levels of financial capability and a similar socio-economic profile within each segment. We have labelled these segments A – E.

Table 2: Financial capability dimensions, competencies and segments

Main dimensions of financial capability	Main competencies of financial capability	Associated socio-demographic variables
Knowledge/awareness <ul style="list-style-type: none"> • Of financial products and services • Of financial planning and concepts 	Short-term planning and discipline <ul style="list-style-type: none"> • Budgeting • Keeping to the budget 	Gender Age Level of education achieved Position in the household <ul style="list-style-type: none"> • Marital status • Relationship to the head of household Main source of income
Numeracy skills Addition, subtraction, multiplication and division	Long-term planning and discipline <ul style="list-style-type: none"> • Setting financial goals • Concerned about long-term financial needs • Keeping to long-term strategy • Review strategy against goals 	
Confidence <ul style="list-style-type: none"> • In making financial decisions • In engaging with financial institutions 	Awareness of financial status/keeping track <ul style="list-style-type: none"> • Know current financial status • Know how much spent in previous week 	
	Seeking financial advice	

Based on the combination of dimensions, competencies and socio-demographic variables, five distinct financial capability segments were developed. These demonstrate similar levels of financial capability and a similar socio-economic profile within each segment, but show significant differences from other segments. These segments are not all the same size, as is illustrated in Figure 3.

Figure 3: Financial capability market segments



The various segments and their distribution over the dimensions and competency scores are summarised in Figures 4 – 10 below.

The scores on **dimensions** were grouped into five levels, with 1 (green) being the highest score and 5 (red) being the lowest. As can be seen from the charts below, Segments A and B consistently scored the highest, followed by C, D and then E.

Figure 4: Knowledge and awareness

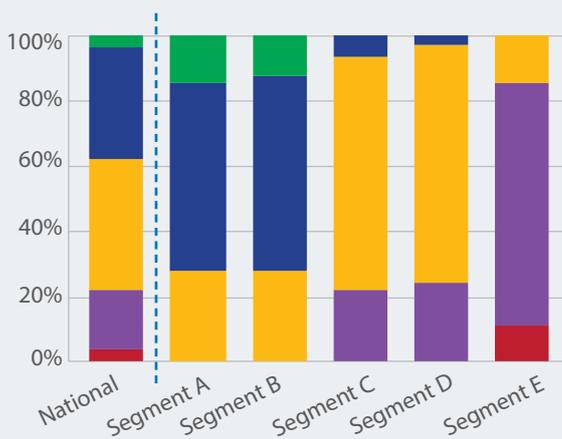


Figure 5: Numeracy

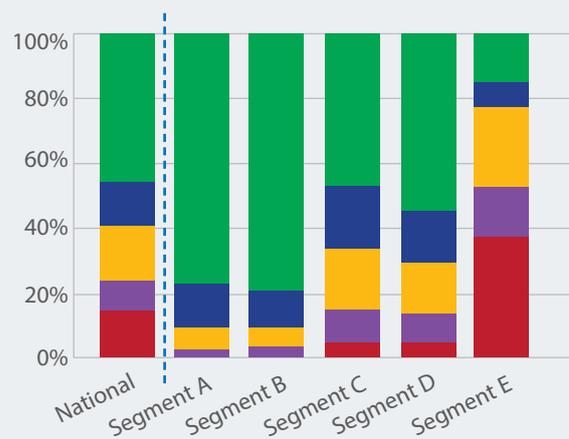
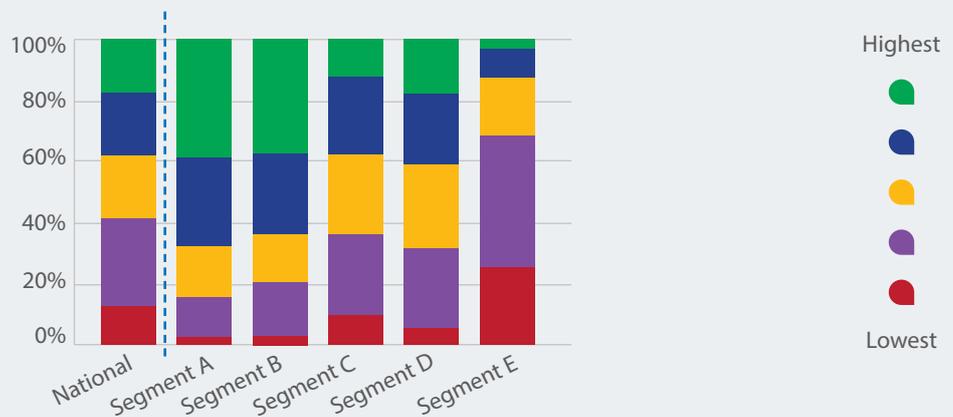


Figure 6: Confidence



The scores on **competencies** were grouped into four levels, with 1 (green) being the highest score and 4 (red) being the lowest. As with the dimensions, Segments A and B scored consistently the highest, followed by C, D and then E.

Figure 7: Short-term planning and discipline

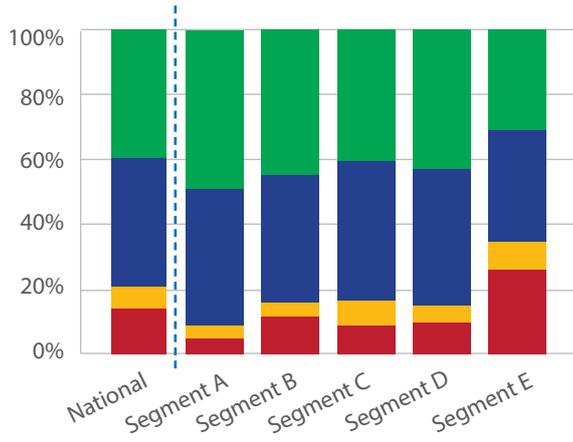


Figure 8: Long-term planning and discipline

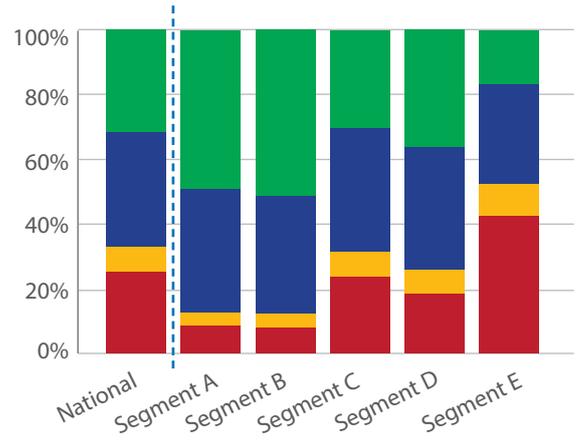


Figure 9: Knowledge of financial status

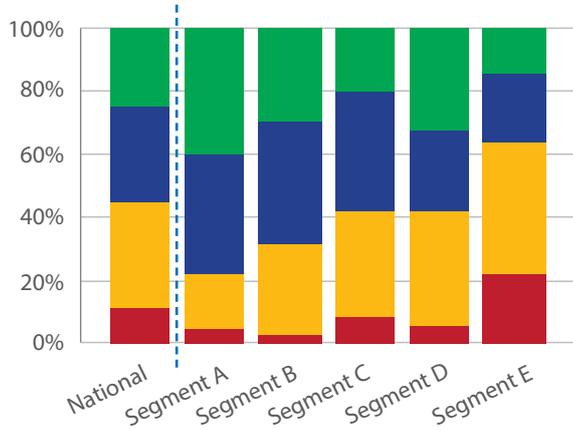
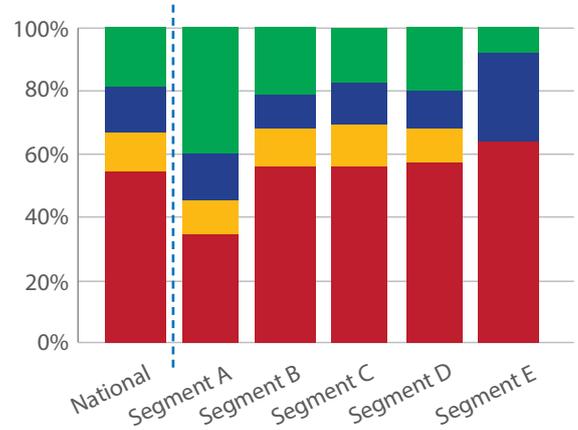


Figure 10: Information seeking



Lowest ■ ■ ■ ■ Highest



Segment A: Mature family – in control (4,801,854 = 21.4%)

Segment A represents middle and upper income, mature families. It has a male bias, urban bias, and the highest percentage of those who generate their main income through their own business. It has the second highest LSI, second highest level of education and second highest level of financial inclusion (as measured using the Access Strand) after Segment B. It has the highest number of savers and borrowers of all the segments.

Segment A also has the most positive attitude to money and life, and people in this segment regard themselves as being in control of their own destinies and finances. Not surprisingly, Segment A has the highest scores in terms of financial capability dimensions and competencies.

This segment can be reached through radio, newspapers and TV (in that order) and has the highest newspaper readership (20%) of all segments.



Segment B: Young educated adults – privileged (1,469,182 = 6.5%)

Segment B consists of privileged educated young adults, and appears to be mostly siblings of the upper end of Segment A. Three quarters are aged between 15 and 24 years. Segment B has the strongest urban bias (61.8%), a slight male bias, has the highest education of all segments with 5.2% having a tertiary education (compared with the national average of 1.3%), the highest level of formal sector employment (10.4% compared with the national average of 3.5%²) and the highest LSI profile of all.

Segment B has the highest level of formal financial inclusion and a high percentage of savers, but an average percentage of borrowers (i.e. savers far exceed borrowers). It therefore appears as though this group is financially self-sufficient and financing its lifestyle through its high income levels. The people in this segment generally have a positive outlook on money and a modern outlook on life, i.e. they are in control of their own destiny. Segment B has the second highest scores on financial capability dimensions and competencies after Segment A.

This segment can be reached through radio, TV and newspapers (in that order) and, at 25%, has the highest TV viewership of all.



Segment C: Spouses, widows and children of Segment A (5,561,934 = 24.8%)

Segment C appears to represent the siblings, spouses/home-makers, divorcees and widows of the lower end of Segment A. It has the biggest proportion of women (80.8%) of all the segments; an urban bias; and a slight bias to younger age groups. Forty percent is married, 36.5% single and 14.2% divorced/widowed. Only 20% of those in this segment are the heads of households. Educational levels are much higher than those of segments D and E, but those with tertiary education make up a mere 0.3% of Segment C.

In terms of its socio-economic profile, Segment C is similar to that of the national average, as it has a socio-economic profile lower than A and B, but higher than that of D and E. In terms of scores on financial capability dimensions and competencies, it has similar/slightly higher scores than Segment D. However, Segment D is 100% male, displays much lower levels of education, a lower socio-economic profile and is 83% rural. It may therefore be that Segment C displays lower than expected levels of financial capability because of limited involvement in household decision-making. Segment C also has the second lowest score on “my life is close to my ideal” after Segment E (which consists primarily of disadvantaged women). It therefore appears as though there is a level of frustration among these relatively educated young urban women and that they may want to have more control over their destiny and money matters.

² National figures from the Ministry of Labour showed formal employment in 2013 at 5.1% but the sampling approach differs from that of the FinCap Baseline.



Segment D: Traditional small-scale male farmers - struggling

Segment D comprises men only and there is not a single woman in this segment. Segment D has a strong rural bias and represents the typical traditional (male) small-scale farmer in Tanzania. Their incomes and LSI profile are low, as are their levels of education; English reading and writing skills; and their levels of formal financial inclusion - all of which are second lowest, with only Segment E being lower. The percentages of savers and borrowers are on par with national averages, but Segment E has by far the highest percentage (18%) of all segments that expressed the need to learn more about borrowing. This might reflect a need for credit for agricultural purposes or for income-smoothing during low seasons.

This group also appears to be experiencing some financial stress and has the lowest score on “keeping up with necessary expenses without difficulty” (4.5%), and a slightly above average score on “experiencing financial problems” (5.3%).

At almost 50%, Segment D has the highest radio listenership of all, followed by newspapers (13.8%) and village road shows/TV at just over 13%.



Segment E: Rural poor – female survivalist farmers/enterprises; spouses, widows and children of Segment D (7,632,856 = 34%)

Segment E represents the largest segment, comprising more than a third of the adult population. This group appears to be completely marginalised. It has a rural bias of 75%, a female bias of 65.8% and has the lowest educational levels (one quarter has no formal education whatsoever). Only 66% can read and write in Kiswahili and 4.6% in English. They seem to generate an income mostly from (survivalist) farming (48.3%) and some micro businesses (11%), with 24% dependent on family and friends for an income. It appears as though this group may represent the siblings and spouses of Segment D. It

also has the highest percentage of widowed/divorced/separated (16.3%) of all the segments.

This segment has the lowest income, with 70.6% falling into LSI 5. Almost two thirds (61%) are financially excluded. Segment E has the lowest percentage of savers and the lowest percentage of borrowers. This segment shows the highest levels of financial stress of the five segments, with more than 7% of respondents indicating that they have serious financial problems and a further 18.9% indicating that they are “keeping up with necessary expenses, but it is always a struggle.” Only 1% indicated that “my life is close to my ideal,” while almost 30% indicated that “my life is not very close to my ideal.”

This segment’s self-identified need for financial education appears to centre on basic coping and survivalist topics, such as how to save (14%), followed by how to obtain life insurance, planning for old age and how to borrow - all at just over 12%. The prospect of retirement is of much bigger concern to this group than others, as 12.4% indicated a need for training on this, compared to the national average of 8%. Given that this segment represents over a third of the adult population, it also has the biggest impact on the average national score on retirement.

Just under 50% of Segment E can be reached through radio, followed by village roadshows at 11.4%. As many as 19.9% indicated that they could not be reached through any of the listed sources of information or media. Government social programmes, non-government organisations (NGOs) and donors will therefore have to play a major role in reaching this large segment.

Implications for and limitations of financial education

The main issues to be addressed through financial education on a **national level** are:

- Mathematical literacy.
- Basic knowledge of concepts, products and financial service providers – primarily life insurance and borrowing.
- Financial planning and specifically budgeting, planning for unexpected expenses and making provision for old age/retirement.

These topics are best delivered through in-depth classroom-based training, but this could be supplemented by innovative extra-curricular school clubs, the use of audio-visual streaming and some talk-show radio. These supplementary approaches can only be used to complement classroom-based training – they will not serve as a substitute.

Classroom-based training – particularly on mathematical literacy – calls for the Ministry of Education and Vocational Training (MoEVT) to step in and play a major role with regard to both in-school children and adult education. Vast resources and innovative methods will be required to reach adults in deep rural areas – in particular Segments C, D and E. The Government, donors and private sector may consider forming a public-private partnership to launch such a national classroom-based mathematical literacy and financial capability programme. This could be coordinated through the proposed Financial Education Secretariat (FES).

The specifics of what needs to be addressed in each **financial capability segment** and the most suitable channels differ between segments. A broad range of stakeholders will have to support the implementation of financial education interventions to facilitate reach and impact. It is recommended that the Financial Education Framework of 2011 be updated and refined, based on the findings of the Baseline.

There are several **challenges and limitations** associated with the successful implementation of financial education and its potential impact in the marketplace. The level of financial capability is but one of many factors which influences and determines financial behaviour. The biggest constraints in desired financial behaviour in Tanzania remain exogenous factors:

- **Poverty.** While financial education interventions can help people to budget better and manage their meagre incomes better, poverty will continue to pose the single biggest constraint to asset-building among Tanzanians.
- **Shortcomings in the financial sector (supply side).** Coupled with the challenge of poverty, is the absence of appropriate, accessible and affordable products and services, particularly targeted at the lower LSIs. Notably, these include accessible and affordable life and medical insurance, retirement products and savings instruments with positive returns. It serves no purpose to train people on the need for and requirements of these products if these are not available in the marketplace.

The support of several stakeholders in the private and government sectors will be required to achieve impact in the marketplace with any future financial education initiatives. The MoEVT has an important role to play. Mathematical skills are not only required for improved personal financial management and decision-making, but are fundamental life skills. While those involved in financial education can guide and assist the MoEVT with the implementation of mathematical literacy, it remains the ultimate responsibility of the Ministry.

1. Introduction and background

In 2008 the Bank of Tanzania appointed Marketworx Africa to develop a National Financial Education Framework with the support of the Financial Sector Deepening Trust (FSDT), Tanzania. The Framework was accepted by the Government of Tanzania in 2011. It comprised several components: an organisational structure and stakeholder strategy; a high-level public financial education consumer strategy; and an implementation plan and monitoring and evaluation framework. The Framework identified the need for setting a national financial capability baseline, against which progress in the levels of financial capability could be measured over time.

The Bank of Tanzania therefore commissioned a national financial capability baseline survey (Baseline) to inform the refinement of the public financial education component of the national Framework, to inform policy on financial education and to measure progress over time. The Baseline was implemented with support from the FSDT, which contracted Marketworx Africa to design the survey, oversee the implementation and conduct the final analysis. A total of 3,320 adults, aged 16 and above, were interviewed in a nationally representative sample in 2012/2013.

This report presents the methodology, design and findings of the survey. Section 2 details the methodology and research hypothesis which informed the questionnaire design. Section 3 presents the profile of the respondents, findings on financial capability dimensions and competencies and the financial capability segments. Section 4 presents the implications for financial education, as well as the limitations and risks which will determine the success and impact of required financial education interventions.

Any monetary references to US dollars have been converted at the rate of TSh1,666.67 = US\$ 1.³

2. Methodology and hypothesis

2.1 Defining financial capability

Human behaviour is the outcome of a complicated set of underlying motivators and drivers. If we want to influence financial behaviour, we need to understand the complex set of factors which determines such behaviour. Levels of financial capability have been identified as one of several key drivers of financial behaviour. But what exactly is financial capability?

The national Financial Education Framework (2011) for Tanzania adopted the following definition of **financial capability**⁴: *The ability of an individual to act with confidence in making optimal choices in the management of his/her money matters.*

But what are the determinants of an individual's ability to make improved and optimal personal financial decisions? How do we measure an individual's level of financial capability, his or her ability to make financial decisions and the underlying motivators and determinants?

Financial behaviour is often used as a proxy for levels of financial capability, but an individual's desired financial behaviour (a function of financial capability) may not always be reflected in his or her actual financial behaviour. For example, poverty or lack of access to financial services may mean that an individual does not save as much as s/he would like or does not use formal financial services for remittances as these are not available or affordable. In setting a financial capability baseline, it is therefore necessary to define the underlying indicators of financial capability, and distinguish these from exogenous factors which may impact on an individual's actual behaviour.

³ www.xe.com – June 2014.

⁴ The commonly used term 'financial literacy' is narrower and relates only to the knowledge component of financial capability.

2.2 Objectives of the Baseline survey

The overall aim of the survey was to measure levels of financial capability in Tanzania so that key areas of concern can be addressed through financial education interventions and progress measured over time.

To this end, the Baseline sets out to:

- Define indicators of financial capability in Tanzania.
- Measure levels of financial capability against these indicators.
- Segment the population based on similar levels of financial capability to enable targeted financial education interventions.
- Identify other factors which may impact on financial behaviour and negate the impact of financial education interventions.
- Refine the National Financial Education Framework of 2011.

2.3 Hypothesis: developing the questionnaire

Rather than decide what the various determinants of financial capability may be, we wanted to let the data tell us what these are. We therefore developed a hypothesis of what might constitute financial capability in the Tanzanian context. The basis of this hypothesis was that financial capability comprises several **dimensions** which influence an individual's **competency** in dealing with different aspects of personal financial management.

To identify the possible dimensions and competencies, we conducted 12 focus groups discussions (FGDs)⁵ in Tanzania, 100 in-depth-interviews (IDIs), and an in-depth analysis of FinScope Tanzania 2006 and 2009. We also reviewed other financial capability surveys, notably the work done by the Organisation for Economic Development and Cooperation (OECD)⁶ and the the United Nations Development Programme (UNDP) in the Pacific.⁷

To enable us to develop financial capability segments and describe these in terms of differentiating variables, we included questions on various socio-economic variables and on financial inclusion. The latter enabled us to develop a “link” to FinScope Tanzania through a rudimentary Access Strand.⁸

In short, while the Baseline set out to measure financial capability on an individual level, we also took into consideration contextual factors which may influence the individual's ultimate financial behaviour. As such, we also considered the individual's current financial context (level of financial inclusion as measured by the Access Strand), the individual within the household (e.g. status and decision-making role), the household in the community (e.g. socio-economic level as defined by the Lifestyle Index which was developed from the survey data), and the community within the broader context (e.g. access to financial services and information). This is illustrated in Figure 1.

We also included questions around access to information on personal finance, sources of advice and information, as well as media usage, to enable the development of targeted financial education initiatives delivered through relevant channels.

Figure 1: Scope of questionnaire



The topics covered in the final Baseline questionnaire are summarised in Table 3.

⁵ The BoT/FSDT initially partnered with the Russian-funded Financial Literacy Trust (FLIT) in the development of the survey instrument. The FLIT was set up to design and administer financial capability surveys in low and middle income countries. The FLIT was implemented by the World Bank and the approach drew heavily on the Financial Capability Baseline survey designed and implemented by the UK Financial Services Authority (FSA) in 2006. Focus group discussions (FGDs) were conducted in eight countries, of which Tanzania was one. FGDs in the eight countries as well as the subsequent in-depth interviews (IDIs) were exchanged and analysed. The FLIT drew up an initial questionnaire, which was then customised by the Tanzanian team for the Tanzanian context, with input from other sources and surveys.

⁶ Atkinson and Messy (2012) report on OECD financial literacy studies in 14 countries: Albania, Armenia, the Czech Republic, Estonia, Germany, Hungary, Ireland, Malaysia, Norway, Peru, Poland, South Africa, the UK and the British Virgin Islands.

⁷ UNDP Pacific Centre and J. F. Sibley, Massey University.

⁸ The FinScope Tanzania Access Strand profiles the adult population of Tanzania based on usage of financial services, grouped into: (1) formal, (2) semi-formal and (3) excluded.

Table 1: Content of questionnaire

A. Dimensions of financial capability
<ul style="list-style-type: none"> • Knowledge and awareness
<ul style="list-style-type: none"> • Attitudes to money - savings and credit in particular
<ul style="list-style-type: none"> • Confidence: <ul style="list-style-type: none"> • In making financial decisions • In dealing with financial service providers
<ul style="list-style-type: none"> • Skills: numeracy⁹
B. Financial capability competencies
<ul style="list-style-type: none"> • Day-to-day money management (short term): <ul style="list-style-type: none"> • Setting short-term goals and plans • Budgeting for short-term, regular day-to-day income and expenses • Sticking to a budget
<ul style="list-style-type: none"> • Planning for large expected events (medium term)
<ul style="list-style-type: none"> • Long-term planning: <ul style="list-style-type: none"> • Setting long-term goals and plans • Planning for retirement/old age • Planning for dependent children
<ul style="list-style-type: none"> • Risk management and coping mechanisms – planning for large unexpected events
<ul style="list-style-type: none"> • Saving behaviour
<ul style="list-style-type: none"> • Credit behaviour and levels of indebtedness
<ul style="list-style-type: none"> • Financial behaviour in the business context (only for those who generate an income from their own business, farming or fishing activities) <ul style="list-style-type: none"> • The existence and level of formalisation of the business plan and budget • Whether personal and business finances are managed separately
<ul style="list-style-type: none"> • Decision-making, product choice and search behaviour <ul style="list-style-type: none"> • Seeking advice • Product search and decision-making behaviour (relating to savings and credit) • Information sources use
C. Factors which may impact on ultimate financial behaviour
<ul style="list-style-type: none"> • Socio-demographics of the individual <ul style="list-style-type: none"> • Location (urban, rural) • Gender and age • Education and language skills
<ul style="list-style-type: none"> • The individual's financial context <ul style="list-style-type: none"> • Sources and level of income • Financial vulnerability • Levels of financial inclusion/Access Strand
<ul style="list-style-type: none"> • The individual within the household <ul style="list-style-type: none"> • Marital status and relationship to head of household • Decision-making in the household
<ul style="list-style-type: none"> • The household within the community <ul style="list-style-type: none"> • Financial support received by the household from outside that household • Socio-economic profile of the household: Lifestyle Index (LSI)
D. Segmentation and further analysis
<ul style="list-style-type: none"> • Level of financial inclusion/FinScope Tanzania Access Strand
<ul style="list-style-type: none"> • Access to financial information
<ul style="list-style-type: none"> • Sources of advice
<ul style="list-style-type: none"> • Media usage

⁹ The skills questions were drawn from the questionnaire developed by the UNDP Pacific Centre and J.E. Sibley, Massey University.

2.4 Sample

The questionnaire was administered on an individual level.¹⁰ The sampling approach was developed with assistance from the National Bureau of Statistics of Tanzania (NBS). It followed the same approach as that of FinScope Tanzania, to enable the Financial Capability (FinCap) and FinScope Tanzania datasets to be linked and to conduct comparative analyses. The sample was drawn by applying 'stratified probability sampling,' also known as multi-stage sampling. Firstly, a sample of 415 Enumerator Areas (EAs) was drawn from nine zones; after which a sample of eight households was drawn from each EA. A Kish grid was then applied within each household to randomly select one respondent aged 16 or above. This method yielded a total sample of 3,320 adults. The final sample drawn was weighted to the national population based on the 2012 census data, yielding a nationally representative respondent base of 24,043,237.

2.5 Analytical approach to financial capability segmentation

The financial capability segmentation model was developed through statistical interrogation of the data and consisted of several steps.

Step 1: Firstly, we set out to identify the concepts or **dimensions** that best describe financial capability in the Tanzanian context and that best differentiate respondents with respect to levels of financial capability. This was done by conducting two rounds of principal component analysis. The main dimensions identified were: (1) knowledge and awareness of financial concepts, (2) numeracy skills and (3) confidence. The fourth dimension included for testing in the questionnaire, namely "attitudes to money and life in general," did not emerge as a strong differentiating variable. This does not mean that attitudes are not important in the context of financial capability, but simply that attitudes were not found to be strong *differentiators* among different segments of the population.

Table 2 summarises the three main differentiating dimensions of financial capability, their sub-components and the corresponding questions from which these were drawn.

Table 2: Main differentiating dimensions of financial capability

Dimensions of financial capability	Descriptors (aggregated questions)
Knowledge/awareness	Knowledge/awareness of financial products/services Knowledge/awareness of financial topics/concepts
Numeracy	Numeracy skills
Confidence	Confidence in making financial decisions Confidence in engaging with financial institutions

Step 2: Once the dimensions of financial capability were determined, multivariate regression analysis was applied to determine the main concepts or competencies that relate to the three key differentiating dimensions. Four main competencies were identified, namely: (1) short-term planning and financial discipline; (2) long-term planning and financial discipline; (3) awareness of financial status; and (4) seeking information and advice on financial matters and products.

¹⁰ Some financial capability surveys are administered on the household level and the interviews are conducted with the head of household and the spouse (where applicable). While this approach provides invaluable information on the dynamics within a household, it does not tell us what the financial education needs are of the other members of the household who may become financial decision-makers in the future.

Table 3 summarises these four dimensions, their sub-components and the corresponding questions from which these were drawn.

Table 3: Main differentiating competencies of financial capability

Competencies	Aggregated questions
Short-term planning and discipline	Budgeting Keeping to the budget
Long-term planning and discipline	Financial goals Concern about long-term financial needs Keeping to long-term strategy Review strategy against goals
Awareness of financial status	Knowledge with regard to amount spent in previous week
Information seeking	Seeking financial advice

Other competencies tested in the questionnaire, such as product choice and decision-making, were not identified in the statistical data analysis as being strongly related to the three differentiating dimensions. Again, as with the dimensions, this does not mean that these are not relevant in determining levels of financial capability, but merely that these did not contribute to strengthening the segmentation model. Also, only those questions answered by all respondents could be considered. As such, questions relating to an individual's financial behaviour in the enterprise context could not be included as a potential competency on a national level, as not all respondents have an enterprise.

Step 3: Through regression analysis, several demographic features were identified which displayed a significant correlation with the underlying variables of the dimensions and competencies, and as such helped to further differentiate/segment and describe these segments. These demographic features included:

- Gender
- Age group
- Level of education achieved
- Position in the household (marital status and relationship to the head of household)
- Main income generating activity/source of income.

Step 4: Finally, **five financial capability segments** were identified with common demographics and traits with respect to the dimensions and competencies of financial capability within each segment. These segments were then described in terms of their socio-demographic profiles, measures on financial capability dimensions and competencies, usage of media and exposure to sources of information. This segmentation model allows refining of the preliminary segmentation model and Consumer Financial Education Strategy component developed in the National Financial Education Framework, 2011. The implications for the National Framework are discussed in Section 4.

More detail on the statistical approach as well as the scores of these five segments against the main dimensions and competencies of financial capability are included in Annex A.

3. Findings

3.1. Demographic profile of respondents

Table 4 below shows the respondent profile weighted to the adult population aged 16 and older. While the total sample was 3,320, the total weighted population is 24,043,237. The profile of the respondents was found to be similar to that of FinScope Tanzania 2013, which serves to validate the data and also allows for linking the datasets through the Access Strand.

Table 4: Demographics of respondents

Age	Percentage
16-24	31%
25-34	23%
35-49	26%
50+	18%

Location	Percentage
Mainland	97%
Zanzibar	3%
Urban	36%
Rural	64%

Gender ratio	Percentage
Male	46%
Female	54%

Marital status and relationship to the head of household

Approximately 63% of the respondents are married or living together, with 25% never/not yet married and about 12% separated/divorced/widowed.

Figure 2: Marital status

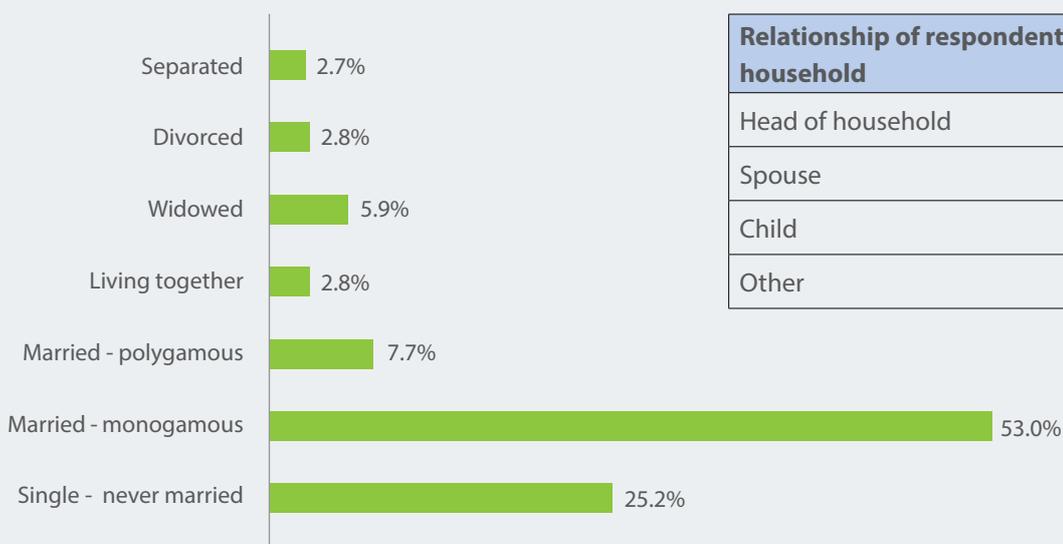


Table 5: Head of household

Relationship of respondent to head of household	Percentage
Head of household	45.2%
Spouse	28.2%
Child	18.0%
Other	8.6%

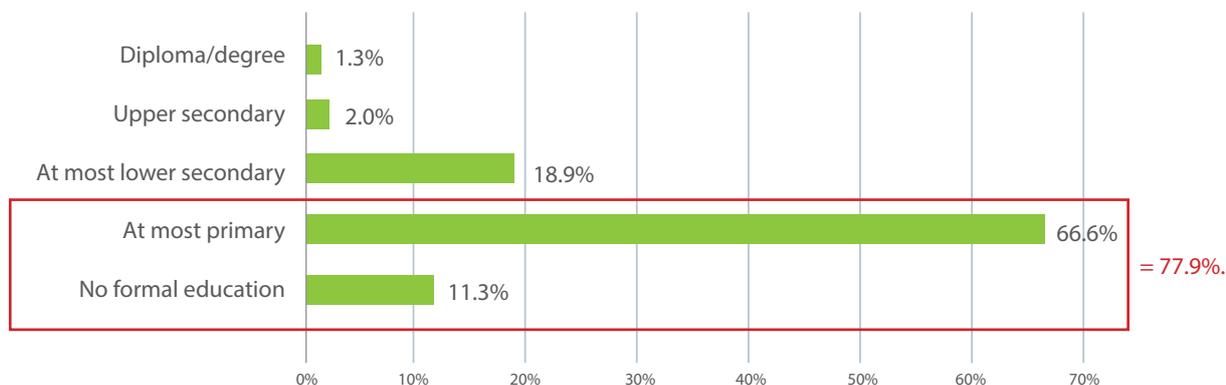
Only 45% of respondents were the head of household, with 28% being the spouse, 18% children and the remainder other family or household members.

3.2. Socio-economic profile of respondents

3.2.1 Education and language skills

Educational levels are low and 11.3% of adults have no formal education, with a further two thirds having at most primary education. I.e. more than three quarters of the Tanzanian adult population have no or only (some) primary education. A mere 1.3% have tertiary education.

Figure 3: Highest level of education achieved



An attempt was made to test “functional” language skills by providing respondents with show cards with one question in English and one in Kiswahili. The respondents were asked to read the questions and write the answer. While more than 80% could read and write Kiswahili, only 19% could read and write English with a further 5% being able to read (but not write) English.

This has far-reaching implications for financial education channels and materials, as well as for the manner in which financial institutions communicate with current and potential clients, and the language used in product descriptions and application forms.

Table 6: Language skills: reading and writing English and Kiswahili

	Kiswahili	English
Read and write	83.8%	19.3%
Read only	1.5%	5.0%
Write only	0.0%	1.1%
Neither read nor write	14.5%	74.3%

3.2.2 Sources of income

Most households have more than one source of income, with 77% of respondents contributing to the household income and 22% being sole income earners. As shown in Table 7 below, the main difference in sources of income between men and women is that 34% of women (compared with 9% of men) are dependent on family or friends. Furthermore, 75% of men generate an income from their own enterprises, including farming and agricultural-related activities, compared with 57% of women. However, informal and agricultural-related sources of income remain dominant, with only 4% of the population (5% of men and 3% of women) generating an income in the formal sector.

This implies that employee-based financial education interventions will reach only a small portion of the population, and that innovative forms of communication are required to reach the less organised formal sector and also at-home women dependent on income from family and friends.

Table 7: Highest source of income per gender (single mention)

Highest source of income	Total	Male	Female
Own farm	40.9%	49.2%	33.9%
Family or friends	22.5%	9.1%	33.8%
Own business	15.9%	15.4%	16.4%
Agricultural trading	9.0%	11.1%	7.3%
Informal sector	4.1%	5.8%	2.7%
Formal sector	3.7%	4.9%	2.8%
Employed on someone else's farm	1.7%	2.1%	1.4%
Sub-letting property	1.0%	1.0%	1.0%
Other	1.1%	1.4%	0.8%

3.2.3 Levels of income and financial vulnerability

Incomes are low, as shown in Table 8 below. More than half the population (more than 45% of men and about 56% of women) earn less than TSh 50,000 (US\$ 30) per month. As expected, women earn less than men, although the reported differences are small.

Table 8: Individual monthly incomes (TSh)

Personal income range	All respondents	All cumulative	Males	Females
No Income	1.3%	-	0.8%	1.7%
Below TSh 50,000	50.9%	52.1%	45.3%	55.7%
TSh 50,001 – 150,000	29.3%	81.4%	31.1%	27.7%
TSh 150,001 – 300,000	11.9%	93.3%	13.2%	10.7%
TSh 300,001 – 600,000	4.5%	97.7%	6.7%	2.5%
TSh 600,001 – 1,000,000	1.2%	99.0%	1.5%	1.0%
TSh 1,00,001 – 2,000,000	0.6%	99.6%	0.8%	0.5%
TSh 2,000,001 – 4,000,000	0.3%	99.8%	0.4%	0.2%
TSh 4,000,001 – 6,000,000	0.0%	99.9%	0.0%	0.1%
TSh 6,00,001 – 10,000,000	0.1%	99.9%	0.1%	0.0%
Above TSh 10,000,000	0.1%	100.0%	0.1%	0.0%

The levels of financial vulnerability and absolute poverty are further underscored by 51.2% of respondents stating that they sometimes or always run short of money for necessary expenses. Furthermore, only 8.1% kept up with the payment of necessary expenses without difficulty, while 4.8% indicated that they have “fallen behind with the payment of necessary expenses and have serious financial problems.”

Table 9: Financial vulnerability: running short of money for necessary personal or household expenses

Run short of money for necessary expenses	Total	
Never	10.9%	48.8%
Rarely	37.9%	
Sometimes	48.6%	51.2%
Always	2.6%	

Table 10: Keeping up with payment of necessary expenses

Keeping up with payment of necessary expenses	Total	
Without difficulty	8.1%	79.5%
Keeping up, but it is a struggle sometimes	71.4%	
Keeping up, but it is always a struggle	15.7%	20.5%
Have serious financial problems and have fallen behind with many expenses	4.8%	

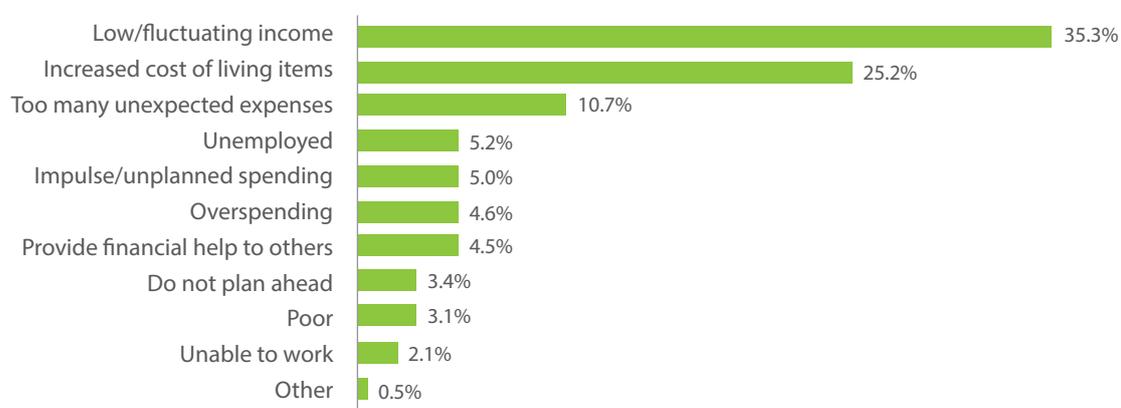
As many as 81.9% of those that run short of money to pay for essential expenses, indicated that they sometimes borrow to make ends meet.

Table 11: Borrow to pay for necessary expenses

Borrow money to pay for necessary expenses	Total
Yes	81.9%
No	18.1%

As illustrated in Figure 4, the main reasons for running short are related to low/irregular incomes, i.e. as a result of income pressures and not as a result of over-spending.

Figure 4: Reasons for running short of money for necessary expenses

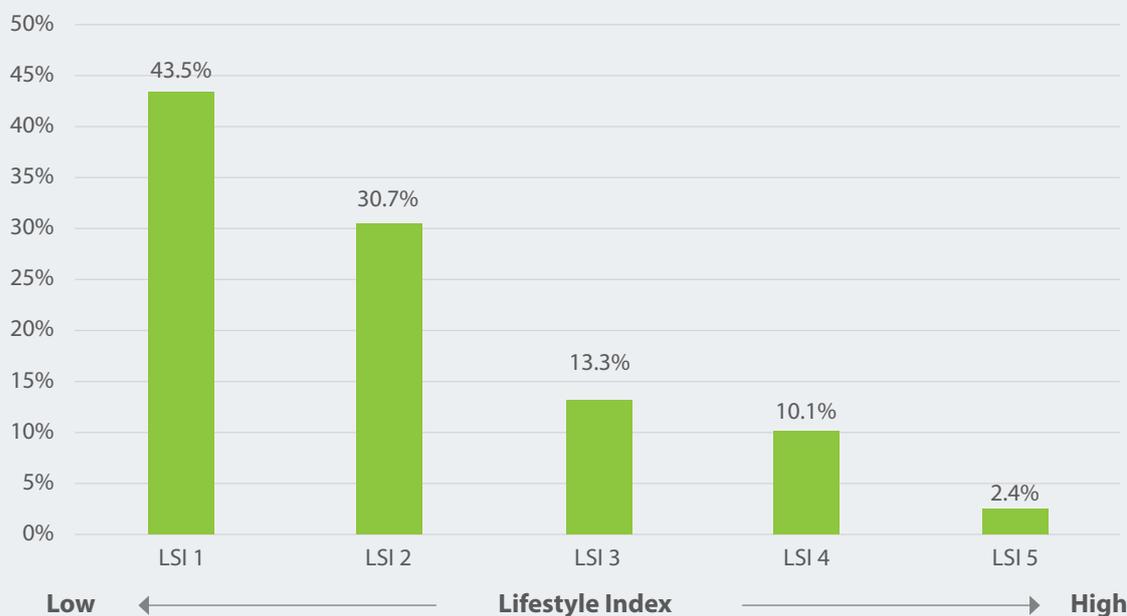


Most of the adult population struggles to make ends meet, which means that they have little, if anything, left to accumulate assets or save for asset-generating purposes. While financial education can help people to better manage their meagre incomes, it will not have a major impact unless the issue of poverty is addressed.

3.2.4 Lifestyle Index (LSI)

A socio-economic profile or Lifestyle Index (LSI) was developed on household level. This was done by using a combination of the Tanzanian All Media and Products Survey (TAMPS) Living Standards Measure (LSM) data and other socio-economic indicators, based on which a continuum of five bands were created, with 1 having the lowest score and 5 the highest. Each respondent was allocated a score and allocated to a band accordingly. As the majority of the population is poor, with limited assets, there is a skew towards the lower LSIs, with 75% of the population falling into LSI 1 and 2 (Figure 5).

Figure 5: Population by Lifestyle Index (LSI)



3.3 Financial context of respondents

3.3.1 Financial inclusion: Access Strand

The FinScope Tanzania Access Strand depicts the level of financial product usage (savings, credit, insurance, transactional and mobile banking) from various service providers categorised as formal, informal, semi-formal; and the number of adults who do not use any of these financial services (i.e. the financially excluded). These definitions have changed somewhat over time, as illustrated in Figure 6.

Figure 6: Definition of FinScope Tanzania Access Strand ¹¹

2006/2009		2013	
Classification	Highest level of usage	Classification	Highest level of usage
Formal	Commercial banks Postbank Insurance	FORMAL	Banked Commercial banks Postbank
Semi-formal	SACCOS MFIs Remittance companies Mobile money		Non-bank formal Insurance SACCOS MFIs Remittance companies Mobile money
Informal only	Savings/credit groups Shops/supply chain credit Money lenders Friends/Family	Informal only (external)	Savings/credit groups Shops/supply chain credit Money lenders
Excluded	Save at home/in kind	Excluded	Friends/family Save at home/in kind

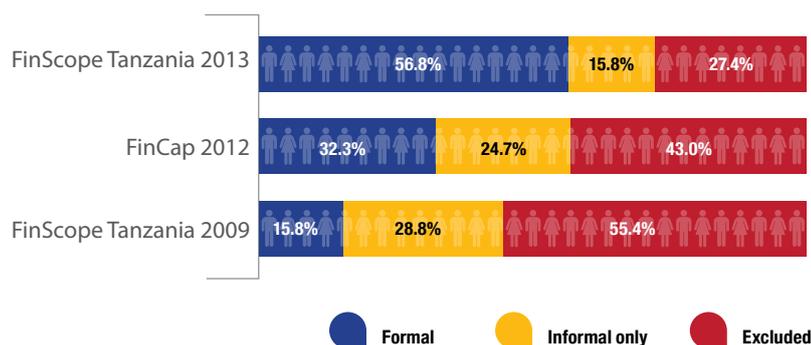
Age group: Adults - individuals 16 years or older

¹¹ FinScope Tanzania 2013 – Launch Presentation.

A rudimentary Access Strand was developed for the Baseline, based on savings and credit only. As illustrated in Figure 7, the financial capability (FinCap) Access Strand fits well between that of the FinScope Tanzania's surveys of 2009 and 2013. The major jump in formally financially included from 15.8% (FinScope Tanzania 2009) to 56.8% (FinScope Tanzania 2013), can be largely attributed to the uptake of mobile payments and mobile banking services.

These levels of financial inclusion provide an indication of the segmentation of financial sector stakeholders and channels through which different market segments can be reached. For example, those who are currently banked and/or served through mobile phones, can be reached through the formal communication channels of banks, or by mobile network operators through mobile phones for messaging on financial education. It also helps clarify the appropriate financial education message in the context of someone's level of financial inclusion. The Baseline Access Strand is therefore used later in this report as one of the descriptors of the FinCap segments.

Figure 7: FinCap and FinScope Tanzania Access Strands - usage of financial products and services¹²



3.3.2 Financial decision-making in the household

As illustrated in Table 12, around one third of decisions are made by the head of household and partner together, with around one quarter of decisions made by the respondent only. As expected, there is a bias towards men when it gets to decision-making on larger long-term financial decisions, with 27.7% of such decisions made by men alone as opposed to 16.8% of such decisions made by women alone. This is important when considering whom to target in the household in relation to specific financial education content issues.

Table 12: Household decision-making

	Day-to-day financial decisions		Long-term/large financial decisions	
	Male	Female	Male	Female
Respondent alone	24.8%	25.7%	27.7%	16.8%
Husband/wife/partner	13.1%	14.1%	8.2%	16.9%
Respondent with husband/wife/partner	35.5%	30.6%	36.7%	35.3%
Respondent and someone else in HH	12.5%	13.4%	15.3%	13.1%
Someone else	14.0%	15.8%	11.0%	16.7%
Nobody	0.0%	0.0%	0.4%	0.1%

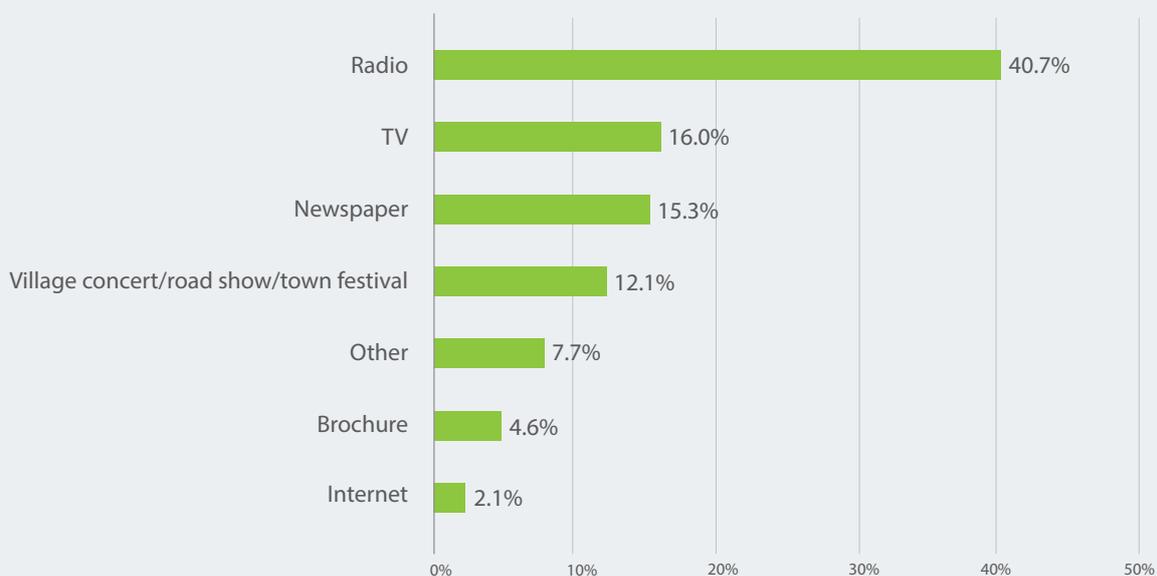
¹² Date of fieldwork.

3.3.3 Sources of financial information/media

Unlike developed countries, where people are often subjected to information overload, Tanzanians have limited exposure to media and other sources of information. As illustrated in Figure 8, the main source of information is above-the-line (ATL) media, primarily radio (41%), followed by television (16%) and newspapers (5%). These would be mostly marketing messages, rather than objective information on financial matters. ATL media are 'passive' channels, as people have limited choice in what they would like to see or hear or learn more about, as opposed to sources such as the internet where a person can actively search for the desired information. Internet access in Tanzania remains limited with only 2% of respondents listing this as a source of information on financial matters. As such, the opportunity for self-education remains limited in Tanzania and more access to information on demand ('as needed') is required.

Two thirds of respondents then also indicated that the information available on financial matters is not adequate; while 52% felt that the information was not reliable. Credibility of the source of information will be critical to the success of any planned financial education interventions. Section 3.5.7 explores behaviour in seeking advice on financial matters.

Figure 8: Sources of information on financial matters



3.4. Findings on dimensions of financial capability

3.4.1. Knowledge and awareness

Figure 9 and Figure 10 illustrate current levels of awareness and understanding of various financial and economic terms. The levels of understanding are based on self-assessment and not on actual levels (i.e. these were not independently tested).

It is interesting to note that, while 85% of people indicated that they have heard of and know what M-Pesa means, only 25.5% of people have heard of and know what mobile banking means. It is therefore a matter of terminology and not actual knowledge, which emphasises the need to be cautious about language and terminology in financial education initiatives. Layman's terms should be used when communicating with the public, rather than industry or practitioner terms.

Figure 9: Knowledge and awareness of financial and economic terms, products and services (self-assessment)

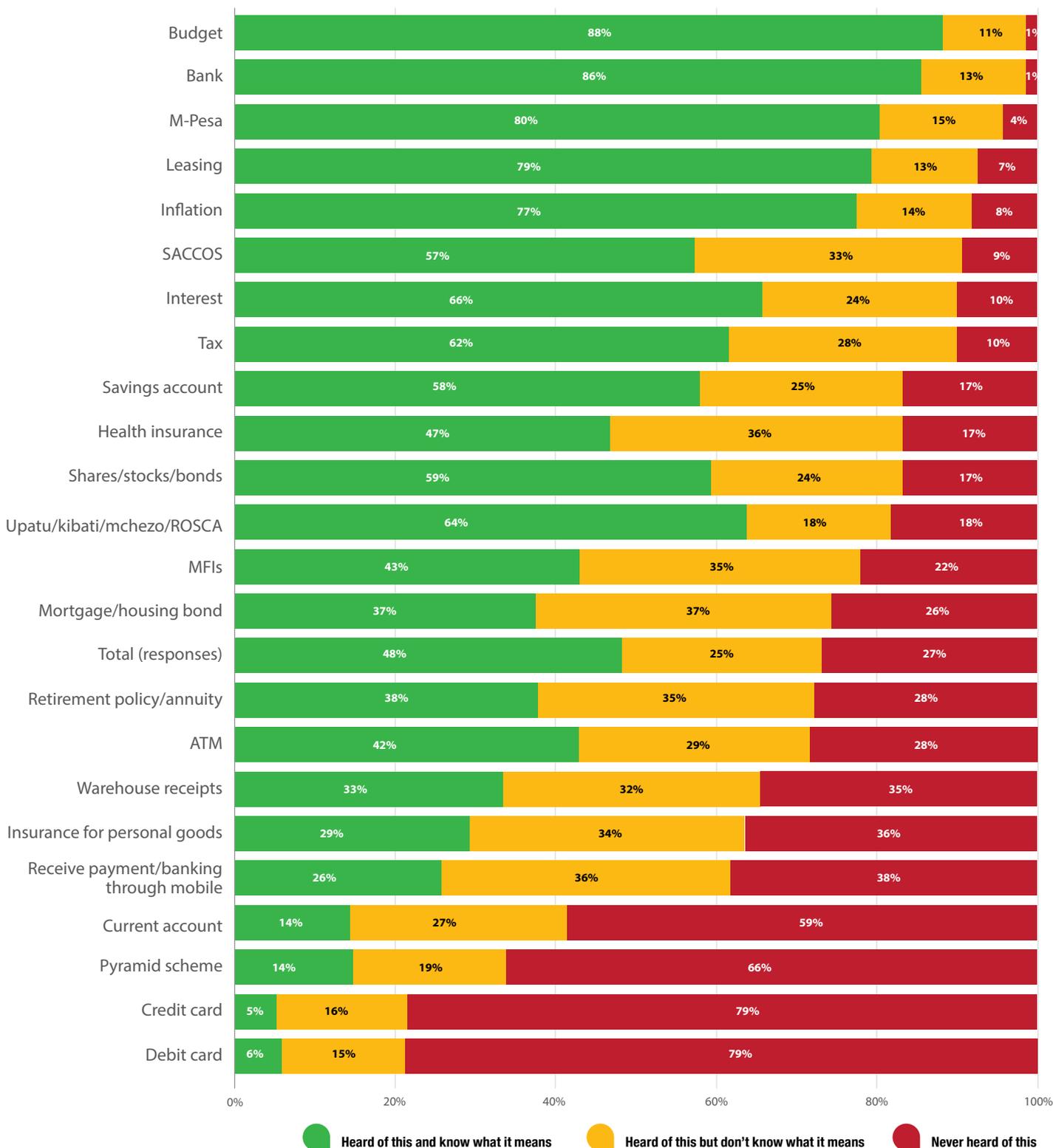
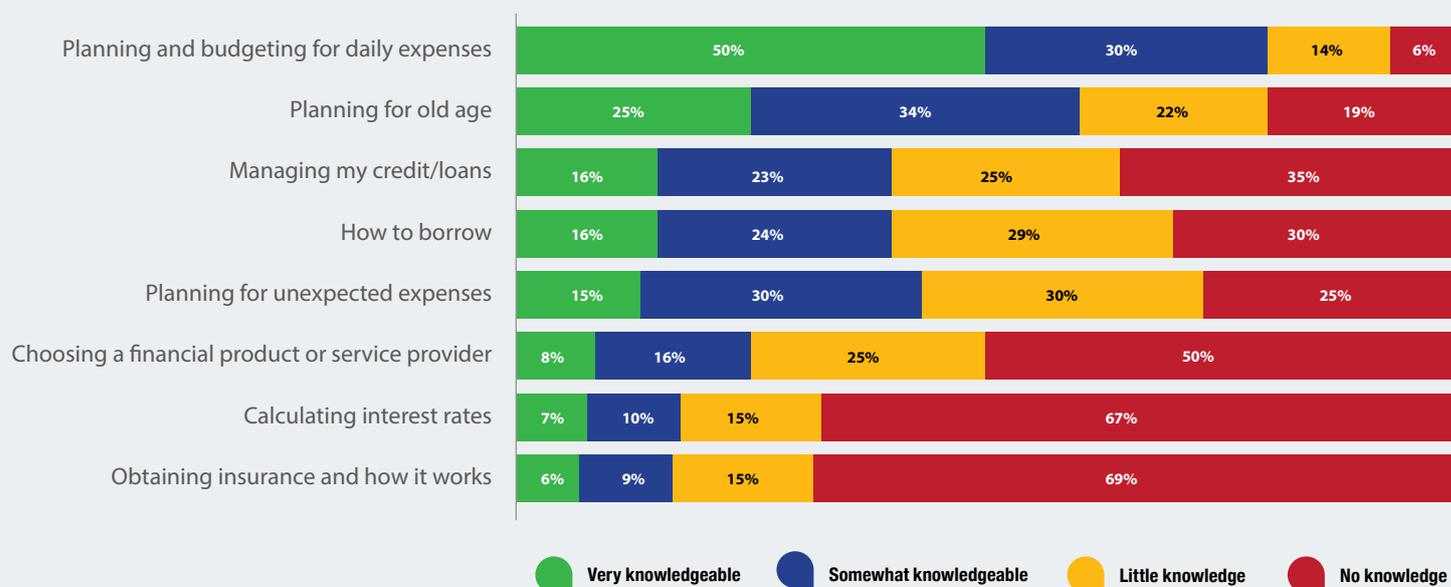


Figure 10: Knowledge of financial planning activities (self-assessment)



Topics on which respondents would most like training or information (single mention) are summarised in Table 13. The highest mention is that of life insurance (17%), while planning for unexpected expenses was ranked fourth at 9%. This is a common theme throughout the survey and has also been observed in FinScope Tanzania and elsewhere in Africa: illness and death of the (main) breadwinner are the main threats to a household’s financial security. Access to affordable life insurance in Tanzania should be improved, complemented by financial education interventions aimed at educating the public on the benefits, pitfalls and requirements of insurance.

The second highest mention is on ‘how to borrow.’ More on this is provided in Section 3.5.6: Credit behaviour.

The third ranked mention is how to calculate interest rates. Numeracy is a major challenge and respondents scored poorly in basic mathematics in the survey (see Section 3.4.3). Calculating interest rates will remain difficult without some basic mathematical skills. We also observe later that many people do not know how much interest they are earning on savings.

Table 13: Topics respondents would most like training or information on (read out options - single mention)

Would like to receive information or training on	% of adults (single mention)	Grouped
How to obtain life insurance and how it works	17.1%	Risk management = 30.9%
Planning for unexpected expenses	9.1%	
How to obtain insurance for personal goods and how it works	4.7%	
Planning for old age	8.9%	Planning = 20.7%
Planning and budgeting your daily expenses	6.0%	
Planning for the financial security of your dependant	5.8%	
How to borrow	12.4%	Credit and loans = 16.7%
How to manage your credit/loans	4.3%	
How to calculate interest rates	9.6%	Mathematical skills = 9.6%
How to choose a financial product or service provider	8.2%	Other financial services/ products = 20%
How to save	8.0%	
Paying with or sending money through a mobile phone	3.8%	

3.4.2. Attitudes to saving and loans

Table 14 illustrates respondents' attitudes to saving. Generally, people have a very positive attitude to saving, but they save less than they would like to because of income constraints. Also refer to Section 3.2 on incomes and financial vulnerability, and Section 3.5.5 on saving behaviour.

Table 14: Attitudes to saving

Positive statements	Agree and strongly agree
It is important to save for old age	96.8%
I do not save as much as I would like	75.8%
I always make provision for expected and unexpected expenses	63.3%
When I receive income, I immediately save some	62.0%
I save money regularly	27.6%
Negative statements	Disagree and strongly disagree
I do not save because I do not need to	97.5%
I do not worry about saving for the future	94.5%
I save only if I have money left after expenses	49.2%

While there is sometimes some under-claim in credit and over-claim in savings, the general pattern emerging from the data is that more adults appear to save than to borrow. When taking into consideration monetary savings only, there are 1.7 savers for every borrower.

Of those who do not have a loan (54% of the adult population), two thirds stated that they did not want a loan as they feared it may be too expensive and a further 20% indicated that they did not need a loan (Figure 11). Those who borrow often seem to do so primarily for income-smoothing purposes/convenience (see Section 3.5.6: Credit behaviour). On a national level (all adults with or without a loan), less than 3% of adults indicated that they feel out of control with the amount they have borrowed, and only 12% (Table 13) of the *total population* indicated that they would like to learn more about how to go about taking out a loan.

Figure 11: Reasons for not having a loan (those without a loan)

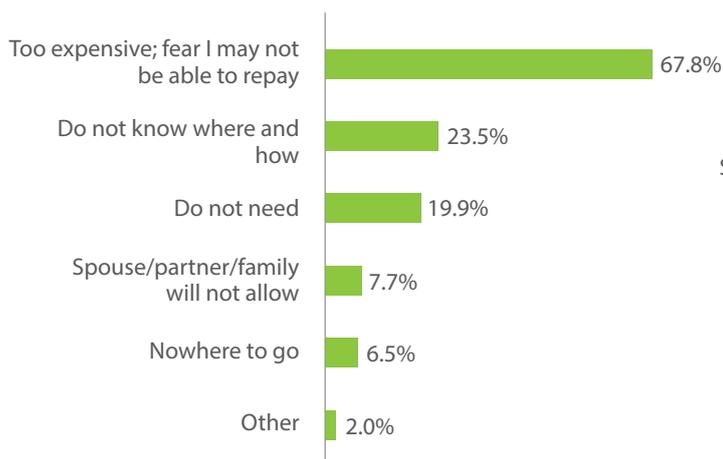
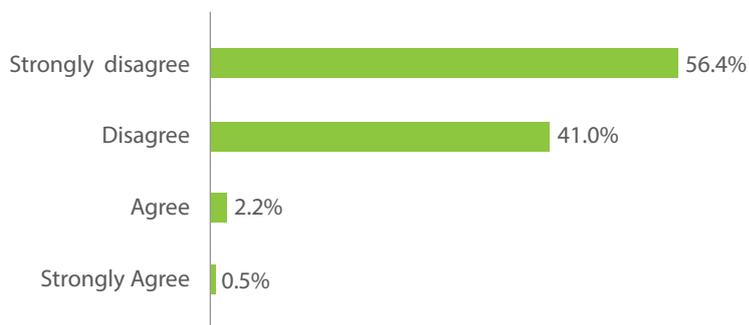


Figure 12: Feeling out of control with amount borrowed (all adults)



Of those that borrowed, more than two thirds indicated that they have borrowed up to their maximum/more than they could really afford, while less than 10% indicated that they have ever borrowed to pay off another debt (Table 16). So, there appears to be some debt stress developing among those that have borrowed, with a small percentage (about 10% of those that have borrowed and 3% of the total adult population) showing severe signs of debt stress. This should be closely monitored over time and a more in-depth study into debt may be considered. From a financial education perspective, it is important to identify those that are showing severe levels of debt stress and those that may develop debt stress in the nearby future (i.e. those that feel that they have borrowed to their maximum) and reach them with targeted messaging on how to manage and get out of over-indebtedness.

These findings differ among different financial capability market segments in Tanzania and are further analysed by segment level in Section 3.6.3.

Table 15: Feelings about the amount borrowed

Feelings about amount borrowed	% of adults
I have borrowed more than I can afford	1.6%
I have borrowed to my limit and cannot afford to borrow more	67.7%
I have borrowed the amount that I need	27.8%
I could afford to borrow more if I wanted/needed to	2.8%

Table 16: Have borrowed to pay off other debt

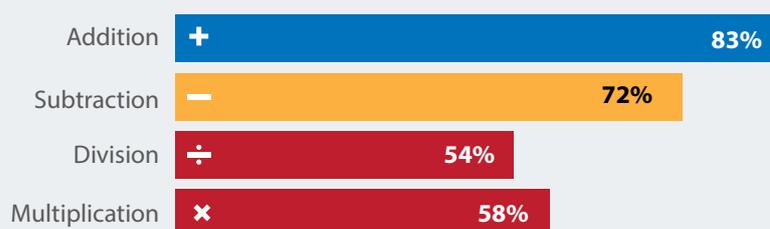
I have borrowed to pay off other debt	% of adults *	Grouped
Often	0.9%	Debt stress: 8.6%
Sometimes	7.7%	
Rarely	14.4%	88.8%
Never	76.4%	

*Remainder refused to answer

3.4.3. Numeracy skills (mathematical literacy)

Respondents were provided with four simple problem sums which required skills in addition, subtraction, division and multiplication. They performed poorly on division and multiplication.¹³ It is not possible to budget or track expenses and income accurately without these basic skills – and it is even less possible to calculate interest and monthly loan repayments or the total cost of a loan over a given period. This emphasises the need for developing improved applied mathematical skills at school level and running adult mathematical literacy courses, either as stand-alone courses or embedded in other vocational training.

Figure 13: Numeracy skills (mathematical literacy)



3.4.4. Confidence

People's level of confidence is a major determinant of their financial behaviour. If people do not have the confidence to act, their behaviour will not change, no matter how knowledgeable they are. As illustrated in Table 17, people are more confident in making financial decisions than in engaging with financial institutions. This is in line with the findings from other studies which have demonstrated that low income people often feel intimidated by (formal) financial service providers.

The financial service providers can do much to make people feel more welcome and comfortable in interacting with their staff. Confidence also increases with knowledge and hands-on experience and, as such, financial education can go a long way in strengthening people's confidence in both making decisions and interacting with financial service providers.

¹³ The end-evaluation (2013) of the Financial Knowledge for Africa (FIKA) programme – a financial education programme implemented by the Equity Group Foundation and the MasterCard Foundation in Kenya – yielded similar results relating to mathematical literacy.

Table 17: Confidence in making financial decisions and engaging with financial service providers

Level of confidence	Making financial decisions	Dealing with financial service providers
Very confident/confident	65%	32%
Not confident at all	35%	68%

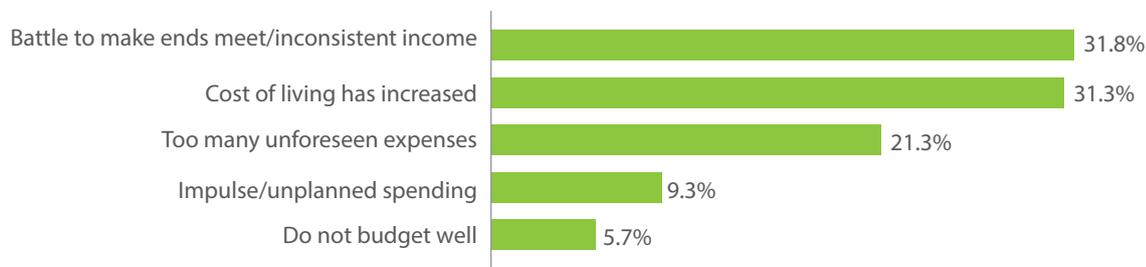
3.5. Findings on financial capability competencies

3.5.1. Day-to-day money management (short term)

Budgeting and financial discipline - personal/household

Eighty-six percent of respondents indicated that they have a personal or household budget. Of those, 92% of respondents claim that they always or mostly keep to their budget. As illustrated in Figure 14, the main reasons cited by respondents for not keeping to their budgets relate to income and expense pressures (84%).

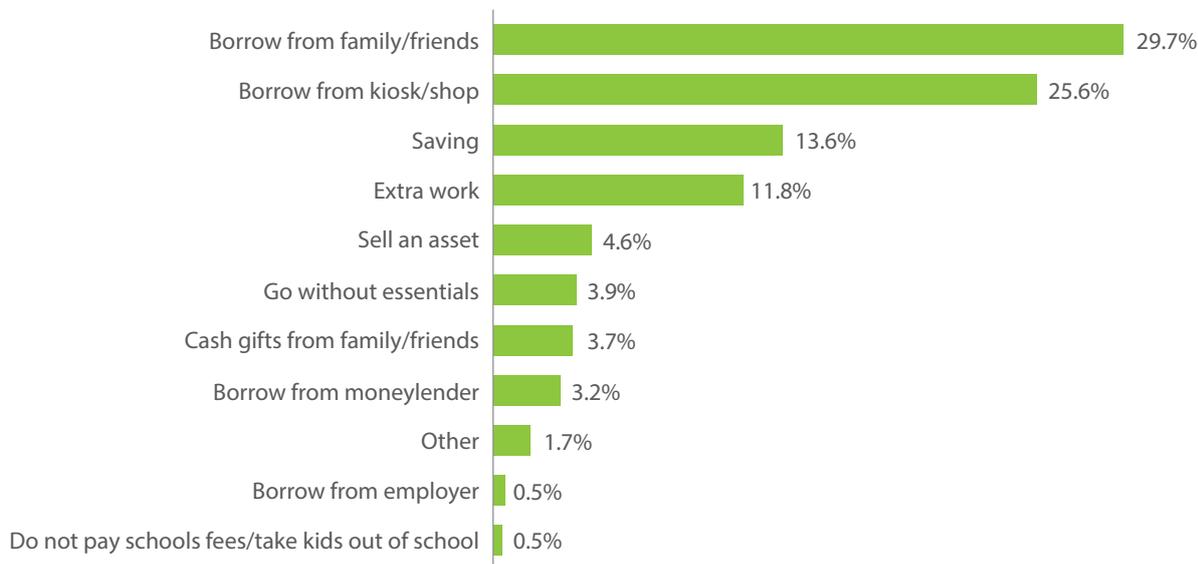
Figure 14: Reasons for not keeping to budget



Coping strategies (income-smoothing)

As illustrated in Figure 15, people’s main coping strategies when running short of money are to borrow from family or friends (30%), followed by borrowing from a kiosk¹⁴. Only 14% rely on savings. This means that almost 50% of those that often/regularly run short of money for essential expenses, borrow in one form or another. This reaffirms that “not keeping to a budget” is seemingly primarily the result of poverty rather than poor financial management.

Figure 15: Coping mechanisms



¹⁴ Credit from a kiosk may also not be perceived as ‘true borrowing,’ but rather as an arrangement of convenience which does not require cash-to-hand and/or also enables the children and other family members to make purchases ‘on account.’

Keeping track

As illustrated in Figures 16 and 17, 45% of respondents did not know/only had a rough idea of what their expenses were over the past week and 38% did not know/only had a rough idea how much money they had available at that point in time. Furthermore, of those who have borrowed, more than a third did not know or only knew roughly how much they have borrowed and repaid in loans over the past 12 months (Figures 18 and 19). These findings imply that people may not budget and keep to their budget as well as they think, as they do not seem to track their expenses (including loan repayments) and cash flow all that well. This may at least partially be the result of poor financial/mathematical skills.

Figure 16: Aware of expenses over the past week

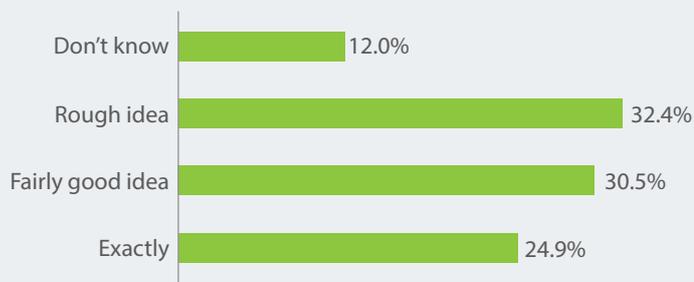


Figure 17: Aware of money available for day-to-day spending

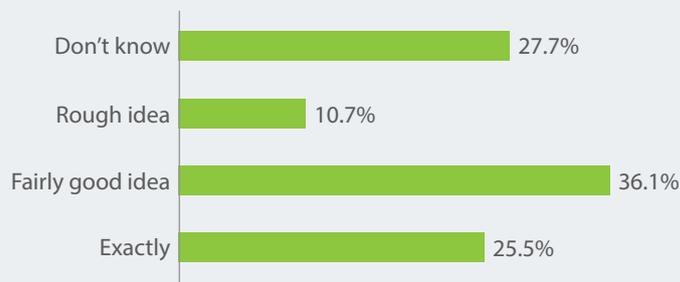


Figure 18: Know how much borrowed over the past 12 months

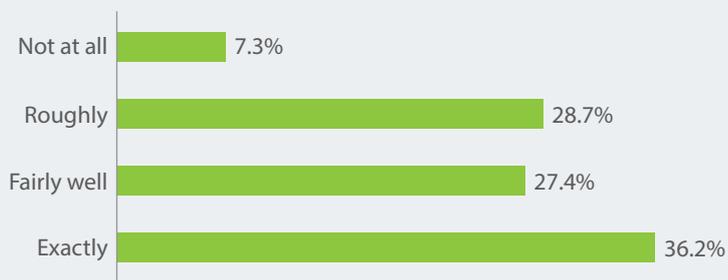
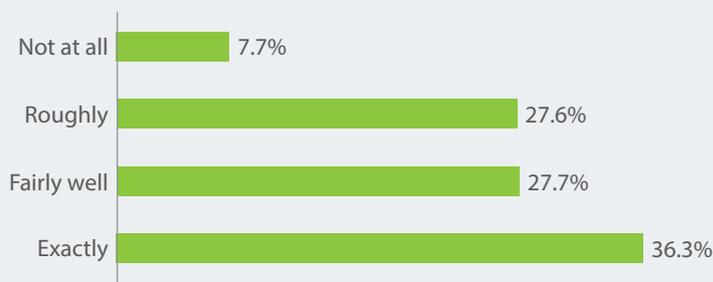


Figure 19: Know how much repaid in loans over the past 12 months



It has been demonstrated elsewhere that training on budgeting can improve even poor people's budgeting skills and ability to track their spending and income.¹⁵

¹⁵ In Kenya, the Equity Group Foundation, with the support of the MasterCard Foundation, implemented a highly successful nationwide financial education programme. It consisted of several components, including budgeting, and the latter was cited by trainees as being by far the most valuable of the four modules (the others being saving, borrowing and formal financial services).

Enterprise finances

As many as 77% of respondents reportedly have their own businesses, be that a farm, agriculture-related business or other form of enterprise. Only 59% of those with a business activity have a budget (as opposed to 86% of adults having a personal household budget). Of these business budgets, only 24% are in writing (Table 18).

Table 18: Personal/Household vs. business budgets

	Personal budget (all adults)	Business budget (of those adults with a business)
Have a budget	86%	59%

Personal and business finances are closely integrated and less than 1% of respondents have a separate bank account for their businesses (Table 19). The need for separating business and household budgets and for keeping separate financial records and bank accounts for personal and business purposes, should be emphasised in financial education initiatives.

Table 19: Business and personal bank accounts

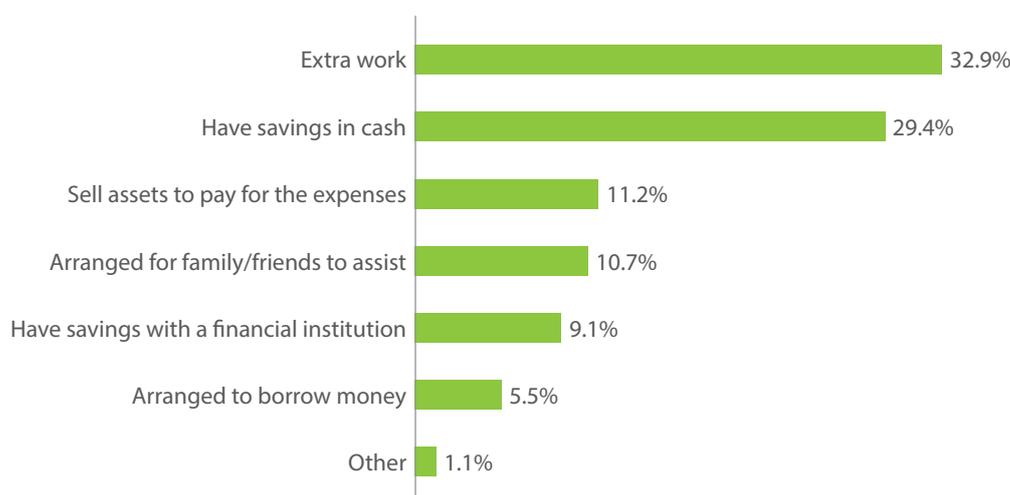
Bank accounts	Percentage
No account	83.9%
Personal only	12.8%
One account for both personal and business purposes	1.8%
Business only	0.8%
Separate personal and business	0.7%

3.5.2. Planning for large expected events (medium term)

Almost 61% of respondents indicated that they have an expected large expense in the next 12 months (e.g. a wedding, annual rent or home improvements). As many as 74% of respondents indicated that they have a plan or strategy in place to provide for such an expense. As illustrated in Figure 20, people's main plan or strategy was simply to do extra work (32.9%), followed by savings in cash (29.4%). Thereafter they needed to sell assets or appeal to family for assistance. Sixty percent of respondents then also felt that they would only be able to cover the expense in part and 40% was "fairly to very worried" about this.

When budgeting and planning for day-to-day expenses, there is a need to emphasise the importance of setting aside savings to make provision for such large expected expenses.

Figure 20: Strategies to provide for large expected expenses



3.5.3. Long-term planning

General

As illustrated in Table 20, the majority of respondents (82.7%) indicated that they had long-term financial goals, with 90.6% stating that they have plans to achieve these goals, and as many as 26% indicated that these plans are written down. Eighty-four percent indicated that they often/regularly review the plans; and 90% indicated that they mostly keep to the plans. It therefore appears as though most adult Tanzanians are very structured and disciplined in their long-term planning.

Table 20: Long-term goals and plans for achieving them

Long-term planning	Percentage of adults
Have financial goals	82.7%
Have plans to achieve these goals	90.6%
Mostly keep to plan	90.0%
Often/regularly review plans	84.0%
Plans are written down	26.0%

Retirement

Of the survey respondents, 11% were retired or working less due to old age and the remainder were not yet retired. It is encouraging to observe that 72% of those who are retired, indicated that they had a retirement plan in place before they stopped working; and 77% of those who are still working indicated that they have a plan in place.

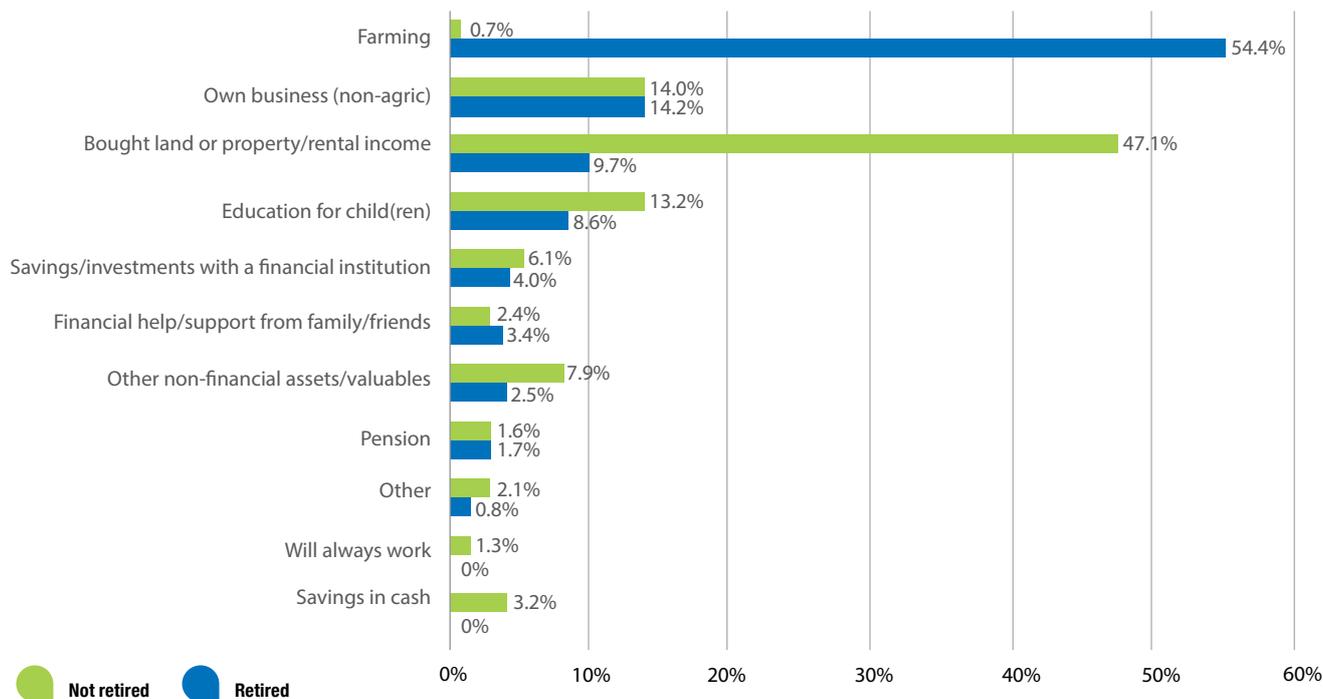
Most people have multiple strategies for retirement. Figure 21 presents the major strategies (single mention) of retirees and non-retirees. While land ownership/access to land appear to be the dominant strategy for both groups, there appears to be major differences in the planned use of the land. Retirees are indicating that they are relying predominantly on farming, whereas non-retirees plan on relying predominantly on rental income from the land. It is unclear why there is such a big difference in the (planned) usage. One explanation may be that younger generations still see land ownership as security, but would rather rent it out to others than to farm themselves.

Another noticeable difference between these two groups can be seen in the reliance on investment in children's education as a coping strategy, with 13% of those not yet retired citing this as their main strategy, as opposed to only 9% of those already retired.

While it is a commonly held view that people's main retirement strategy is to rely on family and friends, only around 5% of respondents cited this as their main strategy. Combined with investment in children's education, this equals to around 15% only (average for both retirees and those not yet retired).

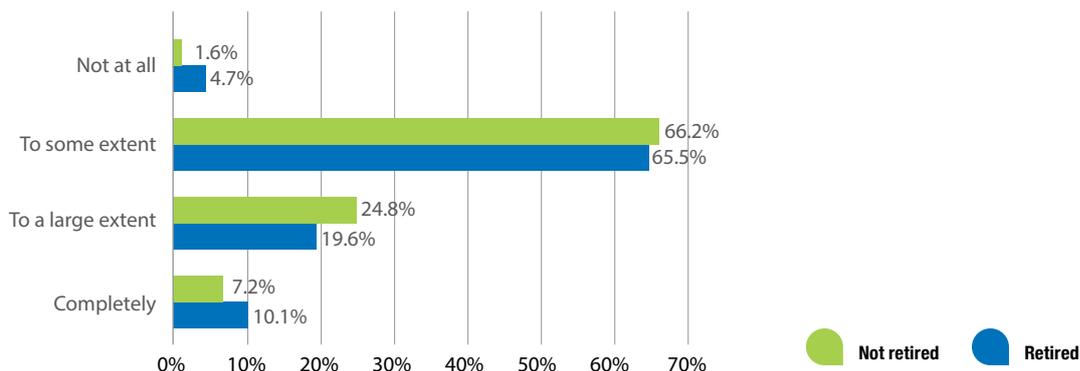
A mere 3% of respondents plan to rely on investments, cash or savings. This differs substantially from the situation in developed countries, where much emphasis is placed on monetary investments (e.g. retirement annuities) as the main instrument for retirement planning.

Figure 21: Main retirement strategies: retirees and those not yet retired (single mention)



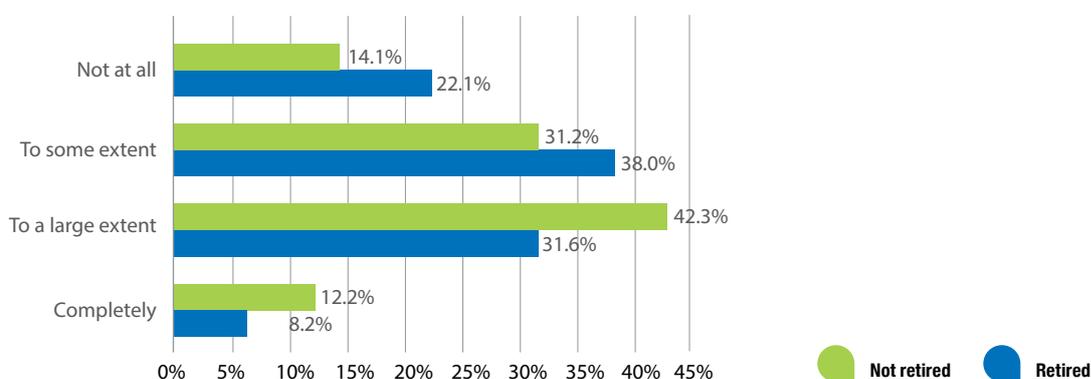
Of further concern is that less than a third (29% of retirees and 30% of those not yet retired), indicated that their plans would completely or largely cover their needs (Figure 22). The remainder feel that their plans would, at least to some extent, fall short.

Figure 22: Extent to which retirement plans (will) cover expenses



Furthermore, 45% of those not yet retired and 60% of retirees were “very to fairly worried” about covering their household expenses through their retirement (Figure 23).

Figure 23: “Are you worried about covering your expenses in retirement?”

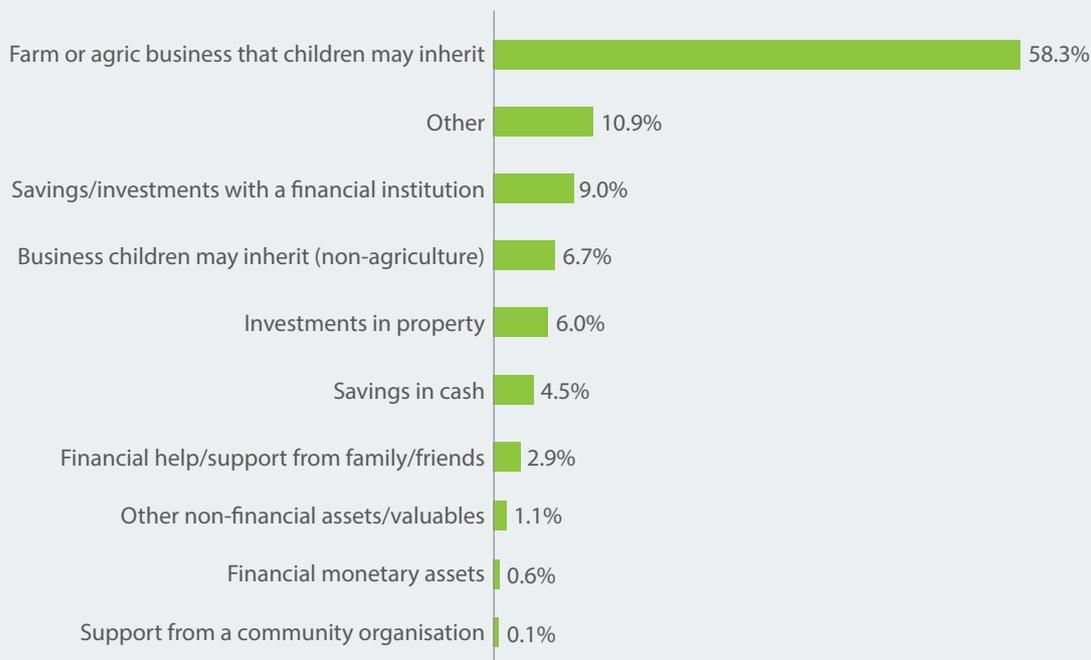


Almost a quarter (23%) of all respondents believe planning for retirement should start around age 30, with the mean being 29 years of age. Given average life expectancy of 54 years for most people, there is clearly a major need for providing financial education on planning for retirement.

Children

Seventy-one percent of respondents have minor children dependent on their financial support. Of these, 71.5% indicated that they had a strategy in place to provide for their children's future needs, should something happen to them or should they lose their income. As with retirement planning, people have multiple strategies in place with the main one (single mention) being farming or an agricultural-related activity (58.3% of respondents) – see Figure 24.

Figure 24: Main strategies for providing for children (single response)



Only around 29% of respondents feel that their plans will make provision for their children, should something happen to them as providers; while 52% are very worried about providing for their children. Clearly there is a need for financial education on how to provide for minor children. This is critical to mitigate the poverty trap of future generations and to prevent children from becoming destitute when they lose their parents.

Life policies are almost non-existent at 1.6%; whereas funeral policies are now held by 14% of the adult population. The low uptake of life policies illustrates a huge opportunity in the marketplace and a need to educate the population on the value of life policies and how they work.

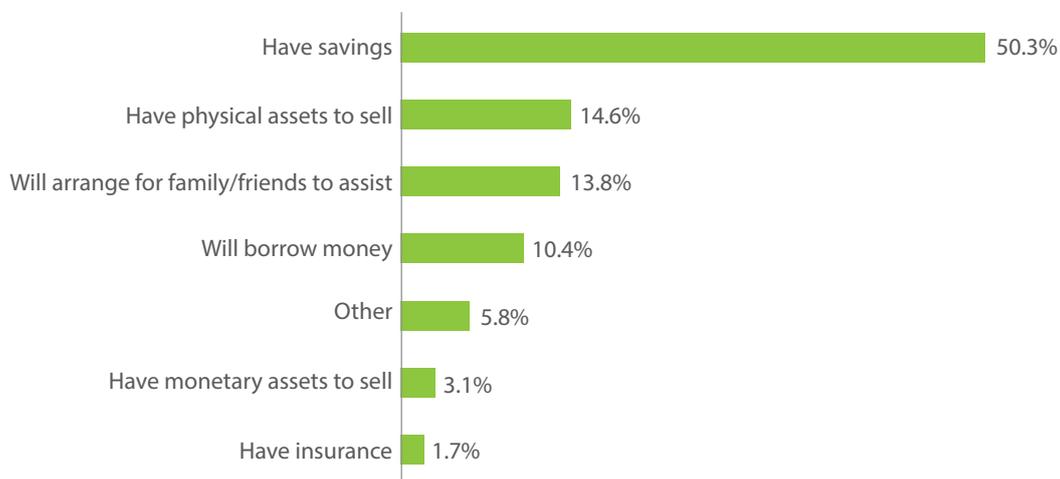
Table 21: Percentage of respondents with a life policy or funeral policy

	Percentage of adults
Have a life policy	1.6%
Have a funeral policy	14.0%

3.5.4. Risk management: unknown exceptional (large) expenses

Sixty-two percent of respondents indicated that they do not have a plan in place to deal with unexpected (large) expenses. Of the 38% who do have a plan in place, most have multiple strategies. As illustrated in Figure 25, half of the respondents indicated that they would mostly (single response) rely on savings, whereas others indicated that they would need to sell physical assets (15%), ask for assistance from family and friends (14%) or borrow (10%). Only 2% have insurance, of which two-thirds have only medical insurance.

Figure 25: Main strategies for dealing with large unexpected expenses (single mention)



It is therefore no surprise that 87% of respondents indicated that they are worried about covering such a possible expense. This points to the need for introducing (micro) insurance - life insurance and income protection in particular - to the market, and educating the public on the types of insurance, the benefits and how to obtain these.

3.5.5. Saving behaviour

The most common type of saving is in the form of cash at home (Figure 26), while the main reason for saving (based on FinScope Tanzania 2013 data), is for income-smoothing purposes (Figure 27). Financial education can encourage people to save more, save more regularly and also save for asset-building purposes. However, the form of savings (cash at home) may not change much in the absence of easily accessible, cost-effective savings products and services with a positive effective interest rate.

Figure 26: Types of savings

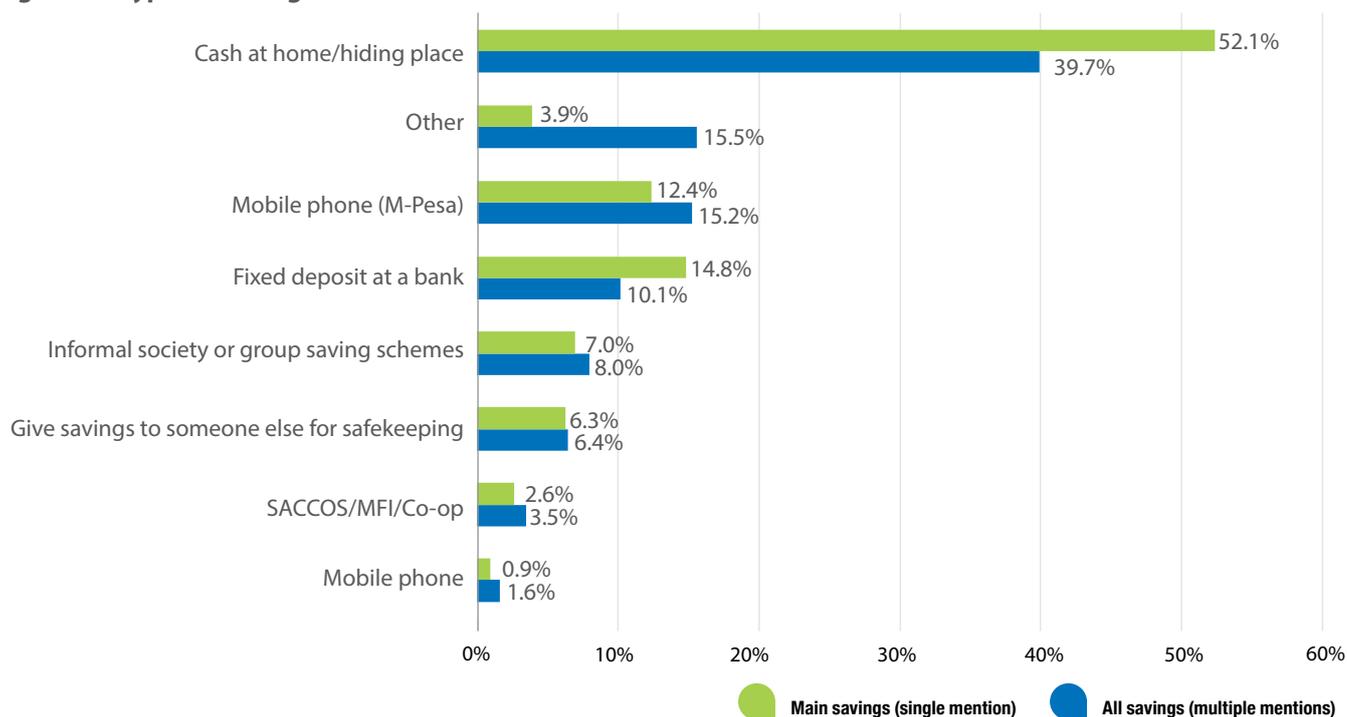
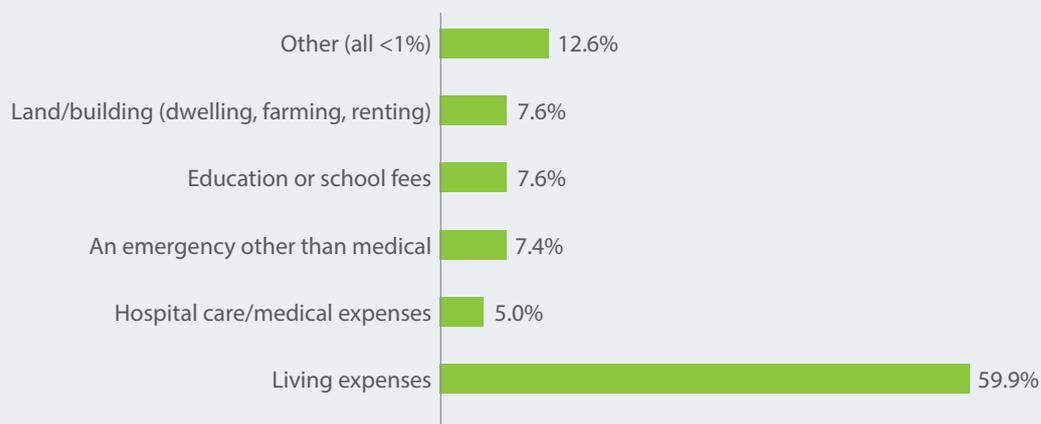


Figure 27: Reasons for saving

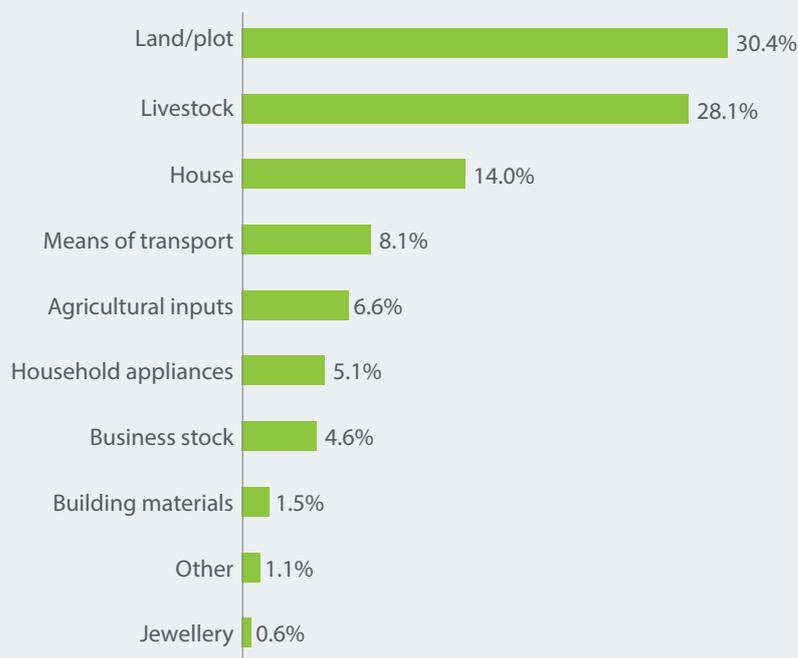


Source: FinScope Tanzania 2013

Only 14.5% of respondents indicated that their savings earn interest. This further underscores the need for an opportunity in the marketplace for easily accessible and cost-effective saving with a positive interest rate. Only 60% of those that indicated their savings earn interest knows “exactly or fairly well” how much interest their savings are currently earning. This again points to generally low levels of education, literacy and numeracy skills.

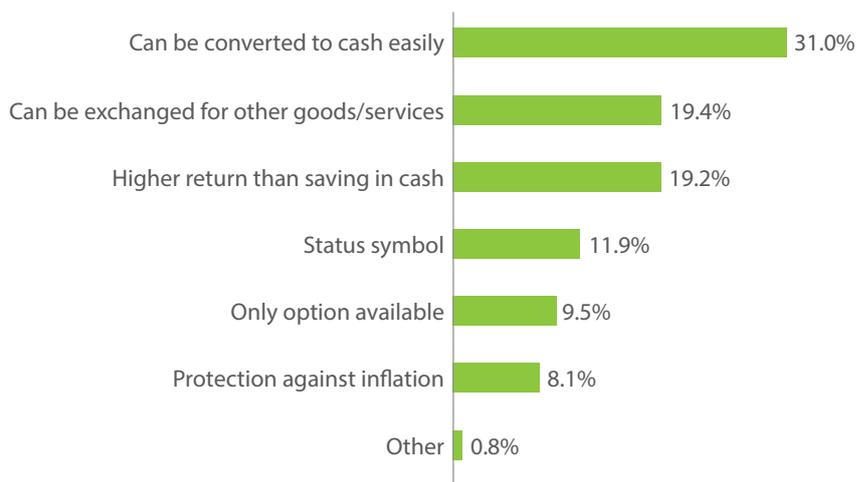
In addition to monetary savings, 62% of people save in non-monetary form. The forms of non-monetary savings are listed in Figure 28. These are based on spontaneous responses (i.e. not “read-outs”).

Figure 28: Types of non-monetary savings (spontaneous)



As illustrated in Figure 29 below, the most important criterion for non-monetary savings is that it must be easily convertible to cash or exchangeable for other goods. Also, almost one in five respondents indicated that non-monetary savings yield a higher return than savings in cash, while a further 8% stated that such non-monetary savings provided protection against inflation. It should be noted that these options were ‘read-outs’, which may have inflated some of these responses. Nevertheless, it appears as though many people are deliberate in their decisions and choices of non-monetary savings.

Figure 29: Why people save in non-monetary form (read-out)



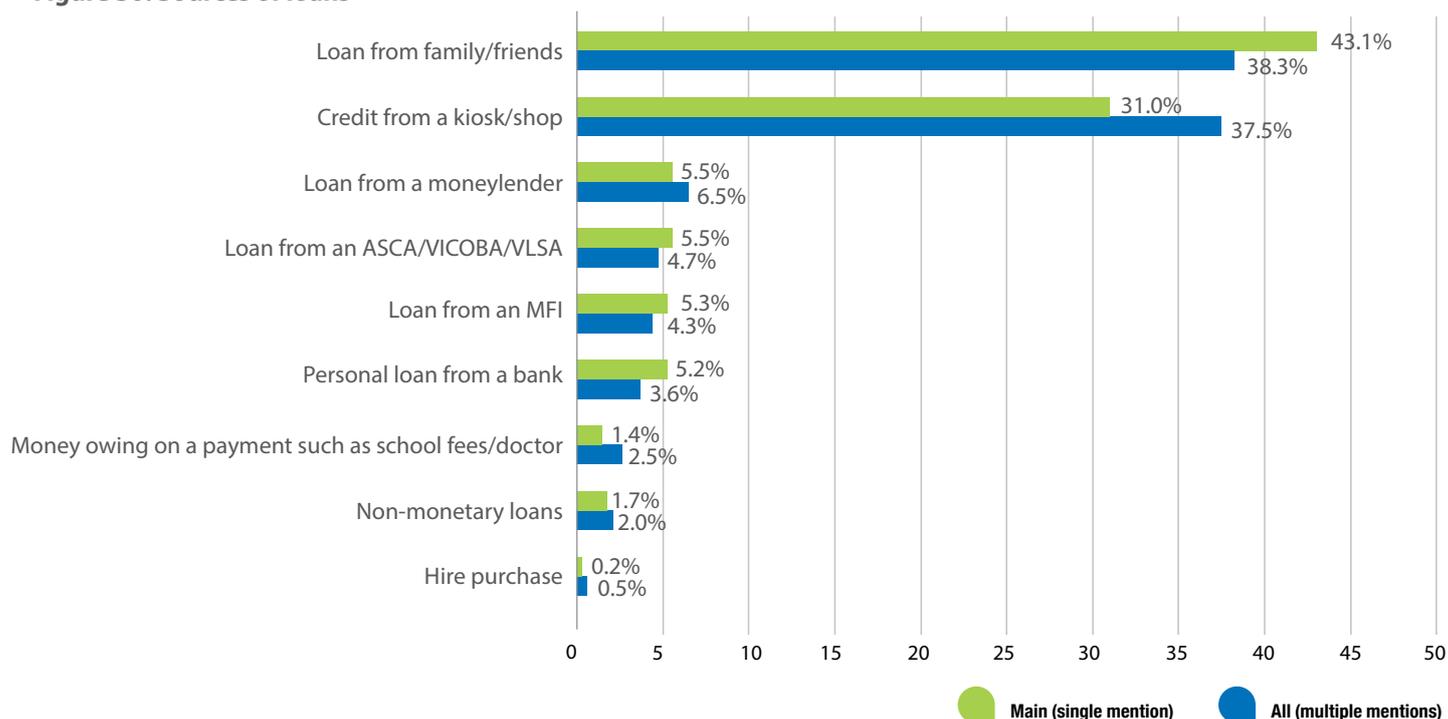
3.5.6. Credit behaviour

Forty-six percent of respondents indicated that they hold credit in some form. Figure 30 illustrates the types and sources of credit. Borrowing through financial service providers is minimal. The main source of credit is from family and friends, followed closely by credit from a kiosk. As with saving, most borrowing is for income-smoothing purposes. This is also illustrated by the high number of respondents with credit at kiosks.¹⁶

About 30% of those without credit (i.e. around 20% of the adult population), indicated that they do not know where and how to apply for a loan. Only 12% of the total adult population indicated that they wanted to know more about loans. So there is a need for financial education on credit; but this should be done in a targeted manner and the risks associated with credit – particularly consumer credit – must be clearly communicated. As with saving, unless financial service providers make available easily accessible competitive loans for productive purposes, financial education on loan types may not have much of an impact or facilitate the uptake of productive loans.

An appropriate **consumer protection framework** is also required to complement borrowing, including public education on people’s rights, obligations and recourse options.

Figure 30: Sources of loans



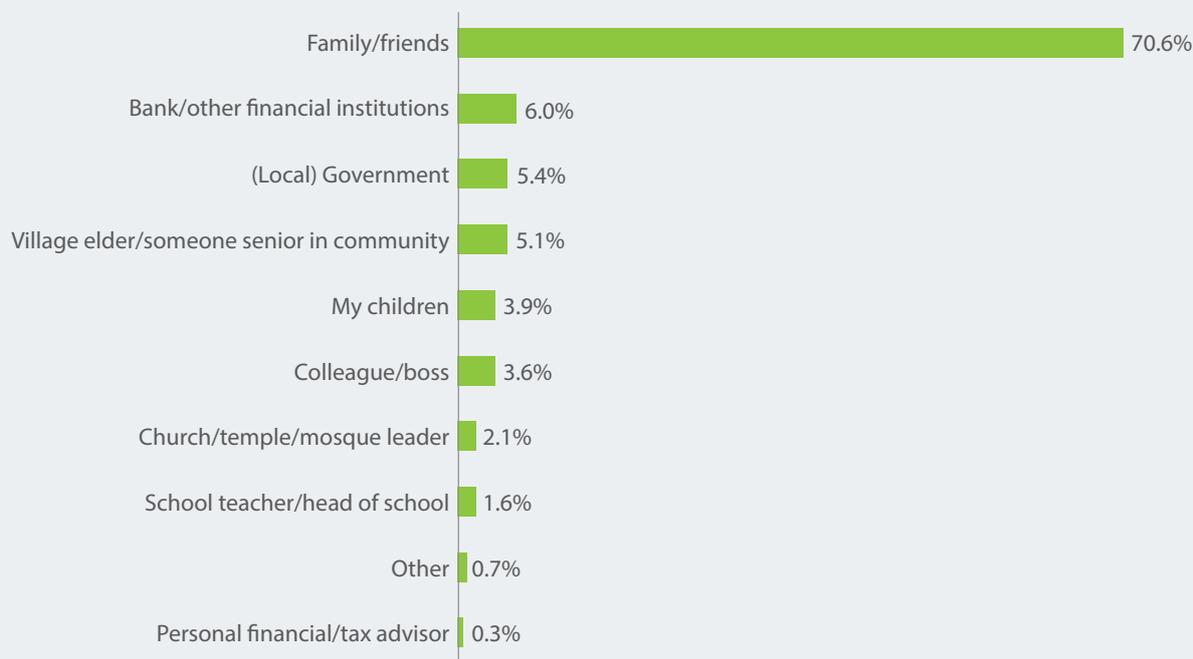
¹⁶ These findings are also supported by findings from FinScope Tanzania 2013.

3.5.7. Seeking advice and product search behaviour

Seeking advice

Most people (52%) rarely or never seek advice on financial matters. Those that do seek advice, do so primarily from family and friends. It is questionable to what extent the family and friends are able to provide appropriate advice.

Figure 31: Sources of advice



Product search behaviour

Respondents displayed limited deliberate “search” behaviour when choosing savings and loan products, with less than 50% indicating that they searched for information on advantages and disadvantages. People appear to be a bit more careful and discerning when it comes to loans. This is probably because there are limited (cost-effective) saving options, with most being in the form of cash at home, whereas loans must be sourced from outside. Many people may not have more than one source of loans available in their communities.

Table 22: Product search behaviour

Product choice	Savings	Loans
Searched for information on advantages and disadvantages	41.2%	48.5%
Considered many alternatives before deciding	53.2%	59.7%

Furthermore, unlike developed countries where there is often an over-supply of information and marketing messages, there is only limited information available in most communities in Tanzania. Not surprisingly, this competency (product search behaviour) had a weak score relative to others when considering the main differentiating competencies.

3.6. Financial capability market segmentation

Five market segments were developed through statistical modelling (see Section 2 and Annex A), based on the main differentiating dimensions, predictive competencies and a range of demographics. This section presents the main dimensions, followed by the competencies and then the financial capability segments. Each segment is described in detail in terms of its socio-demographic profile, scores on the dimensions and competencies, levels of financial inclusion, main financial education needs and points of contact (communication channels).

3.6.1. Main dimensions of financial capability

The main discriminating dimensions of financial capability in Tanzania are summarised in Table 23 below; and the adult distribution or scores in terms of these dimensions are illustrated in Figure 32.

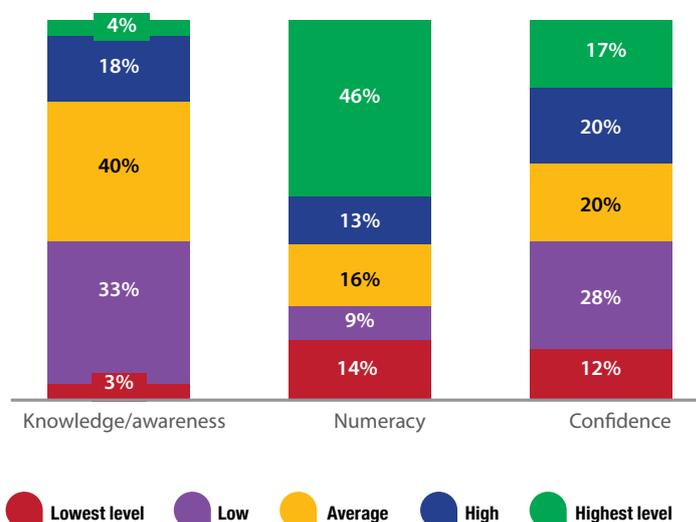
From the distribution across these dimensions, it can be seen that the population performed very differently in terms of numeracy skills, since numeracy achieved both the largest percentage of high scores (46.5%) and low scores (14.8%) of the three dimensions. On “knowledge and awareness,” 40% received an average score of 3, with few obtaining a high score (4.1%) or low score (3.8%).

A strong statistical relationship was found between these three dimensions and the following: levels of basic education, gender, location, level of financial inclusion of the individual and the socio-economic profile of the household. This is explored further in Section 3.6.3: Financial capability market segments.

Table 23: Main differentiating dimensions of financial capability

Dimensions of financial capability	Descriptors (aggregated questions)
Knowledge/awareness	Knowledge/awareness of financial products/services Knowledge/awareness of financial topics/concepts
Numeracy	Numeracy skills
Confidence	Confidence in making financial decisions Confidence in engaging with financial institutions

Figure 32: Distribution scores for main differentiating dimensions of financial capability¹⁷



3.6.2. Main financial capability competencies

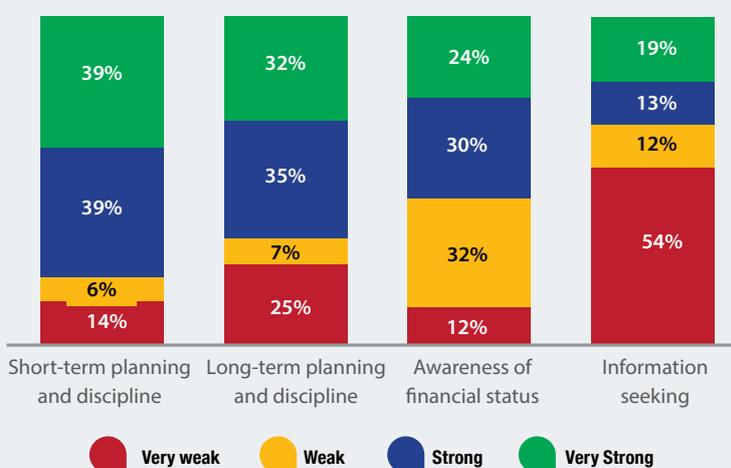
The competencies, which hold a strong relationship with the dimensions, are summarised in Table 24 below; and the adult distribution or score in terms of these competencies is illustrated in Figure 33. From the distribution it can be seen that the highest relative score was achieved on short-term planning and discipline, followed by long-term planning and discipline, then “awareness of financial status” (keeping track of short-term expenses) and, lastly, the weakest score was achieved on information seeking. These illustrate the priority issues to be addressed among the population.

¹⁷ These may not total 100% due to rounding.

Table 24: Main differentiating competencies of financial capability

Highest (1) to lowest (4) overall score	Competencies	Sub-components
1	Short-term planning and discipline	Budgeting
		Keeping to the budget
2	Long-term planning and discipline	Financial goals
		Concern about long-term financial needs
		Keeping to long-term strategy
		Review strategy against goals
3	Awareness of financial status/keeping track	Knowledge with regard to amount spent in previous week
4	Information seeking	Seeking financial advice

Figure 33: Distribution scores for main differentiating competencies of financial capability¹⁸



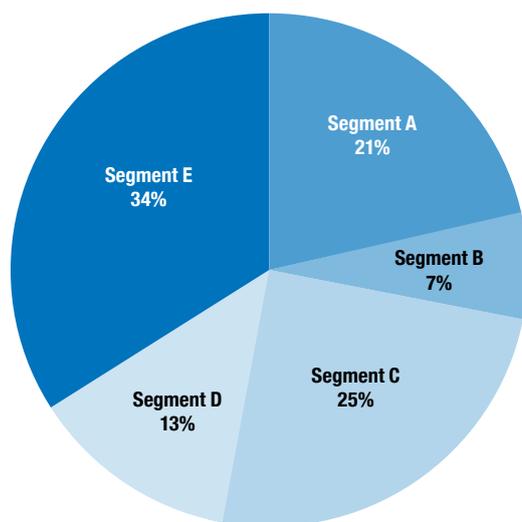
3.6.3. Financial capability market segments

Overview of the market segments

Through regression analysis, several socio-demographic variables were identified which hold a strong relationship with the financial capability dimensions and competencies described earlier. Based on these, five market segments were developed, each with a similar socio-demographic profile and similar scores on the dimensions and competencies within each segment. These five market segment are named A to E.

¹⁸ These may not total 100% due to rounding.

Figure 34: Financial capability market segments



Segment scores on dimensions

The adult distribution scores of the three dimensions are provided in Table A2 in Annex A. These distributions are shown graphically for the financial capability market segments in Figures 35 to 37, with green being the highest score and red being the lowest.

Segments A and B appear to demonstrate similar behaviour, as do Segments D and E, although the latter performed consistently lower than A and B. Segment C, which is also the largest segment with 34% of the adult population, is by far the weakest performer across all three dimensions.

Figure 35: Knowledge and awareness

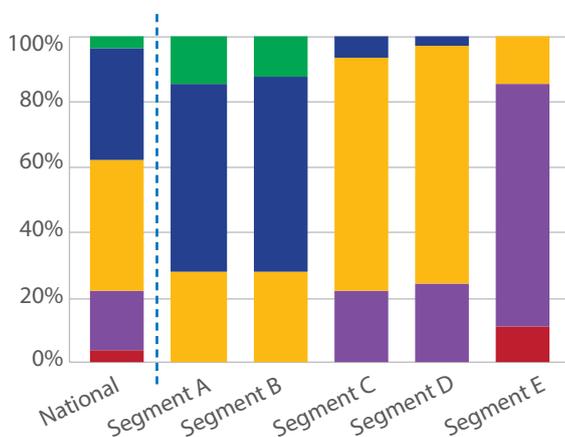


Figure 36: Numeracy

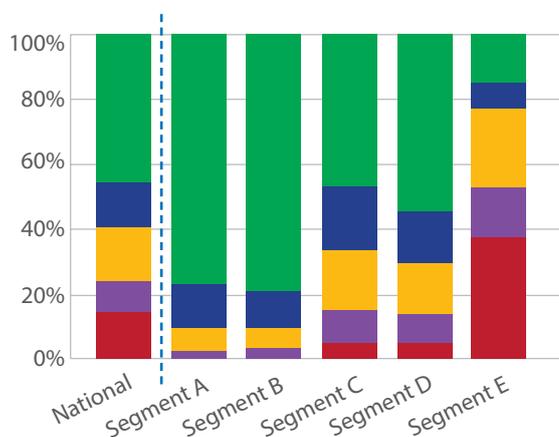
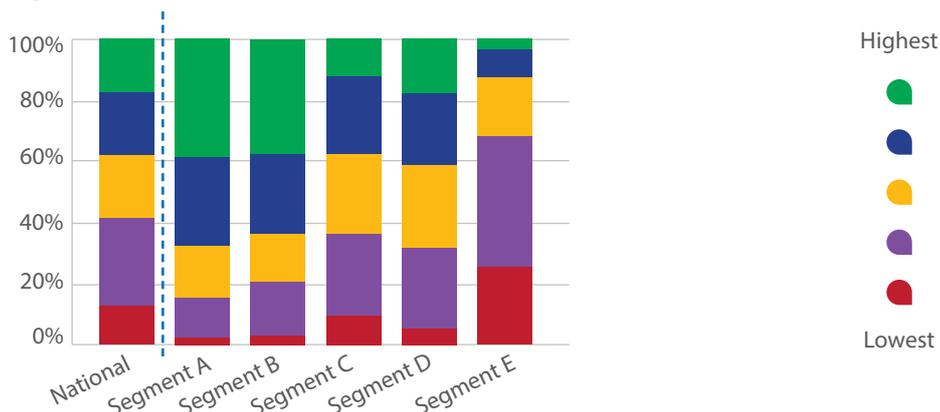


Figure 37: Confidence



Segment scores on competencies

The adult distribution scores of the four competencies are presented in Table A4 in Annex A. These are graphically depicted for the various financial capability market segments in Figures 38 to 41 below, with green being the highest score and red being the lowest.

As with the dimensions, segments A and B appear to achieve similar scores on all four competencies, as do D and E, although these perform consistently lower than A and B. Segment C, which represents 34% of the adult population, is by far the weakest performer across all four competencies.

Figure 38: Short-term planning and discipline

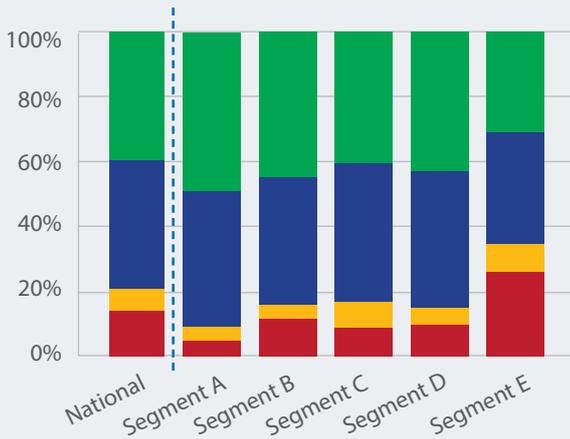


Figure 39: Long-term planning and discipline

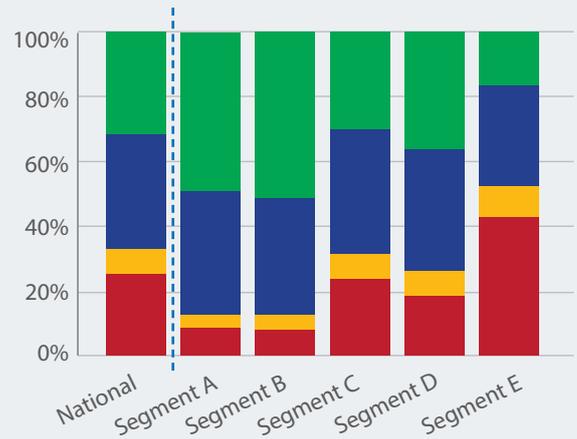


Figure 40: Knowledge of financial status

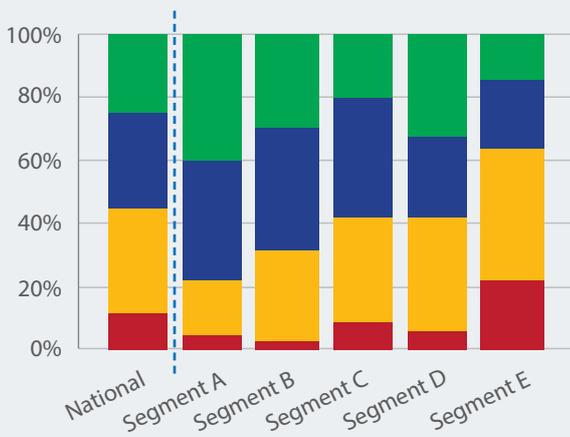
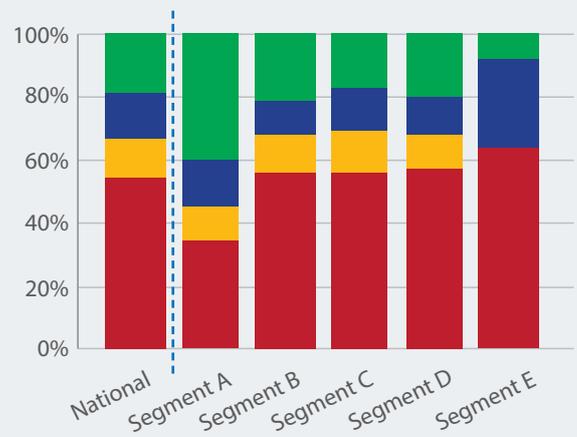


Figure 41: Information seeking



Lowest ● ● ● ● Highest

Market segment descriptions

Annex A comprises a set of tables which detail the demographics, socio-economic context, financial behaviour and context, and attitudes to life and money of the financial capability market segments. These are summarised in Table 25 below followed by a detailed description of each segment.

Table 25: Summary description of financial capability market segments

	Segment A	Segment B	Segment C	Segment D	Segment E
Percentage of adult population	21.4%	6.6%	24.8%	13.2%	34.1%
% Urban	43.7%	61.8%	42.6%	16.6%	24.5%
Gender	Male bias	Male bias	Strong female bias	100% male	Female bias
Age	Biased to older	Young: 74% aged 15-24	Bias to young	98.5% aged 25+	Slight bias to young and old
Marital status	82% married	89% single	Bias to single and widowed/divorced/separated; half are married	99% married	Mostly married, but also bias to widowed/divorced/separated
Relationship to HoH	Bias to HoH	Bias to child	Bias to single and widowed/divorced/separated; half are married	95.5% HoH	Slight bias to spouse
Level of education	Slightly higher than average	Highest educated	Slightly higher than average, but few tertiary	82% primary education only	Lowest educated with 25% no formal education
Kiswahili: read and write	Above average	Very high	Above average	Slightly above average	Below average
English: read and write	Above average	Very high	Average	Below average	Very low
Sole breadwinner	Above average	Below average	Below average	Above average	Below average
Main source of income	Bias to own business; but main source is farming	Bias to family/friends and formal employment	Bias to family/friend; low on farming	Strong bias to farming	Bias to family/friends and farming
Household monthly income	Above average	Above average	Slightly below average	Low	Lowest
Lifestyle indicator (LSI) band	High	Highest	Low/average	Very low	Lowest
Financial inclusion (Access Strand)	Very high	Very high	Low/average	Low	Lowest
Savers per segment	94.3%	92.2%	84.9%	84.0%	70.7%
Borrowers per segment	66.0%	45.9%	44.1%	42.6%	37.1%
Borrowed to limit and cannot afford more	59.4%	62.4%	67.9%	72.8%	75.7%
Have serious financial problems and have fallen behind with many expenses	2.8%	1.7%	3.9%	5.3%	7.1%
"I cannot control my own finances, it is in the hands of God"	19.6%	11.6%	21.5%	22.8%	24.2%
"My life is not at all close to my ideal"	10.1%	8.3%	17.5%	15.3%	29.4%



Segment A: Mature family - in control (4,801,854 = 21.4%)

Segment A has a slight male bias (57.2% versus the national average of 45.4%) and is mature (more than two thirds are aged 35 or above). Eighty-two percent is married, with 65% being the head of the household and 30% the spouse. After Segment B, they have the second highest level of education: 23% have completed Lower Secondary, over 4% have completed Upper Secondary and 3.9% have a diploma or degree. This segment has the second highest English reading and writing skills (28%) after segment B. It appears as though the top end of segment A may be the parents of Segment B.

Segment A has a strong urban bias (44% versus the national average of 34.5%) and a slight (but not significant) bias to Zanzibar (3.35% versus national average of 2.71%). The highest source of income is farming (38%), although the percentage of farmers is lower than in the other “mature” segments (D and E). They have the highest number of people with their own businesses (24%) and the highest formal employment (9%) of the other mature segments. Almost a quarter falls into the top three LSIs.

Nearly two thirds are formally banked and this segment has the highest number of savers (94%) and also the highest number of borrowers (66%). While almost 59.4% indicated that they have borrowed to their maximum, this percentage is significantly lower than the national average (67.7%).

This segment has the highest percentage seeking financial advice (62%). While they mostly seek advice from family and friends (61%), this is a significantly lower source of advice than for the other segments. Fourteen percent seek advice from banks or other financial institutions, which is significantly higher than other segments. While their main source of information is radio (35%), this exposure is lower than that of the other segments and they have the highest newspaper readership (20%) and exposure to TV (25%) of the mature segments. Still, only 1.9% uses the internet.

As for the need for information, they rate higher than other segments on second tier products such as life assurance (23.7%) and general insurance (9.5%). Interestingly, Segments A and B, with the highest levels of education and numeracy skills, are also the market segments indicating the greatest desire for training on calculating interest rates at 13.4% and 13.8% respectively. Training sought on borrowing comes in at 11.4%, slightly (but not significantly) lower than the other segments.



Segment B: Young educated adults – privileged (1,469,182 = 6.5%)

Segment B stands out as the smallest segment, with by far the highest socio-economic profile. This segment essentially comprises the educated young adults, with 74% aged 15-24 and a further 23% aged 25-34. As such, they appear to represent the leaders and opinion formers of tomorrow. The segment has a male bias (54%) and a strong urban bias (61.8% versus national average of 34.5%). It has the highest educational level of all the segments, with 9.1% having Upper Secondary (national average = 1.97%) and 5.24% holding a diploma/degree (national average = 1.31%). As many as 71.6% read and write English (national average = 18.5%).

Segment B's population is mostly single (89%), and mostly the children in the household¹⁹. As such, they are mostly co-breadwinners (84.5%) and 45% receive money from family and friends. They also have the highest formal sector employment at 12.2% (national average = 3.51%). Fourteen percent have their own business and 13% a farm (although this may be a family farm).

This group also reflects the highest level of formal financial inclusion at 66% (national average = 32.3%). The percentage of savers (92%) is second only to segment A (94%). So too is the percentage of borrowers at 45% compared with Segment A's 66% - the highest of all segments – with 62% of segment B's borrowers stating that they have borrowed to their limit (slightly below the average of 67.7% and second lowest after Segment A). Not one borrower in segment B indicated that s/he has borrowed more than s/he can afford.

The percentage that seeks financial advice often/sometimes (66.9%) is significantly higher than the national average (39%), and again second to Segment A (88%). Slightly more than the national average seeks advice from financial institutions (8.26%). The majority (74.2%) seek advice from family and friends. Their information sources also have a similar pattern to that of Segment A, with a significantly higher than average percentage consulting brochures (6.9%) and newspapers (19.4%). They have the highest TV viewership (25%) and internet access (5.5%). At 30%, their radio listenership is below the national average (41.3%), but it still represents their single highest form of media usage.

As with segment A, what they would most like training on is life insurance (22.4%) and calculating interest rates (13.8%). The main difference in desired training relative to other segments is the significantly higher proportion who indicated that they would like information on choosing a financial service provider: 13.9% compared with the national average of 8.2%. Also noteworthy is the significantly below average percentage (6.6%) who indicated they would like to know more about borrowing (national average = 12.6%). It appears as though this segment has (or intends to have) its own and/or family resources and as such is saving rather than borrowing.

Segment B members therefore seem largely in control of their finances and may only require highly targeted financial education interventions to expose them to second and third generation products such as insurance and assurance, retirement planning, mobile banking and the capital markets.

¹⁹ Even though they are young adults, they are still the children of parents with whom they live.



Segment C: Spouses, widows and children of Segment A (5,561,934 = 24.8%)

Segment C is the second largest segment after Segment E and represents almost a quarter of the population. It has the strongest female bias of all the segments with as many as 80.8% of this segment consisting of women (compared with the national profile of 54.6% female). This group has an urban bias (42.6%) similar to that of Segment A. However, the age distribution is somewhat biased towards the younger groups, with 37.6% falling into the young adult age group of 16-24 years (national average = 25.4%), and only 9.9% falling into the 50+ years age group (national average = 19%). The remainder is aged 25-49. Its socio-economic profile is lower than that of segment A, but substantially higher than that of the traditional male farmers in Segment D. However, levels of financial capability are more in line with that of Segment D than with Segment A.

While almost 50% are married, 36% are single (compared with the national average of 24%) and 14.2% are widowed/divorced/separated. Only 20% is the head of household, with 43.2% being the spouse (national average = 28.4%). A large proportion (83.4%) are co-breadwinners - significantly higher than the national average of 77.3%. Their main source of income (33.6%) is from family and friends. This is second only to the young adults in Segment B. Their second main source of income is farming, which at 31.7% is significantly lower than the national average of 41.7%. Having their own business, at 18.4%, is slightly higher than the national average of 16.3% and significantly higher than the other female-biased group, Segment E, which scored 11%. Their LSI profile has a similar pattern to that of Segment A, although it is somewhat lower in socio-economic terms, with 26% falling into LSI 5.

It therefore appears as though this group may largely represent the children, spouses and widows/divorcees of the middle and lower end of segment A, and perhaps some of the upper end of segment D. In other words, many are seemingly housewives, with some involved in farming or running a small business.

Their levels of education are slightly above the national average, with a significantly higher number having completed Lower Secondary (24.5% versus a national average of 18.9%). However, a significantly lower percentage than the national average has a diploma or degree (0.3% versus the national average of 1.3%). Kiswahili and English reading and writing skills are above the national average at 91.7% and 20.6% respectively.

Levels of financial inclusion are quite similar to that of the national average, i.e. higher than that of Segments D and E, but much lower than those of Segments A and B. The percentage of savers (85%) is slightly higher than the national average, and the percentage of borrowers (44%) is slightly lower, with both almost on par with that of Segment D. Like the other female biased group, Segment E, their financial advice seeking behaviour is below the national average, as is their approach to financial institutions. Their usage of the media and sources of information is also on par with that of the national averages, except for the use of brochures, which is somewhat below the national average (3.0% compared with the national average of 4.4%).

With regard to topics they would like training on, they are in line with most of the national averages: 16.7% want training on life assurance; 12.7% want to know more about how to borrow; 10.2% want to know how to choose a financial institution and 9.4% would like training on planning for an unexpected event. They score below the national average on saving (5.7% versus the national average of 8.4%) and above the national average on paying with or sending money by mobile phone (5.7% compared with the national average of 3.8%). This may well be because so many are seemingly dependent on family members for their incomes.

Despite having a much higher socio-economic standing than Segment D (male farmers), this group rated second last (after the other female-biased group: Segment E), on attitudes to life, with more than three quarters (76.3%) indicating that "my life is not very close/at all close to my ideal."



Segment D: Traditional small-scale male farmers – struggling

This segment is interesting insofar as it comprises exclusively men and contains not a single woman. Segment D has a strong rural bias (83.4%), 99% are married, and 95% are the head of the household. Educational levels are second lowest after Segment E: 82.9% have primary education only and a further 7.42% have no formal education. While 80.3% can read and write Kiswahili, only 8.3% can read and write English.

This segment has the highest percentage of sole breadwinners (38.5%), and only 0.3% receives money from family or friends. Farming and agricultural trading reflect 78% of the main income sources; with own businesses accounting for 14.7%. However, incomes remain low and this segment has the second lowest reported household income after Segment E. Almost a third report a household income of less than TSh 50,000 per month. This group also reflects the second lowest LSI after Segment E, with 50% falling into LSI 5 and a further 40% into LSI 4. In other words, 90% fall into the lowest two LSIs. It therefore appears as though this segment represents the typical male small-scale farmer in Tanzania.

They have the second lowest formal financial sector inclusion (22.8%) and second highest level of financial exclusion after Segment E (53.5%). Despite low incomes, 84% save (slightly above the national average of 82%) and do so mostly in cash at home (48.8% compared with national average of 40.3%). Borrowing stands at 42.6%, slightly below the national average of 46.3%. Of those that borrow, 72.8% indicated that they have borrowed to their maximum (national average = 67.7%), while 3.7% indicated that they have borrowed more than they could really afford (national average = 1.42%).

The percentage of those that seek advice is in line with the national average. As for the sources of advice, the profile is similar to other segments, with over two thirds seeking advice from family and friends. However, they score much lower than segments A and B on seeking advice from financial institutions (3.25%), and have the highest score of all segments on seeking advice from village elders (10% compared with national average of 5.2%).

Exposure to brochures (3.9%), newspapers (13.8%) and TV (11.38%) are all below the national averages, but they have the highest exposure to radio at 49.4% (national average = 41.3%). More than 8% indicated no exposure to any of the listed sources of information.

In terms of desired training, at 18.3% this segment has the highest score of all on “training/education on borrowing.” It appears as though this segment represents the typical farmer in need of (probably mainly agricultural) credit, while, among those who borrowed, there is a slight indication of debt stress. This points to the need for affordable and accessible agricultural credit, with supporting insurance (including life and crop price/damage/yield insurance); and the need for targeted financial education on how to obtain such credit, with the associated pitfalls and consumer redress options.



Segment E: Rural poor – (female) survivalist farmers and micro enterprise owners; spouses, widows and children of Segment D (7,632,856 = 34%)

Segment E is the largest segment and represents a third of the adult population. This segment showed the lowest scores on all the financial capability competencies and dimensions, and is also by far the poorest: for 86.5% life is sometimes/always a struggle while a further 7% is experiencing serious financial difficulty. In this segment, 80% indicated that life is not close to their ideal. However, there is also a sense of “acceptance” of their dire situation, with almost a quarter indicating that

they cannot determine their own destiny as “it is in the hands of God.”

This market segment has strong rural (75.5%) and female (65.8%) biases and it appears as though many in this segment may be the spouses of the men in Segment D. The age distribution is almost equal across the age groups, with a slight bias towards the 15-24 year age group. They have by far the lowest levels of education, with a quarter having no formal education and two thirds only having primary education. It follows that they have the lowest skills in terms of reading and writing Kiswahili (66%) and English (4.6%).

While the percentage of single (22.8%) and married (60.9%) respondents are slightly (but not significantly) below the national average, the percentage of widowed, divorced and separated respondents at 16.3% is significantly higher than the national average (11.7%). Slightly more than a third (36.9%) is the head of the household, about a third (32.5%) is the spouse and 18.6% the child (of segment D). Also, a significantly high percentage are co-breadwinners (81.4%). Despite that, the reported overall household income is significantly lower than in the other segments, with one third of households bringing home less than TSh 50,000 (US\$ 30) per month. Not surprisingly, 70.6% of this segment falls into the lowest LSI band.

With 48.2% generating an income from farming, this is second only after segment D. The spouse/wife may be working the same land as the husband (some of whom are likely to be in segment D). A further 23.9% indicated family and friends as their second highest source of income, while they reportedly have the lowest percentage of own businesses. This group therefore appears to be primarily small-scale farmers and rural women dependent on family and friends for much of their income.

The level of formal financial inclusion at 10.5% is far below the national average of 23.3%. The completely excluded, at 61%, is far above the national average of 43%. They have the lowest percentage of savers (71%) and also the lowest percentage of borrowers (37%) of all the segments. Despite this, the highest debt stress is being experienced by this group, with a significantly higher percentage (75.7%) than the national average (67.8%). This indicates that they have borrowed to their limit, with a significantly higher percentage (2.8%) than the national average (1.42%) indicating that they have borrowed more than they can afford.

This group displays the lowest “seeking advice” behaviour (29% seeks advice often/sometimes versus the national average of 48%). Their main source of advice is family and friends, which at 80% is significantly higher than the national average of 70.7%. This market segment does not read much and only 1.2% obtains financial information from brochures, and 8.5% from newspapers. This is significantly lower than the national averages of 4.5% and 15% respectively. They also have the lowest TV exposure at 8.6% (almost half the national average of 15.8%). However, at 48.6% they have the second highest radio listenership after Segment D; and around 11.4% indicated that they have been exposed to a village concert or roadshow. This is on par with the other segments who all report almost exactly the same, with no significant deviation between any of the segments. As many as 18.9% (the highest of all segments) indicated that they do not use any of the listed sources of information or media.

When asked on what topics they would like more information/training, their responses related primarily to financial survival and security, with a significantly higher than average percentage indicating “how to save” (14% versus the national average of 8.4%). This was followed by “planning for retirement” (12.4% versus the national average of 8.8%); “life insurance” (12.3%, although this is significantly lower than the national average of 16.7%) and “how to borrow” (at 12.2% roughly on par with the national average of 12.6%). This may be primarily to borrow for survival/income smoothing purposes. They also rated “planning and budgeting” the highest at 8% – slightly higher than the two other low income groups (Segments C and D) and much higher than the two higher income groups (A and B at 2.2% and 2.3% respectively, which appear more in control of their finances and financially self-sufficient).

4. Implications for and limitations of financial education

The findings provide us with the indicators of financial capability in Tanzania to be tracked over time, as well as baseline data against which to track these. The findings also identify the key messages to be communicated on a national level, the most appropriate channels through which to reach the broad adult population, as well as specific messages and channels for various market segments. These findings and implications for financial education are summarised below.

4.1. Main messages and channels

The main issues to be addressed through financial education on a national level are:

- Mathematical literacy
- Basic knowledge of concepts, products and financial service providers – primarily life insurance, savings and borrowing
- Financial planning and specifically budgeting, planning for unexpected expenses and making provision for old age/retirement.

Most of these concepts are not easily explained through mainstream Above-the-line (ATL) media, but requires in-depth classroom-based training. This points to the important role the educational system has to play, particularly in relation to mathematical skills. These skills will not improve unless the enrolment rate and quality of education improves, and mathematical literacy is offered to all Tanzanians as part of the mainstream curricula – for both in-school learners and through adult education initiatives.

To strengthen the quality of teaching, it can be supported by streaming audio-visual (A-V) mathematical programming on TV and in schools.²⁰ Such A-V programmes can further be supported by extra-curricular activities at schools, such as school clubs. The challenge is that the school enrolment rate is low and drop-out rates high, particularly among those who most need this education. Also, TV viewership is low among the lower LSI bands.

Another option is to distribute supplements with mathematical literacy concepts and financial product information through newspapers and other print material, which could also reach adults. However, the circulation of print media is extremely low, which is not surprising given the low literacy levels. Newspapers tend to be read mainly by the top end of the market.

Dedicated classroom-based programmes on mathematical literacy, financial planning and product concepts will therefore have to be offered to adults, in particular those in segments C, D and E.²¹ The financial sector service providers, Government and donors should consider a public-private partnership to launch such an initiative, possibly co-ordinated through the proposed Financial Education Secretariat (FES).

As radio remains the medium with the broadest reach, consideration should be given to using radio to support child and adult classroom-based initiatives. Interactive talk shows with specialists provide the opportunity for in-depth discussion on topics relevant to the audience, and can be done at relatively low cost. However, the use of radio is not a suitable medium for teaching mathematics and concepts such as budgeting – these require a classroom environment.

It is interesting to observe that roughly 10% of all FinCap segments have been exposed to village theatre/road shows. This remains an effective way in which to reach people; but the messaging needs to be very simple and is best used to introduce people to specific concepts such as mobile banking or life insurance, rather than for in-depth training on complicated topics.

²⁰ This has been done successfully in South Africa through an NGO, Mindset, set up by the private sector (Liberty Life and Standard Bank) and supported by several private, public and donor organisations.

²¹ This has been done successfully in Kenya, but requires huge resources and long-term commitment.

4.2. Refinement of the Financial Education Framework of 2011

As illustrated by the review of the individual financial capability segments, the specifics of what needs to be addressed in each segment and the most suitable channels differ among these segments. Differences in the profiles of the various FinCap Segments (e.g. in terms of household decision making, access to finance and poverty levels), may influence the extent to which knowledge or skills gained from financial education initiatives will be put into practice by a specific segment. Such differences among the segments must therefore be taken into consideration in the design of financial education interventions.

It is recommended that the Financial Education Framework of 2011 be updated and refined based on the findings of the Baseline. While the Baseline findings can inform the messaging, set benchmarks and guide suitable ATL media to reach certain segments, the stakeholders currently interacting with these various segments will need to play a major role in supporting the implementation of any planned interventions. As such, these stakeholders must be identified and co-opted into supporting the implementation of financial education among the various segments. Detailed financial education strategies will have to be developed for each segment, indicating the roles of various stakeholders.

4.3. Challenges and limitations

Apart from the several challenges identified in reaching the marketplace with appropriate messaging, we need to reiterate that the level of financial capability is but one of many factors which influences and determines financial behaviour. The biggest constraints in desired financial behaviour in Tanzania remain exogenous factors:

- **Significant poverty.** While financial education interventions can help people better budget and manage their meagre incomes, poverty will continue to pose the single biggest constraint to asset-building among Tanzanians.
- **Shortcomings in the financial sector (supply side).** Linked to the problem of poverty is the absence of appropriate, accessible and affordable products and services, particularly among the lower LSI bands. All across Africa we see the single biggest risk among poor people being illness or the death of the main breadwinner. Still, in many areas, there are few if any suitable insurance products available. It serves no purpose training people on the need for and requirements of life insurance, if such products are not provided or readily accessible in the marketplace. The same applies to retirement annuities and cost-effective savings instruments which yield positive returns. Much has been made of mobile payments and banking; yet, while this has certainly played a major role in more cost-effective transacting, it still has to address the major financial needs of the population.

As pointed out earlier, the support of several stakeholders (private and government) will be required to achieve impact with any future financial education initiatives. The Ministry of Education and Vocational Training (MoEVT) has a very important role to play. Mathematical skill is not only required for improved personal financial management and decision-making, but is a fundamental life skill. As such, it is really beyond the responsibility of those involved in financial education, to ensure that the population of Tanzania is mathematically literate. While those involved in financial education can guide and assist the MoEVT with the implementation of mathematical literacy, it remains the ultimate responsibility of this Ministry.

Annex A: Statistical approach to development of the financial capability segments²²

Identifying the dimensions of financial capability

The FinCap Tanzania questionnaire contained various questions measuring various concepts relating to levels of financial capability. In order to construct indicators of financial capability that can be used to describe different segments of the population in terms of financial capability variables, these questions needed to be aggregated and reduced in order to (i) describe the different concepts effectively and (ii) to determine the significance of each concept in terms of describing differences in financial capability.

To achieve this, the following approach was followed:

- Variables with high non-response rates were identified and excluded from the analysis.
- Variables measuring the same concept were identified and aggregated through conducting principal component analysis.
- Key dimensions of financial capability were identified by conducting a second round of principal component analysis, using the aggregated concept variables. These dimensions are summarised in Table A1.
- Financial capability dimensions of different population segments were compared by converting principal component scores to a 5-point scale (Table A2).

Table A1: Key dimensions of financial capability in Tanzania

Dimensions of financial capability	Aggregated questions
Knowledge/awareness	Knowledge/awareness of financial products/services Knowledge/awareness of financial topics/concepts
Numeracy	Numeracy skills
Confidence	Confidence in terms of making financial decisions and engaging with financial institutions

²² Irma Grundling, Yakini Development Consulting, 2014.

Table A2: Adult distribution scores for financial capability dimensions

Knowledge/Awareness	Highest level	2	3	4	Lowest level
Dar es Salaam adults	10.0%	28.4%	40.9%	16.9%	3.9%
Other urban adults	5.1%	24.7%	40.9%	26.3%	3.0%
Rural adults	2.7%	14.3%	39.7%	39.3%	4.0%
Zanzibar adults	3.1%	25.0%	41.5%	28.2%	2.3%
Male adults	5.0%	22.9%	41.6%	28.2%	2.2%
Female adults	3.3%	14.9%	38.9%	37.8%	5.1%
Adults with no formal education	0.0%	3.4%	26.3%	59.2%	11.1%
Adults with at most primary education	2.5%	15.8%	42.6%	35.6%	3.5%
Adults with at most lower secondary education	8.0%	29.2%	45.2%	16.7%	0.8%
Adults with upper secondary education	14.5%	56.0%	14.4%	11.6%	3.4%
Adults with a diploma or degree	30.6%	52.3%	14.5%	2.6%	0.0%
Adults 16 – 17 years	0.0%	4.8%	44.9%	40.3%	10.0%
Adults 18 – 25 years	3.1%	17.0%	39.1%	36.6%	4.2%
Adults 26 – 35 years	4.1%	20.3%	39.5%	33.7%	2.4%
Adults 36 – 45 years	4.8%	22.7%	38.4%	31.0%	3.0%
Adults 46 – 55 years	6.6%	19.0%	41.7%	29.5%	3.3%
Adults 56 – 65 years	4.6%	19.6%	44.6%	27.5%	3.7%
Adults older than 65 years	3.8%	13.3%	39.0%	38.8%	5.2%
Highest LSI category adults	25.8%	43.7%	24.6%	5.9%	0.0%
Level 2 adults	10.5%	45.7%	35.2%	7.9%	0.7%
Level 3 adults	9.1%	25.7%	48.4%	15.5%	1.3%
Level 4 adults	3.9%	19.9%	46.0%	27.3%	2.9%
Lowest LSI category adults	0.2%	8.0%	35.4%	50.4%	6.0%
Numeracy	Highest level	2	3	4	Lowest level
Dar es Salaam adults	57.7%	12.7%	12.9%	7.1%	9.7%
Other urban adults	52.7%	14.6%	13.2%	7.9%	11.6%
Rural adults	42.2%	12.4%	18.1%	10.1%	17.2%
Zanzibar adults	42.4%	19.4%	15.9%	14.1%	8.2%
Male adults	56.4%	12.4%	13.0%	7.4%	10.8%
Female adults	38.1%	13.6%	19.1%	11.0%	18.1%
Adults with no formal education	5.1%	7.1%	16.8%	14.1%	56.9%
Adults with at most primary education	42.9%	14.4%	19.6%	10.7%	12.4%
Adults with at most lower secondary education	73.1%	12.6%	8.2%	4.2%	1.8%
Adults with upper secondary education	86.3%	9.8%	3.0%	0.9%	0.0%
Adults with a diploma or degree	0.0%	6.3%	1.1%	0.0%	0.0%

Numeracy	Highest Level	2	3	4	Lowest Level
Adults 16 – 17 years	41.6%	15.2%	23.2%	8.7%	11.2%
Adults 18 – 25 years	49.5%	13.2%	16.8%	8.5%	12.0%
Adults 26 – 35 years	48.7%	13.7%	16.6%	7.5%	13.5%
Adults 36 – 45 years	47.6%	14.3%	13.7%	11.2%	13.2%
Adults 46 – 55 years	44.7%	10.1%	18.8%	10.4%	16.0%
Adults 56 – 65 years	45.5%	12.2%	11.3%	9.2%	21.7%
Adults older than 65 years	24.3%	10.2%	16.0%	13.4%	36.1%
Highest LSI category adults	92.6%	5.7%	0.6%	1.1%	0.0%
Level 2 adults	76.4%	8.6%	10.6%	3.4%	1.0%
Level 3 adults	59.5%	16.4%	11.5%	8.7%	4.0%
Level 4 adults	51.4%	14.7%	15.7%	7.3%	10.9%
Lowest LSI category adults	29.5%	12.4%	20.4%	12.8%	24.8%
Confidence	Confidence	2	3	4	Lowest Level
Dar es Salaam adults	18.7%	20.9%	19.2%	28.7%	12.6%
Other urban adults	24.2%	22.4%	18.9%	22.4%	12.1%
Rural adults	15.4%	18.6%	21.8%	31.8%	12.4%
Zanzibar adults	20.6%	33.3%	14.3%	11.9%	19.9%
Male adults	21.0%	21.0%	20.9%	27.2%	9.9%
Female adults	15.3%	19.4%	20.4%	30.2%	14.8%
Adults with no formal education	11.4%	15.5%	19.9%	31.2%	22.0%
Adults with at most primary education	16.3%	20.7%	21.9%	28.8%	12.3%
Adults with at most lower secondary education	22.4%	21.3%	17.9%	28.3%	10.1%
Adults with upper secondary education	42.6%	12.1%	24.4%	18.7%	2.2%
Adults with diploma or degree	27.1%	32.3%	11.4%	25.5%	3.8%
Adults 16 – 17 years	8.5%	9.5%	23.2%	37.4%	21.4%
Adults 18 – 25 years	15.8%	19.6%	19.5%	30.4%	14.7%
Adults 26 – 35 years	19.8%	22.0%	22.4%	25.0%	10.7%
Adults 36 – 45 years	20.0%	21.4%	19.6%	29.0%	10.0%
Adults 46 – 55 years	23.9%	21.5%	19.0%	26.4%	9.2%
Adults 56 – 65 years	12.0%	21.7%	22.7%	28.9%	14.7%
Adults older than 65 years	12.3%	13.1%	20.0%	36.6%	18.0%
Highest LSI category adults	32.8%	25.0%	21.2%	15.1%	5.9%
Level 2 adults	26.5%	21.1%	18.2%	23.5%	10.5%
Level 3 adults	26.5%	22.9%	20.3%	20.5%	9.8%
Level 4 adults	21.4%	22.3%	18.9%	27.7%	9.7%
Lowest LSI category adults	9.9%	17.2%	22.6%	34.1%	16.3%

Identifying the competencies related to financial capability

Once the dimensions of financial capability were determined, multivariate regression analysis was conducted to determine which concepts were related to the dimensions of financial capability – i.e. underlying financial capability competencies (Table A3). Different population segments were compared in terms of financial capability competencies by converting principal component scores of these competencies to a 4-point scale (Table A4).

Table A3: Competencies underlying financial capability

Competencies	Aggregated questions
Short-term planning and discipline	Budgeting
	Keeping to the budget
Long-term planning and discipline	Financial goals
	Concern about long term financial needs
	Keeping to long-term strategy
	Review strategy against goals
Awareness of financial status	Knowledge with regard to amount spent in previous week
Information seeking	Seeking financial advice

Table A4: Adult distribution scores on financial capability competencies

Short-term planning and discipline	Highest Level	2	3	Lowest level
Dar es Salaam adults	41.4%	35.4%	6.4%	16.8%
Other urban adults	44.7%	34.6%	8.0%	12.7%
Rural adults	38.1%	41.5%	6.1%	14.3%
Zanzibar adults	33.3%	41.6%	4.2%	20.9%
Male adults	40.2%	40.0%	6.0%	13.8%
Female adults	39.4%	38.5%	7.0%	15.0%
Adults with no formal education	25.6%	42.4%	9.7%	22.3%
Adults with at most primary education	39.2%	40.5%	6.2%	14.1%
Adults with at most lower secondary education	48.3%	32.7%	5.9%	13.1%
Adults with upper secondary education	38.2%	46.4%	2.7%	12.8%
Adults with a diploma or degree	52.2%	34.4%	6.2%	7.2%
Adults 16 – 17 years	24.1%	31.1%	8.2%	36.6%
Adults 18 – 25 years	38.5%	38.5%	8.6%	14.4%
Adults 26 – 35 years	46.8%	38.7%	3.5%	11.1%
Adults 36 – 45 years	44.4%	39.2%	6.1%	10.3%
Adults 46 – 55 years	35.0%	43.1%	7.6%	14.3%
Adults 56 – 65 years	37.2%	39.8%	5.9%	17.1%
Adults older than 65 years	25.4%	45.9%	10.2%	18.4%
Highest LSI category adults	49.5%	28.9%	2.7%	18.9%
Level 2 adults	47.9%	40.4%	5.7%	6.0%
Level 3 adults	48.5%	33.0%	4.2%	14.2%
Level 4 adults	41.2%	41.9%	6.3%	10.6%
Lowest LSI category adults	33.7%	39.6%	7.8%	19.0%

Long-term planning and discipline	Highest Level	2	3	Lowest level
Dar es Salaam adults	36.5%	31.3%	8.3%	23.8%
Other urban adults	34.5%	32.7%	6.5%	26.2%
Rural adults	31.1%	37.1%	7.7%	24.1%
Zanzibar adults	12.8%	32.4%	4.1%	50.7%
Male adults	37.3%	36.1%	6.2%	20.4%
Female adults	27.6%	34.6%	8.4%	29.4%
Adults with no formal education	15.9%	26.2%	10.8%	47.0%
Adults with at most primary education	31.0%	36.9%	7.8%	24.3%
Adults with at most lower secondary education	39.6%	35.2%	4.8%	20.3%
Adults with upper secondary education	49.8%	30.1%	7.0%	13.1%
Adults with a diploma or degree	60.2%	30.5%	2.4%	6.9%
Adults 16 – 17 years	20.2%	30.9%	8.2%	40.7%
Adults 18 – 25 years	32.6%	36.6%	7.5%	23.3%
Adults 26 – 35 years	36.3%	37.2%	7.1%	19.4%
Adults 36 – 45 years	36.3%	37.1%	7.1%	19.5%
Adults 46 – 55 years	31.0%	33.1%	6.8%	29.1%
Adults 56 – 65 years	25.4%	28.6%	11.2%	34.9%
Adults older than 65 years	14.0%	32.9%	3.5%	49.7%
Highest LSI category adults	57.3%	26.0%	3.6%	13.1%
Level 2 adults	43.4%	35.4%	6.1%	15.2%
Level 3 adults	38.4%	31.5%	9.7%	20.3%
Level 4 adults	35.7%	38.2%	5.6%	20.5%
Lowest LSI category adults	23.5%	34.9%	8.5%	33.2%
Awareness of financial status	Highest Level	2	3	Lowest Level
Dar es Salaam adults	25.4%	29.4%	31.8%	13.4%
Other urban adults	22.2%	35.8%	29.7%	12.3%
Rural adults	25.0%	29.0%	34.3%	11.8%
Zanzibar adults	40.9%	27.7%	15.2%	16.2%
Male adults	28.0%	30.7%	29.6%	11.6%
Female adults	22.3%	30.3%	34.8%	12.7%
Adults with no formal education	12.1%	19.4%	43.9%	24.5%
Adults with at most primary education	24.2%	31.9%	33.3%	10.6%
Adults with at most lower secondary education	30.3%	32.1%	25.6%	12.0%
Adults with upper secondary education	49.0%	27.6%	16.8%	6.6%
Adults with diploma or degree	35.2%	31.6%	25.0%	8.2%
Adults 16 – 17 years	16.4%	28.0%	24.4%	31.1%
Adults 18 – 25 years	24.3%	30.4%	33.7%	11.5%
Adults 26 – 35 years	25.1%	34.7%	31.6%	8.6%
Adults 36 – 45 years	29.6%	31.3%	29.3%	9.8%

Awareness of financial status	Highest Level	2	3	Lowest Level
Adults 46 – 55 years	26.1%	27.8%	36.0%	10.1%
Adults 56 – 65 years	24.0%	24.1%	37.1%	14.9%
Adults older than 65 years	12.9%	25.3%	38.0%	23.8%
Highest LSI category adults	29.1%	31.3%	24.3%	15.3%
Level 2 adults	34.4%	33.4%	23.0%	9.2%
Level 3 adults	24.0%	40.5%	22.2%	13.3%
Level 4 adults	27.1%	30.3%	33.4%	9.1%
Lowest LSI category adults	21.1%	26.8%	37.5%	14.5%
Information seeking	Highest level	2	3	Lowest level
Dar es Salaam adults	25.8%	11.6%	17.4%	45.2%
Other urban adults	23.2%	11.6%	12.8%	52.4%
Rural adults	17.8%	13.6%	11.9%	56.8%
Zanzibar adults	15.5%	22.0%	15.8%	46.7%
Male adults	22.8%	13.2%	12.2%	51.8%
Female adults	17.6%	13.0%	13.5%	55.9%
Adults with no formal education	10.2%	16.1%	13.1%	60.6%
Adults with at most primary education	19.9%	14.4%	13.5%	52.1%
Adults with at most lower secondary education	21.5%	8.3%	11.4%	58.9%
Adults with upper secondary education	42.5%	9.7%	12.3%	35.4%
Adults with diploma or degree	41.9%	3.7%	9.3%	45.2%
Adults 16 – 17 years	8.7%	4.4%	12.7%	74.2%
Adults 18 – 25 years	14.0%	10.8%	15.0%	60.2%
Adults 26 – 35 years	22.1%	15.1%	12.4%	50.4%
Adults 36 – 45 years	24.6%	13.7%	12.8%	48.9%
Adults 46 – 55 years	27.3%	17.7%	9.4%	45.6%
Adults 56 – 65 years	16.5%	12.6%	15.0%	55.9%
Adults older than 65 years	16.1%	10.3%	13.0%	60.6%
Highest LSI category adults	33.8%	5.8%	9.5%	50.8%
Level 2 adults	27.3%	7.3%	11.3%	54.1%
Level 3 adults	27.0%	12.3%	12.2%	48.4%
Level 4 adults	20.3%	14.8%	13.5%	51.4%
Lowest LSI category adults	15.0%	13.9%	13.3%	57.8%

Segmenting the Tanzanian adult population according to financial capability

For the purpose of developing an effective intervention strategy to address financial capability shortcomings in the adult population, it is necessary to identify subgroups with diverse financial capability characteristics or different levels of financial capability. Such subgroups can be identified by conducting cluster analysis using the financial capability dimension variables and/or the competency variables.

The most significant segmentation for the Tanzanian adult population was obtained as follows:

- Cluster analysis using financial capability dimension and competency variables did not result in segments that could guide the development of a diversified financial capability strategy to address the needs of the different sub-groups.
- The following demographic variables significantly influencing financial capability (identified through regression analysis) were introduced into the cluster analysis together with the financial capability dimension and competency variables:
 - Gender
 - Age group
 - Level of education achieved
 - Position in the household (marital status and relationship to the household head)
 - Main income generating activity/source of income
- Five population sub-groups were identified with distinct differences in terms of financial capability dimensions and competencies (Tables A5 and A6).

Table A5: Financial capability dimension levels of population segments identified through cluster analysis

Knowledge/Awareness	Highest level	2	3	4	Lowest level
Segment A	14.4%	57.4%	28.2%		
Segment B	12.2%	59.7%	28.1%		
Segment C		6.7%	71.4%	21.9%	
Segment D		3.2%	72.8%	24.0%	
Segment E			14.7%	73.9%	11.3%
Numeracy	Highest level	2	3	4	Lowest level
Segment A	77.2%	13.0%	7.4%	1.9%	0.5%
Segment B	79.0%	12.5%	5.5%	2.6%	0.4%
Segment C	47.6%	19.1%	18.5%	10.2%	4.7%
Segment D	54.9%	16.2%	15.1%	8.8%	5.1%
Segment E	15.1%	8.1%	24.0%	15.3%	37.5%
Confidence	Highest level	2	3	4	Lowest level
Segment A	38.9%	28.7%	17.3%	12.7%	2.5%
Segment B	37.4%	26.0%	16.0%	17.2%	3.5%
Segment C	12.6%	25.1%	25.9%	27.1%	9.3%
Segment D	17.6%	23.6%	27.2%	26.4%	5.3%
Segment E	3.7%	9.1%	19.2%	42.3%	25.7%

Table A6: Financial capability competency levels of population segments identified through cluster analysis

Short-term planning and discipline	Highest Level	2	3	Lowest level
Segment A	49.5%	42.0%	3.8%	4.8%
Segment B	44.5%	39.4%	4.9%	11.2%
Segment C	40.9%	42.6%	7.2%	9.3%
Segment D	42.8%	42.4%	4.9%	9.9%
Segment E	30.8%	34.7%	8.8%	25.8%
Long-term planning and discipline	Highest Level	2	3	Lowest level
Segment A	49.3%	38.3%	3.9%	8.6%
Segment B	51.4%	35.8%	4.6%	8.2%
Segment C	29.9%	38.9%	7.4%	23.8%
Segment D	36.6%	37.2%	7.4%	18.8%
Segment E	16.9%	30.4%	10.3%	42.4%
Awareness of financial status	Highest Level	2	3	Lowest level
Segment A	40.2%	37.6%	17.1%	5.2%
Segment B	29.4%	39.7%	27.7%	3.3%
Segment C	20.5%	38.0%	32.8%	8.7%
Segment D	32.5%	26.1%	35.8%	5.6%
Segment E	14.7%	21.8%	41.3%	22.2%
Information seeking	Highest Level	2	3	Lowest level
Segment A	40.5%	15.1%	10.0%	34.4%
Segment B	22.2%	10.1%	12.5%	55.2%
Segment C	17.2%	13.8%	12.9%	56.2%
Segment D	20.3%	12.5%	9.8%	57.4%
Segment E	8.0%	13.1%	15.7%	63.2%

Annex B: Financial capability segment scores

Table B1: Demographic profile

	Total	Segment A	Segment B	Segment C	Segment D	Segment E
Weighted sample	22,416,639	4,801,854	1,469,182	5,561,934	2,950,811	7,632,856
Percentage of adult population	100.0%	21.4%	6.6%	24.8%	13.2%	34.1%
	National average	Segment A	Segment B	Segment C	Segment D	Segment E
Location						
Zanzibar	2.7%	3.4%	1.5%	3.7%	1.9%	2.1%
Mainland	97.3%	96.7%	98.5%	96.3%	98.1%	97.9%
Setting						
Rural	65.5%	56.3%	38.2%	57.4%	83.4%	75.5%
Urban	34.5%	43.7%	61.8%	42.6%	16.6%	24.5%
Gender of respondent						
Male	45.4%	57.2%	54.1%	19.2%	100.0%	34.2%
Female	54.6%	42.8%	45.9%	80.8%	0.0%	65.8%
Age group						
15-24 Years	25.4%	2.7%	74.1%	37.6%	1.6%	30.7%
25-34 Years	24.7%	27.9%	23.3%	24.5%	25.5%	22.8%
35-49 Years	30.8%	45.0%	1.1%	27.9%	37.6%	27.1%
50+ Years	19.1%	24.5%	1.6%	10.0%	35.4%	19.4%
Marital status						
Single	24.1%	5.9%	89.0%	36.5%	1.0%	22.8%
Married/with partner	64.2%	82.3%	9.4%	49.3%	99.0%	60.9%
Widowed/divorced/separated	11.7%	11.8%	1.7%	14.2%	0.0%	16.3%
Relationship of respondent to head of household						
Head	45.2%	65.1%	17.8%	20.0%	95.5%	37.0%
Spouse	28.4%	30.2%	2.0%	43.2%	0.1%	32.6%
Child	16.9%	2.7%	50.4%	24.7%	4.0%	18.6%
Other	17.0%	2.0%	29.8%	12.1%	0.5%	11.9%

Table B2: Socio-economic profile

	National average	Segment A	Segment B	Segment C	Segment D	Segment E
Highest level of education						
No formal education	11.3%	1.1%	0.6%	4.8%	7.4%	25.9%
At most primary	66.6%	68.2%	19.4%	69.0%	82.9%	66.5%
At most Lower Secondary	18.9%	22.6%	65.6%	24.5%	9.0%	7.2%
Upper Secondary	2.0%	4.1%	9.1%	1.3%	0.3%	0.3%
Diploma/Degree	1.3%	3.9%	5.2%	0.3%	0.4%	0.1%
Reading and writing skills						
Kiswahili: read and write	83.9%	95.9%	96.8%	91.7%	89.3%	66.2%
Kiswahili: neither read nor write	14.4%	3.1%	1.8%	6.2%	8.7%	32.2%
English: read and write	18.5%	28.5%	71.6%	20.6%	8.3%	4.6%
English: neither read nor write	75.3%	63.4%	20.9%	71.7%	86.3%	91.6%
Income earner						
Sole breadwinner	22.6%	28.6%	15.5%	16.6%	38.5%	18.5%
Co-breadwinner	77.3%	71.4%	84.5%	83.4%	61.4%	81.4%
Highest source of income						
Family or friends	21.6%	9.9%	45.0%	33.6%	0.3%	24.0%
Formal sector	3.5%	9.2%	10.4%	2.2%	1.4%	0.5%
Informal sector	4.1%	5.5%	12.2%	3.5%	2.5%	2.9%
Employed on someone else's farm	1.9%	0.7%	0.0%	1.5%	1.5%	3.3%
Own farm	41.7%	37.8%	13.0%	31.7%	64.5%	48.3%
Agricultural trading	9.0%	10.2%	4.4%	7.4%	12.9%	8.6%
Own business	16.3%	23.7%	14.1%	18.4%	14.7%	11.0%
Sub-letting property	0.9%	1.8%	0.5%	0.9%	1.0%	0.4%
No income	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Other	1.0%	1.3%	0.5%	0.7%	1.3%	1.0%
Household monthly income						
No income	0.4%	0.2%	0.0%	0.5%	1.1%	0.4%
Below TSh 50,000	22.9%	11.0%	7.3%	17.9%	28.1%	35.0%
TSh 50,001 – 150,000	33.6%	28.0%	28.2%	35.2%	35.5%	36.3%
TSh 150,001 – 300,000	20.3%	26.1%	31.0%	22.6%	22.4%	12.0%
TSh 300,001 – 600,000	9.9%	16.1%	14.6%	12.6%	9.5%	3.3%
TSh 600,001 – 1,000,000	2.6%	7.1%	7.4%	1.0%	0.7%	0.7%
TSh 1,000,001 – 2,000,000	1.1%	3.6%	4.2%	0.2%	0.1%	0.0%
TSh 2,000,001 – 4,000,000	0.5%	1.4%	0.2%	0.2%	0.0%	0.4%
TSh 4,000,001 – 6,000,000	0.3%	1.2%	0.8%	0.0%	0.0%	0.0%
TSh 6,000,001 – 10,000,000	0.1%	0.4%	0.2%	0.2%	0.0%	0.0%
Above TSh 10,000,000	0.1%	0.1%	1.0%	0.0%	0.0%	0.0%
Lifestyle indicator (LSI)						
1 (Highest)	1.7%	3.6%	9.0%	1.1%	0.6%	0.1%
2	9.7%	18.0%	36.6%	10.4%	2.2%	1.7%
3	13.4%	23.0%	19.6%	16.7%	7.1%	6.2%
4	31.2%	38.6%	23.7%	35.9%	39.6%	21.4%
5 (Lowest)	43.9%	16.8%	11.2%	35.9%	50.5%	70.6%

Table B3: Financial behaviour and context

	National average	Segment A	Segment B	Segment C	Segment D	Segment E
Financial inclusion						
Adults with formal savings/ credit/insurance	32.3%	64.1%	66.3%	30.7%	22.9%	10.5%
Adults relying on informal sector for credit/savings	24.7%	19.2%	13.3%	27.9%	23.7%	28.5%
Adults without formal/informal credit and savings	43.0%	16.7%	20.5%	41.4%	53.5%	61.1%
Monetary savings						
Multiple savings (weighted)	32,144,792	8,798,345	2,376,173	7,655,605	4,024,393	9,290,275
Savings products per cluster	143%	183%	162%	138%	136%	122%
Main savings (single)	18,463,794	4,526,204	1,355,082	4,721,588	2,465,939	5,394,982
Percentage savers per cluster (main)	82%	94%	92%	85%	84%	71%
Where savings are held (multiple)						
Fixed deposit at a bank	9.99%	21.07%	16.93%	7.98%	6.34%	0.94%
Mobile phone bank	1.52%	2.47%	5.09%	0.95%	1.52%	0.16%
SACCOS/MFI/Co-op	3.36%	6.29%	2.38%	2.56%	1.83%	2.16%
Mobile phone bank (M-Pesa)	14.62%	20.76%	34.06%	15.17%	10.43%	5.22%
Informal society or group saving schemes	8.19%	12.81%	3.14%	8.36%	5.70%	6.04%
Give savings to someone else for safekeeping	6.57%	3.22%	9.33%	5.85%	9.44%	8.40%
Cash at home/hiding place	40.34%	27.10%	23.56%	45.52%	46.83%	50.08%
Other	15.41%	6.28%	5.52%	13.61%	17.92%	26.99%
Have a loan/credit (multiple mentions)						
Loan/credit products per cluster	28,763,403	6,852,929	1,806,807	6,983,949	3,858,922	9,260,796
Percentage loans per cluster	128%	143%	123%	126%	131%	121%
Borrowers per cluster (single mention)	10,382,930	3,169,881	673,954	2,450,603	1,258,025	2,830,468
Percentage borrowers per cluster	46.32%	66.01%	45.87%	44.06%	42.63%	37.08%
Sources of loans (multiple)						
Personal loan from a bank	1.92%	5.52%	2.84%	1.03%	1.30%	0.00%
Loan from a MFI	2.66%	6.60%	3.77%	1.47%	2.75%	0.38%
Loan from an ASCA/VICOBA/VSLA	2.86%	8.30%	2.32%	1.35%	1.88%	0.49%
Loan from family/friends without security	21.99%	23.91%	21.52%	21.77%	23.06%	20.38%
Loan from a moneylender	3.54%	6.77%	3.40%	2.37%	4.21%	1.78%
Money owing on a payment such as school fees, doctor	1.49%	1.89%	0.76%	1.56%	0.89%	1.54%
Hire purchase	0.34%	0.27%	0.51%	0.33%	0.42%	0.32%
Credit from a kiosk/shop	21.91%	21.04%	19.84%	24.72%	20.16%	21.56%
Non-monetary loans	1.21%	1.88%	0.49%	0.44%	1.18%	1.46%
No response	0.34%	0.05%	0.83%	0.43%	0.28%	0.40%
None	41.75%	23.76%	43.73%	44.53%	43.87%	51.70%

	National average	Segment A	Segment B	Segment C	Segment D	Segment E
Feelings about amount borrowed						
I have borrowed the amount that I need	27.78%	35.01%	34.30%	29.11%	20.42%	20.23%
I could afford to borrow more if I wanted/needed to	2.61%	4.67%	3.30%	1.99%	3.03%	0.46%
I have borrowed to my limit and could not afford to borrow more	67.69%	59.43%	62.40%	67.91%	72.82%	75.73%
I have borrowed more than I can really afford	1.42%	0.48%	0.00%	0.28%	3.73%	2.79%
No response	0.51%	0.40%	0.00%	0.71%	0.00%	0.79%
Keeping up with necessary expenses						
Keeping up without difficulty	7.73%	10.82%	7.44%	8.92%	4.55%	6.19%
Keeping up, but it is sometimes a struggle	71.90%	73.19%	82.93%	71.57%	75.80%	67.69%
Keeping up, but it is always a struggle	15.51%	13.07%	7.97%	15.53%	14.39%	18.91%
Have serious financial problems and have fallen behind with many expenses	4.80%	2.80%	1.67%	3.90%	5.26%	7.13%

Table B4: Attitudes to life and money

	TOTAL (National average)	Segment A	Segment B	Segment C	Segment D	Segment E
Determine own financial destiny: "I cannot control my own finances, it is in the hands of God"						
Disagree	21.55%	19.63%	11.64%	21.47%	22.82%	24.24%
Agree	78.45%	80.37%	88.36%	78.53%	77.18%	75.76%
Attitudes to life						
My life is very close to my ideal	3.28%	7.43%	4.83%	2.37%	3.05%	1.13%
My life is fairly close to my ideal	24.19%	30.78%	34.33%	21.31%	26.85%	19.17%
My life is not very close to my ideal	53.44%	51.68%	52.54%	58.81%	54.81%	50.28%
My life is not at all close to my ideal	19.09%	10.11%	8.30%	17.52%	15.30%	29.42%

Table B5: Seeking financial advice and sources of advice

	TOTAL (National average)	Segment A	Segment B	Segment C	Segment D	Segment E
Seeking financial advice						
Often (1)	11.79%	22.16%	17.86%	8.95%	12.46%	5.92%
Sometimes (2)	36.07%	48.20%	49.07%	36.65%	41.70%	23.34%
Rarely (3)	22.92%	16.63%	21.01%	23.41%	25.14%	26.02%
Never (4)	29.06%	12.86%	12.05%	30.50%	20.70%	44.71%
Sources of advice						
Family/friends	70.68%	61.11%	74.21%	72.99%	69.00%	80.02%
Bank/other financial institutions	6.09%	13.65%	8.26%	3.23%	3.25%	0.69%
School teacher/head of school	1.69%	1.58%	2.85%	2.02%	1.18%	1.44%
Village elder/someone senior in community	5.18%	4.03%	1.15%	4.06%	10.01%	6.01%
Church/temple/mosque Leader	2.19%	2.31%	0.36%	3.38%	1.78%	1.75%
My children	3.96%	3.19%	0.00%	2.94%	5.89%	6.00%
(Local) Government	5.45%	8.41%	6.49%	5.66%	5.79%	1.07%
Colleague/boss	3.62%	4.54%	4.98%	4.21%	1.62%	2.70%
Personal financial/tax advisor	0.38%	0.29%	0.98%	0.50%	0.60%	0.03%
Other	0.76%	0.90%	0.72%	1.02%	0.88%	0.29%

Table B6: Sources of financial information

Brochure	4.45%	7.94%	6.98%	1.21%	3.03%	3.90%
Newspaper	15.19%	20.23%	19.36%	8.50%	15.25%	13.81%
Radio	41.30%	35.66%	30.40%	48.59%	40.95%	49.44%
TV	15.83%	19.72%	25.09%	8.57%	17.08%	11.38%
Internet	1.85%	1.86%	5.53%	0.95%	1.67%	0.89%
Village concert/road show/town festival	12.24%	12.32%	11.38%	11.37%	13.56%	11.83%
Other	1.33%	0.84%	1.17%	1.93%	1.75%	0.46%
None of these	7.81%	1.44%	0.08%	18.89%	6.71%	8.30%



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