



Financial Services Demand Side Survey Tonga





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Preface

In 2013 members of the Pacific Islands Regional Initiative (PIRI), formerly known as the Pacific Islands Working Group (PIWG), a grouping under the Alliance for Financial Inclusion (AFI), jointly undertook a review of available data and measurement exercises with which they could design and evaluate their national financial inclusion strategies and their Maya Declaration commitments. As part of this exercise, PIRI members agreed to adopt not only the core set of AFI financial inclusion indicators, but to expand that set too. The members committed to carrying out demand side surveys to capture those indicators. In early 2015, demand side surveys were held in Fiji, Samoa and Solomon Islands. In the first half of 2016, corresponding surveys were conducted in Tonga and Vanuatu. These surveys were jointly supported by AFI and the Pacific Financial Inclusion Programme (PFIP).

Alliance for Financial Inclusion

The Alliance for Financial Inclusion (AFI) is the world's leading organization on financial inclusion policy and regulation. A member-owned network, AFI promotes and develops evidence-based policy solutions that help to improve the lives of the poor. Together, AFI members from more than 120 financial inclusion policymaking institutions are working to unlock the potential of the world's nearly 2 billion unbanked through the power of financial inclusion.

Pacific Financial Inclusion Programme

PFIP is a Pacific-wide programme helping low-income households gain access to financial services and financial education. It is jointly administered by the UN Capital Development Fund (UNCDF) and the United Nations Development Programme (UNDP) and receives funding from the Australian Government (DFAT), the European Union and the New Zealand Government (MFAT). PFIP funding for the Tonga Demand Side Survey was from the MFAT regional programme.

PFIP aims to add one million Pacific Islanders to the formal financial sector by 2019 by supporting policy and regulatory initiatives, funding innovation with financial services and delivery channels, disseminating market information, and empowering consumers.

PFIP operates from the UNDP Pacific Office in Suva, Fiji and has offices in Papua New Guinea, Samoa and Solomon Islands.

Acknowledgements

This survey would not have been possible without the commitment and dedicated efforts of the National Reserve Bank of Tonga (NRBT), particularly Governor Kioa and the NRBT staff. Thanks are also extended to Winston Fainga'anuku, Masiva Masila of the Tonga Department of Statistics (TDoS), David Megill and the data collection team for their hard work and perseverance. Heartfelt thanks go to the Data Subgroup of PIRI, in particular Lanna Lome-Ieremia of CBS, Denson Deni and Caroline Kanoko of CBSI, for their dedication and initiative. Furthermore, warm thanks go to the Tongans who gave their time and information about their lives to make this survey possible.

Sincere thanks go to the staff at PFIP for coordination and guidance throughout the project, including Jeff Liew, Krishnan Narasimhan, Esther Bates, Erica Lee and Elizabeth Larson. Warm thanks are also extended to Bankable Frontier Associates (BFA) Justin Grider, Sushmita Meka, Brian Loeb, Kelly Nguyen, and Michelle Hassan for their tireless efforts in designing the surveys, working with the enumerators and drafting the final report.

Foreword

The National Reserve Bank of Tonga (NRBT) acknowledges the valuable contribution of financial inclusion initiatives towards achieving the bank's vision of being an effective and dynamic central bank in promoting Tonga's economic prosperity. The financial system is the backbone for the economic development of any country however, to be effective, it is important that the services and benefits that the financial service providers have to offer are in tune to the public's demand and are able to be accessed by the people at all levels of society. This entails recognising the needs of the people and developing appropriate strategies to meet those needs, with the view of lifting the standard of living of the people. I am therefore very pleased to present this report of Tonga's Demand Side Survey (DSS), the first of its kind to be conducted in the Kingdom, as a step towards the right direction of building an inclusive economy.

This DSS provides the baseline level and condition of access and usage of financial services and products in the country. It has also identified the challenges and barriers that are faced by our people with regards to accessing financial products and services, as well as the type of products and services that are in demand. The outcome of the DSS also identifies the level of awareness and financial literacy of the people. These findings would provide great insights into how to bridge the gap between the formal and informal sectors to ensure inclusive economic growth for Tonga. At the same time, appropriate policies are to be developed to ensure the safety, soundness and stability of the financial system is not jeopardised.

The results of the survey will be a platform where the NRBT, financial service providers, private sector, government and other relevant stakeholders join forces to develop and improve financial inclusion in Tonga. A national financial inclusion strategy is to be developed on the basis of this survey together with the outcome of the Supply Side Survey conducted on the suppliers of financial services. I do hope that the result of the demand side survey would help develop an effective and valuable national strategy that contribute to improving people's confidence to access the formal financial system and appropriate financial products and services are available to meet the public's demand. The NRBT recognises that financial inclusion is not just about the availability and sustainability of financial services in the remote areas, but also the affordability and relevance of these services to the livelihood of the people.

I would like to commend the support of the Pacific Financial inclusion Programme (PFIP) in co-funding this survey, the Bankable Frontier Associates for their professional advise and guidance throughout the entire process, and the Tonga Department of Statistics for providing the crucial domestic insight in carrying out this national survey. Thank you to the staff of the NRBT for your dedication and commitment towards completing this survey. Last but not the least, I would like to express my sincere thanks to the people of Tonga for warmly accepting our request to participate in this important survey, your notable contribution and cooperation is much appreciated.



Sione Ngongo Kioa
Governor
National Reserve Bank of Tonga

Contents

Preface.....	iii
Foreword	iv
Acronyms and abbreviations	vi
Executive Summary	1
Financial access and usage in Tonga.....	3
Barriers to formal financial inclusion.....	10
Bank account usage is related to Tongans’ source of income	16
Tongan adults are predominantly savers, but not for long-term goals	18
Nearly three-quarters of adults receive international remittances.....	21
Tongan adults are active mobile phone users but not with mobile money	24
Almost 90% of Tongans do not have insurance	25
Next steps for understanding financial inclusion in Tonga	26
Annex A: Regression Results.....	27
Annex B: Financial Inclusion Indicators	28
Annex C: Detailed Survey Results.....	29
Annex D: Methodology and Sample Description.....	38
Annex E: Maps of Access Points	40

Acronyms and abbreviations

ATM	Automated Teller Machine
AFI	Alliance for Financial Inclusion
DSS	Demand side survey
FAS	Financial Access Survey
Global Findex	World Bank Global Financial Inclusion Indicators
GPFI	Global Partnership for Financial Inclusion
IMF	International Monetary Fund
MFI	Microfinance Institution
NRFB	National Recruitment Fund Board
NRBT	National Reserve Bank of Tonga
PFIP	Pacific Financial Inclusion Programme
PIRI	Pacific Islands Regional Initiative
TDoS	Tonga Department of Statistics
UNCDF	United Nations Capital Development Fund

Executive Summary

This report describes the level of financial access in Tonga — the fourth Pacific Islands Regional Initiative (PIRI)¹ country to move forward with a financial inclusion demand side survey (DSS) effort. DSS surveys were previously completed in Samoa, Fiji and the Solomon Islands. The survey was conducted in the first quarter of 2016 and includes indicators from the 2014 World Bank Global Findex surveys as well as the Global Partnership for Financial Inclusion (GPFI) indicators.

A long process led to the completion of the DSS in the Pacific region: In 2013 the members of PIRI jointly undertook a review of available data and measurement exercises with which they could design and evaluate their national financial inclusion strategies and their Maya Declaration commitments under the Alliance for Financial Inclusion (AFI). As part of this exercise, PIRI members agreed to adopt not only the core set of AFI financial inclusion indicators but to expand that set, as well. The members further committed to carrying out a DSS to capture those indicators.

In general, the Tonga DSS, like the surveys in the other PIRI countries, was designed to capture financial inclusion indicators that would be comparable across the region and globally. Importantly, these were the first such surveys in each country.

The National Reserve Bank of Tonga (NRBT) and its PIRI partners understand that “financial inclusion” incorporates not only individuals’ access to and usage of formal financial services, but also how those services fit into individuals’ lives — the quality that those services deliver. More attention and research needs to be devoted to this quality dimension in Tonga and the other PIRI partners — more than could be achieved in this first round of surveys. Still, this report presents valuable evidence of how Tongans use financial services, alone and in combination. This is information that is impossible to learn from supply-side sources alone.

Bank account ownership is a first step to effective financial inclusion

Supply-side and demand-side data both have their strengths and limitations. Supply-side data can lack common identifiers across accounts, while demand-side data can be prone to exaggeration of information by respondents. Given the potential limitations of utilizing only supply or demand data, both should be taken together to highlight financial ownership and usage while contextualizing the numbers across a population. Without current supply-side data, we leverage demand-side responses to understand financial inclusion in Tonga.

While 41% of Tongan adults are banked (compared with 39% of adults in Samoa), bank account ownership is only a first step in achieving meaningful financial inclusion. Table 1 below demonstrates another way of looking at financial inclusion through self-reported savings with a formal financial provider: 18% of Tongan adults self-reported saving in their accounts at a formal financial institution in the past year. Self-reported savings shows the percent of the adult population in Tonga that said they personally saved some amount in their account with a formal institution such as a bank, credit union or MFI in the past year. The percent of adults who saved at a formal institution is on par with other Pacific Island countries like the Solomon Islands, but lags behind Fiji.

Table 1: Percent of adults who reported saving at a formal financial institution² in the past year

Country	Percent of adult population
Tonga (2016)	18%
Fiji (2014)	38%
Solomon Islands (2015)	17%
Samoa (2015)	11%

Among Tongan adults that have a bank account, 36% reported saving in their bank account, while 21% reported borrowing from their bank in the past 12 months.

This report examines this savings behavior, as well as Tongans’ self-reported usage of payment, credit and insurance products.

Men and women are equally banked

Surprisingly, 41% of male adults and 41% of female adults report having a bank account. Factors such as employment type, education level and the sending and receiving of remittances are all correlated with the likelihood of being banked. This does not mean that men and women have equal access to all types of formal financial services, or that they can or do use these bank accounts in the same way. The survey did reveal that women are more likely to earn income from self-employment, while men are more likely to report earning private and agricultural income. These kinds of differences could inform financial service providers and policy makers’ strategies to deepen inclusion among both men and women.

¹ PIRI members include the central banks of Fiji, Samoa, Solomon Islands, Vanuatu, Papua New Guinea, Timor Leste and Tonga.
² Bank, credit union, or microfinance institution.

Remittances are common across Tonga

Remittance income is an important source for many Tongan adults: 70% of Tongan adults reported receiving remittances last year. Salaried and unsalaried Tongan adults alike receive remittances, and this money pays for personal expenses, church offerings and emergencies. Sending and receiving remittances can be costly (18% reported sending remittances), particularly by Western Union, the dominant player. Fees, travel costs and currency fluctuations cut into the amounts that Tongans ultimately send and receive.

Savings goals appear to be short term

Overall, 63% of Tongan adults reported saving in the past year. Respondents said they mainly save for short-term uses like personal expenses and emergencies. Very few Tongan adults currently save for business, assets, and housing or land purchases. Most saving is by informal methods such as saving at home or in savings clubs and on a frequent basis (in the past 30 days). Tongan savers appear to be active but focus on immediate needs first.

Cash is king in payments

Income and payments revolve around cash. Both in the private sector and in agriculture the majority of Tongan adults receive income in cash. Only in the public sector do we see employees receiving income into a bank account. Nearly all (98%) respondents report paying utility and school payments with cash instead of digital instruments like bank transfers, debit cards or mobile money; only 10% of respondents reported using mobile money services such as Digicel.

Financial access and usage in Tonga

The Tonga DSS data were collected in February 2016, by the TDoS, in close collaboration with NRBT. The sample is nationally representative, using three-stage, systematic random sampling. Enumerators used a Kish grid to randomly select one adult respondent (age 15 and above) from each sampled household. Thus, all findings apply to Tongan adults unless otherwise stated. Further details can be found in Annex D: Methodology and Sample Description.

Tongan financial inclusion strand

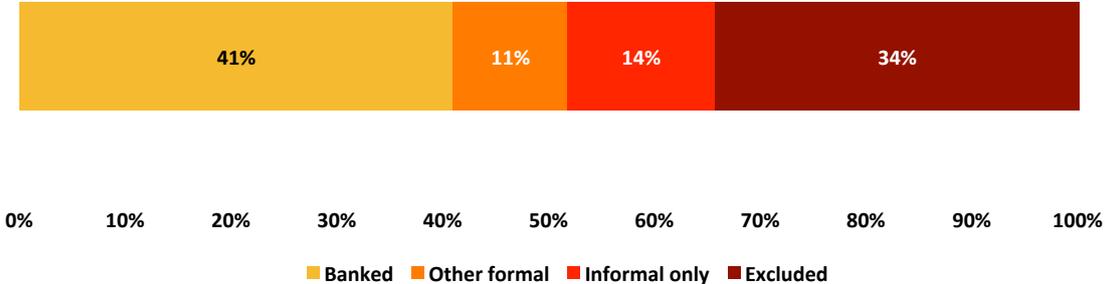
Financial inclusion is a journey that begins with enrollment with a formal financial service provider and develops as the customer uses savings, credit, insurance and payment services to manage his or her daily financial life. This report provides basic baseline indicators of where Tongan adults are on this journey.

Throughout the report, the financial inclusion strand is the primary means of illustrating Tongan adults’ current standing in the first crucial phase of financial inclusion: formal financial enrollment. The financial inclusion strand captures respondents’ usage of various financial services over the 12 months prior to their being interviewed.³ Note that Tongan adults that are considered “banked” have a formal bank account, but this categorization says nothing about if and how they use that account. Usage is explored further in the sections related to bank accounts and specific products.

Financial inclusion strand	
<i>Banked</i>	The respondent currently has a formal bank account.
<i>Other formal</i>	Over the past 12 months, the respondent used the services of a credit union, microfinance institution (MFI) ⁴ , the National Recruitment Fund Board (NRFB), investments (stocks, bonds and others), insurance or owns a mobile money account.
<i>Informal only</i>	Over the past 12 months, the respondent has used a savings club or other non-regulated financial instrument, such as taking credit from a shop, moneylender, or hire purchase.
<i>Excluded</i>	Over the past 12 months, the respondent has not used any of the services mentioned for the other three categories, but may have borrowed from or lent to friends and family, saved money in the house, pawned goods, borrowed from an employer, saved with a friend or trusted person, etc. This category would include respondents who only use money transfer services, as well.

According to the DSS, 41% of Tongan adults have a commercial bank account, as Figure 1 below shows, while another 11% access financial services from other formal providers such as credit unions, MFIs, insurance, mobile money, or finance companies. However, 34% of adults appear to be excluded from both formal and informal financial services. The remainder of this report presents in-depth findings on the factors associated with inclusion in Tonga, given its unique context.

Figure 1: 2016 Tongan Financial Inclusion Strand

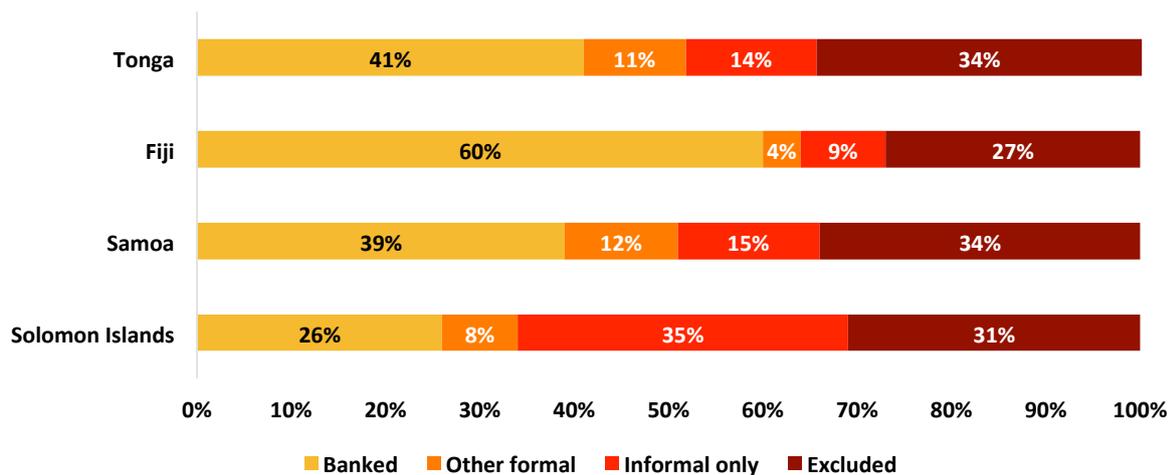


³ The access strand methodology is borrowed from the FinScope surveys, developed by FinMark Trust, which are implemented on a regular basis in a number of countries throughout Africa. The access strand, which segments adults by the types of financial services used, allows policymakers and providers to visualize changes in access to financial services over time.
⁴ South Pacific Business Development, or SPBD, is the only MFI operating in Tonga.

Benchmarking financial access in Tonga

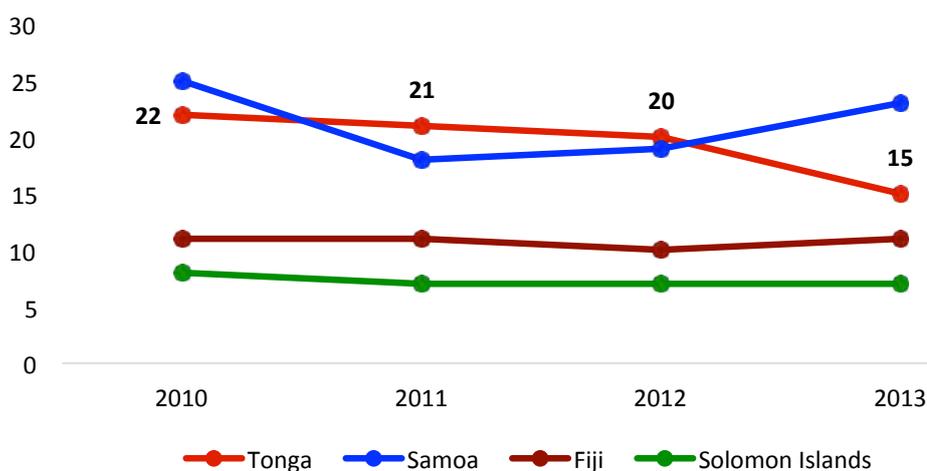
As Figure 2 shows, in Tonga the percentage of banked adults (41%) appears to be higher than in the Solomon Islands (26%), behind Fiji (60%) and comparable to Samoa (39%). The data collected by the International Monetary Fund's Financial Access Survey (FAS) helps to explain the variation between countries.

Figure 2: Inclusion Strand across PIRI-member Countries



As Figure 3 and Figure 4 show, the penetration of bank branches and ATMs in Tonga is relatively high. In 2011 and 2012, Tonga had the most bank branches per 100,000 adults of the four countries, but fell in 2013. In 2013, Westpac Bank of Tonga teamed up with the Tonga Development Bank but closed down a number of branches on the outer islands.⁵ Similarly, ATM penetration is relatively high in Tonga, although as of 2013 it falls behind that of Fiji and Samoa.

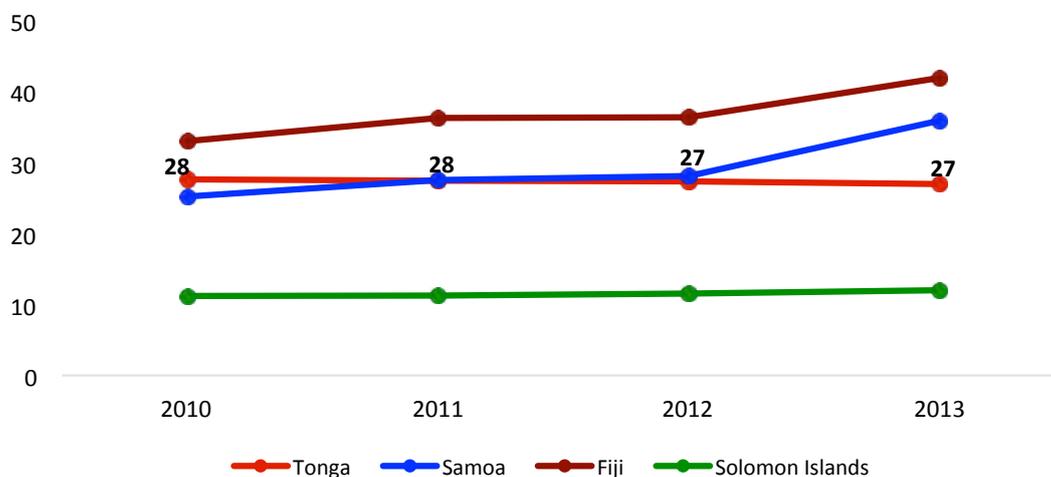
Figure 3: Number of commercial bank branches per 100,000 adults



Source: IMF Financial Access Survey, available at <http://fas.imf.org/>

⁵ <http://matangitonga.to/2013/09/02/westpac-tonga-teams-tdb-haapai-and-eua>

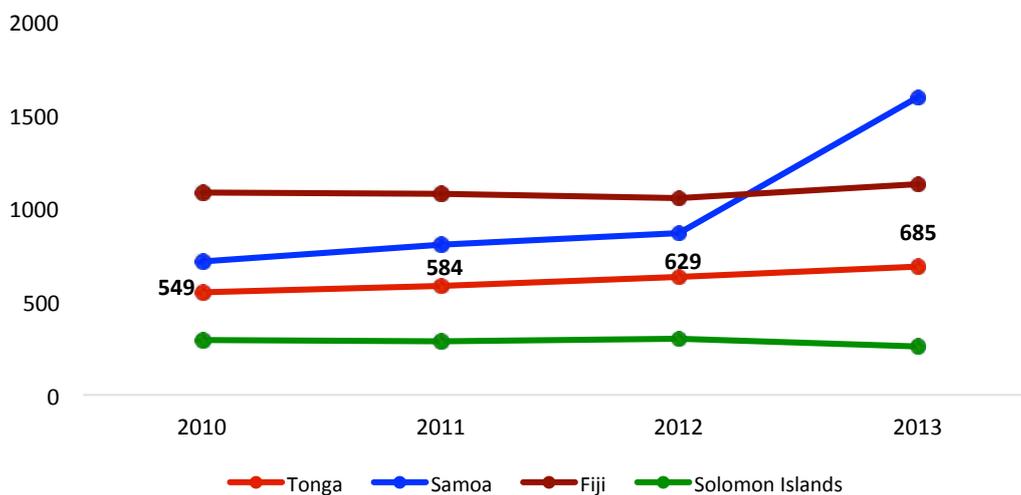
Figure 4: Number of ATMs per 100,000 adults



Source: IMF Financial Access Survey, available at <http://fas.imf.org/>

The relative proliferation of access points to population in is likely one reason that Tonga’s proportion of banked adults is higher than in the Solomon Islands. Maps of current Branch, ATM and Merchant locations can be found in Annex E. Figure 5 shows the number of deposit accounts with commercial banks per 1,000 adults and again shows Tonga with a higher number compared to the Solomon Islands, but below Fiji and Samoa.

Figure 5: Deposit accounts with commercial banks per 1,000 adults



Source: IMF Financial Access Survey, available at <http://fas.imf.org/>

Tonga is classified as an upper-middle income country,⁶ but its level of formal account ownership (48%) is more closely aligned with that of lower-middle income countries (42%). Looking at usage in Tonga paints a slightly different picture. The use of credit and reported savings from any source is on par with upper-middle income countries, and credit from formal financial institutions is relatively high in comparison to both lower-middle and upper-middle income countries. However, self-reported saving in formal financial institutions is still closer to that in lower-middle income countries.

⁶ <http://data.worldbank.org/country/tonga>

Table 2: Benchmarking Tonga’s savings and loan behavior

	Lower-middle income countries (2014)	Tonga (2016)	Upper-middle income countries (2014)
Account with a formal financial institution	41.8%	48.0%	70.4%
Loan in the past year (from any source)	47.4%	37.4%	37.7%
Loan from a financial institution in the past year	7.5%	13.6%	10.4%
Saved any money in the past year (self-reported)	45.6%	62.9%	62.7%
Saved any money at a financial institution in the past year (bank, credit union, or MFI)	14.8%	18.2%	32.2%

Source: World Bank Global Findex (Global Financial Inclusion Database), accessed: 04/2016

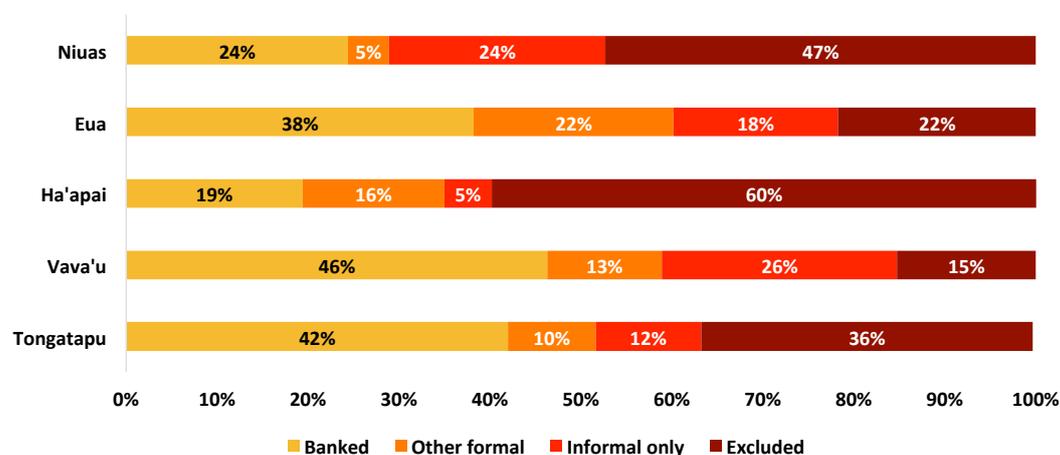
Differences in usage within Tonga

Bank account ownership is highest in Tongatapu and Vava’u Islands, while the other islands appear to lag behind account ownership

Among the five islands of Tonga, the percentage of banked adults in Tongatapu and Vava’u is the highest compared with the islands of Niua, ‘Eua, and Ha’apai. Tongatapu and Vava’u are the two largest islands in Tonga, containing 87% of the population.⁷ These islands have more developed infrastructure, including greater access to formal financial services. Vava’u (46%) and Tongatapu (42%) have the highest percentage of banked adults. Vava’u also has the highest percentage (26%) of adults using informal financial services as well.

Meanwhile, a combined 12% of the population lives on Niua, ‘Eua and Ha’apai islands according to the 2011 census. The percentage of banked adults is low in Niua and Ha’apai (24% and 19% respectively), while the proportion of excluded adults is high (47% and 60%). Of the three small islands, 38% of adults in ‘Eua have a bank account and another 22% use other formal financial services. ‘Eua is closer to Tongatapu, the main island, and ‘Eua residents are more likely able to access services on Tongatapu than residents of Niua and Ha’apai, which are smaller, more scattered islands farther from the main island.

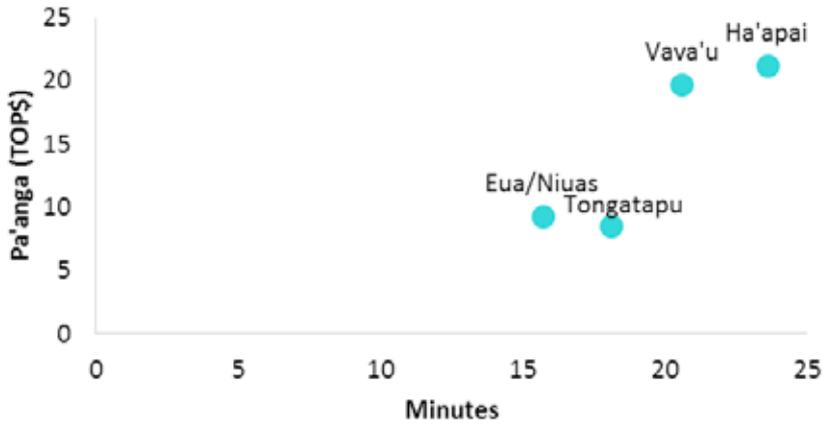
Figure 6: Financial Inclusion in Tonga, by Island



⁷ Tonga Department of Statistics. “2011 Census of Population and Housing.” <<http://tonga.prism.spc.int/index.php/tonga-documents?view=download&fileId=46>>

The time and cost to reach a bank branch in Ha’apai is the highest compared to the cost and time on the other five islands (Figure 7). In Ha’apai, adults must travel further and pay more to reach the nearest bank branch. Adults in Ha’apai travel nearly 24 minutes and pay up to TOP\$21 (USD \$9.13)⁸ to reach a bank branch on average. This travel cost is 2.5 times higher than on Tongatapu and 1.8 times the average across all islands. The increased travel costs and time to reach a bank branch in Ha’apai can be explained by the fact that there is currently only one bank branch in Ha’apai. Travel time can be up to six hours by ferry from the farthest island to the bank branch in Ha’apai. See Annex E: Maps of Access Points for detailed maps for each island.

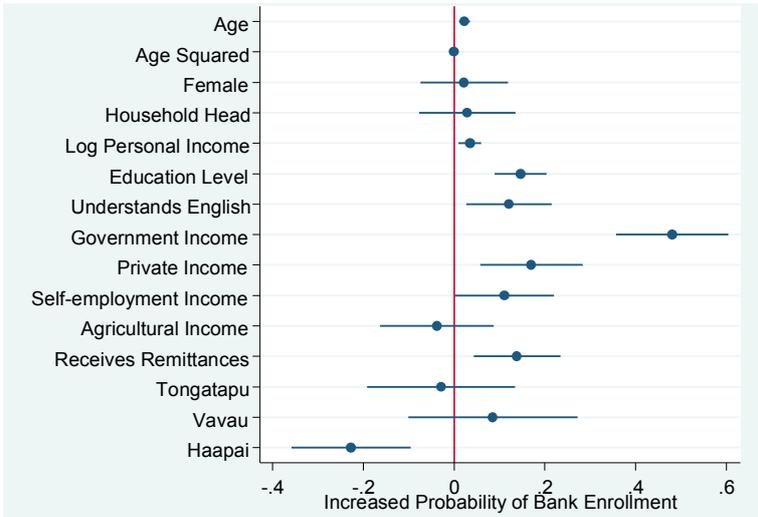
Figure 7: Time and cost to reach a bank branch in Tonga



Employment type, income, education and receipt of remittances are associated with bank account ownership

We used a logistical regression model to get a better sense of the factors that influence the probability that an adult has a bank account in Tonga. These results do not imply causation. Education level, income level, employment type and whether or not a household receives remittances are all correlated with the probability of bank account ownership. In Figure 8⁹ below, factors that are on the right of the vertical line at 0 indicate a positive correlation with bank account ownership, while factors that are on the left indicate a negative correlation. The strongest predictor of enrollment with a bank is being a public sector employee.

Figure 8: Logistical regression graphical representation of the likelihood of bank account ownership

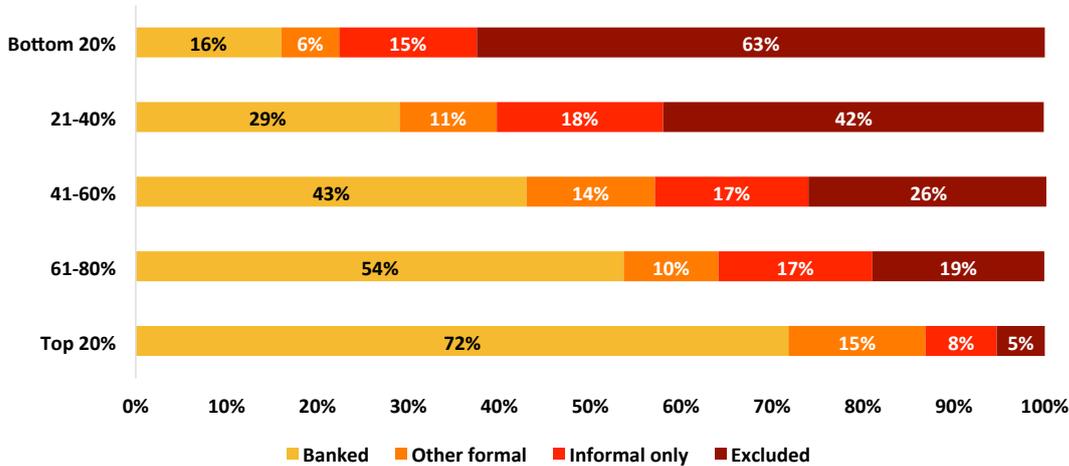


⁸ Exchange rate USD \$1 = TOP \$2.30 as of March, 2016
⁹ Detailed regression results can be found in the Annex. An example of how to interpret the results in the Figure are “Those with government income are 48 percentage points more likely to report having an account at a bank compared to those without government income”

Interestingly demographic factors such as gender and age do not seem to be statistically significantly correlated with account ownership. As the logistical regression results show, type of income is correlated with account ownership. Public sector employees are 48 percentage points more likely to report owning a bank account than adults who are not public sector employees, all else equal. This result is not surprising as the majority of government employees receive their salary through an account. Interestingly, Tongan adults that earn private income, self-employed or receive remittances are also more likely (17, 11 and 14 percentage points respectively) to own a bank account relative to Tongan adults that do not earn private income, are not self-employed or do not receive remittances, all else equal.

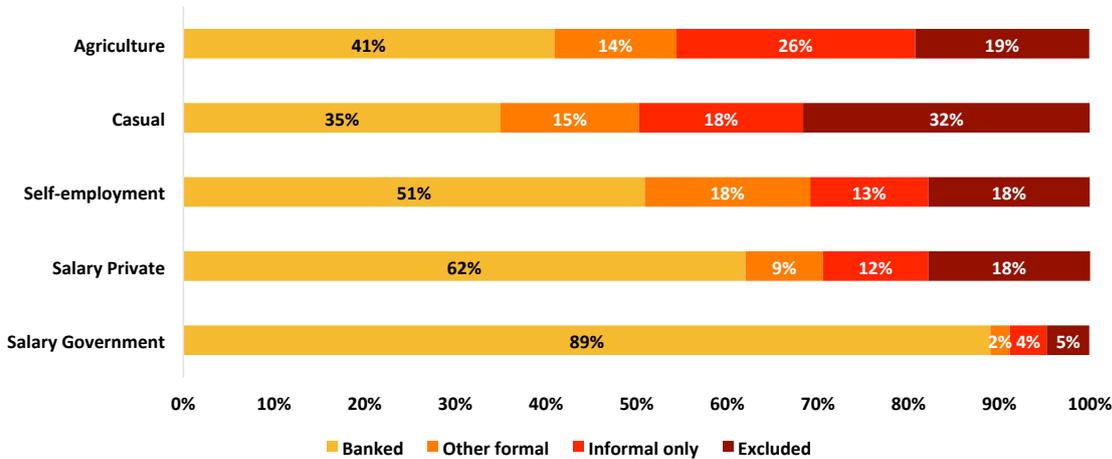
Level of income (Figure 9) is correlated with bank account ownership as is the *type* of income earned (Figure 10). While 72% of adults in the top income quintile are formally banked, this is true of only 16% of adults in the bottom income quintile. These adults are predominantly financially excluded, with 63% having used no formal or informal financial services in the past year.

Figure 9: Inclusion Strand by Income Quintile



Type of income matters as well. Of banked public sector employees, 85% reported receiving their salary directly into an account at a bank or another type of formal financial institution. This helps to account for the high level of account ownership among public sector employees, and in subsequent sections we will see how this affects account usage.

Figure 10: Inclusion strand by employment type

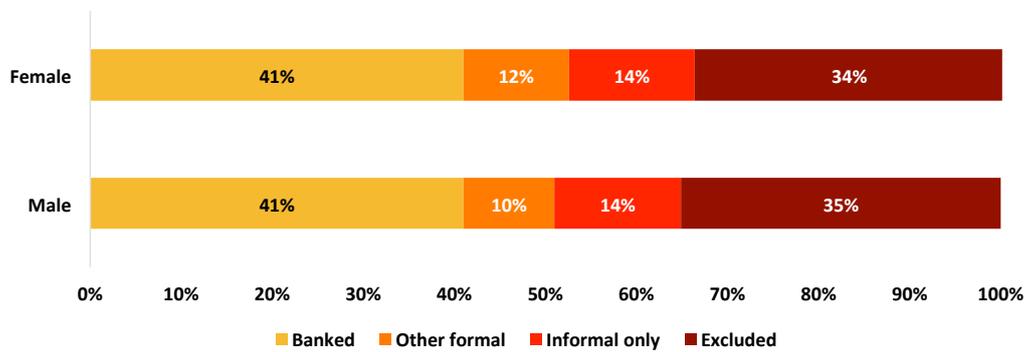


Although private salaried employment and self-employment are also correlated with bank account ownership, nearly 40% of adults earning private salaries and 50% of self-employed adults are unbanked.

Women and men report similar levels of bank account ownership

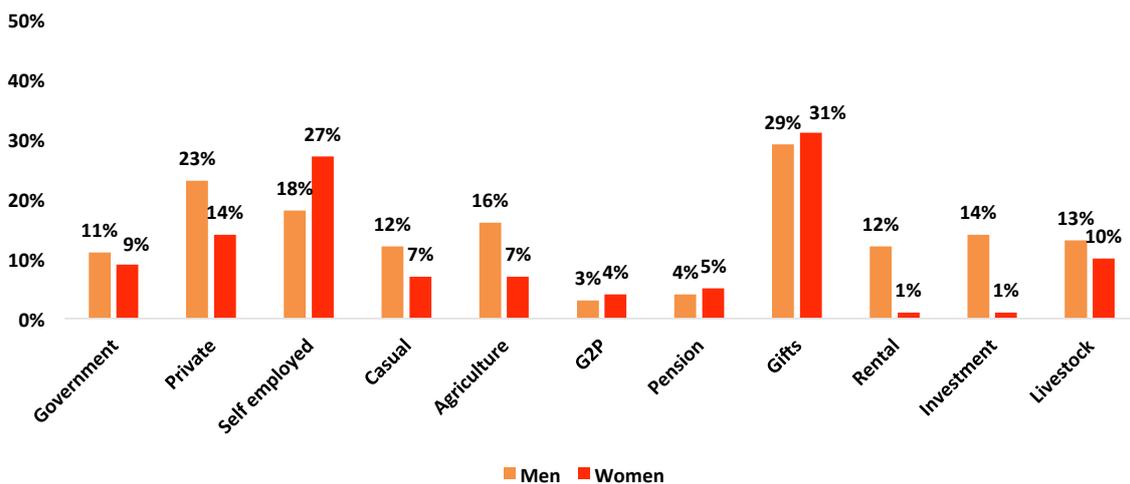
As indicated above, gender is not correlated with bank account ownership in Tonga. These results buck the global trend in which there is a gender gap in bank account access (again, the inclusion strand does not capture the quality of financial services nor does it tell us about how these accounts are used). The Global Findex reports that 65% of men had a bank account in 2014 compared to 58% of women.¹⁰ While the results do not show a gap between genders in Tonga, there is still concern that more than one-third of men (35%) and women (34%) are financially excluded from formal and informal financial services.

Figure 11: Financial inclusion strand in Tonga 2015, by Gender (%)



Gender differences are present in other areas, such as employment. Women are more likely to report earning income from self-employment while men are more likely to report earning income from other sources like private employment and agricultural work (Figure 12).

Figure 12: Income sources, by Gender (%)



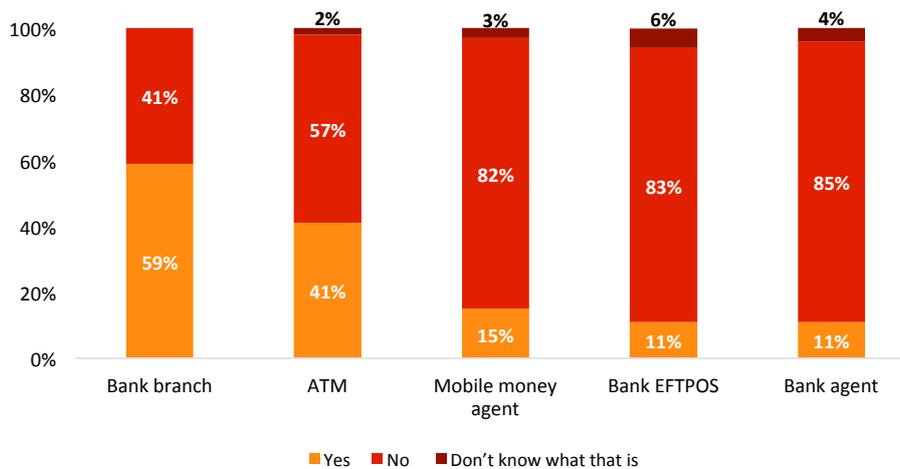
¹⁰ World Bank Global Findex (Global Financial Inclusion Database), accessed: 04/2016

Barriers to formal financial inclusion

Tongan adults lack awareness about the locations of proximate financial access points

We asked respondents if they knew of common financial access points close to their homes, such as bank branches, ATMs, or bank or mobile money agents (Figure 13). With the exception of the location of bank branches, the majority of adults do not know of other financial access points near their homes.

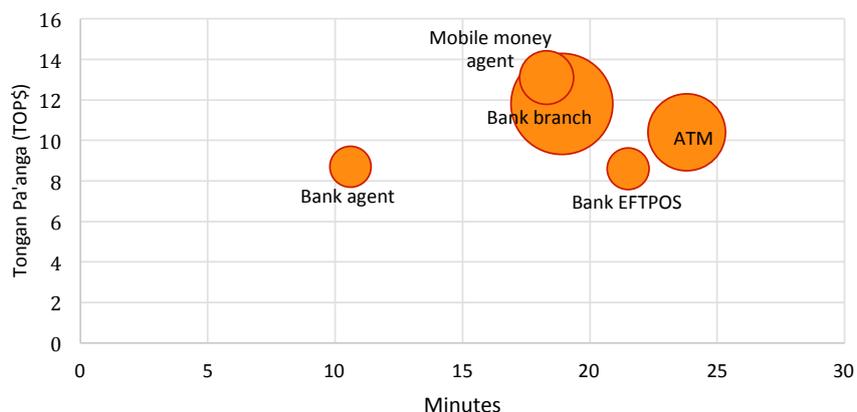
Figure 13: Percentage of adults that are aware of financial access points



Agents can better penetrate the islands for increased access

For respondents that reported financial services close to their homes, follow-up questions asked about the time and cost to reach these services. Across respondents, the time and method of transportation varied by financial access point. Although Tongan adults were less likely to report knowing of a bank agent close to their home (11%), those that did reported less time to reach a bank agent relative to other financial access points (Figure 14¹¹).

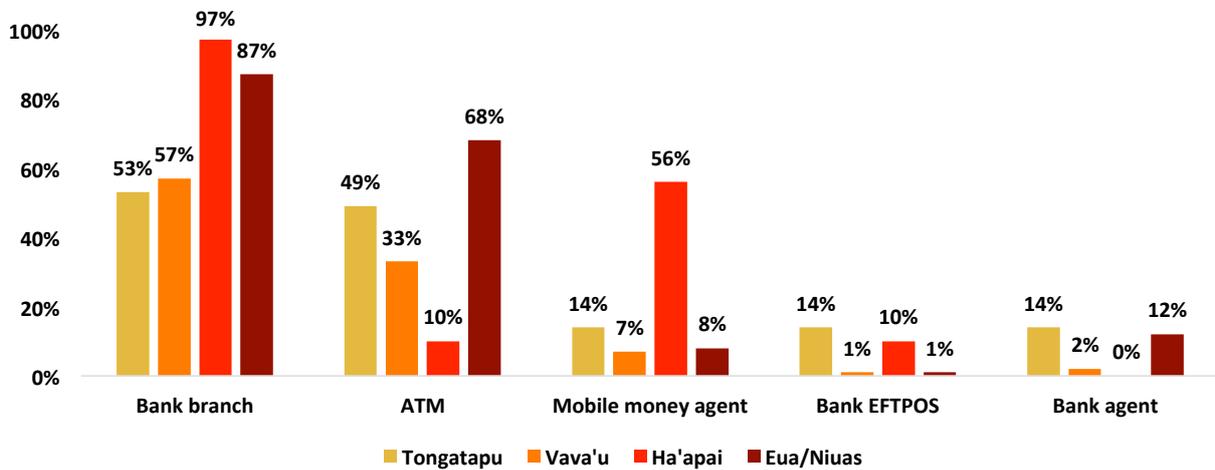
Figure 14: Self-reported time and cost to reach financial access points



Agents appear to help cut down the time required to reach a financial access point, but there is work to be done. Figure 15 shows the percentage of Tongan adults across islands that reported a financial service point close to their home. On every island except Ha'apai, less than 15% of respondents reported a mobile money agent, bank EFTPOS, or bank agent close to their homes.

¹¹ As reported by those respondents that were aware of each financial access point. The size of each bubble indicates the proportion of respondents that were aware of each type of access point.

Figure 15: Respondent knowledge of financial access points, by Island

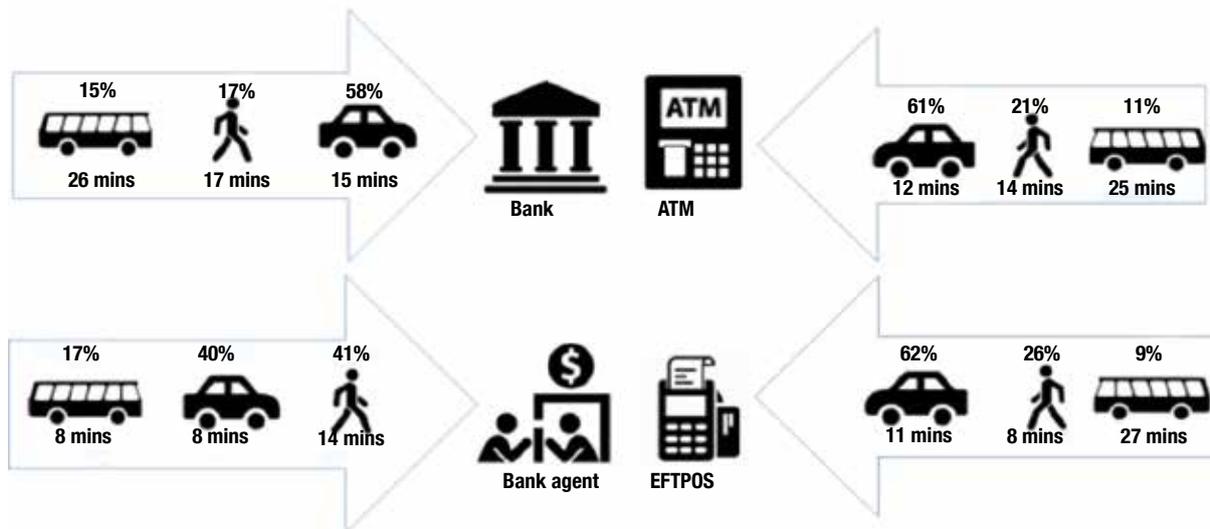


Respondents reported taking approximately 14 minutes to reach a bank agent by foot or 8 minutes by car, while taking 17 minutes to reach the bank branch by foot and 15 minutes by car.

Figure 16 shows the difference in travel time and transportation prevalence for various financial service access points.

The three most popular modes of transportation to financial access points are driving in a private car, walking and taking a bus. Even though the Tongan islands are relatively small in size, the majority of respondents choose to travel by car to reach financial access points. But across transportation options, Tongan adults spend less than 30 minutes, on average, to reach access points. Financial access points appear to be within a reasonable distance for many Tongan adults, but a challenge is reaching the more than 50% of Tongan adults that do not know of or have financial access points nearby.

Figure 16: How do you usually travel to various access points?



Lack of identification may be a barrier to bank account ownership for some adults

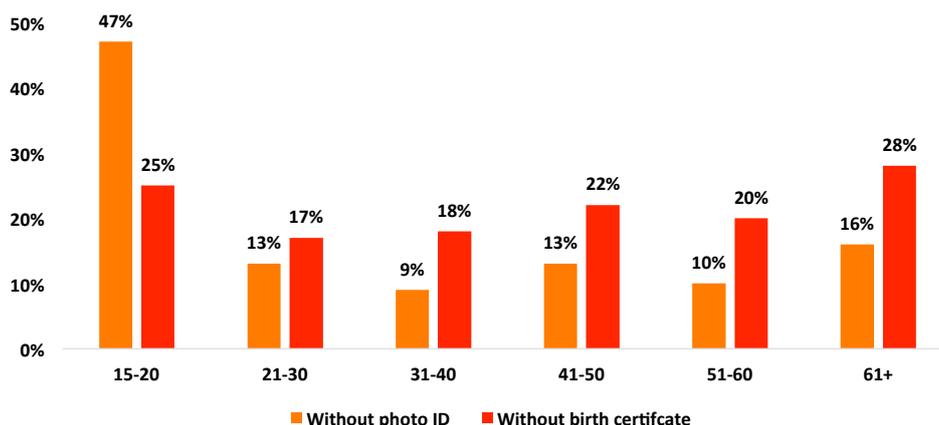
Lack of identification is a potential barrier to financial access as KYC/AML regulations often require formal identification. This is no different in Tonga. 19% of Tongan adults do not have a formal photo ID, and 21% of adults do not have a birth certificate (Figure 17). Furthermore, 7% of adults have neither a photo ID nor a birth certificate. According to legislation, in the absence of formal IDs, a reliable third party (bank staff, church minister, town officer) can vouch for a customer,¹² but it is unknown how widely this is known or used.

Figure 17: Percent of adults without formal identification



Not surprisingly, Tongan adults between the ages of 15-20 are more likely to report not having a photo ID relative to other age groups (Figure 18). National IDs are issued to citizens who are 21 years and above. Financial service providers can work with young Tongan adults as they navigate obtaining an ID and opening their first formal financial account.

Figure 18: Percent of adults without formal identification, by age bracket

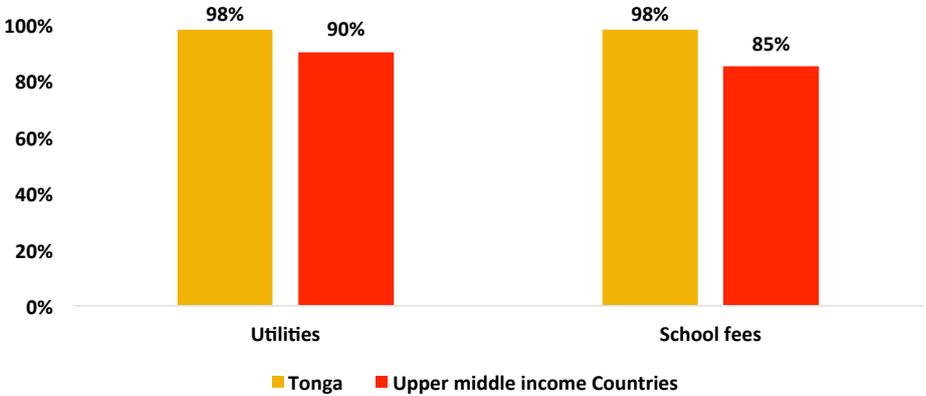


Major payments are primarily cash-based

Another potential barrier to financial inclusion in Tonga is the heavy reliance on cash payments. The majority of Tongan adults use cash to pay for utilities and school fees (Figure 19) and this rate is higher compared to other upper middle income countries. On average, 85% of adults pay school fees with cash in other upper middle income countries, but 98% of adults pay school fees in cash in Tonga. Expanding alternative payment channels and options could spur movement away from this reliance on cash.

¹² [http://www.reservebank.to/data/documents/Legals/Legislation/NRBT_MLPC_Regulations_2010\(v1\).pdf](http://www.reservebank.to/data/documents/Legals/Legislation/NRBT_MLPC_Regulations_2010(v1).pdf)

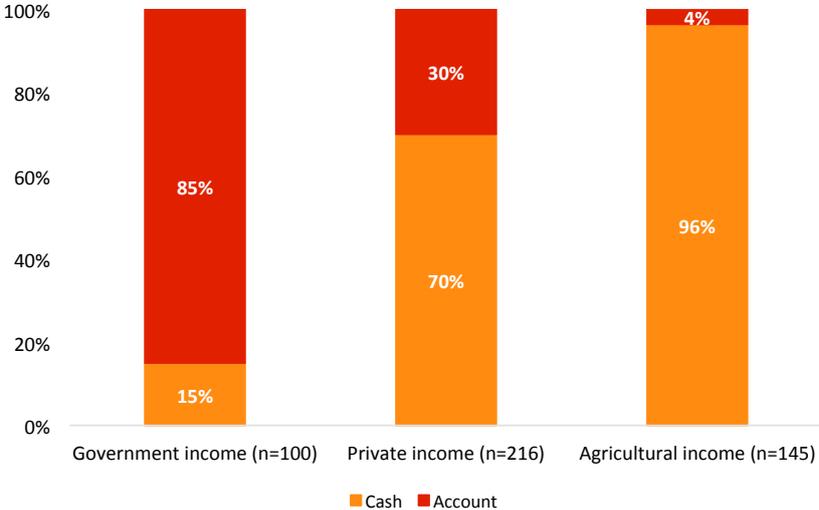
Figure 19: Cash payments for utilities and school fees in Tonga compared with other upper middle income countries



Source: World Bank Development Data, available at <http://databank.worldbank.org/data>

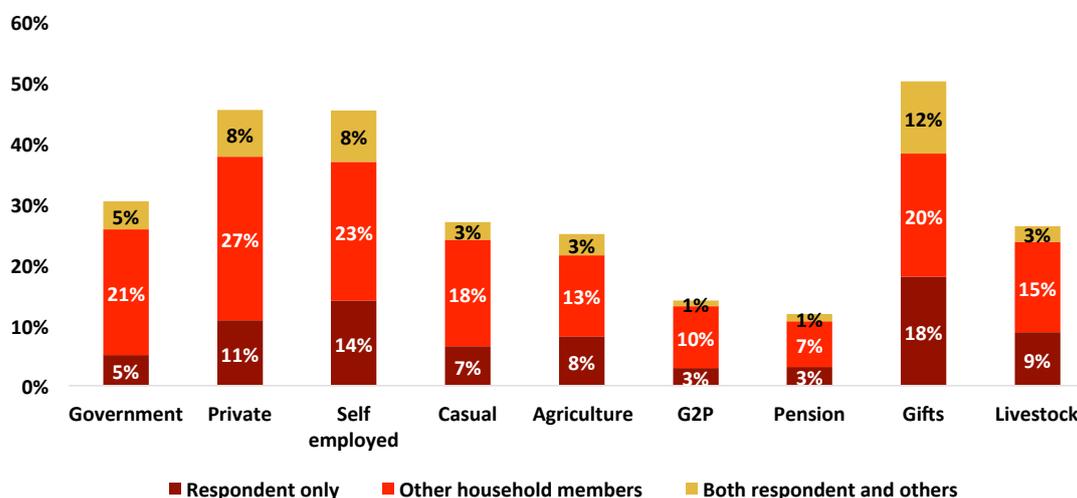
The prevalence of cash may be explained by vendors only accepting cash for payments. Another explanation for the prevalence of cash may be that the majority of adults receive income in cash with the exception of public sector workers. Even in the private sector, 70% of Tongan adults receive their salaries in cash (Figure 20). Meanwhile most public sector employees are paid directly via a bank account (85%).

Figure 20: Mode of income payments by employment type



While the survey did not collect information on the size of private firms, salary payments may present an opportunity to move towards formal financial inclusion. More than 40% of adults either received salaries from a formal employer or had another member of the household that received this (Figure 21). Figure 21 also shows that a large percentage of Tongan adults receive gifts as income. Gifts include remittances, which is another opportunity for formal financial inclusion, discussed in subsequent sections.

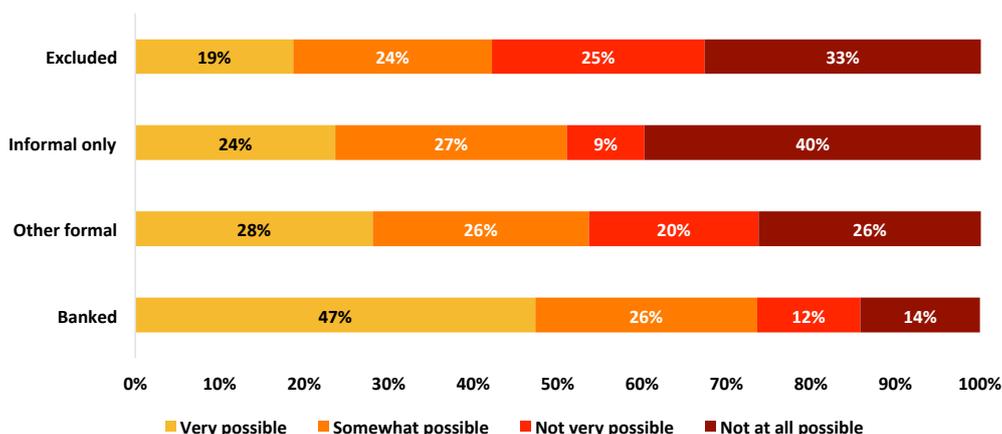
Figure 21: Income sources



Family relationships drive financial engagement

Tongan adults rely heavily on family or friends for financial needs. This reliance may slow financial inclusion as adults tend to look to social networks prior to considering savings or credit, for example. We see that across financial strands, approximately 50% or more of respondents said that it would very possible or somewhat possible for them to come up with TOP\$900 (USD \$391.30) within a month (Figure 22). However, the source of these funds is surprising.

Figure 22: Ability to come up with TOP \$900 (USD \$391.30) within a month



Across financial strands the majority of respondents cited family and friends as the main source of money for this hypothetical emergency. Only 34% of banked Tongan adults said they would get the money from savings (Figure 23).

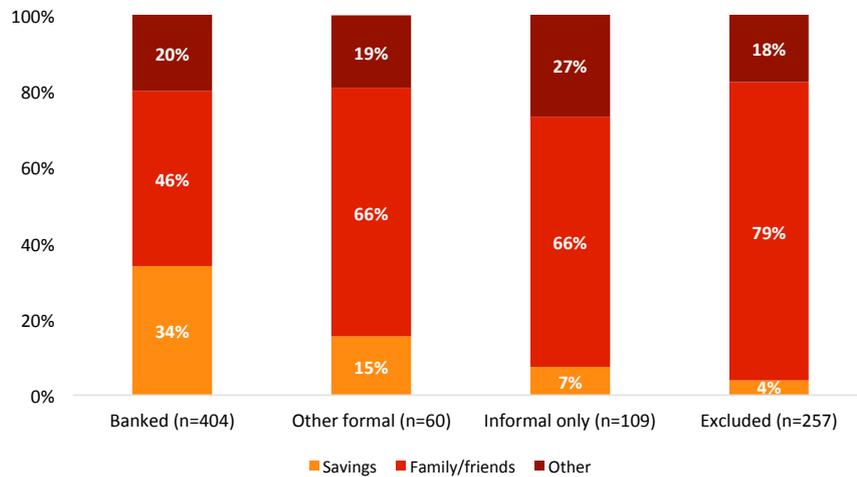
The reliance on family and friends is a testament to the ability to lean on social networks. But family and friends may not have always have funds, or family turmoil from lack of repayment may ensue.

As previous research has shown, in Pacific Island countries such as Tonga where formal social protections systems are largely absent or slowly developing, migration and remittances can perform a similar function informally.¹³ Migration, remittances and social networks provide a vital support network for many families in Tonga. Governments and financial service providers should more effectively plan and design policies that incorporate these relationships into policy and formal financial systems. In Tonga as of 2012 there is a social welfare policy for adults over 75 years.¹⁴ But as this policy disseminates and for adults that do not qualify for the welfare, migration will continue to play an instrumental role.

13 Brown, Richard PC, John Connell, and Eliana V. Jimenez-Soto. "Migrants' remittances, poverty and social protection in the South Pacific: Fiji and Tonga." Population, Space and Place 20.5 (2014): 434-454.

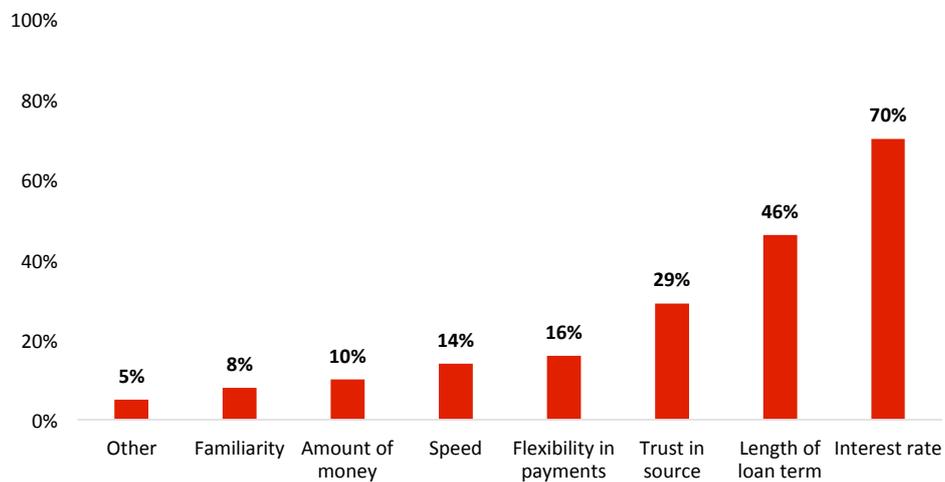
14 <http://www.nrbf.to/index.php/social-welfare>

Figure 23 : Emergency funding source by financial strand



The familiarity associated with social networks also appears to influence loan choices. Apart from self-reported sensitivity to interest rates, the next two important loan qualities are length of loan term (46%) and trust in the loan source (29%) (Figure 24). Borrowing from social networks potentially provides lower interest rates and more flexible repayment plans. But there are also greater risks: family members may not have funds available in time of need or if they themselves are cash-strapped.

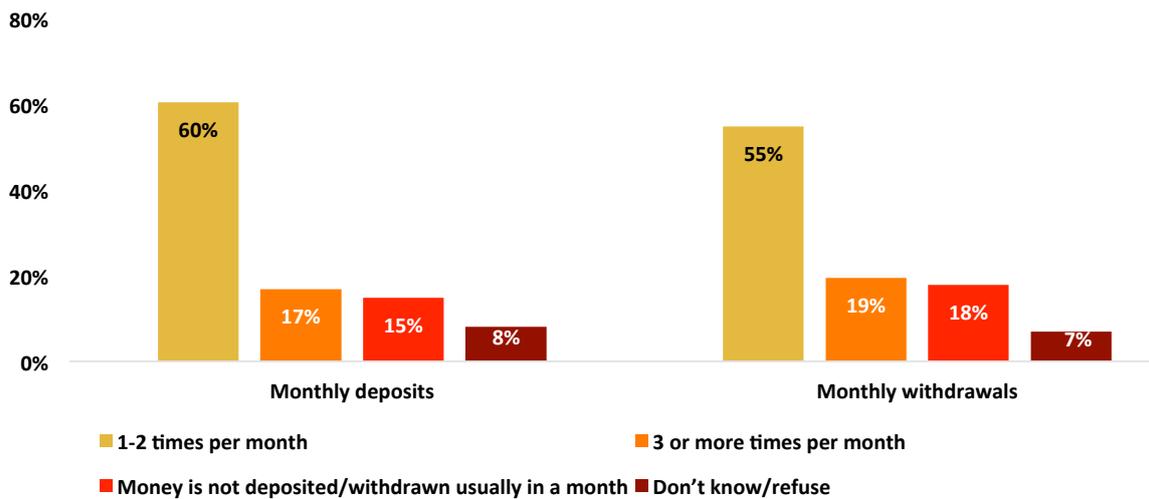
Figure 24: Most important loan qualities (multiple responses)



Bank account usage is related to Tongans' source of income

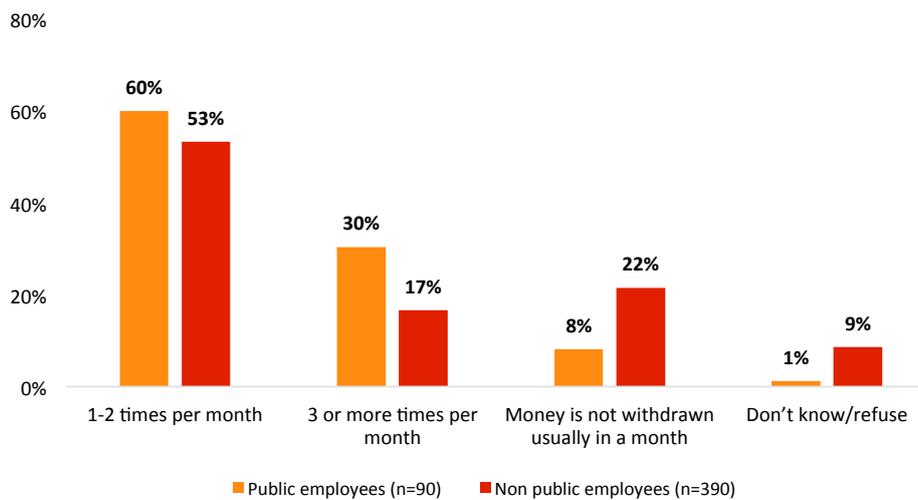
Withdrawal and deposit frequency sheds light on the usage of accounts held at formal financial institutions. Nearly 80% of banked Tongan adults report that in a normal month, money is deposited into their accounts at least once (Figure 25). For salaried employees that receive income into their accounts, this result is not surprising as salaries are usually paid fortnightly.

Figure 25: Deposit and withdrawal frequency from main account



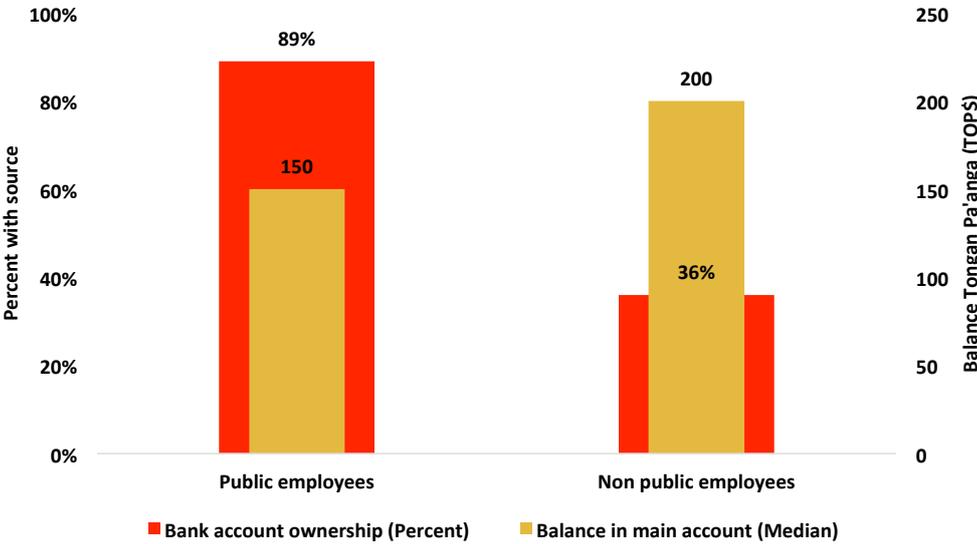
Bank account usage appears to be split between respondents that transact frequently and those that transact minimally. Breaking down account usage and balances, we see that banked public employees withdraw more frequently compared to banked nonpublic employees (Figure 26). This transaction behavior appears to affect balances as well (Figure 27¹⁵). Public sector employees were more likely to report having a bank account, but they withdraw their money more frequently and have lower account balances in their primary account compared to nonpublic sector employees.

Figure 26: Withdrawal frequency from primary account for banked public and non-publicly employed respondents



15 Non-publicly employed respondents include all banked respondents with employment types besides public employment

Figure 27: Bank account ownership and average balances in primary account for banked public and non-publically employed respondents



For example, 11% of government employees that receive salary into a bank account stated that they withdraw salary immediately. The remaining 89% withdraw the money throughout the course of the month.

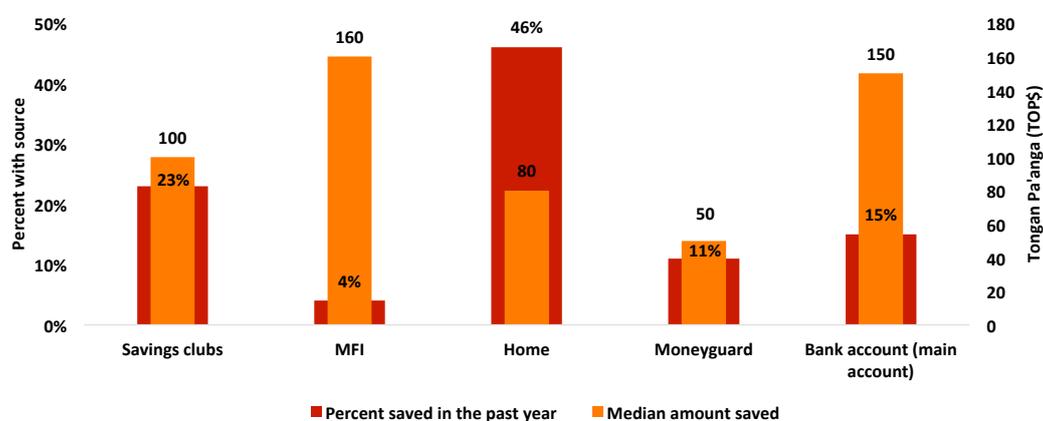
Tongan adults are predominantly savers, but not for long-term goals

Informal saving instruments are more prevalent than formal instruments

According to the DSS, 63% of Tongan adults saved in the past year, but the majority did so using informal instruments. Saving at home (46% of all respondents) is most popular, followed by the use of savings clubs (23%). Saving at home is a popular savings destination for both banked and unbanked adults.

Even though informal instruments dominate in terms of the proportion of the population using each instrument, the median amount saved in formal savings instruments is considerably higher compared to that in informal instruments (Figure 28).

Figure 28: Percent of Tongan adults with various savings source and median balance in each¹⁶



Tongan adults have a variety of savings instruments that they use frequently (Table 3). Apart from mobile banking, the majority of Tongan adults with a given savings instrument have saved in that instrument in the past 30 days.

Table 3: Savings frequency across non-bank savings instruments

	Past 30 days	2-3 months	3-6 months	6-12 months
Savings club (n=255)	82%	5%	4%	8%
Family (n=75)	40%	24%	13%	16%
MFI (n=54)	79%	17%	4%	0%
Home (n=544)	76%	13%	5%	6%
Moneyguard (n=114)	66%	20%	5%	6%
Superannuation fund (n=38)	66%	9%	8%	6%
Mobile banking (n=126)	19%	68%	4%	9%

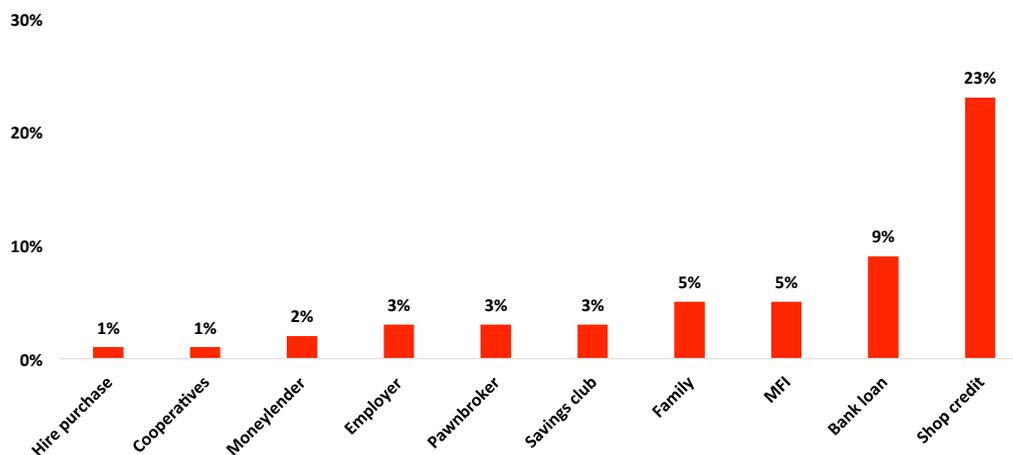
Tongan adults do not appear to be heavy borrowers: only 37% took credit in the past year. Credit from shops is the most frequently accessed source of credit, with 23% of Tongan adults having taken credit from a small store or shop in the past year (Figure 29); 9% of Tongan adults have borrowed from a bank in the past year. Credit amounts varied greatly according to the source. The median amount for shop credit was TOP\$50 (USD \$21.74), compared with TOP\$900 (USD \$391.30) for credit from an MFI.

Shop credit is built on relationships between the borrower and store owner. A shop owner decides to whom to extend credit, and often these amounts are small.¹⁷

¹⁶ MFI refers to the South Pacific Business Development (SPBD)

¹⁷ Sushmita Meka, and Justin Grider. De Fiado En Fiado: Credit to Bridge Expenses in Mexican Financial Diaries Households. Publication. Print. March 2016. <http://financialdiaries.com/wp-content/uploads/2016/03/DE-FIADO-English-compressed.pdf>

Figure 29: Percent of respondents that have borrowed from various credit sources in the past year



We examined the most frequent savings and credit combinations utilized by Tongan adults and find that clear patterns emerge (Figure 30). The majority of Tongan adults that report saving have only one savings instrument—savings in the house. And the majority of Tongan adults who report taking credit have only one credit source—credit from the store. As Figure 30 shows, Tongan adults that do have multiple savings and/or credit instruments at once mix an informal instrument such as borrowing from the store as well as the bank (3% of adults that borrowed in the previous year).

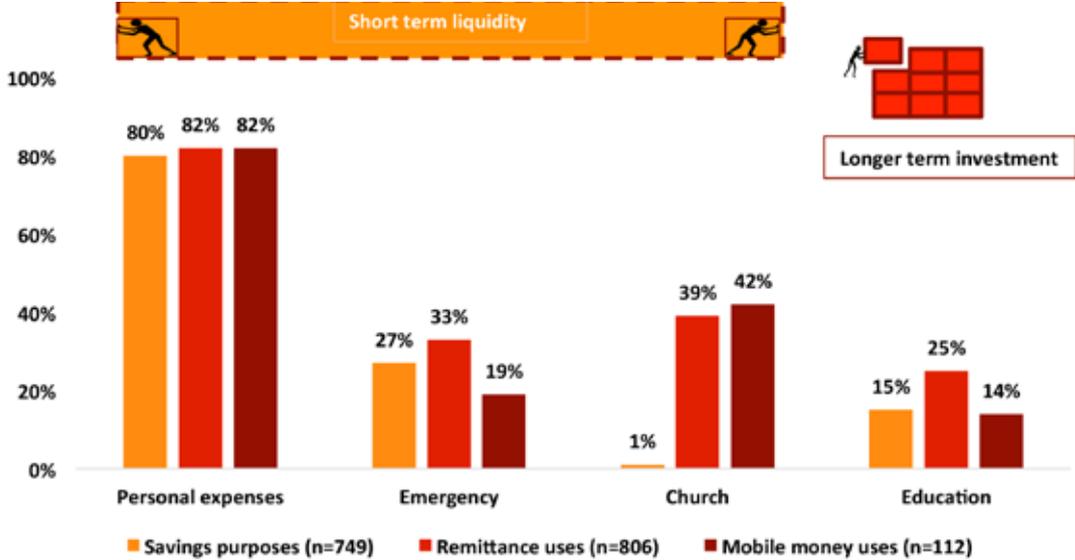
Figure 30: Top savings and credit combinations

		Top savings combinations	Top credit combinations
Household 	1 st	 29%	 37%
Bank 	2 nd	  9%	 12%
Savings clubs 	3 rd	 8%	 5%
MFI 	4 th	  5%	  3%
Store credit 	5 th	 5%	  3%

Savings and remittance purposes center on short term goals rather than longer term investments

Though 63% of Tongan adults reported saving money in the past 12 months, savings purposes are geared towards every day expenses (80%) and for emergencies (27%). As Figure 31 shows, both savings and transfers received through mobile money or from remittances center on these short term goals. In addition, religion is a large part of life in Tonga, and life actively revolves around it. We can see this devotion to the church as Tongan adults reported donations to the church as the second most popular use of remittances and mobile money transfers after personal expenditures.

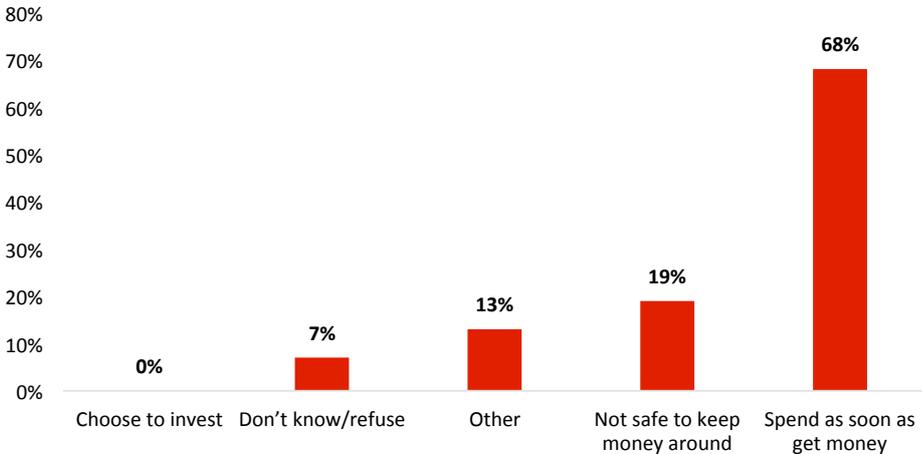
Figure 31: Savings purposes, remittance and mobile money uses (Multiple responses)



Few respondents reported long term savings goals, such as saving for education, housing, or purchase of assets. Only 15% of Tongan adults report saving for education purposes.

Respondents that are not currently saving cite “Spending as soon as they get money” (68%) as the main reason for not doing so (Figure 32). Although the availability of money influences savings habits, spending money as soon as one gets it is different from not having enough money to save. Banks such as BSP currently offer a “bonus savings account” which has tiered interest plans to help clients achieve personal savings goals.¹⁸ These accounts offer a better return but penalize withdrawals and limit the accessibility of funds, which might explain why take-up/usage in the survey is low.

Figure 32: Self-reported reasons for not saving



18 <http://www.bsp.to/Personal/Accounts/Savings-Accounts/Plus-Saver-Account.aspx>

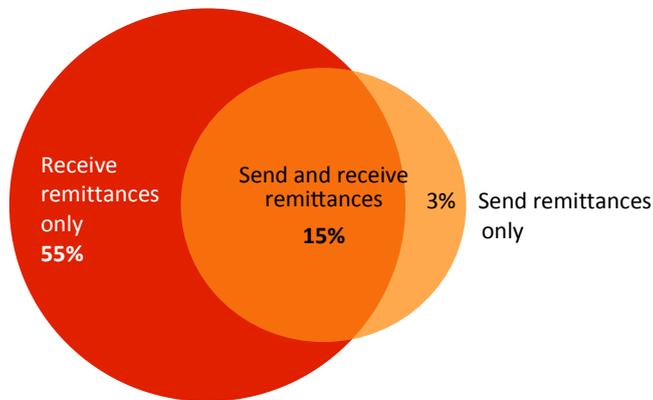
Nearly three-quarters of adults receive international remittances

Remittances services are used by many who have no other relationship with formal financial services

According to a World Bank study, Tonga is among the top remittance-receiving countries in the world.¹⁹ Remittances accounted for up to 28% of Tonga’s GDP in 2009. According to the DSS survey, nearly three-quarters of Tongan adults (70%) reported receiving remittances in the past year (Figure 33). Additionally, 16% of adults reported remittances as their main income source.

The overwhelming majority of remittances come from abroad (93%). Meanwhile, another 5% of adults received remittances from both abroad and within Tonga. The percentage of adults receiving domestic remittances in Tonga is less than that of other upper middle income countries (18%).²⁰ International remittances mostly came from three countries: New Zealand (57%), Australia (43%) and the United States (37%).

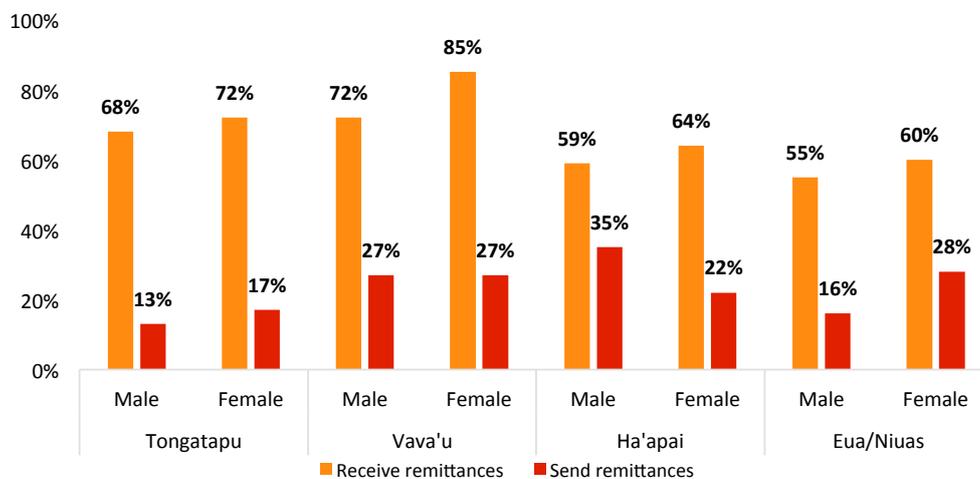
Figure 33: Percentage of Tongan adults receiving and sending domestic and international remittances



Analyzing remittance results by island and gender, interesting patterns emerge.

Figure 34 shows that both men and women in Ha’apai and in Eua/Niuas²¹ are less likely to report receiving remittances, but this finding is not statistically significant; the differences across islands are statistically significant. Meanwhile women in Vava’u are more likely to receive remittances. The other differences presented below are suggestive but the figures are not statistically significant.

Figure 34: Remittance receivers/senders by gender and island



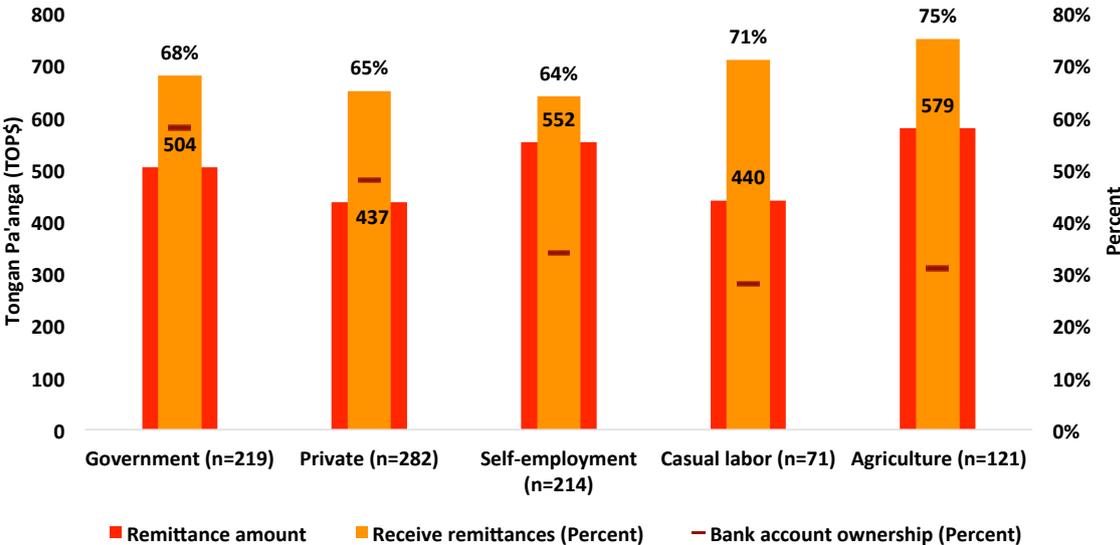
19 Ratha, Mohapatra and Silwal. Migration and Remittances Factbook 2011. World Bank. Accessed 05 May. 2016.

20 World Bank Data. Global Findex. Accessed 05 May. 2016.

21 Eua and Niuas were combined because of size

As Figure 35 shows, Tongan adults across income sources not only receive remittances but receive similar remittance amounts. Bank account ownership, however (shown by the dot in Figure 35), differs by income source.

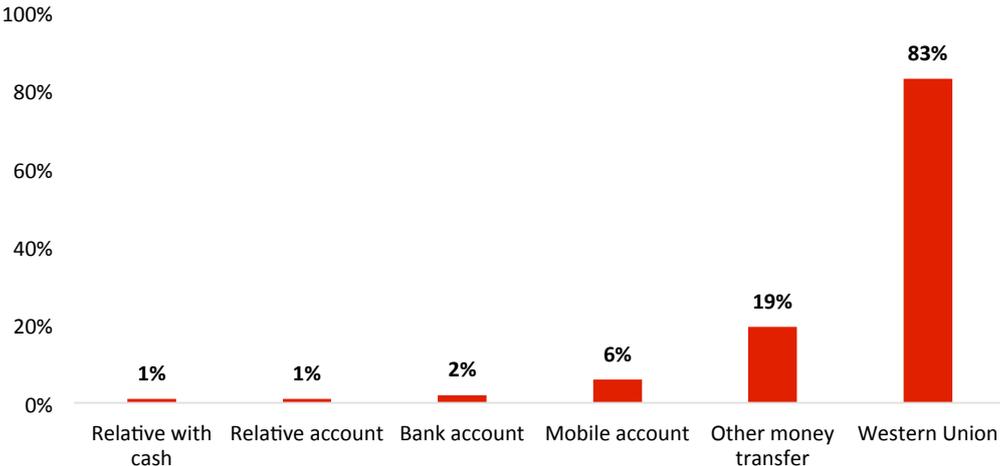
Figure 35: Remittance receivers and amount by main income source



Nearly all remittances are sent through Western Union

The majority of Tongan adults used Western Union to receive remittances: 83% of remittances are sent through Western Union compared with only 2% sent through a bank account (Figure 36).

Figure 36: Remittance channel from abroad (Multiple responses)



Receiving remittances via Western Union carries visible and invisible costs for Tongan adults.

Figure 37 breaks down the likely costs incurred from sending approximately TOP\$300 (USD \$130.43) from New Zealand to Tonga. Fees from Western Union, currency fluctuations and the cost to travel to a Western Union location may all chip away at the final amount of money that a person receives in hand.²² Tongan adults are likely losing over 25% of the original remittance amount because of these costs.

Figure 37: Example of remittance charges (in TOP\$)²³



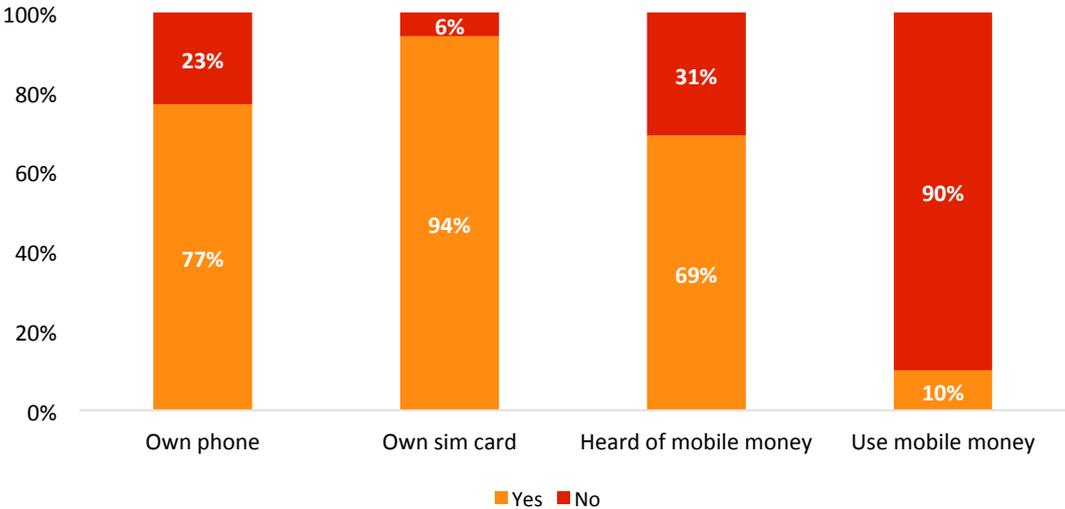
²² Using the survey result, we took an average of the cost from respondent home to a bank, which is 11.8 minutes. We multiplied this number by two to find the cost of a round trip.

²³ Numbers come from the cost of sending NZD 200 via Western Union on Tonga http://www.sendmoneypacific.org/compare/list/6/new_zealand-to-tonga-200.html

Tongan adults are active mobile phone users but not with mobile money

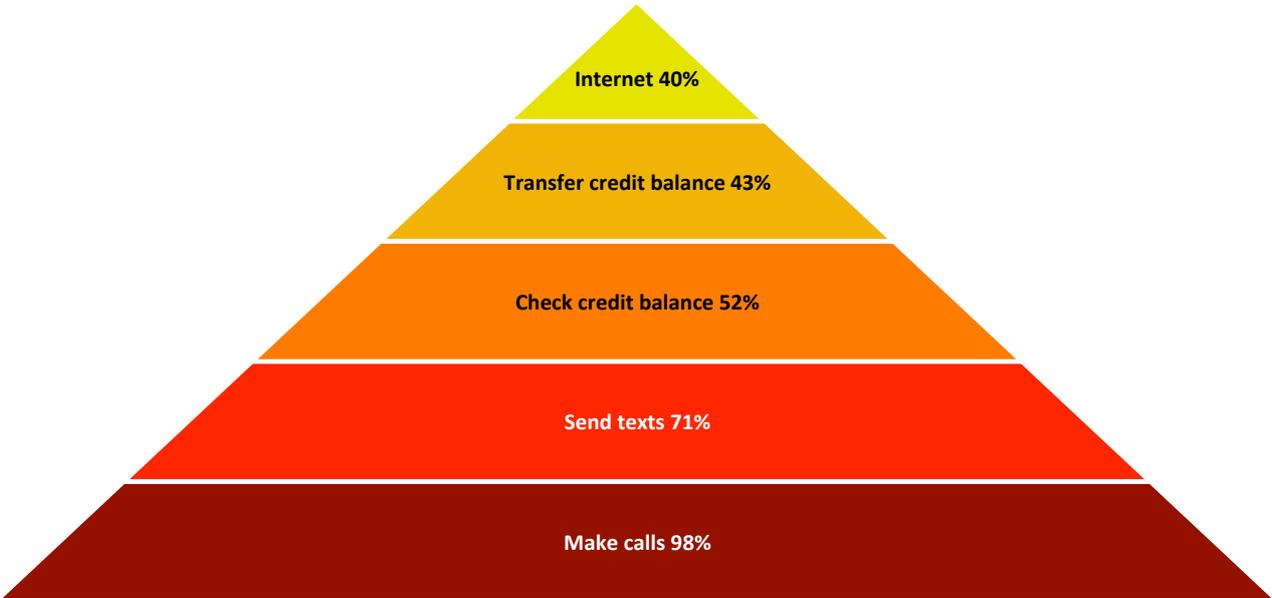
Almost 80% of Tongan adults own a mobile phone, and over 90% own a SIM card (Figure 38). However, there is a large drop-off with mobile money. Only 10% of Tongan adults have a mobile money account (such as Digicel Mobile Money) and approximately 15% of Tongan adults that have heard of mobile money currently use it.

Figure 38: Mobile phone ownership and mobile money usage



This is surprising given the reported uses of mobile phones in Figure 39, which demonstrate that Tongan adults appear comfortable using their mobile phones. Figure 39 shows the reported uses for a mobile phone by respondents. Respondents were allowed to select multiple answers, and we can see that use cases center around making calls and texts. For those with mobile phones, 62% even reported texting every day.

Figure 39: Reported mobile phone uses (Multiple responses allowed)



Almost 90% of Tongans do not have insurance

The majority of Tongan adults know about insurance but do not have it. Only 13% of Tongan adults reported having insurance, while 64% know what insurance is but don't have it (Figure 40). Insurance ownership was spread across employment types. Only 36% of Tongan adults that work for the government claimed to have insurance (Figure 41).

Figure 40: Insurance usage

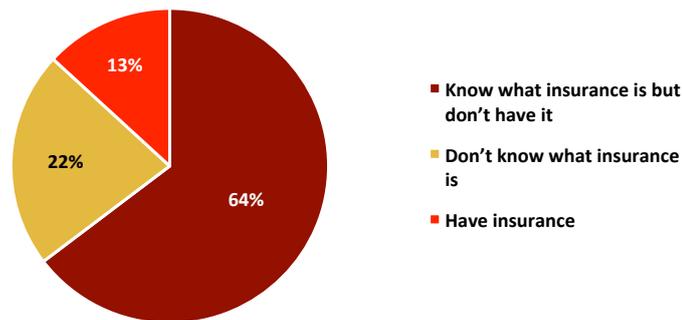
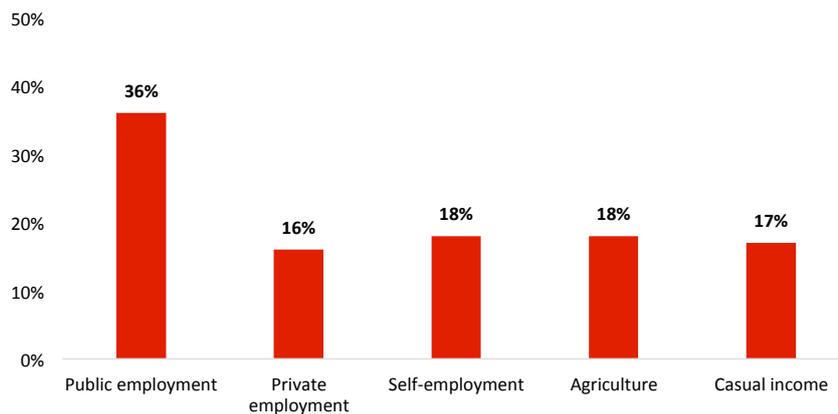
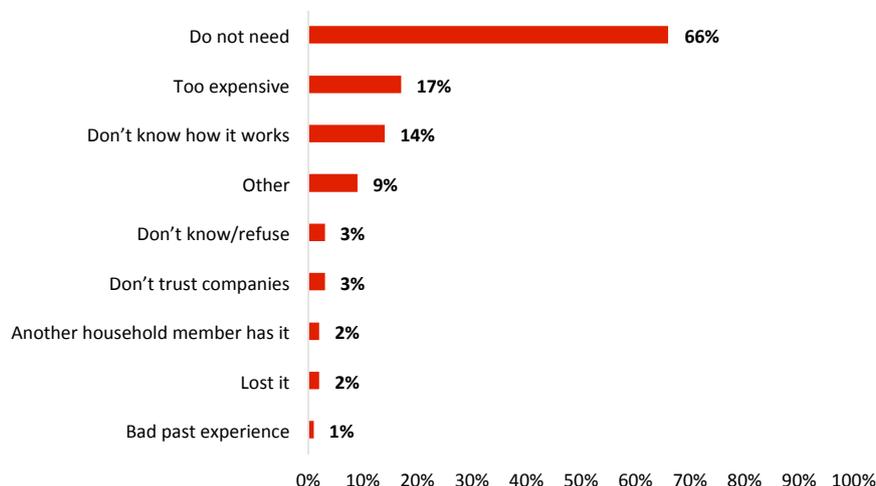


Figure 41: Insurance usage across income sources



Lack of insurance is not surprising given the financial portfolios of Tongan adults. As shown in the sections above, Tongan adults rely heavily on informal financial services and social networks for financial needs. The majority of Tongan adults that save do so for everyday expenses. Insurance has a long term time horizon, and may not register as an immediate need compared with shorter-term consumption requirements. The main reported reason for not having insurance is the lack of need (66%) (Figure 42).

Figure 42: Reasons for not having insurance (multiple responses)



Next steps for understanding financial inclusion in Tonga

Tonga has similar levels of account ownership to other Pacific Island countries but lags behind other upper-middle income countries. The survey finds that 34% of Tongan adults are excluded from financial services—formal or informal.

This section presents some preliminary suggestions for the NRBT and other local stakeholders for understanding the drivers of not only account ownership but also full, meaningful financial inclusion.

In the survey, financial access was strongly linked with formal employment, but unevenly: 85% of public sector employees receive income through bank accounts, whereas only 30% of private sector employees receive income this way. We do not know if these public sector employees had accounts prior to their employment (89% of respondents who work in the public sector are banked, compared with only 62% of privately employed adults), but in other countries employers have been powerful forces in catalyzing account opening and usage. As research for the *Better Than Cash Alliance* documents, large private sector employers in the Philippines tend to require their employees to open accounts with a specific bank.²⁴ *The Alliance* has developed a toolkit²⁵ for businesses to evaluate the case for these kinds of policies. Incentives for businesses to digitize their relationships with their suppliers and vendors can also have powerful impacts on account opening and usage, as seen in Nigeria,²⁶ a country much larger than Tonga but with an average income that is not too dissimilar.

While the DSS looked at the usage of financial services by individuals in Tonga, stakeholders could further investigate the incentives of private sector businesses: their current options for financial products and how formal financial services could address businesses' needs to pay their employees and supply chain partners. Financial service providers may find that this is a valuable market, particularly for workers who receive a regular salary. The NRBT could take the lead in helping the market understand why private sector employers continue to pay in cash or cheque and how they can be encouraged to drive formal account opening.

Another significant finding of the DSS was that many Tongans save but do so for short-term needs. We do not know if this behavior is related to a lack of suitable formal financial products for longer-term, goal-oriented saving; it could also be linked to Tongans' perceptions of the financial risks they face and their perceived need to have cash on hand. Local stakeholders may want to better understand what drives this savings preference. If financial service providers can bring down fees for some accounts (20% of Tongan adults with a bank account said that they had to pay a fee to open the account) and provide the convenience and familiarity of informal instruments with the security and opportunity to grow through formal channels, Tongan adults might be more inclined to open an account and save at banks and other formal institutions.

Finally, remittances play a vital role in financial lives of Tongan adults: 70% of Tongan adults received remittances last year and 16% of Tongan adults reported remittances as their primary household income source. Currently, the overwhelming majority of remittances are sent via Western Union. Remittance senders and recipients must pay fees, deal with the risk of currency fluctuations and travel to and from Western Union locations. Even banked Tongans use Western Union, meaning those senders and recipients must travel even more to withdraw or deposit the funds. These steps, and their accompanying costs, reduce the final amount of money that remittance recipients have to either spend or save.

The DSS cannot tell us if there is a market opportunity for other players besides Western Union. But the extent of dominance suggests the NRBT and other local stakeholders could try to learn more about how existing money transfer options are meeting the needs of everyday Tongans. Many Tongan adults that are today excluded from the formal financial system are nevertheless receiving remittances, but these funds are not directly helping these people access other financial services like earning interest on their savings, keeping their funds safe, taking credit and building their credit worthiness, or being able to make digital payments with that money without the risks of using cash. These are all potentially revenue-generating services for other financial services providers. Bank and mobile money agents can penetrate Tonga's outer islands to connect Tongans adults with financial services. We have seen that these agents are not well known, but do lower transportation costs to access points.

The DSS was a first step in identifying the state of financial inclusion in Tonga, particularly the access and usage dimensions, from the perspective of Tongan individuals. The three suggestions presented above, as well as the insights captured in the rest of this report, demonstrate the value of understanding the demand-side perspective. Hopefully they also make the case to policymakers and industry for understanding that perspective on a deeper level and on an ongoing basis.

24 See James Hokans (2014), *Leaving Money on the Table: Corporate and SME Experiences of Digitizing Business Payments in the Philippines*, Better Than Cash Alliance, available at <https://www.betterthancash.org/tools-research/case-studies/leaving-money-on-the-table-corporate-and-sme-experiences-of-digitizing-business-payments-in-the-philippines>.

25 See David Porteous (2015), *Business Toolkit*, Better Than Cash Alliance, available at <https://www.betterthancash.org/tools-research/toolkits/business>.

26 See Brian Loeb (2015), *The response of large corporates and their value chains to government policies to shift to digital payments: Nigeria's "Cashless" policy*, Better Than Cash Alliance, available at <https://www.betterthancash.org/tools-research/case-studies/nigerias-cashless-policy>.

Annex A: Regression Results

Table 4: Regression results

VARIABLES	(1) Logit Have formal bank account	(2) Logit Saved in a formal bank account in the past 12 months	(3) Regression Deposit frequency (Ordinal scale)	(4) Regression Withdrawal frequency (Ordinal scale)
Age	0.02*** (0.01)	0.01*** (0.00)	0.00 (0.02)	-0.01 (0.01)
Age squared	-0.00*** (0.00)	-0.00** (0.00)	-0.00 (0.00)	0.00 (0.00)
Female	0.02 (0.05)	0.03 (0.02)	0.19 (0.12)	-0.02 (0.12)
Household head	0.03 (0.05)	-0.01 (0.03)	0.24* (0.15)	0.07 (0.13)
Log income	0.04*** (0.01)	0.01 (0.01)	0.05 (0.03)	-0.02 (0.03)
Education level	0.15*** (0.03)	0.03* (0.02)	0.07 (0.07)	0.01 (0.06)
English literacy	0.12** (0.05)	0.03 (0.03)	0.15 (0.13)	0.20 (0.14)
Government income	0.48*** (0.06)	0.15*** (0.06)	-0.19 (0.19)	0.36** (0.14)
Private income	0.17*** (0.06)	0.06 (0.04)	-0.08 (0.16)	0.15 (0.14)
Self-employment	0.11** (0.06)	0.01 (0.03)	-0.01 (0.12)	-0.01 (0.12)
Agriculture	-0.04 (0.06)	0.01 (0.03)	0.18 (0.14)	-0.20 (0.15)
Gifts	-0.01 (0.05)	0.01 (0.02)	-0.04 (0.11)	-0.14 (0.11)
Receive remittances	0.14*** (0.05)	0.06*** (0.02)	0.27* (0.14)	0.32** (0.14)
Tongatapu	-0.03 (0.08)	-0.19*** (0.04)	0.10 (0.22)	0.43* (0.22)
Vava'u	0.09 (0.10)	-0.00 (0.03)	0.40* (0.23)	0.44* (0.25)
Ha'apai	-0.23*** (0.07)	-0.09*** (0.02)	-0.18 (0.27)	0.59** (0.28)
Constant			1.36*** (0.46)	1.73*** (0.42)
Observations	1,017	1,017	407	390
R-squared			0.09	0.10

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Annex B: Financial Inclusion Indicators

Table 5: PIRI Demand-side Indicators

ACCESS INDICATORS			
			<i>Confidence interval</i>
3.4 % of adults with a mobile phone subscription		77%	[74%, 80%]
4.3. Average cost of traveling to the nearest access point (public transit fee or gas costs), converted to USD	Bank branch	TOP 11.8	TOP [10.2,13.4]
	ATM	TOP 10.4	TOP [8.9,11.9]
	Bank agent	TOP 8.7	TOP [5.6,11.7]
	Mobile money agent	TOP 13.1	TOP [8.5,17.7]
4.4. Average time of traveling to the nearest access point in minutes	Bank branch	18.9	[17.4,20.4]
	ATM	23.8	[18.5,29.2]
	Bank agent	10.6	[8.7,12.5]
	Mobile money agent	18.3	[15.7,20.8]
4.5. Average time waiting to be served when opening a deposit account (in hrs.)		.29	[.26,.31]
4.7. Percentage of adults reporting that they do not have all identification documents required to open a basic account		1.3%	[.00,.02]

Table 6: GPFI indicators

GPFI Indicators	Proportion	95% CI
Formally banked adults: % of adults with an account at a formal financial institution	48.0%	[44.5%,51.5%]
Adults with credit from regulated institutions (bank and credit union only)	9.1%	[7.2%,11.1%]
Adults with credit from regulated institutions (bank, credit union, finance company, or MFI)	13.6%	[11.3%,15.9%]
Adults with insurance	13.4%	[11.1%,15.7%]
Saved at a financial institution in the past year (bank, credit union, MFI)	18.2%	[15.6%,20.8%]
Remittances (send or receive)	73.2%	[70.1%,76.3%]

Annex C: Detailed Survey Results

Table 7: Inclusion categories

Financial inclusion category	%	95% CI
Banked (n=480)	40.8%	[37.5%,44.3%]
Other formal (n=130)	10.8%	[8.9%,13.1%]
Informal only (n=158)	13.9%	[11.7%,16.4%]
Excluded (n=372)	34.5%	[31.2%,37.9%]
N=1,140		

Table 8: Bank account types and motivation for opening account

Does anyone in your household apart from you currently have any type of account with a bank?		95% CI
Yes (n=401)	28.8%	[25.9%,31.9%]
No (n=739)	71.2%	[68.1%,74.2%]
N=1,140		
Have you, personally, ever had any type of account with a bank?		95% CI
Used to have, but no longer have (n=69)	6.2%	[4.7%,7.9%]
I have this now (n=480)	40.8%	[37.5%,44.3%]
Never had (n=591)	53.0%	[49.6%,56.5%]
N=1,140		
How many bank accounts do you have?		95% CI
1 (n=373)	75.8%	[70.7%,80.2%]
2 (n=92)	21.1%	[16.9%,26.0%]
3 (n=15)	3.2%	[1.7%,5.8%]
N=480		
In which bank is your account? (Account 1)		95% CI
BSP (n=152)	31.6%	[26.8%,36.9%]
ANZ (n=96)	10.1%	[16.2%,24.7%]
TDB (n=82)	14.5%	[11.1%,18.6%]
MBF (n=139)	30.8%	[26.0%,36.0%]
Other (n=11)	3.1%	[1.6%,5.8%]
N=480		
What type of account is this? (Account 1)		95% CI
Current account (n=205)	42.5%	[37.2%,47.9%]

Savings account (n=250)	51.8%	[46.3%,57.2%]
Term deposit (n=17)	4.6%	[2.6%,7.8%]
Other (n=8)	1.2%	[0.5%,2.6%]
N=480		
What is the main reason that you opened this account? (Account 1)		95% CI
To receive a payment (salary, remittances, other) (n=91)	21.9%	[17.6%,27.1%]
To keep my money safe (n=355)	71.7%	[66.4%,76.5%]
To receive government benefits (n=7)	1.4%	[0.6%,3.4%]
To get a loan (n=7)	1.4%	[0.7%,2.8%]
Other (n=13)	3.1%	[1.7%,5.7%]
Don't know/refuse (n=3)	0.4%	[0.0%,1.5%]
N=480		
In which year did you open this account? (Account 1)		95% CI
2000 or earlier (n=40)	9.9%	[6.7%,14.5%]
2001-2010 (n=107)	26.9%	[22.1%,32.4%]
2011 (n=17)	3.9%	[2.3%,6.7%]
2012 (n=30)	7.1%	[4.6%,10.8%]
2013 (n=38)	9.3%	[6.3%,13.6%]
2014 (n=53)	13.7%	[10.1%,18.2%]
2015 (n=119)	29.2%	[24.2%,34.7%]
N=404		

Table 9: Documentation

Do you currently have a birth certificate?		95% CI
Yes (n=884)	76.9%	[73.8%,79.7%]
No (n=241)	21.3%	[18.6%,24.3%]
N=1,140		
7.2 Do you currently have a photo ID?		95% CI
Yes (n=943)	80.7%	[77.7%,83.4%]
No (n=197)	19.3%	[16.6%,22.3%]
N=1,140		
Where did you open this account? (Account 1)		95% CI
Bank branch (n=430)	99.4%	[97.7%,99.7%]
Other (n=2)	0.6%	[0.1%,2.3%]
N=432		

Was a minimum balance required to open the account? (Account 1)		95% CI
Yes (n=281)	51.8%	[46.3%,57.2%]
No (n=161)	37.9%	[32.7%,43.4%]
Don't know (n=38)	10.3%	[7.2%,14.6%]
N=480		

Table 10: Constraints to access

	Mean	95% CI
Cost to bank branch (TOP)	11.8	[10.2,13.4]
Time to bank branch (min)	18.9	[17.4,20.4]
Cost to ATM (TOP)	10.4	[8.9,11.9]
Time to ATM (min)	23.8	[18.5,29.2]
Cost to bank agent (TOP)	8.7	[5.6,11.7]
Time to bank agent (min)	10.6	[8.7,12.5]
Cost to bank mobile money agent (TOP)	13.1	[8.5,17.7]
Time to mobile money agent (min)	18.3	[15.7,20.8]

Table 11: Account usage

What is the main reason for opening the account (Account 1):		95% CI
To keep money in a safe place (n=355)	71.7%	[66.4%,76.5%]
To receive a payment (salary, remittance) (n=91)	21.9%	[17.6%,27.1%]
To receive government benefits (n=7)	1.4%	[0.6%,3.4%]
To get a loan (n=11)	1.4%	[0.7%,2.8%]
Other (n=13)	3.1%	[1.7%,1.5%]
N=480		
In the past 12 months, have you borrowed money from any of these banks?		95% CI
Yes (n=116)	21.4%	[17.3%,26.0%]
N=480		
In a typical month, how many times is money deposited into this account (by you or others) (Account 1)?		95% CI
1 - 2 times per month (n=294)	60.4%	[54.9%,65.6%]
3 or more times per month(n=68)		
Money is not deposited in a normal month (n=80)	16.8%	[12.9%,21.6%]

Don't know/refuse (n=38)	8.0%	[5.5%,11.6%]
N=480		
In a typical month, how many times is money withdrawn from this account (by you or others) (Account 1)?		95% CI
1 - 2 times per month (n=273)	54.8%	[49.3%,60.1%]
3 or more times per month(n=79)	19.5%	[15.4%,24.3%]
Money is not withdrawn in a normal month (n=100)	18.7%	[14.8%,23.5%]
Don't know/refuse (n=28)	7%	[4.6%,10.6%]
N=480		

Table 12: Mobile money

Do you, yourself, have a mobile phone?		95% CI
Yes (n=896)	77.1%	[73.9%,79.9%]
No (n=244)	22.9%	[20.1%,26.0%]
N=1,140		
Do you have an active SIM card?		95% CI
Yes (n=921)	93.8%	[92.6%,95.4%]
No (n=54)	6.1%	[4.4%,8.3%]
N=977		
How many active SIM cards do you have?		95% CI
1 (n=814)	88.9%	[86.3%,91.2%]
2 (n=103)	10.5%	[8.4%,13.1%]
3 or more (n=4)	0.5%	[0.0%,1.7%]
N=921		
How often do you use a phone to send text messages?		95% CI
Daily (n=386)	61.8%	[57.4%,66.1%]
A few times a week (n=173)	23.4%	[19.9%,27.4%]
About once a week (n=55)	8.2%	[5.9%,11.2%]
Once a month or less (n=46)	6.6%	[4.7%,9.1%]
N=660		
Have you HEARD about sending and receiving money using your phone?		95% CI
Yes (n=787)	68.9%	[65.6%,72%]
No (n=353)	31.1%	[27.8%,34.2%]
N=1,140		
Do you, personally, have a mobile money account?		95% CI

Yes, currently (n=126)	14.6%	[11.9%,17.8%]
No, never had (n=645)	82.9%	[79.5%,85.8%]
No, but used to have (n=16)	2.5%	[1.4%,4.5%]
N=787		
In the last 12 months, have you used a mobile money account?		95% CI
Yes, to send and receive (n=29)	18.8%	[12.1%,28.0%]
Yes, to receive only (n=83)	67.7%	[57.0%,76.8%]
Yes, to send only (n=3)	4.3%	[1.4%,12.8%]
No, not in the past year (n=10)	8.7%	[4.1%,17.5%]
Don't know/refuse (n=1)	0.1%	[0.0%,3.5%]
N=126		
When was the last time you sent money through Digicel Mobile Money (even using someone else's account)?		95% CI
In the past 30 days (month) (n=6)	17.1%	[6.3%,39.0%]
2 - 3 months ago (n=5)	16.9%	[5.7%,40.4%]
3 - 6 months ago (n=15)	46.4%	[25.9%,68.3%]
6 - 12 months ago (n=6)	19.6%	[7.8%,41.5%]
N=32		
When was the last time you received money through Digicel Mobile Money or a similar service?		95% CI
In the past 30 days (month) (n=32)	31.9%	[22.0%,43.7%]
2 - 3 months ago (n=14)	11.3%	[6.1%,19.9%]
3 - 6 months ago (n=30)	21.3%	[13.8%,31.5%]
6 - 12 months ago (n=36)	35.5%	[25.3%,47.2%]
N=112		

Table 13: Remittances

Do you have any relatives or acquaintances living elsewhere (in Tonga or abroad) that sent you money in the past 12 months?		95% CI
Yes (n=826)	70.3%	[66.9%,73.4%]
No (n=311)	29.5%	[26.4%,32.8%]
Don't know/refuse (n=3)	0.0%	[0.0%,0.7%]
N=1,140		
Is the money sent from...?		95% CI
Abroad (n=742)	92.9%	[90.8%,94.6%]

Another part of Tonga (n=19)	2.3%	[1.3%,4.1%]
Abroad and Tonga (n=64)	4.7%	[3.5%,6.2%]
N=825		
How is the money from abroad usually sent to you? (Multiple responses)	Percent of cases	
Own bank account (n=15)	1.8%	
Own Digicel Mobile Money account (n=45)	5.9%	
Western Union (n=674)	83.0%	
Other money transfer (n=145)	19.5%	
Through a relative or friend (by cash) (n=10)	1.2%	
Through a relative or friend (using the relative's mobile money or bank account) (n=1)	0.1%	
Other (specify) (n=3)	0.3%	
Don't know/refuse (n=2)	0.3%	
N=806		
How is the money from elsewhere in Tonga usually sent to you? (Multiple responses)	Percent of cases	
Own bank account (n=3)	5.3%	
Mobile account (n=7)	10.6%	
Western Union (n=55)	60.0%	
Other money transfer (n=10)	14.9%	
Through a relative or friend (by cash) (n=4)	3.6%	
TDB money transfer (n=5)	4.6%	
Other (n=1)	2.4%	
N=83		
About how often do you usually receive this money from abroad?		95% CI
Weekly (n=45)	4.9%	[3.6%,6.9%]
Fortnightly (n=82)	9.0%	[7.0%,11.6%]
Once a month (n=249)	31.1%	[27.4%,35.1%]
Every 2-3 months (n=200)	25.6%	[22.1%,29.4%]
Twice a year (n=118)	14.7%	[12.0%,17.9%]

Once a year (n=50)	6.3%	[5.3%,9.6%]
Other (specify) (n=55)	7.1%	[5.3%,9.6%]
Don't know/refuse (n=7)	1.2%	[0.5%,2.6%]
N=806		
Do you regularly send any money to family or friends (in Tonga or abroad)?		95% CI
Yes (n=232)	18.3%	[15.8%,21.1%]
No (n=904)	81.5%	[78.7%,83.9%]
Don't know/refuse (n=4)	0.2%	[0.0%,0.6%]
N=1,140		
Where do you send the money?		95% CI
Other parts of Tonga (n=204)	88.8%	[82.9%,92.8%]
Abroad (n=22)	9.1%	[5.5%,14.7%]
Abroad and Samoa (n=5)	1.3%	[0.5%,3.1%]
Don't know/refuse (n=1)	0.9%	[0.1%,5.6%]
N=232		
How do you usually send the money to other parts of Tonga? (Multiple responses)	Percent of cases	
Own bank account (n=8)	4.4%	
Mobile account (n=21)	10.1%	
Western Union (n=133)	62.7%	
Other money transfer (n=34)	20.9%	
Through a relative or friend (by cash) (n=7)	2.9%	
Through a relative or friend (using the relative's mobile money or bank account) (n=2)	0.8%	
Other (n=13)	5.3%	
Don't know/refuse	0.9%	
N=209		
About how often do you usually send this money?		95% CI
Weekly (n=6)	3.4%	[1.4%,8.3%]
Fortnightly (n=6)	3.8%	[1.6%,8.7%]
Once a month (n=51)	24.7%	[18.2%,32.6%]
Every 2-3 months (n=60)	29.9%	[22.6%,38.4%]
Twice a year (n=51)	20.9%	[15.2%,28.1%]
Once a year (n=21)	10.2%	[5.9%,16.7%]

Less than once a year (n=1)	0.6%	[0.0%,4.3%]
Other (specify) (n=12)	6.2%	[3.3%,11.2%]
Don't know/refuse (n=1)	0.3%	[0.0%,1.9%]
N=209		
Sends or receives remittances		95% CI
Yes (n=861)	73.2%	[69.9%,76.2%]
No (n=279)	26.8%	[23.8%,30.1%]
N=1,140		

Table 14: Insurance

Do you have any type of insurance?	95% CI	
Yes (n=732)	13.4%	[11.3%,15.8%]
I know what insurance is but do not have it (n=746)	64.4%	[61.0%,67.7%]
Don't know what insurance is (n=221)	22.2%	[19.3%,25.3%]
N=1,140		
Which of the following types of insurance do you have? (Multiple responses)	Percent of cases	
Health insurance (n=27)	13.3%	
Life (n=141)	67.6%	
Home (n=43)	21.1%	
Vehicle (n=12)	7.8%	
Funeral (n=2)	0.5%	
Travel (n=2)	1.9%	
Other (n=6)	3.3%	
Don't know/refuse (n=13)	8.2%	
N=203		
Reasons for not having insurance for those who don't have (Multiple responses)	Percent of cases	
Used to have but had bad experience (n=9)	1.2%	
Used to have but lost it (n=20)	2.7%	
Do not need (n=467)	62.6%	
Don't know what it is or how it works (n=87)	11.7%	
Too expensive (n=141)	18.9%	

Don't trust companies (n=22)	2.9%
Another household member has insurance (n=15)	2.0%
Other (n=78)	20.5%
Don't know/refuse (n=15)	2.0%
N = 746	

Table 15: Main income source

What is the household's main source of income?		95% CI
Salary – Government employment (n=219)	21.6%	[18.8%,24.6%]
Salary – Formal private employment (n=282)	26.2%	[23.2%,29.4%]
Self-employment (n=214)	18.0%	[15.6%,20.8%]
Casual labor or odd jobs (n=71)	5.2%	[3.9%,6.9%]
Agricultural income (n=121)	10.2%	[8.3%,12.4%]
Pension fund (n=10)	0.5%	[0.0%,1.0%]
Government benefits (n=17)	1.2%	[0.7%,2.1%]
Gifts/remittances (n=196)	16.4%	[14.1%,19.1%]
Investment income (n=2)	0.2%	[0.0%,1%]
Rentals (n=8)	0.6%	[0.2%,1.4%]
N=1,140		

Annex D: Methodology and Sample Description

The Tonga DSS covered a nationally representative sample of 1,140 respondents selected from the 2011 national census household sample using stratified 3-stage random sampling. The sampling frame was stratified by the five island divisions of Tonga. A total of 114 sample census blocks were selected at the first sampling stage. The sample was allocated to the island divisions proportionally to the number of households in the frame for each stratum, with oversampling in the smallest islands of Ha'apai, Niuatoputapu and Niuafu'ou.

Within each stratum, the sample census blocks were selected systematically with probability proportional to size (PPS), where the measure of size was based on the total number of households in the frame for each census block. Following the selection of 114 census blocks, a new listing of households was conducted in each of these sample census blocks. At the second sampling stage a sample of 10 households was selected from the listing for each sample census block, for a total sample of 1,140 households. Finally, at the third sampling stage one household member aged 15 years or older was randomly selected for the survey from all the persons in that age group identified in each sample household using a Kish grid.

A list of reserve households for possible replacement were also randomly selected in each sample census block. Any sample household that could not be interviewed was replaced with a household from the reserve.

In order for the sample estimates to be representative of the population, it was necessary to multiply the data by a sampling weight. Household weights varied based on the ratio of the number of households listed in each census block to the corresponding number from the 2011 sampling frame. Individual person weights took into consideration the number of household members aged 15 years or more.

Figure 43: Marital status of the sample

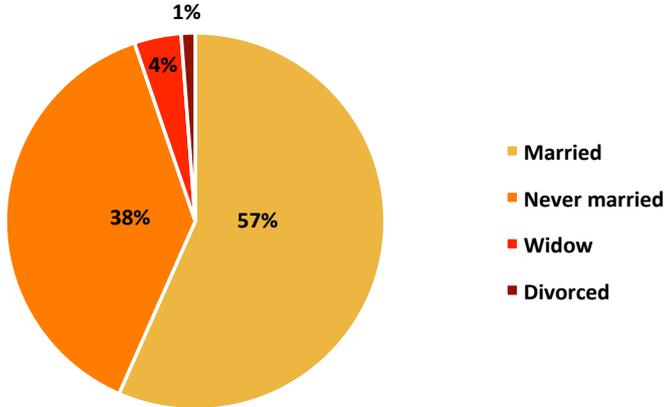


Figure 44: Relationship to the household head sample breakdown

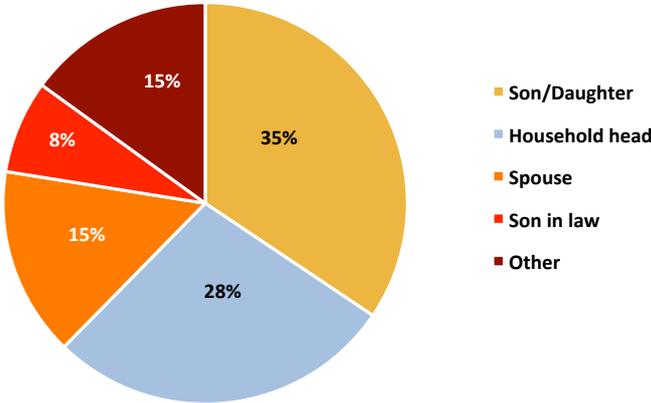


Figure 45: English literacy level of sample

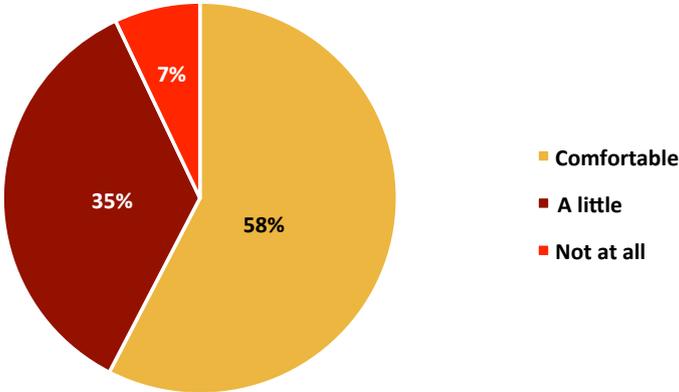


Figure 46: Education level of sample

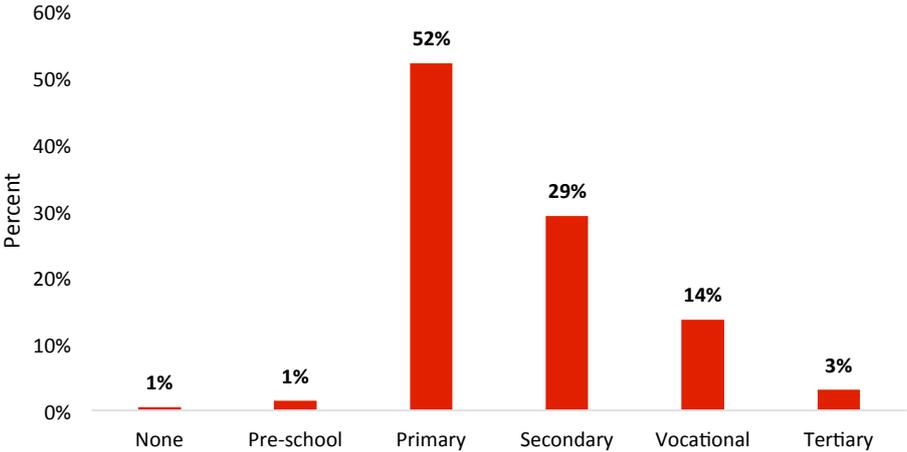
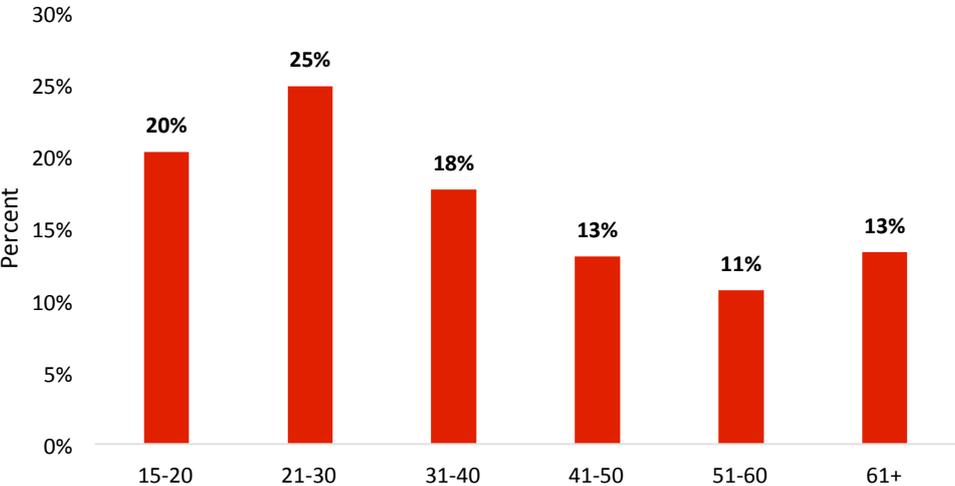


Figure 47: Age range of the sample



Annex E: Maps of Access Points

Figure 48: Access points on Tongatapu and Eua

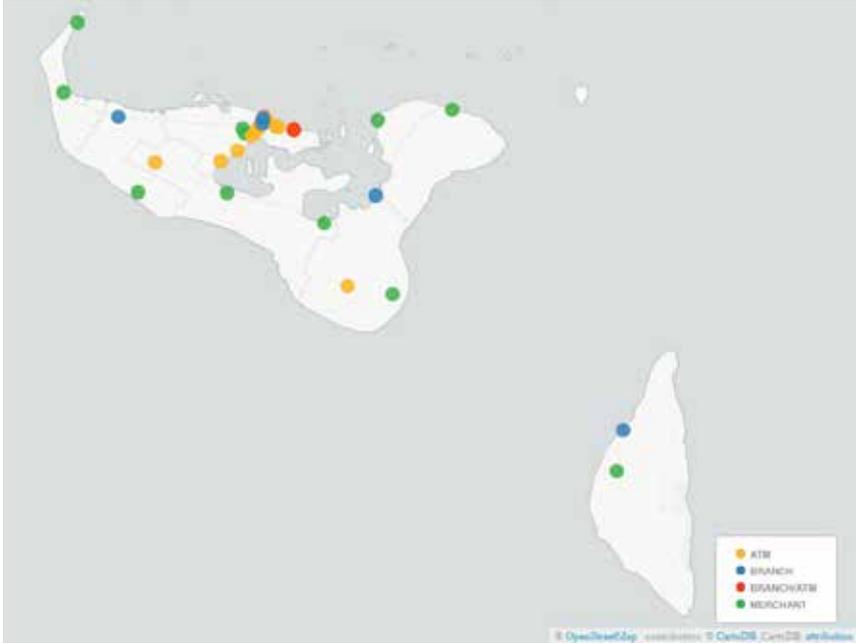


Figure 49: Access points on Vava'u

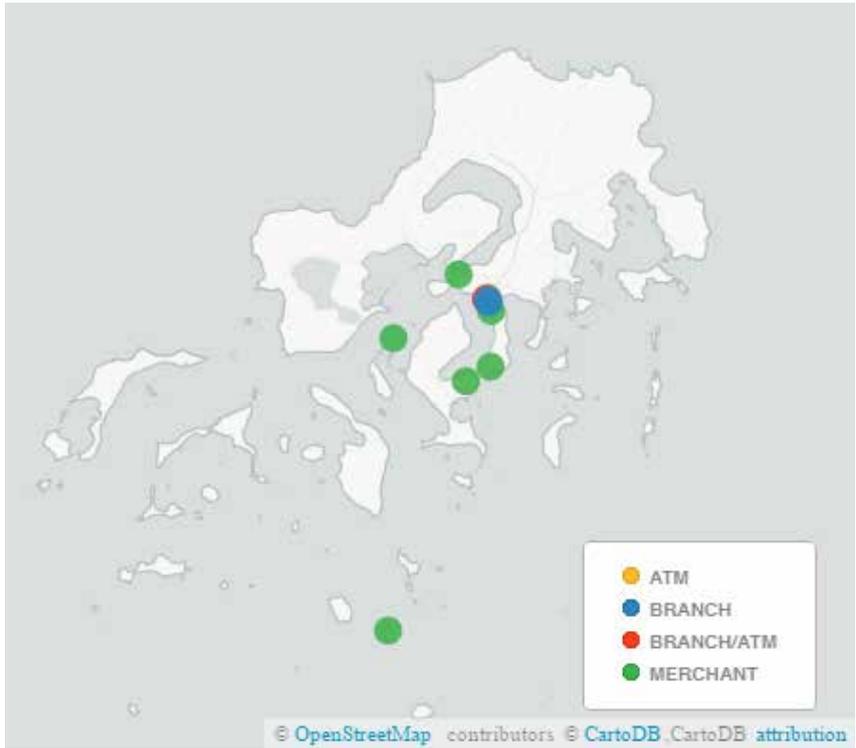


Figure 50: Access points on Ha’apai and Niuas





