



CENTRAL BANK OF SAMOA

# Financial Services Demand Side Survey Samoa







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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. 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 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 quality and affordable financial services and financial education. It is jointly managed by the UN Capital Development Fund (UNCDF) and the United Nations Development Programme (UNDP) and receives funding from the Australian Government, the European Union and the New Zealand Government.

PFIP aims to add one million Pacific Islanders to the formal financial sector by 2019 by spearheading policy and regulatory initiatives, facilitating access to appropriate financial services and delivery channels and by strengthening financial competencies and consumer empowerment.

## Acknowledgements

This survey would not have been possible without the dedicated efforts of staff at the Central Bank of Samoa, including Lanna Lome-Ieremia, Annunziata Aita, and Tua Toomata, and from the Samoa Bureau of Statistics including Benjamin Sila, Leilua Taulealo and Taiaopo Faumuina. Sincere thanks also go to the staff at PFIP for coordination and guidance throughout the project, including Jeff Liew, Amit Kumar, Shadiyana Begum and Elizabeth Larson. Warm thanks are also extended to Bankable Frontier Associates (BFA) Aneth Kasabele, Sushmita Meka, Brian Loeb, Laura Cojocar, and Caitlin Sanford for their tireless efforts in designing the survey, working with the enumerators and drafting the final report.

This report is dedicated to the memory of Reuben James Summerlin.

# Foreword

It is with great pleasure that I present this report on the first National Demand Side Survey to assess the access and usage of financial services and products in Samoa.

The lack of data on access and usage of financial services, especially by low-income households, made it difficult to understand the extent of financial inclusion in Samoa. The demand-side survey, therefore, was intended to supplement the recently compiled supply-side data to provide a comprehensive picture of financial inclusion in the country. Additionally, the survey aimed to establish baseline information on access, usage and quality of the financial services and products currently available to all Samoans from the viewpoint of the customer. The survey data is envisioned to help monitor the growth of financial inclusion as well as to conduct evidence-based policy making to expand financial inclusion in Samoa.

Samoa is the third Pacific Island Regional Initiative (PIRI) member to conduct a financial inclusion demand-side survey, after Fiji and Solomon Islands. I have the confidence that the findings of the survey would provide useful data to the Government, Central Bank of Samoa (CBS), private sector and all other stakeholders. The CBS intends to incorporate the results of the demand-side survey into Samoa's national financial inclusion strategy and work plan.

The survey reveals that the biggest driver of financial access seems to be formal employment; however, more than a third of Samoan adults are excluded entirely from financial services and about 39% of Samoan adults have a bank account. Interestingly, more adult women are financially included than men, which may be driven by the higher proportion of women receiving remittance income.

The research further reveals that barriers such as distance and high minimum balance requirements contribute to a high overall transaction cost of maintaining a formal bank account. This holds especially true for rural Samoans. Additionally, the survey affirms that Samoans receive a high proportion of foreign remittances but more than two-thirds are used to cover personal expenses. The survey further shows that Samoan adults actively use informal savings instruments (such as savings clubs) and informal credit sources (such as friends and family).

The results of the first national demand-side survey, provides a solid platform for the collaborative work between the Government, CBS, private sector and all other stakeholders to improve access to affordable and safe financial services. While the findings may highlight implications for policy and strategy, they also make a case for new product development to meet the current and prospective demand in financial service offerings to better support the economic prosperity aspirations of our Samoan people.

To conclude, I would like to thank the Alliance for Financial Inclusion (AFI), and the Pacific Financial Inclusion Programme (PFIP) for their support in co-funding this study and Bankable Frontier Associates (BFA) for conducting the research. I would also like to acknowledge the kind assistance of the Samoa Bureau of Statistics, but most especially a big faafetai to the many Samoans who participated in the survey.



Maiava Atalina Ainuu-Enari  
**GOVERNOR**

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Unless otherwise noted, exchange rate used is USD 1.00 to WST 2.27, as of 11 June 2015 via <http://www.oanda.com/>.

# Acronyms and abbreviations

<b>AFI</b>	Alliance for Financial Inclusion
<b>CBS</b>	Central Bank of Samoa
<b>DSS</b>	Financial inclusion demand side survey
<b>FAS</b>	IMF Financial Access Survey
<b>FIDWG</b>	Financial Inclusion Data Working Group
<b>Global Findex</b>	World Bank Global Financial Inclusion Indicators
<b>GPII</b>	Global Partnership for Financial Inclusion
<b>NWU</b>	North West Upolu
<b>PFIP</b>	Pacific Financial Inclusion Programme
<b>PIRI</b>	Pacific Islands Regional Initiative
<b>RoU</b>	Rest of Upolu
<b>SBS</b>	Samoa Bureau of Statistics
<b>SNPF</b>	Samoa National Provident Fund
<b>UNCDF</b>	United Nations Capital Development Fund
<b>WST</b>	Samoa Tala



# Executive summary

The Samoa Financial Inclusion Demand Side Survey (DSS) is a project of the Central Bank of Samoa (CBS) and the Samoa Bureau of Statistics (SBS). The main purpose of the DSS is to help the Government and other stakeholders gain a better understanding of the needs of Samoans in regard to financial services and products. The survey establishes baseline data that will provide useful information on access, usage and quality of the financial services and products currently available to all Samoans from the viewpoint of the customer.

The results of the survey will be used to develop evidence-based policy solutions to address the gaps, as well as to monitor the growth of financial inclusion. The CBS intends to incorporate results into Samoa's national financial inclusion strategy and work plan.<sup>1</sup> The key findings of the survey are summarized below.

## More women are financially included than men

Thirty nine per cent of Samoan adults have bank accounts, and another 12% use other formal financial services, such as credit unions, microfinance institutions (MFI), the Samoa National Provident Fund (SNPF), investments (stocks, bonds, unit trusts, or others), and insurance.

Contrary to the global trend on gender and financial inclusion, a slightly higher proportion of Samoan women (40%) are banked than men (38%). Also, there are statistically significantly more men (39%) who are excluded entirely from financial services than women (30%). While it is important to investigate the reasons for higher exclusion among men, it is likely that bank account ownership among Samoan women may be driven by remittance income. A statistically significantly higher proportion of women (48%) receive remittances than men (39%), and receiving remittance income is positively associated with the likelihood of being banked.

## Half of formerly banked adults are now excluded completely from financial services

Twenty one per cent of Samoan adults used to have bank accounts but no longer do, and half of these are now excluded entirely from financial services. The majority of these (83%) adults are in rural Samoa, primarily in Savai'i (32%) and Rest of Upolu (RoU, 31%), followed by North West Upolu (NWU, 21%). Most (69%) of these respondents are male and closed their accounts due to low usage (47%) or no longer needing one (33%).

Similar profiles emerge when looking across all formerly banked adults. Again, the majority (87%) live in rural Samoa, particularly in RoU (36%). Only 2% reported closing their accounts due to branch distance. Rather, as with formerly banked adults that are now excluded from all financial services, the most common responses for closing accounts were due to low usage (48%) and a lack of need (37%).

Interestingly, 59% of these adults received remittances in the past year. While the majority of these adults received international remittances via Western Union (91%), 6.7% received remittances through another individual's bank account, and 2% in cash. This finding highlights that channeling remittances through bank accounts may be one manner of onboarding this segment back into the formal financial sector.

## Barriers to financial inclusion are more pertinent among rural Samoans

Eighty per cent of unbanked Samoans responded that they do not have a bank account due to a lack of money. This finding may speak to existing barriers such as distance, high minimum balance requirements, or a lack of suitable products that cater to the needs of people with low incomes (or a lack of knowledge thereof on the part of the unbanked).

In fact, the median reported distance to the nearest bank branch is 5.5 km in rural areas compared to 1 km in urban Samoa. Seventy four per cent of all banked adults (and 78% of rural banked adults) reported median minimum balance requirements of WST 50 (USD 22.03) for their bank accounts. Also, rural adults reported longer median waiting times at the bank (1 hour) compared to urban adults (0.3 hours) in order to open their accounts. All of these barriers contribute to a high overall transaction cost of maintaining a formal bank account, especially for adults with low and irregular income streams.

<sup>1</sup> Central Bank of Samoa. "Financial Service Access & Usage Demand Side Survey Completed." Press Release, April 2015. < <http://www.cbs.gov.ws/index.php/media/latest-news/financial-service-access-and-usage-demand-side-survey-completed/>> Accessed June 15 2015.



## Nearly all remittances in Samoa are sent from abroad

More than half (56%) of respondents reported receiving money from relatives or acquaintances that live either in Samoa or abroad. In particular, all urban and 97% of rural remittance receivers receive money from abroad. Forty two per cent of recipients of foreign remittances in Samoa receive them from more than one country, with New Zealand topping the list in terms of remittances sent.

The majority of Samoans report using remittances (69%) to cover every day expenses, and 76% of remittance recipients reported receiving remittances on a regular basis. As highlighted earlier, there is a positive association between the likelihood of being banked and receiving remittance income. Of adults receiving remittance income, 42% are currently banked and 22% have previously been banked.

## One-fifth of Samoan adults are insured

Samoa has higher insurance coverage than Fiji and the Solomon Islands. Twenty one per cent of Samoan adults have some type of insurance policy. Among these insured adults, majority (69%) have life insurance. The higher proportion of life insurance ownership could be driven by the fact that the main provider of life insurance in Samoa (the Samoa Life Assurance Corporation) is state owned, and it could be provided by employers.

## Use of mobile financial services is low

While 71% of Samoan adults own a mobile phone, only 3.7% of mobile phone owners have a mobile money account.<sup>2</sup>

Even among banked adults, only 7.8% have mobile banking services which allow them to access their bank accounts directly from their phones. Across all Samoan adults, 2.6% report having a mobile wallet, 3% have mobile banking services, and 0.5% have both. These findings suggest real barriers to the adoption of mobile technology for financial transactions in Samoa.

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<sup>2</sup> The DSS distinguished between having a mobile wallet (mobile money account) or having a mobile banking account. A mobile wallet allows a user to store e-money in a mobile account which is not linked to a bank account. In Samoa, mobile wallets are currently only offered by Digicel. Mobile banking, on the other hand, allows bank clients to access their bank account and execute financial transactions from their phones.

# Financial access and usage by inclusion strand in Samoa

Data collection for the Samoa Financial Inclusion DSS took place between March and April, 2015, by the SBS in close collaboration with CBS. SBS designed the sample to be nationally representative, using 2-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 Samoan adults (15+) unless otherwise stated. Further details on the methodology can be found in Annex C.

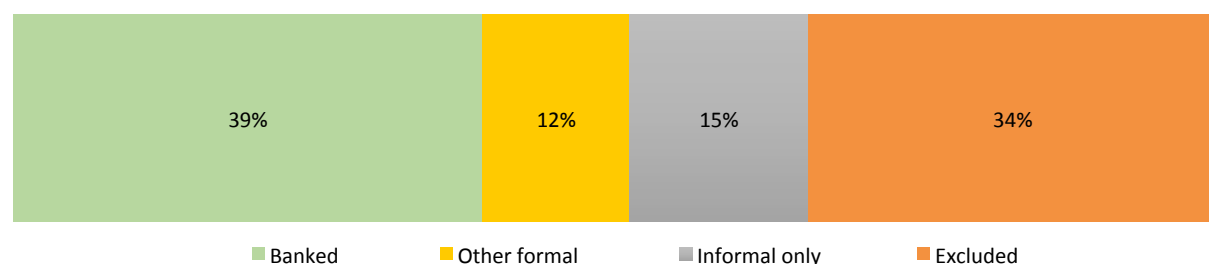
## Financial inclusion strands in Samoa

The Samoan financial inclusion strand is defined based on respondents' usage of various financial services over the 12 months prior to their being interviewed.<sup>3</sup>

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) <sup>4</sup> , the Samoa National Provident Fund (SNPF), investments (stocks, bonds and others), or insurance.
<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 moneyguard, or trusted person.

39% of Samoan adults currently have a bank account, while 12% use other formal services such as credit unions, microfinance, insurance, or finance companies. However, 34% of respondents are excluded from both formal and informal financial services (Figure 1).

Figure 1: Samoa 2015 financial inclusion strand



The proportion of banked adults in Samoa is comparable to that of other lower middle-income countries aggregated in the World Bank Global Financial Inclusion Index (Global Findex, 41.8%).<sup>5,6</sup> A breakdown of inclusion strand by gender shows that a slightly higher proportion of Samoan women (40%) are banked than men (38%) (Figure 2). This is contrary to the global trend in which the gender gap in financial inclusion remains persistent, with a higher proportion of men being banked than women. According to the Global Findex, 65% of men reported having a bank account in 2014 compared to 58% of women.

<sup>3</sup> 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 the use of financial services over time.

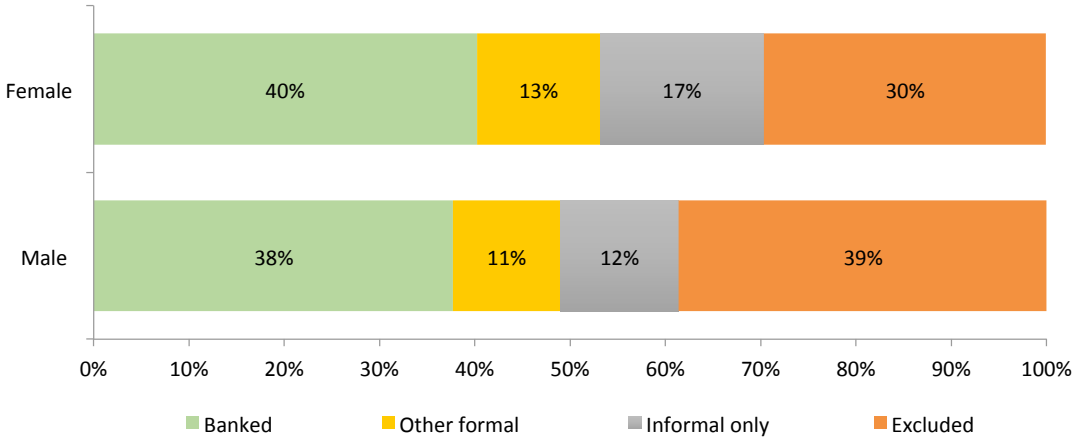
<sup>4</sup> South Pacific Business Development, or SPBD, is the only MFI operating in Samoa.

<sup>5</sup> World Bank. Global Financial Inclusion Indicators: Regional Dashboard (Income Group Comparisons). 2014. Accessed 18 June, 2015.

<sup>6</sup> Lower-middle income countries are defined as those in which gross national income per capita was between USD \$1,026-4,035 in 2011 as defined by the World Bank Atlas Method. In comparison, upper-middle income countries had a GNI per capita between USD \$4,036-\$12,475 in 2011. Samoa's GNI was USD \$3,970 in 2013. See also: Asli Demirguc-Kunt and Leora Klapper, "Measuring Financial Inclusion: Explaining Variation in Use of Financial Services across and within Countries." Brookings Papers on Economic Activity, Spring 2013.

Although the difference in the proportion of banked men and women in Samoa is not significant, the percentage of women banked in Samoa is higher than that presented in the Global Findex for lower middle-income countries (35%). Nonetheless, there are significantly more men (39%) who are excluded entirely from financial services than women (30%).<sup>7</sup> A detailed comparison of the Pacific Islands in relation to the Global Findex indicators is provided in Annex A. In addition, Annex A provides a list of PIRI demand side indicators, along with the GPMI Financial Inclusion Indicators for Samoa.

Figure 2: Samoa 2015 financial inclusion strand, by gender

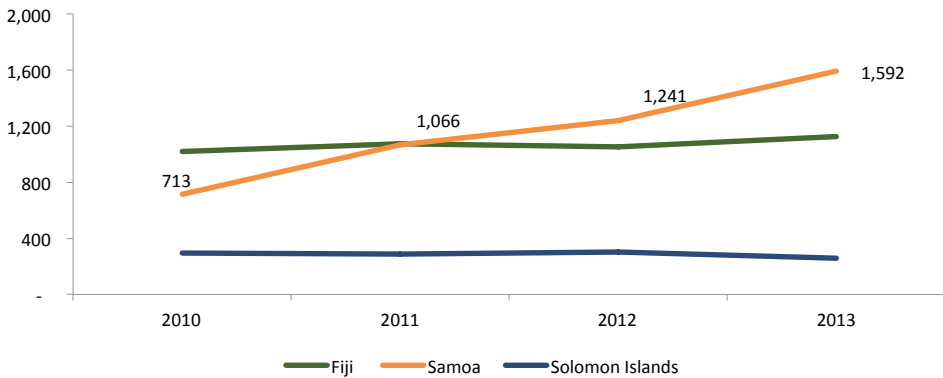


### Benchmarking Samoa’s level of financial inclusion

The proportion of banked adults in Samoa lags behind that of Fiji (60%), but is ahead of that of the Solomon Islands (26%). This finding can be rationalized in light of data collected by the International Monetary Fund’s Financial Access Survey (FAS).

Samoa has a higher proportion of deposit accounts for its population than the Solomon Islands, but a lower proportion than in Fiji (Figure 3).

Figure 3: Deposit accounts with commercial banks per 1,000 adults, 2013<sup>8</sup>

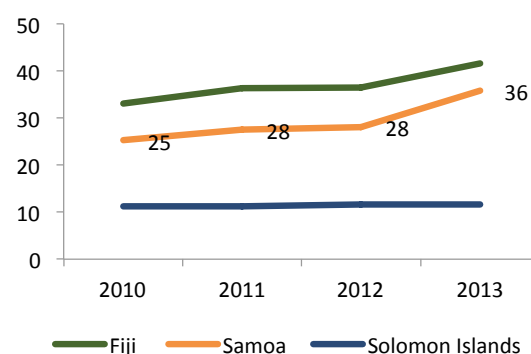
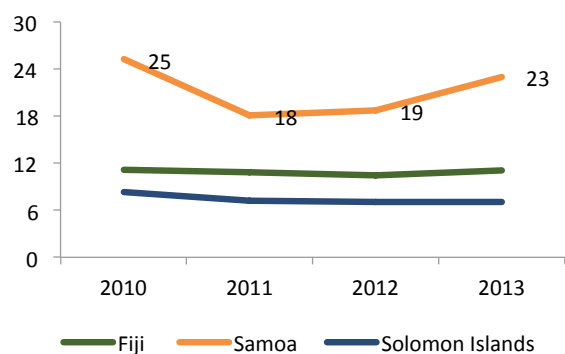


Financial Access Survey, available at <http://fas.imf.org/>

<sup>7</sup> T-test results for financial exclusion by gender: t=2.921, p=0.0036.  
<sup>8</sup> This figure reports combined household and non-financial corporation accounts, or those of small, micro or medium enterprises. Looking only at household deposit accounts in Samoa, this number drops to 1,333 accounts per 1,000 adults.

Figure 4 and Figure 5 below illustrate the penetration of bank branches and ATMs in each country. Samoa has more branches per 100,000 adults than either Fiji or the Solomon Islands.<sup>9</sup> However, Fiji is still ahead in number of ATMs per 100,000 adults.

Figure 4: Number of commercial bank branches per 100,000 adults      Figure 5: Number of ATMs per 100,000 adults



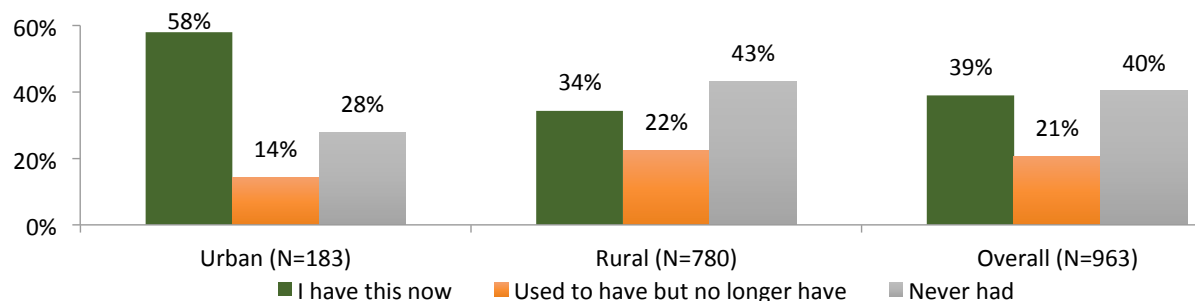
Financial Access Survey, available at <http://fas.imf.org/>

## Understanding the drivers of financial inclusion in Samoa

### Savai'i hosts a higher proportion of financially excluded adults

As expected, there is a significantly higher proportion of banked adults in urban (58%) than in rural (34%) Samoa (Figure 6).<sup>10</sup> Additionally, a significant proportion of former account owners are in rural than in urban Samoa.<sup>11</sup>

Figure 6: Urban/rural split in bank account ownership



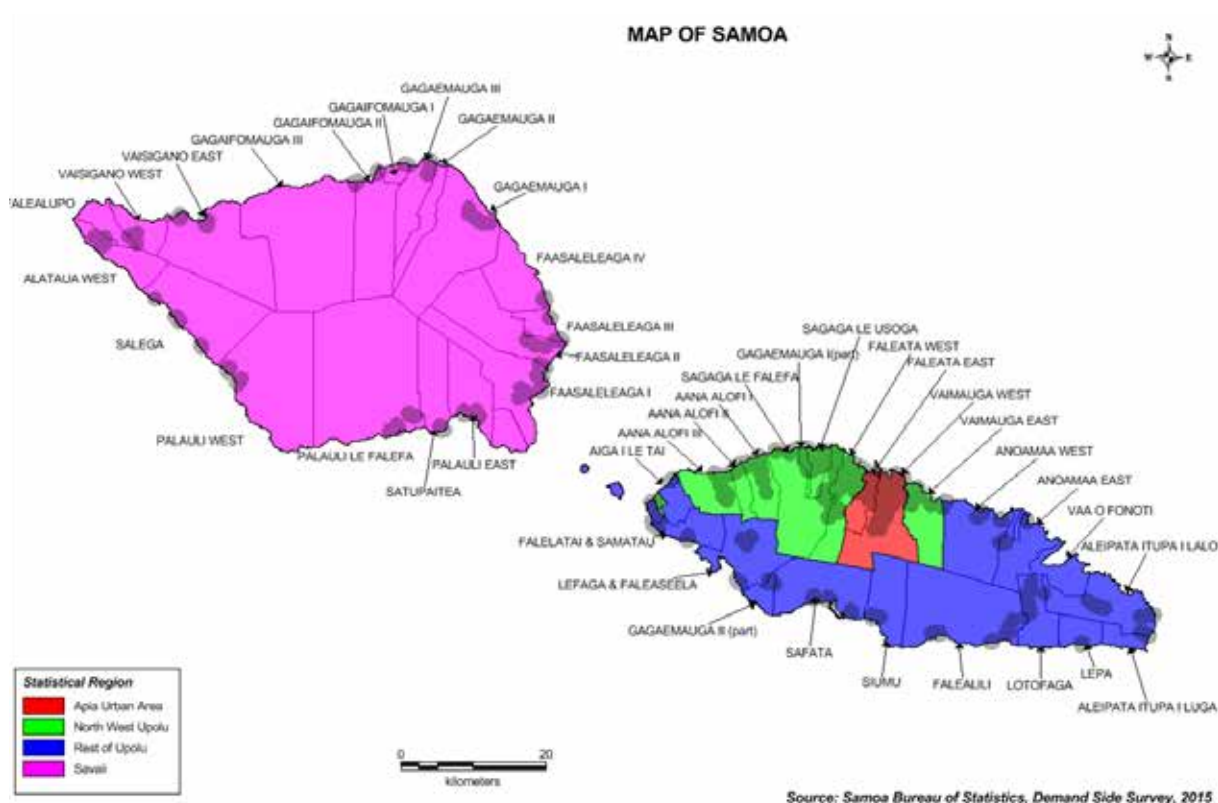
<sup>9</sup> The ratio for Samoa is higher due to its small population (about 190,000 in 2013)

<sup>10</sup> T-test results for bank access by urban/rural split:  $t=5.8064$ ,  $p=0.0000$ .

<sup>11</sup> T-test results for closed accounts by urban/rural split:  $t=2.4017$ ,  $p=0.0165$ .

The following map highlights the areas which were included in the DSS, along with each region. Only Apia Urban Area (AUA, shaded in red) is considered urban. Thus, the banked population is geographically concentrated in a relatively small area.

Figure 7: Map of Samoa, highlighting enumeration areas covered in the 2015 DSS



Further analysis of financial inclusion by region (Figure 8) suggests a similar distribution of unbanked adults between Savai'i and the Rest of Upolu (RoU). The RoU and Savai'i have the highest proportion of respondents using only informal financial services (24% and 21%, respectively).

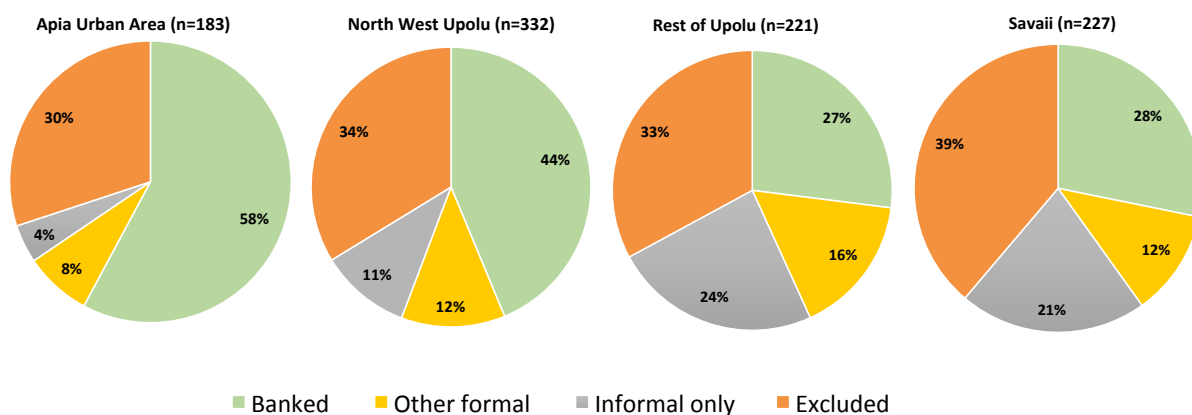
The proportion of excluded adults in the RoU and Savai'i is greater than the proportion that is banked. The high rates of exclusion in RoU and Savai'i are reasonable given the estimated distance to the nearest bank branches and ATMs in these regions. The median distance to the nearest bank branch is 13 kilometers (km) and 7 km in RoU and Savai'i, respectively, compared with 1 km for the Apia urban area and 3 km for NWU.

The results are also consistent with the fact that there is a slightly higher level of basic needs poverty incidence in RoU (20.5% of households and 26.6% of population) and Savai'i (21.9% of households and 28.8% of population) compared with NWU and AUA at 19.4% and 17.2% of households and 26.8% and 24.4% of the population, respectively.<sup>12</sup> Detailed results are located in Annex B.<sup>13</sup>

12 Samoa Bureau of Statistics and UNDP Pacific Centre. "A Report on the Estimation of Basic Needs Poverty Lines, and the Incidence and Characteristics of Hardship and Poverty: Analysis of the 2008 Household Income and Expenditure Survey." <[http://www.spc.int/nmdi/Reports/SAM\\_Poverty\\_Analysis\\_Report\\_Final\\_280310.pdf](http://www.spc.int/nmdi/Reports/SAM_Poverty_Analysis_Report_Final_280310.pdf)> Accessed June 2015.

13 Annex B contains tables with details results from each section of the survey.

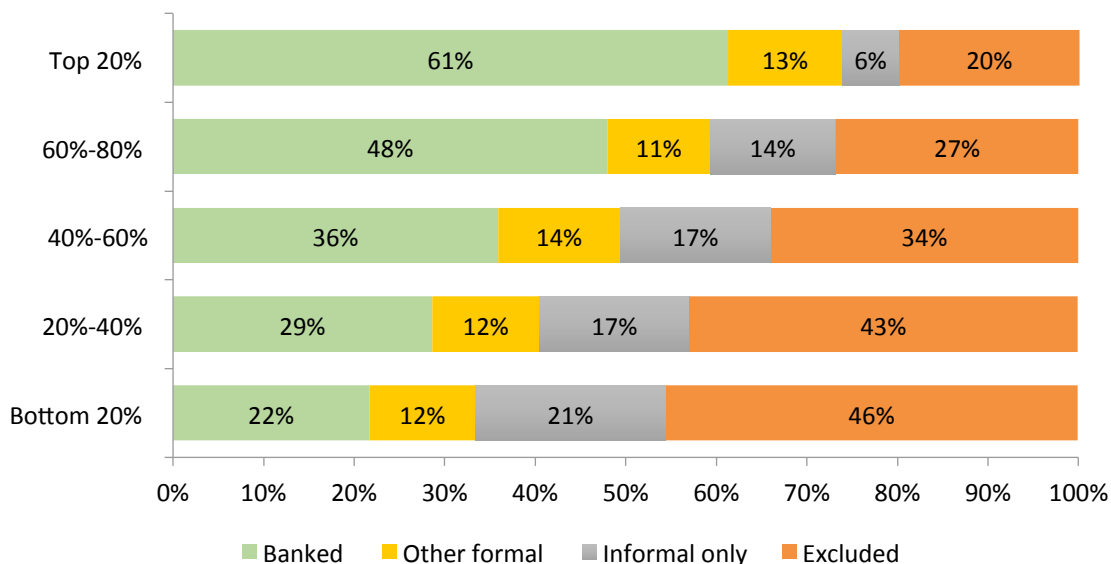
Figure 8: Financial inclusion strand by division



### Income predicts the likelihood of being financially included

Unsurprisingly, income is a major driver of formal financial inclusion. There is a statistically significant positive association between the probability of being banked and income level.<sup>14</sup> As Figure 9 below shows, only the top income quintile has above 50% of adults with bank accounts. Nearly half of the adults in the two bottom income quintiles are excluded entirely from formal financial services. Income quintiles were defined based on weekly per capita income<sup>15</sup> at the sample level.

Figure 9: Financial inclusion by income quintile

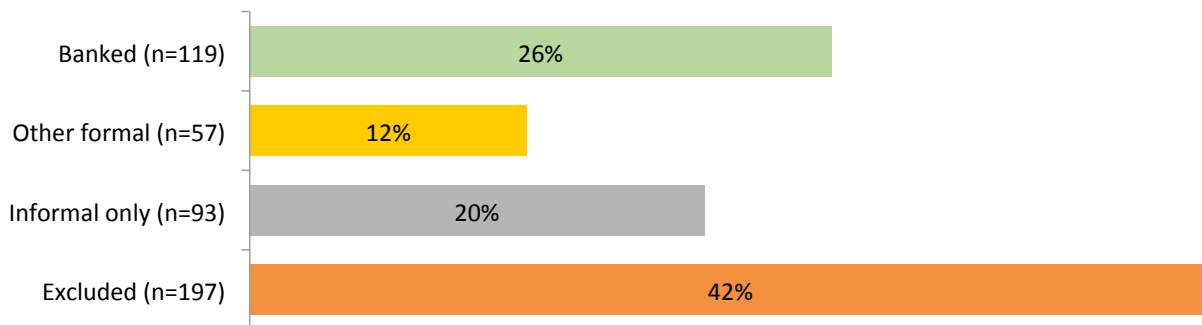


Nonetheless, a different measure of income—the per capita less than USD \$2 per day line—indicates that nearly 26% of adults falling below the per capita USD \$2 per day income bracket are currently banked and 42% are excluded (Figure 10). The proportion of banked adults is slightly higher and that of excluded slightly lower than that of the lowest income quintile above.

<sup>14</sup> Both probit and logit regression models have significant and positive income coefficients for different specifications. Detailed results are found in Annex E.

<sup>15</sup> Per capita was defined using the Samoa Bureau of Statistics definition for adult equivalent which classifies children (those age under 15) as half an adult.

Figure 10: Inclusion strand for respondents earning \$2 per day or less

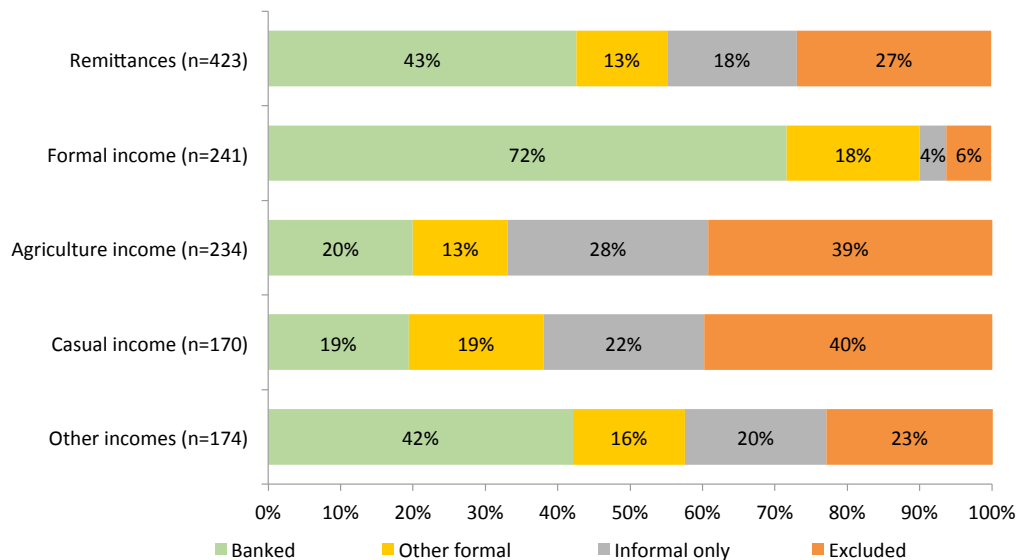


### Formally employed Samoans are more likely to be banked

In addition to income levels, there is a notable difference in formal inclusion depending on respondents' income sources (Figure 11). There is a 44.9 percentage point change in the probability of being banked when an individual becomes formally employed.<sup>16</sup>

Also, although not statistically significant, the probability of someone being banked given that he/she is receiving remittance income or other income such as government benefits, fixed asset income, and others, increases. As discussed below, these may partly be because many banked adults open accounts to receive payments, including salaries or remittances.

Figure 11: Financial inclusion strand by income source<sup>17</sup>



<sup>16</sup> See probit and logit regression model results in Annex E.

<sup>17</sup> Other income sources include government benefits (social welfare, government scholarships etc.), income from renting properties (including leasing land or receiving royalties), income from investments in other companies (such as shares, unit trusts etc.), income from gambling or lottery winnings (including winnings from sports, bingo, or other), income from other fixed assets, board allowances, church donations etc.



There is a significant negative association between being banked and either earning casual or agricultural income.<sup>18</sup> That is, the probability of an adult Samoan being banked if she or he is a farmer or casual laborer decreases. This may be speaking to the irregularity of agricultural and casual income and the fact that these income earners might have pressing needs requiring them to spend their earned income more frequently. Moreover, adults earning casual or agricultural income are much more likely to be excluded (40% and 39%, respectively) or to rely mostly on informal sources of finance only (22% and 28%). This may also be due to the fact that agricultural and casual workers are mostly male (31% and 28% compared with 18% and 7% of adult females, respectively), and are concentrated in rural areas (30% and 20% compared with 8% and 2% of urban adults, respectively) where bank branches are relatively far away.

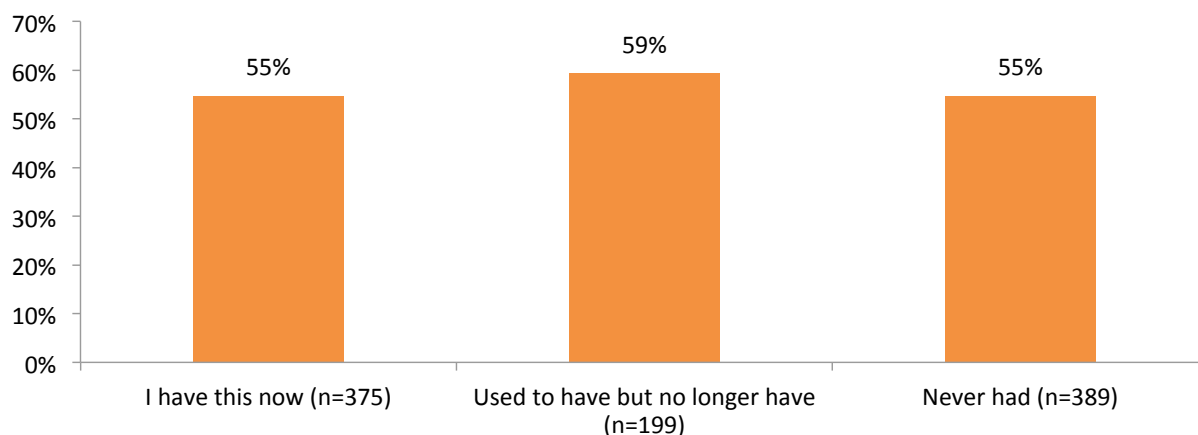
A higher proportion of self-employed adults (55%) and adults receiving a pension (76%) are banked in Samoa. However, the number of entrepreneurs or adults receiving a pension is too small to allow for statistically sound inferences.

### General remittances do not necessarily drive bank account ownership

The mere fact of receiving remittances does not guarantee ownership of a bank account. In fact, there is a negative association between having received remittances in the past year and the likelihood of being banked. However, this association is not statistically significant to make any conclusive inferences. As discussed below, this finding could be due to the fact that the majority of Samoans use remittance services such as Western Union or MoneyGram to receive money sent from abroad or within Samoa. Therefore, understanding why remittance recipients in Samoa prefer remittance services to direct bank transfers may be important to extending financial inclusion to Samoan remittance recipients.

As shown in Figure 12 below, a slightly higher proportion of formerly banked adults are remittance recipients (59%) compared to those who are currently banked (55%) or never banked (55%). It is likely that some of the formerly banked initially opened bank accounts to receive remittances and are currently using other remittance services to receive money from abroad or within Samoa.

Figure 12: Remittance recipients in bank account ownership



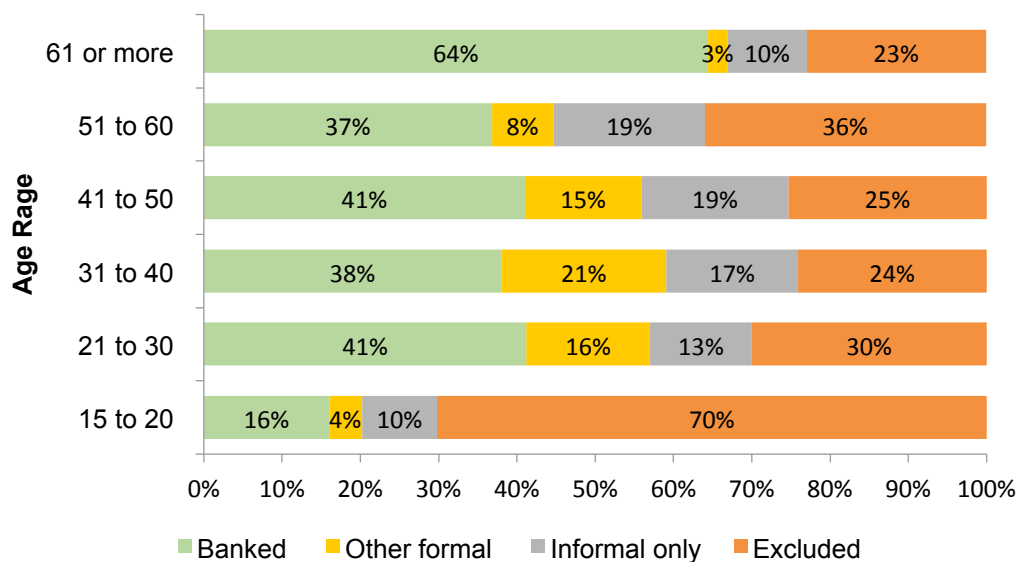
### Young adults are less likely to use financial services of any kind

Nearly two-thirds (64%) of adults over 60 are banked. This proportion is about 20% of all banked adults in Samoa. Therefore, statistically sound inferences about this group are constrained by the small sample size.

However, young adults in Samoa (those between 15 and 20 years) are less likely to be banked (Figure 13).<sup>19</sup> Young adults are also least likely to be using any financial service. 70% of young adults are completely excluded from financial services compared to less than 40% for other age groups. This may be driven by the fact that many Samoans in this age group might still be in school and not earning any income to sustain a formal bank account.

<sup>18</sup> Both probit and logit regression models have significant and negative coefficients on casual and agricultural income. Detailed results are found in Annex E.  
<sup>19</sup> Demiguc-Kunt, Asli, et. al. "The Global Findex Database 2014: Measuring Financial Inclusion around the World." World Bank Policy Research Working Paper 7255, April 2015.

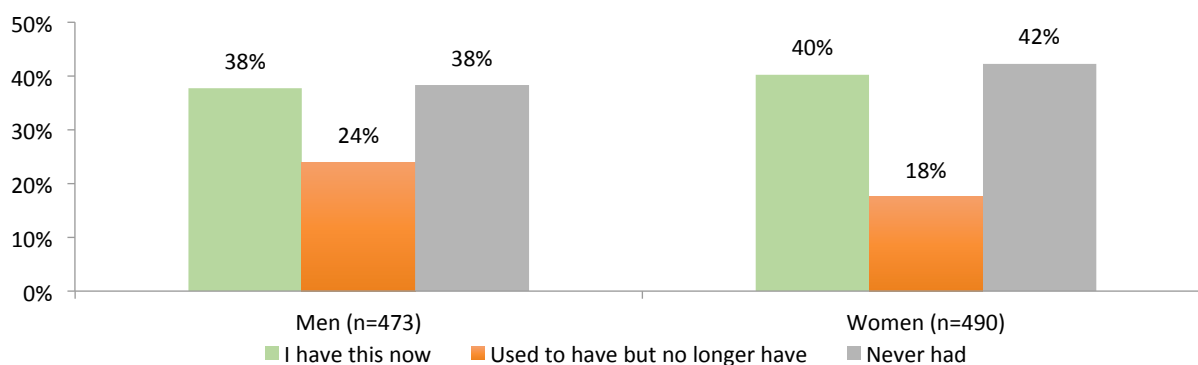
Figure 13: Inclusion strand by age



### More women have access to financial services

As previously mentioned, a slightly higher proportion of women have bank accounts (40%) compared with men (38%) as shown in Figure 14. This may be partly due to the fact that a significantly higher proportion of women (48%) earn income from remittances than men (39%) (see below), and there is a positive association between being banked and receiving remittance income.<sup>20</sup> Also, the proportion of men (24%) who were previously banked is higher than that of women (18%).

Figure 14: Bank account ownership by gender



The six-percentage point difference between previously banked men and women is statistically significant.<sup>21</sup> Therefore, understanding the reasons why men are more likely to close accounts could highlight Samoan men's banking needs that are not currently met.

Consistent with the observation that a relatively higher proportion of Samoan women are using other formal and informal financial services than men, a slightly higher proportion of women (42%) have never been banked compared with men (38%).

20 T-test results for remittance income by gender:  $t=2.8359$ ,  $p=0.0047$  and both probit and logit regression models have positive coefficients on remittances income. Detailed results are found in Annex E.

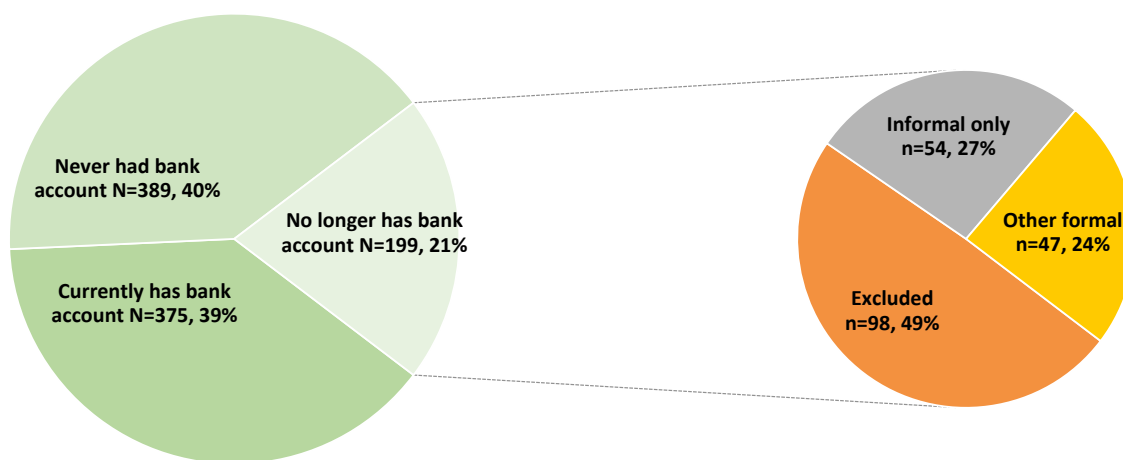
21 T-test results for closed accounts by gender:  $t=2.434$ ,  $p=0.0151$

## Former formal account ownership is high among the excluded strand

Rates of former formal account ownership are high across the board, but particularly among the “excluded” inclusion strand (Figure 15). Half of currently excluded adults used to have bank accounts but no longer have them. The reasons for account closures among this segment should be investigated further.

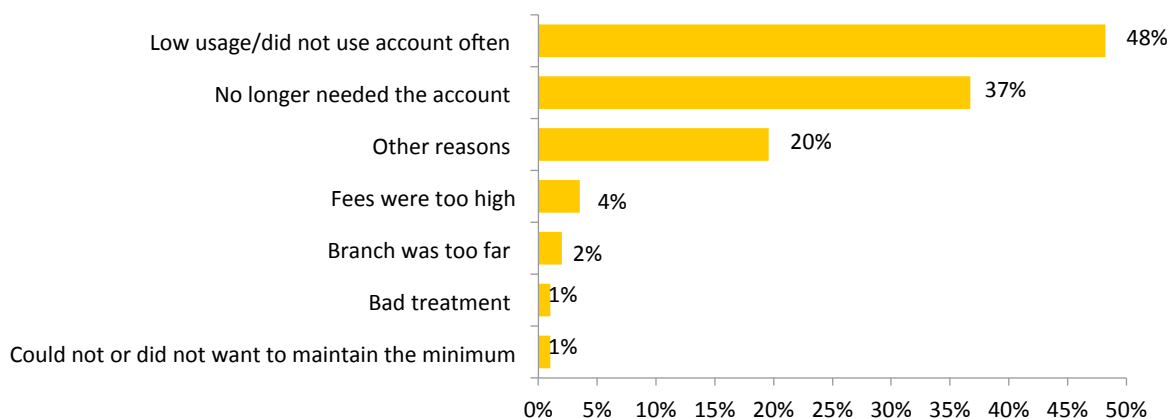
The majority of these formerly banked excluded adults (83%) live in rural Samoa: 32% and 31% in Savai’i and RoU, followed by 21% in NWU. Most are male (69%) and reported low usage (47%) and no longer needing an account (33%) as the reason for closing their bank accounts. These adults are working age (average and median age of 40), but the majority receive casual (28%) or agricultural (19%) income.

Figure 15: History of bank account usage by financial inclusion category



Across all formerly banked adults, 87% are in rural Samoa, with a high percentage from RoU (36%), followed by Savii (27%), and NWU (24%). Only 2% reported closing their accounts due to branch distance—rather the top reasons provided for closing accounts were low usage (48%) and no longer needing an account (37%, Figure 16). 20% of previously banked adults closed their accounts for other reasons, including insufficient funds or because they stopped working.

Figure 16: Reasons for no longer using a bank account (%)<sup>22</sup>



<sup>22</sup> Other reasons include respondents stopped working, not having enough money to save, using spouse’s account, among others.

Figure 17: Reasons for no longer using a bank account by urban/rural split

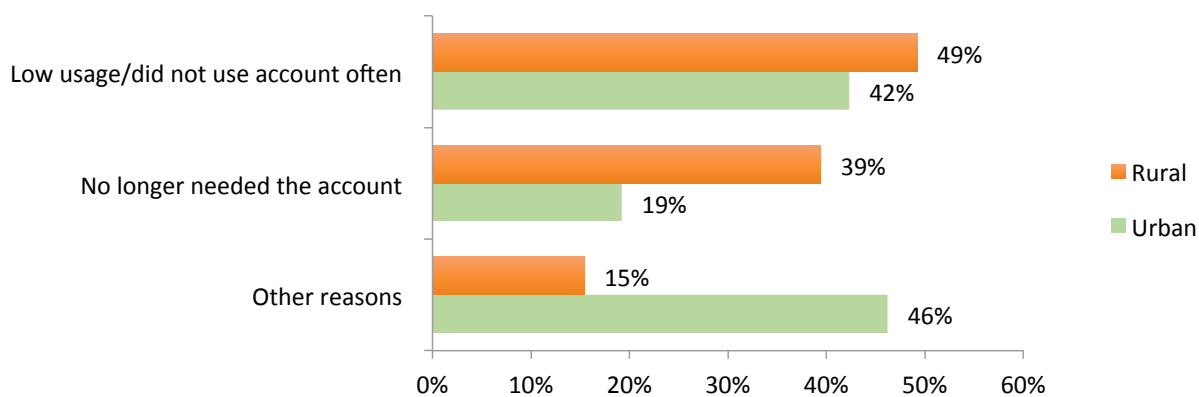
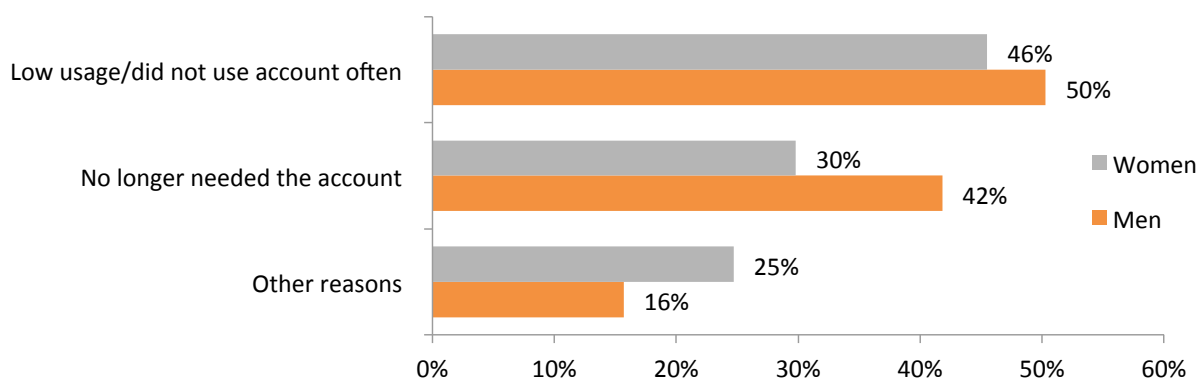


Figure 18: Reasons for no longer using a bank account by gender



*Note: Multiple answers allowed*

As figure 17 and 18 above show, rural Samoans and men were more likely to close their accounts due to low usage or no longer needing accounts than urban Samoans and women, respectively.

As presented below, the majority of banked respondents opened bank accounts to receive payments. Hence, it is likely that accounts may have been closed after a certain period of inactivity, especially if the purpose was to receive a one-off payment. Further research with previously banked clients can help to elucidate whether this was, indeed, the reason for closing an account or whether other reasons were at play.

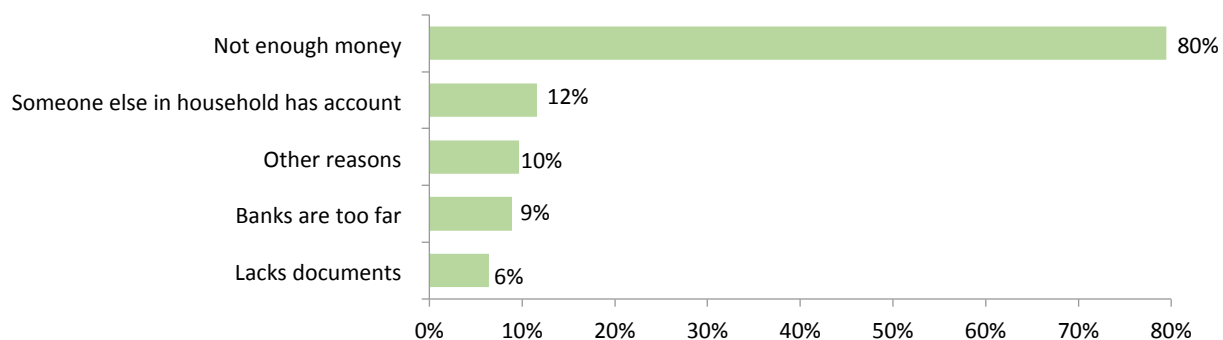
However, the fact that 59% of formerly banked adults receive remittance income presents an interesting opportunity to bring this segment back into the formal financial sector through competitive account-linked remittance transfer products. Indeed, while the majority of remittances are received via Western Union or other remittance transfer services (91%), 6.7% received remittances through another individual's bank account and 2% via cash.

## Barriers to formal inclusion

### Unbanked adults overwhelmingly quote lack of money as a reason for not having an account

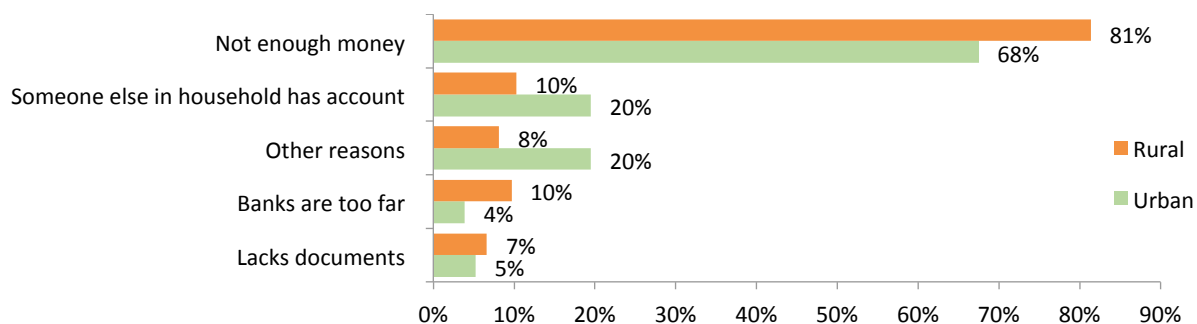
80% of unbanked Samoans answered that they do not have a bank account due to lack of money (Figure 19) compared to 50% of Fijians answering the same. Account sharing is another common reason for not having a bank account as indicated by the 12% reporting that another family member already has an account.

Figure 19: Most frequent self-reported reasons for not using banks



Note: Multiple answers allowed

Figure 20: Most frequent self-reported reasons for not using banks by urban/rural split

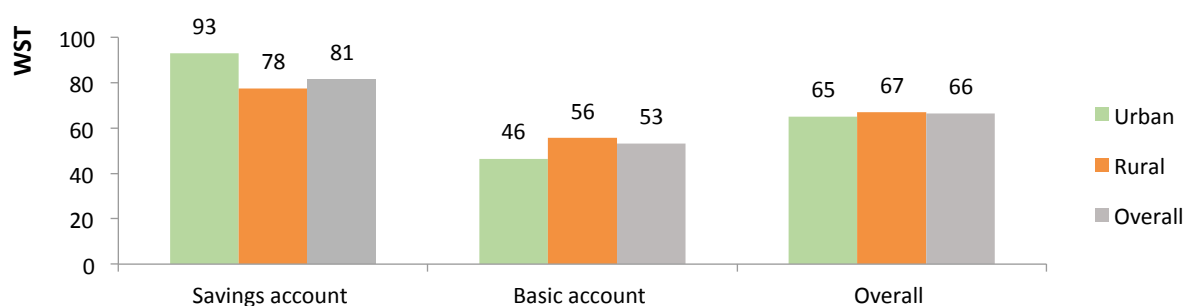


Note: Multiple answers allowed

Focusing in on lack of money as a barrier to inclusion, this distinction is more vivid between urban and rural adults. A significant proportion of unbanked rural adults (81%) reported a lack of money as a reason for not having a bank account compared with unbanked urban adults.<sup>23</sup> A closer examination of this group shows that more than half (57%) are in the bottom two income quintiles and depend on remittances (39%), agriculture (37%), or casual labor (27%) for income. These respondents were almost equally distributed across rural Samoa, with the highest proportion found in Savai'i (36%), followed by NWU (35%) and RoU (29%). Hence, it is likely that the stated reason for being unbanked may echo the fact that it is costly to open and maintain a bank account in rural Samoa.

In fact, 74% of banked adults (78% of rural banked adults) reported minimum balance requirements on their bank accounts. As shown in Figure 21 below, rural banked adults report slightly higher overall average minimum balances at around WST 66.93 (USD 29.48) compared with banked urban adults at WST 65.08 (USD 28.67). In particular, banked rural adults incur higher average minimum balances than banked urban adults on basic access accounts.

Figure 21: Average minimum balance amount (WST)



Reducing minimum balance requirements, particularly on basic access accounts, may be an easy means of reducing the cost of banking for unbanked Samoan adults.

### Voluntary exclusion is prominent in urban areas

As illustrated in Figure 20 above, 20% of unbanked adults in urban Samoa reported not having a bank account because another family member already has an account, compared with 10% of rural adults. In general, more women (14%) reported this as a reason for not having a bank account than men (9%), implying that some excluded women or urban adults may be accessing formal financial services through the accounts of other household members. The higher rate of voluntary exclusion (12%) in Samoa could be due to cultural or socio-economic reasons by which some individuals prefer not to use mainstream financial services.

### Distances to access points are especially high for rural Samoans

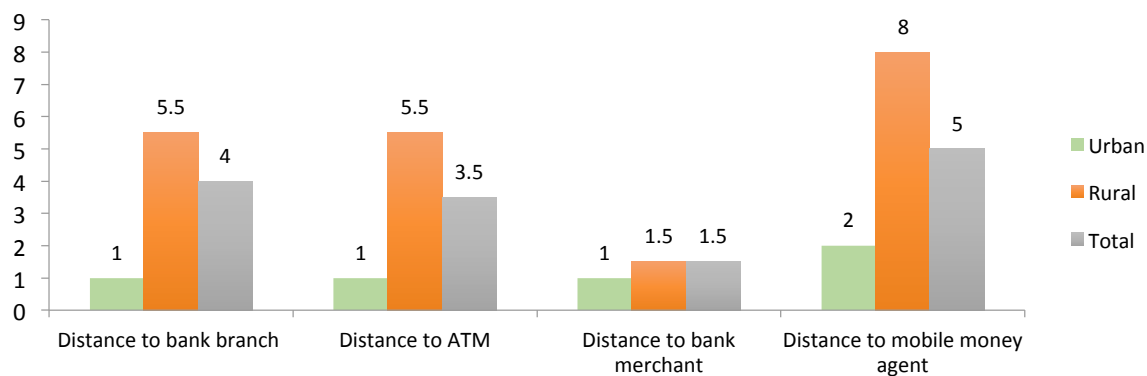
10% of unbanked rural adults (Figure 20) cited longer distances to banks as a reason for not having a bank account. Indeed, the median distance to the nearest branch in rural Samoa is 5.5 km compared to 1 km in urban areas.

Rural adults are also relatively far from ATMs and mobile money agents (Figure 22). These discrepancies are reflected in the time spent traveling to the nearest access point between rural and urban respondents as shown below (Table 1).

Surprisingly, the median distance to the nearest bank merchant was nearly the same for rural and urban adults. The median reported distance to the bank merchant is 1 km for urban adults and 1.5 km for rural adults, suggesting successful efforts to expand branchless banking channels on the part of providers.

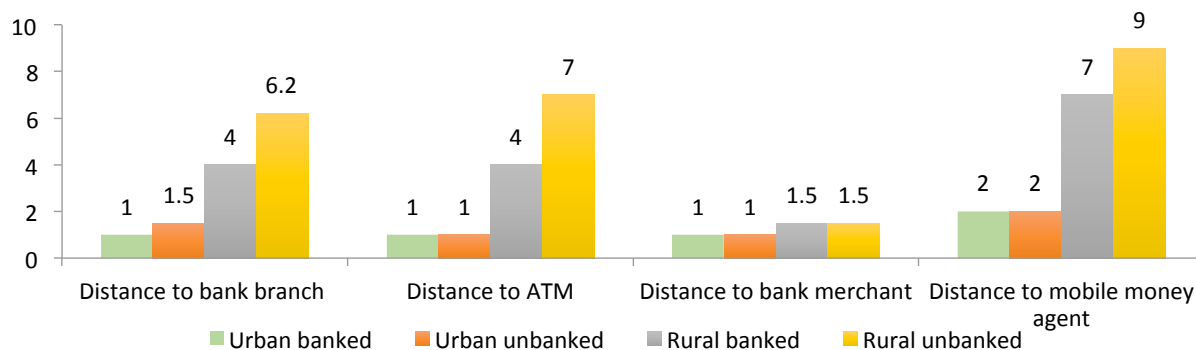
<sup>23</sup> T-test results for lack of money by urban/rural split:  $t=2.7817$ ,  $p=0.0056$ .

Figure 22: Median self-reported distance to nearest access point (km)



The distance to access points likely affects a person’s likelihood of being banked. As highlighted, distance seems to play a role in rural areas. While in urban areas, the average distance to the nearest access point is similar across access points; there are differences in distance to access points between banked and unbanked adults in rural areas (Figure 23). For instance, the median distance to the nearest bank branch is 6.2 km for unbanked rural adults compared with 4 km for the banked rural adults.

Figure 23: Banked/unbanked split in distance to nearest access point (km)



97% of banked adults opened their bank accounts at the bank branch itself, and the remaining 3% opened their accounts through rural banking initiatives or via school banking. In order to use the account, one would also need to be able to travel relatively frequently to an access point. With the median distance of 6.2 km to the nearest bank, and 7 km to the nearest ATM, distance impedes rural respondents from formal financial inclusion. Also, on average, banked rural adults spend nearly twice as much time traveling to the bank branch they use to access their account than banked urban adults (15 minutes and 8.5 minutes, respectively).

As Table 1 below shows, banked rural adults reported longer average (3.5 hours) and median (1 hour) waiting times at the bank than banked urban adults (0.5 and 0.3 hours, respectively) to open accounts. This may partly be due to fewer staff or inefficient processes and banking infrastructure in rural bank branches. Lack of client knowledge about account opening procedures and documents required may also be reflected in the increased wait times reported by rural respondents. For example, some rural respondents may have had to visit the branch multiple times to complete documentation or provide adequate identification, increasing the overall mean and median values.

Table 1: Banked respondents’ wait times

Among respondents with bank accounts		Mean	Median
How long does it usually take you to reach the branch that you use?	Urban (n=104)	9.9 min	8.5 min
	Rural (n=241)	61.6 min	15 min
	Overall (N=345)	45.5 min	10 min
How long did you have to wait at the bank to complete and submit your application?	Urban (n=101)	.5 hours	.3 hours
	Rural (n=244)	3.5 hour	1 hour
	Overall (N=345)	2.6 hours	0.5 hours
Once your application was submitted, how long until the account was opened?	Urban (n=100)	27.2 hours	24 hours
	Rural (n=244)	43 hours	24 hours
	Overall (N=344)	38.3 hours	24 hours

Detailed data on the availability of access points can be found in Table 9 of Annex B.

Additionally, unbanked rural adults cite other reasons, such as insufficient funds or being unemployed (8% and 20% for urban) and lack of documents (7% and 5% for urban) as barriers to financial inclusion. The proportion of adults reporting lack of documents as a barrier corresponds well to the 5% of all adults who do not have any of the required documents - birth certificate, driver’s license or passport. In general, 95% of adult Samoans have at least one form of primary identification required to open a bank account: 92% have birth certificates and more than half (56%) have a valid photo ID (passport or driver’s license). (Table 8, Annex B).

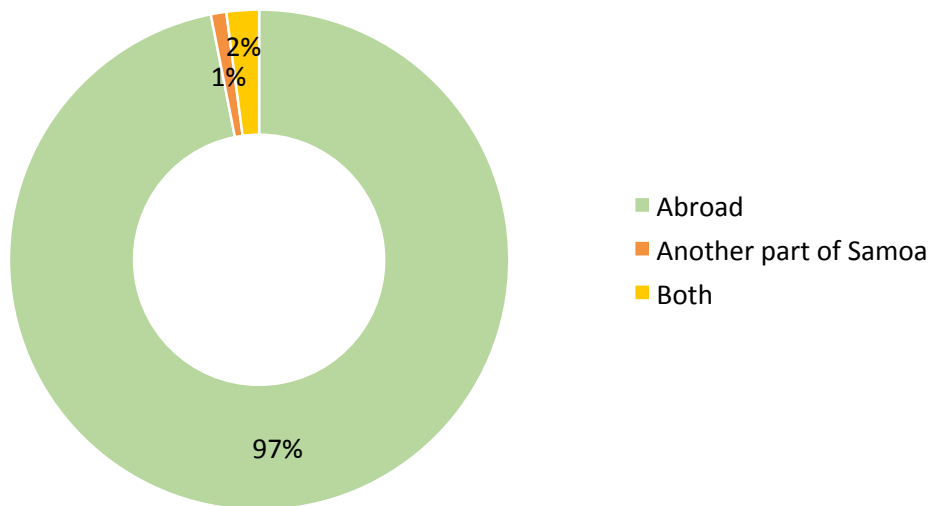
In summary, minimum balance requirements, combined with high costs of travel and time associated with travel and waiting at the bank may be too strenuous for adults with low, irregular income streams. All of these add to the overall transaction cost of being banked, which may be particularly strenuous for adults that have to forgo income in order to access bank services. Given the high distances faced by rural unbanked respondents, revisiting agent regulations related to account opening and transactions might help to increase inclusion among the unbanked, along with lowering of minimum balance requirements.



# Spotlight on Remittances

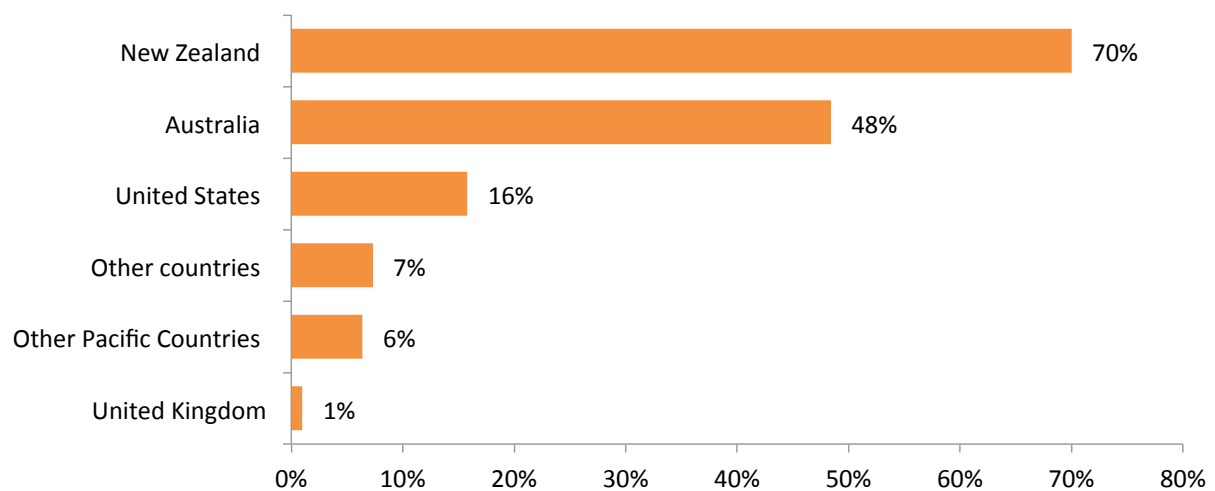
More than half (56%) of adults reported receiving money from relatives or acquaintances in Samoa or abroad. Nearly all remittances in Samoa were sent from abroad as Figure 24 below shows. All urban (100%) and 97% of rural remittance recipients have someone sending them money from abroad.

Figure 24: Source of remittances among those receiving remittances



Of the 97% receiving remittances from abroad, the majority receive remittances from New Zealand, followed by Australia and the United States (Figure 25).

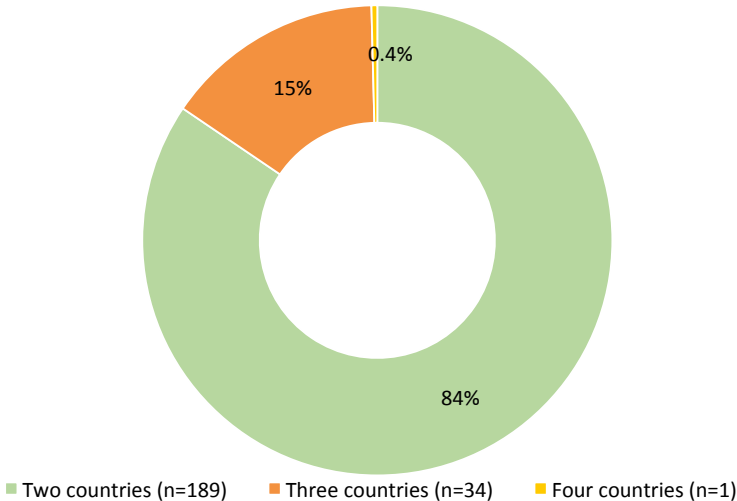
Figure 25: Source of remittances among those receiving foreign remittances



Note: Multiple answers allowed

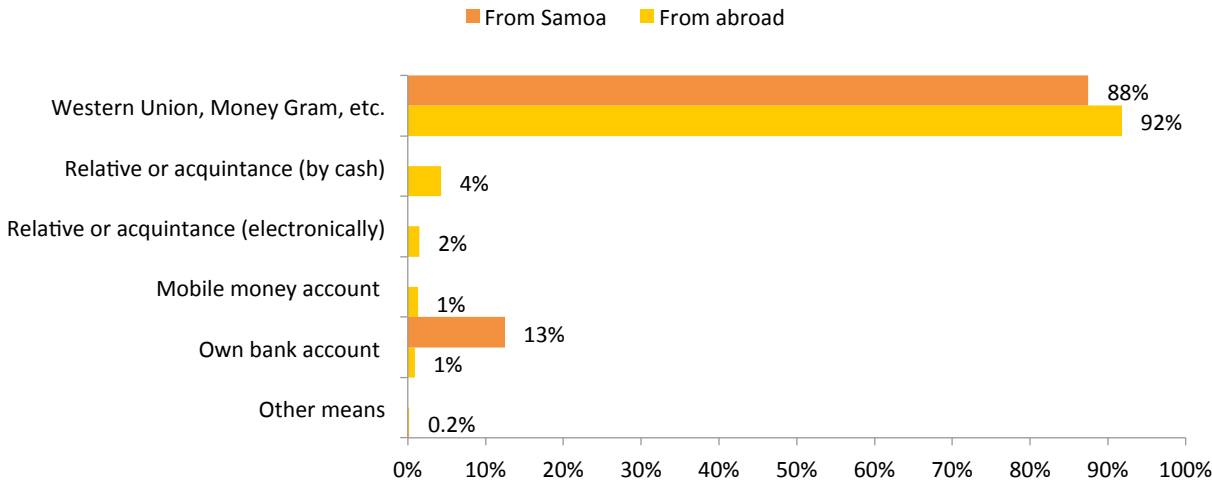
Some recipients of foreign remittances (42%) receive money from more than one country. Of these adults, the majority (84%) receive remittances from two countries as shown on Figure 26 below.

Figure 26: Adults receiving remittances from more than one country



A greater proportion of both international (92%) and domestic (88%) remittances are received through a remittance service such as Western Union or Money Gram. The remaining 13% of domestic remittances are transferred directly to the receiver’s bank account. Other options are infrequently used for remittances sent from abroad (Figure 27).

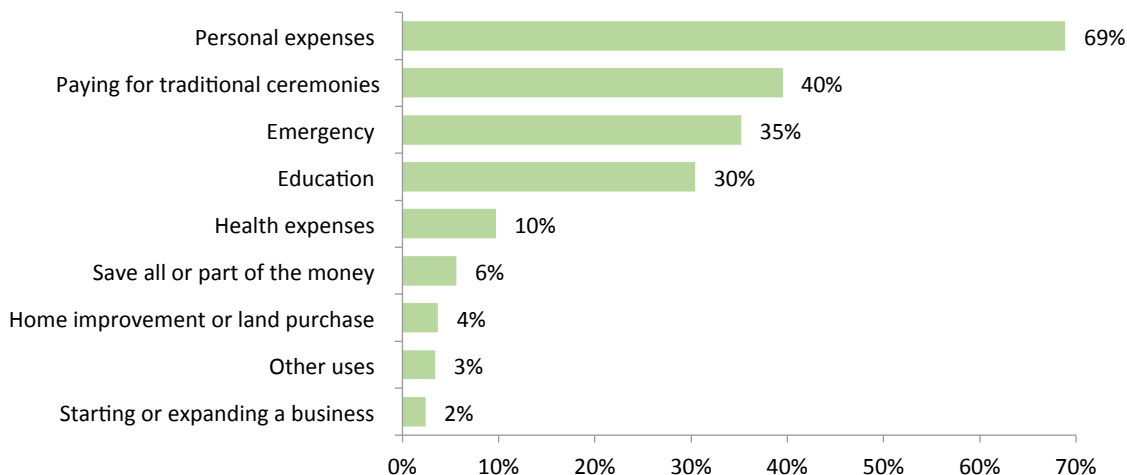
Figure 27: Mechanisms for receiving remittances



**More than two-thirds of remittances received are used to cover personal expenses**

A follow-up question on what Samoans do with remittances revealed that the majority (69%) use this money to pay for personal expenses, including food and utilities (Figure 28). More than a third (40%) of remittance recipients reported using the money to pay for traditional ceremonies, such as weddings, funerals, church obligations and unforeseen events (35%). This is reasonable given that only 22% of remittance recipients earn formal income, and the remaining 78% rely on remittances and other non-formal income sources to cover daily needs.

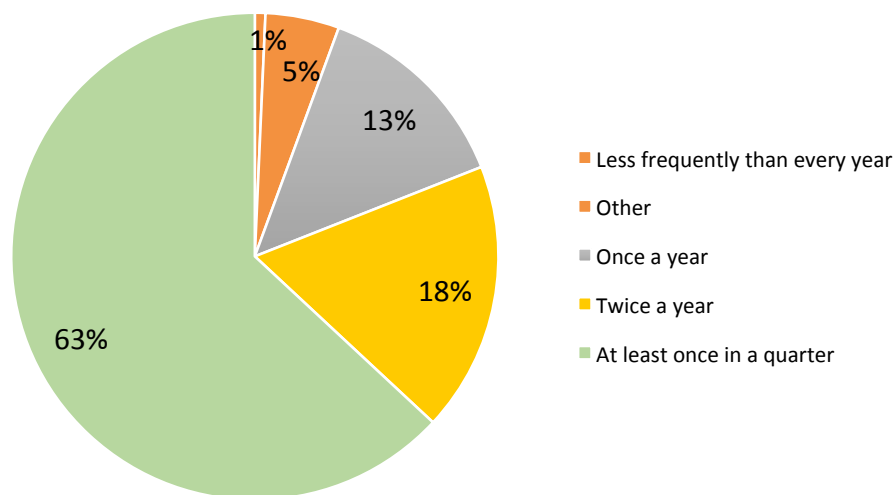
Figure 28: Remittance use among those receiving remittances respondents



Note: Multiple answers allowed

Of those receiving remittances, 76% reported remittances as a source of income which they receive once a month (30%) and some once every other month (25%). In general, 63% of adults receiving remittances reported receiving remittances at least once per quarter (Figure 29).

Figure 29: Remittance frequency among those receiving remittances

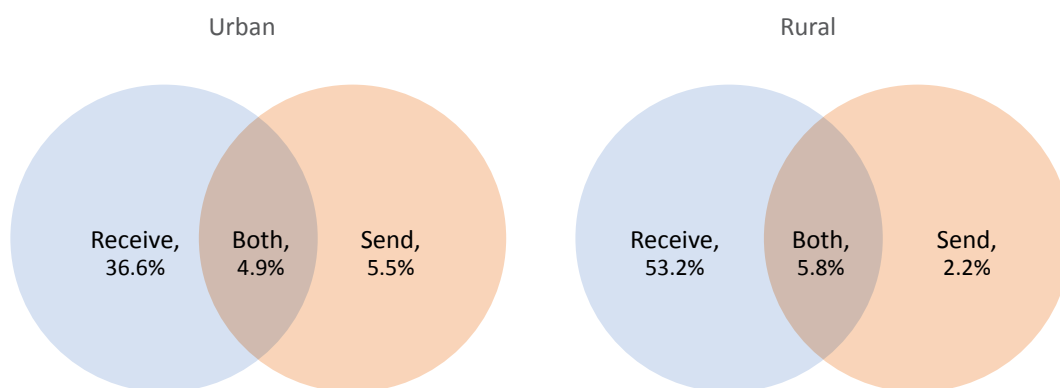


Of those reporting remittances as an income source, 42% are currently banked, 22% were previously banked and 36% have never been banked.

Additionally, a significant proportion of remittance recipients are rural (Figure 30).<sup>24</sup> A slightly higher but non-significant proportion of urban adults sent money in the past year (10%) than rural adults (8%). However, the sample size of remittance senders is too small to make statistically sound inferences.

24 T-test results for receiving remittances by urban/rural split:  $t=4.3309$ ,  $p=0.0000$

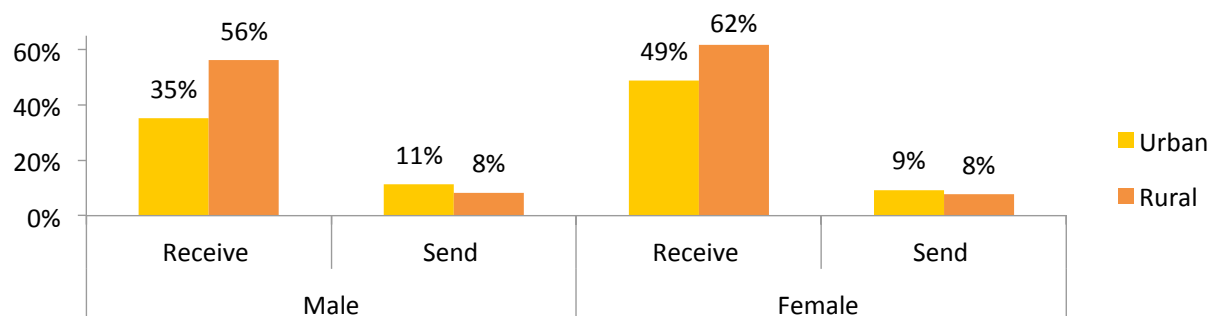
Figure 30: Proportion of adults that sent or received remittances during the previous year, by location



Looking at remittances sent and received by gender and location, sharp differences emerge (Figure 31). A statistically significantly higher percentage of women (59%) receive remittances than men (52%).<sup>25</sup> When we analyze these patterns by location, the differences are still higher but less significant. 49% of urban Samoan females received remittances in the previous year compared with 35% of urban men. Also a slightly higher proportion of rural females (62%) received remittances than rural men (56%).

Within each gender group, there is a significant difference in the percentage of adults that received remittances based on location. The proportion of rural men who received remittances is 21 percentage points higher than urban men, whereas the proportion of rural females is 13 percentage points higher than that of urban females.<sup>26</sup>

Figure 31: Remittance patterns among urban and rural men and women



25 T-test results for receiving remittances by gender:  $t=2.3394$ ,  $p=0.0195$

26 T-test results for receiving remittances by urban/rural split are:  $t=3.7756$ ,  $p=0.0002$  and  $t=2.2004$ ,  $p=0.0282$ , for male and female respondents, respectively.

# Spotlight on bank account usage

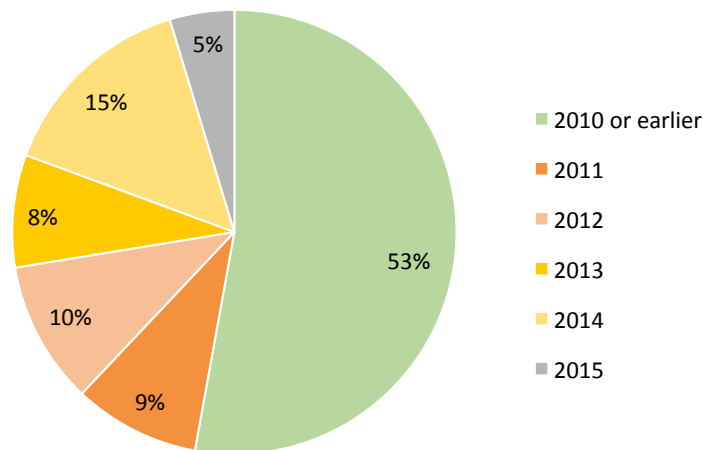
The Samoa DSS asked about account details for banked adults, up to three accounts per person. Most banked adults (89%) have only one bank account, while 11% of banked adults have two or more. The majority of banked adults (94%) opened their own primary accounts. For the purposes of the analysis, we report on the respondents' primary bank account unless otherwise specified.

## Urban banked adults have maintained their accounts for several years

Among banked adults, more than half (53%) opened their primary account in 2010 or earlier (Figure 32), while 20% of banked respondents opened their primary account between 2014 and 2015.

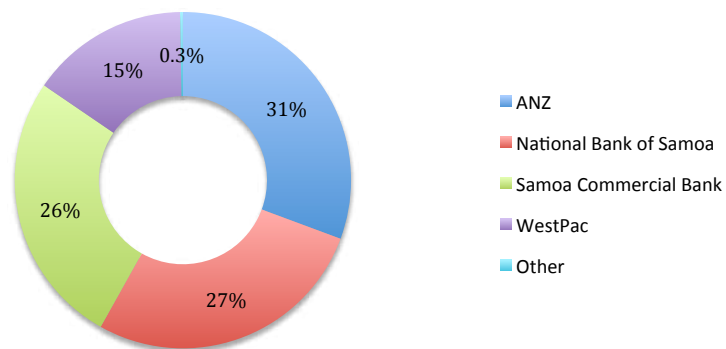
There is a significant difference between urban and rural Samoans in length of account ownership - urban adults (28%) are more likely to have held an account continuously longer than rural adults (17%).<sup>27</sup> This may be due to the fact that bank branches were mainly opened in urban areas and have lately extended their branch networks to rural areas.

Figure 32: Year of primary account opening



Nearly a third of banked adults have at least one of their three accounts at ANZ Bank, the largest bank in Samoa by total assets.<sup>28</sup> Of the four banks in Samoa, Westpac surprisingly has the smallest proportion of accounts of banked adults given that it is the second largest bank in Samoa (Figure 33).

Figure 33: Bank at which primary account held



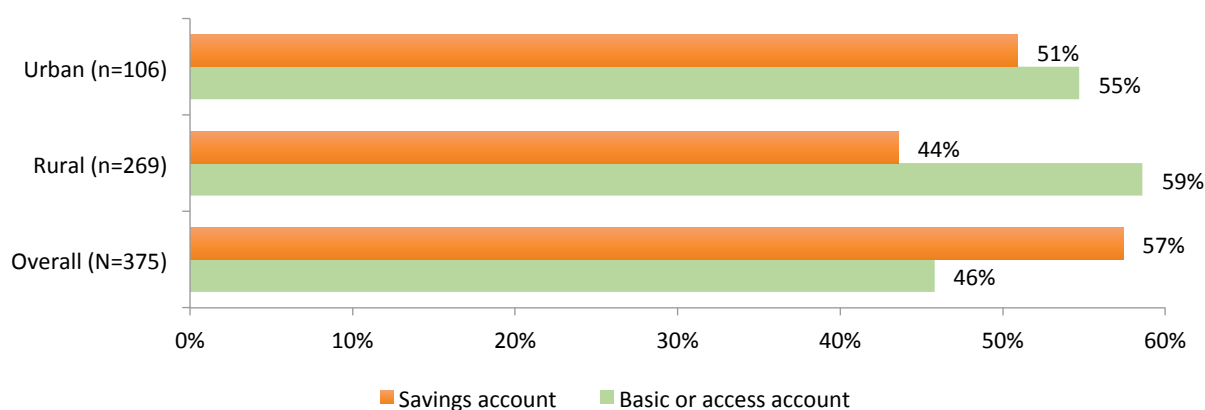
<sup>27</sup> T-test results for length of account ownership by urban/rural split:  $t=3.3661$ ,  $p=0.0008$ .

<sup>28</sup> United States Department of State. 2014 Invest Climate Statement. <<http://www.state.gov/documents/organization/228604.pdf>> Accessed June 19, 2015.

## Banked adults opened accounts to receive payments or to keep money safe

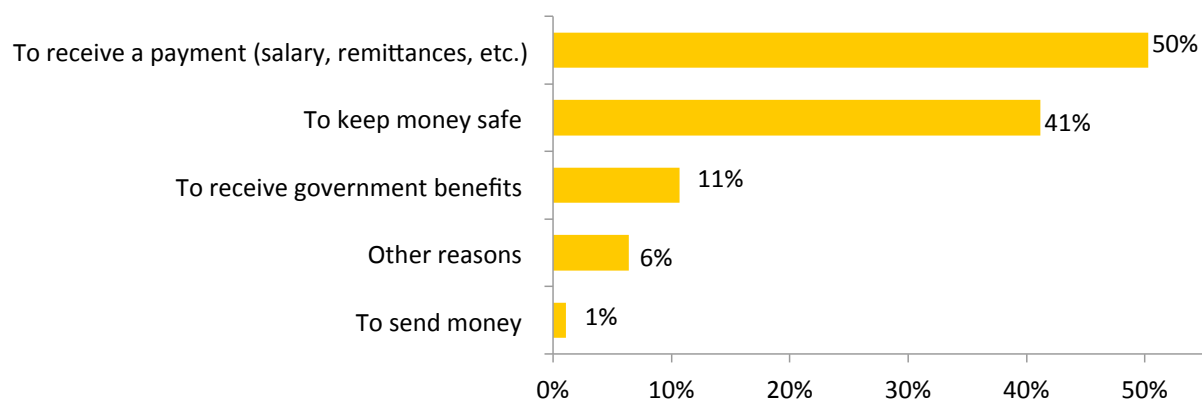
18% of Samoan adults have at least one savings account, and 22% have at least one basic or access account. Among banked adults, 57% have at least one savings account and 46% have a basic or access account (Figure 34). A higher proportion of rural adults (59% and 55% for urban) have basic or access accounts, whereas more urban adults tend to have savings accounts (51% for urban and 44% for rural). The differences in account types between urban and rural adults are significant.<sup>29</sup> This may be because a basic or access account has more flexible deposit and withdrawal features that are appealing to rural Samoans than a savings account. Account ownership type between men and women is not significantly different.

Figure 34: Account types among banked adults



Half (50%) of respondents opened an account to receive a salary or remittances, and an additional 11% said their main reason was to receive government benefits (Figure 35). Another 41% of the respondents said they opened account(s) in order to keep money safe. Only 1% of respondents opened an account to send money.

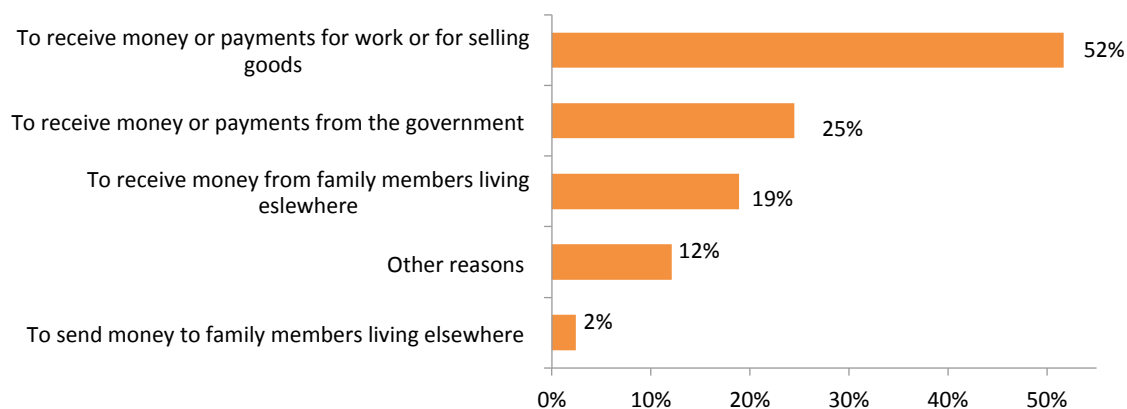
Figure 35: Main reasons for opening a bank account



In line with the reasons for opening accounts, receiving payments or money are the primary uses for the accounts mentioned by banked adults.

<sup>29</sup> T-test results for ownership of savings account and basic access accounts by urban/rural split:  $t=-4.6694$ ,  $p=0.0000$ , and  $t=-3.3544$ ,  $p=0.0008$ , respectively

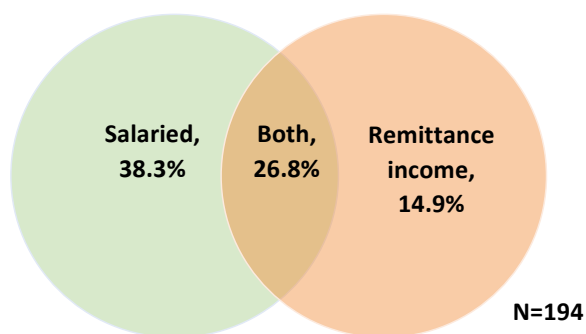
Figure 36: Reasons for using a bank account over the past 12 months



Note: Multiple answers allowed

As shown on Figure 37 below, for those using bank accounts to receive money or payments for work or for selling goods, 65% are earning income from salaries and 42% from remittances.

Figure 37: Proportion of salaried and remittances recipients receiving payments for work into their account



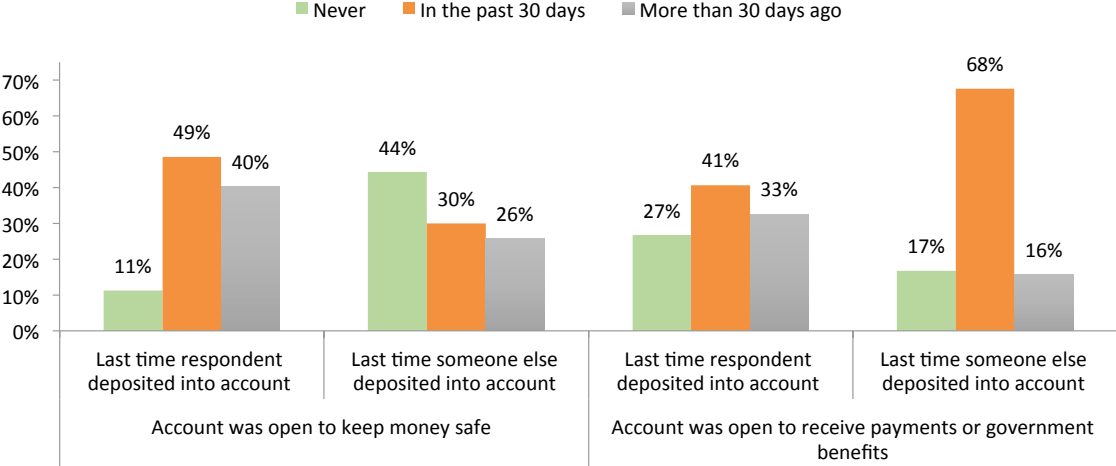
About 11% of banked adults said they use their account for business purposes (Table 2). It may be interesting to learn whether the low usage of accounts for business purposes is consistent with the number of formally registered businesses in Samoa.

Table 2: Do you use your account(s) for personal transactions, business purposes or both?

Business or personal usage	%	95% confidence interval
Personal transactions only	89.1%	[84.7%, 92.3%]
Business purposes only	1.4%	[0.6%, 3.1%]
Personal and business transactions	9.6%	[6.5%, 13.9%]

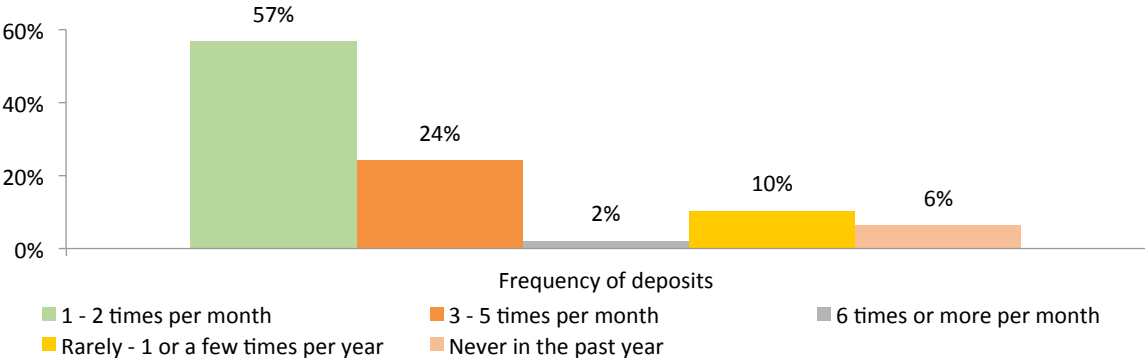
Samoans are active users of their bank accounts. 49% of respondents who opened bank accounts primarily to keep money safe have made deposits into their accounts in the last 30 days, and only 11% claim to have never made a deposit. 41% of respondents who opened bank accounts to receive payments or government benefits have made deposits into their accounts in the last 30 days, whereas 27% claim to have never made a deposit (Figure 38).

Figure 38: Frequency of deposits into bank accounts



Moreover, more than half of banked Samoans deposit into their account 1-2 times a month. A combined 16% of banked Samoans reported to rarely or never deposit into their account in the past year (Figure 39). A similar pattern is observed between respondents who opened their accounts to keep money safe and those that opened accounts to receive payments or government benefits.

Figure 39: Frequency of deposits into bank accounts (per month)



However, Figure 40 and Figure 41 below highlight the fact that those who opened accounts with the intention to keep money safe are doing so, whereas those who opened to receive payments are doing frequent withdrawals. 78% of those who opened an account to receive payments have withdrawn money in the last 30 days, and a combined 88% have withdrawn 1-2 or 3-5 times in a month.



Figure 40: Frequency of withdrawals from bank accounts

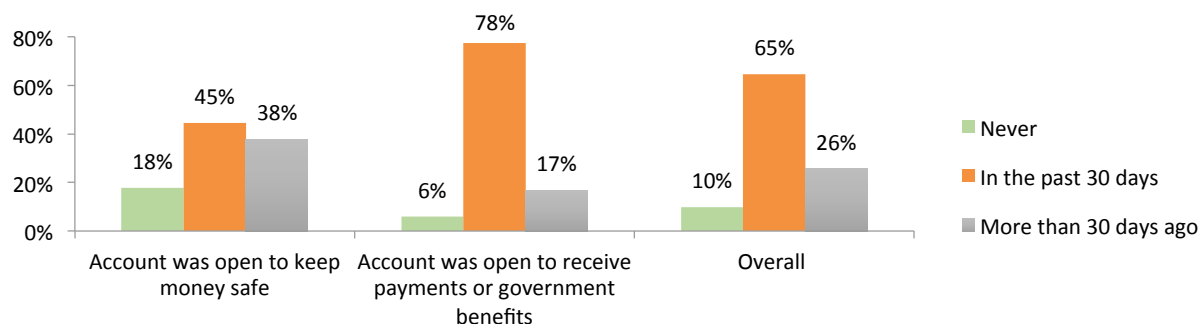
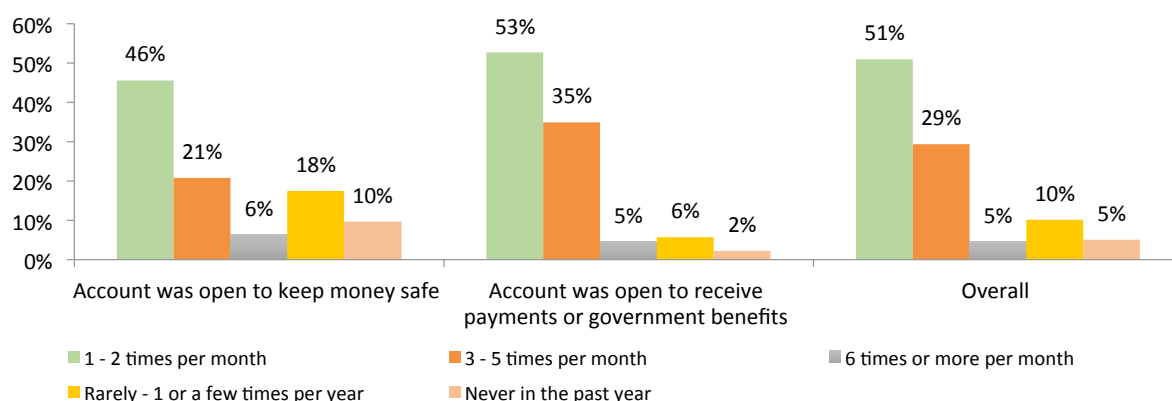


Figure 41: Number of withdrawals from bank accounts per month



The majority of banked Samoans are using bank branches to make deposits (86%) and withdrawals (51%). In general, banked Samoans are not utilizing other value additional banking features (Table 3), with the exception of access cards (debit cards), which are used by more than half of account users (59%). 23% of adult Samoans own access cards that they use frequently. 42% of banked adults with access cards use them 1-2 times per month, and 44% use them 3 - 5 times per month. Mobile banking and internet banking is available to only about 8% of banked adults.

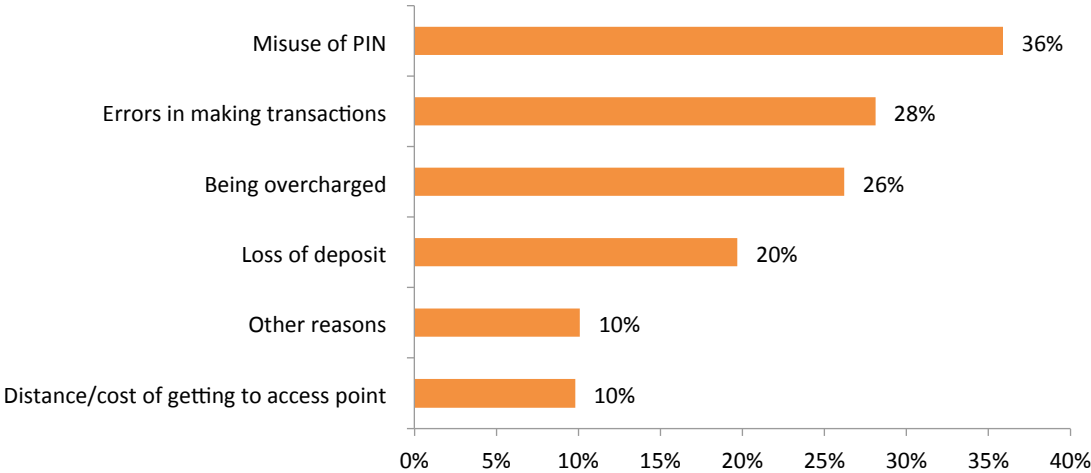
Table 3: Access to bank account features among banked respondents

Product	Percent
Access cards	58.6%
Mobile banking	8.3%
Wire transfer	8.2%
Internet banking	6%
Checks	3%
Credit cards	3%

### Samoans prefer cash for its convenience

Respondents with access to at least one of these features were asked about their preference for using cash versus electronic money. More than half (57%) responded that they prefer to use cash for all payments. 88% of these prefer cash (rather than electronic money) for its convenience, while others answered that they do so for ease of budgeting (22%) and to avoid fees (14%).<sup>30</sup> Misuse of PIN is a primary concern reported by many banked Samoans (36%) that prefer cash to electronic money (Figure 42), followed by the fear of making an error during a transaction (28%) or being overcharged (26%).

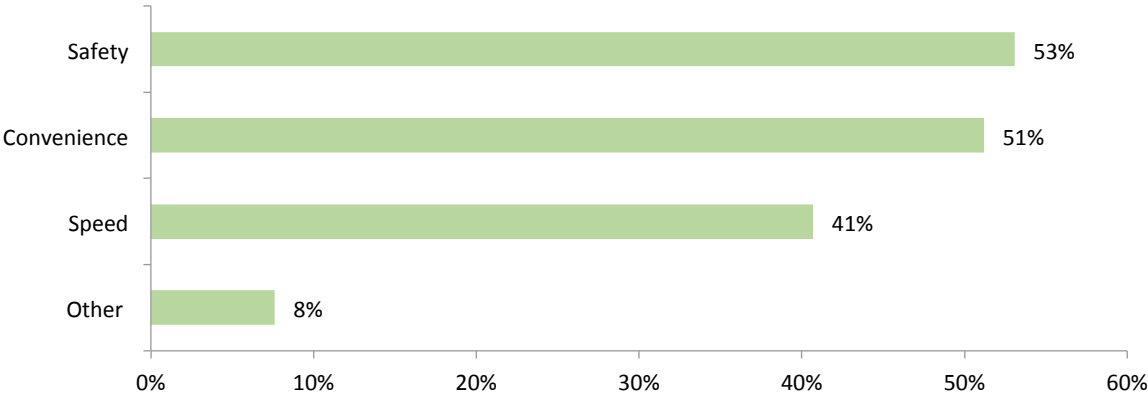
Figure 42: The main reported concerns with electronic money



Note: Multiple answers allowed

As indicated in Figure 43 below, of the banked Samoans that prefer to use electronic money to cash, safety (53%) and convenience (51%) were most frequently mentioned as reasons for their preference.

Figure 43: Reasons for preferring to use electronic money instead of cash



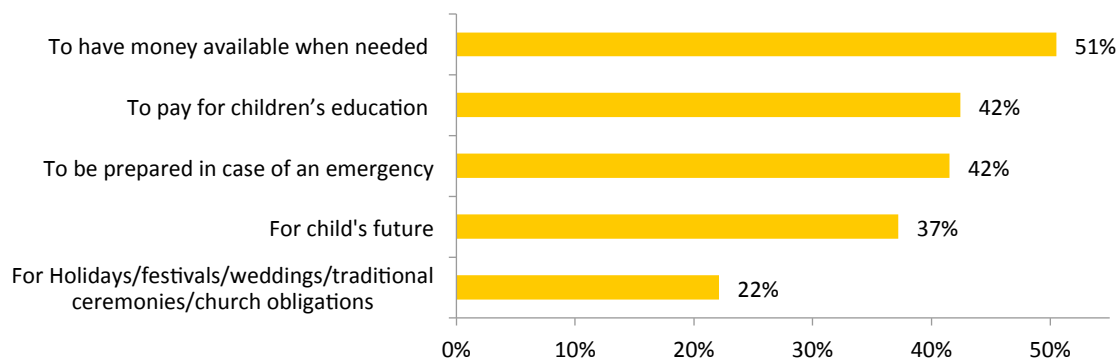
Note: Multiple answers allowed

<sup>30</sup> Multiple answers were allowed.

# Spotlight on Savings

34% of Samoans saved money in the past 12 months for emergencies or unexpected events (50%), for future expenses (such as education, weddings, retirement, or large purchases - 19%), or for both (31%). As indicated in Figure 44, the need to save to have money available when needed (51%), to pay for a child's education (42%), to be prepared in case of an emergency (42%), for a child's future (37%) and for social activities such as holidays, festivals, or weddings. (22%) is common among Samoans.

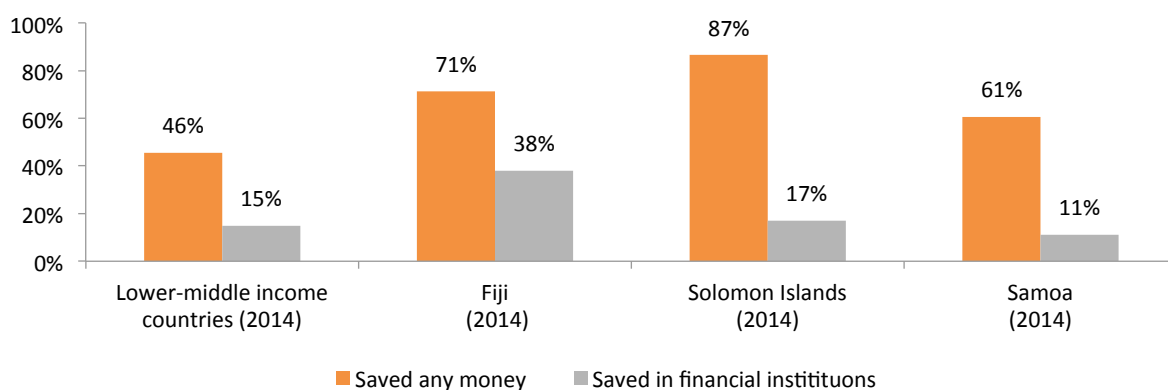
Figure 44: Common reasons for savings among adult Samoans



Note: Multiple answers allowed

Among Samoans who saved in the past 12 months, 61% saved using any savings instrument.<sup>31</sup> This proportion is lower than that of other Pacific Island countries which have completed a DSS. While the proportion of Samoans who save is higher than that of comparable lower-middle income countries, Samoans are less likely to save compared to Fijians and Solomon Islanders (Figure 45).

Figure 45: Savings in Samoa compared with other lower-middle income countries, Fiji and Solomon Islands



Lower-middle income countries data from database: Global Findex (Global Financial Inclusion Database), last updated: 04/2015

<sup>31</sup> Any savings includes respondents who indicated having savings, including those who saved in bank accounts, savings clubs, credit unions, MFIs, at home, in investments, or with family, moneyguards, or SNPF in the past 12 months

### Samoan adults actively use informal savings instruments

A higher proportion of wealthy adults saved compared to those in the bottom income quintiles. These rates converge when looking at rates across common methods of saving (Figure 46). While only 8% of Samoan adults in the poorest income quintile had used savings clubs to save during the previous year, 5% of those in the wealthiest quintile had done so. The proportion of adults who saved with moneyguards<sup>32</sup> is again about the same across all income quintiles. Further, the proportion of adults saving at home is fairly similar across income quintiles, with the middle class (40% -60% quintile) utilizing this method more (22% of respondents) than other income groups.

The fact that the wealthy adults save more but haven't dominated any of these methods implies that wealthier adults may be saving more in banks due to their higher usage of bank accounts. Indeed, Figure 47 below shows that more banked respondents reported saving something over the past 12 months.

Figure 46: Percent of adults saving, by income quintile

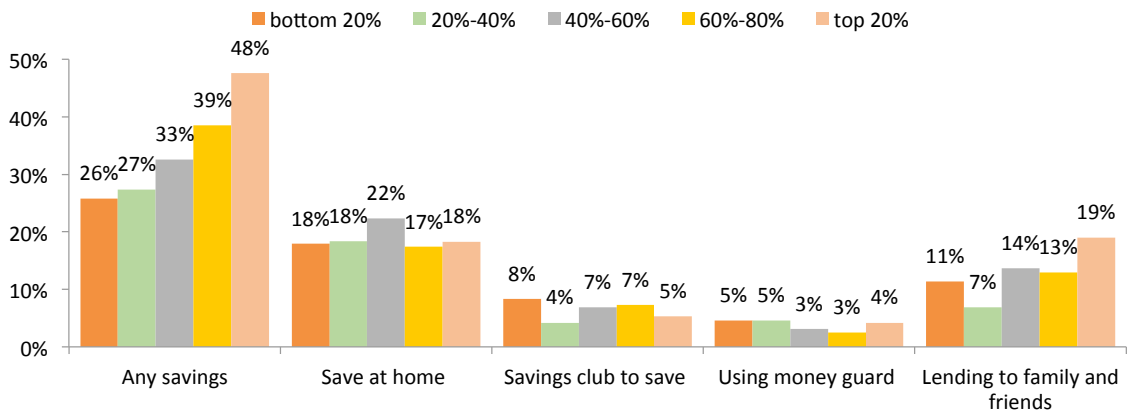
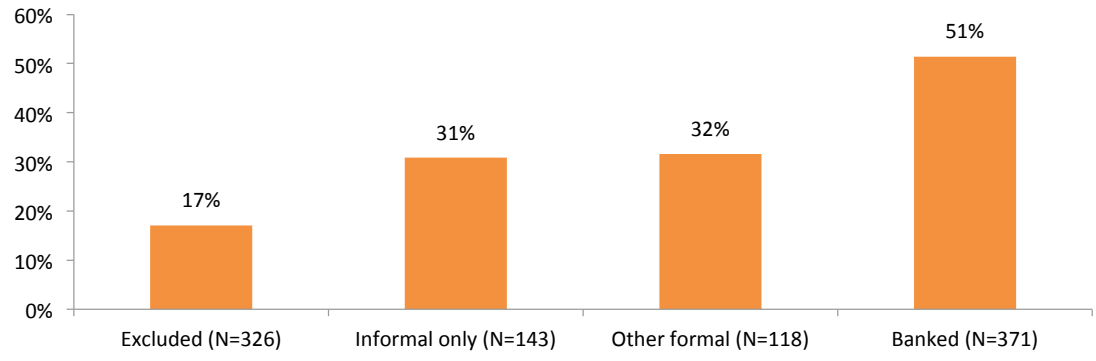


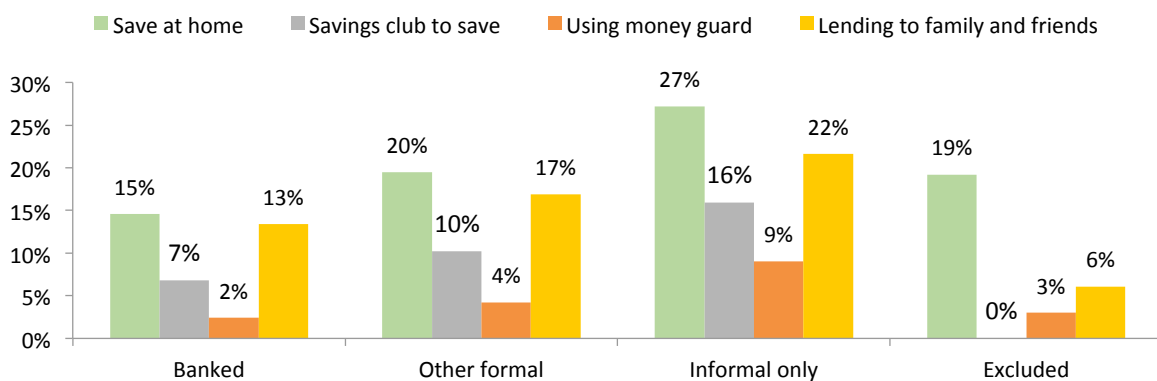
Figure 47: Savings behavior by financial inclusion category



Saving at home is common among Samoan adults, particularly among unbanked and low income earners, and as Figure 48 below shows, unbanked adults are more likely to lend to friends or family and use savings clubs than those in the banked or other formal inclusion strands.

32 A moneyguard refers to an individual that a respondents trusts to hold onto their money for short periods, such as a friend, neighbor or other family member.

Figure 48: Non-bank savings by financial inclusion category



In general, the average amount saved using informal savings mechanisms is relatively small. Table 4 below shows the highest amount saved is through savings clubs and has an average of WST 325 (USD 143).

Table 4: Average savings balances across types of savings instruments<sup>33</sup>

Savings vehicle	Percent of sample	Average value saved		95% confidence interval	
		WTS	USD	WTS	USD
Savings club	6%	325	143	[169 – 480]	[75 – 212]
Extending loans to friends and family	12%	109	48	[26 – 192]	[12 – 85]
Saving at home	18%	146	64	[43- 248]	[19– 109]
Giving someone else money to keep safe (money guard)	4%	133	59	[60– 207]	[26– 91]
Samoa National Provident Fund (SNPF)	13%	12,532	5,521	[9,081 – 15,983]	[4,000– 7,041]

## 1 in 5 adults Samoans have long-term savings through SNPF

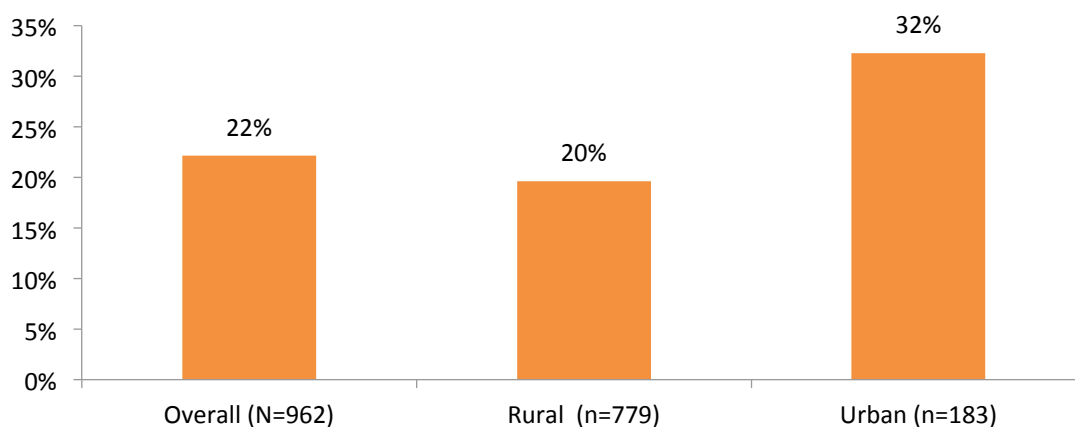
22% of Samoans use the SNPF to save for retirement (Figure 49).<sup>34</sup> However, a significantly higher proportion of urban adults (32%) use SNPF compared with rural adults (only 20%).<sup>35</sup> This is not surprising as formal wage employment is more prevalent in urban areas (44% and 23% for rural). The majority (66%) of adults earning a formal salary (private or public) reported using SNPF to save, compared with only 8% of respondents with non-formal income sources.

<sup>33</sup> Given the small number of respondents using credit unions, MFIs and formal investment vehicles to save, these balances are not reported here. Further, all savings balances should be interpreted along with the accompanying confidence intervals, which provide an estimate of the sample mean. For example, if the Samoa DSS were conducted again using the same sampling methodology, the average mean for each instrument would fall within the reported intervals 95% of the time.

<sup>34</sup> SNPF accounts include an entitlement allowance, meaning that account holders can borrow against their total contribution of retirement savings. The entitlement can be a small loan, or land, housing or vehicle credit.

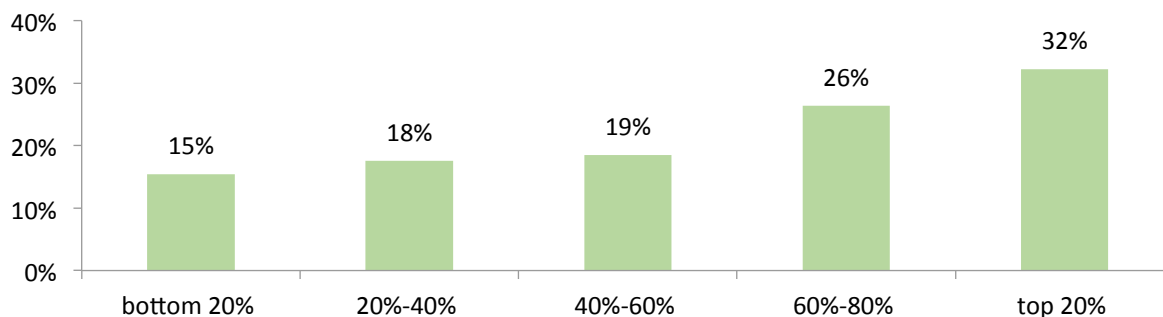
<sup>35</sup> T-test results for SNPF savings by urban/rural split:  $t=3.6878$ ,  $p=0.0002$ .

Figure 49: Usage of SNPF



In line with these findings, usage of SNPF also differs by income level (Figure 50). The wealthier are more likely to be using SNPF for long-term savings than respondents at the bottom of income quintile.

Figure 50: Usage of SNPF by income quintile



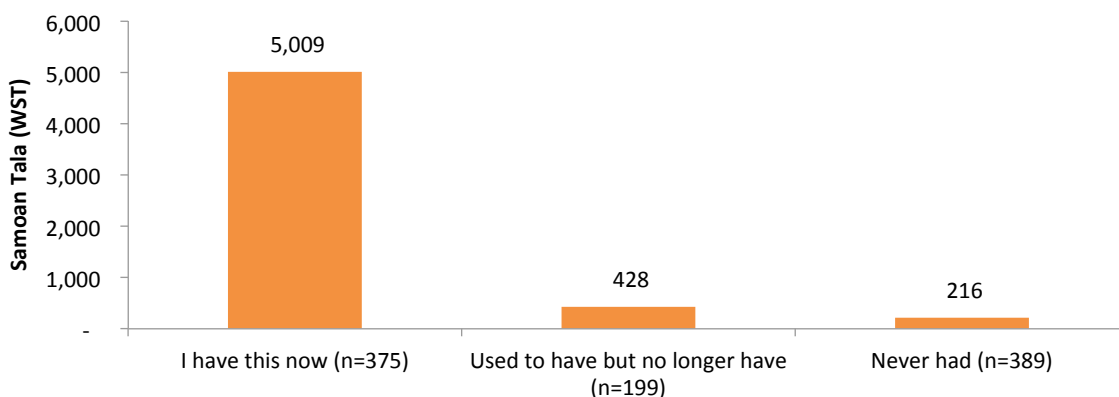
Although a slightly higher proportion of men (24%) reported using SNPF for long-term saving than women (20%), the difference is not significant.

### Banked respondents reported higher levels of savings balances overall

Overall, savings balances (including savings in all instruments) of the banked are significantly higher than those of the unbanked or previously banked (Figure 51).<sup>36</sup> Banked adults had an average WST 5,009 (USD 2,206) in savings compared with an average of WST 428 (USD 188) among the previously banked and WST 216 (USD 95) among the unbanked. It is likely that SNPF account holders and urban adults skew average savings balance for both banked and unbanked adults. The average savings balance among SNPF account holders is WST 3,428 (USD 1,510). Also, urban adults have significantly higher average savings balances, WST 4,015 (USD 1,769), compared to rural adults with WST 1,683 (USD 741). Excluding SNPF balances, banked adults still have higher average savings at WST 1,213 (USD 534) compared with WST 83 (USD 36) for previously banked and WST 60 (USD 26) for unbanked.

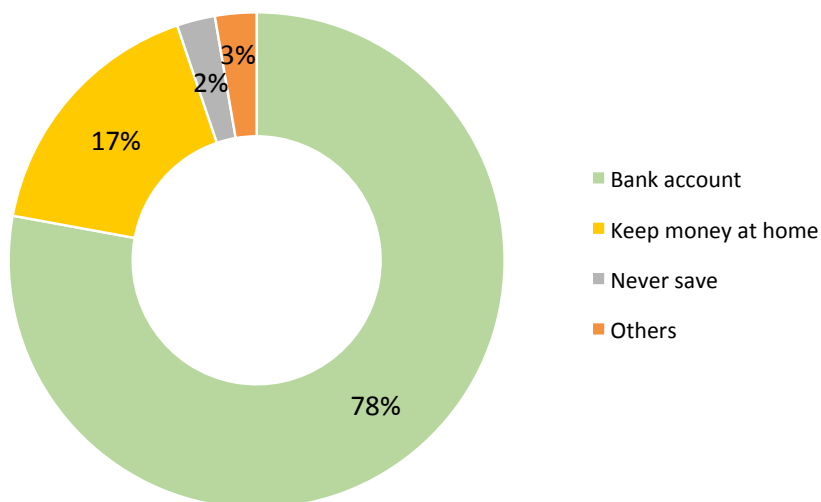
<sup>36</sup> T-test results for SNPF savings by urban/rural split:  $t=3.6878$ ,  $p=0.0002$ .

Figure 51: Average savings balances across the banked and unbanked respondents (WST)



All respondents were asked to indicate which method they would choose to save if they had the choice. Regardless of bank account status, two-thirds of Samoan adults said they would prefer to save through a bank account (Figure 52). The proportion of Samoans preferring to save through a bank account suggests that Samoans value safety for their savings. Cash and other informal saving options are associated with risks such as risk of loss or theft or pressure to spend or lend money to friends or family. However, nearly a third (32%) of adults answering that they would prefer to save through a bank account have never had a bank account, suggesting a latent demand for access. Only 46% of these adults are currently banked and 22% were previously banked.

Figure 52: Preferred method for saving<sup>37</sup>



Only 23% of banked adults answering that they would prefer to save through a bank account had actually saved in one of their bank accounts in the past 12 months. Seventeen per cent had saved at home and 12% had lent money to friends and family. Lack of alignment between preferred saving methods and actual methods used may highlight a lack of affordable and easily accessible formal savings products that accommodate frequent withdrawals. Further research on savings preferences and actual practice may help to better understand this disparity.

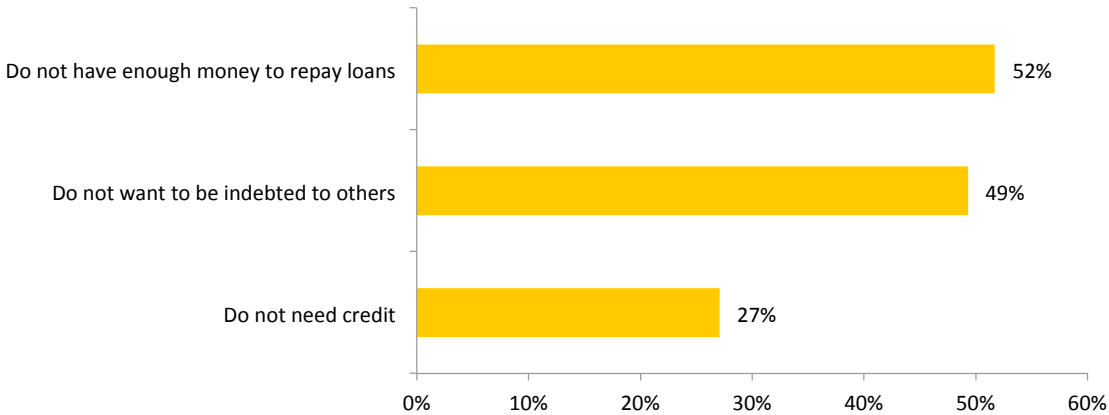
<sup>37</sup> Other includes methods preferred by less than 2% of respondents' population. These are savings club, using money guards, SPNF and all others.

# Spotlight on credit use

Nearly half (47%) of adult Samoans had borrowed from formal or informal sources during the previous year. Across all Samoan adults, the mean number of loans outstanding per adult was 1.2. Samoan adults with credit outstanding at the time of survey had borrowed to invest in education (15%), to build, improve or renovate a house (12%) and to pay for weddings or funerals (10%), among other reasons.

Among adults with no credit outstanding, the majority reported not having credit because they do not have enough money to repay loans (52%), they don't wish to be indebted to others (49%), or they don't need credit (27%) as shown in Figure 53 below.<sup>38</sup>

Figure 53: Commonly cited reasons for not having credit

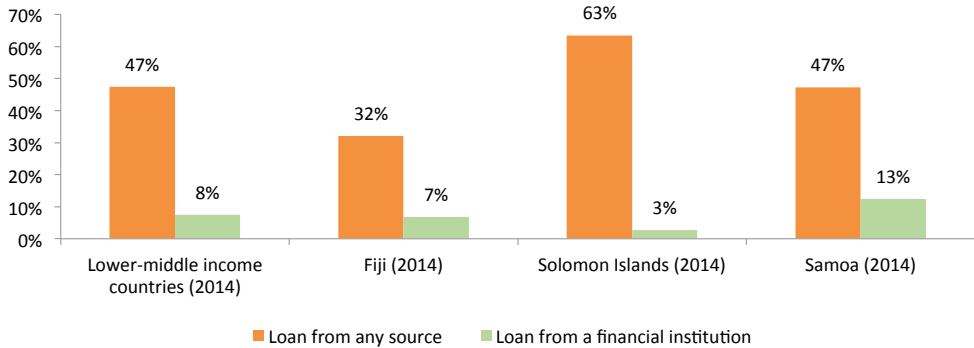


Note: Multiple answers allowed

Samoan adults reporting not having money to repay loans as a reason for not having credit are likely to have never been banked (55%) or to earn income informally from agriculture (67%) or remittances (54%).

A much higher proportion of adults have loans from any source compared to the rate of adults with loans from financial institutions (Figure 54). This indicates that the majority of Samoan adults are likely being served by informal financial services despite the fact that more Samoans are taking loans from financial institutions than adults in comparable lower-middle income countries and other Pacific Islands. Overall, use of credit (both formal and informal) in Samoa is similar to comparable lower-middle income countries but higher than in Fiji.

Figure 54: Credit usage in Samoa compared with other lower-middle income countries, Fiji and Solomon Islands



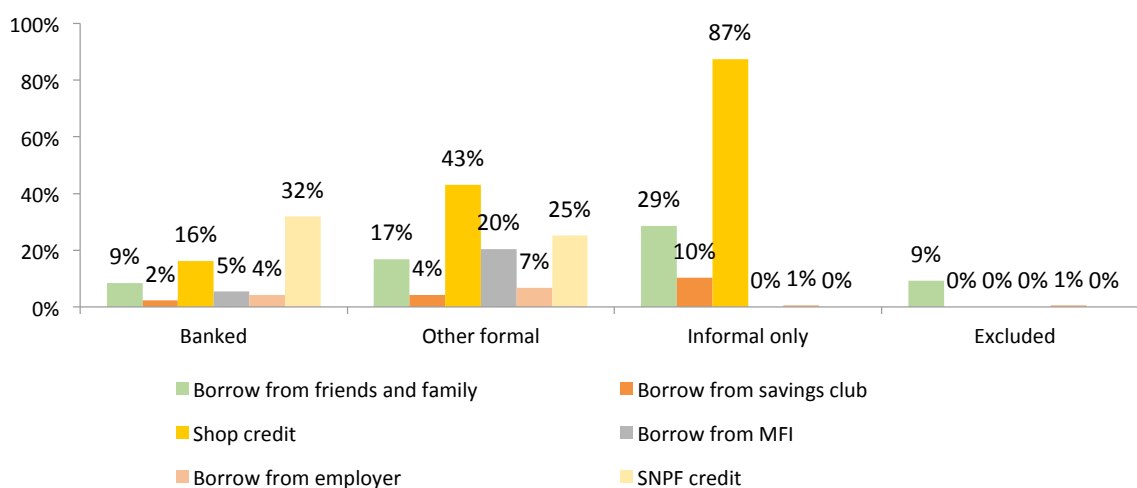
Lower-middle income countries data from database: Global Findex (Global Financial Inclusion Database), last updated: 04/2015

38 Multiple responses allowed.



Like savings, use of informal credit varies by inclusion strand (Figure 55). Given a higher preference towards borrowing from friends and family, respondents in all categories borrowed from this source, with a greater percentage of adults in the “informal only” strand (29%) doing so in the past year. Those in the informal only strand used shop credit much more (87%) than those in the other formal (43%) or banked (16%) strands. Respondents in the banked (32%) and other formal (25%) strands have SNPF as an additional source of credit. However, adults who are entirely excluded from financial services have only family and friends as well as employers to rely on for credit, given the inclusion strand’s means of classification.

Figure 55: Non-bank sources of credit by financial inclusion category



## Samoan adults actively use informal credit sources

Table 5 shows the average outstanding credit balances for different sources of credit, from formal (commercial banks, MFIs and SNPF) to informal (friends and family and shop credit). The majority of Samoan adults are borrowing from shopkeepers. Borrowing from commercial banks is also more frequent than borrowing from other formal sources such as MFIs. Commercial banks have the highest average outstanding balance compared to all other sources, suggesting that commercial banks are providers of larger sized loans.

The low usage of other formal sources such as microfinance could be due to the fact that such services are not widespread in Samoa compared to commercial banks.

Table 5: Average amount of credit outstanding, by credit source<sup>39</sup>

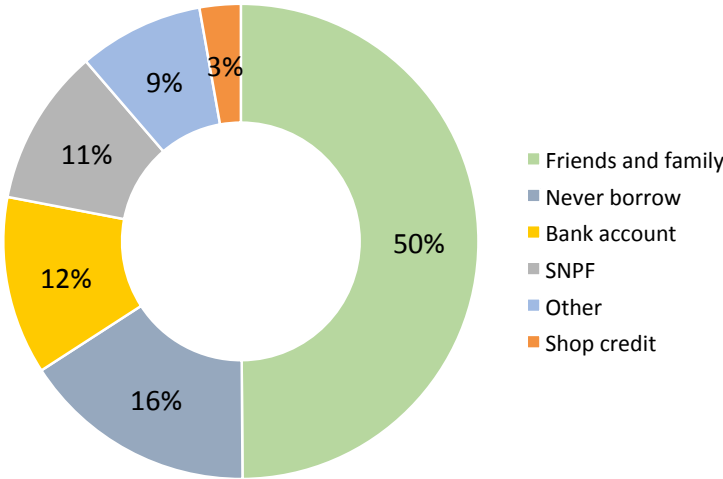
Credit source	Percent of Sample	Average outstanding		95% confidence intervals	
		WST	USD	WST	USD
Commercial bank loan	20%	12,204	5,376	[3,098 – 21,310]	[1,365 – 9,388]
Loans from friends and family	13%	56	25	[21 – 91]	[9 - 40]
Loan from MFI	5%	1,422	626	[916 – 1,928]	[403 - 849]
SNPF credit	13%	2,577	1,135	[1,445 – 3,708]	[637 - 1,634]
Shop credit	25%	69	30	[-14 – 152]	[-6 - 67]

When asked which credit source was most important to them, about half of Samoans replied that they prefer credit from friends

<sup>39</sup> Given the small number of respondents using moneylenders, credit unions, hire purchase, pawning or laybys, employer credit, or savings clubs to borrow, these balances are not reported here. Further, all credit balances should be interpreted along with the accompanying confidence intervals, which provide an estimate of the sample mean. For example, if the Samoa DSS were conducted again using the same sampling methodology, the average mean for each instrument would fall within the reported intervals 95% of the time.

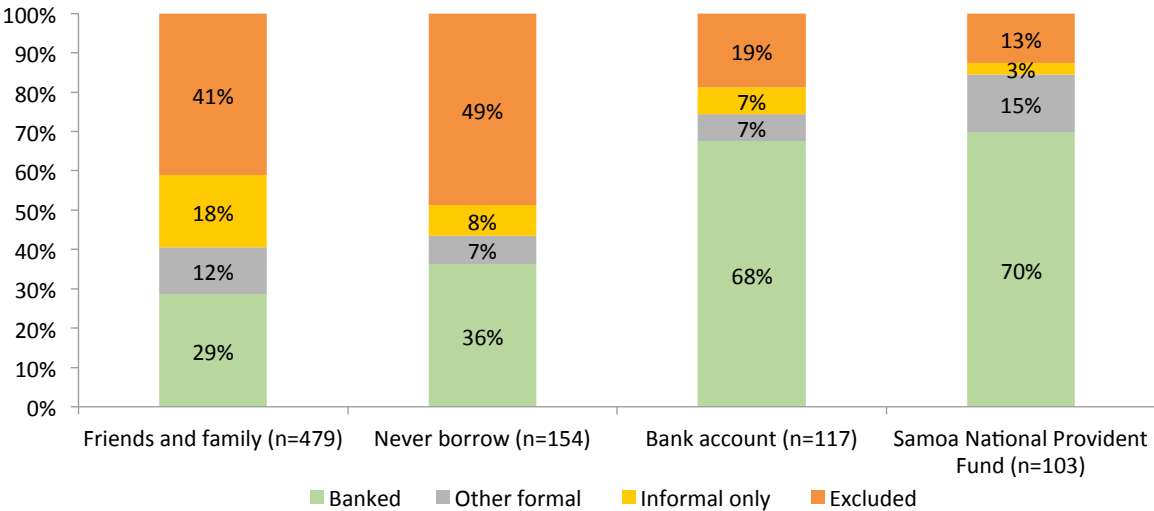
and family compared with 12% who prefer formal credit from banks (Figure 56). Convenience, ease, having a relationship with the lender, speed, and lack of interest were some of the most frequent reasons given for a particular credit source.

Figure 56: Preferred source of credit<sup>40</sup>



Preference of credit source in Samoa mirrors financial inclusion status. A higher proportion of Samoan adults preferring credit from friends and family (41%) and those who never borrowed (49%) are entirely excluded from financial services (Figure 57). A higher proportion of Samoans preferring credit from formal sources (68% from bank and 70% from SNPF) are actually banked. It is unclear whether preference towards a particular credit source influences the likelihood of being financially included or excluded.

Figure 57: Financial inclusion category by top four preferred source of credit



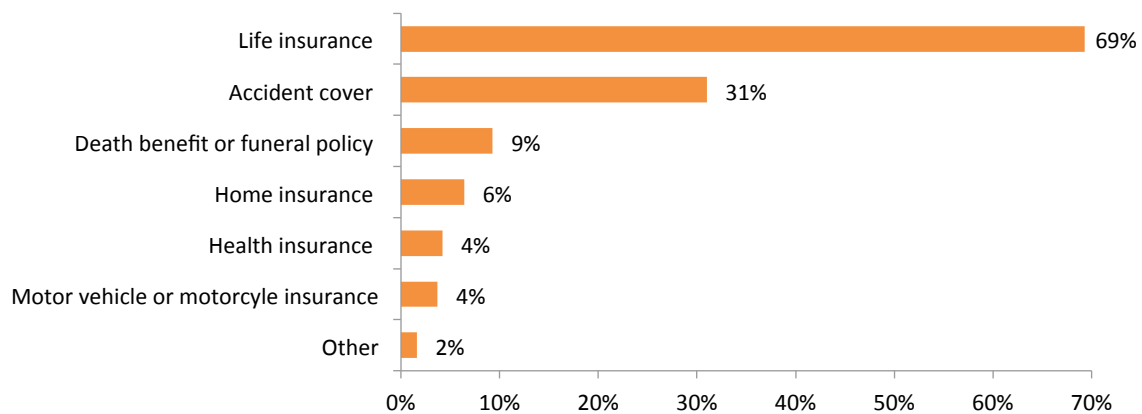
<sup>40</sup> Other includes methods preferred by less than 3% of the sample. These are savings clubs, microfinance, moneylenders, employers, development banks and others.

# Spotlight on insurance

In general, 21% of all adults in Samoa have any type of insurance (Figure 59). Of the insurance owners, 66% are currently banked, 14% have previously been banked and 20% have never been banked.

Insurance ownership in Samoa is influenced by ownership of life insurance. Among the insured adults, majority (69%) have life insurance, followed by about one-third (31%) with accident coverage (Figure 58). The higher proportion of life insurance ownership could be driven by the fact that the main provider of life insurance in Samoa (the Samoa Life Assurance Corporation) is state owned, and it could be provided by employers.

Figure 58: Types of insurance owned

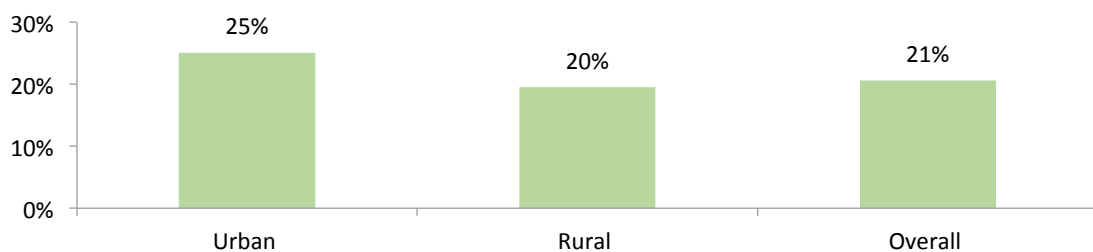


Note: Multiple answers allowed

Given that a higher proportion of insured adults have life insurance, it is not surprising that the rate of insurance ownership is significantly higher among employed (45%) than unemployed Samoan adults (11%).<sup>41</sup> Among adults with life insurance, one-third receive formal wages.

Among insurance owners who are not banked, 32% receive formal wages. This suggests that one-third of these adults may have received insurance through an employer. Additionally, a higher percentage are female (59%) than male (41%), and 58% have life insurance, followed by 41% with accident insurance. While the DSS detail did not probe into whether the respondent was the policy holder or another household member, some respondents may have answered that they are covered by insurance that is held by another family member. Accident insurance, for example, is required for salaried employees.

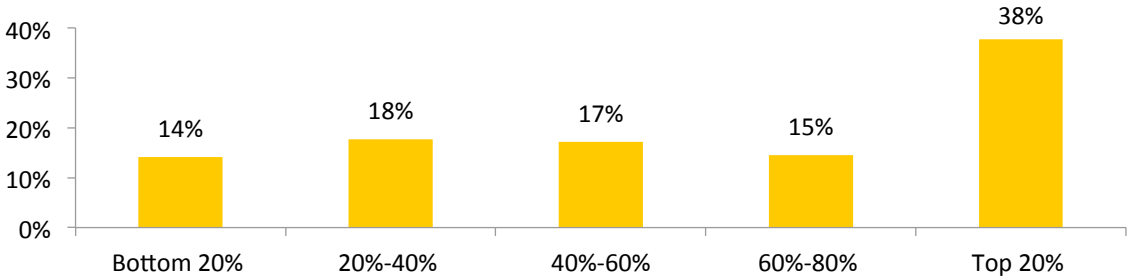
Figure 59: Insurance ownership in Samoa



41 T-test results for insurance ownership by employment:  $t=-12.3606$ ,  $p=0.0000$

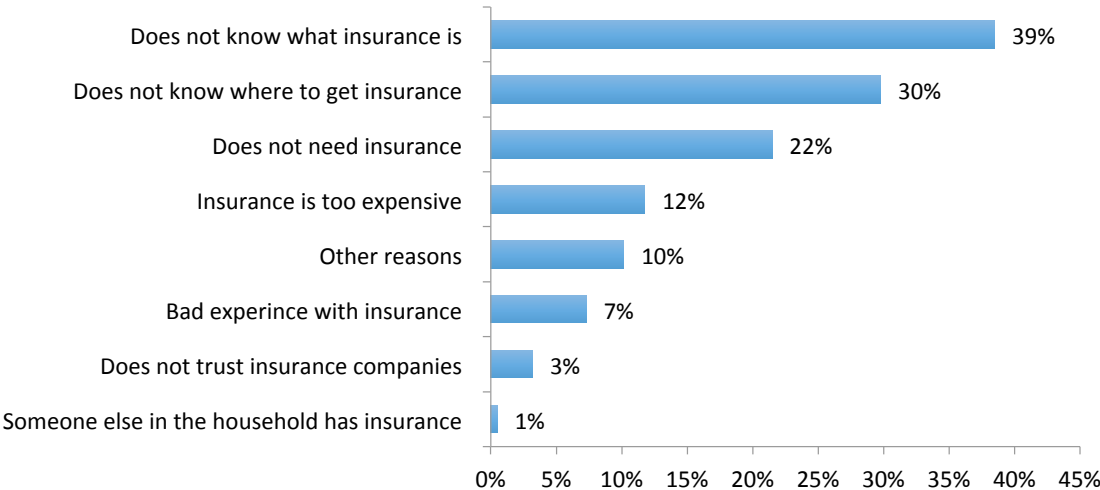
The difference in insurance ownership between urban (25%) and rural (20%) adults is not significant. However, there is a significantly higher proportion of insured adults in the top income quintile than in other income quintiles (Figure 60).<sup>42</sup> This finding could partly highlight the fact that the wealthier are more likely to be informed about the importance of insurance and are willing to cover themselves against risks or that they receive insurance through their employment or SNPF. Indeed, wealthier Samoans are more likely to have home, motor vehicle and other insurance,<sup>43</sup> whereas a higher proportion of adults in the bottom four-income quintiles have accident coverage.

Figure 60: Insurance ownership across income quintiles



When asked why they don't use insurance, 39% of uninsured adults answered that they don't know what it is, followed by 30% who do not know where to get insurance and 22% who said they do not need it (Figure 61). Given that more than a third of respondents do not know what insurance is, an insurance component could be included in ongoing financial education efforts.

Figure 61: Self-reported reasons for not using any type of insurance



Note: Multiple answers allowed

<sup>42</sup> T-test results for insurance ownership by top 20 income earners/others split: t=6.5706, p=0.0000

<sup>43</sup> Other insurance include business, retirement and microfinance insurance

## Spotlight on mobile financial services

The Samoa DSS finds low usage of mobile financial services<sup>44</sup> despite the fact that 71% of Samoan adults own a mobile phone, and nearly 15% of those who do not own a phone regularly use someone else's. Further, awareness of mobile money is relatively low: 37% of adults were aware of mobile money services.

Across all adults, 2.6% had a mobile wallet, 3% had mobile banking services, and 0.5% had both at the time of survey. With respect to mobile wallets, nearly 6% used to have a mobile money account but no longer had one at the time this survey was conducted. Further, 2% of adults reported that they used to have mobile wallets but no longer do. Even among respondents who both have a SIM card and have heard of mobile money, only about 8% had a mobile money account.

When asked why they don't use mobile money, more than a third of respondents who have heard of mobile money reported that they don't know how to use it (36%), followed by nearly 23% who indicated that they don't have enough money to use mobile money services.

Due to the low number of respondents with mobile money accounts, statistically sound inferences about this segment are not possible (details in Table 11, Annex B).

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<sup>44</sup> The DSS distinguishes between two types of mobile financial services: 1) mobile wallets or mobile money which allows the storage of e-money in a mobile account which is not linked with a bank account and 2) mobile banking, in which a mobile phone can be used to access banking services and execute financial transactions. In Samoa, mobile money accounts are currently only offered by Digicel, which launched its product in 2011.

# Conclusion

The Samoa DSS highlights the fact that the rate of financial inclusion in Samoa (39%) lags behind that of Fiji (60%) even though it is comparable to that of the other lower-middle income countries (42%) and ahead of Solomon Islands (26%). More than a third (34%) of Samoans are excluded entirely from financial services.

Interestingly, Samoan women appear more likely to be banked than men, and there is a significant distinction between the proportion of men (39%) and women (30%) who are completely excluded from financial services.

As expected, unbanked Samoans are more likely to be found in rural areas than urban – with a higher concentration of unbanked adults found in Savai'i. Moreover, nearly half of adults in the bottom income quintile (46%) and more than two-thirds (70%) of adults aged 15-20 are excluded from financial services entirely – highlighting the fact that the poor and youth in Samoa are yet to be reached by formal financial services.

Among unbanked adults, the most common reason for not having a bank account is lack of money—cited by 80% of unbanked respondents. Additionally, a greater percent of rural unbanked adults cited distance as one of the factors preventing them from accessing financial services. Both of these reasons may speak to the fact that it is costly to open and maintain a bank account in Samoa. 74% of banked respondents reported having a minimum balance requirement, with median amounts of around WST 50 (USD 22.02). The required minimum balance, combined with the cost of travel to the nearest branch, and time associated with this travel is likely too strenuous for adults with low and irregular income streams. Despite this, the apparent spread of bank merchants, which appear to be in close proximity of both banked and unbanked adults provides optimism for increasing inclusion among those that are currently unbanked. However, further research to understand the existing disparities in formal inclusion across gender, age and income groups would be relevant in guiding policies towards financial inclusion in Samoa.

For banked Samoans, there appears to be a positive association between receiving remittances and the likelihood of being banked. The fact that a higher proportion of women (56%) receive remittances than men (40%) may help to explain why Samoan women are more likely to have a bank account compared to men.

Among banked adults, the general use of electronic payment systems is very low. Along the same lines, the degree to which mobile financial services is reaching the unbanked population in Samoa is low. To a large extent, the lack of knowledge about how to use mobile services appears to contribute to low usage.

Whether banked or not, Samoans are saving less than comparable Pacific Islanders such as Fijians and Solomon Islanders. Despite the similarities in savings behavior by gender within Samoa, there is a marked difference in how people save across financial inclusion strands. Among banked adults who save, many save using their bank accounts, whereas many other adults turn to alternative methods of saving. Also, similar to savings, the majority of Samoan adults rely on informal credit for different purposes. Most adults borrow to invest in education, to build or renovate a home or to pay for social functions such as weddings. There is no significant distinction in borrowing behaviors between men and women.

Similar to other formal services, ownership of insurance is more prominent among wealthier adults than among adults in other income quintiles. The rate of insurance ownership is significantly higher among employed (45%) adults than unemployed adults (11%), and the high rate of life insurance ownership among insured Samoans suggests that this may be provided by employers.

These findings provide a basis for further research into barriers to formal financial inclusion in Samoa. Policy responses in the immediate term may include:

- Financial literacy education related specifically to insurance and mobile money if increased uptake of these are priorities of CBS;
- Revisiting agent guidelines to determine whether bank merchants can open accounts (particularly in Savai'i and the Rest of Upolu where formal account ownership is low), in addition to performing account-related transactions;
- Advocating for lower minimum-balance requirements, particularly for lower-income respondents; and
- Including remittance products in national policies on financial inclusion. Remittances are a clear gateway to formal products in Samoa that can be leveraged for potential onboarding of other products and services.

# Annex A: Financial Inclusion Indicators

## PIRI Demand-side Indicators

ACCESS INDICATORS			Confidence interval
3.4 % of adults with a mobile phone subscription		70.7%	[67.6%, 73.6%]
4.3. Average cost of traveling to the nearest access point (public transit fee or gas costs), converted to USD	Bank branch	\$1.9 USD (WST 4.3)	USD [1.7, 2.2] WST [3.8, 4.9]
	ATM	\$2.0 USD (WST 4.5)	USD [1.7, 2.3] WST [3.8, 5.3]
	Bank merchant	\$1.5 USD (WST 3.4)	USD [1.1, 1.9] WST [2.5, 4.3]
	Mobile money agent	\$1.8 USD (WST 4.0)	USD [1.1, 2.4] WST [2.5, 5.4]
4.4. Average time of traveling to the nearest access point in minutes	Bank branch	44.8 min	[28.1, 61.5]
	ATM	32.7 min	[23.9, 41.7]
	Bank merchant	12.6 min	[10.4, 14.7]
	Mobile money agent	20.8 min	[15.4, 26.3]
4.5. Average time waiting to be served when opening a deposit account (in hrs.)		2.6 hrs.	[1.8, 3.5]
4.7. Percentage of adults reporting that they do not have all identification documents required to open a basic account		5%	[3.4%, 6.4%]
USAGE INDICATORS			Confidence interval
5.3. Percent of adults with at least one type of regulated deposit account		39%	[35.9%, 42.2%]
5.4. Percent of adults with at least one type of regulated credit account		13.4%	[11.2, 16.0]
5.5. Percent of adults with at least one regulated financial product		39%	[35.9, 42.2]

5.6. Percent of people with an active deposit account—have had any deposit or withdrawal in the last 90 days	34.9%	[31.9, 37.9]
5.7. Percentage of adults earning below US \$2 per day who have a deposit account	25.6%	[22.2, 29.3]
6.1. Percentage of adults with at least one active mobile financial services product*	-	-
6.2. Percentage of adults who have sent money through mobile financial services in the last 12 months for person to person transfers and bill pay	0.7%	[0.3, 1.5]
6.3. Percent of adults who have received money (including e-money) through mobile money in the last 12 months	2.71%	[1.82, 4.0]
7.1. Percent of adult women with an active deposit account OR percent of deposit accounts held by women	35.1%	[31.0, 39.5]

\* Given the low level of reported mobile money usage, these indicators cannot be reported with statistical accuracy.



## Global Financial Inclusion Indicators

Benchmarking the Samoa Financial Inclusion Indicators				
	Lower-middle income countries (2014)	Fiji (2014)	Solomon Islands (2014)	Samoa (2014)
0 deposits in a typical month (% with account)	57.2%	7.5%	23.5%	16.8%
0 deposits/withdrawals in a typical month (% with account)	34.6%**	13.7%	9.9%	10.3%
0 withdrawals in a typical month (% with account)	57.8%	12.8%	21.6%	15.2%
1-2 deposits in a typical month (% with account)	32.4%	63.9% <sup>45</sup>	61.6%	56.8%
1-2 withdrawals in a typical month (% with account)	27.5%	56.3% <sup>46</sup>	55.6%	50.9%
3+ deposits in a typical month (% with account)	8.8%	27.3%	13.7%	26.3%
3+ withdrawals in a typical month (% with account)	12.5%	29.9%	21.8%	34%
ATM is main mode of deposit (% with* account)	3.85%	2.8%	4.3%	5.8%
ATM is main mode of withdrawal (% with account)	42.4%	80.7%	58.4%	47.0%
Account at a formal financial institution (bank or credit union)	41.8%	60.2%	26.2%	38.94%
Account used for business purposes (total population)*	4.14%	3%	5%	4.2%
Account used to receive payments from government (total population)	3.3%	7.3%	8.4%	9.55%
Account used to receive remittances (total population)*	3.73%	4.8%	6.9%	7.37%
Account used to send remittances (total population)*	2.9%	0.6%	5.7%	0.93%
Account used to receive salary or wages (total population)	5.6%	29.1%	7.4%	20.15%
Bank teller is main mode of deposit (% with account)*	3.48%	80%	64.1%	85.9%
Bank teller is main mode of withdrawal (% with account)	45.8%	10.6%	16.4%	50.6%

<sup>45</sup> This includes deposits which are made infrequently or only a few times per year – 24.4% of banked respondents.

<sup>46</sup> This includes withdrawals which are made infrequently (less than once per month) or a few times per year – 24.3% of respondents.

	Lower-middle income countries (2014)	Fiji (2014)	Solomon Islands (2014)	Samoa (2014)
Cheques used to make payments (total population)*	4.84%	1.5%	1.2%	1.14%
Credit cards (total population)	3.7%	3%	0%	1.04%
Debit cards (total population)	21.2%	47.2%	20.8%	22.64%
Retail store or agent is main mode of deposit (% with account)	1.7%	4.9%	16.7%	0.3%
Retail store or agent is main mode of withdrawal (% with account)	1.92%	4%	16%	0.5%
Mobile phone used to pay bills (total population)*	1.89%	0.0%	1.3%	0.1%
Mobile phone used to receive money (total population)*	3.57%	2.3%	3.2%	2.7%
Mobile phone used to send money (total population)*	2.27%	1.4%	3.6%	0.73%
Saved any money in the past year	45.6%	71.2%	86.5%	60.60%
Saved at a financial institution in the past year (bank, credit union, or MFI)	14.8%	37.9%	17.1%	11.1%
Saved for emergencies in the past year (total population)*	22.08%	31.2%	21.1%	16.3%
Saved for future expenses in the past year (total population)*	19.81%	9.2%	11.2%	6.33%
Saved using a savings club in the past year	12.4%	9.0%	1.48%	6.3%
Loan in the past year (from any source)	47.4%	32.0%	63.45%	47.2%
Loan from a financial institution in the past year	7.5%	6.9%	2.7%	12.5%
Loan from a private lender in the past year	8.5%	2.7%	9.9%	2%
Loan from an employer in the past year*	4.88%	1%	7%	2.8%
Loan from family or friends in past year	33.1%	8%	20%	13%
Loan through store credit in the past year*	8.18%	10.4%	51.62%	24.6%

	Lower-middle income countries (2014)	Fiji (2014)	Solomon Islands (2014)	Samoa (2014)
Personally paid for health insurance (all respondents)*	5.15%*	1.2%	0.14%	0.4%%*
Received domestic remittances last year	17.8%	9.6%	35.9%	2.8%

\* Indicator included in 2011 Global Findex only.

\*\* While the 2014 Global Findex indicators report 0 deposits or withdrawals in the past year, the Fiji, Solomon Islands and Samoa indicators reports 0 deposits or withdrawals in a typical month.

## GPFI indicators

GPFI Indicators	Proportion	95% CI
Formally banked adults: % of adults with an account at a formal financial institution	39%	[35.9%, 42.2%]
Adults with credit from regulated institutions (bank and credit union only)	8.6%	[6.9%, 10.8%]
Adults with credit from regulated institutions (bank, credit union, finance company, or MFI)	13.4%	[11.2,16.0]
Mobile transactional use	-	-
High frequency account usage	36.8%	[33.8%, 39.9%]
Adults with insurance	20.6%	[18.1, 23.3]
Saved at a financial institution in the past year (bank, credit union, MFI)	11.1%	[9.2,13.5]
Remittances (send or receive)	58.3%	[55.3%,61.3%]

# Annex B: Detailed Survey Results

Table 6: Inclusion categories

Financial inclusion category	%	95% confidence interval
Banked (n=375)	39%	[35.9% — 42.2%]
Other formal (n=117)	12.2%	[10.0% — 14.8%]
Informal only (n=144)	14.8%	[12.7% — 17.1%]
Excluded (n=327)	34%	[30.9% — 37.3%]
N=963		

Table 7: 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=593)	62.8%	[59.8%,65.8%]
No (n=352)	37.2%	[34.2%,40.2%]
N=945		
Have you, personally, ever had any type of account with a bank?		95% CI
Used to have, but no longer have (n=199)	20.7%	[18.3%,23.4%]
I have this now (n=375)	39.0%	[35.9%,42.2%]
Never had (n=389)	40.3%	[37.4%,43.2%]
N=963		
Bank account holders		
How many bank accounts do you have?		95% CI
1 (n=333)	88.7%	[84.9%,91.6%]
2 (n=32)	8.7%	[6.2%,12.0%]
3 (n=9)	2.4%	[1.3%,4.5%]
5 (n=1)	0.3%	[0.0%,1.9%]
N=375		
In which bank is your account? (Account 1)		95% CI
WestPac (n=57)	15.2%	[11.7%,19.4%]
ANZ (n=115)	30.7%	[25.9%,36.0%]
National Bank of Samoa (n=103)	27.5%	[22.8%,32.7%]
Samoa Commercial Bank (n=99)	26.4%	[21.5%,31.8%]
Other (n=1)	0.3%	[0.0%,1.9%]
N=375		
What type of account is this? (Account 1)		95% CI
Basic or access account (n=208)	55.3%	[50.2%,60.2%]
Cheque account (n=8)	2.2%	[1.0%,4.6%]

Savings account (n=155)	41.5%	[36.9%,46.3%]
Fixed deposit or programmed account (n=4)	1.1%	[0.4%,2.8%]
N=375		
Has at least one savings account (banked respondents, all accounts)		95% CI
Yes (n=171)	45.8%	[41.1%,50.5%]
No (n=204)	54.2%	[49.5%,58.9%]
N=375		
Has at least one basic or access bank account - for banked respondents, all accounts		95% CI
Yes (n=216)	57.4%	[52.4%,62.4%]
No (n=159)	42.6%	[37.6%,47.6%]
N=375		
What is the main reason that you opened this account?		95% CI
To receive a payment (salary, remittances, other) (n=188)	50.3%	[44.8%,55.8%]
To keep my money safe (n=155)	41.2%	[35.9%,46.7%]
To receive government benefits (n=40)	10.7%	[7.9%,14.2%]
To send money (n=4)	1.1%	[0.4%,2.9%]
Other (n=24)	6.4%	[4.4%,9.3%]
N=375		
In the past 12 months, have you used your account(s) for the following (all accounts):		95% CI
To receive money or payments for work or for selling goods directly into your account (n=194)	51.7%	[46.5%,56.8%]
To receive money or payments from the government (n=92)	24.5%	[20.1%,29.7%]
To receive money from family members living elsewhere directly into this account (n=71)	18.9%	[15.3%,23.1%]
To send money to family members living elsewhere using the account (n=9)	2.4%	[1.2%,4.8%]
Other (n=45)	12.1%	[9.4%,15.4%]
N=375		
In which year did you open this account? (account 1)		
1990 or earlier (n=13)	3.9%	
1991-2000 (n=40)	11.9%	
2001-2010 (n=127)	37.1%	
2011 (n=32)	9.2%	[6.5%,12.9%]
2012 (n=35)	10.4%	[7.6%,14.0%]
2013 (n=28)	8.2%	[5.5%,11.9%]
2014 (n=50)	14.7%	[11.3%,18.9%]
2015 (n=16)	4.7%	[2.8%,7.7%]
N=341		

Table 8: Documentation

Do you currently have a birth certificate?		95% CI
Yes (n=890)	92.6%	[90.8%,94.1%]
No (n=71)	7.4%	[5.9%,9.2%]
N=961		
7.2 Do you currently have a driver's license?		95% CI
Yes (n=218)	22.7%	[19.9%,25.8%]
No (n=744)	77.3%	[74.2%,80.1%]
N=962		
Do you currently have a passport?		95% CI
Yes (n=449)	51.9%	[47.6%,56.1%]
No (n=463)	48.1%	[43.9%,52.4%]
N=962		
Where did you open this account? (Account 1)		95% CI
Bank branch (n=329)	93.6%	[90.3%,95.9%]
Rural banking (n=3)	0.9%	[0.3%,2.6%]
School banking (n=3)	0.8%	[0.3%,2.6%]
Other (n=16)	4.7%	[2.9%,7.4%]
N=351		
Was a minimum balance required to open the account? (Account 1)		95% CI
Yes (n=252)	73.6%	[68.2%,78.3%]
No (n=90)	26.4%	[21.7%,31.8%]
N=342		

Table 9: Constraints to access

		Mean	95% CI
Distance to bank branch (km)	Urban (n=183)	1.6 km	[1.2,1.7]
	Rural (n=780)	9.1 km	[7.6,10.6]
	Overall (N=963)	7.6 km	[6.4,8.8]
Cost to bank branch (WST)	Urban (n=172)	WST 2.5	[2.1,2.9]
	Rural (n=616)	WST 4.9	[4.2,5.6]
	Overall (N=788)	WST 4.3	[3.8,4.9]
Time to bank branch (min)	Urban (n=175)	20.4 min	[0.4,40.4]
	Rural (n=621)	52 min	[31.1,72.9]
	Overall (N=796)	44.8 min	[28.1,61.5]
Distance to ATM (km)	Urban (n=183)	1.4 km	[1.2,1.6]
	Rural (n=780)	9.9 km	[8.0,11.8]

	Overall (N=963)	8.2 km	[6.7,9.8]
Cost to ATM (WST)	Urban (n=173)	WST 2.4	[1.9,2.8]
	Rural (n=594)	WST 5.2	[4.2,6.2]
	Overall (N=767)	WST 4.5	[3.8,5.3]
Time to ATM (min)	Urban (n=175)	9.9 min	[8.4,11.5]
	Rural (n=597)	39.8 min	[28.1,51.6]
	Overall (N=772)	32.7 min	[23.9,41.7]
Distance to bank merchant (km)	Urban (n=183)	1.7 km	[1.5,1.9]
	Rural (n=780)	2.3 km	[1.9,2.8]
	Overall (N=963)	2.2 km	[1.8,2.6]
Cost to bank merchant(WST)	Urban (n=71)	WST 2.0	[1.5,2.5]
	Rural (n=136)	WST 4.2	[2.8,5.6]
	Overall (N=207)	WST 3.4	[2.5,4.3]
Time to bank merchant(min)	Urban (n=72)	7.1 min	[5.7,8.5]
	Rural (n=137)	15.6 min	[12.3,18.8]
	Overall (N=209)	12.6 min	[10.4,14.7]
Distance to mobile money agent (km)	Urban (n=183)	2 km	[1.7,2.2]
	Rural (n=780)	11 km	[9.1,12.8]
	Overall (N=963)	9.2 km	[7.7,10.7]
Cost to mobile money agent (WST)	Urban (n=35)	WST 2.3	[1.3,3.2]
	Rural (n=73)	WST 4.9	[2.7,7.0]
	Overall (N=108)	WST 4.0	[2.5,5.4]
Time to mobile money agent (min)	Urban (n=36)	7.5 min	[5.6,9.4]
	Rural (n=77)	27.3 min	[19.6,35.1]
	Overall (N=113)	20.8 min	[15.4,26.3]

Table 10: Account usage<sup>47</sup>

Do you use your account(s) for personal transactions, business purposes, or both?		95% CI
Personal transactions (n=326)	89.1%	[84.7%,92.3%]
Business purposes (n=5)	1.4%	[0.6%,3.1%]
Personal and business transactions (n=35)	9.6%	[6.5%,13.9%]
N=366		
In the past 12 months, have you used your account(s) for the following:		95% CI
To receive money or payments for work or for selling goods directly into your account (n=194)	51.7%	[46.5%,56.8%]
To receive money or payments from the government (n=92)	24.5%	[20.1%,29.7%]
To receive money from family members living elsewhere directly into this account (n=71)	18.9%	[15.3%,23.1%]

<sup>47</sup> "I don't know" responses were calculated as missing as well as when respondents refused to provide an answer.

To send money to family members living elsewhere using the account (n=9)	2.4%	[1.2%,4.8%]
Other (n=45)	12.1%	[9.4%,15.4%]
N=375		
In the past 12 months, have you borrowed money from any of these banks?	%	95% CI
Yes (n=81)	21.7%	[17.7%,26.3%]
N=374		
When was the last time you, yourself, made a DEPOSIT into this account? (Account 1)		95% CI
Never (n=76)	20.7%	[17.0%,25.0%]
In the past 30 days (n=156)	42.1%	[36.9%,47.5%]
2 to 3 months ago (n=45)	12.3%	[9.2%,16.3%]
3 to 6 months ago (n=29)	7.9%	[5.7%,10.9%]
6 to 12 months ago (n=29)	7.8%	[5.3%,11.5%]
Over a year ago (n=34)	9.1%	[6.6%,12.6%]
Total (n=369)		
When was the last time someone else made a DEPOSIT into this account (including the government, an employer)? (account 1)		95% CI
Never (n=101)	27.3%	[23.7%,31.2%]
In the past 30 days (month) (n=196)	53.4%	[48.6%,58.2%]
2 to 3 months ago (3 months) (n=22)	5.9%	[3.9%,8.7%]
3 to 6 months ago (n=9)	2.4%	[1.2%,4.7%]
6 to 12 months ago (n=11)	3%	[1.7%,5.3%]
Over a year ago (n=30)	8%	[5.6%,11.4%]
Total (n=369)		
In a typical month, how many times is money deposited into this account (by you or others)?		95% CI
1 - 2 times per month (n=212)	56.8%	[51.65,62.0%]
3 - 5 times per month (n=90)	24.2%	[20.0%,28.9%]
6 times or more per month (n=8)	2.1%	[1.0%,4.5%]
Rarely - 1 or a few times per year (n=39)	10.4%	[8.0%,13.4%]
Never in the past year (n=24)	6.4%	[4.1%,9.8%]
Total (n=373)		
When was the last time you or someone else made a WITHDRAWAL from this account?		95% CI
Never (n=36)	9.7%	[7.2%,13.0%]
In the past 30 days (month) (n=239)	64.6%	[59.7%,69.1%]
2 to 3 months ago (n=52)	13.9%	[10.3%,18.5%]
3 to 6 months ago (n=15)	4%	[2.3%,6.9%]
6 to 12 months ago (n=17)	4.6%	[2.7%,7.7%]
Over a year ago (n=12)	3.2%	[1.9%,5.4%]
Total (n=371)		
In a typical month, how many times is money withdrawn from this account (by you or others)		95% CI



1 - 2 times per month (n=190)	50.9%	[45.8%,55.9%]
3 - 5 times per month (n=109)	29.4%	[24.5%,34.7%]
6 times or more per month (n=17)	4.6%	[3.0%,6.9%]
Rarely - 1 or a few times per year (n=38)	10.1%	[7.6%,13.5%]
Never in the past year (n=19)	5.1%	[3.3%,7.8%]
Total (n=373)		

Table 11: Mobile money<sup>48</sup>

Do you, yourself, have a mobile phone?		95% CI
Yes, I have my own mobile phone (n=680)	70.7%	[67.7%,73.6%]
No, I use someone else's mobile phone when I need one (n=140)	14.6%	[12.6%,16.8%]
No, I have never use a mobile phone (mine or someone else's) (n=142)	14.7%	[12.7%,17.0%]
Total (n=962)		
Do you have an active SIM card?		95% CI
Yes (n=739)	90.1%	[87.4%,92.3%]
No (n=81)	9.9%	[7.7%,12.6%]
Total (n=820)		
How many active SIM cards do you have?		95% CI
1 (n=669)	90.5%	[88.1%,92.5%]
2 (n=67)	9.1%	[7.2%,11.5%]
3 (n=3)	0.4%	[0.1%,1.2%]
Total (n=739)		
How often do you use a phone to send text messages?		95% CI
Daily (n=320)	39.1%	[35.8%,42.4%]
A few times a week (n=191)	23.2%	[20.8%,25.9%]
About once a week (n=55)	6.7%	[5.2%,8.6%]
Once a month or less (n=25)	3%	[2.1%,4.5%]
Never (n=229)	28%	[24.8%,31.4%]
Total (n=820)		
Have you HEARD about sending and receiving money using your phone?		95% CI
Yes (n=357)	43.9%	[40.5%,47.4%]
No (n=463)	56.1%	[52.6%,59.5%]
Total (n=820)		
Do you, personally, have a mobile money account?		95% CI
Yes, currently (n=25)	7.4%	[4.9%,11.0%]
No, never had (n=293)	86.9%	[82.4%,90.4%]
No, but used to have (n=19)	5.6%	[3.4%,9.3%]
Total (n=337)		

<sup>48</sup> "I don't know" responses were calculated as missing as well as when respondents refused to provide an answer.

In the last 12 months, have you used a mobile money account?		95% CI
Yes, to send and receive (n=4)	1.1%	[0.4%,3.0%]
Yes, to receive only (n=22)	6.2%	[4.0%,9.4%]
Yes, to send only (n=3)	0.8%	[0.3%,2.7%]
No, not in the past year (n=5)	1.4%	[0.5%,3.6%]
Never used (n=321)	90.4%	[86.8%,93.1%]
Total (n=355)		
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=2)	32.6%	[32.6%,32.6%]
2 - 3 months ago (n=1)	16.2%	[16.2%,16.2%]
3 - 6 months ago (n=1)	17.2%	[17.2%,17.2%]
6 - 12 months ago (n=2)	34.1%	[34.1%,34.1%]
Total (n=6)		
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=9)	36.2%	[19.9%,56.4%]
2 - 3 months ago (n=6)	23.8%	[11.5%,42.9%]
3 - 6 months ago (n=3)	12%	[4.3%,29.1%]
6 - 12 months ago (n=7)	27.9%	[12.4%,51.5%]
Total (n=25)		
In a typical month, how many times do you use Digicel Mobile Money?		95% CI
1 - 2 times per month (n=15)	51.4%	[30.0%,72.3%]
3 - 5 times per month (n=4)	14.1%	[5.0%,34.0%]
6 times or more per month (n=2)	6.9%	[1.5%,26.4%]
Rarely - 1 or a few times per year (n=8)	27.6%	[12.4%,50.6%]
Total (n=29)		
Is your Digicel Mobile Money account for personal use, to receive benefits, or both?		95% CI
For personal use (to save, send, or receive money) (n=19)	76.4%	[44.9%,92.8%]
To receive benefits (n=3)	11.7%	[1.4%,55.4%]
Both (n=3)	11.9%	[2.3%,43.9%]
Total (n=25)		

Table 12: Remittances

Do you have any relatives or acquaintances living elsewhere (in Samoa or abroad) that sent you money in the past 12 months?		95% CI
Yes (n=536)	55.6%	[52.4%,58.7%]
No (n=426)	44.4%	[41.3%,47.6%]
Total (n=962)		
Is the money sent from...?		95% CI
Abroad (n=520)	97%	[95.5%,98.0%]
Another part of Samoa (n=5)	1%	[0.4%,2.1%]
Abroad and Samoa (n=11)	2.1%	[1.3%,3.3%]
Total (n=536)		
How is the money from abroad usually sent to you?		95% CI
Own bank account (n=5)	0.9%	[0.3%,2.6%]
Own Digicel Mobile Money account (n=7)	1.3%	[0.6%,2.7%]
Western Union, Money Gram, other (n=487)	91.8%	[88.9%,94.0%]
Through a relative or friend (by cash) (n=23)	4.3%	[2.9%,6.3%]
Through a relative or friend (using the relative's mobile money or bank account) (n=8)	1.5%	[0.8%,2.9%]
Other (specify) (n=1)	0.2%	[0.0%,1.4%]
Total (n=531)		
How is the money from elsewhere in Samoa usually sent to you?		95% CI
Own bank account (n=2)	12.5%	[12.5%,12.5%]
Western Union, Money Gram, other (n=14)	87.5%	[87.5%,87.5%]
Total (n=16)		
About how often do you usually receive this money?		95% CI
Once a week or more (n=14)	2.6%	[1.4%,5.0%]
Fortnightly (n=50)	9.4%	[7.0%,12.4%]
Once a month (n=157)	29.3%	[25.6%,33.2%]
Every second month (n=117)	21.7%	[18.4%,25.4%]
Twice a year (n=96)	17.9%	[14.5%,22.0%]
Once a year (n=72)	13.4%	[10.7%,16.7%]
Less frequently than every year (n=4)	0.7%	[0.3%,2.0%]
Other (specify) (n=26)	4.9%	[3.3%,7.1%]
Total (n=536)		
Do you regularly send any money to family or friends (in Samoa or abroad)?		95% CI
Yes (n=81)	8.4%	[6.8%,10.4%]
No (n=881)	91.6%	[89.6%,93.2%]
Total (n=962)		
Where do you send the money?		95% CI

Other parts of Samoa (n=66)	81.6%	[71.9%,88.5%]
Abroad (including other Pacific Islands) (n=13)	15.6%	[9.4%,25.6%]
Abroad and Samoa (n=2)	2.5%	[0.6%,9.9%]
Total (n=81)		
How do you usually send the money to other parts of Samoa?		95% CI
Your bank account (n=6)	8.9%	[4.1%,18.1%]
Your Digicel Mobile Money account (n=1)	1.4%	[0.2%,10.3%]
Western Union, Money Gram, others (n=57)	83.9%	[74.9%,90.1%]
Through a relative or friend (by cash) (n=3)	4.3%	[1.5%,11.7%]
Through a relative or friend (using the relative's mobile money or bank account) (n=1)	1.5%	[0.2%,10.2%]
Total (n=68)		
How do you usually send the money abroad?		95% CI
Your bank account (n=3)	20.7%	[20.7%,20.7.2%]
Western Union, Money Gram, other (n=12)	79.3%	[79.3%,79.3%]
Total (n=15)		
About how often do you usually send this money?		95% CI
Once a week or more (n=4)	5%	[1.9%,12.7%]
Fortnightly (n=11)	13.6%	[7.7%,22.7%]
Once a month (n=26)	32.4%	[23.6%,42.7%]
Every second month (n=14)	17.1%	[10.6%,26.4%]
Twice a year (n=17)	20.9%	[13.6%,30.6%]
Once a year (n=4)	4.8%	[1.8%,12.4%]
Less frequently than every year (n=1)	1.3%	[0.2%,8.2%]
Other (specify) (n=4)	5%	[1.9%,12.8%]
Total (n=81)		
Sends or receives remittances		95% CI
Yes (n=563)	58.3%	[55.3%,61.3%]
No (n=400)	41.7%	[38.7%,44.7%]
Total (n=963)		

Table 13: Insurance

Do you have any type of insurance?		95% CI
Yes (n=192)	20.6%	[18.1%,23.3%]
No (n=741)	79.4%	[76.7%,81.9%]
N=933		
Have health insurance?		95% CI
Yes (n=8)	4.2%	[2.1%,8.1%]
No (n=184)	95.8%	[91.9%,97.9%]

N=192		
Have life insurance?		95% CI
Yes (n=133)	69.3%	[63.1%,74.9%]
No (n=59)	30.7%	[25.1%,36.9%]
N=192		
Have home insurance?		95% CI
Yes (n=12)	6.4%	[3.5%,11.4%]
No (n=180)	93.6%	[88.6%,96.5%]
N=192		
Have motor vehicle or motorcycle insurance?		95% CI
Yes (n=7)	3.7%	[1.8%,7.5%]
No (n=185)	96.3%	[92.5%,98.2%]
N=192		
Have death benefit or funeral policy?		95% CI
Yes (n=18)	9.3%	[5.9%,14.5%]
No (n=174)	90.7%	[85.5%,94.1%]
N=192		
Have accident cover?		95% CI
Yes (n=60)	31.0%	[25.3%,37.4%]
No (n=132)	69.0%	[62.6%,74.7%]
N=192		
Have other types of insurance?		95% CI
Yes (n=3)	1.6%	[0.5%,4.8%]
No (n=189)	96.3%	[95.2%,99.5%]
N=192		
Reasons for not having insurance for those who don't have		
Had it previously but had a bad experience		95% CI
Yes (n=54)	7.3%	[5.4%,9.6%]
No (n=687)	92.7%	[90.4%,94.6%]
N=741		
Do not need insurance		95% CI
Yes (n=159)	21.5%	[18.7%,24.6%]
No (n=582)	78.5%	[75.4%,81.3%]
N=741		
Do not know what insurance is or how it works		95% CI
Yes (n=286)	38.5%	[35.2%,41.9%]
No (n=455)	61.5%	[66.6%,73.7%]
N=741		
Do not know where or how to get insurance		95% CI
Yes (n=220)	29.8%	[26.3%,33.4%]
No (n=521)	70.2%	[66.6%,73.7%]

N=741		
Insurance is too expensive		95% CI
Yes (n=86)	11.7%	[8.8%,15.4%]
No (n=655)	88.3%	[84.6%,91.2%]
N=741		
Do not trust insurance companies		95% CI
Yes (n=23)	3.2%	[2.1%,4.7%]
No (n=718)	96.8%	[95.3%,97.9%]
N=741		
Another household member has an insurance policy which covers me		95% CI
Yes (n=4)	0.5%	[0.2%,1.4%]
No (n=737)	99.5%	[98.6%,99.8%]
N=741		
Do not have insurance for other reasons		95% CI
Yes (n=74)	10.1%	[7.9%,12.8%]
No (n=667)	89.9%	[87.2%,92.1%]
N=741		

Table 14: Financial services, by financial inclusion segment

	Excluded (N=327)	Informal only (N=144)	Other formal (N=117)	Banked (N=375)
In the past 12 months, have you saved or put aside any money, even a little	17.1%	31.3%	31%	51.4%
	[13.3%,21.9%]	[24.3, 39.3%]	[24.1%,38.9%]	[46.2%,56.5%]
Have you given loans to OR borrowed from family or friends during the last				
Yes, giving loans only	3.7%	6.2%	11.9%	11.0%
	[2.2%,6.2%]	[3.2,11.8%]	[7.6%,18.3%]	[8.1%,14.7%]
Yes, borrowing only	6.8%	13.8%	11.1%	6.1%
	[4.7%,9.7%]	[9.4%,19.9%]	[6.7%,17.7%]	[4.0%,9.0%]
Yes, giving AND borrowing	2.4%	15.3%	5.1%	2.4%
	[1.0%,6.0%]	[10.4%,21.9%]	[2.2%,11.3%]	[1.3%,4.6%]
Have you saved at home during the last 12 months?	19.2%	27.7%	18.9%	14.6%
	[14.9%,24.3%]	[19.8%,37.3%]	[12.6%,27.3%]	[11.6%,18.3%]
Have you given other people money to keep safe for you during the last 12	3.0%	9.0%	4.3%	2.4%
	[1.6%,5.5%]	[5.1%,15.3%]	[1.8%,9.8%]	[1.2%,4.7%]
Have you, personally, taken a loan from an employer or client during the	0.6%	0.7%	6.8%	4.3%
	[0.2%,2.4%]	[0.1%,4.9%]	[3.5%,12.9%]	[2.6%,6.9%]

	Excluded (N=327)	Informal only (N=144)	Other formal (N=117)	Banked (N=375)
Have you, personally, taken a layby during the last 12 months?	0%	0%	0%	0.8%
				[0.3%,2.5%]
Have you, personally, pawned something during the last 12 months?	0.3%	0%	0%	0%
	[0.0%,2.1%]			
Have you used a savings club to save OR borrow during the last 12 months?				
Yes, to save only	0%	9.0%	5.9%	4.9%
		[5.2%,15.1%]	[2.6%,13.0%]	[3.1%,7.6%]
Yes, to borrow only	0%	3.5%	0%	0.5%
		[1.6%,7.5%]		[0.1%,2.0%]
Yes, to save and borrow	0%	6.9%	4.3%	1.9%
		[3.8%,12.3%]	[2.0%,9.2%]	[0.9%,3.8%]
Have you borrowed from a moneylender or other private finance company in the last 12 months?	0%	0.7%	0%	4.9%
		[0.1%,4.7%]		[3.2%,7.5%]
Have you, personally, taken a hire purchase during the last 12 months?	0%	0%	0%	0.3%
				[0.0%,2.1%]
Have you, personally, saved OR borrowed with a credit union or cooperative				
Yes, to save only	0%	0%	0%	0.5%
				[0.1%,2.0%]
Yes, to borrow only	0%	0%	0%	0.3%
				[0.0%,2.0%]
Yes, to save and borrow	0%	0%	0%	0.8%
				[0.3%,2.5%]
Have you, personally, saved with OR borrowed from a microfinance institute				
Yes, to save only	0%	0%	1.7%	0%
			[0.4%,6.5%]	
Yes, to borrow only	0%	0%	6.9%	4.3%
			[3.7%,12.5%]	[2.4%,7.5%]
Yes, to save and borrow	0%	0%	13.7%	1.1%
			[8.5%,21.5%]	[0.4%,2.8%]
Have you used a SNPF (or other pension) to save OR borrow during the last 12 months				
Yes, to save only	0%	0%	32.7%	13.8%
			[24.5%,42.2%]	[11.0%,17.1%]
Yes, to borrow only	0%	0%	0.9%	6.7%
			[0.1%,6.2%]	[4.2%,10.7%]

	Excluded (N=327)	Informal only (N=144)	Other formal (N=117)	Banked (N=375)
Yes, to save and borrow	0%	0%	24.5%	25.2%
			[17.1%,33.7%]	[21.2%,29.7%]
Have you used credit for small things at the shop during the past 12 months	0%	87.5%	42.6%	16.2%
		[81.1%,92.0%]	[34.7%,51.0%]	[13.1%,19.9%]
Have you made any long term investments, including stocks, bonds, and other investments	0%	0%	1.7%	2.2%
			[0.4%,4.8%]	[1.0%,4.7%]

Table 15: Financial services, by location

	Urban		Rural	
In the past 12 months, have you saved or put aside any money, even a little?	39.0%	[31.3%,47.3%]	33.0%	[29.4%,36.8%]
Have you saved at home during the last 12 months?	9.3%	[5.6%,14.9%]	20.9%	[17.6%,24.7%]
Have you used a savings club to save OR borrow during the last 12 months?				
Yes, to save only	7.1%	[4.4%,11.2%]	3.2%	[2.1%,4.9%]
Yes, to borrow only	0%		0.9%	[0.5%,1.8%]
Yes, to save and borrow	1.1%	[0.3%,4.5%]	2.6%	[1.7%,3.9%]
Have you given loans OR borrowed from family or friends in the past 12 months?				
Yes, to save only	4.9%	[2.7%,8.9%]	8.6%	[6.6%,11.2%]
Yes, to borrow only	3.3%	[1.5%,7.0%]	9.3%	[7.7%,11.1%]
Yes, to save and borrow	2.7%	[1.1%,6.4%]	5.2%	[3.7%,7.2%]
Have you used a cooperative or credit union to save or borrow in the past 12 months ?				
Yes, to save only	0%		0.3%	[0.1%,1.0%]
Yes, to borrow only	0%		0.1%	[0.1%,1.0%]
Yes, to save and borrow	0%		0.4%	[0.1%,1.2%]
Have you saved or borrowed from a microfinance in the past 12 months?				
Yes, to save only	0%		0.3%	[0.1%,1.0%]
Yes, to borrow only	2.7%	[1.0%,7.5%]	2.5%	[1.5%,4.1%]
Yes, to save and borrow	0.5%	[0.1%,4.0%]	2.5%	[1.6%,3.9%]
Have you used SNPF (or other pension) to save OR borrow in the past 12 months?				
Yes, to save only	17.5%	[12.5%,23.9%]	7.3%	[5.8%,9.3%]
Yes, to borrow only	5.5%	[2.7%,10.8%]	2.1%	[1.1%,3.8%]
Yes, to save and borrow	14.8%	[10.4%,20.5%]	12.3%	[10.1%,15.0%]
Have you saved at home in the past 12 months?	9.3%	[5.6%,14.9%]	20.9%	[17.6%,24.7%]
Have you given money to someone else to keep safe for you during the past 12 months?	0%		4.8%	[3.5%,6.4%]



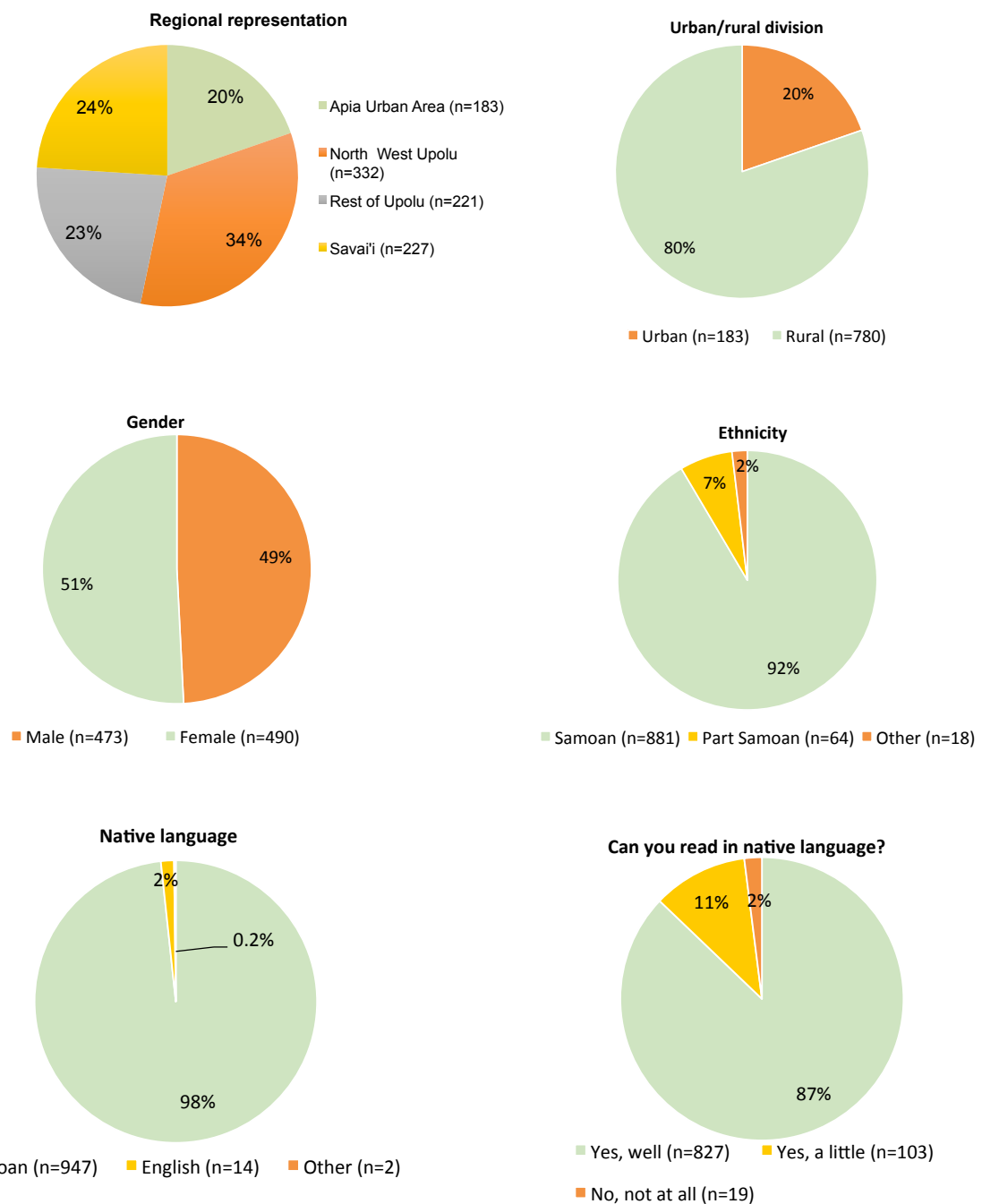
	Urban		Rural	
Have you made any investments, including stocks, bonds and other investments during the past 12 months?	2.7%	[1.0%,7.6%]	0.6%	[0.3%,1.5%]
Have you used a layby in the past 12 months	0.6%	[0.1%,4.1%]	0.3%	[0.1%,1.0%]
Have you borrowed from an employer or client you are doing a job for?	1.6%	[0.5%,5.0%]	3.1%	[2.0%,4.8%]
Have you borrowed from a moneylender or other private finance company during the past 12 months?	4.4%	[2.3%,8.3%]	1.4%	[0.8%,2.5%]
Have you used a hire purchase during the past 12 months?	0.5%	[0.1%,4.2%]	0%	
Have pawned in the past 12 months?	0%		0.1%	[0.0%,0.9%]
Have you used credit for small things at the shop during the past 12 months	6.6%	[3.4%,12.2%]	29%	[25.9%,32.2%]

# Annex C: Methodology and Sample Description

The Samoa DSS covered a nationally representative sample of 963 respondents selected from the national census household sample using 2-stage systematic random sampling. The first stage was selected at the EAs level, stratified by region. A total of 135 primary sampling units or clusters were selected in which 46 were from urban and 89 from the rural.

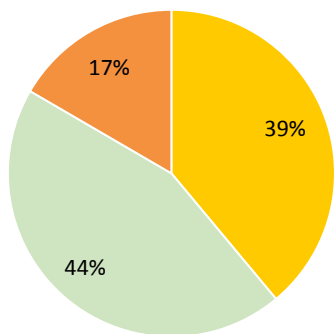
The second stage was at the household level. A total of 5 households were selected from each cluster in the urban and 10 households from each cluster of the rural Samoa. Enumerators used a Kish grid to randomly select one adult respondent (age 15 and above) from each sampled household.

All respondents were over 15 years old. The average age of the respondents was 39.5 years.



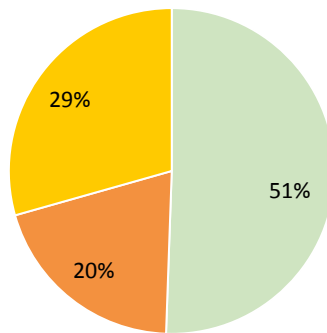


**Can you read in English?**



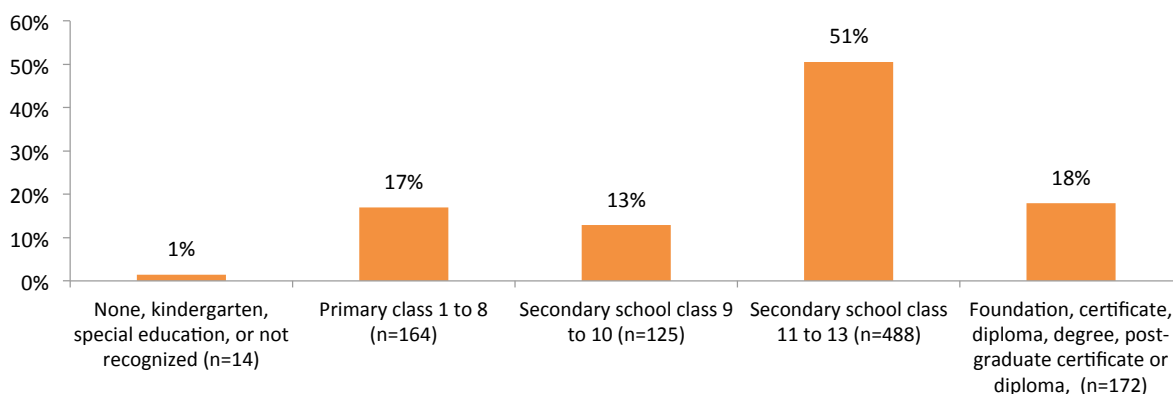
- Yes, well (n=375)
- Yes, a little (n=428)
- No, not at all (n=160)

**Would you feel comfortable to communicate on your own in English?**

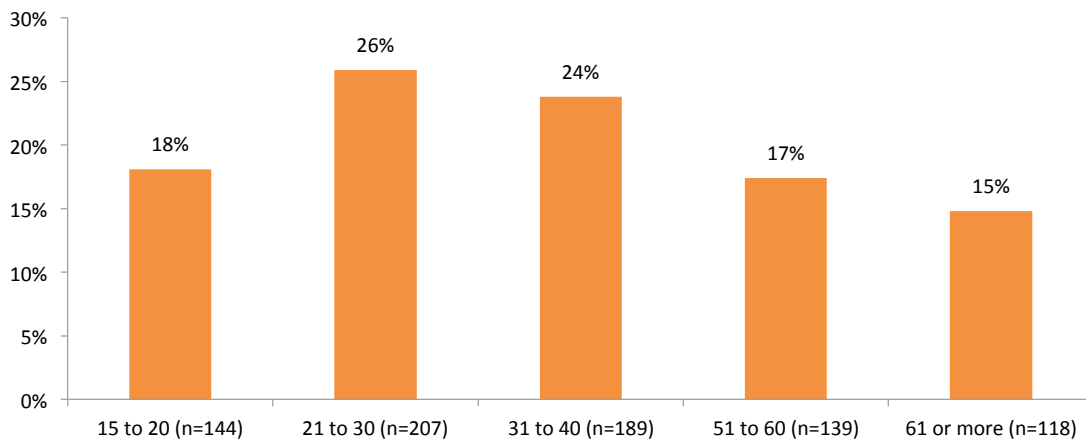


- Yes, comfortable speaking and reading on my own (n=406)
- Yes, comfortable speaking only (n=161)
- No, I would need assistance (n=236)

**Highest Education Completed**



**Age range**



# Annex D: Statistical Outputs

T-test for equality of means, bank status by gender

Group	Observations	Mean	Std. Error	Std. Deviation	95% confidence interval
Males	473	0.3763	0.0223	0.4850	[.3325, .4201]
Females	490	0.4020	0.0222	0.4908	[.3585, .4456]
Difference		-0.0257	0.0314		

$t = -0.8179$ , degrees of freedom = 960

$H_a: \text{diff} \neq 0$ ,  $p = 0.4136$

T-test for equality of means, financial exclusion by gender

Group	Observations	Mean	Std. Error	Std. Deviation	95% confidence interval
Males	473	.3848	0.0224	0.4871	[0.3408, 0.4288]
Females	490	.2959	0.0206	0.4569	[0.2554, 0.3365]
Difference		0.0889	0.0304		

$t = 2.921$ , degrees of freedom = 961

$H_a: \text{diff} \neq 0$ ,  $p = 0.0036$

T-test for equality of means, bank status by urban/rural split

Group	Observations	Mean	Std. Error	Std. Deviation	95% confidence interval
Urban	183	.5792	0.0366	0.4950	[0.5070, 0.6514]
Rural	780	.3449	0.0170	0.4756	[0.3114, 0.3783]
Difference		0.2344	0.0404		

$t = 5.8064$ , degrees of freedom = 266

$H_a: \text{diff} \neq 0$ ,  $p = 0.0000$

T-test for equality of means, closed accounts by urban/rural split

Group	Observations	Mean	Std. Error	Std. Deviation	95% confidence interval
Urban	183	.1421	0.0259	0.3501	[0.0910, 0.1931]
Rural	780	.2218	0.0149	0.4157	[0.1926, 0.2510]
Difference		-0.0797	0.0332		

$t = -2.4017$ , degrees of freedom = 961

$H_a: \text{diff} \neq 0$ ,  $p = 0.0165$

T-test for equality of means, remittances income by gender

Group	Observations	Mean	Std. Error	Std. Deviation	95% confidence interval
Male	473	1.6068	0.0225	0.4890	[1.5626, 1.6509]
Female	490	1.5163	0.0226	0.5002	[1.4719, 1.5607]
Difference		0.0904	0.0319		

$t = 2.8359$ , degrees of freedom = 961

$H_a: \text{diff} \neq 0$ ,  $p = 0.0047$

T-test for equality of means, closed accounts by gender

Group	Observations	Mean	Std. Error	Std. Deviation	95% confidence interval
Male	473	.2389	0.0196	0.4269	[0.2003, 0.2775]
Female	490	.1755	0.0172	0.3808	[0.1417, 0.2093]
Difference		0.0634	0.0260		

$t = 2.434$ , degrees of freedom = 961

$H_a: \text{diff} \neq 0$ ,  $p = 0.0151$

T-test for equality of means, length of account ownership by urban/rural split

Group	Observations	Mean	Std. Error	Std. Deviation	95% confidence interval
Urban	183	.2787	0.0332	0.4496	[0.2131, 0.3443]
Rural	780	.1705	0.0135	0.3763	[0.1441, 0.1970]
Difference		-0.1082	0.0321		

$t = 3.3661$ , degrees of freedom = 961

$H_a: \text{diff} \neq 0$ ,  $p = 0.0008$

T-test for equality of means, savings account ownership by urban/rural split

Group	Observations	Mean	Std. Error	Std. Deviation	95% confidence interval
Urban	183	1.7049	0.0338	0.4573	[1.6382, 1.7716]
Rural	780	1.85	0.0128	0.3573	[1.8249, 1.8751]
Difference		-0.1451	0.0311		

$t = -4.6694$ , degrees of freedom = 961

$H_a: \text{diff} \neq 0$ ,  $p = 0.0000$

T-test for equality of means, basic access account ownership by urban/rural split

Group	Observations	Mean	Std. Error	Std. Deviation	95% confidence interval
Urban	183	1.6831	0.0344	0.4665	[1.6150, 1.7511]
Rural	780	1.7974	0.0144	0.4022	[1.7692, 1.8257]
Difference		-0.1144	0.0341		

$t = -3.3544$ , degrees of freedom = 961

$H_a: \text{diff} \neq 0$ ,  $p = 0.0008$

T-test for equality of means, using SNPF savings by urban/rural split

Group	Observations	Mean	Std. Error	Std. Deviation	95% confidence interval
Urban	183	.3224	0.0346	0.4687	[0.2540, 0.3907]
Rural	780	.1974	0.01426	0.3983	[0.1694, 0.2254]
Difference		0.1250	0.0339		

$t = 3.6878$ , degrees of freedom = 961

$H_a: \text{diff} \neq 0$ ,  $p = 0.0002$

T-test for equality of means, saving balances by banked/unbanked split

Group	Observations	Mean	Std. Error	Std. Deviation	95% confidence interval
Unbanked	588	289.5	57.3	1389.6	[177.0, 402.1]
Banked	375	5005.8	1058.6	20499.1	[2924.3, 7087.3]
Difference		-4716.3	848.2		

$t = -5.5696$ , degrees of freedom = 961

$H_a: \text{diff} \neq 0$ ,  $p = 0.0000$

T-test for equality of means, saving balances by urban/rural split

Group	Observations	Mean	Std. Error	Std. Deviation	95% confidence interval
Urban	183	4014.9	1058.8	14323.7	[1925.7, 6104]
Rural	780	1682.9	454.0	12679.5	[791.7, 2574.1]
Difference		2332.0	1068.3		

$t = 2.1828$ , degrees of freedom = 961

$H_a: \text{diff} \neq 0$ ,  $p = 0.0293$

T-test for equality of means, receiving remittances by urban/rural split

Group	Observations	Mean	Std. Error	Std. Deviation	95% confidence interval
Urban	183	1.5847	0.0365	0.4941	[1.5126, 1.6568]
Rural	779	1.4095	0.0176	0.4921	[1.3749, 1.4441]
Difference		0.1752	0.0404		

$t = 4.3309$ , degrees of freedom = 960

$H_a: \text{diff} \neq 0$ ,  $p = 0.0000$

T-test for equality of means, receiving remittances by gender

Group	Observations	Mean	Std. Error	Std. Deviation	95% confidence interval
Male	472	1.4809	0.0230	0.5002	[1.4357, 1.5262]
Female	490	1.4061	0.0222	0.4916	[1.3625, 1.4498]
Difference		0.0748	0.0320		

$t = 2.3394$ , degrees of freedom = 960

$H_a: \text{diff} \neq 0$ ,  $p = 0.0195$

T-test for equality of means, male receiving remittances by urban/rural split

Group	Observations	Mean	Std. Error	Std. Deviation	95% confidence interval
Urban	97	1.6495	0.0487	0.4796	[1.5528, 1.7461]
Rural	375	1.4373	0.0256	0.4967	[1.3869, 1.4878]
Difference		0.2122	0.0562		

$t = 3.7756$ , degrees of freedom = 470

$H_a: \text{diff} \neq 0$ ,  $p = 0.0002$

T-test for equality of means, female receiving remittances by urban/rural split

Group	Observations	Mean	Std. Error	Std. Deviation	95% confidence interval
Urban	86	1.5116	0.0542	0.5028	[1.4038, 1.6194]
Rural	404	1.3837	0.0242	0.4869	[1.3360, 1.4312]
Difference		0.1280	0.0581		

$t = 2.2004$ , degrees of freedom = 488

$H_a: \text{diff} \neq 0$ ,  $p = 0.0282$

T-test for equality of means, insurance ownership by top 20 income earners and others

Group	Observations	Mean	Std. Error	Std. Deviation	95% confidence interval
No insurance	747	1.8367	0.0135	0.3699	[1.8101, 1.8632]
Insurance	186	1.6237	0.0356	0.4858	[1.5533, 1.6939]
Difference		0.2130	0.0324		

$t = 6.5709$ , degrees of freedom = 931

$H_a: \text{diff} \neq 0$ ,  $p = 0.0000$

T-test for equality of means, insurance ownership by employment

Group	Observations	Mean	Std. Error	Std. Deviation	95% confidence interval
Employed	260	1.55	0.0309	0.4984	[1.4891, 1.6109]
Not employed	186	1.8886	0.0121	0.3149	[1.8647, 1.912]
Difference		-.3386	0.0274		

$t = -12.3606$ , degrees of freedom = 931

$H_a: \text{diff} \neq 0$ ,  $p = 0.0000$

# Annex E: Regression Output

**Logit Models (The dependent variable is the dummy variable indicating whether a respondent is banked or not)**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
VARIABLES	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Receive remittance	-0.190 (0.153)	-0.185 (0.153)	-0.110 (0.159)		-0.124 (0.149)	-0.164 (0.147)	-0.200 (0.146)			
Male	-0.236 (0.146)	-0.237 (0.147)	-0.495*** (0.157)	-0.187 (0.140)	-0.0567 (0.144)	-0.0347 (0.146)	-0.204 (0.140)	-0.254 (0.166)	-0.228 (0.146)	-0.228 (0.146)
Urban	0.587*** (0.189)	0.578*** (0.190)	0.674*** (0.194)	1.062*** (0.175)	0.770*** (0.181)	0.938*** (0.178)	1.030*** (0.176)	0.503** (0.198)	0.605*** (0.189)	0.596*** (0.189)
Income	0.640*** (0.077)	0.643*** (0.0777)							0.641*** (0.077)	0.644*** (0.0777)
Age	0.0262*** (0.00450)	0.0168 (0.0212)	-0.0115 (0.0227)	0.0299 (0.0203)	0.0593*** (0.0208)	0.0381* (0.0203)	0.0337* (0.0204)	0.00394 (0.0233)	0.0255*** (0.004)	0.0151 (0.0213)
Age square		0.000106 (0.000234)	0.000568** (0.000250)	-1.61e-05 (0.000222)	-0.000313 (0.000228)	-0.000120 (0.000223)	-4.14e-05 (0.000224)	0.000357 (0.000256)		0.000117 (0.000234)
Has formal income			2.147*** (0.183)					1.980*** (0.188)		
Has remittance income				0.0390 (0.148)				0.0837 (0.164)		
Has agricultural income					-1.152*** (0.194)			-0.646*** (0.210)		
Has casual income						-0.89*** (0.220)		-0.602** (0.242)		
Has all other income							0.0488 (0.180)	0.114 (0.198)		
Remittance user									-0.0810 (0.154)	-0.0736 (0.155)
Constant	-3.71*** (0.338)	-3.54*** (0.498)	-1.486*** (0.471)	-1.76*** (0.423)	-2.05*** (0.429)	-1.70*** (0.425)	-1.73*** (0.424)	-1.64*** (0.471)	-3.75*** (0.338)	-3.57*** (0.497)
Observations	953	953	963	963	963	963	963	963	953	953
Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1										



## Probit Models

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
VARIABLES	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Receive remittance	-0.116 (0.091)	-0.114 (0.0920)	-0.0644 (0.0936)		-0.0767 (0.0902)	-0.101 (0.0893)	-0.120 (0.0887)			
Male	-0.141 (0.0879)	-0.141 (0.0879)	-0.282*** (0.0912)	-0.113 (0.0850)	-0.0281 (0.0874)	-0.0179 (0.0888)	-0.123 (0.0851)	-0.139 (0.0975)	-0.136 (0.0878)	-0.136 (0.0878)
Urban	0.359*** (0.114)	0.355*** (0.114)	0.393*** (0.116)	0.648*** (0.107)	0.469*** (0.111)	0.574*** (0.108)	0.629*** (0.107)	0.300** (0.118)	0.370*** (0.114)	0.365*** (0.114)
Income	0.379*** (0.0443)	0.380*** (0.0444)							0.380*** (0.0443)	0.381*** (0.0444)
Age	0.0159*** (0.002)	0.0117 (0.0128)	-0.00649 (0.0132)	0.0191 (0.0123)	0.0369*** (0.0126)	0.0242* (0.0124)	0.0215* (0.0124)	0.00281 (0.0137)	0.0155*** (0.003)	0.0107 (0.0128)
Age square		4.68e-05 (0.000140)	0.000331** (0.000145)	-1.90e-05 (0.000135)	-0.000198 (0.000138)	-8.24e-05 (0.000136)	-3.51e-05 (0.000136)	0.000208 (0.000150)		5.38e-05 (0.000140)
Has formal income			1.296*** (0.108)					1.19*** (0.111)		
Has remittance income				0.0243 (0.0902)				0.0450 (0.0963)		
Has agricultural income					-0.690*** (0.113)			-0.373*** (0.122)		
Has casual income						-0.539*** (0.128)		-0.323*** (0.136)		
Has all other income							0.0283 (0.111)	0.0628 (0.117)		
Remittance user									-0.0518 (0.092)	-0.0481 (0.0930)
Constant	-2.22*** (0.192)	-2.14*** (0.293)	-0.899*** (0.272)	-1.10*** (0.255)	-1.27*** (0.259)	-1.06*** (0.257)	-1.08*** (0.256)	-0.10*** (0.275)	-2.24*** (0.191)	-2.16*** (0.293)
Observations	953	953	963	963	963	963	963	963	953	953

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

## Dprobit Models

VARIABLES	(1)	(2)
	Model 1	Model 2
Urban	0.142*** (0.0449)	0.116** (0.0463)
Has formal income		0.449*** (0.0374)
Has agricultural income		-0.134*** (0.0418)
Has casual income		-0.117** (0.0464)
Has all other income		0.0179 (0.0364)
Male	-0.0516 (0.0333)	-0.0539 (0.0366)
Age	0.00405 (0.00485)	0.00133 (0.00514)
Age square	2.05e-05 (5.33e-05)	7.60e-05 (5.66e-05)
Income	0.145*** (0.0169)	
Remittance user	-0.0183 (0.0354)	
Observations	953	963
Standard errors in parentheses		
*** p<0.01, ** p<0.05, * p<0.1		







