

# Inclusion inspires global financial agenda but how does it fare in the small Pacific Island Countries? The case of Vanuatu

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**GRIFFITH UNIVERSITY–SOUTH PACIFIC CENTRAL BANKS  
JOINT POLICY RESEARCH WORKING PAPER SERIES**

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## Griffith University–South Pacific Central Banks Joint Policy Research Working Paper Series

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does it fare in the small Pacific Island Countries?  
The case of Vanuatu

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# Abstract

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This study attempts to fill a huge gap in the expanding, country-specific, regional and global financial inclusion literature. It is the first to systematically investigate the issue in the Pacific Island context. Using Vanuatu as a case, and recently available Demand Side Survey data provided by the country's central bank, the study finds that exclusion is mainly voluntary. The use of formal account is more popular in Port Vila and Luganville compared to other regions. Higher income, better education, and age are positively associated with greater use of formal accounts. Women are more likely to have general savings and formal credit compared to men. Policy implications are discussed.

Keywords: Pacific Island Countries; Vanuatu; financial inclusion; formal account; general saving; formal credit

# 1. Introduction

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The ideology of inclusion is indeed increasingly inspiring and influencing the global financial sector agenda—the literature is becoming progressively replete with country, regional and worldwide studies investigating the status quo, extent, determinants and policy direction (Allen et al., 2012; Amidzic et al., 2014; Camara & Tuesta, 2014). The concept connotes access to useful and affordable financial products and services delivered in a responsible and sustainable manner. For instance, access to a basic bank account—a standard measure of inclusion—enhances savings (Aportela, 1999), empowerment (Ashraf et al., 2010), as well as consumption and productive investment of entrepreneurs (Dupas and Robinson, 2009). Financially included individuals and firms are promised a safe place for future savings, which may foster financial stability since bank deposits become the most secure funding base in times of uncertainty and crisis, especially in the case of smaller banks and otherwise those with limited access to financial markets (Han & Melecky, 2013). Financial services make it easier to manage financial emergencies—such as job losses or crop failure—that can push families into destitution (Karlan et al., 2016; Demirguc et. al., 2017). The macro-economic benefits are equally compelling—inclusion triggers economic development and thereby contributes to poverty reductions via, among others, investments in education and entrepreneurship (Beck, Demirgüc-Kunt, & Levine, 2007; Bruhn & Love, 2014).

Financial *exclusion* then becomes problematic when it is involuntary or forced. Exclusion warrants policy action when there are individuals whose marginal benefit from using financial services exceeds the marginal costs, but who are excluded by barriers such as high account fees, large distances, and lack of suitable products—that result from market failures (Allen, Demirgüc-Kunt, Klapper, & Peria, 2012). And the extent and instances of exclusion, globally, has indeed been concerning. According to the latest available global trends, in 2017, around 1.7 billion people worldwide (approximately  $\frac{1}{4}$  of world population) remained unbanked i.e. without an account at a financial institution or through a mobile money provider; virtually all of these in developing economies—nearly half in just seven: Bangladesh, China, India, Indonesia, Mexico, Nigeria, and Pakistan. Gaps persist as well; e.g. fifty-six percent of all unbanked adults are women and poorer households—those who have no easy access to banks in their regions or who have developed a deep mistrust of the financial system.

Demirgüc-Kunt and Klapper (2013a) analyse the use of financial services in 148 countries using 2011 data from the World Bank's Global Findex database (Findex). In addition to average statistics, they examine individual and country characteristics associated with three main indicators of financial inclusion; ownership of a bank account, savings on a bank account, and use of bank credit. They show that differences in income among countries and among individuals within countries influence the level of financial inclusion. Allen, Demirgüc-Kunt, Klapper, and Peria (2012) identify individual and country characteristics that determine the ownership of a bank account and savings on a bank account for 123 countries. They provide evidence of positive impacts of several individual characteristics; in particular, income and education. Similarly, country-specific and regional studies have increasingly been investigating the extent and determinants of financial inclusion with the aim of influencing policy directions (Demirgüc-Kunt & Klapper, 2013a; Allen et al., 2012; Fungacova & Weill., 2015).

Remarkably, conspicuously missing from the Findex database and the financial inclusion literature so far are a host of economies located to the East and North-East of Australia—the Pacific Island Countries<sup>1</sup> (PICs)—not only are these among the world's most remote and geographically-dispersed but also small in size, with limited natural resources, narrow-based economies, large distances to major markets, and vulnerable to exogenous

shocks—a sure recipe for growth, development and poverty and inequality challenges and high degree of volatility. These economies are also among the most vulnerable in the world to the effects of climate change and natural disasters—at least eight PICs are among the world's 20 countries with the highest average annual disaster losses scaled by gross domestic product. Add to this the relatively underdeveloped, bank-centric, financial systems and the state of affairs becomes rapidly sombre.

We attempt to fill this gnawing gap in the literature by bringing to light the case of one such PIC—Vanuatu. The data source is a 2016 field survey, spanning 991 households, based on the Findex framework and methodology, including the survey instrument. The Demand Side Survey (DSS) data is the first of its kind for the country, giving policy-makers valuable baseline information of consumers' access to and use of formal financial services, and laying the groundwork for future research into how these services fit into and transform the lives of everyday Ni-Vanuatu.

Our intentions are to do the following. First, what is the status of financial inclusion in Vanuatu, using standard measures in the literature: (i) formal account ownership; (ii) savings activities; and (iii) credit or loan activities. Second, what are the determinants of exclusion. And third, what are the motivations and reasons for exclusion? We go a bit further and unbundle Vanuatu's case by province/region—despite the far-flung geographical set-up of the island nation, which the data allows. This is another important contribution of the study, in terms particularly of a more targeted policy approach.

Results show that the rural population is largely unbanked. Barriers include lack of identification, distance to access points, preference for cash, and the perceived cost of setting up formal accounts especially in an agrarian society like Vanuatu. According to the DSS, financial constraints, distance to banks, lack of knowledge in document handling, cost of having a bank account, lack of trust in banking systems, and someone else in the family owning a bank account discourages respondents to have their own bank account. Agriculture in Vanuatu is a cash-driven business and 100% of adults that involved in the sector receive their income in cash, compared with just 19% of adults working in the public sector. The rest of the paper is structured as follows. Section 2 provides the indicators of financial inclusion in Vanuatu. Section 3 discusses the determinants. Section 4 identifies motivations and reasons for financial inclusion or exclusion. Section 5 concludes with some policy implications.



## 2. Financial inclusion in Vanuatu

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### 2.1 Data

The data source primarily is a 2016 Demand Side Survey (DSS) conducted by the Reserve Bank of Vanuatu, in collaboration with Vanuatu's National Statistics Office. A stratified three-stage sample design was used to select a sample of 991 households and persons aged 15 years or older from across the country for interviews. The sampling frame was stratified by both urban (436 respondents) and rural (555 respondents) as well as all 8 provinces<sup>2</sup> of Vanuatu: Port Vila, Shefa, Luganville, Sanma, Penama, Torba, Tafea and Malampa. Of the 991 respondents, 64% were married; 50% were comfortable in English language; 50% were in the 21–40 age group; and 50% had at least primary education.

### 2.2 Measures

Consistent with the literature (for example, Demirgüç-Kunt and Klapper, 2013a; and Fungacova and Weill, 2015), we measure financial inclusion using three indicators. The first and most traditional is the ownership of an account in a formal financial institution (formal account). The relevant survey question here was: *Have you, personally, ever had any type of account with a bank?* The second indicator relates to savings behaviour (general saving). The survey question here was: *In the past year, have you saved or put aside any money, even a little?* This question applied only to those who had indicated they had saved or set aside money in general in the past 12 months, which explains the slightly lower number of respondents compared to the first indicator. The third indicator relates to borrowing behaviour (formal credit). The question here was: *Have you borrowed from a financial institution (bank, credit union or microfinance institution) in the past 12 months?*

## 2.3 Descriptive statistics

Table 1: Main indicators of financial inclusion in Vanuatu

	Formal Account (n=990)	General Saving (n=980)	Formal Credit (n=990)
All	37%	39%	46%
Panel A: By province			
Luganville	41.11%	64.44%	40.00%
Malampa	17.50%	47.90%	25.83%
Penama	35.24%	63.81%	40.95%
Port Vila	54.78%	54.46%	69.86%
Sanma	29.52%	61.90%	26.67%
Shefa	32.50%	60.00%	50.00%
Tafea	28.00%	49.33%	33.33%
Torba	36.67%	53.33%	76.67%
Panel B: By marital status			
Divorced/Separated	38.89%	52.94%	22.22%
Married or Defacto	43.26%	61.97%	46.51%
Never Married	30.14%	46.95%	60.64%
Widow/Widower	33.33%	42.22%	26.67%
Panel C: By income			
Poorest	20.69%	38.61%	54.68%
2	22.73%	52.79%	42.42%
3	33.86%	64.29%	44.09%
4	50.72%	62.22%	51.45%
Richest	72.59%	65.46%	55.33%
Panel D: By education			
None	7.58%	48.48%	19.70%
Primary School	27.31%	55.75%	39.65%
Secondary School	47.83%	57.69%	59.24%
Tertiary	79.41%	62.24%	74.51%
Panel E: By gender			
Female	35.03%	62.70%	52.25%
Male	43.22%	50.21%	45.93%
Panel F: By age			
Youngest	17.51%	44.39%	58.06%
2	41.67%	65.73%	50.56%
3	52.38%	62.02%	53.81%
4	48.15%	58.29%	42.86%
Oldest	37.11%	54.40%	39.18%

*Note:* This table displays the descriptive statistics for the three main financial inclusion indicators in different provinces across Vanuatu. Formal account refers to adults reported to currently have a bank account at a formal financial institution. General saving refers to adults reported to have saved or set aside money in the past 12 months. Formal credit refers to adults reported to have borrowed money in the past 12 months using a financial institution.

**Table 1** shows the main descriptive statistics for the above three indicators of financial inclusion for the 8 provinces across Vanuatu. As **table 1** shows, overall, 37% of the respondents had a formal bank account, compared to 60% in Fiji, 41% in Tonga, 39% in Samoa and 26% in Solomon Islands, which then is not really an outlier among the Pacific Island Countries but is still concerning. Across the provinces, access varies widely, with 55% of the respondents in Port Vila having a bank account compared to 17% in Malampa. Interestingly, however, even in Port Vila, the central business district and capital of Vanuatu, around only a half of the respondents had access to a bank account. Married respondents appear to slightly outnumber the divorced/separated group and are noticeably more in number compared to the never married group. Income seems to be positively related to bank account access as does the level of education. As well, more male and middle-aged respondents have access to a bank account.

Of the 991 respondents, 39% had saved or put aside some money in the previous 12 months. Interestingly, while those in Port Vila seemed to have most access to bank accounts, these respondents did not necessarily also save more than those in other provinces. In fact, only in Port Vila was the savings ratio about the same as access to bank account; in case of all other provinces, the savings ratio was far much more than access to bank account, indicating that savings may not necessarily be positively related to bank account. For example, Malampa, with the least access to bank account, had over 2.5 times as much savings. In the case of other categories, the pattern seems to be similar to bank account access: marital status, income and age appears to be positively related to savings. As well, more middle-aged respondents but not so in the case of gender this time: while more male had access to a bank account, the savings pattern is in the opposite direction—women seem to save more than men.

With respect to formal credit, at 46%, the overall ratio looks better than access to bank account and savings. At first glance, it'd appear that the ratios revert to bank account access patterns for the provinces, with Port Vila again surging to the top spot. However, a closer look reveals that it might in fact be the province of Torba with the highest ratio of formal borrowing. Overall, the ratios are better than bank account access. Interesting but not surprising patterns also emerge for other categories. For example, never married take the centre stage now; as well, the difference between income groups is less noticeable. Further, females and younger people tend to borrow more; however, education still appears to be positively related to borrowing.

## 3. Determinants of financial inclusion in Vanuatu

### 3.1 Methodology

Our main empirical specification focuses on the earlier described three dimensions of financial inclusion: a) bank account, (b) general savings, and (c) formal credit. Our profit model with maximum likelihood is as follows:

$$finInc_{ki} = \alpha_k + \beta_{k,1}age_i + \beta_{k,2}gender_i + \beta_{k,3}education_i + \beta_{k,4}income_i + \beta_{k,5}m\_status_i + \beta_{k,6}region_i + \varepsilon_{k,i} \quad [1]$$

where  $k = 1,2,3$  and  $finInc_{ki}$  denotes one of three indicators of financial inclusion and  $i$  is the index for individuals and  $\varepsilon_{k,i}$  is the error term.

$$finInc_{1i} = \begin{cases} 1 & \text{if an individual is having a formal account} \\ 0 & \text{otherwise} \end{cases}$$

$$finInc_{2i} = \begin{cases} 1 & \text{if an individual is having a general savings} \\ 0 & \text{otherwise} \end{cases}$$

$$finInc_{3i} = \begin{cases} 1 & \text{if an individual is having a formal credit} \\ 0 & \text{otherwise} \end{cases}$$

The explanatory variables are from the DSS, which is based on the literature and include age, gender, education, income, marital status and in the case of Vanuatu, province or region as well. The latter is unique to Vanuatu and expected to provide more meaningful and targeted policy actions. Income includes five dummy variables, each equal to one if the individual's income is in a given quintile, from the first (poorest 20%) to the fourth (fourth 20%); the base dummy variable is for the first income quintile (poorest group). Four dummy variables are used for education; each equal to one if the individual has primary, secondary and tertiary education, with the base level set at no education. Age is defined as the number of years (Age) and squared age (Age<sup>2</sup>) in the estimations, to consider possible nonlinearity in the relation between age and financial inclusion. Gender is taken into account by introducing a dummy variable equal to one if the individual is a male. Marital status is included as married, divorced, widow or never married and the base category is married or defacto individuals. Eight different regions of Vanuatu are also included in the model as dummy variables: Luganville, Malampa, Penama, Port Vila, Sanma, Shefa, Tafea and Torba. Descriptions of variable used are reported in **Table 2**. We estimate Eq. (1) for the main indicators of financial inclusion and the results are reported in **Table 3**.

**Table 2: Description of the main variables in the estimations**

	Definition
Gender	= 1 if Male = 0 if Female
Age	= Age in number of years
Income – Poorest 20%	= 0 if income in the first income quintile
Income – Second 20%	= 1 if income in the second income quintile, =0 otherwise
Income – Middle 20%	= 1 if income in the third income quintile, =0 otherwise
Income – Fourth 20%	= 1 if income in the fourth income quintile, =0 otherwise
Income – Richest 20%	= 1 if income in the fifth income quintile, =0 otherwise
Education – None	= 0 otherwise
Education – Primary school	= 1 if they have attended primary school, =0 otherwise
Education – Secondary school	= 1 if they have attended secondary school, =0 otherwise
Education – Tertiary school	= 1 if they have attended tertiary school, =0 otherwise
Marital status – Married or Defacto	= 0 if the individual is married = 1 if the individual is divorced or separated, =0 otherwise
Marital status – Divorced/Separated	= 1 if the individual is a widow or widower, =0 otherwise
Marital status – Widow/Widower	= 1 if the individual is never married, =0 otherwise
Marital status – Never married	
Region – Luganville	= 0 if the region is Luganville
Region – Malampa	= 1 if the region is Malampa, =0 otherwise
Region – Penama	= 1 if the region is Penama, =0 otherwise
Region – Port Vila	= 1 if the region is Port Villa, =0 otherwise
Region – Sanma	= 1 if the region is Sanma, =0 otherwise
Region – Shefa	= 1 if the region is Shefa, =0 otherwise
Region – Tafea	= 1 if the region is Tafea, =0 otherwise
Region – Torba	= 1 if the region is Torba, =0 otherwise

Table 3: Determinants of the main financial inclusion indicators.

	Formal Account	General Saving	Formal Credit
Age	0.105*** [5.71]	0.022 [1.44]	0.002 [0.12]
Age <sup>2</sup>	-0.001*** [-4.87]	-0.000 [-1.48]	-0.000 [-0.11]
Male	0.137 [1.44]	-0.405*** [-4.69]	-0.197** [-2.23]
Education – primary school	0.899*** [3.44]	0.058 [0.31]	0.412** [1.99]
Education – secondary school	1.639*** [5.93]	0.177 [0.88]	0.849*** [3.82]
Education – tertiary	2.246*** [7.10]	0.269 [1.13]	1.19*** [4.65]
Income – second last poorest group	0.119 [0.76]	0.324** [2.42]	-0.093 [-0.67]
Income – middle income group	0.358** [2.48]	0.620*** [4.75]	-0.131 [-0.97]
Income – second richest group	0.631*** [3.82]	0.635*** [4.11]	-0.125 [-0.79]
Income – richest group	1.034*** [6.30]	0.738*** [4.89]	-0.263* [-1.70]
Marital status – divorced/separated	-0.541 [-1.47]	-0.379 [-1.14]	-0.676* [-1.92]
Marital status – widow/widower	0.180 [0.73]	-0.378* [-1.74]	-0.281 [-1.18]
Marital status – never married	-0.092 [-0.71]	-0.183 [-1.57]	0.181 [1.52]
Region – Malampa	-0.764*** [-3.52]	-0.438** [-2.35]	-0.240 [-1.26]
Region – Penama	0.217 [1.04]	0.059 [0.30]	0.258 [1.33]
Region – Port Vila	0.174 [1.01]	-0.316** [-1.96]	0.734*** [4.63]
Region – Sanma	0.071 [0.33]	0.107 [0.54]	-0.203 [-1.02]
Region – Shefa	0.021 [0.10]	-0.054 [-0.29]	0.457** [2.46]
Region – Tafea	0.073 [0.30]	-0.211 [-0.99]	0.022 [0.10]
Region – Torba	0.684** [2.23]	-0.115 [-0.41]	1.230*** [4.14]
Constant	-4.330*** [-8.51]	-0.356 [-0.89]	-0.824** [-2.06]
Observations	990	980	990
Pseudo R-squared	0.262	0.073	0.145
Predicted probability (at mean)	0.359	0.570	0.490

Note: z-statistics are shown in parentheses \*\*\*p<0.01, \*\* p<0.05, \* p<0.1.

### 3.2 Determinants of main financial inclusion indicators

Results show that men are less likely to have general savings or formal credit compared to women in Vanuatu. Hence gender exerts an impact on financial inclusion with regard to general savings and formal credit. However we note that men are more likely to have formal accounts. The survey shows that there is a significant gender gap in bank account ownership. 35% of female adults report owning a bank account, compared to 43% of men. Even though women are less likely to report owning a bank account, they are more likely to report saving in the past 12 months, and they say they deposit and withdraw from their bank accounts more frequently.

We find significant effects for Age and Age<sup>2</sup>, which are respectively positive and negative for formal accounts. Hence there is a nonlinear relation between age and financial inclusion. This means that older people use more formal financial services than does the rest of the population, but this is only up to a certain age. We interpret this result in terms of a “generational effect”, which may derive from the demand side or the supply side. Older individuals might be more reluctant to use formal financial services. Alternatively, financial institutions might be exerting less effort into attracting older clients. Allen et al. (2012) find a similar nonlinear relation between age and formal account in data from all around the world.

The level of education impacts both formal account and formal credit but not the general savings. It can be seen that when the level of education increases the need of financial services increase as well. This may be due to high level of income generated based on an individual’s level of qualifications. High income correlates positively with formal account and general savings. DSS findings in Vanuatu states that employment type is associated with bank account ownership in the country. Nearly every adult employed in the public sector has a bank account, has used other formal financial services or has used some informal financial service in the past year. With respect to regions, residents in Malampa region are less likely to possess a formal account or general savings compared to residents in Luganville. Whereas, residents in Torba are more likely to have a formal account and access to formal credit compared to residents in Luganville. Residents in Port Vila are less likely to have general savings and more likely to have formal credit compared to residents in Luganville.

Our findings suggest that characteristics of individuals can help explain the use of formal financial services. However, we observe major discrepancies between the three main financial inclusion indicators, with individual characteristics having a more significant influence on formal account use, which is considered the main indicator for financial inclusion. Our results are consistent with Allen et al. (2012) and Fungacova and Weill (2015). The main similarities concern the influence of income, education, and age on the use of a formal account. Allen et al. (2012) also find that richer and more educated people are more likely to have a formal account, and that a nonlinear relationship exists for age.

## 4. Motivations and reasons for financial inclusion/exclusion

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Results show that the rural population is largely unbanked. Barriers include lack of identification, distance to access points, preference for cash, and the perceived cost of setting up formal accounts especially in an agrarian society like Vanuatu. According to the DSS, financial constraints, distance to banks, lack of knowledge in document handling, cost of having a bank account, lack of trust in banking systems, and someone else in the family owning a bank account discourages respondents to have their own bank account. Agriculture in Vanuatu is a cash-driven business and 100% of adults that involved in the sector receive their income in cash, compared with just 19% of adults working in the public sector.

Fungáčová and Weill (2015) find that in China richer, more educated, older men are more likely to be financially included. Concerning barriers to financial inclusion, poorer people care more about their lack of money and the fact that another member of the family has an account while more educated people are more concerned about cost and trust in the banking system. Women are less likely to be financially included due to lack of documentation or another member of the family has an account. Finally, older people are more concerned about lack of money, distance and religious reasons. The study also finds that income and education influence the choice between formal and informal credit but education does not lead to higher formal credit in China. Women seem to be discriminated as they do not substitute formal credit with informal credit. Kostov et al. (2015) study the “Mzansi” accounts in South Africa to analyze the role of households’ behavior decision process. They find that aspirations and financial literacy are important determinants of the decision process.

Gender also matters for financial inclusion. Using the 2012 Global Findex on 98 developing countries, Demirgüç, -Kunt et al. (2013a) find that a significant gender gap exists in account ownership, formal saving and formal credit. Being a woman would increase the likelihood of being financially excluded. Difficulties in providing collateral or personal guarantees, lower levels of financial literacy and business experience, the husband’s adverse credit history and constraints felt in the financial system are some of the main reasons for such gender gap in formal financial inclusion.

However, the existence of such discriminations in informal finance is less certain. Indeed, in some countries, women are more likely to use informal financial services. Aterido et al. (2013) analyze this issue in nine African countries but do not find significant gender discrimination. The gender gap in Africa seems therefore to be linked with women participation outside the financial sector; women would be discriminated in other areas of the economy, like formal employment, education and within the household. Moreover, they confirm that African women are more likely to resort to informal financial services. Allen et al. (2016) provide evidence of country characteristics influencing financial inclusion. High-quality institutions, efficient legal rules, strong contract enforcement and political stability bring about more financial inclusion.

Moreover, characteristics about the banking sector also play a key role. High costs of opening and using bank accounts but also high distance and high disclosure requirements reduce formal inclusion. Trust in the banking sector can also influence. The existence of a deposit insurance scheme and of tax incentive schemes also lead to greater financial inclusion. Religion may influence financial inclusion, as shown by Demirgüç, -Kunt et al.



(2013b). Using a sample of 65,000 adults from 64 economies, they study this question by analysing the impact of being a Muslim on formal account, formal saving, formal credit, and barriers to financial inclusion. They find that Muslims resort significantly less to formal account ownership and formal saving than non-Muslims. However, Muslims would not be less likely to borrow, either formally or informally, than non-Muslims. The typical categories excluded from formal financial systems (the poor, the less educated, women and rural adults) are the same for Muslims and non-Muslims. Moreover, religion would be more cited as a barrier to financial inclusion by Muslims, but this result is due to respondents in Sub-Saharan Africa.

## 5. Conclusion and policy implications

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This study is the first to systematically investigate the level and determinants of financial inclusion in the case of Pacific Island Countries, using the case of Vanuatu, based on the country's central bank-led Demand Side Survey (DSS) conducted in 2016. A total of 991 households and persons aged 15 years or older from across the 8 provinces of Vanuatu were interviewed, keeping also in mind the gender and rural-urban balance. Financial inclusion is measured using standard proxies—formal bank account, general savings and formal credit. Results, based on a probit model, show that men are less likely to have general savings and formal credit compared to women. However, men are more likely to have formal accounts. As well, education and income are positively related to inclusion.

While the results are not too different from the rest of the region and compared to similar economies elsewhere, there is vast room for continuing to drive the financial inclusion agenda. For example, ownership of a formal account may be enhanced by dismantling obstacles relating to gender, income and education, all of which constitute more long-run issues. For instance, the lack of a bank account can make liquidity management and payments difficult, which could result in high fees associated with the use of money orders or check-cashing services (Lusardi, 2010). Also, cash transactions present financial and personal risks for those unbanked, since individuals have no recourse if the funds are stolen (Gross, Hogarth and Schmeiser, 2012). An individual's decision to remain unbanked can have long-lasting effects, since having a bank account can facilitate asset building and wealth creation that may allow for consumption smoothing at retirement or when faced with shocks (Rhine et al., 2006).

The relevant authorities in Vanuatu may also monitor the use of formal credit closely as this might lead to major concerns in the short run if not managed properly. Even if alternative ways of borrowing, mainly from family and friends, are in general available, the relatively low reliance on formal credit can in the long run lead to slower economic growth, as borrowing prospects for individuals would be reduced. It can also hamper financial stability, since all credits granted outside the formal system are outside of the scope of banking regulation. Hence, focusing on growth and preserving financial stability provide incentives for regulators to encourage the use of formal credit in Vanuatu. Moreover, financial providers in Vanuatu can use the findings of this study to monitor the purposes of savings, credit and remittances. For example, as indicated by the DSS results, savings is primarily used for education, credit for housing and remittances for short-term expenses (utility bills, food). Formal financial providers can use these findings to design and market products. One reason they might opt for informal savings instruments may be because those instruments may potentially meet needs that are not being met by formal instruments, such as convenience and flexibility of savings.

Vanuatu's financial sector is unlikely to remain unaffected by political and economic developments in the country. Political and macroeconomic instability and weak governance, among other things, may impact adversely on it. The main issues for the future are sustainability and vulnerability. Sustainability relates to the continued commitment to the comprehensive reform program, consolidation of the reform and restructuring of the financial sector. Vulnerability encompasses possible threats to macroeconomic stability and the risks associated with the misuse of the offshore centre.

Policy makers seeking to increase account ownership among agricultural workers may address barriers such as lack of identification, distance to access points, preference for cash, and the perceived cost of setting up formal accounts. Being financially included leads to various economic benefits. It can favor the disadvantaged and poor people

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allowing them to increase their income and the probability of being employed. Indeed, in the absence of inclusive financial systems, poverty traps can emerge and hamper economic development since access to financial tools allows society to invest in education, projects and entrepreneurship (Demirgüç, Kunt and Klapper, 2012). In addition, financial inclusion can favor women empowerment (Swamy, 2014) and contribute to financial stability (Han and Melecky, 2013).

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#### Notes

- 1 Fiji, Papua New Guinea, Solomon Islands, Vanuatu, Tonga, Samoa, Cook Islands, French Polynesia, Kiribati, Marshall Islands, Micronesia, Nauru, New Caledonia, Niue, Palau, Tokelau, Tuvalu.
- 2 Actually, there are 6 provinces and 2 towns (Port Vila and Luganville)—for convenience and ease of reading, we consider all as provinces—this is also consistent with the survey instrument.



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