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FINANCIAL ACCESS AND EXCLUSION IN KENYA AND UGANDA

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Contents

1	Introduction	1
2	Context: Financial sector development debates and approaches.....	2
3	Methodology.....	5
4	The Financial Landscapes of Kenya and Uganda.....	7
4.1	Kenya.....	7
4.2	Uganda	9
4.3	Access strand analysis.....	10
5	The determinants of access and exclusion	11
6	Discussion.....	17
6.1	Social institutions as barriers to access	17
6.2	The role of the informal and semi-formal sectors in expanding provision.....	19
7	Conclusion.....	21

List of Tables

Table 1: Access strand definitions.....	6
Table 2: Financial service use in Kenya, per cent currently using (weighted)	9
Table 3: Financial service use in Uganda, per cent currently using (weighted).....	10
Table 4: Access strands and multiple use, Kenya and Uganda (per cent)	11
Table 5: Logistic regression results by access strand, Kenya and Uganda.....	13

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Abstract

Policy emphasis has recently shifted to 'Finance for All' given evidence that financial sector development (FSD) contributes to growth but that the primary effects on poverty do not arise from pro-poor provision. This paper uses data from Financial Access Surveys carried out in 2006 in Kenya and Uganda to investigate the socio-economic, demographic and geographical factors causing access to and exclusion from formal, semi-formal and informal financial services. It approaches this from the perspective of institutional analysis. It finds, first, that social institutions do present underlying barriers to access - more so than geography - and that informal provision is extensive. These findings suggest that institutional theories of FSD need to address the role of underlying social institutions and better understand the role of informal finance, and that policy for effective outreach must similarly consider these dimensions.

Key Words: financial access; financial exclusion; microfinance; social institutions; informal finance.

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1 Introduction

The role of the financial sector as leading contributor to growth has been substantially accepted and recently the focus has turned to its contribution to poverty reduction. However, the evidence of direct links to poverty reduction is deemed to be weak (World Bank 2008) and hence the policy agenda for financial sector development has turned away from a period of emphasis on microfinance towards ensuring access to 'Finance For All' (World Bank 2008). This new focus therefore requires that policy makers have an adequate understanding of the factors enabling access and creating exclusion in particular financial markets. The key dimensions leading to exclusion from financial services are generally considered to be factors such as physical distance, cost of services and identification requirements. However, a range of socio-economic, demographic and geographic dimensions can influence exclusion, and it is important to understand these in detail if policy is to address barriers to entry. Moreover, better understanding of the contribution of both the semi-formal sectors (including microfinance) and informal sectors to the landscape of access is also needed, since policy may also need to address these sectors for successful financial sector development to take place.

This paper approaches the issue of access and exclusion to financial services from the wider perspective of institutional analysis. The 'institutional turn' (Evans 2007) is now prevalent in development economics and more broadly in development policy and practice (see, e.g., World Bank 2002). With its foundations in new institutional economics, its emphasis has been on investigating the impact of property rights and legal and regulatory frameworks on economic development. However, some institutional analysts have increasingly recognised that there are underlying institutions, in particular social institutions, that underpin and influence the institutional environment. Since socio-economic characteristics are indicators of social institutions such as gender, age, race, caste, ethnicity, religion and so on, investigating their influence on access and exclusion allows us to consider the role that these social institutions play in creating access and exclusion, and hence to better understand the role of these underlying social institutions in financial sector development.

This paper uses data from nationally representative datasets collected in 2006 by FinAccess Kenya and Finscope Uganda to examine the nature and extent of financial service use across the formal, semi-formal and informal financial sectors. These surveys are among the first of their kind in the region to focus specifically on financial service use by individuals. First, we describe the financial landscape of savings and loans services across the spectrum of formal to informal financial provision: banks, co-operatives, microfinance institutions, ROSCAs, ASCAs. We then employ the concept of the 'financial access strand' (DFID/Finmark Trust/World Bank 2005) that has been developed to provide a summary profile of financial access and use logistic regressions to investigate the influence of socio-economic, demographic and geographic characteristics on their use.

The findings offer a detailed understanding of the low use of formal services, the extensive use of informal services, and demonstrate the extent of exclusion from all services in Kenya and Uganda. The analysis presents patterns of inclusion and exclusion dependent on the key factors of employment, gender, age and education and geography. Poverty proxies in the form of asset indicators also had predictable effects on the extent of use of services.

The main implications of this analysis are two-fold. First, the importance of socio-economic characteristics in determining access suggests that these present underlying barriers to entry for users and suggests the importance of a wider range of factors for policy attention than the strong focus on lowering transactions costs alone. This also suggests that it is necessary to move to integrate these institutions within the theoretical analysis of the role of institutions in financial sector development. Second, by demonstrating the extensive use of semi-formal and informal services it suggests the importance of again considering how policy relates to informal sector provision. Despite the emphasis on utilising the informal sector to make links to the formal sector during the 1990s and in particular the growth of the microfinance sector, as demonstrated here, MFI penetration of the market has overall remained low. More recently policy discussion has now shifted back to the role of formal banks in downscaling to reach poorer clients. While the latter is and must remain an important thrust of policy, this evidence again raises the question of how policy can best work to strengthen the semi-formal and informal sectors as providers of ongoing importance for poorer people. At the theoretical level, the importance of informal finance raises the question for institutional analysts of the role that this sector plays in the transition to formal services through developing norms and habits that either enable or constrain users ability to engage with more formalised services.

2 Context: Financial sector development debates and approaches

The role of the financial sector as leading contributor to growth has been a focus of much recent debate. There are some who question the evidence for the positive causation of financial sector development (FSD) on growth and emphasise the potential for bi-directionality and the variation due to specific conditions by country and time period (Lawrence 2006). However others conclude that the weight of evidence from a range of types of studies suggests that the financial sector does not simply respond to the economy (Levine 2005). This has in turn led to the question of the relationship between financial sector development and poverty reduction (Jalilian and Kirkpatrick 2005). This work deals with two causal mechanisms, first the indirect effect of FSD on growth and its impact on poverty and second the direct effect resulting from policy interventions leading to the improved provision of financial services to the poor. It concludes that poverty-reduction arising from the indirect effect on growth operates up to a threshold of economic development and hence most is to be gained from this route in lower income countries but this impact will be adverse if income inequality deteriorates as a result of FSD. Honohan (2007) finds that the FSD impact on poverty is via measures of financial depth rather than access levels, with access not strongly correlated with poverty rates or national income. But he also finds that access levels are quite well correlated with inequality suggesting that better access lowers inequality. However, research by Beck, Demirguc-Kunt and Levine (2007a) suggests that FSD disproportionately benefits the poor through faster than average growth of GDP per capita. Their evidence suggests that 60 percent of the impact on the poorest 20 percent operates through aggregate growth while 40 percent operates through reducing inequality. As they indicate, however, this does not suggest how to better achieve poverty-reducing financial development.

The impact of this evidence has been to recently shift donor policy emphasis from a focus on providing financial services to the poor – in particular via microfinance – to the need to provide ‘Finance for All’ (World Bank 2008) and a wider focus on the unbanked and those on low incomes. This development can be understood from at least two perspectives and builds on other

developments in the sector. First, the approach within the sector has been turning towards building the financial sector as a whole and not just focussing on microfinance. This is exemplified by The Consultative Group to Assist the Poor (CGAP) which, after focussing on microfinance for its first ten years, has turned its attention to 'Access for All' and the building of what it terms inclusive financial systems (Helms 2006). This reflects a view that it is necessary to work with a wide range of actors in the financial sector and not microfinance organisations alone to deliver the outreach needed through organisational and technological innovation. Despite the emphasis and investment in the microfinance sector by donors over the last two decades, progress in terms of overall outreach has been seen to be limited despite the headline figures of campaigns such as The Microcredit Summit (Microcredit Summit Campaign 2008) and extensive publicity around some MFI success stories. Honohan (2004) argues that the differences between microfinance and mainstream retail finance have been overdrawn and are superficial rather than substantial, and that microfinance appears to be constrained to outreach of less than 1 per cent in most countries – what he calls a 'threshold effect' (Honohan 2004: p.5). While a number of microfinance institutions around the world have been successfully transformed organisationally and legally into formal sector institutions and in some cases achieved private investment (both via socially responsible investment funds and IPOs) (Forster and Reille 2008; Rhyne 2005) these transformations have taken a considerable amount of time and in some cases been expensive for the outreach and scale they have so far delivered. Second, the evidence for the impact of microfinance on poverty reduction has also not been straightforward to obtain and has been subject to much debate as to its validity due to its methodological pitfalls (Morduch 1999), so that despite numerous studies demonstrating positive impacts (Copestake, et al. 2001; Hulme and Mosley 1996; Khandker 1998) debate is still vibrant as to the public policy case for investment in the sector. This has also now led to calls for the need to conduct random control trials to adequately establish evidence (World Bank 2008). The evidence cited above alongside this lack of impact evidence has also been used to support the trend a wider focus on finance for all, despite the concerns of the poverty reduction lobby that this risks donor mission drift¹.

The renewed emphasis on the role of the financial sector in growth and development has also converged with debates over the role of institutions in economic development and which institutions are most effective for FSD in particular. The general institutional literature has focused on property rights; regulatory institutions; institutions for macroeconomic stabilization and for social insurance (Acemoglu, et al. 2001; Rodrik, et al. 2004). Fergusson's review indicates that the main focus has been that the depth and breadth of capital markets is positively supported by better protection for creditor's with the alternative view that too high a level of protection can impede incentives and risk taking (Fergusson 2006). This has led onto the second main aspect of the discussion which has been primarily methodological in the search for an instrumental variable that can enable the institutional effects to be disentangled and which has focussed on the origin of these rules in a small family of legal systems. Fergusson also reports that a further but less prominent aspect of the discussion has involved the role of institutions such as trust or social capital. This has found that these are positively related to levels of FSD, and further work has found that more

¹ The Microcredit Summit Campaign led the passage the Microenterprise for Self-Reliance Act 2000 through the US Congress in order to ensure that half of USAID's Microenterprise funds be allocated to programmes reaching the very poor, that is those living on less than a dollar a day or less than 50 per cent of their national poverty line.

hierarchical religious systems tend to lower organizational performance and the protection of creditors. The role of politics in FSD has also been explored, while competitive political institutions support FSD by limiting state power, powerful political interests can oppose reform and therefore it may only occur when in their interests (Rajan and Zingales 2003).

Critics of the general literature on institutional development have questioned why these particular institutions - especially property rights - are so often put at the centre of the analysis, arguing that this is reductionist rather than theoretically informed and confuses form (eg judiciary) of the institutions and their functions (eg rule of law) as the same function may arise from a variety of forms (Chang 2005). A further criticism is that the literature fails to adequately specify the categories of institutions involved, pointing out that it is necessary to distinguish between the areas in which they operate: law, politics, economics and social; their formality (formal or informal/indigenous); and on their position in a hierarchy (Jutting 2003). Williamson's (2000) hierarchy describes four levels: the first level is those institutions related to underlying social structure; second, the rules of the game – seen as those such as property rights and the judiciary which define the overall (formal) institutional environment and in the context of markets define what can be exchanged; third, rules related to the playing of the game, for example, contracts and, fourth, rules related to resource allocation mechanisms (e.g. trade flow regimes, social security systems). This categorisation exposes a level of institutional analysis that has not been adequately undertaken - the institutions of social structure such as those of gender, class, religion and ethnicity have rarely been the focus for economists (Harriss-White 2004). Rodrik too has recognised that the market economy is embedded in non-market institutions, but that there is no direct or 'unique mapping' between them (Rodrik 2000: p.3) nor are these non-market institutions there to serve the logic of market institutions. In Chang's terminology, these social institutions have multiple forms but their function is to create social difference and processes through which inclusion and exclusion in the economy operates (Johnson 2006). This then signals a level of institutional differentiation which has not yet been adequately incorporated into the analysis of FSD.

Within this wider theoretical and policy context, the focus on extending access leads to the need for empirical measurement of access and analysis of its determinants. One issue has been the distinction between access and use, this recognises that use figures may not adequately signal actual access due to voluntary exclusion (Claessens 2006). Involuntary exclusion may arise from barriers to access to the formal system, high costs relative to income or due to lack of a credit record. The new institutional economics (NIE) highlighted the moral hazard and adverse selection problems in credit markets that can lead to lack of supply and rationing and hence that the reasons for exclusion can be complex and difficult to establish empirically (Claessens 2006). While the NIE offers a means to recognise that transactions and information costs of geographic access and that overcoming these information barriers has costs, the causes of non-use are complex and may arise from costs, risk or discrimination with these interacting in different ways. The NIE also further makes the case – given information problems in credit markets – that it is necessary to distinguish between access to different types of services, in particular deposits and loans. However, while the distinction between access and use is particularly important in developed countries with already high levels of access (as a rule of thumb as many people in developing countries are excluded as are included in developed countries), data on use is an adequate starting point to explore the causes of exclusion in most developing countries especially given the complexities of these distinctions.

The factors that affect access to financial services are numerous. Income, wealth and education offer key roles in explaining use (Claessens 2006). Further factors of convenience and trust and the lack of need or ability to save are also important, as are overall perceptions of the formal sector which can be affected by banking crises and wider macro-economic conditions (Claessens 2006). Convenience in terms of geographical conditions is recognised as a key issue in the literature. Beck et al (2007b) have undertaken cross-country analysis of the variation in banking sector outreach across countries. Outreach indicators are developed which reflect density of coverage geographically and demographically (bank branches and ATMs per 1000 km² or per 100,000 people) deposit and loan accounts per capita and loan/deposit to income ratios. These are then regressed on variables of institutional quality (an index of governance indicators), credit information sharing and banking freedom, banking system structure, and physical infrastructure. They find outreach to be correlated with population density and economic size and this suggests economies of scale in banking provision. They find that their measures of institutional quality are strongly associated with outreach, and that the effective sharing of credit information and fewer restrictions on access are to some extent related to higher use. They also find that better physical infrastructure for transport and communications is positively associated with banking use (after controlling for population density and economic size), although none of these results suggest directions of causality between supply and demand.

However, as indicated above, the analysis of the influence of underlying social institutions on development in general and markets in particular has been limited. For example, while various work has long recognised that gender has been a factor leading to exclusion and this has been used to justify the role of microfinance programmes in targeting women, the World Bank's WDR (World Bank 2002) Building Institutions for Markets chapter on financial markets makes no reference to gender at all, and this reflects the generally weak analysis of its impact on the financial sector as a whole (van Staveren 2001). Further, as Harriss-White indicated as above, beyond gender there are a range of social institutions that deserve analytical attention and may be the underlying causes of patterns of discrimination and exclusion such as age, religion, race, ethnicity and caste.

Research in this area is therefore developing and this review suggests that institutional analysis needs to be able to adequately theorise the role of social institutions in financial sector development in order to make progress. Moreover, if policy for proactive provision of financial services to the excluded is to advance appropriately, further detailed analyses of the particular factors in different country contexts will be needed to establish the most important factors to be addressed.

3 Methodology

Data availability at all levels to examine the extent and determinants of access to financial services has been relatively limited (Claessens 2006). While household level surveys have collected data – usually on the use of formal services – it has rarely probed in more detail into savings and loan behaviour. In particular, with the growth of microfinance, understanding of the complexity of poor people's financial service use has developed (Rutherford 1999) and in particular the variety of informal financial service use (Wai 1992) and multiple use of a range of services by individuals and households. In the past, the extent and volumes involved in informal service use have been surveyed only by relatively small scale household surveys (e.g. of moneylender credit) and the subject of 'guesstimates' of overall use (Germidis, et al. 1991).

Based in South Africa, the FinMark Trust pioneered an in-depth survey of individual financial service use using a market research firm in 2002. The motivation for this survey arose from the wider debate in the financial service field of the need to understand the dynamics of financial access and to track it over time and specifically, in South Africa, this was a result of the Financial Services Charter agreed in 2003 in which the banking sector committed to significantly extending access to the excluded black population (Porteous and Hazelhurst 2004). In South Africa, the banking sector has now taken over the sponsoring these studies as a means of obtaining market research data. These surveys have since been replicated in four countries in Southern Africa (Lesotho, Swaziland, Namibia and Botswana), five countries in East Africa – Kenya, Uganda, Tanzania, Rwanda and Zambia, and planning is underway for similar surveys to be undertaken in Ghana, Nigeria and Pakistan.² In both Kenya and Uganda the surveys have been supported by a coalition of public and private agencies with the main financial support coming from the UK’s Department for International Development and the survey itself was undertaken by a market research company, The Steadman Group, in 2006.

In Kenya the Financial Access Survey comprised a nationally representative sample of 4418 observations of which 4214 were used in the analysis – those respondents aged 18+ years old. In Uganda the survey comprised a nationally representative sample of 2959 respondents aged 18+ years. In both cases the sample frame was provided by the national statistical offices based on their national sampling frame (for details, see FinAccess 2007; FinScope Uganda 2007).

On the basis of the initial work in South Africa, and the wider concern to track changing access over time, the concept of the ‘access strand’ has been developed (DFID/Finmark Trust/World Bank 2005). This places each respondent in a single and mutually exclusive category of financial service use dependent on the most formal service they use. Hence if someone has a bank account but also uses informal groups they will be counted as being a user of formal services and placed in the formal access strand. If they only use a ROSCA they would be placed in the informal access strand. The four strands in use are: formal, other formal, informal and excluded. ‘Other formal’ refers to those subject to some reporting requirements and usually involves entities such as consumer finance companies, credit card companies and credit unions. In the context of Kenya and Uganda the institutions in this category are referred to as semi-formal (see Table 1).

Table 1: Access strand definitions

	Kenya	Uganda
Formal	Banks, building society, PostBank, insurance companies	Banks, credit institutions and MDIs
Semi-formal	SACCOs, MFIs, Government institutions	MFIs (excl MDIs) and SACCOs
Informal	ROSCAs, ASCAs, groups/individuals other than family/friends (eg. employer, moneylender, hire purchase / shop/ buyer)	ROSCAs, ASCAs, NGOs, savings clubs, welfare funds, investment clubs (other than family/friends) and moneylenders
Excluded	None of the above financial services	None of the above financial services

Source: FinAccess (2007); FinScope Uganda (2007)

² Finmark Trust website, Accessed 04 Aug 2008.

The paper uses the access strand as the basis for its categorization of access and exclusion. It then uses the variables available in the data set to investigate the geographic, demographic and socio-economic factors that influence the likelihood of using each type of service, that is, each access strand. The socio-economic characteristics included in the dataset offer a useful if not ideal and complete basis for the analysis of determinants of use. Proxy poverty indicators in the form of assets and basic needs - shelter, fuel, water, food – were included. Expenditure data was not collected, although an income question was asked in the Uganda survey and has been included in the analysis and is indicative, its use is limited as it refers to cash income only. Main income source or employment can also be interpreted to reflect levels of income which are obviously likely to be higher and more reliable for example amongst public and private sector employees. Geographic variables available were the classification of location as rural or urban and the Province or Region of the country.

A best-fit logistic regression model³ was developed and applied for all access strands.⁴ In addition, the same analysis was undertaken for use of each type of savings and credit service reported in the survey. The full results of this latter set of regressions are not reported here but are referred to in the discussion where they offer further explanation of the access strand results obtained. In presenting the results we report the odds ratios rather than the regression coefficients (Table 5) and discuss the increased or decreased likelihood that a person with a particular characteristic uses the service compared to someone with the base characteristic (which is the category without a reported result in the table).

4 The Financial Landscapes of Kenya and Uganda

This section gives a brief overview of the financial landscapes in Kenya and Uganda as a context for understanding the access strands and hence interpretation of the findings reported below.

4.1 Kenya

Table 2 summarises the use of various financial services. This indicates that 13.7 per cent use bank accounts while a further 5.6 per cent use the PostBank – formerly savings accounts held at the Post Office. The formal banking sector in Kenya has its roots in the British owned banks of the colonial period and after independence government-owned banks were established through start-up and nationalization to respond to the needs of African business. According to Brownbridge (1998b),

³ A binomial logit model was used, as this had first been applied to the service-by-service analysis. This yielded the same results as a multinomial logit which was later tested on the data.

⁴ The logistic regression model was defined as follows:

$$\log \hat{z}_i = \log \frac{\Pr(\text{serviceuse})}{1 - \Pr(\text{serviceuse})} = \beta_1 + \beta_2 X_2 + \dots + \beta_j X_j$$

where X_2, \dots, X_j represent the socio-economic characteristics of financial services users and $\Pr(\text{service use})$ represents the likelihood of an individual using a financial service. On the left-hand side of the regression model, the dependent variable represents the access strand which is used; hence taking a dichotomous form: a value of 1 if used and a value of zero otherwise. On the right-hand side of the model, the independent or explanatory variables are those geographic, demographic and socio-economic characteristics taken from the Financial Access Survey and considered as a proxy to people's profiles. As with the dependent variables, the explanatory variables are dichotomous; thus having a value of 1 if a specific socio-economic characteristic corresponds to an individual and a value of zero otherwise.

Kenyan post-independence policy towards the financial sector was extensive but not especially repressive as the banking system expanded both in terms of institutional diversity and the value of assets and liabilities in the system and government effort was mainly involved in setting up government owned banks, non-bank financial institutions (NBFIs) and development finance institutions and did not directly interfere in the operations of the international commercial banks. However, political interests have been key factors in the performance of both the national banks and NBFIs (Lehman 1992; Ogachi 1999). Deregulation of interest rates and charges that did exist took place in the early 1990s (Brownbridge 1998b) and since then the key factor influencing bank lending rates has been macroeconomic management. With high Treasury Bill rates in the late 1990s, banks had little incentive to find ways to lend commercially. This changed dramatically in the early 2000s, as the Government reduced its fiscal deficit, TB rates fell and banks had to re-orient their operations towards clients, never the less the survey indicates that only 2.1 per cent of the population were borrowing from the banking sector in 2006.

Savings and credit co-operatives have a strong history in Kenya and are predominantly based on either the common-bond of cash crop production or employment. With its strong cash-crop sector in tea and coffee, but also dairy and pyrethrum, these SACCOs have grown out of the agricultural co-operatives which established separate SACCO entities during the 1990s as a result of a government requirement to do so (Alila and Obado 1990). The employee SACCOs operate in both the public sector – civil servants, teachers, hospital workers etc – and among private sector employees. It is these two areas, in the main, that have given them their extensive coverage – 12.8 per cent of the population having savings account, and almost 4.1 per cent with loans – almost double the outreach of loans as for the banks.

The microfinance sector started in the 1980s with one of the best known institutions the Kenya Rural Enterprise Programme under USAID sponsorship, and expanded over the 1990s to a sector with a relatively small number of key institutions including Kenya Women Finance Trust and Faulu Kenya. In the 1990s KREP transformed itself into a fully regulated bank (so comes under banks in this data). The Equity Bank has often been held up as a key innovator within the microfinance sector (Coetzee, et al. 2002), but is also included in the Bank figures here. The figures here for MFIs therefore exclude these institutions and suggest that outreach of the sector is limited at 1.5 per cent of savings accounts and less than one per cent per cent of loans, although as half of bank coverage on the loan side – this can be therefore considered relatively effective. Honohan identifies a one per cent ‘threshold effect’ for microfinance outreach, suggesting that few countries have broken through this barrier (Honohan 2004) and while these figures are not strongly suggestive that microfinance has broken through this threshold, the inclusion of K-REP and Equity would of course considerably improve the picture.

Systems of group-based finance have long been known to be extensive in Kenya, especially rotating savings and credit associations (ROSCAs) (Alila 1992; Ardener and Burman 1995) (Kimuyu 1999) and this is the first time the actual extent of their use has been established nationally at 29.3 per cent. These systems simultaneously enable both saving and borrowing so the table includes them on the savings side only and their operation does not usually involve the payment of interest.⁵ Accumulating savings and credit associations which usually involve saving into a central pot and the

⁵ ROSCAs can involve interest payments where the pot is allocated on a bidding basis rather than by lottery or preference order as is usually the system used in Kenya.

taking of loans on which interest is paid are used by a further 5.4 per cent for saving and 1.7 per cent for loans. Savings with groups of friends – where there is no borrowing – are also quite extensively used at 10.9 per cent (and this is not included in the informal sector definition as it does not involve intermediation).

The most common sources of borrowing are from local shops – 22.8 per cent – usually where goods are taken and paid for later, and from family and friends at 12.6 per cent. Remaining sources of borrowing from government institutions (special loan boards etc), employers, buyers and informal moneylenders are all small at around 1 per cent but relative to banks in terms of outreach clearly play a role.

Table 2: Financial service use in Kenya, per cent currently using (weighted)

	Savings	Loans
Bank/building society	13.7	2.1
PostBank	5.6	—
SACCO	12.8	4.1
MFI	1.5	0.8
ROSCA	29.3	—
ASCA	5.4	1.7
Local shop	—	22.8
Family or friend	5.7	12.6
Hidden savings	27.9	—
Group of friends	10.9	—
Government	—	1.1
Employer	—	0.9
Buyer	—	0.9
Informal moneylender	—	0.7

Source: Authors' calculations, based on FinAccess Kenya data.

4.2 Uganda

The banking sector in Uganda has similar colonial origins to that in Kenya and while government owned banks were established after independence the sector is now dominated by private banks. The Uganda Commercial Bank was created after independence out of the Uganda Credit and Savings Society, and became its backbone. Financial sector reform in the 1990s liberalised interest rates and produced positive real lending rates (Brownbridge 1998a). But the poor performance of the public banks, and in particular UCB, resulted in its privatization and sale to the South African owned Stanbic in 1999 (Clarke, et al. 2007). While macroeconomic management produced high TB rates in the late 1990s, these then fell again after 2001 and caused the banks to start lending again (Seibel 2003). Centenary Rural Development Bank set up by the Catholic Church in 1983 was successfully in offering savings products to an extensive client base, but until 2002 had not been successful at on-lending (Seibel 2003). This has led to the sector reaching 14.1 per cent of the population with savings services and 2.4 per cent with loans (Table 3) – figures that are slightly higher but broadly comparable to the situation in Kenya.

The SACCO sector is however much less significant in Uganda than in Kenya – 2.7 per cent of savings accounts and 1.3 per cent of loans. This can be explained from its history – as indicated above the UCB was formed out of the UCSS and co-operative activity was further consolidated under its remit by Amin in 1972 (Clarke, et al. 2007). The 1970 Co-operative Act removed autonomy and gave rise to extensive political interference, and although this autonomy was restored in 1992, marketing

cooperatives continued to suffer from a lack of trust and remain insolvent (Ssemogerere 2003). Moreover, the Cooperative Bank, despite attempts at restructuring in the late 1990s (Brownbridge 1998a), closed in 1999 (Deshpande, et al. 2006). As a result there are few SACCOs of significant size and outreach and more recently the SACCO format has become a means for establishing small locally based organizations undertaking microfinance activities, of which there are now very many.

The microfinance sector started to develop in the late 1990s as Uganda's economic performance improved and with the support of international donors. A 2004 survey estimated the presence of some 1,400 MFIs serving 340,000 borrowers and over 900,000 savers (Nannyonjo and Nsubuga 2004). However this includes ROSCAs, ASCAs and SACCOs. Four MFIs have transformed to regulated status (MDIs) under the 2003 Micro-Deposit-Taking Institutions Act and in the main analysis below are therefore included under the formal sector, but for the purposes of Table 3 we have included them with the rest of the MFI sector to give an indication of the extent of the microfinance sector's outreach at 3.7 per cent for savings and 2.4 per cent for loans. The loan outreach is the same as the banking sector suggesting that growth in Uganda has been relatively strong and effective and has overcome the one per cent threshold effect indicated by Honohan. We have further estimated from the data that the MDIs contribute 1.9 percentage points of the formal sector access strand outreach of 18.1 per cent (mutually exclusive categorization).

By contrast to Kenya, the use of informal group based systems is much less – ROSCAs at 8.4 per cent, ASCAs at 3.6 per cent, welfare funds 3.2 per cent and investment clubs at 2.1 per cent. Strikingly the figure for those who keep money in a hidden place is 68.4 per cent. Saving and borrowing from family and friends is the most commonly used other means (but use of this service is classified as excluded). On the lending side there is also a considerable use of shops (18 per cent).

Table 3: Financial service use in Uganda, per cent currently using (weighted)

	Savings	Loans
Bank/credit institutions (excl MDIs)	14.1	2.4
SACCO	2.7	1.3
MFI (MDIs and other MFIs)*	3.7	2.4
NGOs	0.7	0.2
ASCA	4.3	1.6
Savings Club	3.6	0.7
ROSCA	8.4	—
Welfare Fund	3.2	0.3
Investment Club	2.1	0.2
Family or friend	12.7	8.4
Shops	0.7	18
Employer	0.2	0.2
Hidden savings	68.4	—
Informal moneylender	0.1	0.5

Source: Authors' calculations based on FinScope Uganda data

4.3 Access strand analysis

When mutually exclusive use of services is defined as in the classifications in Table 1 above, access strands as in Table 4 are derived. In Kenya, this indicates that overall some 18.5 percent use formal services, 8.1 per cent use semi-formal services as their 'most formal' service, while some 35 per cent use the informal sector and 38.3 per cent are excluded. In order to understand use better, we have also computed the figures for multiple use of access strands breaking down those who use formal

services into those who only use formal services and those who combine these with other types of services also. This indicates that only 4.9 per cent use formal services alone, 3.2 per cent use them in conjunction with semi-formal services, while 5.5 per cent use formal and informal services and 5 per cent use services from all three sectors. In the semi-formal sector also, the majority of these users also combine their use with informal services.

Table 4: Access strands and multiple use, Kenya and Uganda (per cent)

Access strands (weighted)	Kenya	Uganda
Formally included	18.5	18.1
<i>Of whom:</i>		
<i>Formal only</i>	4.9	11.8
<i>Formal and semi-formal</i>	3.2	1.6
<i>Formal and informal</i>	5.5	4.3
<i>Formal and semi-formal and informal</i>	5.0	0.4
Semi-formally included	8.1	3.1
<i>Of whom:</i>		
<i>Semi-formal only</i>	3.0	2.4
<i>Semi-formal and informal</i>	5.2	0.6
Informally included	35.0	16.6
Excluded	38.3	62.2
Total	100.0	100.0

Source: FinAccess Surveys, and authors' calculations⁶

In Uganda, 18.1 per cent of the population use formal services, only 3.1 per cent use the semi-formal sector as their most formal service and 16.6 use the informal sector while 62.2 per cent are excluded. Of those using the formal sector the majority – 11.8 per cent – use these only, while 4.3 per cent combine them with the use of informal services, and a further 2 per cent are combining them with semi-formal services. On the other hand of the 3.1 per cent using the semi-formal sector, only a minority are combining their use with informal services (0.6 per cent). The transformation of some MFIs into licensed deposit takers following the introduction in 2003 of specific legislation means that these transformed MFIs – termed Microdeposit taking institutions (MDIs) – have been included in the formal sector because they are now fully regulated by the Central Bank and, in terms of quality, therefore do not differ from Banks and credit institutions. In this case the 'other MFIs' are classified with SACCOs in the semi-formal access strand to contribute to the 3.1 per cent total. The informal sector at 16.6 per cent reflects the lower outreach of informal group systems noted above, and encompasses only around half the outreach of the informal sector in Kenya.

5 The determinants of access and exclusion

We now proceed to discuss the findings of the logistic regressions of use of the access strands and the findings are given in Table 5. We order the discussion on the basis of the factors that were most significant in their influence on access across all the access strands and also across the two countries.

⁶ There are minor differences between the access strand figures reported here and those reported for Kenya by FinAccess (2007). These arise from minor differences in service classifications between access strands.

Employment or main income source is the factor that has the most influence on access and exclusion in both countries. In Kenya, those employed on domestic chores and those dependent on pension/transfers are more than twice as likely to be totally excluded than those whose main income is from farming, livestock or fishing (base category) and this is also reflected in significantly lower likelihoods of being formally included. Those employed on other people's farms in full time/seasonal work are also more likely to be excluded than those in the base category, and significantly less likely to be semi-formally included although there is no significant impact on formal inclusion.

On the other hand, government employees are nine times more likely to use formal services and seven times less likely to be completely excluded from financial services compared to the base category. They are half as likely to only use semi-formal services and four times less likely to only use informal services. Private sector employees are more than twice as likely to be formally included and half as likely to be excluded. Those whose main income is running their own business are less likely to be excluded, but more likely to be included via formal or informal services but less likely to be semi-formally included. This reflects the fact that SACCOs tend to cater to farmers and employees and that MFIs who are targeting this market have made limited impact so far. On the other hand since those who run their own business span a huge spectrum of formal to informal businesses they are therefore likely to use ROSCAs/ASCAs and formal services.

For Uganda, the pattern is very similar. Those dependent on pensions and transfers and those working on people's farms or domestic chores, and those selling agricultural farm, livestock and fish produce are more likely to be excluded than those who run their own businesses (the base category in this case) and correspondingly significantly less likely to be included via the formal sector. The likelihood of inclusion via the formal sector is significantly increased by being a private sector employee compared to running your own business.

Age also has strong effects in both countries. In Kenya the effects are strong and consistent, the older age groups are much less likely to be excluded than 18-24 year olds. The oldest age groups are much more likely to be formally or semi-formally included and less likely to be only informally included. This result also demonstrates that for younger people, ROSCAs/ASCAs in the informal sector do not provide services to fill the gap between exclusion and more formal services. This can be understood in relation to the higher levels of mobility and weaker social networks that these people are likely to have.

The effect of age on access in Uganda, on the other hand, presents an interesting contrast. Those in the 25-34 and 35-44 age groups are significantly more likely to be formally included than the 18-24 years category, but age categories over 45 are not. This formal inclusion is also reflected in the fact that the 25-44 year olds are significantly less likely to be excluded, the 45-54 age group was also less likely to be excluded than 18-24 year olds. People in the over 55 category were also significantly less likely to be included through the informal sector. This pattern may be explained by the fact that banking services have expanded in the last 20 years since the civil war ended in the 1980s and while younger age groups may have learnt to use them older people did not have access to and learn banking practices during the unstable years of the 1970s and 1980s. Hence the contrast to Kenya highlights the potentially cumulative effect over time of having had reason to open a bank account at some point in your life and hence being more likely to still be using one.

Johnson & Nino-Zarazua: Financial access and exclusion

Table 5: Logistic regression results by access strand, Kenya and Uganda

18+ years old	Kenya					Uganda			
	Formally included	Semi formally included	Informally included	Excluded		Formally included	Semi formally included	Informally included	Excluded
Location					Location				
Rural	1.02	1.57*	1.05	0.75**	Rural	1.02	1.20	1.03	0.95
Urban	---	---	---	---	Urban	---	---	---	---
Gender					Gender				
Men	---	---	---	---	Men	---	---	---	---
Women	0.82	0.87	1.46***	0.77***	Women	0.69**	0.94	1.26*	1.06
Marital status					Marital status				
Single	0.90	0.75	0.77**	1.74***	Married	---	---	---	---
Divorced	1.00	0.95	0.79	1.50	Divorced	1.18	0.49	0.82	1.18
Widowed	1.17	0.73	1.28*	0.89	Widowed	1.42	0.56	0.90	0.98
Married/Cohabiting	---	---	---	---	Single	1.19	0.35*	0.70*	1.34*
Age					Age				
18-24	---	---	---	---	18-24	---	---	---	---
25-34	2.29***	1.84*	1.00	0.64***	25-34	1.75***	1.17	0.96	0.71**
35-44	2.72***	2.90***	0.87	0.57***	35-44	2.22***	1.91	0.95	0.61***
45-54	3.53***	3.16***	0.63***	0.65**	45-54	1.70	1.36	1.09	0.65*
55+	6.02***	5.19***	0.50***	0.56***	55+	1.75	1.61	0.51**	1.10
Education					Education				
No formal education	---	---	---	---	No formal education	---	---	---	---
Primary	2.06***	1.88**	1.00	0.67***	Primary	2.49**	2.55	1.06	0.75*
Secondary+	4.34***	1.88**	0.68**	0.62***	Secondary+	8.59***	2.85	0.65*	0.44***
Region					Region				
Nairobi	---	---	---	---	Central Kampala	---	---	---	---
Central	1.45	2.72**	1.05	0.41***	Other Central Regions	0.58*	1.34	0.44**	1.86***
Coast	0.72	0.17**	0.37***	3.23***	Eastern	1.61	0.45	0.62	0.94
Eastern	1.33	1.32	1.48*	0.49***	Northern	1.93*	1.85	0.61	0.76
North Eastern	---	---	0.01***	69.14***	Western	1.75*	3.90**	0.73	0.61*
Nyanza	1.13	1.38	1.66**	0.46***					
Rift Valley	1.33	0.88	1.22	0.70					
Western	0.88	0.86	0.68	1.40					
Employment / Main source of income					Employment / Main source of income				
Pension/transfer from family or friend	0.46***	0.28***	0.92	2.16***	Pension/transfer from family or friend	0.31***	---	0.27***	5.24***
Sell produced from farm, livestock & fishing	---	---	---	---	Sell produced from farm, livestock & fishing	0.37***	0.64	0.80	1.80***
Employed on people's farm full time/seasonal	0.67	0.48**	1.06	1.32*	Trading agricultural, livestock & fish products	0.87	1.26	1.00	1.10
Employed on domestic chores	0.19***	0.19	1.11	2.44***	Working on people's farm/domestic chores	0.21***	0.47	0.66	2.38***
Government	9.68***	0.49*	0.25***	0.13***	Employed in the formal sector	2.30***	0.69	0.55	0.48***
Private sector	2.64***	0.91	0.86	0.49***	Working for an individual in a priv. business	0.88	0.64	0.97	1.22
Running own business	1.46**	0.41***	1.38***	0.76**	Running own business	---	---	---	---
Sub letting of land, house/rooms, earning from investments & others	1.59	1.23	0.95	0.60	Sub letting of land, house/rooms, earning from investments & others	0.85	0.33	0.62	1.60*
Dwelling general condition					Dwelling general condition				
Permanent	1.42	1.21	1.11	0.70*	Permanent	---	---	---	---
Semi-permanent	1.10	1.34	1.37*	0.62***	Semi-permanent	0.89	0.66	1.48**	0.84

Johnson & Nino-Zarazua: Financial access and exclusion

18+ years old	Kenya					Uganda			
	Formally included	Semi formally included	Informally included	Excluded		Formally included	Semi formally included	Informally included	Excluded
Temporary	---	---	---	---	Temporary	0.56	0.80	1.01	1.14
Traditional	0.41*	0.56	1.18	0.90					
Main source of lighting					Main source of lighting				
Electricity, solar & gas	1.24	0.59*	0.95	1.00	Electricity, solar, generator, battery & gas	1.16	0.67	0.75	1.03
Kerosene	---	---	---	---	Paraffin (Lantern & Tadooba)	---	---	---	---
Firewood, candle & others	0.85	0.75	0.63*	1.52*	Firewood, candle & grass	0.43*	1.24	0.92	1.42
Main source of water					Main source of water				
Tap	---	---	---	---	Tap/pipe water	---	---	---	---
Well	0.78	0.47***	1.22	1.25	Well, springs & bore hole	0.83	1.97	1.75***	0.70*
Surface water	0.77	0.58***	1.12	1.25*	Rain water, surface water & vendors	0.81	1.45	1.42**	0.81
Toilet facilities					Main source of cooking fuel				
Own flush toilet	---	---	---	---	Electricity, gas	1.48	1.84	0.73	0.91
Shared flush toilet	0.58*	3.97*	1.61	0.97	Paraffin, grass	2.87***	1.26	1.06	0.53**
Latrine	0.73	2.81	1.56*	0.98	Charcoal	1.73***	1.51	0.62*	0.91
					Firewood	---	---	---	---
Household assets					Household assets				
Radio	1.58*	1.39	1.15	0.75**	Radio	1.24	2.60*	1.05	0.83
Television	1.75***	0.96	0.73**	0.85	Television	2.06***	0.98	0.64	0.58***
Bicycle	1.18	0.80	1.22*	0.80*	Bicycle	1.21	0.72	1.21	0.87
Car	3.11***	0.24*	0.56*	0.50***	Car	1.30	0.94	0.71	1.01
					Motorcycle	1.30	0.27	0.81	1.16
					Every HH member has two sets of clothes	1.65*	0.56*	1.41*	0.71**
Mobile phone usage					Mobile phone				
Use own mobile phone	2.84***	1.17	0.70**	0.53***	Mobile phone	2.70***	1.01	0.95	0.48***
Use somebody else's mobile phone	0.86	1.27	1.13	0.91					
Do not use at all	---	---	---	---					
Frequency of family without enough food to eat					HH meat/fish meals in the last 7 days				
Often	0.45***	0.52*	1.17	1.34*	5 to 7 days a week	---	---	---	---
Sometimes	0.53***	1.10	1.20	1.10	3 to 4 days a week	0.90	1.10	0.93	1.01
Rarely	0.78	1.35	1.19	0.86	1 to 2 days a week	0.65	1.16	1.09	1.19
Never	---	---	---	---	Not at all	0.73	1.42	0.93	1.19
Frequency of family feeling unsafe from crime inside home					Income				
Often	0.89	1.46	0.80	1.12	None	1.11	1.36	0.82	1.16
Sometimes	1.17	0.99	0.83*	1.14	1-90,000(US\$50)	---	---	---	---
Rarely	1.07	1.28	0.83*	1.09	90,000-300,000 (US\$167)	1.20	1.90	1.06	0.91
Never	---	---	---	---	300,000 – 850,000 (US\$472)	1.84*	1.41	1.32	0.63**
					850,000+	2.80***	1.33	0.97	0.52***
Number of obs.	4084	4084	4214	4214	Number of observations	2959	2650	2959	2959
Pseudo-R ²	0.4020	0.1764	0.1310	0.2130	Pseudo-R ²	0.3854	0.1307	0.0818	0.1933

Note: Asterisks designate significance level: * 0.05; ** 0.01; *** 0.001

In geographical terms the effects of rural and urban location and region of the country were examined. In Uganda being rural or urban had no significant effects, while in Kenya – perhaps contrary to expectation – being rural significantly reduced the likelihood of being excluded overall and this is matched by a marginally significant increase in the likelihood of inclusion via the semi-formal sector. The service level analysis demonstrated that this result was due to the SACCO sector and is due to the fact that rural agricultural co-operatives have been historically strong.

Since the regression holds other variables constant, the effect of Province in Kenya and Region in Uganda are not simply picking up the relative poverty of people in different parts of the country. Those living in the remote and difficult terrain of North-Eastern Province in Kenya are 69 times more likely to be excluded compared to those living in Nairobi. This exclusion is not moderated by the informal sector in this province as people are also 100 times less likely to use informal services. Levels of access to formal and semi-formal services were zero to so the regression could not produce results. Those living in Coast Province are three times more likely to be excluded as those in Nairobi. This appears to be caused by the deficit of informal and semi-formal services, since while they are not significantly less likely to have a bank account they are almost three times less likely to be informally included and nearly six times less likely to be semi-formally included. On the other hand, those in Nyanza and Eastern are less than half as likely to be excluded and more likely to be informally included indicating that the informal sector is helping fill the gap in these two areas. Those in Central Province are less likely to be excluded by comparison to Nairobi. However, it appears that in this case it is the semi-formal sector that fills the gap. The service level analysis demonstrated that this is due to the role of SACCOs in the region, and relates to the fact that these are operating within the strong tea and coffee cash crop sector.

This analysis therefore gives us a very strong regional picture of the strength of coverage and the way in which the informal sector reduces that exclusion. A key finding here is that, overall in Kenya, inclusion via the formal sector is not significantly affected by Province or rurality once other factors are controlled for. This result was further confirmed in the service level analysis for banks. A variable regarding the distance of the nearest bank on a scale of 'near' to 'very far' was included in the regression and did not produce significant results. These results therefore suggest that factors other than geography are more important in creating barriers to access.

The results in Uganda were similar with respect to the urban-rural variable with rurality not giving significant results. However, the regional analysis in Uganda does suggest that region was weakly significant in its impact on inclusion via the formal sector. Compared to Central Kampala, those in Northern and Western regions are moderately significantly more likely to be included via the formal sector. But, this is not an explicable result and may be a curiosity of the data. People in Central Regions (excluding Kampala)⁷ are half as likely to be included via the formal sector and almost twice as likely to be excluded as those in Central Kampala. They are also twice less likely as those in Central Kampala to be informally included, suggesting that the informal sector is less strong there than in other regions as a means of inclusion. A further significant result is that those in Western Region are four times more likely than those in Central Kampala to be included via the semi-formal sector and can be explained by the higher prevalence of SACCOs. Overall then, while the results for the formal sector in Northern and Western are a little surprising, the data indicates a reduced role for the

⁷ Referred to in the table as 'other central'.

informal sector in 'other central regions' compared to Kampala and a slightly stronger role for the semi-formal sector in Western region.

The impact of education is strong in both countries and presents a clear pattern. In Kenya, educated people are significantly less likely to be excluded than those without formal education, and much more likely to use formal and semi-formal services. Secondary education also resulting in lower exclusion via the informal sector though other data suggests that they may also make use of such services.

In Uganda the picture is similar and having a secondary education is one of the strongest positive factors associated with use of formal sector services, by a factor of eight compared to those having no education, while primary education more than doubles this likelihood. But, educational level does not significantly increase the likelihood of inclusion via the semi-formal sector. This reflects the lower level of development of this sector overall but the service level analysis for all MFIs (ie MFIs and MDIs) gives the result that being educated to secondary level increased the likelihood of holding a savings account with an MFI by over four times although it did not have an impact loan use.

The influence of gender on access is interesting and somewhat surprising in both countries. In Kenya, being a woman significantly lowers the likelihood of exclusion from financial services overall. This is because it significantly raises the likelihood of inclusion through informal services, and the service-by-service analysis shows that this is especially due to the influence of ROSCAs. According to the access strand analysis, women are less likely to access formal and semi-formal services but not significantly so. However, the service level analysis shows that gender is significant in affecting access to particular types of service: the analysis of bank services on their own does indicate that women are significantly less likely to have a bank account, while this is not the case for the PostBank when it is separated out from other banks, so that combining these in the formal access strand therefore ameliorates the negative impact of gender on bank access. This happens similarly in the semi-formal access strand: SACCO and MFI services independently showed that women were significantly less likely to use SACCOs but significantly more likely to use MFIs, which is as we would expect given their emphasis on targeting women. Given therefore that in the formal and semi-formal access strands respectively, banks and SACCOs are the more important services overall compared to the PostBank and MFIs, it is important to recognise that gender does present a barrier to access to banks and SACCOs which the access strand analysis alone can obscure.

In Uganda, women were significantly less likely to be included via the formal sector than men. They are also significantly more likely to be included via the informal sector – mainly ROSCAs. However, by contrast the MFIs that are in the semi-formal sector do not have the expected bias towards women. Overall this does not result in a significant gender bias in the likelihood of being excluded as it does in the case of Kenya.

The analysis looked at the influence of ownership of five assets on access: car, TV, radio, bicycle and mobile phone. In Kenya, they presented a fairly consistent and expected pattern in relation to financial service use. Of these, owning a car is the most influential asset indicator in reducing exclusion and increased formal inclusion. Owning a TV does not significantly reduce the likelihood of exclusion but significantly increases the likelihood of being included via formal services. Owning a radio reduces the likelihood of exclusion and significantly increases the likelihood of formal inclusion. Owning a bicycle significantly reduces the likelihood of exclusion but this is matched by it significantly increasing the likelihood of only being included in the informal sector. In Uganda, having

a TV or mobile phone was significantly associated with increased likelihood of formal inclusion and reduced likelihood of being excluded. Owning one of these means that someone is around half as likely to be excluded but more than two times more likely to be formally included, while not affecting use of informal and semi-formal services. Using somebody else's mobile phone compared to not using one at all has no influence on use. Having a TV also significantly increased the likelihood of using a semi-formal MFI. Owning a car, perhaps surprisingly, had no significant effect on inclusion in any particular sector, nor did having a bicycle, although having a radio had a mildly significant impact on semi-formal inclusion.

Of the other poverty indicators used, in Kenya a food security indicator had an understandable pattern. Those who 'often' go without enough food are more likely to be excluded and significantly less likely to be included in the semi-formal and formal sectors. On the other hand, only 'sometimes' going without enough food significantly reduces the likelihood of formal inclusion but does not significantly increase the likelihood of exclusion. It is interesting to note that the food security indicator is not as important in explaining use as might be expected. This may be because it is a subjective assessment and therefore the relative assessment of 'rarely', 'sometimes' or 'often' for those who experience food insecurity may differ between areas of the country.

In Uganda, an income indicator asking about monthly cash income was collected and split into five categories and while its accuracy might be weak it has a straightforward effect. Cooking fuel as a poverty proxy has a slightly surprising influence on formal inclusion. Those who cooked on paraffin or charcoal were significantly more likely to be formally included than those cooking with firewood, but those who cooked with electricity were not significantly more likely, but this may be due to the very low overall use of electricity as a cooking fuel.

6 Discussion

These findings suggest two overall points for the analysis of financial service access. First, it demonstrates that barriers to formal service access arise from a number of socio-economic sources and – in these examples – more than from geography – therefore suggesting that social institutions such as age and gender are important, alongside the well-recognised roles of income, wealth and education. Second, it demonstrates the importance of the semi-formal and informal sectors in contributing to access and the way these are also influenced by underlying social institutions, and so develops a much more detailed understanding of how these services contribute to the overall landscape of access and exclusion. These two findings have implications for both policy and theory.

6.1 Social institutions as barriers to access

This analysis suggests that in Kenya, geographic factors are not as important as other socio-economic variables in explaining variation in access to financial services. In Uganda, if at all, the influence of geography on access appeared slightly in favour of rural people. Density of bank branches has been found to be an important variable in explaining variation in formal sector access across countries (Beck, et al. 2007b), however within these contexts - where access is overall low – other factors were more important. The geographic variables used here were not necessarily ideal, and are likely to be improved in future versions of the survey, but the three variables used were broadly consistent and these results suggest that policy attention should turn to other factors. This result contrasts with the findings of Porteous in a joint analysis of seven African Finscope datasets, in

which urban location was found to be important (Bankable Frontier Associates LLC 2007), and suggests that while location may be important in determining levels of outreach in cross-country data-sets, within country it may not be the key factor when a wide range of other variables are taken into account.

We have found that the variables which have consistently strong effects on access are similar in both countries - employment, age, education, gender and poverty proxies. Porteous also finds these variables to be important in his multi-country analysis but finds that country dummies were also significant, leading him to argue that there may be other unobserved supply or demand side factors that would help explain access (Bankable Frontier Associates LLC 2007). Never the less, given that these factors are consistently significant, the analysis suggests that they have important implications for extending access. As discussed above, the employment variable to some extent combines the impact of level of income and nature of employment, although in the Ugandan case an income variable was also included and should reduce the extent of this effect. That more formal employment in the public and private sectors tends to lead to greater inclusion is largely due to the fact that these employers will insist on bank accounts for the payment of wages and salaries. The cost of services relative to income is not a factor that this analysis has directly investigated, it must of course be considered as an important factor in any discussion of extending access. Finding ways to lower transactions costs of delivery and provide cheaper products will inevitably be important however we question in the light of these findings whether these alone will be enough given that there appear to be other barriers to entry. Moreover, Porteous estimates that halving the costs of running a bank account may only bank some 20 per cent of the unbanked in the region (Bankable Frontier Associates LLC 2007).

This analysis has demonstrated that age and gender – as underlying social institutions – influence access. The results of age appear to have cumulative effects over time. The microfinance sector has not been strong in tackling age – mean age of borrowers has consistently been in the mid-30s for most programmes and the logistic regressions in the service level analysis for microfinance also indicated increased likelihoods for the 34-44 age group. This sector has not adequately tackled this dimension of exclusion for younger people.

With respect to gender, the influences are as expected with respect to the formal sector but also demonstrate that men are less likely to access the informal sector in both countries, and this results in their increased overall exclusion in Kenya. Microfinance methodologies have partially reversed the bias but clearly their limited overall outreach means that if policy is to emphasise working with the formal sector, then renewed attention needs to be given to the gendered barriers to accessing these services. There are often features of product design whose gender bias may not be obvious and products therefore need to be carefully considered for their gender biases through market research into the design, terms and conditions and delivery systems to understand their implications for both genders. Moreover, these barriers to access also arise from wider norms in society - especially in the household - about who owns bank/SACCO accounts, assets and so on. While legally women may have the same rights as men in property ownership, practice is rarely in fully in line with policy so that policy-makers need to consider also how to promote good role models and examples of women using financial services and systematically identify and tackle the norms that are constraining this. On the other hand, men are much less likely to use informal groups and this is a constraint to their access. In strengthening informal groups through methodologies that make them more transparent and easier to operate, this is also likely to have the effect of making them more useful to men, as

they will be prepared to work together to mediate larger volumes of funds. While this may not fully address the seasonality of much demand for finance, especially in rural areas, it can assist in closing the gap of provision.

Further, the findings show that – as expected – the least educated are the most excluded in both countries. For policy purposes, clearly Universal Primary Education is an important potential contributor to improving this in the long run but raises the question of what else can be done to overcome these barriers to access. Along with the findings on age and gender, these results suggest the importance of both financial literacy and product design.

Financial literacy programmes have recently come to the fore⁸ (Miller, et al. n.d.) and might be experimented with both for children in schools and adults. Integrating financial literacy into school curricula may help address the barriers to access for young people who go through school, but there are a high proportion of the adult population for whom education will still be a barrier – almost 20 per cent of the population in both countries – who have ‘no’ formal education and significant groups with only a few years education. This also therefore suggests a critical need to find simple and accessible ways to communicate information about services offered by a range of providers.

Product design is also very important in general since very simply designed products that can be easily understood will also reduce barriers to their use. Drawing from features of the informal sector that people understand in product design may also help. In particular, easy and simple access to loans in the event of emergencies is a key feature of informal group systems that poor people value.

From a theoretical point of view, these findings also suggest that it is necessary to broaden the analysis of access to a wider range of underlying social institutions, and their influence on market development, and to extend and develop the theory of the role of institutions in financial sector development to incorporate these. Variables such as religion, race and ethnicity were not available in this dataset, but are clearly important potential factors in creating exclusion in a number of socio-cultural contexts, including Kenya and Uganda. In relation to understanding the way in which such social institutions structure access to services in specific markets, little analysis of this kind has yet been undertaken, but is needed if the impact of discriminatory aspects of involuntary exclusion is to be adequately understood. Such institutions can not only create barriers to access in and of themselves, but can also interact with property rights and other aspects of the institutional framework - such as legal enforcement – to structure opportunities in the market. This will also offer further evidence to develop our understanding of the role of these institutions in growth and development overall.

6.2 The role of the informal and semi-formal sectors in expanding provision

This analysis demonstrates the contribution of the semi-formal and informal sectors to overall financial service access. Formal sector provision is extremely important and the emphasis of policy and efforts to encourage banks to move downmarket, but these findings suggest that the informal and semi-formal sectors also require careful consideration for their role in providing access and the policy implications of this.

⁸ ‘Getting it right on the money’, *The Economist*, 3 April 2008.

The analysis has clearly demonstrated the importance of the informal financial service sector in overall access— especially through ROSCAs in Kenya. The analysis clearly demonstrates how its use improves access in Kenya in some regions of the country compared to others, and for women in both countries. The strengths and weaknesses of these systems have also been well-researched (Bouman 1995). They have strong social functions – especially of bringing women together – and this is also rooted to different degrees in underlying cultural traditions prevalent in different areas – which is especially clear in the case of Kenya. Second, this gender bias also reflects patterns of demand by gender and in East Africa they tend to intermediate small amounts that women require based on their income and expenditure flows, where as men often require larger lump-sums of credit than these can provide (Johnson 2004a). Further strengths are their flexibility, especially for poor people in responding to emergencies and analysis of this survey also demonstrated this (see Johnson and Nino-Zarazua 2007a; Johnson and Nino-Zarazua 2007b), and the social support they offer at times of crisis (Johnson 2004b). The fact that over half of those who use formal sector services also use informal groups demonstrates that they clearly have added-value even to those who have formal access.

Of course, it is these strengths that are also the root of their weaknesses, since social dynamics within groups can be problematic and mean that some individuals are able to access funds more easily than others, while some individuals cannot – or will not – repay and members can therefore lose their money (Bouman 1995; Johnson and Sharma 2007). It is generally found that groups that are exclusively male often perform poorly, whereas women are more able to manage these dynamics (Johnson 2004a). It is important to consider therefore what the implications for policy in seeking to extend and improve access to financial services are. First, given their importance in overall access ROSCAs are the least well organised (Johnson and Nino-Zarazua 2007a), it is appropriate to consider how their services might be improved. Experience has shown that injecting funds into informal groups rarely leads to their expansion and growth and indeed poor experience of this contributed to stricter group methodologies developed by MFIs with strong management systems and persistent follow up (Jain 1996). Alternative approaches involve working to develop the capacity of the groups to manage their own operations independently and more effectively based on their own savings pool and several approaches now focus on this, for example, Village Savings and Credit Associations⁹ (Anyango, et al. 2007) and other approaches to build capacity.¹⁰ Policy should therefore consider how to further expand or support the development of these approaches.

The analysis also demonstrated the importance of the semi-formal sector comprised of SACCOs and MFIs in improving access. MFIs in Kenya have succeeded in overcoming the bias of banks and SACCOs towards men as women are significantly more likely to use them. For this reason alone there is a case for continuing the expansion of MFI provision as a means of overcoming the gender barrier to inclusion. However, since the SACCOs are a significant player in Kenya, policy should also therefore consider how best to support the sector in extending its service delivery. This might include capacity building of systems to deliver services more efficiently and at lower cost, and to find methodologies to reach further into rural areas and to support a wider range of agriculturally-based livelihoods. By contrast, in Uganda the contribution of the semi-formal sector to overall access is

⁹ These were initiated by CARE in Mali in the MMD programme and are variously known as Village Savings and Loan Associations (VSLAs), SLAs, Savings and Credit Associations (SCAs).

¹⁰ Decentralised Financial Services Project in Kenya have been developing participatory tools to work with groups to achieve this.

only 3 per cent and the historical context of this has been indicated above and this study did not further investigate the causes.¹¹ Given this, and in contrast to Kenya, it may be argued that the relative weakness of this sector does not offer a firm basis for future expansion, although it is currently the focus of the Government's Bono Bagagawale initiative to promote rural poverty eradication.

The implication of these findings regarding the extensive role of the semi-formal and informal sectors for the institutional analysis of financial sector development is the need to better understand the role these sectors play in the creation of formal financial sector development more broadly. In his now classic 1962 article on ROSCAs, the anthropologist Clifford Geertz (1962) argued from West African evidence that these mechanisms formed the 'middle rung' of economic development as they not only facilitated agriculturalists to become traders in the occupational sense but also in the broader cultural sense that they begin to develop relationships of specifically economic institutions in which ritual solidarity becomes subordinate to impersonal and increasingly formalised enforceable and legal rules. Of course, such transitions in the mechanisms of 'institutionalised suspicion' (Dore, in Johnson and Sharma 2007) are not guaranteed and the questions of cause and effect need to be untangled (Ardener 1964). However, given the prevalence of many different forms of informal finance in many parts of the world the question of what role different types play in the transition to formalised services through their contribution to the habits and norms that enable formal services to take root has still to be investigated.

7 Conclusion

This paper has used the concept of financial access strands to identify categories of formal, semi-formal and informal services and has investigated patterns of access to and exclusion from these services arising from a range of socio-economic, geographic and demographic variables. It has found overall that employment, age, education, gender and geography are key factors but that in these countries access to formal services was not as strongly influenced by geography as other studies have concluded. It has set this investigation within the context of analysis of the institutional foundations of financial sector development. As a result, it has argued that underlying social institutions - of which age, gender, educational attainment and so on are indicators - are clearly important to understanding patterns of access and exclusion. This suggests, at the policy level, that widening access requires that these causes of exclusion are adequately addressed and that emphasis on lowering transactions costs is not likely to be sufficient. With respect to the institutional analysis of financial sector development, the need is for systematic theorisation of the role of underlying social institutions in creating exclusion and constraining access.

The findings have also demonstrated the extent and importance of the informal financial sector in contributing to access and the patterns of access that also arise in these as a result of social institutions and geography. Not only does this raise the issue for policy makers of whether and how they might incorporate the informal sector into their strategies for widening access, but for institutional analysts it raises the question of how informal services contribute to development of norms and habits that enable or constrain the evolution and use of formal services.

¹¹ Notably, *The Effects of Wholesale Lending to SACCOs in Uganda*, by Alexandra Fiorillo, September 2006, published by FSDU; and, *Status of Missing SACCOs and MFIs from the 2005/200 Census of Tier 4 Institutions*, by Friends Consult, published by AMFIU, February 2007.

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