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Saving and borrowing in rural Uganda

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ABSTRACT

Sub-Saharan Africa has languished in recent decades – a period in which countries elsewhere in the world (especially in East and Southeast Asia) have made substantial progress in terms of economic and human development. It is widely recognised that high levels of savings, together with investment in physical and human capital, have been among a number of key factors that have led to such success. Uganda is an economy in sub-Saharan Africa that has shown some promise of success in the 1990s. It has enjoyed macroeconomic stability and a rapid rate of economic growth. However, in some other respects, the country retains features that give cause for concern for future development. Poverty in the rural areas remains widespread, and the domestic savings rate is amongst the lowest in the world.

Drawing on the results of a survey carried out in 1997, this paper explores the reasons underlying the persistence of poverty in rural Uganda, and investigates aspects of saving and borrowing behaviour in households. The potential role of microcredit arrangements in alleviating poverty (and in generating a flow of savings) is examined, and the conditions that may favour success in the operation of microcredit schemes are evaluated.

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1   Introduction

The role of financial markets in mobilising savings and in channelling funds into productive investment is central to a successful strategy for economic and human development. At the macroeconomic level, the raising of productive capacity is essential if real GDP is to rise through time. To some extent that process can be bolstered from external financing, but sole reliance on such funding is not sustainable in the long run. At the microeconomic level, there are analogous issues. Individual producers and households require credit facilities to enable the expansion of productive capacity and to generate income-earning possibilities. To this end, it is important to mobilise funds domestically, as well as relying on financing from external sources.

In the rural areas of many developing countries, the lack of access to effective formal financial markets may be seen as a severe constraint that prevents low-income households from improving their lot and leads to the persistence of poverty. The success of the Grameen Bank in Bangladesh in channelling credit to low-income households (especially women), and offering an escape route from poverty has attracted much attention – and led to many attempts at replication. However, the effects of microfinance schemes on poverty alleviation cannot be taken for granted (Schreider and Sharma, 1999).

This paper explores some of these issues insofar as they affect savings and borrowing behaviour in Uganda, drawing on a survey of rural households carried out in 1997 under the aegis of the Bank of Uganda (Smith, 1997). Section 2 of the paper sets the macroeconomic context of the Ugandan economy, Section 3 examines savings

and borrowing behaviour in rural Uganda, reporting on a study carried out by the Bank of Uganda in 1997. Section 4 investigates whether financial markets can be seen to have failed, and Section 5 summarises.

2   Uganda – the macroeconomic context

In common with many other countries in sub-Saharan Africa, Uganda entered the 1980s with income per capita levels lower than two decades earlier. From a macroeconomic perspective, the Amin era of the 1970s was especially damaging. In these years, GDP per capita fell steadily, and manufacturing activity virtually disappeared. In the early 1980s under Milton Obote, income per head stabilised, but inflation became a major problem, such that the present President Yoweri Museveni inherited an economy in which GDP was stagnant and inflation was accelerating (reaching a peak of almost 250% in 1987.

This was the backdrop against which structural adjustment was launched. This came in the form of an Economic Recovery Program (ERP) in May 1987, supported by the World Bank, the IMF, the African Development Bank and the member countries of the Paris Club (Kikonyogo, 1996). If judged in terms of conventional macroeconomic indicators, the ERP had an enormous impact. Per capita income began to grow again, and by the late 1990s had regained its previous peak level. Inflation was brought under strict control, with "headline" inflation falling to *minus* 2.3% in the year to May 1998.

Although this record was encouraging, concern began to rise in the late 1990s about whether this macroeconomic success was being shared by all members of Ugandan society. In particular, living conditions in the rural areas were seen to have been left untouched by the benefits of economic growth, prompting UNDP (1997) to

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refer to the "two faces of Uganda". An important question is the extent to which this duality arises from the inadequacies of markets within the country – including financial markets.

Such arguments do not necessarily imply that people are *damaged* by structural adjustment programmes, but that they do not always benefit from them as much as might have been hoped. The impact of structural adjustment on lower-income groups has been the subject of much debate. For example, Stewart (1991) argued that in a number of countries the stabilisation and adjustment packages led to a reduction in the welfare of the poor. Others (e.g. Jacques, 1997) have argued that it is important to distinguish between the short-run transitional effects of adjustment programmes and the long-run impact. The *World Development Report 1999/2000* (World Bank, 1999) recognises the limitations of trickle-down, and the need for development efforts to address human needs directly. A key issue that remains to be resolved is that of how this can be best achieved.

## 3   Saving and investment in the macroeconomy

The share of Gross Domestic Investment in Uganda's GDP has followed a clear pattern in the years since Independence in 1962, as shown in Figure 1, which also identifies the timing of changes in political regime.

Figure 1:
Saving and investment in Uganda

Source: World Bank CD-ROM 1998
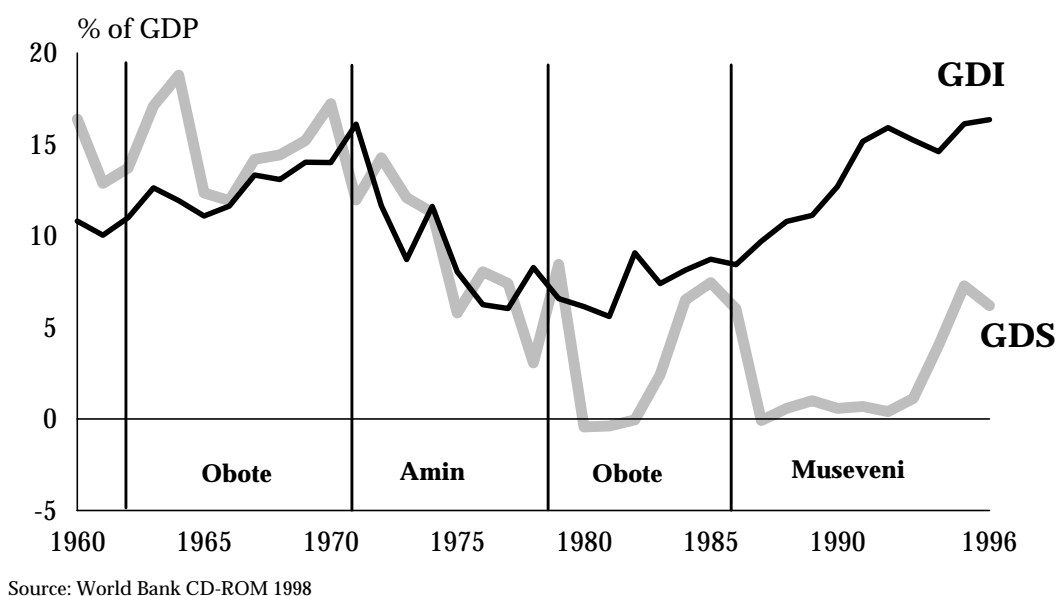
Investment can be seen to have increased relative to GDP in the initial years after independence, only to fall substantially during the Amin years in the 1970s. Only during the ERP period has investment recovered. In the post-Amin era, investment has outstripped domestic savings, bolstered by inflows of aid and other capital flows (including borrowing). It is especially noticeable in Figure 1 that there have been periods when virtually all of GDP has been taken up with consumption, such that Gross Domestic Saving was zero – or even negative. Although savings have increased in the mid-1990s, the savings ratio in 1997 was among the lowest in the world, and less than half of the average for sub-Saharan Africa, as shown in Figure 2.

Figure 2:
Gross Domestic Savings 1997
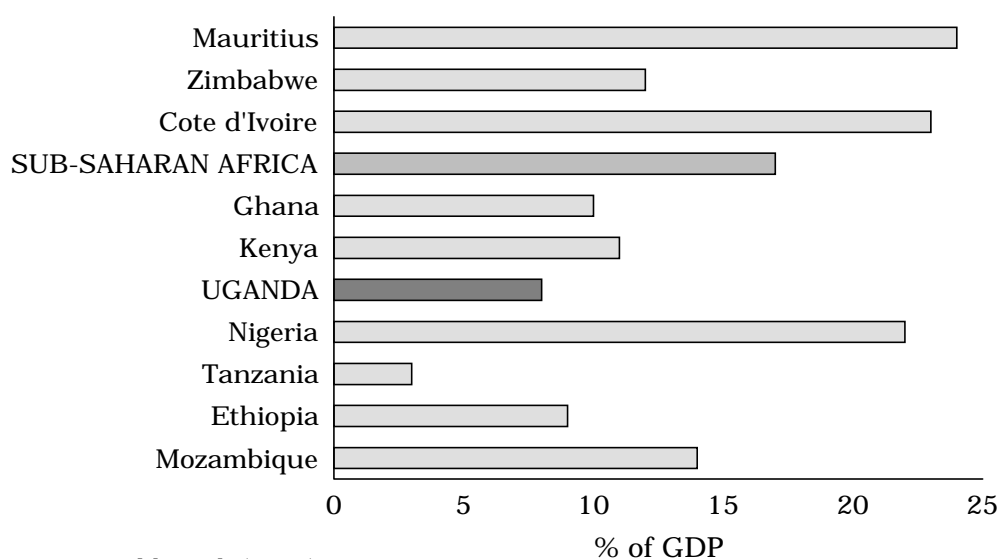
Source: World Bank (1999)
Note: Countries in descending order of GNP per capita in 1997 US$

The implication of this pattern of savings and investment is that Uganda has been heavily dependent on external flows in order to support investment. In this context, the external debt position faced by the economy is critical. External debt became a major problem for the country, having built up during the 1980s and early 1990s to a level that was seen to be unsustainable, such that in 1998 Uganda became the first country to qualify for and benefit from debt relief under the Heavily-Indebted Poor Countries (HIPC) initiative. Something of this situation can be seen in Figure 3, which shows debt service relative to exports of goods and services.

Figure 3:
Debt service (% of exports)
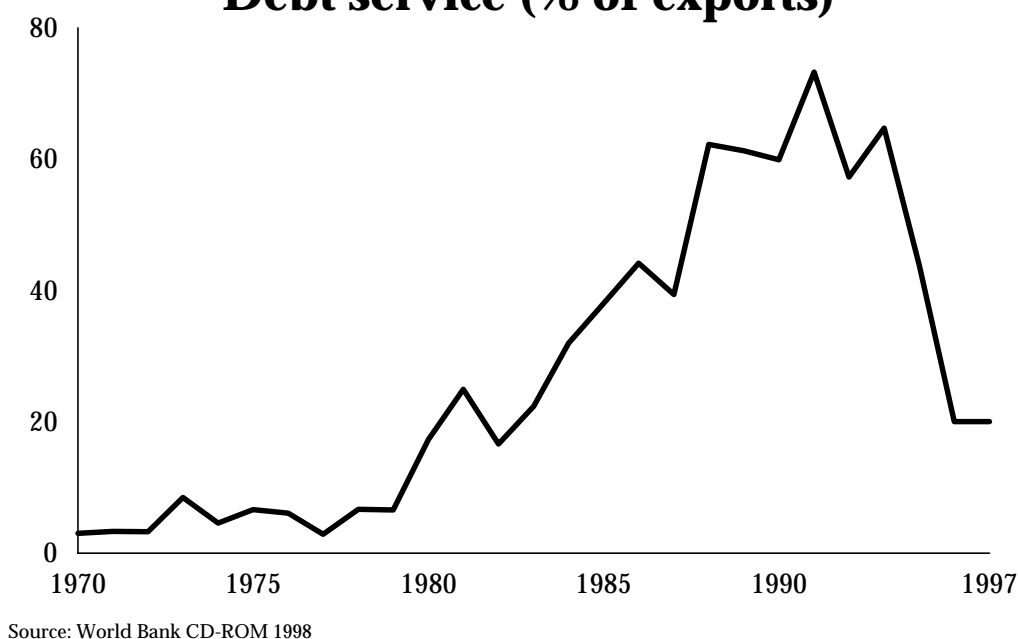
The other key factor in the development equation is international trade. In common with other countries in sub-Saharan Africa, Uganda has traditionally relied on primary commodities for exports. In particular, coffee has been predominant – between 1982 and 1989, coffee comprised more than 90% of total exports. The volatility of international coffee prices creates a situation of uncertainty for any country depending upon the crop so heavily, and induces vulnerability. The ERP thus set out to stimulate both the volume and the diversity of exporting activity in the economy. There has been some success with this policy, with coffee's share in total exports falling to 53% in 1993, but then expanding again in the following years when coffee prices rose sharply with the frost that affected coffee production in Brazil at that time. However, in terms of the volume of exports, more progress is needed: in 1998 exports of goods and services comprised only 10.3% of GDP, albeit this represents an improvement on the pre-ERP position.

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At the macroeconomic level, the performance of the Ugandan economy has been adjudged by many to have been highly promising, with the annual growth rate of real GDP over the last decade averaging 6.4% on World Bank figures. However, it is important to explore the extent to which this apparent success has been disseminated throughout the economy, and shared by all members of society. It is widely acknowledged (e.g. UNDP (1998)) that poverty remains a severe problem in the rural areas of Uganda, although Appleton (1998) argues that consumption data reveal an improvement in household welfare between 1992 and 1996. If progress in development and poverty alleviation is to continue, it is important to investigate the potential for mobilisation of domestic savings, and for the channelling of funds into appropriate investment.

3.1   The Bank of Uganda survey

A survey carried out under the auspices of the Bank of Uganda (Smith, 1997) explored the attitudes and behaviour of households in respect of savings and borrowing activity. The survey involved interviews on a systematic/cluster sampling basis with just over 300 households in four regions of Uganda in October and November 1997. The primary objective of the survey was to set benchmarks that would enable the monitoring of households in different areas, in order to gauge whether success at macroeconomic level was being translated into improved living conditions in rural areas. The study collected information about the physical living conditions of respondents, household characteristics, access to markets and agricultural practices, as well as asking about savings and borrowing behaviour. Most of the households were located in rural areas.

3.2   Saving in rural Uganda

Over the sample as a whole, 27.9% of respondents indicated that they had undertaken some savings at some point. However, the incidence varied both between and within regions, as can be seen in Table 1.

TABLE 1: Savings behaviour:

(% of respondents answering "yes" to the question "Have you undertaken any savings?")

Location	Rural	Trading Centre	Urban	All
East	17.6	29.4	N/A	19.8
Central	25.0	42.9	50.0	42.9
West	34.4	35.3	38.5	35.2
North	0.0	N/A	13.3	8.7
All	23.8	34.1	35.4	27.9

In all regions, households in the rural areas were less likely to have undertaken savings than those in urban areas, whilst those living in trading centres were in an intermediate position. Follow-up questioning revealed that the most common reason given for not saving was low income (85.4%), although a number of non-saving respondents also referred to the poor access to financial institutions. The extremely low incidence of savings amongst households in the Northern region in part reflects

the high level of uncertainty felt here in the presence of continuing civil unrest in the region.

In order to analyse the savings decision more thoroughly, a logit analysis was set up, in which:

$$I = Z'\beta + \varepsilon$$

In this specification, I is an index that takes on the value 1 if the household has undertaken savings, and 0 otherwise. Z is a vector of household characteristics expected to influence the savings decision. In particular, household income is expected to be crucial – especially given the number of respondents who indicated that low income was the prime reason for them not saving. In considering the probability that a household will save, the potential vulnerability of the household is likely to be important. A vulnerable household – for example, a household with no land, a large family, or a female head – may be most in need of saving, but also be least able to save. If access to financial markets is significant in enabling savings, then distance from a town may be influential. In the context of Uganda, regional effects may also be important – the insecurity of the Northern region has already been mentioned. Income estimates are not always reliable in this sort of survey, so data on expenditure were also collected. Expenditure was thus used as a proxy for income in some of the estimations. Table 2 summarises the key results.

TABLE 2: Logit estimation of savings behaviour

Variable	Expected sign	Coefficient (t-value)	Marginal effect	Coefficient (t-value)	Marginal effect
Income	>0	0.0025 (1.58)	0.0004		
Expenditure	>0			0.0067 (2.42)	0.0012
Household size	<0	0.1370 (2.58)	0.0239		
Agricultural land	>0	0.6404 (2.31)	0.1119	0.5236 (1.88)	0.0970
Female head	<0	-0.7060 (-1.24)	-0.1234	-1.0623 (-1.85)	-0.1967
Education of head	>0	0.1002 (2.23)	-0.0175	0.0840 (1.97)	0.0156
Distance	<0	-0.0328 (-1.26)	-0.0057		
North	<0	-1.8157 (-1.98)	-0.3173	-1.7332 (-2.17)	-0.3210
East	<0	-1.1789 (-2.76)	-0.2060	-0.9468 (-2.20)	-0.1753
Constant		-2.2681 (-3.81)		-1.6464 (-4.03)	
N		214		209	
Goodness of fit		0.7710		0.7416	
Pesaran-Timmermann		-26.67 (.000)		-27.01 (.000)	
Pseudo R-Squared		0.1761		0.1490	
t-statistics in parentheses ( )					

Income is seen to have the expected positive effect on savings, although this is stronger when the expenditure proxy is used. In the equation using income, household size is seen to have a positive effect, such that larger households are more likely to have indulged in savings. This effect is not detected when expenditure is used as a proxy for income. Otherwise, the effects are in line with *a priori* expectations.

These results are generally consistent with those achieved by Obwona and Ddumba-Ssentamu (1998) who had access to a larger sample of rural and urban

households. They found that the dependency ratio had a negative and significant effect on monetary savings, especially in urban households. No hint of this effect was found in the present study – and it has already been noted that household size produced a conflicting result. Obwona and Ddumba-Ssentamu found that income was significant for urban, but not for rural households.

The act of saving in itself is not sufficient to enable funds to be channelled into productive uses. Households may save not in order to undertake productive investment, but for consumption or in order to pay school fees or medical expenses. This would not preclude the flow of funds into investment if savings were in the form of financial assets, which could then be on-lent. However, saving in the rural areas is still often in impotent forms that cannot be channelled into alternative uses. In this context, the dividing line between savings and investment may become blurred. If a household "saves" by purchasing additional goats, chickens or land, arguably this may constitute investment. However, a number of respondents indicated that the land they had purchased as a form of saving was not being farmed, often because it was in fragmented parcels that could not be effectively used. In other cases, savings were in the form of hoarded cash hidden in the house. Lack of access to financial institutions, and lack of confidence in them, was a prime cause of such impotence in saving behaviour.

3.3   Borrowing in rural Uganda

As with saving behaviour, the pattern of borrowing varied for households in different regions of the country. This is shown in Table 3. With the exception of the Western region, households in rural areas were less likely to have borrowed than those located in trading centres or in the urban areas.

TABLE 3: Borrowing behaviour:

(% of respondents answering "yes" to the question "Have you ever borrowed any money?")

Location	Rural	Trading Centre	Urban	All
East	21.4	36.8	N/A	24.3
Central	12.5	28.6	52.2	39.5
West	41.7	30.8	41.2	39.4
North	25.0	N/A	26.7	25.9
All	30.3	32.7	41.8	32.9

Follow-up questions revealed a number of reasons offered by households for not having borrowed, as shown in Figure 4.

Figure 4:
Reasons for not borrowing
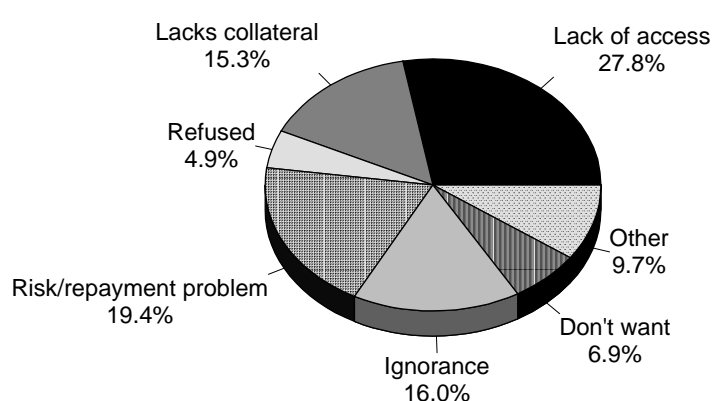
The most commonly-cited reason was lack of access, which most often reflected the absence of financial institutions in the area. The lack of collateral had discouraged a significant number of respondents from trying to borrow, although a

relatively small number had tried to borrow and been refused. Uncertainty and lack of confidence in being able to repay loans had deterred many households from borrowing, and ignorance about the process of borrowing was also widespread.

Of the households who had borrowed, the vast majority had done so through informal sources, with a small minority (19 households) having borrowed from a bank, through the *entandikwa* scheme, or through microfinance institutions, mainly in the Western Region. Informal sources mainly involved borrowing from friends or relatives, sometimes in the form of assets rather than finance. Interest rates payable on these loans varied from zero to 500%, with some loans carrying such high rates as 20% per month, 50% per two months or 20% per two weeks. Given low incomes, such punitive rates may discourage borrowing even in times of great need, and several respondents mentioned fear, or the difficulty of repayment as reasons why they had not undertaken borrowing, as mentioned above. An important concern arising from high interest rates is the sense of powerlessness that may be engendered in the rural poor.

The reasons for borrowing were varied, but included payment of school fees, medical expenses, rent and food, as well as some who borrowed for more directly productive purposes such as capital or farming inputs. In the context of seeking to promote development and to empower the poor, the concern about borrowing arises especially from the minority of loans for such directly productive purposes. This is not to deny the importance of investment in human capital through education or improved health care, but it is also vital to encourage the take-up of income–earning opportunities.

4   Financial market failure?

Does the saving and borrowing behaviour revealed by the survey reflect a failure in financial markets? This is a key question in many ways, given that the ethos of the structural adjustment programme relies so heavily on the encouragement of market-friendly development. Creating macroeconomic stability and opening up domestic markets to freer international trade will not guarantee the alleviation of poverty if there are segments of society who are excluded from markets.

The evidence presented above is somewhat inconclusive in this respect. There were respondents who cited the lack of access to financial institutions as reasons for not saving, but they were a minority. Low income was clearly a more significant factor. This is supported by the logit analysis, which showed that income was highly significant, but that distance (which might be thought to be related to market access) was of marginal significance. Lack of access was seen to be more important in discouraging borrowing, but again the results cannot be seen as being conclusive.

A logit estimation was carried out to investigate this more carefully. The probability that a household will indulge in borrowing is thought to depend upon a range of household characteristics in addition to access to markets, including income (or expenditure), size, ownership of land and age of the head of household. Households where the head is absent may also find it difficult to borrow locally. Income and expenditure could be associated with high or low probability of borrowing. Where income per household member is low, borrowing may be needed, but also more difficult. The ownership of land is likely to encourage borrowing, if only because the land represents a potential form of collateral. In the estimation, access to markets is proxied by distance from urban centres, and by a dummy for the

Central region, where access to the financial institutions in Kampala is easier. Table 3 summarises the results.

TABLE 3: Logit estimation of borrowing behaviour

Variable	Expected sign	Coefficient (t-value)	Marginal effect	Coefficient (t-value)	Marginal effect
Income	?	0.0107 (1.26)	0.0024		
Expenditure	?			0.0236 (2.15)	0.0056
Household size	>0	0.1150 (2.55)	0.0262	0.1360 (2.56)	0.0323
Agricultural land	>0	0.4194 (1.78)	0.0956	0.4535 (1.79)	0.1075
Absent head	<0	-1.0940 (-1.64)	-0.2493		
Age of head Distance	<0			-0.0229 (-1.78)	-0.0054
Central	<0			-0.0105 (-0.50)	-0.0025
	>0	0.5139 (-1.12)	-0.1171	0.5673 (1.20)	0.1345
Constant		-1.6706 (-4.02)		-0.8902 (-1.45)	
N		214		209	
Goodness of fit		0.6589		0.6555	
Pesaran-Timmermann		-26.30 (.000)		-18.10 (.000)	
Pseudo R-Squared		0.0477		0.0533	
t-statistics in parentheses ( )					

The pseudo R-squareds of these equations suggest that the relationship here is not very strong, although this statistic is of limited value in this context. The goodness of fit statistic, which is more helpful, is satisfactory. However, there is no support for the importance of access to financial markets, with distance playing no significant role in either version of the equation. Furthermore, the Central regional dummy is not statistically significant, although of the expected sign.

Some further evidence on the attitude of households towards credit was uncovered in the survey through the open-ended question "What could best improve your life?" Given that respondents were aware that the survey was being carried out by the Central Bank, it is perhaps no surprise that this produced many responses involving credit or simply asking for money. Figure 5 summarises the responses.

Figure 5:
What could best improve your life?
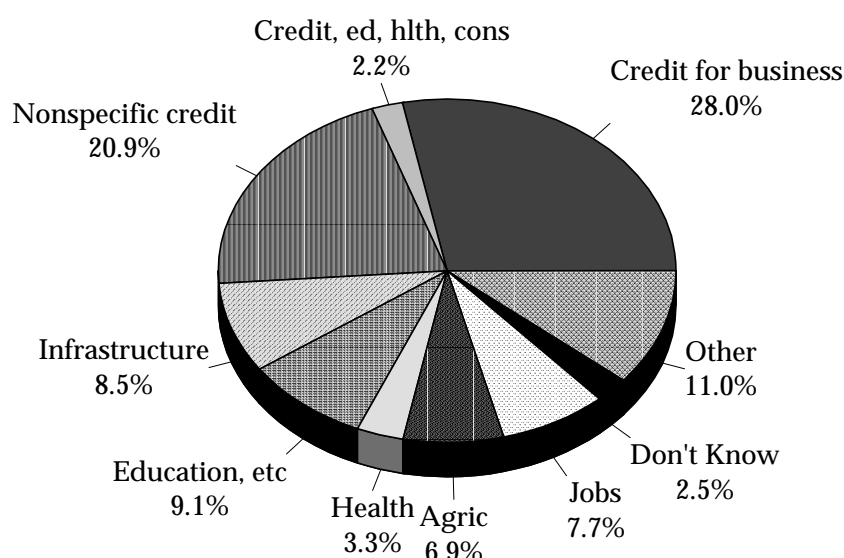
At face value, this might be interpreted as indicating a demand for credit in the areas visited in the survey. However, it is important to note that many of the pleas for credit were non-specific in nature, and others were requests for credit for food and other immediate expenses, rather than to exploit productive opportunities. Indeed, 2.5% of the responses were from respondents who answered that they were "not aware", or did not know what could improve their lives – this in spite of the poor conditions in which they were living.

These results may be seen to have important implications for microfinance operations. It seems apparent that one important way of attempting to eradicate poverty is by providing people with credit opportunities that will enable them to engage in more productive activities and generate income-earning opportunities. The survey results suggest that merely providing a flow of credit, by whatever route, will not be sufficient. It will also be crucial to provide appropriate guidance and advice that will raise awareness of productive possibilities for the use of credit. Indeed, 36 respondents referred explicitly to the need for advice, education or training opportunities. In particular, there may be an important role for agricultural extension schemes to run in partnership with microfinance projects. However, too narrow a focus on purely income-generating schemes may neglect the fact that the poor also need financial services as a cushion against shocks caused by weather or other events such as bereavement that bring unexpected problems.

These results are consistent with those of Buckley (1997), who undertook some similar research into informal savings and credit arrangements in Kenya, Malawi and Ghana. His conclusions were also that microfinance by itself is not sufficient to ensure that the problems of poverty and underdevelopment are fully addressed.

5   Conclusions

Policies to promote economic development and to alleviate poverty have often prioritised macroeconomic stability, the liberalisation of trade and deregulation of domestic markets. Such measures may be necessary preconditions for success in meeting these objectives, but the analysis in this paper suggests strongly that they are unlikely to be sufficient.

If people are isolated from national markets, then they will be unable to share in national economic progress. Access to financial markets may be especially important, if people are to be able to use saving and borrowing behaviour in order to generate new income-earning opportunities. However, even access to financial markets is not likely to prove sufficient. It may also be necessary to alter attitudes and expectations, or to provide advice, training and guidance on the ways in which credit might be used to open up new opportunities for individuals and communities. Only then may the task of alleviating poverty begin, and sustainable economic development take off.

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