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# Household Credit and Saving: Does Policy Matter?

*by*

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- Abstract** This paper surveys the existing literature on the determinants of household savings and credit in developing countries and examines the ways in which macro-level policies might impact on household financial behaviour.
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## Household Credit and Saving: does policy matter?

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### I Introduction

For almost thirty years, the proponents of financial liberalisation as a means towards financial deepening have dominated the financial development literature. The World Bank in various publications (see especially, World Bank, 1989,1998, 2000) sees financial liberalisation as a means of reversing the distortionary effects of previously state interventionist policies which have had the opposite effect to that intended by the original policy. Belief that there is a strong association between financial repression and stagnation has been strong. Attempts have been made at the macro-level to test the validity of the converse association, between financial liberalisation and growth (e.g. King and Levine, 1993; Demetriades and Hussain, 1996; Levine, 1997). At the same time, there has been a significant amount of research on household financial behaviour. Policies expected to accelerate financial development should result in changes in household financial behaviour. Households should increasingly resort to formal institutions to finance their investments in producer or consumer durables and also to manage their savings. Knowledge of the channels through which this process occurs, the speed with which policy feeds through to behaviour and the income groups it affects would have important implications for future policy, apart from being important information for policy makers as they monitor the effects of changes in policy. The research project of which this is the opening working paper is concerned to address the links between macro-level policies which are designed to develop financial markets and institutions and micro-level behaviour of households and individuals within them. As we shall see, there is very little reported research on this issue. This paper therefore surveys the existing literature on the determinants of household savings and credit in developing countries and examines the ways in which macro-level policies might impact on household financial behaviour.

It might be expected that monetary, financial and fiscal policies would work through the standard channels (for example, credit, investment and balance sheet channels) to impact on households both directly and indirectly. However, the extent of this impact would depend on what other factors independent of policy changes might affect household

decisions. It would also depend on the degree to which monetary policy decisions affected those households dependent on informal financial markets and the degree to which informal markets responded to changes directly or indirectly affecting formal financial markets. Hence, assessing the impact of macro-level policy requires analysis of the behaviour of participants in both formal and informal financial markets and of the factors that determine the demand for credit and the supply of savings from households in both sectors.

The origins of the debate about financial liberalisation lie with the work of McKinnon (1973) and Shaw (1973) and have been expanded in the work of Fry (1995). Most of the discussion in these seminal texts is at the level of 'consumers', 'savers' and 'investors'. Financial liberalisation enables financial markets to operate effectively. Savers are paid market interest rates and the flow of savings thereby increases. Investors have to pay market rates for credit and therefore have to invest efficiently. Consumers are properly rewarded for their patience in foregoing current for future consumption. Savers who deposited their savings in the curb markets<sup>1</sup> and borrowers who borrowed there shift their activities to formal markets, as they become more competitive and open. Higher savings rates and more productive investment generate higher growth rates.

However, is there any evidence that households, who are the consumers and savers and investors in the personal sector, and the markets in which they operate, respond in the ways outlined above? In particular, the policy impact in developing countries is meant to be on the production and investment decisions of the large number of rural households that form the backbone of these economies. Their savings individually may be small relative to disposable income<sup>2</sup>, but they are still a significant part of aggregate savings, as well as of the demand for credit for both production and consumption purposes.

This paper surveys the literature in the areas of household savings and credit and of informal and formal sector financial markets to discover how

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<sup>1</sup> The concept of curb or kerb markets comprise savings and loan activities based on informal institutional arrangements, such as savings cooperatives, friends and relatives, and moneylending. The term also refers to parallel markets in foreign exchange, for example.

<sup>2</sup> Newlyn (1977) reports household savings as a proportion of disposable income for developing countries ranging from -5% to 16.8% with a median of 4%. More recent data for India has household financial saving at 11.16 for 1992-95 compared with a figure for the US in 1995 of 2.7 for 'personal saving' (Loayza and Shankar, 1998; Gale and Sabelhaus, 1999). The World Savings Database at the World Bank shows for 24 countries for 1992, net household savings to disposable GDP ranging from 15.8% to 0.8 % with a median of 5.4 %.

far predicted household behaviour, derived from the financial repression and deepening literature, is borne out by empirical studies. The focus here is not specifically on financial liberalisation and its effects on household behaviour. In spite of the big push towards financial liberalisation in the last decade, there have been other macro-financial policy changes over time that should have affected household financial behaviour, according to the McKinnon-Shaw school. The central issue here is whether macro-level policy interventions have the household and individual level effects predicted by the theory.

The next section of this paper discusses the possible channels of monetary and financial policy and how far these affect savings and credit decisions in poor countries. Section III discusses the World Bank view of financial development. Section IV discusses the literature on the determinants of household savings and possible policy measures to increase these. Section V discusses the determinants of the demand for credit and Section VI concludes.

## **II Channels of Macro-Policy to Micro-Behaviour**

How might changes in macroeconomic policy affect household financial decisions? One way of tackling this question has been to theorise the effects of a monetary shock on investment and saving behaviour. A standard text book approach (e.g. Mishkin, 2001) discusses this monetary transmission mechanism in the following way. An increase in money supply increases the amount of bank liquidity and causes interest rates to fall in order to encourage households and firms to spend more on consumption and investment goods respectively. In this case, households are expected to reduce savings and increase spending and/or borrowing. Firms are also expected to increase borrowing for investment. There is an overall increase in employment and output, especially of credit services. This liquidity effect is counterbalanced in the modern literature by an anticipated inflation effect (Li, 2000). Here an expansionary monetary shock leads households to expect that the rate of inflation will increase. They therefore move out of cash and increase demand for credit with the resultant increase in nominal interest rates and a reallocation of labour towards credit services. Where the liquidity effect dominates, overall real activity rises over the period following the shock.

This approach is one in which credit for household consumption, consumer credit, plays an important role in understanding how the credit channel works through consumer spending to deliver the desired

outcomes for policymakers. Here, policymakers are grappling with ways of avoiding or smoothing business cycles, and the role of consumer credit in this process is critical. For developing economies, the focus is different. The absence of well-developed monetary and financial institutions, including markets, switches attention to ways of deepening and widening financial activity<sup>3</sup>. In this process, financial liberalisation plays a key role. The assumption is that releasing interest rate setting to the markets raises nominal rates, thereby encouraging saving and investment with high returns to cover the increased cost of borrowing. Alongside this, various constraints on bank activity such as a relaxation of controls on credit and on bank reserve ratios should limit the degree to which pent-up demand for credit drives interest rates up to excessively high levels, choking off potential investment. An assumption that such liberalisation policies work is that stabilisation policies are also implemented, especially control on government expenditure so that it is not financed by a monetary expansion which simply fuels inflation and the private sector is not crowded out by excessively high borrowing rates.

The traditional transmission channel approach works on the basis that monetary policy influences spending on investment, including consumer durables, through changing financial prices, principally the short and long term interest rates (see Taylor, 1995). However, it has been pointed out that, empirically, such cost of capital effects do not appear to be very large. For example, Romer and Romer (1990) suggest that an increase of 1% on the two-quarter lagged interest rate differential between the federal funds rate and the three month Treasury bill rate generates a decrease in industrial production of 0.0173% over the 12 quarters after the monetary shock which generates the increase in differential. However, Fry (1995) reports studies which suggest on average a positive relationship between real interest rates and growth: a 1 percentage point increase in real deposit rates is associated with a 0.5 percentage point increase in the growth rate. Later studies cited in Fry (1995) have found lower coefficients of around 0.2.<sup>4</sup> This may depend on the countries and time chosen. There could be an

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<sup>3</sup> There are of course well developed informal financial markets (see below) though because of the nature of these markets data on the shares of formal and informal sectors in such market activity is hard to come by (see below).

<sup>4</sup> A study of India by Athukorala (1998) suggests that a 1% increase in the real deposit rate produces a 0.2% increase in private investment through the supply of real bank credit. Although the author finds a negative relationship between the real lending rate and private investment, a 1% rise in the lending rate resulting in a 1.5% decline in investment, the overall result is that a 1% rise in the real deposit rate gives a 2% increase in private investment. As the author points out this is strong support for McKinnon's complementarity hypothesis that high deposit rates mobilise capital available for investment and that this effect is greater than the cost of capital effect.



inverted U-shaped function with a positive relationship between interest and growth in more financially repressed economies becoming negative as real rates rise above zero.

In developed economies, the view seems to be that previous levels of output have a greater effect on determining investment and therefore growth by generating particular expectations about the future. This remains the case even when a cost of capital effect, however small, is found to be significant (Bernanke and Gertler, 1995).

Alternative explanations of the effect of monetary policy on spending decisions propose a transmission channel based on changes in the balance sheet of borrowers resulting from central bank policy changes (Bernanke and Gertler, 1995). According to this view, firms find that increases in interest rates raise the costs of servicing loans and therefore reduce profits. The ensuing cash flow problems of firms cause a decline in output, inventories and investment. Similar balance sheet effects are found for consumption decisions about housing and durables. Both effects feed through eventually to aggregate demand.

Alongside these views about the transmission mechanism, there has been the strict monetarist view that emphasises relative price effects and the neutrality of money. Here monetary policy changes which are not backed by output changes have price effects, thus leaving real variables unchanged, once these price effects have been fully assimilated by all agents (Meltzer, 1995).

In both developing and developed country cases, national aggregate data forms the basis of the analysis. However, the transmission channel goes from policy to household and firm. What is of interest here is how micro-level agents respond to macro-level changes. We shall return to this issue below.

### **III Savings**

In the developed country literature, analysis of savings behaviour has been dominated by life-cycle theory (see Attanasio and Banks, 2001). Consumption smoothing over the life-cycle is dependent on the existence of well-behaved financial markets for savings and loans. In the developing country literature, the possibility for consumption smoothing through participation in financial markets (e.g. credit for housing and durables, insurance policies for crop failure, health and old age) is limited because these markets are incomplete or missing (Morduch, 1995). Rosenzweig

(2001) points to the highly volatile incomes around a low mean which added to the lack of well-established insurance and credit markets leads to limited possibilities for increasing savings rates, highly correlated as they are with income and investment.

However savings are still seen as one way of mitigating risk, especially of income variability in poor households. The risk of crop failure or of unemployment means households either build up savings or attempt to gain access to loans. Saving is therefore a type of self-insurance. Poor households are unlikely to save much, already finding hard to gain sufficient income to satisfy minimum consumption needs. Mutuality in insurance provision by groups of households is a way that households can mitigate idiosyncratic risk. For very poor households this form of insurance may not be enough to cope with shocks. Other coping strategies may involve migration, increasing the supply of child labour or reducing food intake, with obvious effects on health, especially that of children (see World Bank, 2000:145).

Empirical studies have used rainfall variability as an instrument to identify income variability in order to test for consumption smoothing, the idea being that if transitory changes in income did not affect consumption, then households were consumption smoothing and therefore saving and dissaving. The empirical literature in this area, some of which uses the ICRISAT data for India, suggests that consumption smoothing does go on with an implication that the lack of credit markets may not be as important as theory suggests. There are problems with this empirical work because it is important to take into account the question of family labour. If the family supplies less labour and hires more when there is an output increase because of good weather, then this will distort real net income unless the implicit cost of family labour is taken into account. What is happening is that when the harvest is good because of favourable weather, family labour input is lower because leisure is more highly valued as income rises. Weather therefore ceases to be an adequate instrument for income fluctuations because the shadow wage is endogenously determined (i.e. the opportunity cost of leisure is determined by the weather) (Rosenzweig, 2001). This appears to contradict earlier work by Wolpin (1982) who used historical weather data and more recent household income and consumption data to test for the permanent income hypothesis. Knowledge about weather history gives households information about income fluctuations. Wolpin finds that income

elasticities of consumption are close to unity, as the permanent income hypothesis would predict.

However, weather is still going to be an important variable in determining whether harvests are successful and therefore determining how much dissaving has to occur to smooth consumption or how far credit is sought to do the same. Rosenzweig and Binswanger (1993) find that the timing of the monsoon is an important determinant of output. Using data from the ICRISAT village surveys, they find that a delay in the onset of the monsoon by 16 days reduces crop profits by 6%. Once again it is likely that the poorest households will be in the greatest need of some form of insurance, but they would be least likely to find an insurer. The existence of informal insurance arrangements gets round this problem at least in theory, though the possibility of default on reciprocity is always present. As Thomas and Worrall (2000) note, if the costs of giving, whether in the form of gifts or quasi-credit are covered by the perceived benefits of future reciprocity, then often these forms of informal credit are likely to be more effective than other informal or more formal systems. However, there is an issue of default which has been addressed in the literature and which suggests that such informal arrangements may not perform as well as more formal ones in which contracts bind both parties to a credit agreement (Coates and Ravallion, 1993). In the case of informal insurance, Ligon et al, (2002) find that a model of dynamic limited commitment works well: here what determines how much is transferred from lender to borrower is history dependent.

There are informal pressures which give incentives to repay. As Udry (1994) points out in a study of risk pooling in northern Nigeria, in credit markets which are confined to relatively small groups of households, a lot is known about each other's circumstances and people are able to lend and/or borrow with greater certainty of acquiring a loan and being repaid, and this makes this kind of informal credit market relatively successful.

Consumption smoothing can also be effected by using assets as a buffer stock, whether bullocks (Rosenzweig and Wolpin, 1993), cattle (Dercon, 1998), or food stocks (Townsend, 1995; Fafchamps et al, 1998). Kochar (1997a), using the ICRISAT village data, has suggested that idiosyncratic crop shocks can be mitigated by entry into the labour market (see also the effect on child labour supply noted below). This raises the question of how far improving the workings of labour markets, linked for example to public works programmes, can act as a form of social insurance. Other

issues of interest here are the seasonality of production/income and therefore the need for consumption smoothing over seasons. The ICRISAT data allows for the testing of whether households smooth consumption over seasons and Jacoby and Skoufias (1998) (reported in Rosenzweig, 2001) get results which imply that consumption smoothing over seasons does take place.

Where formal banking institutions are present, savings rates when harvests are good are higher the closer, geographically, households are to the institutions (Behrman et al reported in Rosenzweig, 2001). This raises the question of the extent to which banking institutions have an incentive to establish more branches to tap the savings of households previously not served by such branches. Hellman et al (1996) construct two models. In one, they show that limiting competition by giving a bank exclusive rights over an area about whose quality little is known, can result in the bank gaining enough to cover its costs of investing in the new market. Government limits on the length of exclusive rights allows other banks to enter until competitive equilibrium profits are made. In another model, they show that putting a ceiling on deposit rates allows banks operating in the more conventional competitive framework, to make profits at the margin. Banks therefore have the incentive to invest in attracting new depositors and thus increasing the depth of the financial system.

Households find other ways than saving to effect the smoothing process such as marital ties, or changing family size (Rosenzweig, 2001). Deaton and Paxson (2000) consider that the existence of multigenerational households hides the differences between individuals within households. They develop a method of deriving individual behaviour from household data and then apply this to Thailand and Taiwan household survey data. They find that there is some support for the life-cycle hypothesis that savings increase with growth as the younger age groups save more as their incomes rise.

In contrast to the substantial literature on consumption smoothing and the role of saving, there is a limited literature on the effects of policy change on saving. Testing for these policy effects is an empirical matter. For example, a study of personal money demand and savings in China has identified several policy changes over the period leading to liberalisation (Ma, 1993). Ma shows that personal savings and the demand for money did respond to policy regime shifts. Interestingly he finds that the marginal

propensity to save was much higher in the 1950s than in the reform period of the 1980s, but was at its lowest in the highly repressive 1960s and 1970s.

Browning and Lusardi (1996), in an article whose principal objective is to review the literature on why households save, coincidentally take note of studies which look at behaviour in the light of announcements about changes in government policy such as an increase in social security payments (Wilcox, 1989), or changes in credit restrictions (Alessie, Devereux and Weber, 1993).

In the former study, consumption, especially on durables, increased when social security payments increases were paid, rather than when they were announced six weeks earlier. As Wilcox notes, this suggests myopia, binding liquidity constraints, or substantial credit market transactions costs. In any case it contradicts the standard life-cycle hypothesis. In the latter study, the authors model the consumption of durable and non-durable goods in an intertemporal framework allowing for changes in financial conditions. Financial liberalisation appears to have relaxed the binding financial constraint associated with regulations on borrowing for consumer durables purchase, especially among the younger age groups. They find support for the hypothesis that the financial liberalisation of 1982 generated a temporary boom in consumer durables expenditure, though not that subsequent increases in durables expenditure during 1985-88 resulted from further liberalisation in 1984 and 1986. In both cases policy changes feed directly into changes in consumption behaviour.

The discussion around the above-mentioned contributions is concerned with policy effects in the presence of liquidity constraints which result in behaviour contrary to that predicted by the standard life-cycle model. One benefit of looking at policy events in this way is that changes in consumption patterns over time can be separated out from the effects of policy changes. Given that most household surveys in most years should have estimates of income and details of consumption, it is possible in principle to look at policy effects on savings independently of changes in income and across income groups.

An interesting study of Russian savings using longitudinal household survey data found that despite the upheavals of transition, households saved much the same in the 1990s than in 1976 (Gregory et al. 1999). This finding is contrary to expectations since there is widespread belief that savings were actually relatively high in the Soviet era because of shortages

of consumption goods – a form of forced saving, and that saving was lower with price liberalisation. In fact Russian households appear to have countered inflation by consuming durables, but also appear to have maintained saving rates having seen their financial assets wiped out by inflation and therefore needing to rebuild these assets but this time holding only foreign currency.

A study of Shanghai households on the other hand reveals a change in saving behaviour after economic reform (Liu and Xu, 1997). Household Saving not only grows, but there is diversification into new financial instruments. Under the new system, it is households and local enterprises which have replaced central government as the generator of savings. Interestingly, delinking social provision from employment conditions has meant the growth of housing markets, and therefore an incentive to save to buy accommodation. Reforms which have impacted on health and pension provision have encouraged households to increase saving. This study suggests that it is important to distinguish between financial sector and other sectoral policy changes when looking for policy effects on household financial behaviour.

One set of studies using panels of countries and aggregate data tries to test for relationships between key variables and saving and the effects of policy on saving. Loayza et al (2000) find that there are long lags between policy changes and changes in private saving behaviour and that financial liberalisation reduces private saving rates. They find no positive relationship between financial deepening and saving or between higher real interest rates and saving. They do find a positive relationship between income growth and saving and this is in line with the findings of Attanasio et al (2000). Maimbo and Mavrotas (2001) in a case study of Zambia also find that financial reforms in that country have not resulted in an increase in savings rates, partly because of poorly functioning institutions which like in Russia result in people holding their financial assets in hard currency.

One attempt to discover the determinants of private saving across a large number of developed and developing countries over time finds that the interest rate is a significant explanatory variable for developed countries in determining savings rates. However this is not the case in developing countries. Here, growth is associated with higher rates of saving but beyond a certain point, as income increases savings ratios fall (see Masson et al, 1998).

#### IV Credit

Developing country credit markets are characterised by their inability to channel lending to the poor because of the poor's lack of collateral. Borrowers then turn to informal credit markets where risk of default is compensated for by very high interest rates or where the cost of credit from friends and relatives can be zero (Kochar, 1997b). Ghosh et al (2000) point out that reforms which raise interest rates on these default risks may reduce the demand for investment credit. On the other hand, if credit is subsidised, then its supply can disrupt well-functioning informal markets. In some cases even these markets are missing and the only way to invest is to accumulate savings (Dercon, 1998).

A key issue is increasing the supply of credit to the poor, who are the people most often forced to borrow to survive rather than to invest. One analysis of the Indian rural credit market argues that institutions will not lend to the poor because even if they do have collateral in the form of a share of future harvests, these harvests are themselves subject to risk (Basu, 1997). However it is easier for Indian peasants to borrow from their landlords, especially in a sharecropping system, because their income is dependent on the harvest of the peasant. This is the essence of the interlinked contract in which credit is extended to the peasant because the landlord knows that the peasant will work to repay the loan (see also, Braverman and Stiglitz 1982; Bardhan and Rudra, 1980). Here there is also a price issue. The interest rate charged to the borrower labourer for example might be low, but the wages he is paid may also be below marginal product (Basu, 1983).

Even where the labourer is able to borrow in a formal financial market, it is not clear whether interest rates charged would be meaningful unless we, or the labourer knew more about the equilibrium wage. Concentration on the above kinds of interlinked contracts has masked what Bell and Srinivasan (1989) found to be dominant forms of such contracts in the context of more commercialised agriculture, namely those involving richer farmers and traders. Their survey across three Indian states showed that in the more commercialised Punjab, 43% of borrowers had interlinked contracts, largely between credit and agricultural marketing. In Bihar, the major form of contract was between credit and labour, where the comparable figure for borrowers with interlinked contracts was 36%. In Andhra, both types of contracts were equally represented and covered 38% of borrowing households. Once again the type of contractual arrangement

in which farmers may hedge against low prices by selling their crop forward to a trader, have to be taken into account alongside changes in monetary policy variables.

Another way of dealing with the problem of the poor's access to credit is to subsidise credit using informal agents. Their knowledge of borrowers reduces the information costs to formal lenders and their knowledge of borrowers' reputations acts as a form of collateral. Braverman and Guasch (1986) review evidence from a number of developing countries which shows that subsidised rural credit has failed to increase agricultural output in a cost effective way and has neither reduced rural poverty nor redistributed income in favour of the rural poor. Hoff and Stiglitz (1997) develop theoretical models which show that channelling subsidised credit through informal moneylenders can result in less credit going to poorer people. Their models show that a subsidy may cause the marginal cost of lending to rise for three reasons. First, a subsidy induces new entry and where there are scale economies, the marginal cost of loan transactions for existing lenders rises causing a rise in interest rates. Secondly, with an increase in the number of moneylenders, borrowers may consider it easier to default and still borrow from another moneylender. This increases enforcement costs for lenders with consequent interest rate increases. In the third model, increased entry makes the exchange of information about borrowers less complete. The costs of information gathering about borrowers' reputations are higher and the resultant increase in enforcement costs drives up the interest rate.

The overall assumption made in the discussion about access to credit is that rural households have a high level of demand for credit. Such an assumption has guided government policies in many countries with the result that these governments have pursued a low and fixed interest rate policy so that cheap credit can be channelled to rural households with the objective of increasing agricultural output. The standard view is that these policies have led to credit rationing as demand exceeds supply and that access to credit has therefore been limited and has often been the preserve of better connected households.

Kochar (1997b) attempts to estimate the demand for credit in rural households independently of lenders' decisions about access to credit. Using a sub-sample of the 1981-2 All-India Debt and Investment Survey (AIDIS) survey, she finds that households are not formal sector credit-constrained and that policies designed to increase the supply of subsidised



credit may have been unwarranted (see also Feder and Lau, 1990, and Kochar, 1997a).

A further effect of cheap credit has been to change the composition of those borrowing from informal rural moneylenders, shifting the lenders' portfolios towards the more risky borrowers. Bose (1998) presents a model which shows that under certain circumstances this 'composition effect' can have negative consequences for credit availability. Bose cites empirical evidence for this theoretical conclusion, some of it based on AIDIS (1951-71).

Similar conclusions about subsidised credit are drawn in theory and practice by Pender (1996) in the context of a study which suggests that the high discount rates in Indian credit markets are unlikely to give rural producers an incentive to engage in sustainable development practices. Subsidised credit is seen as causing greater credit rationing, thus forcing borrowers excluded from the formal subsidised sector into short-term loans from informal moneylenders at high rates of interest. As in Bose's account, Informal lenders will be left with a portfolio of loans from the more risky borrowers and thus reduce the supply of credit.

Finally, an interesting method of characterising the effects of differential access to credit markets is presented by Foster (1995) who uses anthropometric data on child growth at the time of and following floods in Bangladesh in 1988, to show how the inability of landless households to borrow can be measured by the lower child growth in these households.

Turning to the relationship between policy and behaviour regarding the demand for credit, financial liberalisation is expected to result in the credit market channelling loans to projects with competitive rates of return equal to or higher than the equilibrium market rate. Stiglitz and Weiss (1981) famously proposed that lenders were more likely to favour lending at low interest rates to low return - low risk projects largely because they did not have enough information on borrowers and also because in lending to high risk borrowers they were likely to be subject to more loan defaults. The implications for developing countries have been that far from interest rates increases leading to moves away from credit rationing, they would lead to greater credit rationing by lenders because of asymmetric information, with the possibility of less investment than before. This process might be accentuated by the way enterprises themselves assess the risks of investment in the context of uncertainty

especially where they are liquidity constrained and unable to borrow precisely because of uncertainty influencing banks' view of the risk attached to the loan (Patillo 2001).

It is therefore possible that there is a greater role for the informal sector than before. Far from crowding out informal financial markets, such markets would be expected to expand as more borrowers were excluded from formal credit. Research on sub-Saharan Africa has found that after liberalisation, it is not the formal financial sector which deepens, as financial repression theory suggests. Instead, the informal sector expands to meet greater small-scale service and manufacturing activity, itself expanding because of liberalisation of markets in general. The increases in activity, post-liberalization, have been greater in the semi-formal sector (for example, savings and credit associations, savings collectors and rural cooperatives) than in the informal sector, as more commonly conceived (for example, farmer-moneylenders). While private sector credit either fell or rose very slowly as a share of GDP in the period following financial reforms, there were some startling increases in the activities of informal financial sector institutions. In Tanzania and Nigeria for example, deposits in Rotating Savings and Credit Associations (ROSCAs) rose by 113% and 77% over 1990-92 (Steel et al, 1997). Policies towards integrating the semi-formal sector into the mainstream of banking and other financial activity, as well as into an appropriate regulatory framework, have been observed in Asia, but not yet widely in sub-Saharan Africa (Nissanke and Aryeetey, 1988:296-7)<sup>5</sup>. Even here, though, they are likely to be affected by the process of liberalisation and its effects, direct or indirect. As Besley (1995a: 121) points out, these kinds of 'traditional' institutions 'do seem in general to disappear as capital markets develop'. He cites as reasons for this the improvement of monitoring technologies and the financial intermediation scale economies of which formal sector institutions can take advantage.

## **V Microfinance: a Solution for the Poor?**

As the previous discussion has shown, poor people often have little access to credit and savings services even if they are able to save. They cannot provide collateral for credit and are therefore often not even served by informal financial markets. One answer to these problems has been the promotion of microfinance schemes. Microfinance serves both the savings

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<sup>5</sup> In 1993, a non-bank financial intermediary law was enacted in Ghana and this absorbed some of the semi-formal financial institutions (e.g. credit unions, savings and loan companies) into the main stream of banking (Quartey, 1997).

(consumption smoothing) and investment objectives of poor borrowers (Johnson and Rogaly, 1997). Many of these schemes have been successful both in terms of loan recovery rates and increasing output (Hulme and Mosley, 1996), while others have been less successful and often require continuing government subsidy (World Bank, 2000). The Grameen Bank in Bangladesh is usually presented as a model scheme in particular because of its pioneering peer-monitoring approach to overcoming the moral hazard problem and because of its emphasis on lending to women, a feature which has been emulated by other schemes (Goetz and Sen Gupta, 1996).

These schemes and indeed the whole microfinance approach have been subject to critical scrutiny. While microfinance schemes have helped to empower women, there is evidence that women have often been forced to borrow on behalf of men (Goetz and Sen Gupta, 1996). A study of 253 loans to women from microfinance agencies in Bangladesh revealed that almost 63% of the women borrowers had partial, very limited or no control over their loans (Goetz and Sen Gupta, 1996:49). Women then have problems in getting the men to repay loans for which the women are responsible. This study raises issues not only about gender but also about the wider question of different individual behaviours within households and the problems of treating the household as a unitary agent.

The limits of microfinance appear to be recognised by the World Bank in its 2001/2 Report and, in particular, the lack of valuable collateral. Credit risk is covered in micro-finance schemes by giving participants the ability to establish a reputation for reliability in the repayment of loans. Once established, this enables the borrower to get further loans. However, it takes time to establish such a reputation and usually means that although the microfinance scheme will lend again, other sources of credit may still be closed off. The 2001/2 Report addresses this issue by proposing movable property as collateral, by establishing registers of secured interests so that lenders can ensure that it is public knowledge that collateral has been advanced against loans, and by establishing credit registries run by credit reporting agencies (World Bank, 2001: 94-95). However, since the agencies themselves will have to prove their own reputation for providing trustworthy information on borrowers, it is not clear how effective this will be in encouraging lenders to accept less secure forms of collateral.

Other doubts have been expressed about microfinance schemes both in terms of institutional arrangements and of the appropriateness of such

credit schemes for long-term poverty alleviation. The institutional issues concern the integration of micro-finance institutions into the overall financial framework, their role as intermediaries between borrowers and formal sector banks, and the development of working norms which maintain their integrity (Nair, 2000). Micro-finance as directed credit raises questions of opportunity cost: the goal of poverty alleviation might be better served by channelling credit to agricultural infrastructure or to land redistribution schemes (Nair, 2001).

Nonetheless, microfinance is an important development in pro-poor financial policy. Hulme and Mosley (1996) see 'market-determined interest rates, availability of savings and insurance facilities, intensive loan collection, and incentives for borrowing and agency staff' as correlates of success. They propose a set of policy experiments which could improve the effectiveness of the schemes in alleviating poverty, which include mobile banking, interest rate differentials according to loan size, links between staff pay and scheme financial performance and between interest rate and borrower's repayment performance and a drought insurance scheme.

Alongside the expansion of best practice microfinance schemes, the World Bank argues that governments can best help these financial institutions and markets to develop and prosper by investing in rural infrastructure and literacy programmes as well as developing a regulatory framework which lowers transactions costs to formal institutions by establishing the kind of credit information registers mentioned above (World Bank, 2000:75).

What is interesting about these policy proposals is that first, they recognise that the poor are beyond the framework of formal financial institutions and markets and secondly, that they are likely to be incorporated into these markets only by the intervention of microfinance agencies. However, the main objective of liberalisation is to remove government from direct involvement in the provision of subsidised credit. Financial liberalisation in itself therefore does not directly improve the lot of the poor, but is meant to promote a market and regulatory framework in which specialist pro-poor microfinance schemes and institutions can operate successfully.

The Asian financial crisis of 1997 has had a cautionary effect on the enthusiasm for the spread of liberalised financial markets. The importance of market efficiency and especially informational efficiency has led the

World Bank to lay more emphasis on issues of asymmetric information and financial regulation. The Government, from playing a minimal role, is now expected to be both 'supportive and restrictive' in its relations with financial institutions (World Bank, 1998:81). As regards poor households, they are best served by microfinance schemes which promote group lending. Here, peer monitoring and peer information gets round the asymmetry of information which excludes poor households from borrowing from the formal sector. There is indeed evidence that group lending does reduce default and improve repayment rates (Wenner, 1995), while Besley and Coates (1995) have provided a theoretical framework for showing how groups might be better off paying the debts of non-performing members in order to maintain the reputation of the group.

However, in formal markets, financial liberalisation ought to bring with it increased competition between financial institutions, more branch offices of major financial institutions (indicating that such competition is increasing the overall supply of banking services), increased efficiency in transactions indicated by a smaller spread between lending and borrowing rates, and evidence of increases in consumer durables spending with greater liquidity and increased household savings ratios as real interest rates become positive. The development of financial markets also means the development of a greater range of financial products, especially insurance. The World Bank advocates policies which encourage and allow people to build up their assets but also proposes state funded insurance to enable poorer people to mitigate risk.

## **VI Conclusion**

Household decisions about savings are largely governed by consumption smoothing objectives and therefore by the variability of income. Decisions about borrowing may also be governed by consumption smoothing considerations, but also by interest rates and interlinked contracts involving labour and traders. Income variability may be the result of weather variability so that the decision to save or borrow may be more to do with weather than any of the factors usually considered in economic theory. Decisions to lend or save may be governed by the nature of informal financial arrangements. Traditional ways of risk pooling may influence savings and borrowing decisions more than income variability, or the interest rate.

The effects of government policies on household financial decisions over time is under-researched – not surprisingly because there is little long-run

micro-level data. What evidence there is does suggest that such policies do have an effect on households even controlling for these other factors. It also suggests three interesting lines of enquiry in the credit market, and especially its formal-informal division: first, whether access to credit is really constrained; secondly, whether entry into the labour market, by adults or children is a widespread method of reducing income variability; and thirdly, whether liberalisation of credit markets, which presumably means removing subsidised credit, results in more credit being made available from the informal sector – ‘crowding in’ rather than ‘crowding out’.

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