DIW Berlin

German Institute for Economic Research

Discussion Papers

715

Kati Schindler

# Credit for What? Informal Credit as a Coping Strategy of Market Women in Northern Ghana – Revised Version –

Berlin, February 2009

IMPRESSUM



DIW Berlin
German Institute for Economic Research
Mohrenstr. 58
10117 Berlin
Tel. +49 (30) 897 89-0
Fax +49 (30) 897 89-200
http://www.diw.de

ISSN print edition 1433-0210
ISSN electronic edition 1619-4535

Available for free downloading from the DIW Berlin website.

Discussion Papers of DIW Berlin are indexed in RePEc and SSRN.
Papers can be downloaded free of charge from the following websites:

http://www.diw.de/english/products/publications/discussion_papers/27539.html
http://ideas.repec.org/s/diw/diwwpp.html
http://papers.ssrn.com/sol3/JELJOUR_Results.cfm?form_name=journalbrowse&journal_id=1079991

# Credit for what? Informal credit as a coping strategy of market women in northern Ghana

## Revised Version

**Kati Schindler**

DIW Berlin, Mohrenstr. 58,
10117 Berlin, Germany,
email: kschindler@diw.de

4 February 2009

**Abstract**

This paper explores the use of informal credit as a strategy for managing risks by market women in northern Ghana. A broad concept of the costs of risk management strategies is introduced and encompasses both a time and monetary dimension. Based on qualitative data, the analysis reveals that market women invest a considerable amount of time in maintaining complex networks of informal credit providers to insure their access to credit once a shock occurs. Informal credit involves high transaction costs and prevents market women from growing out of poverty in the long term.

**Keywords:** Africa, Ghana, informal credit, risk management, women

**JEL Codes:** O12, O17, D13

**Acknowledgements**

I am very grateful for comments from Christine Binzel, Tilman Brück, Lena Giesbert, Erik Olson, Ulrike Schultz, Steve Tonah and two anonymous referees. Fuseini Salifu provided excellent research assistance. Fieldwork was generously supported by GTZ. All remaining errors are mine alone.

## 1. Introduction

Microfinance has received major attention in academia and among policy makers during the last decade and is regarded as a tool to alleviate poverty on a large scale. Case studies and anecdotal evidence suggest that microfinance has a positive impact on poverty reduction by supplying credit to those who are normally excluded from the formal banking sector (for example, Khandker, 2005), although there is a lack of methodologically robust impact assessments (de Aghion and Morduch, 2005). More diverging results have been found regarding the role of microfinance for women's empowerment (Kabeer, 2001). It has been argued that access to credit improves women's entrepreneurial skills (Goetz and Sen Gupta, 1996) and their bargaining power within the household (Pitt, et al., 2006), while others caution that the impact of microfinance on empowerment is context-dependent (Mayoux, 1999) and may increase inequalities among women (Mayoux, 2001).

Analysing microfinance from the demand side, this paper sheds light on the cost of *not* having access to microfinance in the context of Ghana, where microfinance has recently become available on a broader scale. The analysis will focus on the financial vulnerability of a group of female urban entrepreneurs who actively seek access to credit, but who are, for various reasons, excluded from both commercial banks and microfinance programmes, despite the fact that they match the typical profile of microfinance customers by any textbook definition. Instead, they are constrained to the informal financial sector.

More specifically, the paper explores the role of credit in the livelihoods of market women in the city of Tamale in northern Ghana, using qualitative data. It will be shown, on the one hand, that informal credit is crucial to trading businesses and serves as the market women's main strategy for managing risks inherent in market trade. Market women continuously borrow and repay loans in order to strengthen their links with informal lenders. Informal credits are used to keep consumption stable and to re-establish a livelihood from trade once a negative shock has occurred. On the other hand, the paper argues that the maintenance of informal credit networks is costly to traders and prevents them from growing out of poverty in the long term. These costs may be considered to be the cost of exclusion of microfinance.

The present paper contributes to the literature in two ways. First, it broadens the understanding of the costs of risk management strategies by introducing time as another dimension. The aspect of time has been less recognized so far, yet it is a key factor in the livelihoods of market women in the fieldwork setting. Second, the focus on urban traders implies different livelihood strategies, a different social environment and different types of shocks compared to those of rural farm households analysed in most studies dealing with risk and coping (Moser, 1998). The paper therefore provides new empirical evidence on the financial vulnerability of a socioeconomic group about which little is known.

The next section of the paper presents a framework that provides the theoretical foundation for the empirical analysis, building on existing literature. Given the lack of consensus in the use of terminology across disciplines, key concepts related to household coping strategies with risk will be reviewed and adapted to suit the particular features of skilled urban traders. Section 3 describes the methods of data collection. The following section briefly reviews Ghana’s recent economic reforms and state policies towards market women since the 1970s and describes the site studied, Tamale Central Market. The empirical results are presented in Section 5. The last section concludes and proposes two policy recommendations.

## 2. A framework for analysing households' risk management

Poor households in developing countries are vulnerable to risks that threaten their livelihood and may cause a decline in their well-being (Alderman and Paxson, 1992; World Bank 2001). Additionally, poor households are often constrained in their access to formal insurance schemes and to formal credit markets and own fewer assets than more affluent households. As a consequence, they are less able to cope with and recover from shocks. A large body of studies, both qualitative and quantitative, analyse the strategies employed by poor households to reduce the likelihood and magnitude of risks ex ante and to relieve the impact of shocks ex post (Dercon, 2000; Kurosaki and Fafchamps, 2002). The bundle of both ex ante and ex post strategies are referred to as risk management strategies in the following, in line with concepts proposed in the World Development Report of 2000/01 (World Bank 2001).

### *(a) Success of risk management strategies*

The approach of coping (or survival) strategies has been criticised in the sociological literature on the grounds that the term strategy implies 'the presence of conscious and rational decisions involving a long-term perspective' (Crow, 1989: 19) and is linked to choice, power and interaction. It has been cautioned that poor individuals lack the capability to strategically choose from a range of alternative strategies with a long-term goal (Francis, 2000) but instead are 'victims of circumstances' (Rakodi, 1991: 42). While market women considered in this paper perceive themselves to be poor in absolute terms, they are in fact financially better off than other socio-economic groups. This allows them to deliberately employ strategies that involve different agents both in the short and the long term. The environment to which the concept of coping strategies is applied in this paper is hence very different from what Owusu has criticized as a 'narrow focus on the strategies of the poor and residents of rural and marginal environments' (Owusu, 2007: 451).

Quantitative studies tend to evaluate the success of risk management strategies separately for ex ante and ex post strategies. Analysing ex ante risk reduction, studies focus on the degree of income smoothing realized by households, for example, by diversifying income sources or engaging in activities that involve low risks (Dercon, 2000). The success of ex post shock coping strategies is normally measured by comparing the levels of consumption smoothing achieved. It is assumed that small reductions in household consumption following a shock indicate the availability and effectiveness of good insurance mechanisms (Townsend, 1994; Kazianga and Udry, 2006). A common finding is that households are better able to smooth consumption than income. However, it has been argued that the effectiveness of risk insurance may not be correctly measured by fluctuations in consumption if households are living close to the survival threshold. In that case, households may avoid a decrease in consumption by selling out assets and cutting investments in skills that may have provided more profitable income in the future, thereby perpetuating poverty (Chetty and Looney, 2006). Therefore, the time horizon used to evaluate risk management strategies is of great importance since households have to balance short-term relief and long-term investment activities. The approach taken in the present paper follows Adams et al., who regard risk coping strategies as successful 'if the household is able to summon sufficient resources to overcome adversity without endangering long-term objectives such as livelihood security' (Adams, et al., 1998: 265). In the setting of northern Ghana, risk management strategies are considered to be successful if market women are able to maintain their trading businesses after experiencing a shock, while consumption may or may not be scaled down in the short term.

*(b) Costs of risk management*

Poor households are vulnerable to risk, while risk management strategies in turn relate back to poverty (Rosenzweig and Binswanger, 1993; Ellis, 1998). This is because 'those who can insure their consumption against income shocks can take advantage of the more profitable opportunities and possibly grow out of poverty, while others are stuck with low return, low risk activities, trapping them into poverty' (Dercon and Christiaensen, 2007: 2). Nevertheless, there is little empirical work that quantifies the contribution of risk management strategies to household poverty. For example, it has been found that less risky income-earning strategies, such as growing drought-resistant but low-return subsistence crops (Dercon, 1996) and limited use of fertilizer (Dercon and Christiaensen, 2007), result in a loss of productivity in terms of foregone profit, while the case of income diversification is more ambiguous (Barrett, et al., 2001).

The (ex post) cost of coping with sickness and mortality shocks has been documented more extensively than other shocks, for example, in terms of costs of health care and loss of labour (Rugalema, 2000; Mock, et al., 2003; Yamano and Jayne, 2004). Another branch of research has recently emphasised that many poor households in developing countries – and even more so women – are time poor (Blackden and Wodon, 2006). The time dimension of risk management strategies is particularly important to the fieldwork setting of this study, where time is a key input in the trading business. In the following, a broad notion of costs of risk management is employed which incorporates both a time and a monetary dimension. However, given the nature of the available data (see Section 3), the costs cannot be expressed as proportions of total income. Rather, the aim of this analysis is to provide insights into the trade-offs in the choice of strategies that entail different risks and returns.

*(c) Informal finance and risk management*

Recent research on informal finance[i] in developing countries has revealed that informal finance is a persistent institution. A variety of explanations are offered for this phenomenon. Some authors have identified push factors of formal finance, such as credit rationing (Bell, et al., 1997; Mushinski, 1999), the institutional weaknesses of microfinance

(Tsai, 2004) and tightly scheduled repayment schemes of microfinance programmes (Jain and Mansuri, 2003). On the other hand, there are also some pull factors of informal finance, including its flexibility and convenience (Baydas, et al., 1995), low transaction costs, particularly with credit among relatives and friends (Adams, 1992; Kochar, 1997), and insurance against risk (Udry, 1990). This paper explores the latter function of informal finance in particular.

There are two alternative ways in which individuals make use of informal credit (Fafchamps and Gubert, 2007). On the one hand, informal credit may be employed by households to smooth consumption after experiencing a shock. Many studies in this field focus on credit given among relatives and friends, often without interest, as one particular type of informal finance (Rosenzweig, 1988; Fafchamps and Lund, 2003). On the other hand, informal loans are also transacted in times of smooth production. Once a shock occurs, the credit contract itself may be altered as a strategy to cope with a negative shock. For example, Udry concludes that in rural Nigeria, 'repayments *owed* on a loan appear to depend upon the random production and consumption shocks received by both the borrower and the lender' (Udry, 1990: 261, emphasis in original). This example illustrates the difficulty of disentangling ex ante risk avoidance from ex post shock coping strategies, which should ideally not be mixed in order to formulate precise policy recommendations (Ellis, 1998: 13).

*(d) The impact of household composition*

In the context of Ghana, spouses typically do not pool their income and they pursue separate income-generating activities in order to pay for the household expenses that are culturally assigned to their social role (Robertson, 1976; Clark, 1994; Manuh, 1994). There is ample empirical evidence showing that conflicts between a head and his spouse(s) over the distribution of resources and labour are common. Wives generally have less bargaining power than their husbands, although they often bear the brunt of economic and domestic responsibility in their household (Lloyd and Gage-Brandon, 1993; Avotri and Walters, 2001). As a consequence, 'among women who head households, therefore, we are likely to find women for whom this is the preferred arrangement, and others for whom it is not' (Lloyd and Gage-Brandon, 1993: 118).

In Ghana's Eastern Region, household members were found to maintain separate insurance networks, which results in incomplete risk sharing within households (Udry and Conley, 2004). Using the same survey data, Goldstein, de Janvry and Sadoulet (2004) investigate the role of marital ties between spouses in obtaining assistance in the event of an individual level shock. They find that women living in good quality spousal relationships and whose husbands are relatively wealthy are more likely to ask for assistance from their partner. Similarly, Doss (2001) concludes that shocks to men's and women's incomes have different effects on household expenditure patterns in rural Ghana.

It follows from this review of intra-household relations in Ghana that the unit of analysis to be used to investigate risk management is the individual market woman, her children and possibly other dependents assisting her, but not necessarily her complete household. In the following, they are considered as a unit in the sense that decisions on production, consumption, time allocation, and risk management are taken for the benefit of and with the joint resource and time input of this group. Whether or not other household members, particularly a husband, also engage in a market woman's risk management strategies depends on the composition of the household, the quality of marital ties and the number of sources of income in the household.

## 3. Fieldwork methods

Empirical fieldwork was conducted in the city of Tamale in northern Ghana between August and October 2003 and this combined various qualitative methods of data collection.

Participant observation (Malinowski, 1922) was carried out in Tamale Central Market in order to gain insights into the functioning of market trade. After I was introduced to the market women's representative by civil authorities who granted me research permission, a snowballing technique was employed to identify further interview partners representing different branches of trade in the Central Market. Extensive narrative interviews (Girtler, 2001) were conducted with ten market women and three male traders[ii] at the Central Market. The subjects discussed included the traders' entry into market activities, practices of trade, shocks experienced in the trading business and the household, access to financial services and issues surrounding tasks and responsibilities in the household. A smaller range of topics was discussed with 15 other traders. About half of the interviews were held in English, while a research assistant interpreted the remaining interviews from Dagbani, Twi and Hausa into English. The life history of three market women was also recorded. Given the fact that these three women had a good command of English, the biographical data is biased towards more educated market women. Another method consisted of focus group discussions with four associations of market traders, covering in particular issues such as access to formal and informal finance and the role of credit in their trading enterprises. Most of the interviews with traders and associations were recorded and transliterated; the analysis of the original statements forms the core of the empirical part of the paper. Finally, 14 key experts in the microfinance sector were interviewed, as well as executives of financial institutions in both Tamale and Accra.

The strength of the qualitative methods applied during fieldwork consist in their ability to reveal profound structures and mechanisms of market trade and also to account for cultural variables that are otherwise difficult to measure, such as social standing and reputation. The empirical results are not representative in a narrow statistical sense but, given the depth of the interviews, they are likely to be indicators of general trends. The original plan was to use a questionnaire to document income and expenditure flows of trading businesses, but this method was abandoned since respondents did not feel comfortable about revealing sensitive data such as profit margins in questionnaires. One resultant shortcoming is that the costs of risk management strategies cannot be expressed in terms of proportion of total income but only discussed in absolute terms.

## 4. Case study setting

*Ghana's changing political economy*

Ghana's political economy has undergone major changes since the early 1980s, when the economy was at the point of collapse, leading to the implementation of a strict economic recovery programme (ERP) and structural adjustment from 1983 onwards. The focus of these reforms concentrated on reducing the fiscal disequilibrium, introducing a flexible exchange rate and restructuring the producing sector, along with a reduction of state interventions in the markets (Leith, 1996; Aryeetey and Tarp, 2000). While there is consensus that indicators at the macroeconomic level have improved in the short term as a result of the ERP, the performance of the private sector (Aryeetey, 1994; Amponsah, 2000) and the socio-economic conditions of the majority of the population fell short of expectations (Appiah, et al., 2000; Konadu-Agyemang, 2000; Overå, 2007). Major achievements in poverty reduction have only been realised since the millennium, although regional horizontal inequalities along the north-south divide[iii] remain and have even sharpened (McKay and Aryeetey, 2004; Stewart and Langer, 2007). Several studies find a lack of confidence in institutions and inadequate access to financial services to be the main obstacles to private sector investment in the early post-ERP years (Aryeetey, et al., 1994; Manuh, 1994: 71). In a survey of private enterprises in southern Ghana, Amponsah (2000) finds similar evidence of entrepreneurs' concerns about the threat of expropriation and the unpredictability of the institutional environment. As will be discussed below, these findings are confirmed by fieldwork data from Tamale, where market women consider state interventions in market trade to be a major risk to their business.

Despite their vital economic role, market women suffered severely both from political repression that reached a peak in the early 1980s and from restructuring under the ERP. In a general environment of rising consumer prices and shortages of goods beginning in the 1960s and further deteriorating in the late 1970s, government officials used market women as scapegoats for the economic crisis. 'The market women, because of their *visible* role, were forced to bear the brunt of public displeasure provoked by shortages in goods, *invisible* inflation, decline in terms of trade, corruption, and incompetence' (Robertson, 1983: 469, emphasis in the original). Similarly, Alderman and Shively (1996) find no evidence to support the popular notion that traders contributed to price volatility or engaged in uncompetitive behaviour before and during the ERP. State repression of market women continued during the reform period, given that traders had not 'been recognized in any scheme of government or donor assistance such as has been attempted for retrenched persons and some small-scale entrepreneurs under PAMSCAD [the Programme of Action to Mitigate the Social Costs of Adjustment]' (Manuh, 1994: 73).

*Tamale Central Market*

The city of Tamale, capital of the Northern Region, is home to almost 300,000 inhabitants with the largest ethnic group being the Dagomba people who are predominantly Muslim (Tamale Municipal Assembly 2003). The city plays an important role as a regional trading centre where the agricultural produce of the predominantly rural north and bordering Burkina Faso are aggregated, stored, and transported to Ghana's more densely populated south. After experiencing a rapid population growth, agriculture is only practised in the outskirts of Tamale; consequently, both men and women need to earn a living in the urban economy. For women in Tamale, market trade is the most important and often the only accessible sector that generally has low entry barriers in terms of formal education and initial capital.[iv]

Tamale has three types of permanent markets. First, there is Tamale Central Market, the oldest market in town, in which fieldwork was conducted. Situated in the centre of town, the Central Market supplies locals with consumer goods including foods, clothing, household items, medicine and services such as hairdressing, telecommunications and local healers. The market hosts around 1,500 traders, approximately 95 percent of whom are female. Then there is another large market designed to accommodate large truckloads of agricultural produce sold wholesale. Finally, there are neighbourhood markets in all the various districts of Tamale, providing a small range of foods and everyday supplies.

A striking observation is the segmentation of traders at the Central Market into three main categories. *Hawkers*, children or young women, trade goods in small quantities, often from trays from the floor and have very small capital endowments, normally less than 20 euros. *Market women*, the largest group of traders and almost exclusively women, consider themselves to be established traders and sell a wider range of goods from a fixed stall inside the market. Market women typically have a capital endowment of around 100 to 500 euros. *Wholesalers*, specialized traders and predominantly women, organise the large-scale transportation of goods to Tamale and maintain business connections with market women, but rarely directly with consumers. They typically operate with a capital of 2,000 euros or more. An underlying mechanism seems to function as a poverty trap, causing difficulties for traders to cross the lines between these categories. The focus of this paper is on market women, who are a middle category of traders in terms of capital endowment, experience in trade, exposure to risks and economic responsibility in their household.

## 5. Managing risks

There are several risks inherent in market trade that pose a constant threat to the continuation of trading businesses and consequently to the income flow into the household of market women. These risks may affect individual market women or all traders and they may entail various levels of magnitude of a loss. The most extreme shock that had occurred to the group of traders in the past was the destruction of Tamale Central Market during the military government of J.J. Rawlings. Between 1979 and 1982, a politicised mob was encouraged by soldiers to set markets on fire nationwide as a means of punishing traders for price control violations. The Central Market was burned down completely in February 1982, disrupting market trade for several years. Many of the market women in business at that time suffered a complete loss of their goods and of their cash capital, which many of them used to store in their stalls overnight. As one respondent put it:

> The burning of the market has cost us a lot. Before the market was burned, there were so many customers in this market. The people were saying “abo, abo!,” that is the local term for “excuse me, let me pass!” … After the market burned, most of the businesses have collapsed. Many [market women] had no capital to begin afresh (respondent 12: page 4).

The material loss, in addition to the emotional stress and fear for their lives, caused many of the older traders to withdraw from the market altogether. Often, it was the daughters of former market women who took over the market business in the late 1980s, starting again with very small capital endowments.

> After the market was burned, I couldn’t even get money to buy food. It was my mother who was going to farm. She was planting onions, and through the onions I was able to come here and mobilise some funds to start business again (resp. 8: 4).

This quote indicates that the destruction of the market caused the worst impact a shock may have on market women: the loss of their livelihood from trade. As a consequence, many market women and their households were pushed close to the survival threshold, particularly when they were the main breadwinner. Given that traders as a whole were affected, networks between market women and wholesalers fell apart and traditional risk management strategies failed.

While the burning of the market was an extreme but extraordinary shock, there are a variety of other risks that are likely to occur more frequently. Examples of market-wide risks include the closing of trading businesses by local authorities for sanitary reasons, plans by the city administration to construct and relocate traders in a market hall too small to accommodate them all and an increase in taxes and fees imposed on traders. Risks specific to individual market women are a loss of capital as a result of shocks in trade, such as the breakdown of a relationship with a wholesaler who provides a market woman with supplies on credit, the failure to collect payment for goods that a market woman sells to her customers on credit, theft of goods from the market stall at night-time, the confiscation of goods at a border crossing, the failure to recover money lent to relatives, and high or unforeseen expenses in the household, for example, school fees or medical bills.

Like any other informal sector entrepreneurs, market women do not keep their household budget separate from their trading capital, but rather use cash flows generated from trade to best suit the consumption needs of their households, both in the short and the long term, as the following quote shows:

> I do not separate the money from my sales from the money I use to buy food. When it gets to evening time, I just take money from my sales. I don't calculate my profits (resp. 2: 21).

Because of this interdependence of household and business budgets, a decline in capital due to shocks in trade has an immediate impact on the wellbeing of the household of market women. In turn, illness of a market woman or household members who regularly assist her at the market may cause a shortage of labour in the trading business:

> Some time ago, I think I had malaria. For three days, I didn’t come to work. And some time ago, they operated me. I didn't come to work for roughly one month. The money I saved in the house was the money I spent. And some friends gave me some help. I was staying in the hospital for two weeks and then came home. … Then you use your business money to take care of yourself. But if you put something down for risk, it is very good for when you are sick. You save that money to treat you. When you are not going to work, nobody will pay you (resp. 3: 17).

Therefore, market women invest in risk management strategies that minimize their exposure to risk and facilitate the reconstruction of their enterprise after experiencing a shock. While household consumption may be cut back in the short term as result of a shock, only those individuals with good risk management strategies are able to maintain their livelihood from trade in the long term. This is particularly important, given that more than half of the respondents are the head of their household. Hence, the sample of traders analysed in this paper shows a bias towards those who successfully managed shocks in the past and remained in business.

Credit is the most important strategy of market women for managing risk. However, for several reasons, they do not have access to credit from formal banks and microfinance programmes.[v] First, credit rationing drives poor borrowers out of the market. Second, most market women lack the marketable security that formal banks generally require. Third, compared to cities in southern Ghana, Tamale is less developed in terms of its financial infrastructure. In interviews, branches of commercial banks in Tamale appeared to be either unaware of the high demand for financial services or incompetent at designing new financial products tailored to profitably serve informal sector enterprises, which confirms the findings of other studies (Bortei-Doku and Aryeetey, 1996: 79). Fourth, as discussed above, the negative stereotypes surrounding the role of market women during the economic crisis is a legacy from the past and one reason for the selective provision of financial services that disadvantages market women to this day. Some private sector financial institutions and civil servants in Tamale both expressed negative views towards market women and are still reluctant to assist them. Fifth, almost all donor-driven microfinance programmes in Tamale target households in remote rural areas in the Northern Region with their programmes, in which credit is often only one component besides education, training in entrepreneurial skills and women's empowerment.

Despite the fact that none of the respondents had ever received credit from a formal banking institution (see Table 1), all of them stated univocally that they would prefer receiving a loan from a formal bank over all other types of credit sources.

> Credit is very important. And credit is very necessary for the growth and success of every business. But the most important thing is when you collect credit: work very hard and repay it. When you repay, you prove that you are creditworthy. We are very hardworking (group discussion 1: 8).
>
> We don't have a place where we can borrow [from a bank]. If we could get credit, we could do serious business. We wanted to collect a loan from the bank, but the bank said that we should save money before they can help us. And the capital in our hands is not enough for us to save in the bank. At the bank, you need to save up to some level before they allow you to borrow (resp. 11: 3).

Both statements indicate that market women regard regular access to a reasonable amount of formal credit as a means of expanding the trading business and increasing profit margins, which in turn would render them less vulnerable to shocks. In fact, over half of the respondents continuously apply for a bank loan and have savings accounts at local banks with the intention of demonstrating their financial capability to the bank. However, this involves significant costs. The minimum deposit for opening an account at a local bank ranges between the equivalent of 200 and 1,000 euros, tying up a large amount of capital that cannot be profitably invested in the business. In addition, inflation of around 26.7 per cent in 2003 (IMF, 2005) and credit rationing led to negative real interest rates.

Market women apply for credit from formal financial institutions individually but also aim to access credit through groups, local associations, a particular feature of social life in Ghana. Associations are particularly prominent in the trade sector and may be based on the common ethnic or regional identity of traders, on a common market, on a common type of goods traded, or on a common location of stalls within the Central Market. In the past, associations mainly served to assemble traders and represent traders' interest vis-à-vis local authorities, organise the transportation of goods from the farm gate to the market and set price arrangements. However, the character of traders' associations in Tamale appears to have changed fundamentally over the past ten years.

> One advantage [of associations] is if you individually want to get a loan from the Municipal's Poverty Alleviation Fund, if you apply for a loan and you are a single person, they will not give you the loan. They want a group of people, an association. As an association, you have accounts. So you can apply for the Poverty Alleviation Fund in a group form (resp. 4: 9).

This statement by a member of the smock weavers' association makes clear that today their highest priority is to access group credit. There were even indicators of an abrupt rise in the formation of new associations in Tamale with the sole objective of qualifying for group credit. This shift in the agenda of associations coincided with the introduction of microfinance schemes by a growing number of non-governmental organisations (NGOs) in Tamale as of the mid 1990s, all of which provided group lending. As a result of this, market women spend a considerable amount of time, often at the peak of turnover in the market, attending weekly meetings of various associations where information on microfinance programmes are discussed and application forms to participate in those programmes filled out. Associations typically collect weekly membership fees of 1 to 3 euros per member, which most associations pay into a group savings account at a local bank, both to serve as a loan security and to avoid embezzlement of the money. Most market women are members of several associations, often of a different nature, in order to improve their chance of receiving credit. However, only one respondent had received a one-off group credit through an association to date.

In short, market women in Tamale can only obtain credit from informal sources, but even access to informal credit is not given per se. In the following, it will be shown that market women deliberately invest in relations to a variety of providers of informal credit who in many cases give credit in a disguised form, often in combination with other services. Surprisingly, there are no moneylenders as such operating in Tamale.

The most important providers of informal credit are wholesalers, who grant credit in goods to market women.

> It is not like you just go and they [the wholesalers] give the goods to you on credit. When you are buying from one wholesaler and you are used to her and she sees that you always come to her to buy, then she will ask you, "Why not buy more?" You will tell her that you have no money. Then she gives you a small quantity, she will try you with a small amount. The next time that you come to pay her, she will add more. So you become used to her. … I always buy my things from the same wholesaler in Kumasi (resp. 1: 33).

When business runs as usual, market women benefit by typically receiving supplies from their wholesaler worth twice as much as they can pay in cash, which allows them to widen their range of goods and to increase their turnover. After a shock has been experienced, the relationship with a wholesaler becomes even more crucial when a market woman may obtain supplies exclusively on credit and build on this to restart her trading business. Market women aim at continuously borrowing and repaying supplies from the wholesaler, a strategy that aims at both preventing a shock ex ante and coping with a shock ex post. First, by adhering to the repayment schedule, they prove their reliability and the viability of their business to the wholesaler. Second, they continuously build up a moral obligation on the wholesaler to grant them credit in difficult situations. Third, it reduces the risk of the wholesaler ceasing to cooperate with a market woman, which causes a major shock itself. Relationships between wholesalers and market women are rather unequal in terms of bargaining power and the ability to find a new business partner. Therefore, market women have to carefully balance their short-term utility derived from borrowing after a shock with their long-term need to maintain such a relationship with a wholesaler.

However, maintaining links with a wholesaler comes at a cost.

> When you have your own capital, you are freer. That is much better. At times you will go to the wholesaler's place and things will be expensive there, because she knows that definitely you don't have money to buy in cash (resp. 1: 33).

Although wholesalers generally do not charge explicit interest for giving supplies on credit, they often request market women repay goods at around 25 per cent above the purchase market price, which represents a considerable implicit fee. Furthermore, buying supplies from the wholesaler involves time-consuming and expensive journeys to southern Ghana where most wholesalers are located. In one particular journey, a market woman bought supplies on credit to the amount of 150 euros in Kumasi and spent approximately 8 euros on transportation, carriers, and provisions.

Another source of informal credit is susu collectors, specialized informal finance agents who mainly offer saving services to small enterprises and peasants. Susu collectors have a long tradition in Ghana, while their financial services are still popular today, with more than 4,000 susu collectors operating in the country (GCSCA 2003). A susu collector visits his client's business location every day for a period of at least 31 days and collects a fixed amount of money, typically between 0.50 and 2 euros. The daily savings are recorded in the client's savings passport. After one month, the aggregated amount is paid out to the client as a lump sum, while the susu collector keeps one day's contribution as a fee for his services. Susu clients generally appreciate the discipline to save that is forced upon them by the susu collector and the confidentiality of the susu savings, which are secure against the claims of other household members.

> It happens that at one time, you and him will understand each other. Normally, your plan is to end up with some 100,000 Cedi [10 euros]. The susu collector can add something, so you end up with a million Cedi [100 euros]. It is an understanding between you and him. If the understanding is not much, he will not give you the loan. If you are saving for so many years you can get a loan from him. He definitely knows that you do pay back. But if you just start saving today, he cannot give you a loan like that. He is like a bank (resp. 13: 2).

Clearly, the main incentive for market women to engage in a relationship with a susu collector is the prospect of receiving credit from him. In such a case, the susu collector passes on money to a market woman that he draws from the susu contributions of his other clients. While the amount of credit provided by a susu collector is low compared to the average capital of market women at times of normal business, it is sufficient for a market woman to restart her business after a collapse and further helps to maintain her household until income from trade is re-established. She later repays the credit through daily susu contributions.

Again, investing in the opportunity to borrow from a susu collector comes at a considerable cost. As the above statement points out, market women have to save with a susu collector for several months or even years in order to give proof of their trustworthiness and the financial capacity of their trading business before they are allowed to borrow. Furthermore, susu savings cannot be used productively in the trading business and are considered as costs in the form of foregone profit, as these respondents explain:

> You can only take the susu savings and spend it: you can buy food or clothing. But it cannot help you to get enough capital (resp. 11: 3).
>
> Normally, I buy my goods on credit from a wholesaler. When I do the susu, that means that I have to take away money from my capital. It will come to a point that I will not be able to pay the wholesaler and I cannot continue with the susu. Susu is too much, then (resp. 8: 3).

Also, saving with a susu collector may itself entail a risk for market women, as susu collectors are not subject to financial supervision by the state.

> The susu agents are not trustworthy. At the beginning, they say one thing. If you follow them and give them money for four months or six months, you

> will not see them again. And there is no way to get your money back (resp. 6: 2).

During the field research, two susu collectors operating in Tamale went bankrupt because they were unable to retrieve credit that they had given to some clients out of the savings contributions of others. As a consequence, more than 300 market women lost both their savings and risk insurance. While some market women responded by ceasing to save with susu collectors altogether, others chose to save with different susu collectors simultaneously in order to spread the risk of being affected by the insolvency of one susu collector.

Market women also form local susu groups, referred to as rotating savings and credit associations in the literature.[vi] Ranging from five to over 200 members, susu groups meet according to a fixed schedule, such as every five days, either weekly or twice monthly. During the meetings, every group member contributes a fixed amount of money into a common pool which is then handed over as a lump sum to one member at a time. This process continues until one cycle is completed, that is, each member has received the lump sum once. Each susu group has its own custom of determining the order in which the pool is distributed among members, such as seniority, a lottery, or personal needs of members. Another, less common form of susu groups is to keep the contributions in the pool until a pre-determined amount is reached which is used to buy goods, for example, a cooking pot, for each member. Respondents valued the discipline to save, albeit relatively small amounts, but the most important reason for joining a susu group is the support a member receives when faced with a shock:

> We don't sit and wait for somebody to help us – we do our own thing. In the susu group, at least once in a while one may have bad or good news in the house, like death or delivery. We go into our accounts to remove some money to go and help that person with the money (resp. 1: 8).

The personal bonds between market women that are built up during many years of membership in a susu group also serve other purposes. Many market women remarked that the levels of trust among traders had deteriorated after the destruction of the Central Market in 1982 and considered this to be in stark contrast to the strong networks among traders in the past. Interestingly, almost all respondents had ever lost money that they had lent to other traders in the market:

> Some of the people in the market are not honest. Some will borrow your money and then they don't mind and won't pay you. But in a group – when you borrow money, they know everybody and when you are supposed to pay, you pay (resp. 3: 12).

As a strategy to reduce the risk of default, market women prefer to extend credit to members of a common susu group. On the one hand, a woman's request for credit after experiencing a calamity can hardly be denied by another member of her susu group on moral grounds. On the other hand, the threat of spreading rumour in the susu group about a woman's lack of reliability and trustworthiness is an effective means to ensure a credit is repaid. Again, most market women are members of different susu groups and spend a considerable time every week at group meetings.

Finally, market women have credit links with relatives and friends both inside and outside the household. Mutual assistance in cash and kind is normally based on generalised and balanced reciprocity, depending on the degree of kinship, while its value for the ongoing trading business is rather limited. Market women aim to keep borrowing from husbands and kinsmen to a minimum and rely on this type of informal credit mostly in emergencies to smooth consumption of their households.

> Nowadays, we record everything. At first, it wasn't like that, and it was hampering the growth of our businesses. The moment you come to the market, whether it is announced or prearranged, you will give a bowl of sugar away. The next moment, another person comes by and takes away a cup of rice. By the time the week is over, about five or six family members would have visited you here and you would have given out about six cups of

> rice, six cups of sugar, and six cups of beans. And nobody will pay for that. The extended family system has affected negatively the growth of our markets. People have been in business for 15 or 20 years, but they still don't have money (resp. 1: 17).

As this market woman argues, borrowing from kinsmen and husbands often leads to disproportional reciprocal claims on goods from her stall and cash, which she finds hard to deny, but it interferes with the women's businesses. Market women complained that their success in trade attracts many poorer relatives both from Tamale and rural areas, who point out common kinship ties in order to claim assistance. It appeared to be a balancing act for market women to accommodate the needs of relatives, respecting their societal obligations, while still safeguarding their working capital in order to secure the livelihood of their own households. There is similar evidence from the Gambia, where women carry a higher burden to support dependent kinsmen than men (Chant, 2007).

Common to these different forms of informal credit is the importance attached to social reputation and reliability as determinants of a market woman's creditworthiness (although this is less important in credit relations among kin and friends). In order to build up a good reputation, market women aim at assuming leadership positions in various kinds of organisations – for example, in religious organisations, in neighbourhood associations, and in the committee for conflict mediation in tax issues. At the same time, involvement in social activities provides access to information related to the market, which helps them to minimise their exposure to risks ex ante. Market women invest about one third of their working hours at the market in the maintenance of social networks and ties to providers of informal credit as a strategy of managing risk. This strategy is only feasible if market women have the command over dependent household members to run the market stall in their absence. Ideally, this will be done by their own children, who at the same time acquire the skills of trading, or foster children, a common practice in West Africa.

## 6. Conclusion

This paper has shown that market women in urban northern Ghana maintain a complex network of links with providers of informal credit as their main strategy for managing risk and insuring their livelihood from trade against negative shocks. Informal credit may or may not be attached to savings or other services, it is both monetary and in kind, it is provided by different types of agents in different geographical locations and with various degrees of involvement with market trade, and the nature of the underlying contract ranges from reciprocity to commercial finance. In the short term, informal credits are used to maintain consumption if cash flows from trade are interrupted, while in the long term credits serve to re-establish the trading business by buying new supplies of goods. Given the fact that the providers of informal credit are subject to risk themselves, it is the bundle of networks that provides market women with a reliable insurance against a shock.

The findings of this paper contrast with studies that find evidence of lower transaction costs of informal credit than formal credit (for example, Adams, 1992; Kochar, 1997). Primarily, this is because access to informal finance is assumed to be easily available to households, not least given the difficulty of quantifying non-monetary costs in quantitative studies. For example, Guirkinger describes the administrative procedures that makes credit from formal institutions costly to loan applicants in Peru, 'while in the informal sector, they just need to manifest their demand' (Guirkinger, 2008: 1446). However, Guirkinger admits that 'we omit from this discussion the "building of trust" that may be necessary to obtain a loan in the informal sector' (Guirkinger, 2008: 1451). In contrast, the present paper reveals that even informal credit is by no means readily available. Instead, market women have to continuously invest in their relations with informal credit providers in order to access credit at a given point in time. Market women need to prove their trustworthiness and the viability of their business, while a long-term relationship with an informal credit provider also imposes a moral obligation on him to extend credit when needed. Applying a broad concept of costs that incorporates both a time and monetary dimension, it has been shown that informal credit involves considerable costs, although those costs differ across types of informal credit. Investing in informal credit networks as a risk management strategy presents a barrier to growth for the enterprise of market women. One policy implication following from this research is to provide market women with access to an appropriate amount of formal credit on a long-term, transparent and reliable basis. This would enable market women to invest their time and capital in more profitable opportunities, for example, by buying supplies in larger quantities, and reduce their dependency on wholesalers.

Finally, the paper contributes to a growing body of empirical evidence that female-headed households do not necessarily belong to the poorest group of households (Lloyd and Gage-Brandon, 1993; Chant, 2007). Being the principal breadwinner in their household in most cases, market women are skilful entrepreneurs with extensive networks and long-standing experience in trade who are well-informed about the local financial sector. From a policy perspective, there is no prior need to include educational training or aim at empowerment when providing credit to market women. Rather, it seems that in the context of northern Ghana, the feminist and poverty reduction approaches to microfinance have dominated the debate and diverted attention from the existence of a large and viable group of female entrepreneurs who can be served with self-sustainable credit programmes. The maintenance of informal credit networks may be used as a complement to titled credit security in microfinance programmes as it indicates market women's social capital and success in trade.

# 7. Appendix

**Table 1: Market traders' access to and use of financial services**

| | Number of respondents answering | |
|---|---|---|
| | **yes** | **no** |
| **Have ever received individual credit from a bank or microfinance programme** | 0 | 13 |
| **Have ever received group credit from a bank or microfinance programme** | 1 | 12 |
| **Have a current account or saving account at a bank** | 7 | 6 |
| **Have ever received goods on credit from a wholesaler** | 13 | 0 |
| **Currently receiving goods on credit from a wholesaler** | 12 | 1 |
| **Have ever saved with a susu collector** | 9 | 4 |
| **Have ever received a credit from a susu collector** | 5 | 8 |
| **Currently save with a susu collector** | 3 | 10 |
| **Have ever been member of a susu group** | 7 | 6 |
| **Currently member of a susu group** | 5 | 8 |
| **Have ever received credit from other traders** | 5 | 8 |
| **Have ever received credit from relatives** | 7 | 6 |

Source: Own data. Sample includes 10 market women and three male traders.

## 8. Bibliography

Adams, A.M., Jindra, C. and Sauerborn, R. (1998) Towards a Conceptual Framework of Household Coping: Reflections from Rural West Africa. *Journal of the International African Institute*, 68(2), pp. 263-283.

Adams, D.W. (1992) Taking a Fresh Look at Informal Finance, in: D.W. Adams and D.A. Fitchett (eds) *Informal Finance in Low-Income Countries*, (Boulder: Westview), pp. 5-23.

Alderman, H. and Paxson, C.H. (1992) Do the poor insure? A synthesis of the literature on risk and consumption in developing countries. *World Bank Policy Research Working Paper*, 1008.

Alderman, H. and Shively, G. (1996) Economic reform and food prices: Evidence from markets in Ghana. *World Development*, 24(3), pp. 521-534.

Amponsah, N. (2000) Ghana's mixed structural adjustment results: Explaining the poor private sector response. *Africa Today*, 47(2), pp. 9-32.

Appiah, K., Demery, L. and Laryea-Adjei, S.G. (2000) Poverty in a Changing Environment, in: E. Aryeetey, J. Harrigan and M. Nissanke (eds) *Economic Reforms in Ghana: The Miracle and the Mirage*, (Oxford: James Currey), pp. 304-320.

Aryeetey, E. (1994) Private investment under uncertainty in Ghana. *World Development*, 22(8), pp. 1211-1211.

Aryeetey, E., Baah-Nuakoh, A., Duggleby, T., Hettige, H. and Steel, W.F. (1994) Supply and Demand for Finance of Small Enterprises in Ghana. *World Bank Africa Technical Department Series*, 251.

Aryeetey, E. and Tarp, F. (2000) Structural Adjustment and After: Which Way Forward?, in: E. Aryeetey, J. Harrigan and M. Nissanke (eds) *Economic Reforms in Ghana: The Miracle and the Mirage*, (Oxford: James Currey), pp. 344-365.

Avotri, J.Y. and Walters, V. (2001) "We Women Worry a Lot About Our Husbands": Ghanaian women talking about their health and their relationships with men. *Journal of Gender Studies*, 10(2), pp. 197-211.

Barrett, C.B., Reardon, T. and Webb, P. (2001) Nonfarm income diversification and household livelihood strategies in rural Africa: Concepts, dynamics, and policy implications. *Food Policy*, 26(4), pp. 315-331.

Baydas, M.M., Bahloul, Z. and Adams, D.W. (1995) Informal Finance in Egypt: "Banks" within Banks. *World Development*, 23(4), pp. 651-661.

Bell, C., Srinivasan, T.N. and Udry, C. (1997) Rationing, Spillover, and Interlinking in Credit Markets: The Case of Rural Punjab. *Oxford Economic Papers*, 49(4), pp. 557-585.

Blackden, M.C. and Wodon, Q. (2006) Gender, time use, and poverty in Sub-Saharan Africa. *World Bank Working Paper*, 73.

Bortei-Doku, E. and Aryeetey, E. (1996) Mobilizing cash for business: Women in rotating *susu* clubs in Ghana, in: S. Ardener and S. Burman (eds) *Money go rounds: The importance of rotating savings and credit associations for women*, (Oxford: Berg), pp. 77-94.

Chant, S.H. (2007) *Gender, generation and poverty: Exploring the feminisation of poverty in Africa, Asia and Latin America* (Cheltenham: Edward Elgar).

Chetty, R. and Looney, A. (2006) Consumption Smoothing and the Welfare Consequences of Social Insurance in Developing Economies. *Journal of Public Economics*, 90, pp. 2351-2356.

Clark, G. (1994) *Onions are my husband: Survival and accumulation by West African market women* (Chicago: University of Chicago Press).

Crow, G. (1989) The Use of the Concept of "Strategy" in Recent Sociological Literature. *Sociology*, 23(1), pp. 1-24.

de Aghion, B.A. and Morduch, J. (2005) *The Economics of Microfinance* (Cambridge: MIT Press).

Dercon, S. (2000) Income Risk, Coping Strategies and Safety Nets. *Centre for the Study of African Economies Working Paper Series*, 136.

Dercon, S. (1996) Risk, Crop Choice, and Savings: Evidence from Tanzania. *Economic Development and Cultural Change*, 44(3), pp. 485-513.

Dercon, S. and Christiaensen, L. (2007) Consumption risk, technology adoption, and poverty traps: Evidence from Ethiopia. *The World Bank, Policy Research Working Paper Series*, 4257.

Doss, C. (2001) Is risk fully pooled within the household? Evidence from Ghana. *Economic Development and Cultural Change*, 50(1), pp. 101-130.

Ellis, F. (1998) Household strategies and rural livelihood diversification. *Journal of Development Studies*, 35(1), pp. 1-38.

Fafchamps, M. and Gubert, F. (2007) Contingent Loan Repayment in the Philippines. *Economic Development and Cultural Change*, 55, pp. 633-667.

Fafchamps, M. and Lund, S. (2003) Risk-Sharing Networks in Rural Philippines. *Journal of Development Economics*, 71(2), pp. 261-287.

Francis, E. (2000) *Making a Living: Changing Livelihoods in Rural Africa* (London, New York: Routledge).

Ghana Co-Operative Susu Collector's Association (GCSCA) (2003) *GCSCA Strategy 2004-2006* (Accra: GCSCA).

Girtler, R. (2001) *Methoden der Feldforschung* (Köln, Weimar, Wien: Böhlau).

Goetz, A.M. and Sen Gupta, R. (1996) Who takes the credit? Gender, power, and control over loan use in rural credit programs in Bangladesh. *World Development*, 24(1), pp. 45-63.

Goldstein, M., Sadoulet, E. and Janvry, A.d. (2004) Is a Friend in Need a Friend Indeed? Inclusion and Exclusion in Mutual Insurance Networks in Southern Ghana, in: S. Dercon (ed) *Insurance against Poverty*, (Oxford: Oxford University Press), pp. 217-247.

Guirkinger, C. (2008) Understanding the Coexistence of Formal and Informal Credit Markets in Piura, Peru. *World Development*, 36(8), pp. 1436-1452.

International Monetary Fund (IMF) (2005) *World Economic Outlook April 2005: Globalization and External Imbalances* (Washington, DC: IMF).

Jain, S. and Mansuri, G. (2003) A Little at a Time: The Use of Regularly Scheduled Repayments in Microfinance Programs. *Journal of Development Economics*, 72(1), pp. 253-279.

Kabeer, N. (2001) Conflicts Over Credit: Re-Evaluating the Empowerment Potential of Loans to Women in Rural Bangladesh. *World Development*, 29(1), pp. 63-84.

Kazianga, H. and Udry, C. (2006) Consumption smoothing? Livestock, insurance and drought in rural Burkina Faso. *Journal of Development Economics*, 79(2), pp. 413-446.

Khandker, S.E. (2005) Microfinance and Poverty: Evidence Using Panel Data from Bangladesh. *World Bank Economic Review*, 19(2), pp. 263-286.

Kochar, A. (1997) An Empirical Investigation of Rationing Constraints in Rural Credit Markets in India. *Journal of Development Economics*, 53(2), pp. 339-371.

Konadu-Agyemang, K. (2000) The best of times and the worst of times: Structural adjustment programs and uneven development in Africa, The case of Ghana. *Professional Geographer*, 52(3), pp. 469-483.

Kurosaki, T. and Fafchamps, M. (2002) Insurance market efficiency and crop choices in Pakistan. *Journal of Development Economics*, 67(2), pp. 419-453.

Leith, C.J. (1996) *Ghana: Structural Adjustment Experience*, Vol. 13, Country studies (San Francisco: International Center for Economic Growth).

Lloyd, C.B. and Gage-Brandon, A.J. (1993) Women's Role in Maintaining Households: Family Welfare and Sexual Inequality in Ghana. *Population Studies*, 47(1), pp. 115-131.

Malinowski, B. (1922) *Argonauts of the Western Pacific: An Account of Native Enterprise and Adventure in the Archipelagoes of Melanesian New Guinea*, Vol. 65, Studies in economics and political science (London: Routledge).

Manuh, T. (1994) Ghana: Women in the Public and Informal Sectors under the Economic Recovery Programme, in: P. Sparr (ed) *Mortgaging Women's Lives: Feminist Critiques of Structural Adjustment*, (London: Zed Books), pp. 61-77.

Mayoux, L. (1999) Questioning virtuous spirals: micro-finance and women's empowerment in Africa. *Journal of International Development*, 11(7), pp. 957 - 984.

Mayoux, L. (2001) Tackling the Down Side: Social Capital, Women's Empowerment and Micro-Finance in Cameroon. *Development and Change*, 32(3), pp. 435-464.

McKay, A. and Aryeetey, E. (2004) *Operationalising Pro-poor Growth: A Country Case Study on Ghana* (Washington, DC: World Bank).

Mock, C.N., Gloyd, S., Adjei, S., Acheampong, F. and Gish, O. (2003) Economic consequences of injury and resulting family coping strategies in Ghana. *Accident Analysis and Prevention*, 35(1), pp. 81-90.

Moser, C.O.N. (1998) The Asset Vulnerability Framework: Reassessing Urban Poverty Reduction Strategies. *World Development*, 26(1), pp. 1-19.

Mushinski, D.W. (1999) An Analysis of Offer Functions of Banks and Credit Unions in Guatemala. *Journal of Development Studies*, 36(2), pp. 88-112.

Overå, R. (2007) When men do women's work: Structural adjustment, unemployment and changing gender relations in the informal economy of Accra, Ghana. *Journal of Modern African Studies*, 45(4), pp. 539–563.

Owusu, F. (2007) Conceptualizing livelihood strategies in African cities: Planning and development implications of multiple livelihood strategies. *Journal of Planning Education and Research*, 26(4), pp. 450-465.

Pitt, M.M., Khandker, S.R. and Cartwright, J. (2006) Empowering Women with Micro Finance: Evidence from Bangladesh. *Economic Development and Cultural Change*, 54(4), pp. 791-832.

Rakodi, C. (1991) Women's work or household strategies? *Environment and Urbanization*, 3(2), pp. 39-45.

Robertson, C. (1983) The Death of Makola Market and Other Tragedies. *Canadian Journal of African Studies*, 17(3), pp. 469-495.

Robertson, C. (1976) Ga women and socioeconomic change in Accra, Ghana, in: N.J. Hafkin and E.G. Bay (eds) *Women in Africa: Studies in social and economic Change*, (Stanford: Stanford University Press), pp. 111-133.

Rosenzweig, M.R. (1988) Risk, Implicit Contracts and the Family in Rural Areas of Low-Income Countries. *Economic Journal*, 98(393), pp. 1148-1170.

Rosenzweig, M.R. and Binswanger, H.P. (1993) Wealth, Weather Risk and the Composition and Profitability of Agricultural Investments. *The Economic Journal*, 103(416), pp. 56-78.

Rugalema, G. (2000) Coping or struggling? A journey into the impact of HIV/AIDS in Southern Africa. *Review of African Political Economy*, 27(86), pp. 537 - 545.

Stewart, F. and Langer, A. (2007) Horizontal Inequalities: Explaining persistence and change. *CRISE Working Paper*, 39.

Tamale Municipal Assembly (2003) *Medium Term Development Plan Under the Ghana Poverty Reduction Strategy (2002-2004)* (Tamale: Tamale Municipal Assembly).

Townsend, R.M. (1994) Risk and Insurance in Village India. *Econometrica*, 62(3), pp. 539-591.

Tsai, K.S. (2004) Imperfect Substitutes: The Local Political Economy of Informal Finance and Microfinance in Rural China and India. *World Development*, 32(9), pp. 1487-1507.

Udry, C. (1990) Credit Markets in Northern Nigeria: Credit as Insurance in a Rural Economy. *World Bank Economic Review*, 4(3), pp. 251-269.

Udry, C. and Conley, T.G. (2004) Social Networks in Ghana. *Yale University Economic Growth Center Working Paper Series*, 888.

World Bank (2001) Chapter 8: Helping Poor People Manage Risk, *World Development Report 2000/2001: Attacking Poverty,* (Washington: World Bank), pp. 135-159.

Yamano, T. and Jayne, T.S. (2004) Measuring the Impacts of Working-Age Adult Mortality on Small-Scale Farm Households in Kenya. *World Development*, 32(1), pp. 91-119.

## 9. Endnotes

[i] Informal finance is understood in the following as the provision of small and short-term loans or saving services that occur beyond the scope of a particular country's formal financial system of banks, non-banking financial institutions, and officially sanctioned capital markets (Tsai, 2004: 1503).

[ii] While small-scale market trade is a female domain, I included three male traders in my sample to investigate whether there is a gender bias in the access to credit – which seemed not to be the case. Two of the men are tailors and the third trades kola nuts, one of the few branches of trade that is predominantly conducted by men.

[iii] However, there are also large differences in wealth across urban and rural areas within the Northern Region.

[iv] Using household survey data, McKay and Aryeetey (2004: 20) quantify employment across economic sectors in Ghana and find that 18.6 per cent of the adult population was employed in wholesale and retail trade in 1998. Although these figures have to be considered with caution due to measurement difficulties, invisibility, and the informality of many of those activities, the figure gives a good indication of the sheer size of the trading sector.

[v] Some microfinance programmes in Tamale are run by non-governmental organisations that are part of the semi-formal financial sector. Those programmes offer credit, but are not licensed to provide savings services.

[vi] For a more detailed discussion of women's participation in susu groups in Ghana, see Bortei-Doku and Aryeetey (1996), who come to similar conclusions on women's incentives to join rotating susu groups.