# **WORKING PAPERS**

# GENDER AND MICROINSURANCE

Irma van Leeuwen

November 2005

Working Paper Series No. 418

# **Institute of Social Studies**

# GENDER AND MICROINSURANCE

Irma van Leeuwen

November 2005

Working Paper Series No. 418

Comments are welcome and should be addressed to the author:

c/o ORPAS - Institute of Social Studies - P.O. Box 29776 2502LT The Hague - The Netherlands

workingpapers@iss.nl

The Institute of Social Studies is Europe's longest-established centre of higher education and research in development studies. Post-graduate teaching programmes range from six-week diploma courses to the PhD programme. Research at ISS is fundamental in the sense of laying a scientific basis for the formulation of appropriate development policies. The academic work of ISS is disseminated in the form of books, journal articles, teaching texts, monographs and working papers. The Working Paper series provides a forum for work in progress which seeks to elicit comments and generate discussion. The series includes the research of staff, PhD participants and visiting fellows, and outstanding research papers by graduate students.

For a list of available Working Papers and how to order see the last page of this Working Paper.

Some of the latest Working Papers are published full text (or abstract and content page) on the website: www.iss.nl (Publications / Working Papers Series).

For further information contact:

ORPAS - **Institute of Social Studies** - P.O. Box 29776 2502 LT The Hague - The Netherlands - FAX: +31 70 4260799

E-mail: workingpapers@iss.nl ISSN 0921-0210

# **CONTENTS**

1	INT	TRODUCTION			
2	MI	CROIN	SURANCE AND SOCIAL PROTECTION	2	
	2.1	Insura 2.1.1	ince basics Insurable risks	3	
		2.1.2	The insurance pyramid	4	
		2.1.3	What is microinsurance?	5	
	2.2	Risks 2.2.1	and coping strategies of the poor Main sources of risk	6	
		2.2.2	Coping strategies	6	
		2.2.3	Effectiveness of coping strategies	7	
	2.3	Provid 2.3.1	ling insurance to the low-income market Role of the government	8	
		2.3.2	Formal vs. informal insurance	9	
		2.3.3	Distributions channels	9	
		2.3.4	Products	10	
		2.3.5	The challenges of microinsurance	10	
	2.4	Micro	insurance and social protection from a gender perspective	11	
3	GE	NDER A	ND POVERTY INSURANCE PARADOX	13	
	3.1	Risk a 3.1.1	everse behaviour  Relation with psychological, and biological factors	14 16	
		3.1.2	Relation with vulnerability to (the impact of) certain risks	17	
		3.1.3	Relation with (control over) assets	17	
		3.1.4	Relation with risk management strategies (a.o. limited access to		
		cred	dit)	18	
	3.2	(Conta	rol over) assets Relation with cultural, economic, social and political factors	18 18	
		3.2.2	Relation with vulnerability to (the impact of) certain risks	19	
		3.2.3	Relation with risk management strategies (a.o. limited access to		
		cred	lit)	20	
	3.3	Risk r 3.3.1	nanagement strategies (among others access to credit) Relation with cultural, economic, social and political factors	21 22	
		3.3.2	Relation with vulnerability to (the impact of) certain risks	23	
	3.4	Vulne 3.4.1	rability to (the impact of) certain risks  Relation with psychological and biological factors	24 24	

	3.4.2	Relation with cultural, economic, social and political factors	24
4	POLICY R	ECOMMENDATIONS	26
REF	FERENCES		29

## 1 INTRODUCTION<sup>1</sup>

Until quite recently, attention in the world of microfinance was very much focused on microcredit and, to a lesser extent, microsavings. Since the late 90s, there is a growing interest in microinsurance, assuming that microinsurance can contribute to risk diversification for the poor and that it has, in this way, the potential to contribute to sustainable improvements in their living conditions.<sup>2</sup> Whereas the literature on gender and microfinance in general (concentrating especially on microcredit) is quite extensive and most donors use gender awareness as one of their guiding principles in financing microcredit activities, very little work has been done on gender and microinsurance. The objective of this paper is to demonstrate the relevance of analysing the gender dimensions of microinsurance. More specifically, it concentrates on aspects that donors should be aware of if they want to build a microinsurance portfolio in a gender responsible way. The paper does not claim that microinsurance is in all cases to be preferred above informal risk management strategies or that microinsurance offered by non-government organizations or insurance companies relieves the government of its responsibility in the provision of social protection for poor men and women. We take the existence of microinsurance projects as a reality, and support Morduch (2004) in his opinion that even if the conclusion in some years will be that the impact of microinsurance on poverty reduction is nihil, we will need the experience to come to this conclusion.

The paper is divided into three main parts. In chapter two a summary is given of the appendix of the document "Preliminary Donor Guidelines for Supporting Microinsurance", by the CGAP Working Group on Microinsurance (2003).<sup>3</sup> This

<sup>&</sup>lt;sup>1</sup> This paper was written as part of the postgraduate diploma programme Feminist Development Economics at the Institute of Social Studies in The Hague, under the supervision of Professor Irene van Staveren.

Staveren.

<sup>2</sup> It is generally acknowledged that microinsurance is not a solution for people living in extreme poverty, who struggle to survive every day (Ahuja and Jütting (2004)).

The CGAP Working Group on Microinsurance consists of representatives from donors, multilateral agencies, NGOs, private insurance companies and other interested parties. It was established in 2001 to promote the development of insurance services for the poor through increased stakeholder coordination and information sharing. The Preliminary Donor Guidelines were produced as part of a broader project, "Identifying Good and Bad Practices in Microinsuraces", funded by SIDA, DFID, GTZ and the ILO. This project also conducted a series of case studies of microinsurance operations around the world. At the end of the two-year project, the Donor Guidelines will be revised to take into account the lessons identified in the field.

appendix gives a short and clear introduction to the subject of microinsurance and concepts related to it, but does not pay any attention to gender. As the guidelines seem to be based on the appendix, and we expect many donors to use the guidelines, a critical gender analysis of the appendix seems relevant and will be provided in the last section of chapter two. In chapter three we go deeper into the gender aspects of risk and coping strategies, and the way they affect each other. In doing so, the existence of a paradox becomes plausible. Whereas women's potential demand for microinsurance might be – due to a number of factors – higher than men's, their ability to pay the required premium tends to be lower. This paradox and the relationship between the different factors leading to it is visualised in the diagram in figure 4. Finally, chapter four describes a number of gender related policy recommendations for donors supporting, or planning to support, microinsurance activities and can be considered as a gender focused complement to the guidelines by CGAP(2003).

#### 2 MICROINSURANCE AND SOCIAL PROTECTION

The appendix of the document "Preliminary Donor Guidelines for Supporting Microinsurance" (CGAP, 2003) provides background information for donors to understand the basics of microinsurance. Microinsurance is introduced and the relationship between social protection and insurance is described. Then, it looks at the risks people living in poverty face, how they deal with them in the absence of microinsurance or social protection, and the effectiveness of these mechanisms. Finally, delivery channels, products and difficulties of microinsurance are described. This chapter provides a summary of the contents of the appendix, sometimes complemented with information from other sources. The objective of including this summary here is twofold: on the one hand it gives a short and clear introduction to the subject of microinsurance and concepts related to it. On the other hand, CGAP's appendix seems to be the basis on which its guidelines for donors supporting microinsurance are built. Considering the fact that gender is absent from the appendix, it seems rather logical that gender aspects don't get much attention in the guidelines either. 4 Nevertheless, as microinsurance is a new subject for many donors, and as there aren't many documents guiding them in how to deal with the issue, it is very

<sup>&</sup>lt;sup>4</sup> Attention for gender is limited to the demand for and design of insurance products (see footnote 10).

likely that the guidelines will be used on a broad scale. Therefore, a critical gender analysis of the guidelines starting with the appendix, seems to appropriate and will be done in the last section of this chapter.

#### 2.1 Insurance basics

#### 2.1.1 Insurable risks

Insurance protects people and enterprises against financial loss by spreading their similar risks among large numbers. A contract, or policy, is issued, specifying the amount of a specific loss that will be covered in case of realization of that loss. The insured pays a premium that directly relates to the likelihood and cost of the particular risk. Not all risks are insurable in this way. The following seven basic principles determine whether a loss is insurable:

- 1. The loss must occur by chance, and not be caused intentionally by the insured.
- 2. The loss must be definite, with reasonable confidence that the loss indeed occurred, and it must be measurable.
- 3. The probability of the loss occurring must be calculable, as this is a key component in setting the premium.
- 4. There must be a large number of similar insured units exposed to the risk because of the law of large numbers which states that the larger the sample observed or studied, the more accurate the estimate or prediction.
- 5. The loss must not be catastrophic, creating losses for large numbers of insured at the same time as costs might be beyond the insurer's ability to honour claims. An insurer can avoid huge losses by means of reinsurance, that is, the transfer of some or all risk to other insurers.
- 6. The policyholder must have an insurable interest in the event, and this event must cause a genuine loss to the policyholder. Ownership of property and family or financial ties of a beneficiary are two ways of establishing an insurable interest.<sup>5</sup>
- 7. Premiums must be affordable.

<sup>5</sup> This principle simply means that a person can only insure him- or herself against a loss that will indeed harm him or her in some way. It is not possible to buy an insurance against a potential loss that has nothing to do with the buyer, that will not affect him/her in any way.

## 2.1.2 The insurance pyramid

Figure 1 shows alternative insurance structures and their relationships to each other. *Social insurance* is at the bottom of the pyramid and protections provided are usually designed to give economic security to large sections of the population. Most definitions include the elements that social insurance schemes have been established through a political process and that the schemes are compulsory for all concerned. The most common schemes provide a degree of income replacement in case of e.g. work-place accidents, sickness, disability, retirement, unemployment and maternity leave and are financed by general tax revenues, special taxes, levies or charges. The schemes may be run by government institutions, special-purpose institutions or the private sector. Social protection is broader than social insurance, and can be defined as "the set of policies and programmes designed to reduce poverty and vulnerability by promoting efficient labour markets, diminishing people's exposure to risks, and enhancing their capability to protect themselves against hazards and interruption or loss of income" (CGAP (2003), p.29). Consequently, insurance is not a substitute for social protection schemes but should be complimentary to it.

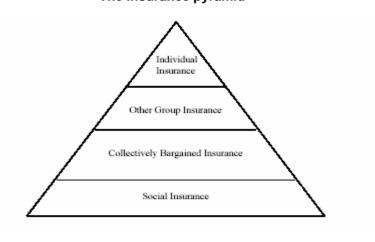


FIGURE 1
The Insurance pyramid

Source: CGAP (2003)

\_

<sup>&</sup>lt;sup>6</sup> Alternatively, Shephard (2004, p.2) describes social protection as "an approach towards thinking about the processes, policies and interventions which respond to the economic, social, political and security risks and constraints poor and vulnerable people face, and which will make them less insecure and less poor, and more able to participate in economic growth. More narrowly, it describes a set of policies that governments can pursue in order to provide protection both to the 'active poor', enabling them to participate more productively in economic activity, and to the less active poor, with considerable benefits for society as a whole."

In the case of *collectively bargained insurance*, the insured normally are groups of employees and the insurance has been agreed on through collective bargaining between trade unions and employer associations. The insurance might deal with group life, supplementary accident and sickness and retirement benefits for example. Workers in the informal economy usually do not have access to these services. The next level in the pyramid consists of *other types of group insurance*. Many different products are included here, both compulsory and voluntary schemes, with premiums ranging from a standard amount for everyone, to individual premiums. The common ground is that participants belong to an affinity group, like a professional association, a church group, a cooperative or a trade union. Finally, *individual insurance* is on the top level of the pyramid. It generally covers life, health, car and other individual needs and is offered by public and private companies. Premiums are collected directly from the individual.

The further one climbs up the pyramid, the more costly the scheme is to operate: more marketing and sales costs are involved, more underwriting (the selection of risks and avoidance of adverse selection) is needed and greater transaction costs are incurred. Concerning group schemes, voluntary schemes are more expensive than mandatory schemes: costs are higher and there is an increased risk of adverse selection.

#### 2.1.3 What is microinsurance?

"Microinsurance is the protection of low-income people against specific perils in return for regular premium payments, proportionate to the likelihood and cost of the risk involved" (CGAP (2003), p. 30). Where available, microinsurance can be used by low-income people as one of several risk management tools. The goal of providing microinsurance should be to extend the advantages of insurance to the low-income market in an efficient and effective way. This does not mean that commercial insurance products can be simply downsized; new and different products that specifically respond to the needs of low-income people should be developed.

<sup>&</sup>lt;sup>7</sup> Brown (2001) defines microinsurance essentially as a financial service which uses risk pooling to provide compensation to low income individuals or groups that are adversely affected by a specified risk or event. Both definitions imply that microinsurance can be found in all levels of the insurance pyramid described above, including social insurance. Normally, however, the word "microinsurance" is not used when the government is the supplier.

## 2.2 Risks and coping strategies of the poor

## 2.2.1 Main sources of risk

Figure 2 shows the risks faced by people living in poverty.<sup>8</sup> Risks faced by people living in poverty are not that different from risks for the non-poor, but poor people are hit more frequently and with a relatively greater financial impact. This is not only the case because they often reside and work in higher-risk areas, but also because they have little or no money to respond to a risk.

Micro Macro Idiosyncratic < Covariant Natural Rainfall Earthquakes Landslides Floods Volcanic eruption Drought Health Epidemic Injury Disability Birth Life cycle Old age Death Social Crime Terrorism Civil war Domestic violence Gangs War Social upheaval Unemployment Economic Resettlement Financial or currency Harvest failure Political Ethnic discrimination Political default on Riots social programmes Coup d'état Pollution Environmental Deforestation

Nuclear Disaster

FIGURE 2
Main sources of risk

Adapted from Holzmann and Jorgensen, 1999, World Bank.

Source: CGAP (2003)

## 2.2.2 Coping strategies

Risks are managed through several mechanisms, including individual, community, private and government social protection systems. CGAP divides *individual risk mechanisms* into individual risk mitigation strategies (ex ante) and individual risk

<sup>&</sup>lt;sup>8</sup> This is a broadly used classification of sources of risk. In general, risks at the micro-level are defined as risks affecting individuals or households, risks at the meso-level as risks affecting groups of households or communities and risks at the macro-level as risks affecting regions or nations.

retention strategies (ex post). Individual risk mitigation strategies involve activities undertaken by individuals or households to avoid or to reduce risk, in order to protect their assets. Once a loss occurs, low-income people often have to fall back on individual risk retention strategies, like selling off assets at below market prices. To avoid this kind of dramatic measures, informal community systems are often developed to assist their members in need. These informal systems may involve collections organized whenever a loss occurs, or a cumulative fund that pays out a fixed amount to assist with the loss. Private systems include risk-managing financial services, offered by MFI's and banks, which give the household the opportunity to get its finances in order without heavy time pressures. Examples are savings products with easy access and emergency loans with quick disbursement. Insurance products can be divided into formal and informal insurance. Formal insurance products are starting to be offered to low-income markets through servicing intermediaries like MFI's. Informal insurance may be provided by several organisations like MFI's, trade unions collecting regular fees from their members, farmers' cooperatives deducting insurance premiums from crop payments and, savings and credit cooperatives deducting premiums from regular savings. Social protection, offered by the government, focuses often on formal sector workers, whereas the most vulnerable people are found outside the formal economy. As a consequence, over two billion people worldwide are not covered by any type of formal social security protection. Usually, their most urgent need is for health insurance.

## 2.2.3 Effectiveness of coping strategies

According to CGAP, most informal and government systems for risk management have proven weak as coping mechanisms, which leaves low-income households to depend on their own strategies or to rely heavily on the support of their community.<sup>10</sup> People's coping strategy will often consist of a variety of sources and its success depends on several factors, like the size of the loss, how often they have asked for the

-

<sup>&</sup>lt;sup>9</sup> The distinction between ex ante and ex post strategies is commonly used and often not limited to individual risk mechanisms, but applied to risk mechanisms in general. In the next chapter it will be shown that the coping strategies to which women and men have access can differ both in type and in effectiveness.

<sup>&</sup>lt;sup>10</sup> There is quite some literature that supports this view. S. Dercon (2005) states, for example, in relation to the weaknesses of informal risk-sharing institutions, that three types of weaknesses are crucial: the type of risk they can handle, the exclusion of marginal groups from these institutions and their apparent inability to handle change.

assistance of others, their ability to help others during their times of need, the cohesiveness of the community, and the degree to which other community members were affected at the same time. Insurance can be an effective means of protection and is most appropriate for costly and unpredictable events. "Insurance replaces the uncertain prospect of large losses with the certainty of making smaller, regular, and affordable premium payments" (CGAP (2003), p. 32).

## 2.3 Providing insurance to the low-income market

In spite of its clear benefits, the provision of insurance to people living in poverty has not yet been very successful. To understand why this is the case, CGAP pays attention to the role of governments, current providers, distribution methods, type of products needed by the poor and the difficulties that have been encountered.

## 2.3.1 Role of the government

Three different roles concerning the provision of microinsurance are distinguished for the government: providing coverage through social protection programmes, creating a suitable regulatory environment and promoting formal sector entry into the low-income market. Regarding the *provision of coverage*, governments, where active, concentrate on the provision of health and catastrophe coverage. Sometimes they provide pensions for civil servants and workmen's compensation schemes for low-income employees. The self-employed or unemployed poor are often not reached.

Protecting consumers from misleading selling practices is the key reason for insurance *regulations*. Governments can create legislation either to control the activities of the microinsurance provider, or to enable it to operate under formal sector regulations. This last measure not only provides the consumer with legal rights, but also enables the provider to access reinsurance cover. The problem with enabling legislation is that few microinsurance experiences are available to base the design on and financial and human resources for monitoring may be lacking. Concerning the *promotion* of formal insurers to participate in the market, CGAP stresses the fact that governments may do so, but that such activities should be combined with consumer education.

## 2.3.2 Formal vs. informal insurance

In the limited number of developing countries, where insurance to low-income households is available, there are normally two forms to be found besides government protection programmes: "The formal insurance industry includes legally recognized insurance companies that have adequate reserves, adhere to capital requirements, employ certified insurance professionals, and operate under the insurance law. The informal insurance providers are not regulated, not re-insurable, and usually without significant capital or reserves." Both types of providers offer similar products, but differ in the way these are developed and managed, and where the risk is born. Informal schemes often have capital problems and are not able to guarantee that members will receive the benefits for which they paid. Although traditionally there hasn't been much interest from the formal sector to service the insurance needs of low-income households, they do have a much greater interest in reaching the poor than bankers: whereas bankers might be worried about getting their money (the loan) back, in the insurance business, it is the clients who pay (the premiums) first and should be worried about the insurer upholding the contract. CGAP welcomes the collaboration between the formal and informal sector that is seen in some countries. "This enables the informal organisation to provide insurance products as an agent without being exposed to any of the insurance risks" (CGAP (2003), p. 34).

#### 2.3.3 Distributions channels

Distribution channels are very important in the marketing of insurance, as it is an intangible service. Issues to consider when choosing a channel to reach the low-income market include costs, efficiency, proximity to the poor, experience and trust. Distribution channels used for microinsurance are individual and institutional agents, insurance distribution integrated with products of another business, direct sales, hospital based health care coverage, and community-based organisations. According to CGAP, a microinsurance distribution channel should already have had financial transactions with low-income people: "It is costly to create a new system just to collect premiums (and to pay claims settlements), so microinsurance will have a greater chance of reaching the poor if it is integrated into existing financial transactions, such as those offered by credit unions and other microfinance institutions" (CGAP (2003), p. 34).

#### 2.3.4 Products

For insurance products for the low-income market to be a success, they should be easy to understand, efficient to administer and, of course, satisfying the specific needs of the poor. The more complex the products are, the larger the probability of failure. Figure 3 summarises common insurance products, with an indicator of their complexity. The complexity is linked to the ability to manage well the controls on the product: how complicated is it to verify or assess a certain loss and what about the opportunities for fraud and moral hazard associated with a product? Furthermore, short-term policies are easier to manage than long-term insurance, as they can be changed relatively quickly when the underlying assumptions appear to be incorrect.

FIGURE 3
Relative complexity of different types of insurance products

Type of Insurance	Protection provided	Complexity of Product	
Crop Insurance	Poor crop yields due to specified causes Natural disaster recovery	HIGHLY COMPLEX	
Health	Medical costs for illnesses and injuries	<b>:</b>	
Annuities, Endowment and	Savings accumulation, retirement		
Whole Life	Premature death	COMPLEX	
Property	Damage, destruction and theft of household assets		
Term Life	Loan principal and interest paid	i	
	Benefit paid to beneficiaries	MODERATE	
	Burial costs	i	
Disability (for loans)	On-going loan payments if borrower becomes seriously disabled		
Credit Life	Loan principal and interest paid on death of borrower	SIMPLE	

Source: CGAP (2003)

## 2.3.5 The challenges of microinsurance

CGAP identifies a number of challenges related to the extension of insurance to low-income people, apart from the delivery problems discussed above. The *high technical complexity* of microinsurance is the first challenge identified. Because of the high level of risks, lack of reliable data and claims volatility, an even greater level of technical expertise and actuarial capacity is needed than for insurance in general. *Lack of comprehension* of the product by the often illiterate (potential) clients is another

problem. Especially clients who haven't made claims are likely to withdraw from a schedule if they don't understand the nature of the product well. Marketing and client education should receive due attention. *Underwriting*, the process of selecting risks for insurance and the conditions of acceptance of these risks, is a highly complicated task. The possibility of moral hazard, adverse selection and fraud should be considered and credible data to assess the risks is usually not available. Concerning the collection of premiums, a paying frequency should be determined that keeps transaction costs reasonably low, but at the same time guarantees the affordability of the premium for the clients. The development of mechanisms to facilitate premium payment is critical to the success of microinsurance. The coverage offered should be limited to the losses absorbable by the capital base of the provider. Independent informal schemes, that do not have access to reinsurance markets, are vulnerable to covariant risks, like epidemics and natural disasters. Schemes linked to larger sources of capital will be able to offer more comprehensive and varied products. Lack of financial sustainability and capacity is yet another challenge. Many microinsurance schemes suffer a large loss in the initial years, resulting from inexperience in underwriting, premium setting, and control development and management. Finally, regulatory requirements such as high capital requirements for formal insurers serving the low-income market, may result in many microinsurance providers operating informally, without access to expertise, reinsurance, or consumer protection oversight. Furthermore, consumers are more exposed to dangers like fraudulent behaviour.

## 2.4 Microinsurance and social protection from a gender perspective

The objective of this section is to have a critical look from a gender perspective at the description of microinsurance and social protection provided by CGAP, which was summarized in the previous sections of this chapter. Where could, and perhaps should, gender aspects have been included? Starting with the section on insurance basics, the description of the different layers of the insurance pyramid could have been done from a gender perspective. Especially with respect to insurance schemes related to work in the formal sector (both social and collectively bargained insurance), the gender aspect is important. Women's labour participation in the formal economy is often low, relative to men's, and more frequently interrupted. This has consequences for the extent to which women can benefit from this kind of insurance. Another remark that could be made concerning the insurance pyramid, is that a layer of

"household insurance", between "individual insurance" and "other group insurance" is lacking. As is the case for the entire appendix, the interests of the individual are, implicitly or explicitly, equated to those of the household. Moving on to the section on risks and coping strategies of the poor, the relevance of a gender analysis becomes very strong and the lack of it perhaps a serious shortcoming. In all three subsections gender aspects are extremely important: Women and men are exposed to different sources of risk and when a risk materializes, the impact on men and women may vary. Furthermore, women and men resort to distinct coping strategies and the effectiveness of these may differ. The next chapter will analyse in detail the gender aspects of risk and coping strategies and the relationship between them. CGAP's subsection on the provision of insurance to the low-income market, also offers possibilities to incorporate gender. Regarding the role of the government in the provision of coverage, the differences in potential benefit between men and women from insurance related to formal employment has already been mentioned. The role of the government in regulation and in consumer education, to protect consumers from misleading selling practices, is especially relevant for women. As Mayoux (2005) puts it, "women have higher levels of illiteracy than men and lower levels of physical mobility in many cultures and may therefore be less able to understand policy conditions and follow-up claims unless these factors are taken into consideration. They may therefore be more recently deceived into taking up schemes which are not to their advantage and also less able to take advantage even of good insurance schemes without considerable follow-up by insurance providers" (Mayoux (2005), p. 4). In order to choose an efficient distribution channel, gender aspects will also have to be taken into account. Of the distribution channels mentioned by CGAP, hospital based health care coverage and community based organisations (especially women's organisations) might be most appropriate to reach women, whereas direct sales and the integration with products of another business could work better for men, depending on the division of tasks and responsibilities between men and women. The subsection on products doesn't mention the fact that women and men, as a consequence of differences in risk attitude, exposure, vulnerability and coping

strategies need (to a certain extent) other types of products. <sup>11</sup> Finally, gender aspects could have been included in the last section, on the challenges of microinsurance. The lack of comprehension, and the related risk of becoming a victim of fraudulent behaviour that might be more relevant for women than for men, has already been mentioned above. Furthermore, moral hazard and adverse selection have a gender component. The literature on microcredit shows that credit officers might assess the risk of moral hazard and adverse selection to be higher in the case of female clients than of male clients. This can lead to lower access to credit products or higher costs for women than for men. A similar phenomenon could occur with microinsurance. Different premiums for men and women might also be set to reflect differences in risk profile. Crucial is the question until what extent differentiation on the basis of gender is acceptable and when it should be considered discrimination. The role of regulation is important here. Concerning premium collection, for women it might be more important than for men that premiums can be paid on a frequent basis, keeping the amounts small. This, because women tend to have lower incomes, lower savings and less cash available.

#### 3 GENDER AND POVERTY INSURANCE PARADOX

The previous section shows that different elements of microinsurance and social protection qualify for a deeper gender analysis: existing insurance structures and their relationship to each other, risks and coping strategies for the poor and more pragmatic aspects of the provision of insurance to the low-income market (corresponding the structure of the discussed appendix by CGAP). In this chapter we go deeper into the gender aspects of risk and coping strategies, and the way they affect each other. In doing so, the existence of a paradox becomes plausible. Whereas women's potential demand for microinsurance might be – due to a number of factors – higher than men's

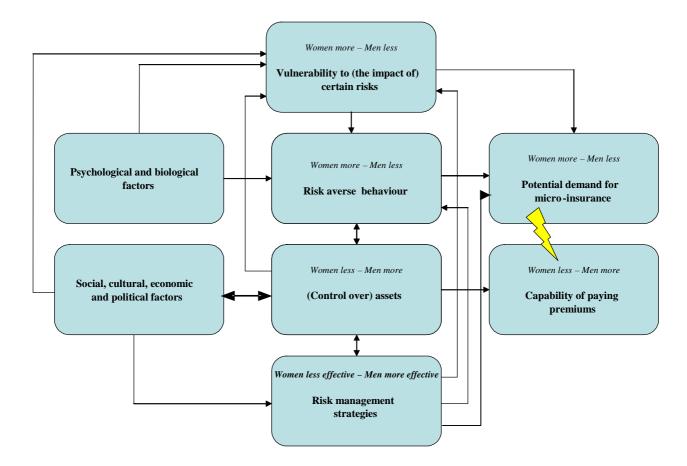
.

<sup>&</sup>lt;sup>11</sup> In part 2 of the Preliminary Donor Guidelines, "Strategies for Donor Support", the gender aspect of insurance products *is* mentioned. Technical assistance is described as one of the ways in which donors could support microinsurance. Technical assistance could be provided on market research, including a demand study, which "should take particular care to assess the different risks and coping mechanisms of men and women – gender differences could significantly affect the design of an insurance product." (CGAP (2003), p. 7). This argument is repeated in the third recommendation (out of 12) stated in the introduction: "Before supporting microinsurance, donors should ensure that there is sufficient demand for such services. Demand research must consider the different needs and preferences of men and women – gender differences could significantly affect the design of an insurance product" (CGAP (2003), p. 2).

their ability to pay the required premium tends to be lower. This paradox and the relationship between the different factors leading to it is visualised in the diagram in figure 4 below. In the concluding section of this paper attention is paid, among others, to conceivable policy implications of this paradox.

FIGURE 4
Gender and poverty insurance paradox – *diagram* 

The four boxes in the center column correspond to paragraphs 3.1, 3.2, 3.3 and 3.4; the arrows connected to a box correspond to the different subparagraphs.



#### 3.1 Risk averse behaviour

An individual's risk perception is shaped by both objective and subjective factors. Objective factors include information on past occurrences of events that negatively influence income or welfare. The subjectivity is found in the estimation of the probabilities that an event will occur and furthermore includes one's vulnerability and potential resilience to an income shock. A household's vulnerability will be determined by its asset base and its access to various risk mitigation and coping

strategies. In general, a relatively small part of differences in attitudes towards risk can be explained by "innate" differences in risk aversion (Weber (2003), Ezemenari, K., Chaudhury, N. and Owens, J. (2002)).

Poverty dimension - Various studies have compared activities undertaken by poor rural households to those of wealthier households. Many conclude that activities by poor rural households tend to be less risky compared to wealthier households. One reason offered is that the poor are "intrinsically" more risk averse. However, an experimental study by Binswanger and Sillers (1983) among villagers in semi-arid tropical India and their review of experimental studies on risk aversion from El Salvador, the Philippines, and Thailand, suggest that both rich and poor farmers hold similar intrinsic attitudes toward risk. Rich respondents and poor respondents exhibited essentially similar measured risk aversion, in spite of large differences in wealth and income. Nevertheless, investment patterns of the two groups normally show that poorer farmers behave in a relatively more risk averse manner than rich farmers. (Ezemenari, K., Chaudhury, N. and J. Owens (2002)). The reasons why the behaviour of the poor may look as if they have more (innate) risk-averse preferences will be discussed further below.

Gender dimension – There is quite some evidence from developed countries that women are more risk averse in their investment decisions than men. Jianakoplos and Bernasek (1998) for example "examined the evidence on gender differences in risk aversion when an individual's entire portfolio of assets is considered, using the U.S. Survey of Consumer Finances. They found that single women are more risk-averse than single men and married couples. As an individual's wealth increases, the proportion held in risky assets was found to increase but for single women, the effect was significantly smaller than for single men and married couples." (Floro, M.S., and Seguino, S. (2002), p. 5) Bernasek and Shwiff (2001) very rightly pose the question whether single women and men are representative for women and men in general. The conclusion of their study is that gender differences are indeed a significant factor in explaining individual investment decisions, and they are not just an anomaly of a single person household. Palsson (1996) examines the behaviour of Swedish households and similarly finds evidence that women are more risk-averse than men. A number of other studies also show that women are more conservative in their investment decisions than men. For example, Bajtelsmit and Bernasek (1996) study United States private pensions and find that women hold a much higher proportion of their portfolios in fixed assets than men. Bajtelsmit and VanderHei (1997) also find gender differences in pension decisions: Women are significantly less likely to invest in employer stock and equities than men. Hinz, McCarthy, and Turner (1996) examine the allocation patterns of federal government workers in the U.S. Thrift Savings Plan and their conclusion is that women invest their pensions more conservatively than men. However, these studies do not explore the reasons *why* risk attitudes and savings behaviour differ by gender (Floro, M.S., and Seguino, S. (2002)).

In the remainder of this section factors are described that might explain the observed differences in risk averse behaviour between the rich and the poor, between men and women. On the other hand, attention is paid to the consequences of the observed differences.

## 3.1.1 Relation with psychological, and biological factors

Gender dimension - Although Ezemenari, Chaudhury and Owens (2002) are not aware of empirical work that addresses the biological dimension of gender and its impact on risk, they suggest that women may experience risk differently from men because of differences attributed to their physiological needs. "Across the lifecycle, individuals require different levels and types of nutrients that will be further differentiated on the basis of sex. In particular, if a woman experienced nutrient deprivation during her early years of life she may be in greater need of resources during her adolescence and reproductive years. These needs may sensitize women's responsiveness to risk." (Ezemenari, K., Chaudhury, N. and J. Owens (2002), p. 5) Floro and Seguino (2002) mention various studies from the field of psychometrics that suggest that women's attitude toward risk differs from men's and demonstrate that gender is a powerful determinant of risk attitudes and judgments. For example, Flynn, Slovic, and Mertz (1994) and Barke, Jenkins-Smith, and Slovic (1997) find in their research on North American scientists that male respondents tend to judge risks as smaller and less problematic. This result is consistent with the previously discussed research on gender differences in attitudes toward financial risk. Whereas in those studies the reasons why were not discussed, the studies in the field of psychometrics suggest there are psychological explanations.

## 3.1.2 Relation with vulnerability to (the impact of) certain risks

Gender dimension – A higher vulnerability also contributes to stronger risk averse behaviour. As Bernasek (2000: 10) argues, women on average experience greater vulnerability than men since they earn on average less than men, are more likely to care for children and elderly, are more likely to live in poverty, and are less likely to have health insurance and pension coverage in their jobs. Furthermore, they have less political power than men. Women's tendency to be more risk averse in their actions may then be a rational response to their greater vulnerability and lack of control over their lives (Floro, M.S., and S. Seguino (2002)).

## 3.1.3 Relation with (control over) assets

Poverty dimension – Poor families often fall into a "poverty trap": they face a difficult trade-off: between accepting risk that could lead to detrimentous fluctuations in income or minimizing risk by selecting low-return investments that perpetuate poverty (Morduch (1999); Binswanger and Rosenzweig (1993), Ezemenari, K., Chaudhury, N. and J. Owens (2002)).

Gender dimension – It is difficult to distinguish gender-based risk preferences from attitudes towards risk, which are influenced by control over assets and access to credit. Although there are no empirical studies that show how differences in access to assets between men and women influence their investment behaviour, there are several studies indicating that greater control over assets by women leads to increased household expenditures on food and increased investments in child health and education. (Ezemenari, K., Chaudhury, N. and J. Owens (2002)). On the inverse relation, from risk averse behaviour to (control over) assets, Bernasek and Shwiff (2001) correctly state that if women are on average less willing to take risks than men, they are also expected to accumulate less wealth on average, since lower risk is associated with lower returns on investment.<sup>12</sup>

<sup>&</sup>lt;sup>12</sup> Barber and Odean (2001) show that there are other factors, apart from differences in risk-aversion, that can lead to differences in returns obtained by men and women. In their study they demonstrate that women suffer less from overconfidence than men. Hence, women's returns decrease less as a consequence of overconfident trading than those of men. Still, women hold less risky positions.

## 3.1.4 Relation with risk management strategies (a.o. limited access to credit)

Poverty dimension – An interesting theoretical explanation behind the observed difference between the relatively more risk averse investment patterns of poor farmers compared to rich farmers, mentioned above, is offered by Eswaran and Kotwal (1987, 1990). They show that credit constraints faced by individuals can overshadow the effect of risk preferences in determining responses to risk. Eswaran and Kotwal's (1990) illustrate this by describing a situation where two agents have identical aversion towards risk, as represented by the same utility function, but differ in their access to credit. The agent with access to the higher credit ceiling is referred to as the rich agent, and the poor agent has access to a lower credit ceiling. Agents are assumed to prefer to smooth their consumption profile by borrowing in bad states and saving in good states (that is, pooling risk across different time periods) and the scope of this consumption smoothing will be restricted by the agent's access to credit. The model shows that although poorer and richer agents have similar risk preferences, poorer agents act as if they are more risk averse than richer agents because of the differences in ability to borrow (Ezemenari, K., Chaudhury, N. and J. Owens (2002)).

Gender dimension - As stated above, it is difficult to distinguish gender-based risk preferences from attitudes towards risk, which are influenced by control over assets and access to credit. "Thus, differences in the behaviour and resource allocation patterns between men and women will be strongly tied to their degree of control and access to assets and risk management strategies." (Ezemenari, K., Chaudhury, N. and J. Owens (2002), p. 5).

## 3.2 (Control over) assets

#### 3.2.1 Relation with cultural, economic, social and political factors

Gender dimension – There is quite some literature on cultural, economic, social and political factors leading to men often possessing or controlling more assets than women. Formal and informal laws in many societies determine issues related to inheritance, marriage, use and transfer rights over assets, income and labour utilization. The larger institutional environment is very important in the determination of women's bargaining power in the competition over scarce resources at home. Goetz and Gupta (1996), in their study of control over loan use in rural credit programs in Bangladesh for example, show that a significant part of women's loans are directly invested by their male relatives, while women borrowers bear the liability

for repayment. This finding has been confirmed by later studies. Inversely, the fact that men tend to have more (control over) assets than women increases their bargaining power and might impact the cultural, economic, social and political aspects of a society.

Quisumbing and Maluccio (1999) use data from Bangladesh, Ethiopia, Indonesia, and South Africa to test whether assets held by men and women when they enter into marriage influence subsequent household expenditure patterns (food, health, education, child clothing, and male adult goods like alcohol and tobacco). The results of the study indicate that the larger the amount of assets under the control of women in Bangladesh, Ethiopia, and Indonesia, the larger the share of household expenditures spent on children's education. Furthermore, the authors find that different assets may have distinct effects on bargaining power within the household, if cultural factors such as "status" or "prestige" are associated with specific assets and thirdly, differences in social norms governing use of assets across communities or ethnic groups may sometimes be more important than variations in asset holding of men and women within those groups. This study clearly shows that attention should be paid to social norms that govern the assignment, control, and transferability of assets by different household members.

Studies on sub-Saharan Africa by Dey Abbas (1997) and Von Braun and Webb (1989) show that even if new agricultural technologies are introduced which in principle could increase, through improved productivity, the wealth of men and women, women might be worse off after such an innovation as a consequence of displacement of women from agricultural activities or monopolizing behaviour by men. Similar cases have been documented in Kenya (Hanger and Moris (1973)) and Burkina Faso (McMillan (1987)). A consequence for policy makers is that whenever technological shocks occur, interventions may be necessary to make sure that the status of women is not undermined by taking into account the potential relative effects on men and their responses (Ezemenari, K., Chaudhury, N. and J.Owens (2002)).

## 3.2.2 Relation with vulnerability to (the impact of) certain risks

A household's asset position plays a central role in its vulnerability and ability to manage risk. As Siegel and Alwang (1999) put it: "Risks are manifested and transmitted in a variety of ways, but the impact of risk on households and their response to it depend, *ceteris paribus*, on their asset base." (Siegel and Alwang

(1999), p. 4). The gender dimension of this relation is illustrated by two examples by Mayoux (2005). She mentions the fact that because of unequal control of property, women can be extremely vulnerable in cases of divorce or widowhood. Secondly, the lower levels of income earned by women makes them less able to invest in disease resistant types of livestock, reliable equipment and to afford veterinary care.

## 3.2.3 Relation with risk management strategies (a.o. limited access to credit)

Poverty dimension – The poverty trap has already been mentioned above: Poor households that are limited in their access to credit often stay poor because of the hard choice they have to make between accepting risk that could lead to pernicious fluctuations in income or minimize risk by selecting low-return investments that perpetuate poverty (Morduch (1999); Binswanger and Rosenzweig (1993)). Dercon and Krishnan (2000) use data from rural Ethiopia to study risk sharing of individual adult health shocks within the household. They find that poor households are affected by agricultural shocks, while richer households are more successful in smoothing consumption levels.

Gender dimension – As stated above, ownership and control over household assets influence an individual's bargaining power over how resources are allocated. Very important is the fact that an individual member's relative claim to wealth also determines her or his potential for pursuing opportunities outside the household in the case it is dissolved or for mitigating risk. Dercon and Krishnan (2000), in their above mentioned study on risk sharing of individual adult health shocks in rural Ethiopia, find that poor households are not sharing risk. Instead, women in these households absorb the impact of adverse shocks disproportionately. How bad the health effects of these shocks on women are, depends on various inside and outside factors that shape intrahousehold bargaining power, such as age gap between partners and customary laws on settlement upon divorce. Similar to the findings of Hoddinott and Kinsey (2000), the most significant of these factors is overall household wealth. Unfortunately, neither Dercon and Krishnan (2000) nor Hoddinott and Kinsey (2000) have information on assets held by men and women. Consequently, it is impossible to draw conclusions from these studies on whether an increase in overall household assets or an increase in the share of assets under the ownership (or control) of women protects them better against adverse shocks (Ezemenari, K., Chaudhury, N. and J. Owens (2002)).

## 3.3 Risk management strategies (among others access to credit)

A common way to categorize risk management strategies is to distinguish between risk management ex ante and risk management ex post. Risk management ex ante aims to reduce the risk of failure or income shortfall by reducing the variability of income. Income portfolio diversification strategies, like crop diversification, income diversification, and migration by either the entire household or selected members to areas with more employment, form an important part of risk management ex ante. The precautionary establishment of mechanisms for compensating income shortfall such as reciprocal exchanges of gifts, loans, and social obligations, and the accumulation of food and other assets that can be drawn down during periods of duress are also included. By risk management ex post coping strategies are meant that reduce the consequences of failure or income shortfall, once it has occurred. Different possibilities are the use of savings, selling of physical assets, utilizing formal and informal sources of credit to stabilize consumption needs, and appealing to social safety nets and private or family networks for financial assistance. In case a family does not succeed to smooth consumption, resource allocation among its members will have to be reduced, and this might ultimately threaten its very existence.

An influential study by Townsend (1994), using data from rural India, finds that rural communities are able to devise informal insurance strategies for pooling idiosyncratic risk in the absence of contingency markets. As a consequence of efficient risk pooling at the village level, households can make independent decisions regarding the allocation of resources to production, levels of household labour supply and consumption choices. This result could be extended to household-level risk pooling, leading to a situation in which efficient risk pooling within the household ensures that negative fluctuations in a member's income do not cause changes in that member's consumption. Sharing risk within the household would enable individuals to rely upon other member's income during times of crises. However, the family will have a more limited pool of resources upon which to rely compared with the village at large and, even more important, the direct dependence of assets across household members is likely to be high, and the risks facing household members will be correlated.

Gender dimension – Goldstein (1999) actually tests for risk pooling across households, extending the work of Townsend (1994). He uses data from rural Ghana

and rejects risk pooling within the household in response to health and agricultural shocks. Goldstein finds that women pool their risk with other nonkin women in the village, while men pool their risk with a wider group that includes clan members both within and outside the village. This illustrates the fact that social networks can be more important than family in helping individuals cope with risk. Goldstein (1999) suggests that in certain circumstances, the household may be the wrong unit of analysis for risk sharing, and thus, a wrong unit of targeting for many policies. "Given these results, a policy such as providing credit or insurance to the 'household head' during a risky agricultural season might not filter through to his spouse should she face unexpected events in her own endeavours" (Goldstein (1999), p. 31). However, to be able to conclude that the household is not pooling risk, we would need evidence that if a woman failed to receive adequate transfers from her social network in the village during an illness, her husband would either not want to or not be able to take care of her. As long as the impact of the shock is successfully mitigated, separate coping channels do not contradict an overall household strategy (Ezemenari, K., Chaudhury, N. and J. Owens (2002)).

## 3.3.1 Relation with cultural, economic, social and political factors

Gender dimension – The way in which men and women respond to risk, even if they have similar risk preferences, might not only depend on the type of market failures individuals face, but also on social norms. Social norms determine for example, whether a woman can work and what kind of work she can do, outside the household. Also her own perceptions of what is possible may depend on social structures, in this way affecting her responses to risk. Women's possibilities of response to shock will be especially limited, where their economic potential is constrained by restrictions on investment in girls' human capital, occupational choices for women in the labour market, or access to local credit markets.

Various studies find that risk management strategies chosen in times of crises might work out better for boys than for girls. These choices are often culturally or socially determined. Rose (1999) shows for example, that in times of crisis, poor rural households in India allocate scare resources to boys at the expense of their daughters, while redressing the inequality during surplus seasons. Behrman (1988) finds that sons receive better nutrition during the bad season, whereas women and girls in

households in rural India are better fed during the good season (Ezemenari, K., Chaudhury, N. and J. Owens (2002)).

## 3.3.2 Relation with vulnerability to (the impact of) certain risks

Poverty dimension – The failure of coping mechanisms might lead to households increasing their labour supply. In case of a covariant shock, which has affected the local labour market, migration may be the only alternative. When men migrate, women and children must fill in the labour slack. If risk management strategies are ineffective, investments in human capital in household members are likely to be reduced. Children might receive less food and be pulled out of school to go to work, resulting in a reduced potential in future earnings for these children. In this way, failures in the labour or credit markets perpetuate poverty and vulnerability across generations.

Gender dimension – Ezemenari, K., Chaudhury, N. and J. Owens (2002) examine available evidence on the disproportionate absorption of shocks by specific household members through the depletion of calories and nutrients, increased incidence of morbidity and mortality, and increased demands on labour time relative to those of other household members, when households are unable to smooth consumption: The impact of a drought on the health or nutritional outcomes of men and women in rural Zimbabwe is studied by Hoddinott and Kinsey (2000). They find that the body mass index (BMI) of women is adversely affected by the drought, whereas men's BMI does not change. Changes in time use might be the reason why women's BMI drop. Higgins and Alderman (1996) use time use survey data from rural Ghana and find that labour time devoted to agricultural activities even in normal times has a strong negative effect on the BMI of adult women, but does not have an impact the BMI of adult males. Some activities require of course more energy than others. As Hoddinott and Kinsey (2000) do not have detailed time use data it is not possible to determine whether the reduced BMI of women is due to a shift towards more strenuous activities or to a relative reduction in calorie intakes.

A well-known phenomenon is the increase in women's labour force participation rates in times of crisis, when many male household heads become unemployed. After the crisis, women often return to unpaid home production. This pattern of frequently interrupted labour force participation makes that women's benefit from contribution-based social protection programs is limited. Furthermore, it

may reduce their welfare in case they don't have a real choice to work or not. They might also get overburdened by the combination of paid and unpaid work in times of crisis (Ezemenari, K., Chaudhury, N. and J. Owens (2002)).

## 3.4 Vulnerability to (the impact of) certain risks

One way to classify risks is along a range from idiosyncratic risks, which occur at the intra-family, family and community level, to those which occur at both community and (inter) national level. (Luttrell, C., and C. Moser (2004)) Another distinction that can be made is that on the one hand individuals may be exposed to different risks, and on the other hand they may experience the same risks differently. In this chapter we will describe differences in exposure to, and differences in the impact of, both idiosyncratic and covariant risks.

Gender dimension – "For poor families and women especially, there is a higher occurrence of idiosyncratic risks in the informal economy. They may find it particularly difficult to recover from repeated shocks such as theft or fire, and are often forced to rely on pooled household resources, which can have an impact on other household members (Lund and Srinivas, 2000)." (Luttrell, C., and C. Moser (2004), p. 5).

## 3.4.1 Relation with psychological and biological factors

Gender dimension – Women are biologically more susceptible to some illnesses, such as STDs and HIV. Furthermore, they are particularly vulnerable to specific health risks, arising from their maternal roles, such as high maternal mortality and complications surrounding pregnancy and childbirth. (Luttrell, C., and C. Moser (2004), Ezemenari, K., Chaudhury, N. and J. Owens (2002) and Mayoux, L. (2005)). Their physical vulnerability makes their property particularly vulnerable to theft and crime. (Mayoux, L. (2005)). On the other hand evidence from Argentina (World Bank 2000) shows that men are more affected by depression (Ezemenari, K., Chaudhury, N. and J. Owens (2002)).

## 3.4.2 Relation with cultural, economic, social and political factors

Gender dimension – Many of the differences in types of risk (and their impact) to which men and women are exposed, are rooted in cultural, economic, social and political factors. For example, women face a higher susceptibility to domestic

violence, which is often socially accepted. They are also more vulnerable to crime and not only for biological reasons. Girl children are particularly vulnerable to withdrawal from school during their adolescence. Women tend to suffer strong restrictions on living arrangements and the freedom they have to remarry is often very limited. (Luttrell and Moser (2004)) The possibility of getting pregnant implies an enormous risk for women, and not only because of the complications surrounding pregnancy and childbirth mentioned above. The responsibility of caring for children means that the risks children bear get to a significant extent transferred to women. Furthermore, the time they spend on caring for the children affects their ability to earn income. Besides the responsibility for children, women are often also supposed to care for the sick and they are affected when relatives have a bad health. (Mayoux (2005)). A large part of gender-related vulnerabilities is linked to the location of woman and men in the labour market, resulting from differences in labour supply between men and women, and to differences in labour incentive effects and transactions costs (Sabates-Wheeler and Kabeer, 2003). Women workers are overrepresented in poorer segments, wages are lower, conditions of employment are less attractive, access to good jobs more precarious, and choice of employment restricted. Mayoux (2005) notes that the fact that relatively many women work in the informal sector make them especially vulnerable to harassment by the authorities, like confiscation of property and destruction of market stalls. Finally, the reasons why women's earning potential is lower than men's are summarized by Lutrell and Moser (2004): "Women's participation in the labour market is more variable and characterised by spells of inactivity and mobility constraints; women live longer, often retire earlier, and experience more occupation and gender discrimination; women tend to be absorbed faster in lower paid and less secure work in the informal sector and displaced faster when work becomes more skilled and needs technological skills (Mehra and Gammage, 1999: 546); differences arising from gender in employment sectors will have differentiated impacts when change occurs, for example increased casualisation and feminisation of the workforce. In some cases, men have been negatively affected by their narrow skills in some sectors. All of these factors can lead to lower wages and lower benefits for women over a lifetime" (Luttrell, C., and C. Moser (2004), p. 8).

#### 4 POLICY RECOMMENDATIONS

Many actors can be involved in the provision of microinsurance and hence, different recommendations could be formulated for these different parties.<sup>13</sup> However, in this section we focus on recommendations to donors supporting MFI's that offer – or are planning to offer – possibly in joint cooperation with a formal insurer–microinsurance products. Consequently, this section could serve as a gender-focused supplement to the donor guidelines by CGAP (2003).

Subjects with strong gender aspects, that a donor, considering supporting a microinsurance project, should have information on, are the distribution channels the MFI is using or planning to use, the role that information or education for potential clients will play and the details on premium setting and collection. Depending on the product and the division of tasks and responsibilities between men and women, some distribution channels might be more appropriate to reach men, like direct sales and the integration with products of another business, and others to reach women, such as hospital based health care coverage and community based organisations (especially women's organisations). Information or education on microinsurance products for potential clients can be especially important for women. Women often show higher rates of illiteracy and sometimes lower levels of physical mobility and this can limit their understanding of policy conditions and follow-up claims. Consequently, they might be tempted to buy products that are of no use to them, or they do not benefit from schemes that are in principle to their advantage. The donor should have a careful look at the way information (if any) is provided to potential male and female customers, taking into account of course the fact that the MFI has an interest in selling large numbers of policies. Regarding the premiums the MFI charges, it is important to check whether different premiums are set for men and women and until what extent these differences should be considered to be discrimination. Concerning premium collection, in general an MFI will be in favour of relatively high, infrequent payments, keeping transaction costs low, whereas clients might prefer to pay lower amounts, more often. This preference by female clients might be especially strong, as women tend to have lower incomes, lower savings and less cash available than man. The

<sup>&</sup>lt;sup>13</sup> As stated in the introduction, we take the existence of microinsurance projects as a reality without claiming that it is a panacea. We support Morduch (2004) in his opinion that even if the conclusion in some years will be that the impact of microinsurance on poverty reduction of women and/or men is nihil, we will need the experience to come to this conclusion.

donor should check whether the MFI takes these possible differences into account and offers flexible payment schemes.

CGAP (2003) does consider the very important gender aspect in the design of insurance products. Their third recommendation (out of twelve) reads: "Before supporting microinsurance, donors should ensure that there is sufficient demand for such services. Demand research must consider the different needs and preferences of men and women - gender differences could significantly affect the design of an insurance product" (CGAP (2003), p. 2). Chapter three indeed shows that men and women are, due to a number of social, economic, cultural, political, psychological and biological factors, exposed to different types of risk, that the same risks can affect them differently, that the extent to which their behaviour is risk-averse might differ, that they have access to distinct alternative risk management strategies and that the same risk management strategy might work out dissimilarly for them. All these factors interlink and might result in a divergent potential demand by men and women for microinsurance, both in terms of the types of products and the extent of the demand. A donor could then limit itself to making sure the MFI performs a gender aware demand research and designs different products to meet the needs of both male and female customers. This is of course already a very challenging task. Ideally, however, a donor would want to know about the structures behind the divergence in demand for insurance products. Maybe, the community under study is a very patriarchal society were women are severely discriminated which makes them especially vulnerable and in need of certain insurance products. In that case, a donor might prefer to (first, or also) support other kinds of projects, aiming directly at the reduction of discrimination. An important variable to look at in the analysis of the structures behind the divergence in demand for insurance products might be (control over) assets. As chapter three shows, the extent to which an individual owns and controls assets is an important determinant in both the (impact of) risks to which he or she is exposed, the level of risk aversion of behaviour, and the extent to which the person is able to manage risk through alternative strategies. A situation where the exposure of women to (the impact of) certain risks is much higher than men's exposure and at the same time her alternative risk management strategies are less effective than men's, might be judged as unfair and be the target of an intervention the donor is willing to finance. The intervention should be aimed at strengthening mechanisms that increase the ownership and control of women over assets and/or at the combat of mechanisms that prevent this increase. In case of success, which is of course not easy to achieve, women's exposure to (the impact of) certain risks will decrease, her ability to manage risks effectively will increase and, what might be an interesting spin-off effect for the MFI, she will probably, as a direct consequence of the increased ownership and control over assets, be able to pay higher premiums for the insurance products she needs (to cover risks she can't cover herself).

In the case a donor does decide to support microinsurance activities of an MFI, possible consequences of the (increased) supply of insurance products should be taken into consideration, both at household level and for the community as a whole. An important lesson learned from the experiences with microcredit, is that access to microcredit by one or more family members may affect the household dynamics and it is important to assess critically who, at household level, pays for the financial product and who really benefits from it. Consequences at community level of an increased supply of microinsurance products might be a decreasing role of the government in the provision of social security and the collapse of community risk pooling mechanisms. In both cases, the situation of the poorest people – often women – who don't have access to microinsurance, will deteriorate.

It should be clear by now that it is impossible to give a blueprint to donors for what a gender sensitive microinsurance programme should exactly look like. The aspects mentioned above depend strongly on the context, especially on the prevailing gender relations, in which the MFI works. As a universal rule though we could say that a precondition for the building of a gender responsible microinsurance portfolio by a donor, is that both staff members of the donor and insurance agents of the financed MFI's should be aware of the many gender aspects related to risk and insurance.

#### REFERENCES

- Ahuja, Rajeev and Johannes Jütting (2004) "Are the Poor too Poor to demand Health Insurance?" *Journal of Microfinance*, vol. 6, number 1, p. 1-21.
- Bajtelsmit, Vickie and Alexandra Bernasek (1996) "Why Do Women Invest Differently Than Men?" *Financial Counselling and Planning* 7.
- Bajtelsmit, Vickie and J. Van Derhei (1997) "Risk Aversion and Pension Investment Choices," in: Michael S. Gordon, et al. (eds.) *Positioning Pensions for the Twenty-First Century*, University of Pennsylvania Press, Philadelphia, p. 45-66.
- Barber, Brad M. and Terrance Odean (2001) "Boys will be Boys: Gender, Overconfidence and Common Stock Investment", *Quarterly Journal of Economics*, February 2001.
- Barke, R, H. Jenkins-Smith and P. Slovic (1997) "Risk Perceptions of Men and Women Scientists," *Social Science Quarterly* 78 (1): 167-176.
- Behrman, Jere (1988) "Intrahousehold Allocation of Nutrients in Rural India: Are Boys Favored? Do Parents Exhibit Inequality Aversion?" Oxford Economic Papers 40(1): 32-54.
- Bernasek, Alexandra (2000) "Gender, Risk and Investment: A Feminist Perspective," paper presented at the Annual IAFFE Conference, Istanbul, Turkey, August 15-17, 2000.
- Bernasek, A. and S. Shwiff (2001) "Gender, Risk, and Retirement", *Journal of Economic Issues* 35 (2): 345-356.
- Binswanger, Hans, and D. A. Sillers (1983) "Risk Aversion and Credit Constraints in Farmers' Decisionmaking: A Reinterpretation" *Journal of Development Studies* 20 (1): 5-21.
- Binswanger, Hans, and Mark Rosenzweig (1993) "Wealth, Weather Risk, and the Composition and Profitability of Agricultural Investments" *Economic Journal* 103(1): 56-78.
- Brown, W. (2001), 'Microinsurance the risks, perils and opportunities', *Small Enterprise Development*, vol. 12, no. 1, p. 11-24.
- CGAP Working Group on Microinsurance (2003), "Preliminary Donor Guidelines for Supporting Microinsurance" (CGAP), document to be found on the web at: http://www.microfinancegateway.org/ section/resourcecenters/microinsurance/.
- Dercon, Stefan, and Pramila Krishnan (2000) "In Sickness and in Health: Risk Sharing within Households in Rural Ethiopia." *Journal of Political Economy* 108 (4): 25-53.
- Dercon, Stefan (2005) "Risk, Poverty, and Public Action" in: Stefan Dercon, ed., Insurance against Poverty, OXFORD University Press.
- Dey Abbas, Jennie (1997) "Gender Asymmetries in Intrahousehold Resource Allocation in Sub-Saharan Africa: Some Policy Implications for Land and Labour Productivity" in:

- Lawrence Haddad, John Hoddinott, and Harold Alderman, eds., *Intrahousehold Resource Allocation in Developing Countries: Models, Methods, and Policy*, Baltimore, MD and London: The Johns Hopkins University Press.
- Ezemenari, K., Chaudhury, N. and J. Owens (2002) *Gender and Risk in the Design of Social Protection Interventions*, Social Protection Discussion Paper Series no 0231, Washington DC: WorldBank.
- Eswaran, Mukesh, and Ashok Kotwal (1987) "Credit as Insurance in Agrarian Economics."

  Department of Economics Discussion Paper, University of British Columbia,
  Vancouver.
- \_\_\_\_\_ (1990) "Implications of Credit Constraints for Risk Behaviour in Less Developed Economies" *Oxford Economic Papers* 42 (2): 473-82.
- Flynn, J., P. Slovic, and C. K. Merck (1994) "Gender, Race and Perception of Environmental Health Risks," *Risk Analysis* 16 (6): 1101-1108.
- Floro, M.S., and S. Seguino (2002) *Gender Effects on Aggregate Saving*, Gender and Development Working Paper Series No. 23, Washington DC: WorldBank.
- Goetz, A.M., and R.S. Gupta (1996) "Who takes the credit? Gender, Power and Control over Loan Use in Rural Credit Programmes in Bangladesh", *World Development* 24 (1): 45-63.
- Goldstein, Markus (1999) "Chop Time, No Friends Intrahousehold and Individual Insurance Mechanisms in Southern Ghana." Working Paper; Clair Brown Fellowship, Fulbright Commission, Institute for the Study of World Politics, National Science Foundation, Social Science Research Council, and World Bank; Washington, D.C.
- Hanger, J., and J. Moris (1973) "Women and the household economy" in: *Mwea: An irrigated rice settlement in Kenya*, ed. R. Chambers and J. Morris, Munich: Weltforum Verlag.
- Higgins, P., and H. Alderman (1996) "Labour and Women's Nutrition: A Study of Energy Expenditure, Fertility, and Nutritional Status in Ghana." Agriculture and Rural Development Department, World Bank, Washington, D.C.
- Hinz, Richard, David McCarthy, and John Turner (1996) "Are Women Conservative Investors?: Gender Differences in Participant-Directed Pension Investments," in: Michael Gordon, Olivia Mitchell, and Marc Twinney (eds.) Positioning Pensions for the Twenty-First Century, University of Pennsylvania Press, Philadelphia, PA, p. 145-156.
- Hoddinott, John, and Bill Kinsey (2000) "Adult Health in the Time of Drought." Food Consumption and Nutrition Discussion Paper No. 79, International Food Policy Research Institute, Washington, D.C.

- Jianakoplos, Nancy and Alexandra Bernasek (1998) "Are Women More Risk Averse?," *Economic Inquiry* 36: 620-630.
- Lund, F. and S. Srinivas (2000) Learning from experience: a gendered approach to social protection for workers in the informal sector, Geneva: ILO.
- Luttrell, C., and C. Moser (2004) *Gender and Social Protection*, paper produced for DFID, UK.
- Palsson, Anne-Marie (1996). "Does the Degree of Relative Risk Aversion Vary with Household Characteristics?" *Journal of Economic Psychology* 17 (6): 771-87.
- Mayoux, L. (2005), 'Gender Dimensions of Micro-Insurance: Questioning the new bootstraps', draft paper for further discussion.
- McMillan, D.E. (1987) "Monitoring the evolution of household economic systems over time in farming systems research", *Development and Change* 18 (2): 295-314.
- Mehra, R. and S. Gammage (1999) 'Trends, counter-trends, and gaps in women's employment', *World Development*, vol. 27, no. 3 (March): 533–50.
- Morduch, Jonathan (1999) "Between the Market and the State: Can Informal Insurance Patch the Safety Net?" World Bank Researcher Observer 14 (2): 187-207.
- Morduch, Jonothan (2004) "Micro-insurance: the next revolution?", forthcoming in Abhijit Banerjee, Roland Benabou, and Dilip Mookherjee, eds., What Have We Learned About Poverty?, Oxford University Press
- Quisumbing, Agnes R., and John A. Maluccio (1999) "Intrahousehold Allocation and Gender Relations: New Empirical Evidence." Policy Research Report on Gender and Development, Working Paper Series no. 2, DRG/PREM Network, World Bank, Washington, D.C.
- Rose, Elaina (1999) "Consumption Smoothing and Excess Female Mortality in Rural India." *The Review of Economics and Statistics* 81 (1): 41-9.
- Sabates-Wheeler, R. and N. Kabeer (2003) Gender equality and the extension of social protection: extension of social security, Geneva: ILO.
- Siegel, Paul B. and Jeffrey Alwang (1999) *An Asset-Based Approach to Social Risk Management: A Conceptual Framework*, Social Protection Discussion Paper Series no. 9926, Washington DC: WorldBank.
- Shepherd, A. (2004) "Policy paper on social protection", Final Draft September 2004, paper produced for DFID, UK.
- Townsend, Robert (1994) "Risk and Insurance in Village India." *Econometrica* 62 (3): 539-91.

- Von Braun, Joachim, and Patrick Webb (1989) "The Impact of New Crop Technology on the Agricultural Division of Labour in a West African Setting." *Economic Development and Cultural Change* 37 (April): 513-34.
- Weber, Elke (2003) "Who's Afraid of a Poor Old-Age? Risk Perception in Risk Management Decisions", in: Olivia S. Mitchell and Stephen P. Utkus, eds., *Pension Design and Structure: New Lessons from Behavioral Finance*, Oxford University Press 2004.
- World Bank (2000) "Household Risk, Self-Insurance, and Coping Strategies in Argentina." White cover draft main report, PREM Unit and LAC region, Washington, D.C.