The Different Techniques and Tools the Poor Use in Cash Flow Management

by

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Introduction

The world leaders want to cut extreme poverty by half in 2015. It is the first of the eight Millennium Development Goals, which has framed the development programs of most donors, governments and development agencies. Unfortunately the Millennium Development Goals do not say what the best strategies are to reduce for instance extreme poverty, which is subject to a deeply divided discussion among development scholars and practitioners. On the one hand Jeffrey Sachs argues that extreme poverty can be stopped within one generation; it merely needs funding, application of available techniques and a political will to implement the first two. Sachs quotes the estimates of the Global Millennium Project to suggest that the amount required from wealthy countries is close to $100 billion per year, which is equal to about 0.7 per cent of GDP of the industrialized nations. His main opponent is William Easterly who claims that after 50 years and more than US$ 2.3 trillion in aid, development programs can show reprehensibly little in terms of concrete achievements. He sees as one of the major shortcomings in development aid the total absence of accountability. Donors are only accountable to parliaments in Europe and America, but there is no feedback or accountability from the target groups, the one or two billion people in the world who live on less than two dollars a day. Despite their antagonistic views on how to reduce extreme poverty, both Sachs and Easterly are equally charmed by the micro credit approach. Both suggest that micro credit is one of the most successful poverty alleviation tools.

Indeed the micro credit industry has attracted the attention of not only Sachs and Easterly but also of governments, donors and the public, with a very simple message that with small loans low income people can pull themselves out of poverty. The argument goes that they will invest the loan in newly established or existing businesses and that the returns of these investments are higher than the interest they have to pay for the small loan. This creates leverage and allows the impoverished to have a higher sustainable income after they have repaid the principal and interest amounts.

This reasoning rests on an explicit and implicit assumption. People like Yunus –the founder of the Grameen Bank in Bangladesh- view poor people as innovative and as small entrepreneurs who lack investment capital to improve their lot. A less often heard assumption is that the poor entrepreneurs also need local investment opportunities. Especially when small loans are linked to poverty alleviation, both are assumed to be there.

Recent micro credit studies cast doubts on the entrepreneurial skills of the poor and it is not a sure thing either that there are plenty of local investment opportunities within reach of the impoverished as long as governments in developing countries pursue an urban and industrialized biased development policy. It is not surprising therefore that recent literature on micro credit pictures a less certain link between poverty eradication and small loans and some even claim that micro credit is oversold. They acknowledge that small loans alone are not the silver bullets. CGAP -an influential microfinance think tank- fro instance has rephrased its position and nowadays supports micro credit interventions only as long as it helps the poor raising their income, building assets and offering a cushion against external shocks. In other words not all micro credit programs lead to less poverty.

Perhaps that this uncertain link between small loans and poverty alleviation is the outcome of a poor understanding of the demand side for financial services at the bottom of the pyramid. Many micro credit interventions simply assume that there is a huge demand for small loans among the millions of the cash hungry small entrepreneurs in Asia, Africa and Latin America. Such statements are usually not backed-up by a thorough analysis of the demand side for financial services and hardly anything is said about the financial behavior of low-income people. From whom did they previously borrow, so before micro credit was introduced and for what purpose? Why did they select this lending source? How do the poor clients actually use the loans and is this different from the written loan use? What are the financial priorities of these people and how do they prioritize the repayments of multiple loans or when repayment schedules conflict with other urgent expenses? What mechanisms do they already have to manage cash flow, or to take advantage of sudden investment opportunities or shelter against risks?

In an effort to better understand the demand side of small financial services, I like to review some common patterns of financial behavior and decisions making processes among small entrepreneurs and poor households; common patterns and processes I feel are insufficiently addressed in literature. With a focus on financial behavior I can still link micro credit interventions to poverty alleviation. After all micro credit is a debt when the clients receive the loan and thus costs money. Only the *use* of this money determines whether future income will be generated; income streams that are sufficient to pay back the loan plus interest and generate a surplus afterwards. This use of money is not only determined by other supporting development measures that hopefully create investment opportunities, but also by the financial behavior and attitude of the poor to make use of the newly created investment opportunities.

In this article I like to discuss the characteristics of income and expenditures of the impoverished and how both are the cause and the outcome of financial behavior. It is from this perspective that I would like to discuss the role of microcredit, thus why poor people borrow and how they will use this money. Next I will show how the impoverished deal with risks. At the end of this article I would like to discuss what opportunities microfinance institutions and commercial banks have in serving the poor and what particular financial products they could offer to meet the needs of low income people.

The article mainly describes my working experiences in different parts of the world especially in Africa and Asia. The article further draws upon a small survey I carried out in December 2008 in Indonesia. Finally I have compared my experiences with finding of a selected list of recent books and articles on microfinance and financial behavior (see list of references).

Income Characteristics

The standard statistical measurement of extreme poverty is an income per person of less than 1 US$ per day, using the Purchasing Power Parity (PPP) method of the World Bank to compare incomes in different currencies and countries. An income between 1$ and 2 US$ per day is defined as moderate poverty. This yardstick of living on one or two dollars a day per person however misses the point if it does not take into account the characteristics of income. Income of the indigents is not only low; it is also uncertain and unpredictable. An equally fundamental challenge of the poor is the timing or frequency of income (daily, weekly, seasonally or even yearly); the reliability of income (is the amount predictable thus is the amount same each time and is the timing predictable) and stability of income (thus how long do the impoverished rely on a particular source of income). Characteristics of income influence as much financial behavior as income level. It already makes a difference whether the impoverished earns every day one dollar, or after one week, 7 dollars or in one go, 30 dollars at the end of the month. When a factory in Blantyre (Malawi) offered the laborers the option to either pay them at the end of the month or twice a month (10th and 27th of the month), nearly all opted to receive their salaries every fortnight. Frequency of income is thus important to the poor.

If income is small but reliable, life is still much easier than if income is low and unreliable. Reliability makes planning of expenditures much easier and it would be much easier as well to calculate how much you can save or how much you can borrow.

In Africa I have observed that the number of hours a self-employed person works depends on the business volume of that day and the time it takes to earn a pre-determined amount of money. If for example a trader on the Blantyre market targets to earn 400 MKW per day (between 2.5 US$ and 3), he or she will work as many hours until this person has actually earned this amount. However there are good market days and poor market days and so on good days the market vendor may stop working at for instance 2 PM, but on poor market days, he or she can continue till it is dark and the market closes.

I believe a more rational way is to exploit good market days and have long working hours and perhaps work only four hours during poor market days. Daily income would certainly fluctuate but income per hour and the average income over a longer period (e.g. week or month) would most probably be higher than when market vendors stop working when they have earned the targeted income for any particular day.

I have interpreted this behavior as a concealed effort to have the same income every day in order to manage the cash flow. The wish to have a regular income is commonly felt in poor neighborhoods in Baguio, the Philippines as well. People with an irregular income pattern envy those who have a regular and fixed income such as teachers, civil servants, or employees working in a shop or small enterprise. This envy still exists even when they realize that the monthly income is less than the average income of the casual laborer or petty trader or small farmer.

The characteristics of the poor household income depend to a large degree on the main earning source. Microfinance studies give the impression that the impoverished people mainly earn their income through self-employment or as casual laborers. A 2003-survey in Baguio however concluded that a

relatively large number of people in the poor neighborhoods (about 70%) relied on salaries, but the situation was very different in Indonesia where only one third of all respondents had a monthly salary. In the townships of Blantyre (Malawi), residents estimate that 70% are self-employed and 30% work as casual or more permanent laborers. The most common type of income in these townships is petty trade (buy and sell), followed by the combination of processing and selling (e.g. prepare food and sell). The large number of people who are vendors made me wonder whether the market is not saturated with goods, but many claim that the demand is still higher and selling produce is more limited by capital shortages to buy new stocks or materials than lack of clients. The large number of people who market also implies that they have income on a daily rather than weekly or monthly basis. Other sources of income for the people in the townships include employment in the factories in one of the industrial estates of Blantyre and neighboring Limbe; working for the government (civil service) or employment in one of the smaller shops and other establishments. It would be a mistake however to think that having a permanent job in the private sector is a guarantee that income is reliable and stable: impecunious are easily fired. On the other hand, also being self-employed can generate a very stable source of income.

Many poor families depend on more than one source of income. In Indonesia 55.4% of the households had two or more income sources and a similar figure I saw in the Philippines (1.6 jobs per family in urban areas and 1.3 in rural areas). Also in the townships of Blantyre nearly all households have two breadwinners. Both spouses work: children often do not contribute to the income and also remittances are not a common income source (unlike in the Philippines and Indonesia). The Blantyre men seemed to control the household money, even the money earned by women, a pattern that is similar in Indonesia and the Philippines.

Income Characteristics of the cooperative members in East Java

# of income sources			Stability of main income source			Frequency of main income			Predictability of income main source		
	In #	In %		In #	In %		In #	In %		In #	In %
1	90	44.6%	>5 years	156	77.2%	Daily	21	10.4%	Always the same	60	29.7%
2	95	47.0%	1-5 years	41	20.3%	Weekly	22	10.9%	Different	112	55.4%
3	17	8.4%	<1 year	5	2.5%	Monthly	67	33.2%	Very different	30	14.9%
>3	0	0.0%				Seasonally or yearly	92	45.5%			

N=202

Source: Survey results East Java, December 2008

My argument is that timing (frequency), stability and predictability of the income sources are more important considerations on which poor people base financial decisions than the absolute but low level of income. With financial decisions low-income people want to manage cash flow and it is more difficult to manage cash flow when income is unstable, has a low frequency and is unpredictable. Though all destitute aspire to have higher incomes, I believe they value the other characteristics of their income even more. This argument then rebukes the idea that many poor people are small entrepreneurs who would more easily accept the risks associated with an unstable and unpredictable cash flow.

Expenses

Similar to the importance of income characteristics, expenses need to be categorized. Each type of expense challenges the penniless and in combination with the income characteristics provide a better understanding of how the poor behave financially. Expenses can be classified in frequency thus daily, monthly, seasonably or annually; whether these are predictable or unpredictable and whether these are "negotiable" (see also overview below). Food for example is a daily expense and is predictable but the cost can be negotiated (*instead of meat, we eat only vegetables today*). School fees are predictable in timing (you know when to pay school fees either quarterly, per semester, annually) and usually in amount as well (you know how much the school fees are; but not necessarily the cost of books and uniforms). Weddings or births are predictable as well (you date and plan a wedding and once the woman is pregnant she knows when the child will be born), but the costs are not known. Costs related to birth and wedding are negotiable to a certain degree. Illnesses or deaths are usually not predictable: time and amounts are often not known. Damages in or on the house are not predictable in time as well but sometimes the repairs of the house or replacing household or kitchen equipment can be postponed (depending on what needs to be repaired). Repayment of a loan is not an expense (only the interest is) but does influence the cash flow. When the borrowed money is sourced from the informal sector, repayment can be negotiated, which is often not the case when the loan comes from a microfinance institution or a bank. The *timing* of farm inputs depends on the crop and season/weather and has therefore little flexibility. *Costs* of farm inputs have some flexibility, but often with consequences for lower future income streams as well.

Expense classification			
Fixed in time and amount	**Fixed in time, negotiable in price**	**Timing is not fixed; amount can be negotiated**	**Unexpected, amount cannot be negotiated**
Rent	Food	Clothes	Serious illnesses
Loan from formal and semi formal lender	Utility bills (water, electricity)	Deaths	Tsunami, earth quakes
School fees (subject to inflation)	Births	Pre-paid mobile phones	Droughts; flooding
Landline phone; subscription mobile phone	Weddings	Transport	Fire, theft, personal accidents
Commitment savings (some poor and MFIs treat savings as an expenses)	Cultural and religious events	Entertainment; purchase TV, house appliances	
Subscriptions	Home improvement	Home repairs; set up business; purchase land	
	Farm or business inputs (though low quality inputs affects future income)	Small or not very serious Illnesses (go to a hospital in town or field clinics)	

NB: the classification of expenses is not always straightforward and expenses may fall in a different box because of differences in culture and personalities. Sometimes people are not free or do not feel free to cut on certain expenditures for instance weddings, contribution to religious events, especially when there is a lot of community pressure. The poor can have some degree of flexibility with small illnesses, but if not treated well, the illness can turn into a serious ailment with grave consequences. The last column includes expenses as a result of common or individual risks. I will discuss this further under the heading managing risk.

Planning for expenses, which are fixed in time and amount, are the easiest; being prepared for unexpected events and where the costs are not known is most difficult. Most of the expenses however fall in between these extremes. Many Microfinance Institutions (MFIs) offer study loans or loans to pay school fees, but do not offer loans in case of emergencies or calamities. This rational is difficult to comprehend because school fees are known in advance -when to pay and often how much- so you can prepare yourself and introduce a special education *savings* program.

The overview on the previous page is not extensive, nor authoritative and subject to discussion and change, but what it does show is the complexity impecunious people face in deciding how to manage their expenses. Not only is their income often unpredictable, unreliable and unstable, so are many of their expenses. It follows therefore that financial management is even more important or vital to the poor than it is for the less poor or the better off. For the near impoverished good financial management sometimes has to do with survival; for the better-off it has more to do with protecting assets and net worth.

The survey in East Java also looked into the issue which of the expenses mentioned in the overview are most difficult to finance and why. The most frequently quoted *expense* were expenses related to the business and the farm and the most frequently mentioned *reason* was that the amount was high. It was mentioned as a most difficult item to finance because the quality, quantity and timing of business inputs have consequences on the future income of the household. Other expenses, which are difficult to finance, are unexpected expenses because of illness and breakdowns in or on the house. Food is not often mentioned even though it is a recurrent expense and when calculated over the year, by far the biggest expense (can reach to 70 to 90% of all expenditures of a household). A similar survey in the Philippines (2003) on the other hand showed that food and medicine expenses came out as the most difficult costs to finance, especially in the urban areas.

Expenses which are difficult to finance	in #	Percentage	Reason why it is difficult to finance	in #	Percentage
Food	14	6.9%	Amount is high	182	90.1%
Utility bills	91	45.0%	Expenditure is unexpected	158	78.2%
School fees, uniforms, books	91	45.0%	It is a daily expense	61	30.2%
Business inputs	172	85.1%	Payment date is fixed and not paying has severe consequences	57	28.2%
Clothes	16	7.9%			
Breakdown or repairs on and in the house	163	80.7%			
Illnesses & hospital bills	144	71.3%			

N=202

Source: Survey results East Java, December 2008

In the next section I would like to demonstrate how low income people use some of these expense characteristics to manage their cash flow and how such decisions have a different impact on the decision makers (the two spouses, husbands and wives).

Managing Cash Flows

Internal Strategies

Managing cash flows means aligning income and expenditures and avoid insolvency. I stressed the importance of timing, reliability and stability of the income sources and made the point that frequent income of the same amount of money over a long time makes it easier to manage cash. The impecunious people increase the frequency of income among others through diversification of the income sources and their search to look for a job and become an employee. If one income source does not give stability and reliability, several income sources combined may. That is why the wife may work part of the day for the government and the other part of the day in her food store or grocery store. This is also the reason why impoverished do not give up odd and unstable part-time sources of income easily, even when a more rewarding and stable source emerges, or why farmers do not want to specialize and grow commercial crops only.

Even with multiple income sources, the timing of income flows and expenses seldom match. The most obvious strategy is therefore to save some money during days or periods that income sources exceed expenses, and use the savings when income is insufficient to cover the daily expenses. Savings thus plays an important role in cash flow management, but does not come out very well in many microfinance studies. This reinforces the belief that impoverished people cannot save and that their income is too low to save. But the opposite is true: the poor have to save in order to survive; it is an essential tool in cash flow management (Rutherford, 2000).

The problem with savings is the interpretation *what constitutes savings?* Economic theories define savings as postponed consumption, but against what period? For many people savings is surplus money when the income cycle is over (usually one month) and a new one starts. This kind of savings is also known as thrift savings. For others, savings is money kept aside for certain planned expenses. These planned expenses may include the purchase of a TV, a bike, a trip around the world, but not to buy food or a utility bill. Money put aside within an income cycle is arguable not savings, but part of budgeting, but what if the income cycle is very long such as in the farming community?

In absolute terms the most important expense of low-income people is food, which is a daily expense and therefore it is easily understood why people keep money at home. The poor however keep more money at home than just for food; money is also kept under the mattress or roof as a device to finance future expenses or unexpected events. Surveys usually do not record this cash at home as savings and also the destitute do not consider money kept in or near the house as savings. Similarly the poor do not consider savings in kind (gold, cow, goat, other live animals, stocks) as savings, nor is it defined as such in surveys.

But underreporting of savings does not stop here: people who participate in a rotating savings and credit association or ROSCAs (I will come back to these associations later in this article) put aside every day, or week or month a substantial amount of money, sometimes even up to 10 to 25% of their income. Also these amounts are not labeled as saving; not in surveys, but also the participants in these ROSCAs do not see the pooled amount as regular savings.

In the definition of the poor, savings refers to amounts of money people have in the bank. Thus if the survey asks them whether they have savings without clarifying what constitutes savings, the respondent will think of amount of savings they have in the bank or credit cooperatives and the answer will therefore be no. Subsequently the questionnaire gives a misleading picture of savings potential and importance among the impoverished.

While savings is one way of managing cash flows, cutting on expenditures is another (of course in practice people often do both). The overview below shows how people in East Java cut their expenditures in response to hiking food prices in 2008.

Adjustments to the food crisis (hiking of daily expenses)

	#	%		#	%
Eat less meat	125	62.5%	Cut on electricity consumption	98	48.5%
Less money for leisure	123	61.5%	Used savings	90	44.6%
Buy cheaper substitutes for daily necessities	117	58.5%	Sold consumer related assets	82	40.6%
Cut on mobile phone expenses	101	50.5%	Cut on allowances for children	35	17.3%
Borrow from friends	101	50.5%	Eat less tempeh and tufo	28	13.9%
N=202			Cut on school expenses	9	4.5%

Source: Survey results East Java, December 2008

It is not surprising that households cut first on daily expenses and leisure time expenses. Cutting on food has an immediate impact and gives the household the feeling that they adjusting their expenditure level. It is also understandable because the biggest expense of poor households during the year is food. However by approaching cuts in the household budget this way, the low-income people consider expenditures on food in isolation from the other expenses. What is meant is that the poor do not first consider their entire expenditure pattern and on this basis make decisions, which expense is not necessary at all, which expense can be reduced and where no further cuts should be made.

Cutting on food expenses also has other impacts: it may affect the quality of the most important asset of the poor, namely labor. It can also lead to increased tension and fights between the spouses. Even when both spouses have agreed on cutting expenses on food, it is usually the woman alone who has to live with the consequences and has to implement the budget cut plan. That same survey in East Java showed that 63 couples or 31% had serious arguments on cutting expenditures, while another 107 or 53% households disagreed on where to cut expenses (especially money spent on leisure activities). A particular feature of household financial behavior as well is that they do not easily cut on school expenses and inputs for the business. This feature was also observed in a survey in the Philippines.

The budget cuts require the cooperation of all members of the household and when one or more members do not keep their promises, it heightens the tension within the household. Sometimes budget cuts do not seem to work. I have often done a simple exercise with the main financial decision makers of the household and asked both husband and wife to prepare a detailed list of all their expenses. I then make a copy of the list and ask each of them independently to prioritize these expenses in a top 5 most important expenses where further cuts are not possible. If the spouses have a good internal financial

communication both husband and wife will have the same list of expenses, but if one expense is different, the priority list is actually six. Often husband and wife are not aware that their priority list of expenses where no cuts are possible is six or even more (instead of the five), and this leads to frictions and the belief that further cutting of expenses leads to nothing.

To summarize, cash flow management of low-income groups is first and fore all diversification of income sources, savings and cutting or postponing expenses. The effectiveness of these measures –especially the last one- depend to a large degree on effective communication between the main financial decision makers. This is also true for the decision to establish financial links with the immediate environment, something I want to discuss in the next section.

Financial links with the environment

Poor households do not only try to align income and expenses by making internal adjustments; with the irregularity and unpredictability of income and similar characteristics for expenses they will soon have to establish financial links with the outside world. These links further serve the purpose of aligning cash coming in and cash going out.

The first of these external financial links are with relatives, friends and neighbors and they form the bulk of the informal finance sector. In the Philippines, households in the countryside on average had three simultaneous financial links with their immediate environment and in the city this was even four. Impoverished people were often lenders and borrowers at the same time: over 80 percent of the people were lenders and over 90 percent were borrowers. Friends, family, and relatives offer small, interest free and short-term loans that are highly flexible in repayment schedules and therefore are very well suited for cash flow situation of the poor household.

It emerges that financial linkages with individuals are not limited to loans only, but also include savings. Temporarily parking money with a trusted person is not uncommon, but also providing loans to friends and neighbors can be as much an effort to park money, as it is a socially moral thing to do to assist people who are in need of a loan. Low-income households also deposit money with professional money guards and they are often willing to pay these people for this service. Literature gives examples from India where money guards pay a visit to their clients to collect deposits every day, who in turn accept a negative rate on savings[1]. The poor are willing to do so because without this service, they would have never managed building up sufficiently large savings in the first place. These savings instruments however are far from perfect: the money guard may disappear, money can be lost and trusted people can cheat. A study of MicroSave in Uganda in 2000 found that people who saved informally lost on average 22 percent of their savings.

One of the reasons why the microfinance industry believes it should extend loans to the bottom of the financial market is to drive the “evil bloodsucking moneylenders” who charge extreme interest rates out of the market. But how important are professional moneylenders for the poor and how much evidence is there that low-income households are financially bounded to the professional moneylenders? Only a

[1] The Esusu in Ghana is another example of collecting savings from individuals, but this is more institutionalized and clients who save with the Esusu collectors do receive a positive interest rate.

small fraction of the financial links in the Philippines and Indonesia was actually with “bloodsucking” moneylenders. Merely in the market places of Baguio vendors borrowed from so-called Bombay lenders (moneylenders of Indian origin). These market vendors generally were very positive about the Bombay lenders, who offer flexible and convenient financial services and the high interest rates did not bother them. Moneylenders are commonly active in market places in other developing countries too, which by no means imply that this is the only market segment they concentrate on. Also in Baguio city, Bombay lenders can often be seen on their motorbikes during the day visiting clients in the neighborhoods.

The disadvantage of having financial transactions with friends and relatives is that these sources are unreliable and insecure (loan requests can be turned down because of lack of money; poor or no recording of the financial transactions can lead to disagreement later on, there are cases of fraud and misappropriation; savings can be stolen or lost). Loans further do not have a clear set of rules or expectation for both parties involved in the transactions. This is the mirror side of the before praised high level of flexibility. Another disadvantage is lack of privacy and the reciprocation condition, thus the need to offer similar favors later on. I spoke to a lady in Baguio who just finished a transaction with a pawnshop. She pawned her jewelry and the interest she had to pay after one month was close to 20% (actually the interest rate was fixed for one month at 7% but she wanted to borrow for 10 days only, which increased the effective monthly interest rate to 20%). I asked her why she did not borrow from friends and relatives and she responded that she did not want to explain why she needed the money. Further she did not like the idea that borrowing from them today, may mean that she has to lend to them tomorrow. Thus though informal arrangements mean money lending at flexible terms, near to the house (close proximity) and with other big conveniences, these sources also lack reliability, privacy and transparency.

Another tool to manage cash flows is the participation in rotating or accumulating savings and credit associations. These are informal associations of usually 10 to 50 people, whose members on a regular basis (daily, weekly, monthly) collect money that is pooled from all participants and distributed on one member each time they meet. This rotation continues until all members have received the pooled funds. The difference with an accumulating savings and credit association is that not all the funds are given to a member each time they meet, and that the group puts part of the funds in a bank or lends it out to even non-members. Participation in such ROSCAs or ASCAs is useful to finance planned expenses, but sometimes membership can also be pledged to accept a loan from informal lending sources. Even MFIs and commercial banks may accept a membership as a partial collateral for loans. When the rotation of the fund is flexible or when it is based on an auction system, participation can also be used to finance unexpected cash outlays of individuals.

In Malawi the rotating savings and credit associations are called Chipelenganyo. Nearly all people in the townships of Blantyre are a member of one or more Chipelenganyo associations. Especially women are active in these groups. Membership is between 12 and 50 participants, convene on a daily or weekly basis and pool small amounts of money in a common fund, which is distributed to one individual each time they come together. The weekly contribution varies from 200 to 500 Malawian Kwacha (1.30 US$ to 3.5 US$). The rotation continues until all members have received the pooled resources and then are re-organized often with the same people, but sometimes with a different composition.

To meet the financial obligation, women sometimes receive the money from their husbands; even borrow from in-laws and friends. When a member cannot meet the weekly obligation, the other members advance the fall out, until the person is able to pay. Frequently missing the payment however is reason for expulsion and the groups apply strict reciprocal rules. If a member refuses to contribute, moral pressure is put on the defaulter and if this does not help the member is expelled from the group, but only after personal items are seized from the house and sold to make up for the shortfalls. After expulsion it will be difficult for such an individual to join another group.

The townships of Blantyre also have ASCAs, thus groups that accumulate money. Also these groups meet every week not only to contribute money but especially to decide how the money will be invested. One of groups had 15 people and collected 100 MKW per member per week. When I interviewed the members, the group had 72,000 MKW in a bank and 40,000 MKW was loaned to 8 members (5,000 MKW per member). These were short-term loans, usually had to be paid back after one week and carried an interest rate of 10% per week. Another group deposited the entire amount of 55,000 MKW in a bank account and a third group has a balance total of 138,000 MKW of which 48,000 MKW was in a bank and 90,000 MKW with the members (the approximate loan amount is 3,000 MKW per borrower). The groups only kept a rudimentary bookkeeping system but so far there have never been any problems. Unlike the Chipelenganyo that dissolve and regroup after one year, members are jealous about the group development, thus they aspire to keep the group intact and let it grow from strength to strength.

ROSCAs and ASCAs also have a social and part insurance function. For instance members of these groups contribute money when one of them marries. Profit from lending is used as an insurance to pay part of the expenses when a member dies, falls ill and issues interest free loans when the business fails.

ROSCAs and ASCAs provide the right doses of discipline, security and flexibility to the members and their financial needs. However these institutions are not the silver bullet for cash flow management as well. They fail to support the desire of some poor to accumulate money for larger investments (e.g. to buy land, pay for wedding or funeral; house improvement) but also to finance working capital for small businesses. The pooled money is also seldom sufficient as an insurance to recover from a major crisis. The rotation and the amount of the fund often do not coincide with business needs and especially when several members have the same business and the same working capital needs, only one member can be satisfied and receive the fund. Especially ASCAs do not have a proper recording system and with this are subject to fraud and misappropriation of funds. Finally it is my impression that ROSCAs and ASCAs are more commonly found in cities where they can attract members who have more diverse cash flow needs.

Another financial link to align income and expenses is savings and credit cooperatives and microfinance institutions. Microfinance institutions are often organized by Non Governmental Organizations (NGOs) with multiple development objectives and rely on donors to fund their portfolio. These institutions have mushroomed over the last twenty years and offer small loans to millions of poor people around the world. Many however offer only inflexible one-size-fits-all loan packages with a fixed predetermined amortization schedule that are not attuned to the cash flow of the low-income people and ignore other

financial services they have, such as savings and payment services. Consequently, even in the microfinance rich Bangladesh with an extensive coverage and reaching out to almost all the impoverished, MFIs only count for a small percentage of all the financial transactions the poor do during the year. Low-income people nevertheless appreciate microfinance providers as reliable lending institutions and therefore prioritize the repayment of micro credit services above those of other providers, especially the informal sector. After all, repayment of an old loan today more or less guarantees a new loan tomorrow. For this reason -and also given that most of the loans are used for other purposes than officially stated in the loan agreement- these institutions are important financial service providers to the poor.

My experiences with these institutions are nevertheless mixed to say the least. They operate mainly in urban and semi urban areas and have yet to venture into the countryside. In my surveys in the Philippines and Indonesia they do not come out as very important providers of financial services, but surely they play a more important role in countries such as Bangladesh, Uganda, Ghana and Bolivia[2].

People at the bottom of the pyramid *do* use commercial banks to manage their cash flow. Several surveys of FINSCOPE in Africa show that low-income people have a savings account and even more poor people use the bank for payment services. Of course a still bigger part of the poor households does not have a savings account and actually the number that operates a bank account is still very low. In Malawi and Rwanda about 20% of all households have access to the formal banking sector, which is marginally better than in Uganda (18%) and Kenya (17%), but worse than some countries in South Africa (Botswana -44%- Namibia -45%- and South Africa -63%). In Asia the percentages of poor people having a bank account are usually much higher than in Africa.

Commercial banks increasingly venture into microfinance, sometimes compelled by government regulations. In India for instance commercial banks by law have to become engaged directly or indirectly in microfinance activities and it seems to work. In the Philippines the government tried a similar policy in the 1980s and 1990s, but here it failed. Sometimes however commercial banks on a voluntary basis enter this market segment either because of an increasing competition and saturation in their traditional market (government bonds; corporate finance) or because of a realization that microfinance activities weather out better during financial crisis than their traditional market.

The efforts of commercial banks in microfinance however are haphazard. They simply do not understand this market and show little willingness to apprehend what the market demands are. One bank in Blantyre offered an industrial company salary processing services. After one year of salary

[2] I admit that some microfinance institutions have gone a long way ever since their establishment and some have even transformed themselves into genuine financial intermediaries. Perhaps my reservations have also to do with the observation that management and board do not have a financial stake in the institution and poor financial results of the operations bears no consequences to them (board and management do not invest own capital and do not lose money when the portfolio deteriorates or are fired). Similarly, in cooperatives members are owners and clients at the same time, with members having opposite financial interests from borrowers. I consider these serious institutional weaknesses. Further most MFIs and cooperatives depend on donors to fund their portfolio (either as grants but increasingly as concession loans) and therefore are more accountable to their funding agency than to the clients they serve. Most cooperatives further cannot offer innovative, flexible and reliable financial services because of internal bickering and opposite politics.

processing, balances on the savings accounts were still low with estimated averages of no more than 2,500 MKW (between 16 and 18 US$). Of the 21 employees I interviewed half maintained the minimum balance of 500 Kwacha (approximately US$ 3.20) and another 7 had a balance between 500 and 2,000 Kwacha.

The workers had a salary bracket between 7,000 and 10,000 MKW per month, yet this is not the reason why savings balances were low. Workers usually withdrew all their salaries (except for the minimum balance of 500 MKW) often the same day they were informed that their accounts had been credited. In other words the laborers saw the new service as just another way or place to receive salaries.

The bank clearly failed to deepen the financial inclusion of the workers. The workers did not see the bank as a place to save or to take on additional financial services because the bank did not really promote such services. The bank was focused only on the fees it received from processing the salaries and withdrawing money from the workers' account.

Poor people hardly ever consider commercial banks to take a loan. These services are difficult to access because of the loan particularities (hard collateral as security, no emergency loans or cash flow loans offered, and low levels of flexibility with fixed repayment schedule). Also here commercial banks exert very little efforts to understand the segment of the low-income market and design products that usually do not meet the financial needs of the poor. Poor people need flexible, convenient and low cost financial products (low costs in terms of transaction costs, not necessarily low interest charged on loans). Only overdraft facilities meet these flexibility criteria but these are often not accessible to low-income groups.

Not surprisingly therefore the attitude of the people in the townships of Blantyre and elsewhere towards banks is mixed. Indeed banks are appreciated as stable and safe places to deposit money, but banks are also feared for their high transaction costs, minimum balances on the savings accounts, treatment by the bank employees, and the like. Formal financial institutions are bound by strict rules including KYC (Know Your Customer) and CDD (Customer Due Diligence), which at the bottom of the pyramid is not appreciated nor understood. Sometimes banks like the savings of the poor, but often do not want the poor in their branches. The treatments these clients receive are discouraging and prevent the deepening of the financial inclusion.

So far I have tried to make the point that the poor operate a complex financial management system, with diversification of revenue sources; complex considerations on where to cut expenses, building up savings and establishing many financial links with their immediate environment and sometimes with the not so immediate environment (rural people have urban accounts; receive and send remittances over large and increasingly international distances)[3].

[3] In nearly all places I have worked, I had the inkling that even the destitute earn sufficient income to meet their daily needs, but not always did they have the money at hand to finance extra ordinary events (whether social, cultural, religious, economical or expenses associated with calamities). They borrowed money for working capital and providential or special needs, less for investments (for the little investments opportunities they had, people used a combination of own capital and informal lending sources).

Low-income families use both formal and informal channels among others because none of the channels are perfect and meet their demands. Friends and relatives offer mostly credit services but these sources are not very reliable; they save with a ROSCA or ASCA but the amounts are small, timing is often not aligned when they need the money and there are recorded cases of fraud. Financial products of MFIs are confined to inflexible lending products and (often) exclude savings, while commercial banks are considered expensive and inaccessible when it comes to loans. Especially access to safe saving products is a problem. Low-income households complain that when they have opportunities to save, they often spend the money quickly because they do not know where to deposit the money and so when the time is there to use the savings for the earmarked purposes or emergencies, the money is already gone.

This complex financial network means that the poor conduct many small transactions using many different channels. Rutherford (in "*Savings Services for the Poor*") estimated that when the amounts of all these transactions with all these different financial intermediaries are added up (loan taken; repayments made at the bottom of the pyramid during the year, the amounts they have deposited and withdrawn and other transactions that have gone through their hands) the sum is 40 percent of the urban's poor annual income and may even reach 75 percent of annual income in rural areas. Although these multiple transactions may not change very much the asset total or even the liability side of the balance, it does show that poor people are very active financially speaking, not in the least because of the imperfections of the supply side of the financial market.

Risk Management

Thus far the article described financial behavior of people at the bottom of the pyramid in more or less "normal circumstances". However cash flow management and aligning income and expenditures is not only a day-to-day challenge, the poor also need to be prepared for risks. Next some insights are given in how they behave financially in extraordinary circumstances such as illness, death, robbery or business failure.

Especially poor people are exposed to different types of risks and each requires another set of coping mechanism. There are risks that affect everybody (tsunami; earth quacks, drought; war) and risks that have an impact on just one person or only a few in the community (illness, loss of employment). Risks can also be categorized by the severity of impact is has on an individual or community. Theft or a small accident have a temporary impact and an individual can recover from the consequences after a few weeks, months maybe up to one year. But the impact of an earth quack or death of the breadwinner can be felt over years to come (see also overview below).

	Classification of risks and impact	
Types of impact	**Individual**	**Communities**
Temporary impact	Illness, small accidents; unemployment; robberies and theft; business failure; fire' loss of property (crop or livestock); not receiving income after work was done	Hunger weeks before the harvest; crop failures; economic depressions with high unemployment; food hikes; political unrest; riots, swine flu or Mexican fever
Lasting impact	Death of bread winner; Disability;	Tsunami; wars and genocide;

	chronic diseases; abandonment or divorce; mudslides	climate change (droughts or flooding); earthquakes; erosion, Acts of God, hurricanes; HIV/AIDS

NOTE: the impact of the different risks is subject to interpretation. Swine flu fever has a temporary impact, but if the government kills all the pigs of the Coptic minority in Cairo that for their livelihood depending on rearing pigs, the impact is lasting.

The options and the responses are different in each of these cases. Poor people may use savings to overcome the lean periods before harvesting, perhaps in combination with cutting expenses for food consumption. They can fall back on other sources of irregular income when the main income all of a sudden is gone after loss of employment. When somebody falls ill, the households may finance medical expenses through savings, selling an animal and other items, in combination with borrowing. When somebody dies the costs of a funeral can be paid from donations from the neighborhood, savings and borrowings as well[4].

One time I interviewed the Syamsuddin family who lives in East Java. Din and Unifah have three children aged 18, 15, and 5. Unifah is 38; Din is 40. Din works for a local radio station and Unifah is engaged in soto processing and marketing of food. A few years back Din had a serious accident with a motorbike. He was hospitalized for some time and the revalidation took about one year. The road accident did not only imply a high hospital bill but also meant a loss of income for about one year.

The hospital required an upfront first down payment with the balance to be paid immediately after the emergency operations, which the couple financed through their savings and borrowings from their parents. However when the bill mounted they were eventually forced to sell their house and the family moved in with the parents of Din. The medical bill was thus financed through multiple means varying from savings, extensive borrowing from family and relatives to finally selling their house.

When I visited the family three years after the accident, they still lived in a rented house and the debts were only partially repaid. They told me they have sold luxury household items to pay back part of the loan and the rest they gradually repaid with income from Unifaf and later the income from Din after he resumed his work. They used different Arisans (the local ROSCA) to save and repay loans. At the time of the second visit they only had debts with their direct family members, but friend and other sources were repaid.

Also in Indonesia migrant labor is on the rise. Many work and live in the Middle East, but some are also employed in Malaysia. They remit substantial amounts of money to their families and their financial successes did not go unnoticed with those who left behind in the villages. One of the migrant workers is Sri Wahyuni. He is 28, and his wife is 23, they have a son of 5. One day he decided to try his luck and contacted a person who worked for another person who was directly linked to an overseas employment agency. The costs of processing the papers, travel costs and fees were to be advanced, which he did through their combined savings (cash and kind) and borrowings from friends and relatives. His

[4] I did not discuss communal risks with a long lasting impact, not because these do not happen, but because of the notion that the poor (and in fact the entire community and sometimes the country as a whole) does not have an effective response to these situations. Such cases require a national and often an international response as seen after the Tsunami in December 2004 and hurricane Katrina that hit New Orleans in August 2005.

"collateral" was future remittances.

Sri did not work very long in Malaysia and was soon expelled from the country because his papers were fictitious. He was an illegal migrant worker as the agent produced forged documents with which he entered the country. When he returned Sri was ruined, the family had huge debts and no income. The income from his wife who ran a small restaurant in front of their rented house was insufficient to pay back the informal loans. Sri sold his motorbike and some house utensils and renegotiated his debts with friends and relatives. He also started a clothing buy and sell business for which he borrowed money from a local cooperative. Part of this loan however, Sri used to pay back some of his friends and relatives. With a stringent household budget and their participations in five different Arisans (the average pooled sum was between 300,000 to 400,000 IDR or US$ 30 to 40), they further managed to reduce their debts. It was through stringent measures including cutting on daily expenses and making long hours that the family managed to repay all loans after nearly five years.

The first case shows that health problems soon can become serious financial problems too. The second example is a special case of "business failure" following an investment that went terribly wrong. Health related problems are the most frequently mentioned risk in the survey in Indonesia, followed by business failure. The diaries of low-income households that were used in the book of Collins et. al. also showed that in Bangladesh, India and South Africa illness and death were the most common risks of low income people. Further the FINSCOPE study of Nigeria indicated that the death of a kin and a serious illness of a household member are the most frequently mentioned causes for the poor to turn into a financial distress.

The table below further shows that the frequency of risk events is very high. A staggering 80% of the household interviewed in Indonesia reported a serious risk event during their lives. This is high but perhaps is also influenced by the way the questions were asked. Yet also the Finscope study in Nigeria reported that 46% had to deal with the consequences of death in the family, and 30% with illness (not necessary implying that these percentages need to be added up). On the other hand it is most likely that illness and death are very serious problems for many households in South Africa given the prevalence of HIV/AIDs.

Frequency of serious individual risk events and coping mechanism

Frequency Risk Events	#	%	Coping Mechanism	#	%
Nothing has happened	39	19.3%	Sold consumer related assets	81	50.0%
Robbed or cheated	12	5.9%	Sold productive assets	39	24.1%
Personal accident (traffic accident; fire)	13	6.4%	Used savings	68	42.0%
Illness	68	33.7%	Borrowed money from friends, relatives, family	81	50.0%
Took a loan and business failed	67	33.2%	Borrowed money from cooperative, bank, money lenders	152	93.8%
Misc.	3	1.5%			
N=201			N=162		

Source: Survey results East Java, December 2008

Note: The term "serious events" is of course subjective and not everybody would call an illness, road accident or failure of business as a serious risk event. Comparison of surveys across countries should be cautious.

Almost 94% of the people in the survey borrowed from the cooperatives, banks or moneylenders. In the Finscope study of Nigeria on the other hand the use of savings and borrowing from friends come out as important coping mechanism. The high percentage in the Indonesia however is explained because the survey population is all members of a cooperative.

The two examples given before also show that the coping mechanism to risks is often a combination of measures using savings, extensive borrowing to selling assets and in very serious cases even selling productive and other essential assets of the households. Debts are then gradually repaid through cutting on daily consumption for sometimes years to come. Many of low-income people in Indonesia further seem to use the Arisan to assist households in this strict financial austerity measures.

In the townships of Blantyre residents often help each other in times of crisis/difficulties. When somebody is sick and has to go to the hospital, neighbors help in transportation. They also visit the person in the hospital and guard the belongings at home. The neighborhood and members of the Chipelenganyo collect money to contribute to the medical expenses. When someone dies, people buy a coffin (or at least contribute to the expenses of a coffin), but also prepare the food and arrange for the transportation of the body and the mourners. Especially market vendors have built-up a social network that acts as an informal insurance scheme that partially offsets some of the costs of an accident or other misfortunes. In general, poor people deal with risks through various means of mutual assistance from neighbors, friends etc in the form of reciprocal assistance, using or relying on savings and taking flexible loans.

With this it would be shortsighted or wrong to conclude that self-help is a substitute for access to public safety nets and commercially based insurances. It does give rise however to the idea that perhaps both systems are complementary to each other. In other words if one day insurances become available, the poor will continue relying on savings and seeking loans to make up for the expenses.

This situation and coping reaction is different from what the International Labor Organization with financial assistance from the Bill and Melinda Gates Foundation seems to suggest namely that on the basis of the multiple risks, impoverished people need various insurance products. Also the Finscope studies suggest this (the most recent one in Malawi). It remains to be seen whether the poor are interested in full insurance products. It is more likely that they want to manage risks, not necessarily being comprehensively insured against all types of misfortunes. Further insurance products are not flexible because the risks are determined in advance and so are conditions under which payouts occurs. Managing risks through savings, flexible loans and social capital is more flexible because these savings and loans can be used for any eventuality.

This is not to say that formal insurances have no role to play in managing risk. Simplified life insurance coverage attached to a 10-year savings plan with added promise of borrowing rights proves to be a very attractive tool to assist low-income households in managing risks. Also debt forgiveness upon death assist the poor in sheltering from excessive risk and some microfinance providers even offer payouts on death, irrespective of the loan or savings status. But some other risks are better tackled through preventive measures (e.g. irrigation and drainage schemes to soften the consequences of drought and flooding; access to primary health care and extension services to promote condoms to prevent

spreading of HIV/AIDS). Finally risks are part of life and some coping mechanisms -though far from perfect- seem to work quiet well.

Other considerations in financial behavior

The argument so far goes that financial decisions of low-income people are better understood from the point of view of cash flow management, being prepared for possible risky events and taking advantage of opportunities, in combination with an imperfect financial supply side that compels the poor to have multiple financial linkages with their immediate environment. Thus savings at home and depositing money in informal associations, flexible and negotiable loan conditions together with social capital play an important role for people living at the pyramid bottom during normal times but also in times of crisis. However there are still other considerations that explain how low-income people arrive at their financial decision.

Micro credit programs, MFIs, donors and governments just as general economic theories seem to picture people are rational beings who make sensible choices. However explaining financial behavior of people is not an exact science; it has more to do with psychology. A relatively new science called behavioral economics and finance is based on the postulation that people generally do not behave as a "homo economicus". I would like to give some examples that I encountered in my work to show that people in general, but also the extremely poor people have their own reasoning for the way they behave financially. It may not always follow the economic textbooks, but often when giving it a second consideration, it does make sense.

The first example concerns how people commonly react to interest rates differentials. Suppose that a person has savings in a bank and the bank offers 2.5 percent interest over the balance. Another bank in town wants to increase the share in the local deposit market and tries to lure customers away by offering 3.5 percent on the deposits. Now let's further assume that savings in both banks are covered by a deposit guarantee scheme and all other conditions are the same such as access to savings, transaction costs (going to the bank and depositing or withdrawing efforts are the same –no problem in the West with internet banking and with the possibility to withdraw money through any ATM) and the like. Would it not be rational to change bank and deposit the money in the bank that offers the highest interest? Yet studies have proven that this does not happen; most people stay with their old bank. Many would perhaps consider changing banks but postpone the decision every day to transfer the money to a new higher earning account. People reason that postponing the transfer by one day will not make such of a difference in terms of loss of extra interest income. On the other hand, the efforts (or costs) to change are "substantial" and immediate (going to the bank, study the conditions of the new accounts; opening a new account, closing the old one, instructing the bank to transfer). Or sometimes the person may simply not feel like doing it today or sees it as an unpleasant task. Whatever the reason or motivation, the decision is delayed for one day, but the next day the person faces exactly the same choice: high immediate costs in terms of actions to move to another bank and small loss of interest income. Because each day has the same implication, the end result is that the person never changes to another bank. This behavior in its own right is rational even though it compares an immediate and one time action and cost with a long-term benefit. In literature such behavior is called procrastination.

Procrastination is important to explain financial behavior but weak discipline is also chief in understanding money decisions. When I met laborers in the Blantyre factories to discuss the introduction of payroll processing I heard several times that easy access to savings was seen as something positive, but that it also has a downside: people are more likely to spend their entire income and thus save less. Workers acknowledged that having easy access to money through the ATMs 7/24 encourages spending money. When they estimated household expenses wrongly they say, they go back to the ATM and take the remaining balances from their accounts. On the other hand if access to their savings would be more difficult, they would simply cut on the expenses, rather than "robbing their savings account".

There is indeed this requirement that easy access requires financial discipline and sometimes people device mental tricks to manage this pressure. One time I had a discussion with a poor woman in Ethiopia. She had a loan from a local microfinance institution and paid a high interest rate for this facility. However she also has a savings account in a commercial bank and the bank offered her a very low interest rate on her deposits. My thoughts whirled when I learned that her savings in the bank was at least 150% in value to the loan she took from the MFI. Would it not be more rational to withdraw the savings than to take the expensive loan? She then explained that it required a lot of her financial discipline to build up her savings and she does not want to repeat this exercise. A loan is indeed much more expensive she replied, but at least if she fails one payment on her loan the people of the MFI would stand on her doorstep the next day to demand the money. So her argument to take the loan instead of her savings was her strategy of dealing with her weak financial discipline to build-up new or to replenish old savings.

Many people also act differently when a purchase is drawn from savings or financed through a loan. Generally speaking, people are much more careful in spending their savings than using a loan. This is not very rational because the loan charges a high interest, while savings account only offer a low interest. So the opposite consideration would make more sense and yet with a loan, people feel they need to exhaust the limit, while with savings they want to cut wherever is possible. This phenomenon that people are more attached to savings than loans is also known in microfinance and received much attention in the literature of the 1980s. During that time, savings were called "*hot money*" and loans were called "*cold money*".

Finally the availability of credit or debit cards has changed the spending behavior of many people. For most of us it is less "painful" to pay the bill with a credit or debit card than when you have to take cash from your wallet. With cash the person actually sees and feels the money before spending it and that makes this individual more careful in spending. Of course paying cash has lower limits as well compared to credit and debit cards: an individual can only spend as much as he or she has in the wallet, while the spending limits of credit cards are much higher. This is the reason why so many people run into financial difficulties: they spend more money than they can afford. Credit and debit cards in other words is an example how new financial tools can change financial behavior.

The final example is a small test I did in a township of Blantyre and with people employed in a commercial bank. I told both groups of a hypothetical contractual savings scheme that earns 8% p/a.

However when the customer fails in one or more payments the interest rate goes down to 4%. The facility also allows borrowing against owns savings up to 80% of the deposit amount. Suppose I continued that you have joined this contractual scheme in January and that something serious happens in October and you need money immediately. The teller in the bank informs you that you are entitled to an overdraft that will cost you 15% interest per annum. But of course you can also take part of your savings but you no longer receive 8% interest over your deposits but only 4%. What would you do?

Everybody in the townships and without any hesitation- said that they prefer to take the loan and leave their savings untouched. When I presented this hypothetical case to the janitors and messengers of the bank they too would take the loan, even if the interest on the loan is much higher than the interest earned on deposit. However when I asked the middle rank and higher bank management what they would do nearly all said they would take the savings even when it meant that interest on savings will be cut by half. This is still better than the charges on the loan of 15%, they said. Only one higher manager said he would calculate first before taking a decision.

And this calculation is indeed what nobody did. The consideration of the middle management was the high interest rate charged on the loan; the consideration of the poor in the townships was the temptation to step out of the program if they took their savings and the (positive) pressure from the bank if they did not repay the loan or overdraft[5].

Cost differential to finance an emergency event through a loan or through withdrawing of savings						
Weekly savings	**Total amount of savings as per week 42**	**Maximum loan amount is 80%**	**Interest rate 8% if complied to pledge**	**Interest rate 4% if failed to comply**	**Interest on loan is 15%**	**Net interest charges**
500.00	21,000.00	16,800.00				
Option one take a loan equal to 80% of deposit				1,793.08	838.56	954.52
Option two withdraw savings				673.08		673.08
Explanation:					Difference	281.44
If a loan is taken, the customer no longer need to continue with weekly deposit						
Amortization schedule is equal to the weekly deposit rate, thus 500 MKW						

New Financial Products

The introduction of this article mentioned that when MFIs (and banks) draw up credit (and other financial) products they do so without much understanding of the financial behavior of people who live at the bottom of the financial pyramid. MFIs are more inclined to listen to international donors upon many still depend and these donors in turn justify their involvement on micro credit because of the

[5] Both have their merits however in this particular case the poor were cleverer. Those who would take their deposit earn a total interest amount of 673 MKW after 76 weeks (the time it takes from October onwards to repay the loan); those who take the loan pay 839 MKW interest but receive 1,793 MKW as interest on their savings account, which gives a net of 955 MKW, 281 MKW more than those who preferred to take their deposits. When I discussed the finding with the middle rank of the bank, they said that poor financial discipline among the poor is indeed a problem, but that middle and higher management people (in the bank) had a better control over their financial spending.

assumed impact it has on poverty reduction (the first of the Millennium Development Goals). The MFI dependency has made them more accountable to the suppliers of funds than it has made them market oriented. The details of their credit products are based on the belief that low-income people are small entrepreneurs; that there are plenty of investment opportunities that are only waiting to be galvanized through small loans, and that people are rational in their behavior. It is a one-size-fit-all credit product that -though permitted a quick rollout of small loans to millions of poor people- is a far cry from the needs and realities in the field. Also the assumed link between small loans and poverty alleviation has prevented the stakeholders from considering other and innovative financial products (savings; payment and remittance services; insurances and pension).

Low-income people need reliable, convenient and flexible financial services. Collins et. al. (2009) have defined these parameters as the delivery of products and services at the promised time, in the promised amount and at the promised price (i.e. reliability); as a chance to take and repay loans and make or withdraw deposits, frequently, close to home or work, quickly, privately and unobtrusively (i.e. convenience) and with an ease with which transactions can be reconciled with cash flows (i.e. flexibility).

Poor people need financial services that assist them managing money on a day-to-day basis through savings; short-term loans; payment and remittance services; building up long-term savings to finance big purchases including major life-cycle events or emergencies; building up pension funds, and allow the poor to borrow money for all purposes and not just for productive or investment use.

It is encouraging to note that more and more microfinance institutions recognize that the poor need more than a one-size-fits-all loan package. When the Grameen bank in Bangladesh experienced a serious reduction of the loan portfolio quality towards the end of the 1990s, they rebuked the trend with the introduction of voluntary savings and contractual savings products. This was a serious and important step for the Grameen bank as many feared that voluntary savings would mean that the client would massively withdraw their money. Similar fears were heard in the Philippines when I tried to convince rural banks in Mindanao to consider voluntary saving products. Contrary to this fear voluntary and contractual savings became such a success that nowadays the balance sheet of Grameen has more savings on the liability side than it gives out loans on the asset side. The bank learned that typically people save frequently in small amounts and withdraw a few times a year when problems or other cultural and religious events arise. These were also the experiences of rural banks in Mindanao.

The Grameen bank also introduced more flexible loans. With the top-up loan facility clients can top-up old loans to the original loan amount if the cash flow so requires or when emergencies happen. Nothing however beats SafeSave in Bangladesh in terms of flexible financial services. SafeSave visits the customers daily at their home or workplace and offers them loans that do not have a fixed term, and payments can be done in very small installments even on a daily basis. Unfortunately many other microfinance institutions still have to follow pursuit.

Understanding the background of financial behavior is a valuable asset in designing the *contents* of new financial products. When people procrastinate, it tells the supplier of financial products that it needs a more personal approach to effectuate behavior. Marketing through flyers and radio commercials is not

enough; it requires house visits and other more personal methods similar to what is found in the corporate finance sector. Weak financial disciplines require contractual savings products where cash flow management is met more through small loans rather than through savings.

The last part of this article discusses a financial products I proposed to a commercial bank in Malawi in which I mimicked some of the mental financial tricks of low-income households. It takes into account the procrastination and weak financial discipline of people and is based on lessons learned in the informal sector, in particular the ROSCAs.

I called the product the "Chipelenganyo savings and loan account", named after the local version of the ROSCA. It is a short to medium term contractual savings product that could be extended to a long-term savings product in combination with lending opportunities. Under the "Chipelenganyo savings and loan product" clients sign up for a contractual savings program of 500 or more Malawian kwacha (or 3.35 US$) every week[6]. If they comply with their pledges they will receive an interest rate of 8% per annum, a rate 2% above the ongoing market deposit rate. However if during the year they fail to comply with the deposit scheme, the interest rate will be cut by half so goes down to 4%, calculated over the outstanding balance and over the entirely agreed term period.

This term account expires after three, six, nine or twelve months and is automatically renewed by the same periods, unless the client instructs the bank one week in advance to transfer the money to a current or savings account. It is unlikely that many poor people will do this; he or she is likely to forget and this way savings will increase for possibly more important events.

The facility offers the account holder the option to take a loan (actually a kind of overdraft) with the deposit as collateral and this way they can manage the cash flow through the overdraft facility. The moment the client takes the overdraft, he or she no longer needs to comply with the weekly 500 or more MKW deposit until the overdraft has been fully amortized (this to avoid a too big financial commitment from the customer). Thus as long as the person repays the overdraft facility and is not late with any payment, the bank will not cut the savings interest by half.

The only condition to take this overdraft is that the deposit amount should reach a minimum level (e.g. 9,000 MKW) and the overdraft facility amount is never more than 80% of the deposit amount. The amortization of loan and interest equals 500 MKW (or more). The bank will charge 15% interest on the outstanding balance.

The details of this financial product were discussed with the people in the townships and the response was very encouraging. Those who were interested in this savings and loan account cited two reasons: less likelihood that all income will be spent and higher interest rates received on this account. The most frequently heard use of this money later on was to pay school fees or to make repairs or improvements in the house.

[6] If 500 Malawian kwacha is too much for an individual, group accounts can be opened and so two or three people would contribute to the minimum deposit of 500 MKW weekly.

Account details of the Chipelenganyo savings and loan product	
Name financial service	"Chipelenganyo" savings and loan account
Account type	Short-to medium savings product with the possibility to take a loan or overdraft
Purpose	Financing individual needs (multi-purpose savings and loan use)
Target Group	Low income people, small business people in townships and elsewhere
Maximum loan amount	80% of the savings in a blocked term deposit account
Guarantees	Amount in blocked savings account in the bank and co-signatures of both spouses (if applicable) or joint signatures of the account
Acceptable collateral	Deposits in the bank
Applicable insurance	N/A
Condition	- Client has been with the bank for more than 6 months
	- Deposit amount is at least 9,000 MKW
Deposit mode	Fixed monthly deposit, which can be stopped without penalty when a loan is taken
Disbursement mode	Bullet payment for loans
Decision taken	Same day
Product characteristics	
Interest rate	8% over outstanding balance of deposit, payable at the end of the contract agreement 3, 6, 9 or 12 months;
	15% over outstanding balance of loan, payable at the end of each month
Maximum grace period	N/A
Duration	- Three, six, nine or twelve months for the deposit contract
	- Between 1 and 10 months for the loan
Installment	Fixed monthly installments for either deposit and loan with a minimum of 500 MKW
Commissions	N/A
Penalties	Interest rate received over entire period reduces from 8% to 4% with breach of monthly deposit amount (except when taken a loan) or withdrawal of savings within one year
	4% per month penalty interest with breach of monthly installment or interest payment

Though people can accept the 125% deposit ratio over the loan amount in the short run, there were also clear messages that in the longer term, people would like to have loans that are bigger than the savings amounts. The bank may consider this option once it has built up more experiences dealing with the poor. The bank can use the movements on the accounts (savings and lending history) when deciding on bigger loans

Final remarks

Both Sachs and Easterly are convinced that micro credit can contribute to poverty alleviation. The simple message "*give a small loan to the poor and they will pull themselves out of poverty*" was a suburb marketing strategy and it gave the idea worldwide attention. However the standardized "one-size-fits-all" credit product, thus a uniform loan amount, for productive use, fixed repayment schedule and the use of joint liability entirely misses the point of micro finance transactions impoverished people do. Also loans for investments suggest that the poor are small entrepreneurs, which is unlikely or that loans can only be paid back through the returns of the investments and not from other income sources.

The multiple financial transactions that people at the bottom of the financial pyramid have with their immediate environment can only be understood in terms of their efforts to align uncertain income streams with sometimes unpredictable expenses and MFIs, banks, credit unions, ROSCAs, friends and family that all offer imperfect financial products. Each of these financial intermediaries has advantages but also serious disadvantages and this complicates the poor's financial transactions. It compels the poor to have financial links simultaneously with many of these intermediaries even to the extent that all financial transactions have a combined value, which can be as high as their income or asset total. That poor people prioritize financial survival does not mean that they do not have longer-term financial goals, but nobody has ever offered them financial products that assist them in the realization of these goals.

In conclusion, it is time to provide new financial services *and* with a different objective. Microfinance no longer should be justified because it is an efficient and effective poverty alleviation tool, which is difficult to substantiate anyway. The justification being involved in microfinance should be that it is otherwise difficult for the poor to financially plan and participate in the day-to-day economic affairs as long as they do not have access to a broad set of flexible financial services. Life is simply very complicated when there is no access to different types of savings and loan products; payment services, insurances; pension and the like, the rich in developing countries and nearly all people in developed countries take for granted. This access to a comprehensive set of financial services attuned to financial behavior and needs of low-income people is the real "basic human right" and if in the process poverty is being reduced, then this is a welcome cousins product of microfinance.

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