Extending social health insurance to the informal sector in Kenya. An assessment of factors affecting demand

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SUMMARY

This paper contributes to analysing and understanding the demand for (social) health insurance of informal sector workers in Kenya by assessing their perceptions and knowledge of and concerns regarding health insurance and the Kenyan National Hospital Insurance Fund (NHIF). It serves to explore how informal sector workers could be integrated into the NHIF.

To collect data, focus group discussions were held with organized groups of informal sector workers of different types across the country, backed up by a self-administered questionnaire completed by heads of NHIF area branch offices.

It was found that the most critical barrier to NHIF enrolment is the lack of knowledge of informal sector workers about the NHIF, its enrolment option and procedures for informal sector workers. Inability to pay is a critical factor for some, but people were, in principle, interested in health insurance, and thus willing to pay for it.

In sum, the mix of demand-side determinants for enrolling in the NHIF is not as complex as expected. This is good news, as these demand-side determinants can be addressed with a well-designed strategy, focusing on awareness raising and information, improvement of insurance design features and setting differentiated and affordable contribution rates.

INTRODUCTION

There is growing international consensus on the importance of extending social protection in health to the whole population (ILO, 2001a, 2001b; Carrin and Preker, 2004; WHA, 2005; Gottret and Schieber, 2006) in order to reduce financial barriers...
to health care services for the needy and to avoid catastrophic health expenditures (Kawabata et al., 2002). The option of social health insurance as a financing mechanism generating additional resources in typically chronically underfinanced health systems is receiving increasing attention (GTZ/ILO/WHO 2006a, Carrin and James, 2004; WHA, 2005), for the informal sector too (GTZ/ILO/WHO, 2006b). However, one of the major challenges to social health insurance in developing countries is integration of the expanding informal sector and inclusion of the poor. Various low-income countries (Ghana, Kenya, Kyrgyz Republic, the Philippines, Tanzania and Viet Nam) and mid-income countries (South Korea, Mexico), which have introduced or are in the process of expanding social health insurance, are being faced with this.

The informal sector is characterized by low and non-regular, non-taxed incomes, insecure employment and self-employment without social security (Canagarajah and Setharaman, 2001; cf. ILO, 2002 and Xaba et al., 2002). It is difficult to assess the income of informal sector workers, on the basis of which social security contributions can be deducted. Hence policymakers wishing to introduce or upscale a national social health insurance for the informal sector and to include the poor are faced with a number of questions regarding insurance scheme design with respect to enrolment, revenue collection, risk pooling and purchasing of health services. Another critical task is promoting demand for and acceptability of social health insurance among informal sector workers during the introduction and scaling-up phase.

Promotion of demand and acceptability starts from a sound understanding of factors affecting demand among informal sector workers and the poor. However, the literature addressing demand-side factors of health insurance in low-income countries is limited. Econometric studies look at socio-demographic and socio-economic household and individual determinants such as age, sex, income, education and their correlation with health insurance ownership. It is found that persons with higher income and higher education are more likely to have health insurance (Xu et al., 2006 for Kenya, Kirigia et al., 2005 for South Africa, Bhat and Jain, 2006 for India). Yet econometric studies do not state why people have joined an insurance scheme, and especially why people with lower incomes, in whom we are particularly interested, have not joined. Research into people’s preferences (Monheit and Primoff Vistness, 2004 for the USA) emphasizes the need to look beyond demographic and income factors to understand people’s reasoning and decision making. Other studies have tried to assess willingness and ability to pay for health insurance (Asenso-Okyere et al., 1997; Arhin, 1997; Mathiyazhagan, 1998; Asfaw, 2002; Dongh et al., 2003; Osei-Akoto, 2003; Ahuja and Jütting, 2004; Akazili et al., 2005; Dror, 2006).

This paper intends to contribute to the understanding of demand for (social) health insurance among informal sector workers in Kenya by assessing their perceptions, knowledge and concerns regarding health insurance and the Kenyan National Hospital Insurance Fund (NHIF).

This assessment serves to explore how informal sector workers could be integrated into the NHIF. The guiding questions are:

- Why have informal sector workers joined or not joined the NHIF as voluntary members?
• Is there willingness among informal sector workers to join the NHIF through group membership?

These questions are all the more relevant in the light of the proposed National Social Health Insurance Act, which aims to expand insurance coverage to the whole population. This Act was passed by parliament in December 2004, but has not yet been signed by the President and instead has been returned to parliament for further deliberations. In this context, the NHIF has begun to introduce various changes to increase membership and benefits.

The paper is structured as follows. The next section outlines the country context of Kenya for this study. Section ‘Determinants Affecting Demand’ outlines the conceptual framework and hypotheses regarding determinants affecting demand for health insurance of informal sector workers. The methodology is described in Section ‘Methodology’, followed by a presentation and discussion of findings (Section ‘Findings and Discussion’). The final section offers conclusions and recommendations pointing to a way forward (Section ‘Conclusion and Recommendations’).

COUNTRY CONTEXT

Fifty-six per cent of the Kenyan population are poor by the World Bank definition, namely living on one dollar or less a day per capita (CBS, 2005). According to the national health accounts, more than a third of the poor who were ill did not seek care, compared with only 15% of the rich. Fifty-two per cent of poor households cited financial difficulties as the principal reason for not accessing health care (MoH, 2005a). Furthermore, 7.7% of poor households were faced with catastrophic health expenditure, i.e. out-of-pocket payments exceeding 40% of disposable household income (Xu et al., 2006). Expanding access to health care for the informal sector and the poor is therefore an important objective of the Kenyan health sector strategy (MoH, 2005b).

Household survey data show that the large majority of Kenyans (98% of the lowest, 96% of the 2nd and 95% of the 3rd quintile) have no health insurance, whereas 12% of the 4th and 25% of the highest quintile do have insurance (Xu et al., 2006). Private health insurance specifically is only accessible to the higher-income segment (Vinard and Basaza, 2006, Nderitu in Kimani et al., 2004). Community-based health insurance (CBHI) is not yet far developed in Kenya. Since its introduction in 1999, about 32 schemes have been set up so far with about 170 000 beneficiaries covered, as data from the Kenya Community-Based Health Financing Association of 2006 show.

Under the current law of the 1998 NHIF Act, NHIF membership is mandatory for all civil servants and formal sector employees. The formal sector comprises those employers registered with the registrar of companies. In 2005, an estimated 1.5 million primary contributors were enrolled in this population group, thus accounting with their dependents for an estimated total of about 5 million Kenyans (NHIF, 2005). Monthly contribution rates through payroll deductions range from 120 Kenyan Shillings (KES) (USD 1.60) for a monthly income of KES 5000–5999 (USD...
66.67–80.00) to KES 320 (USD 4.27) for an income above KES 15 000 (USD 200.00) (as of 2006).

The self-employed and informal sector workers, i.e. all persons who are not formal sector employees, can join the scheme on a voluntary basis. They pay a flat-rate contribution of KES 160 (USD 2.13) per month for their entire nuclear family. This contribution rate corresponds to an income range of KES 7000–8000 (USD 93.33–106.67) for formal sector workers. The informal sector is very heterogeneous, including some better-off income groups with a much higher income than those formal sector employees with the corresponding contribution rate of KES 160, but also many poor people with an income far below KES 7000 (Kimani et al., 2004).

The informal sector consists of what can be called semi-formal employees, often organized in large regional or national associations, such as taxi, matatu (bus drivers) and jua kali1 associations or farmer cooperatives. Domestically employed workers (e.g. house helpers, gardeners) form another large segment, as do the ‘self-employed’, like farmers, fishermen, pastoralists, hawkers etc. Many of these may not be organized in groups or associations based on their occupation, but gather in community-based organizations (women’s groups, self-help groups, loan groups, religious associations, etc.).

Whereas contributions from formal sector employees are deducted from the monthly payroll, informal sector members had to make upfront annual payments of KES 1920 at NHIF area offices, of which there were 23 across the country in 2006. In the event of default, the penalty amounted to five times the monthly contribution rate. But this practice as well as the upfront payment obligation are now being changed.

Previously, the contribution covered primarily the costs of bed occupancy (‘bed costs’) for inpatient care, whereas the remaining costs had to be borne directly by the patient. Since 2004, extension of the benefit package has been underway to cover up to 100% of inpatient care, depending on the hospital’s services and the negotiated daily rebate. Co-payment rates thus vary across hospitals, which send their claims to the NHIF to be reimbursed retrospectively.

The NHIF’s current strategy aims to increase enrolment of the informal sector considerably (NHIF, 2005). So far, however, only 110 000 self-employed/informal sector workers have enrolled as NHIF members (ibid). With their dependants, these make up an additional half million Kenyans with cover. With a Kenyan population of 32.7 million and an estimated 6–7 million workers in the growing informal economy (Boquier, 2005), there is a large potential for expanding (currently voluntary) membership, all the more so in the light of current spending on health. Private health care expenditure per capita amounts to KES 56 a month on average, and KES 330 for an average family of five, which adds up to around 12% of total household non-food expenditure for the poor (CBS, 2005; MoH, 2005a). Hence, the NHIF package for KES 160 per family and month would seem likely to attract more than just 110 000 self-employed/informal sector people. Thus there is need to understand why many more informal sector workers have not joined the NHIF as one of the few available options of health insurance.

1Juá kali means ‘‘under the hot sun’’ and is the Swahili term for informal sector workers, as they operate in little stalls and workshops as vendors, manufacturers, mechanics, etc.
DETERMINANTS AFFECTING DEMAND: CONCEPTUAL FRAMEWORK AND HYPOTHESES

Analytically, factors that facilitate the extension and scaling-up of health insurance can be divided into supply-side and demand-side factors. Whether a household demands and is willing to buy insurance depends on the perceived difference between the level of expected utility with insurance and expected utility without insurance (cf. Kirigia et al., 2005). The perceived difference and expected utility are determined by various factors, which can be grouped into the following categories: (1) personal/household characteristics; (2) health care market characteristics; (3) community characteristics; (4) insurance scheme design features and (5) availability of risk management alternatives. These are specified further in Table 1.

Socio-demographic characteristics and risk aversion are not assessed in this study as the chosen methodology does not allow for further insights into these. However, the studies available on Africa suggest that households are in general risk averse with regard to health care (Arhin-Tenkorang, 2001). Based on a review of literature, consideration of the Kenyan context and discussions with resource persons, the following key issues relating to demand are considered to be particularly relevant for the Kenyan context.

Knowledge of full health care costs
The value attached to and demand for health insurance are influenced by knowledge of the full costs of health care and experience or knowledge of how and when health care costs become ‘catastrophic’. In other words, health insurance would have diminishing marginal utility for someone who underestimates the high costs of inpatient care and also the likelihood of high-risk events by comparison with someone who is fully aware of the high cost of inpatient care and whose demand would therefore be higher (Cutler/Zeckhauser 2000 in Osei-Akoto, 2003).

Availability of quality health care
Even if the potential benefit of health insurance is seen, there is no utility in insurance if informal sector workers have no geographical access to health facilities that are accredited by a health insurance. Similarly, the non-availability of quality health care services (including lack of drugs and other quality deficits) negatively affects demand for health insurance (cf. Carrin, 2003). Thus if informal sector workers perceive quality of health care as a problem, health insurance membership will be less attractive to them.

Absence of alternative risk management institutions
The availability and effectiveness of protection through alternative risk management institutions that cater for meeting people’s health care needs and costs would decrease demand for health insurance. Informal institutions such as group saving mechanisms usually constitute ex-post-risk management strategies that help to prevent or reduce catastrophic health expenditure. Yet as Waelkens et al. (2005) point out, there are various constraints (institutional, social and financial) that limit
Table 1. Determinants affecting demand for health insurance

<table>
<thead>
<tr>
<th>Community characteristics</th>
<th>Personal and household characteristics</th>
<th>Health care characteristics</th>
<th>Insurance scheme design features</th>
<th>Availability of risk management alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solidarity and reciprocity, trust among and across communities</td>
<td>Socio-demographic aspects, affecting risk (perceptions), e.g., household size, sex, age, health status.</td>
<td>Geographical access to health care</td>
<td>Attractive contribution rates and level of co-payments, level of penalties</td>
<td>Waivers and exemption</td>
</tr>
<tr>
<td>Social capital</td>
<td>Preferences and risk aversion</td>
<td>Quality of services and availability of drugs</td>
<td>Attractive benefit package</td>
<td>Community-based health insurance and similar forms</td>
</tr>
<tr>
<td>Familiarity with formal institutions</td>
<td>Knowledge of costs and price sensitivity</td>
<td>Costs and variability</td>
<td>Adequate payment modes (frequency, timing, place of collection, flexibility)</td>
<td>Solidarity groups to cater for high cost events</td>
</tr>
<tr>
<td>Notion on insurability of health (illness is not destiny)</td>
<td>Income and ability to pay</td>
<td>Catastrophic illness costs</td>
<td>Appropriate enrolment procedures, enrolment unit</td>
<td></td>
</tr>
<tr>
<td>Understanding and acceptability of insurance principles</td>
<td>Anticipated quality through health insurance ownership</td>
<td>Options for community participation</td>
<td>Credibility of fund managers</td>
<td></td>
</tr>
</tbody>
</table>

The more pronounced these are, the higher the utility. 

The more attractive and customer-oriented these are, the higher the utility. 

The more effective these are in providing financial protection, the lower the demand for insurance.

(Source: Table constructed from a collection of factors as mentioned by Wiesmann and Jütting, 2001; Carrin, 2003; Osei-Akoto, 2003).
their effectiveness, more so in a changing world in which the traditional mechanisms are less adept. Waivers and exemptions equally serve to provide financial protection. However, they have not been particularly effective in Kenya (Bitran and Giedion, 2003) and there are no clear waiver policy and criteria so far. Given the access barriers to health services faced by a large part of the population (see Section ‘Country Context’), it is questionable to what extent the existing risk management institutions provide sufficient support and financial protection.

According to Ahuja and Jütting (2003), community-based health insurance is more aligned to people’s needs than state or private insurance mechanisms. If this is the case there may be competition between CBHIs and the NHIF in those areas of Kenya where they exist.

**Spirit of solidarity**

In Kenya there is a strong spirit of *harambee*, a Swahili word meaning ‘let’s pull together’. This refers to people sharing and supporting each other within their community (Adili, 2003). Like group saving and other solidarity group activities, it is based on voluntary reciprocity. Hence, our hypothesis is that the spirit of solidarity in Kenya is in principle conducive to the logic of a social health insurance.

**Understanding and acceptance of the insurance rationale**

The literature on community insurance refers to people’s limited understanding and acceptance of the insurance rationale. Low-income households may therefore initially be reluctant to join insurance schemes because they do not readily like the idea of ‘paying’ for services they might not use (Brown and Churchill, 2000). Platteau (1997) argues that people join such micro-insurance arrangements based on the principle of ‘balanced reciprocity’. This means that members expect a roughly equal return from their contribution or payment, rather than being guided by a ‘true logic of mutual insurance’ with winners and losers through income redistribution between ‘lucky’ and ‘unlucky’ individuals (*ibid*). On the other hand, according to Jütting (2001), if solidarity is strong, people may be less concerned whether the benefits of their contributions accrue to themselves or to other community members.

**Credibility of and trust in fund management**

Lack of credibility and trust in fund managers may negatively affect demand for health insurance (cf. Wiesmann and Jütting, 2001; Schneider, 2004). In Kenya, where corruption in public services and parastatals has been a huge problem, they have been often faced with negative attitudes. Hence the NHIF, a parastatal, might equally suffer from these perceptions, thus decreasing demand for NHIF membership.

**Customer-oriented insurance scheme design features**

Insurance scheme design features, particularly the benefit package, payment modes and the enrolment basis (as an individual or family), influence people’s expected utility of health insurance (Carrin, 2003; Schneider, 2004). For the Kenyan case, our
hypothesis is that for many informal sector workers the relatively high amount of upfront payment and (previously) inflexible collection schedules constitute barriers to joining the NHIF.

**Ability to pay**

Finally, demand for health insurance is also determined by the ability to pay membership contributions. Lack of money is indeed a major reason why many do not join (cf. Preker et al., 2002; Jütting, 2004 for Senegal). As expenditure studies show, higher-income quintiles are more likely to be covered by an insurance (Carrin et al., 2005), which is also the case for Kenya (Xu et al., 2006). In Kenya, the non-poor spend 2.6% of non-food expenditure on health insurance schemes, while this figure is only 0.7% for the poor (CBS, 2000). However, studies of community-based health insurance schemes in East Africa also reveal that the majority of members fall below the poverty line (Waelkens et al., 2005). Hence in Kenya, even though about 30% of the population are extremely poor, it is argued that the ‘better-off’ segments in the informal sector are able to make contributions (cf. MoH, 2004).

In sum, there seems to be a complex mix of factors, some of them suggesting low demand, while others anticipate a demand for health insurance.

**METHODOLOGY**

Given the advantages of group membership as the basis for enrolment of informal sector workers, foremost among these being reduced adverse selection, the preferred data collection method was to encounter organized groups in the informal sector through focus group discussions (FGDs). Trained facilitators moderated the FGDs with a key questionnaire, a process which lasted about 2 h. Participants’ in-group discussions knew relatively little about health insurance and the NHIF. The facilitators therefore explained the principles of health insurance in more detail during the latter part of the FGDs in order to discuss health insurance notions and views of respondents. At the end, facilitators further explained NHIF procedures, depending on respondents’ questions. A self-administered questionnaire was distributed to and filled in by all heads of the 23 NHIF area offices and six additional deputies who were present during one of their management meetings. This made it possible to compare the FGD results with the judgment of this senior management group, most of whom have been working for the NHIF for several years.

A total of 19 focus group discussions were undertaken, covering a range of different types of informal sector worker groups (see Table 2). The group size was mostly around 10–15 participants. Groups were selected based on purposive sampling with the help of NHIF area branch officers, whereby the base of the group members was supposed to be outside towns in peri-urban or semi-rural settings. One group type was to be met per area. Thus groups were met within a radius of 70 km from the provincial capitals in four out of seven provinces (Central, Western, Eastern and Rift Valley provinces). Only a handful of all respondents encountered were NHIF members.

In a first step, a content analysis of the FGD data identified determinants affecting the demand-side, guided by our initial hypotheses. Secondly, these issues were
classified into four degrees of barriers to enrolment: ‘major’, ‘medium’, ‘minor’, ‘not at all’, based on the relevance and the level of concern expressed by the discussion group members.

This sample is not representative of all informal sector workers in Kenya. The external validity of the findings remains limited to informal sector workers and groups that share the following characteristics:

- They are willing and able to join in and contribute to group/community work;
- Many of them are poor but still have some monetary income on a more or less regular basis;
- They are well-established and stable groups that are registered and known in the community;
- The informal sector workers are aged between 18 and 50.

The chosen areas are highly populated with a thriving informal sector and many informal sector groups; cash flows in these areas are higher than in the North and North-Eastern parts of the country (CBS, 2005).

Reliability of the results of the focus group discussions is assumed to be high, as different facilitator teams found the same patterns (‘investigator triangulation’). Likewise, informal interviews with individuals correlated with the FGD information.

### FINDINGS AND DISCUSSION

The following findings were made concerning determinants affecting demand, as guided by our initial hypotheses:

**Availability of quality health care services**

In the areas studied, geographic access to health care services was not a barrier. Discussion participants stated that they could reach NHIF accredited hospitals quite easily, although transport by taxi could amount to KES 200–500. This situation may

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*Table 2. Types of groups encountered and group characteristics*

<table>
<thead>
<tr>
<th>Group type</th>
<th>No. of groups</th>
<th>Income activities</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxi/conductor associations</td>
<td></td>
<td>Transport</td>
<td>Men only</td>
</tr>
<tr>
<td><strong>Jua kali association group</strong></td>
<td>1</td>
<td>Manual workers (metal, carpentry)</td>
<td>Mixed</td>
</tr>
<tr>
<td>Farmer groups</td>
<td>3</td>
<td>Farming</td>
<td>Mixed</td>
</tr>
<tr>
<td>Loan support groups</td>
<td>4</td>
<td><strong>Jua kali</strong> (small-scale business)</td>
<td>Women only (1), mixed (3)</td>
</tr>
<tr>
<td>CBD* groups</td>
<td>3</td>
<td>CBD, (joint) income generating activities</td>
<td>Women only</td>
</tr>
<tr>
<td>Self-help groups</td>
<td>4</td>
<td>Farming, <strong>jua kali</strong></td>
<td>Mixed</td>
</tr>
<tr>
<td>Women’s self-help groups</td>
<td>3</td>
<td>Farming, <strong>jua kali</strong></td>
<td>Women only</td>
</tr>
</tbody>
</table>

*CBD: Community-based distribution of family planning methods (condoms, pills).**Mainly small shop, stall and hawking activities.

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change completely in more remote areas of Kenya. However, the quality of services provided at government facilities was considered inadequate, especially the non-availability of drugs. In one encounter, group members asked critically, ‘If you have to pay for drugs in addition to co-payments, what’s the use of being an NHIF member?’

Knowledge of true inpatient care costs

Informal sector workers had a good understanding and knowledge of the costs of outpatient and inpatient care in public, private and mission facilities and could correctly cite costs of typical medical cases. Comparing these with the contribution rates for the NHIF, they saw a great difference from a financial perspective between expected utility with and without insurance. They wondered how the high costs of inpatient care could be covered with the comparatively low contribution rates.

Absence of effective alternative risk management institutions

All discussion group members stated that waivers at hospitals were rare and difficult to obtain. People stated that they resorted to borrowing or to selling land, property or livestock. Several groups had some form of ‘micro-insurance’ mechanism, pooling and saving money on a monthly basis. Other ways to pay for high health care expenditure once incurred included fundraising within the group or the community, church collections, saving groups (like so-called merry-go-rounds) and harambees. Membership in Rotating Saving and Credit Associations also caters for catastrophic health care expenditure. Some groups had established an emergency account, where each member would contribute around 200 KES for an emergency case.

However, group members stated that they would happily leave these mechanisms aside if they had a better and more reliable alternative, as they could easily cite examples of catastrophic health care expenditure where they had difficulties in finding sufficient funds. The discussions revealed that informal sector workers may not feel completely comfortable with these informal risk management practices.

After learning about the option of joining the NHIF, one respondent said that ‘it can assist you without bothering other people’. Another group felt that with health insurance, they would ‘not need to do harambee any more’. As confirmed by key informants, harambee is obviously not a favoured way of raising funds. This goes along with the finding of Cohen et al. (2003) that harambee is not such an effective mechanism as it used to be in the past. The wish to be no longer ‘dependent on assistance from their social network’ is also reported from Senegal by Jütting (2001). This may reflect the current transition that rural societies are undergoing. Finally, it was found that community-based health insurance schemes do not usually constitute competition for the NHIF, as there are very few of them and they are concentrated in certain areas of Kenya.

In sum, the effectiveness of these risk management alternatives with respect to financial protection through pooling appears to be limited. They cannot be considered as an alternative or competition to (social) health insurance and hence as a barrier to demand for health insurance.
Virtually all group respondents were part of a solidarity mechanism as outlined above. People start and join groups mainly to help each other and provide assistance, as they realize that they will be stronger in tackling individual high-cost events as a group. The amount provided to support community members in need of money to pay a hospital bill or a funeral may be fixed, or in other instances may depend on the overall bill and on the friendship with the person in need. In many instances, the assistance amounted to KES 200 for a hospital bill and was much higher for a funeral or a wedding.

The principle of solidarity within the social health insurance mechanism was explained, namely the pooling of risks and funds, resulting in redistribution between the better-off and poor, the healthy and the sick. Feedback from the groups suggests that this principle appears sensible to them and reflects their value system and practice in community and group fundraising, despite the limitations experienced, as outlined above. The prevailing experience with these risk sharing institutions may thus provide a basis for group enrolment.

In fact, the idea of joining as a group seemed to be more favourably received and accepted than joining as an individual. Respondents referred to group advantages, such as ‘being stronger as a group’, or to being able to support each other. Yet a few individuals said that they would prefer to join as individuals, as they did not want to support others unable to raise KES 160 per month.

Furthermore, the group discussions showed that people had a preference for equity in financing. Respondents considered it unfair for somebody with a low income to pay KES 160 a month, if this was what people in the formal sector earning KES 8000 a month would pay. One group suggested that those without employment should pay less and those who have some form of salary should pay more, whereas another group stated that they preferred a uniform rate.

Many discussion participants, especially the younger, the men, as well as the taxi driver/matatu group, knew about the principles of insurance, e.g. through car insurance. Yet the majority of respondents had not heard of the concept of health insurance (‘bima ya afya’) before. After this was explained to them, one of the main concerns about health insurance and the NHIF was what happened to their money and whether contributors would receive their money back if they had not fallen sick over a longer period. The Kenyan Community-Based Health Financing Association reports similar views among its members.

Clearly, respondents’ initial statements reflecting their understanding and notion of health insurance membership related to making pre-payments for a benefit to be received later, rather than to mutual sharing and spreading of risk through pooling of funds. This is because people experience solidarity as voluntary reciprocity and because they practice fund sharing through informal/community risk management mechanisms after a catastrophic expenditure event has taken place. As such, payments are made ex-post and are equal to the transfer received by a person in need (cf. Ahuja and Jütting, 2003). The notion of making ex-ante payments that are...
uncoupled from benefits in the future is unfamiliar in the field of health, but not unknown in other fields such as house and car insurance, where premiums are not paid back either if the event insured against does not occur.

However, the ongoing discussions also showed that people found the concept of health insurance acceptable and useful after realizing that one of its core advantages was the pooling of risk and funds, rather than merely making pre-payments.

*Credibility and trust in fund management*

There was no hint or expression suggesting a lack of trust or credibility in fund management or the NHIF. When prompted, respondents did not see the point in this question. We exclude social desirability responses and rather assume that respondents had had no reason to develop any mistrust.

*Customer-oriented insurance scheme design features*

A number of design features had deterred or put people off from (re)joining the NHIF: upfront annual payments of KES 1920 are difficult to make. Furthermore, in the past, the NHIF had demanded high penalties in cases of default, namely five times the payment arrears. Former members of the NHIF, like farmers and taxi drivers who had had to step out temporarily, would often want to re-enter, but were impeded as they could not afford the penalties.

Group participants voiced their concern about temporary inability to pay, during which period they are not covered by the NHIF. Inability to pay might occur especially during sickness periods, when coverage is most needed. There was a strong preference for smaller and more frequent contributions rather than one upfront payment per year. Especially group respondents located far away from the NHIF area offices also expressed their preference for closer payment points and more flexible collection schedules.

*Ability to pay*

Many groups have a group solidarity mechanism through which they are able to raise and collect substantial amounts of money to be used for emergency cases, such as inpatient care or funeral costs. In the various cases, this amounts to about KES 100–120 a month per family. For example, in a slum in Thika town, each member of a small group pays KES 120 a month into an account, which caters for inpatient care expenditure. The group members reported that this saving and sharing mechanism helped them to cover the costs of inpatient care. Hence people seem to be able to make significant monthly contributions in a range similar to NHIF premiums.

Given that the majority of respondents had had no experience with health insurance and the NHIF so far, the discussion on people’s ability became mixed with statements on their willingness to pay. The amount that people felt could be raised was between KES 100–120. Those with a more regular and higher income, such as taxi and matatu drivers, and male respondents from jua kali groups and cooperative members, appear to be able and willing to pay KES 160. Anecdotal evidence from personal talks with taxi drivers in Nairobi revealed that they pay KES 600 for a
private health insurance package offered to informal sector workers. The FGD also revealed that even people with an income of KES 2000 a month are still interested in the NHIF and willing to pay.

In addition to the above factors, three other key demand-side determinants were revealed that largely explain currently low enrolment rates of informal sector workers.

Knowledge and awareness of the NHIF

Men, taxi/matatu drivers and members of well-organized groups and associations, closer to the formal sector and closer to provincial towns, usually had more knowledge of and experience with the NHIF. Yet most group members had hardly ever heard of health insurance and the NHIF. When they had heard of it (by broadcast or from other people), many would not know what it actually meant. Those with some knowledge usually had positive associations, like ‘support’, ‘assistance’, ‘coverage for some expenditure’ or ‘coming in when somebody is sick and admitted’. On the other hand, some respondents, who were previously NHIF members, reported that they had not even known what their payroll deductions and their membership card were good for.

Knowledge of enrolment option for informal sector workers

The most striking and uniform reaction was that even when informal sector workers knew about the NHIF and what it was, most respondents did not know that informal sector workers could join as voluntary members for a monthly contribution of KES 160 covering the whole family. Again, men and taxi/matatu drivers were generally somewhat better informed. In virtually every encounter, statements of the kind ‘this is only for the rich’, ‘this is only for the employed’, or ‘this is not for us’ were voiced. Therefore, as respondents said, they would not pay attention even to radio messages about the NHIF, as they would not feel concerned and addressed by them. These statements also clearly expressed feelings of exclusion.

Knowledge of enrolment proceedings

Another serious obstacle to enrolling with the NHIF was lack of knowledge about where and how to enrol. When those who were aware of the NHIF’s offer for informal sector workers were asked directly why they had not joined, typical answers were, ‘no one ever approached me’, ‘no one ever asked me’ or ‘I did not know how and where to register’. The lack of information seeking appears to be linked to the feeling of informal sector workers that they are not addressed.

Hence not only is there an information asymmetry between insurers and their potential insured concerning the insurance market, but also such information is actually largely lacking among the latter. This lack of knowledge about enrolment options among a large group of respondents somewhat conceals the effect of other demand factors, as it impedes any explicit assessment of expected utilities.

The following Table 3 below summarizes the extent to which these determinants are major, minor or in no way barriers to demand for health insurance and to joining the NHIF. The shaded cells indicate the FGD results, whereas the numbers show the
Table 3. Barriers to joining the NHIF

<table>
<thead>
<tr>
<th>1. Availability of quality health care</th>
<th>No barrier</th>
<th>Minor barrier</th>
<th>Medium barrier</th>
<th>Major barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Knowledge of true hospital costs</td>
<td></td>
<td>12</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>3. Absence of risk management alternatives</td>
<td></td>
<td>13</td>
<td>11</td>
<td>2 2</td>
</tr>
<tr>
<td>4. Extent of spirit of solidarity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Understanding and acceptance of insurance rationale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Customer-oriented insurance scheme design features</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Credibility and trust in fund management</td>
<td>6</td>
<td>13</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>8. Ability to pay</td>
<td></td>
<td>7</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>9. Knowledge and awareness of NHIF</td>
<td></td>
<td>5</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>10. Knowledge of enrolment option for informal sector workers</td>
<td>2</td>
<td>2</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>11. Knowledge of enrolment proceedings</td>
<td></td>
<td>3</td>
<td>7</td>
<td>13 5</td>
</tr>
</tbody>
</table>
responses of NHIF area officers’ judgment. Overall, the latter confirm the FGD assessment, except that they were more concerned about geographical access to quality health services, particularly for people living in remote areas.

The table reveals that the most critical barrier to NHIF enrolment is the informal sector workers’ lack of knowledge of the NHIF and its enrolment option and procedures for informal sector workers. They do not feel addressed as a target group, even if they hear about NHIF through radio advertisements. For some groups, ability to pay is a constraint, but for others it is not. Insurance scheme design features are also of great importance, but the results suggest that the relevance of insurance scheme design features has partly been weakened for the majority of respondents who lacked knowledge of the enrolment option.

CONCLUSION AND RECOMMENDATIONS

The key finding is that the majority of informal sector workers do not know about NHIF and their option to join. It is difficult to assess expected utilities when information about insurance is incomplete or lacking. Thus it is crucial that research into demand for health insurance is not based on the assumption that people have complete information on the insurance market, especially when researching preferences or socio-demographic factors.

Yet after information and explanations were provided, informal sector workers were, in principle, interested in health insurance coverage. It was also revealed that many of them could raise considerable contribution rates, for some even above the informal sector contribution rate of KES 160. Further, discussions showed that they were also willing to pay depending on their ability. This is similar to the findings of Cohen et al. (2003) that in general people are favourably disposed to the concept of health insurance. Yet, several of the insurance design scheme factors are not adapted to people’s needs and preferences.

In sum, the mix of determinants affecting demand for enrolling in the NHIF is not as complex as initially expected. This is good news, as the factors identified can be addressed with a well-designed social marketing strategy. In response to the above areas of concern, such a strategy should combine the following key areas:

1. Awareness raising and provision of information via different channels and methodologies, packaged for different target groups with different information and educational levels.
2. Improvement of insurance scheme design features, such as flexible payment schedules, accessible payment points and a revised ‘penalty’ system for those wanting to re-join.
3. Setting affordable and differentiated contribution rates that take account of informal sector workers’ varying abilities to pay and of their concern for financial equity.

The FGD findings also suggest that group enrolment is a viable option for extending coverage to the informal sector and that differentiation of contribution

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The self-administered questionnaires distributed to NHIF area officers did not contain all issues that were ultimately revealed in the FGD, which explains the three empty lines.

could be based on group characteristics, as further outlined in Mathauer and Schmidt, 2006, similar to initiatives in other countries (Soonman, 2005 for the Philippines). Likewise, a demand-oriented strategy to increase enrolment needs to be combined with a supply-side approach. Sound revenue and expenditure projections are necessary, including estimations under various scenarios of the utilization rates and contribution levels of informal sector workers.

Finally, while a focus on well organized groups and associations and on those able to pay for health insurance is crucial at the beginning to demonstrate success and impact, it is equally important to target and support specifically poorer informal sector workers who may not be able to pay any NHIF contributions. The emphasis on a pro-poor approach caters to the mandate of a social health insurance and to the national policy of ensuring equitable access to health care. More research into targeting subsidies to poor informal sector workers who are unable to pay is needed to assess how this can best be achieved.

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The empirical findings presented in this paper were the basis for GTZ’s advisory work in the field of extending coverage to informal sector workers.

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