Operating a small-scale household business is risky. A particular feature of HBs is that they largely rely on a single worker’s labour input (or in the best case scenario, a few). In addition to what are considered common risks for medium and large businesses, HB activity may be negatively impacted by any adverse event that affects the owner of a HB, and sometimes even by those that affect other members from the same household. While a construction company is unlikely to suffer from a worker being ill, even though s/he has major responsibilities, an informal bricklayer will lose income for any day spent in bed – and s/he will probably lose customers as well.

In the first section of this chapter a framework for understanding HB vulnerability is developed. Exploiting a special module of the 2014/15 HB&IS survey, it describes the type of adverse events faced by HB owners, the frequency with which they occur and the coping strategies that are used. It appears that HBs frequently experience shocks and that health problems are by far the main vulnerability factor. Dealing with the resulting expenditures often implies borrowing or selling productive assets, which can have lasting consequences on a HB.

Turning to the existing social safety nets, the second section of this chapter measures the inclusion of HB owners in the social protection schemes – a ceaseless and topical challenge, as universal coverage is a clearly stated policy target. Pension and health insurance schemes have achieved unequal progress in including HB workers. Less than 8 per cent of the HB owners will rely on Vietnamese social security (VSS), compulsory or voluntary, as their retirement pension. The overwhelming majority will have to keep on working to make a living, often hoping to receive support from family members. A persistent lack of information about the pension system hinders their inclusion, as...
does a problematic cost-benefit perception. Contributions are too expensive for the level of income that HBs generate. On the other hand, health insurance coverage has improved considerably. The remaining uninsured individuals put forward two reasons for not joining. The cost of premiums is a problem, mainly among the poorest of the informal HB owners. Among the better-off formal HB owners there is a self-selection problem. The owners do not take out insurance because they are healthy. Beyond the coverage of HB owners, evaluating progress towards universal protection also involves discussing the quality and accessibility of care. In this regard, it appears that (1) insured individuals utilise healthcare services more often than uninsured people, (2) overall satisfaction with healthcare is high, although some users insured through social assistance schemes are less satisfied than others, and (3) while out-of-pocket health expenditures account for a large share of the profit generated by the businesses, being insured increases the amount spent and decreases the likelihood of using coping strategies such as selling assets.

1.
UNDERSTANDING THE VULNERABILITY OF HOUSEHOLD BUSINESSES

1.1. From individual risks to the vulnerability of HBs

Risks faced by HBs are twofold and can affect a business directly as well as through its owner. On the one hand, systematic risks (i.e. risks that similarly affect all HBs in the same geographical area or sector) include macroeconomic factors such as high inflation, supply or demand shocks and raw material availability. They also include climate-related events. Not only major catastrophes such as floods or hurricanes can affect HBs. Bad weather can affect the numerous businesses that operate outdoors (22 per cent). Finally, the legal context in which HBs operate is changing and remains largely unclear to informal HB owners (see Chapter 3), which adds to the general uncertainty of the environment. Laws and regulations change rapidly and can push many HBs that are already operating in a regulatory grey zone into an illegal position.¹ On the other hand, idiosyncratic risks (i.e. risks that are peculiar to an individual), especially poor health, can affect HBs or HB owners. A specific event considered to be an idiosyncratic risk from a social protection point of view is disability due to old age, against which it is necessary to be collectively insured.

¹. Street vendors, for instance, have always navigated in troubled waters regarding permission for or tolerance of their activity. They have been negotiating a ban in many preferred locales since 2008 (Turner and Schoenberger, 2012).
Total vulnerability must be considered against this backdrop as the addition of risks faced by businesses and those faced by the individuals operating those businesses. Adverse events experienced by an individual might in turn affect the HB s/he runs through two channels: money and time. First and foremost are the direct and indirect monetary costs that result from shocks. In the case of sickness, the financial burden directly associated with treatment\(^2\) can represent a large share of the household’s budget, and transportation costs to the healthcare facility and other indirect expenditures such as specific kinds of food must be added (Nguyen et al., 2012b). In countries where public healthcare systems are underfunded, substantial “unofficial” payments or gifts may also augment indirect costs\(^3\) (Nguyen et al., 2012a). Overall, considering that households are budget-constrained and that household and HB budgets are often mingled, large monetary costs following adverse events might crowd out expenditures at a household business and threaten its activity or survival. Secondly, time costs can be of importance: Taking again sickness as an example, not only does the ill individual spend time recovering, other healthy household members might have to devote time to caregiving (Sauerborn, Adams and Hien, 1996). Table 9.A in the appendix shows that there is indeed a decrease in both the hours and the number of days worked by individuals when they are sick.

**1.2. Adverse events**

The vulnerability of household businesses to shocks can be seen in Figure 9.1. HB owners reported the incidence of events that generated significant expenditures over the past 24 months – a recall period that allows capturing this kind of event. Overall, 30 per cent of the HB owners had to face at least one type of shock, either a loss of stock or harvest to theft or climate events (7 per cent), a natural disaster (2 per cent), a work-related injury (4 per cent) or a severe disease (21 per cent). The occurrence of occupational injury might seem low, only 4 per cent of the informal HB owners and 3 per cent of the formal HB owners. However, a rapid comparison with the average percentage in developed countries reveals that figures in those countries are usually lower than 1 per cent, which shows that occupational injury in Vietnam is not low in comparison.\(^4\) Poor working conditions, low capitalisation and low quality materials

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2. However, not all illnesses are treated, and even when they are, the efficacy of the treatment is not assured (Sepehri et al., 2008), and such a situation generates costs.
3. This is notoriously the case in Vietnam. Even when accessing healthcare does not require immediate additional fees, they can rarely be avoided since they are later requested for “services” as simple as not sharing a bed with another patient.
4. The incidence of nonfatal occupational injury and illness cases requiring days away from work was 107.1 cases per 10,000 full-time workers in 2014 in the US (BLS, 2015).
make informal jobs risky. Informal businesses and their owners are more vulnerable than formal businesses in every way, because on average they are poorer and operate under more precarious conditions.

**FIGURE 9.1.**
**ADVERSE EVENTS EXPERIENCED BY HB OWNERS WHICH GENERATED SIGNIFICANT EXPENDITURES IN THE PAST 24 MONTHS (PERCENTAGE)**

Health shocks are by far the most common of the risks faced by workers in the informal sector: In the past 24 months, one informal HB owner out of four (one out of five in the formal HB sector) had to cope with significant expenses after s/he or a family member suffered from a severe disease. In addition, a third of the HB owners mentioned that health issues were a moderate to major problem. This is confirmed by the data in Table 9.1, which shows the proportion of HB owners who during the past 12 months experienced sickness that affected her/his work, even if only moderately. This proportion logically increases with age, is significantly higher among informal workers (which may again reflect harder working conditions) and markedly decreases with quartile of profit. If one can become poor as result of getting sick (as explained below), it seems that one might also get sick more often if one is poor.

5. The figures in Table 9.1 differ from those in Figure 9.1 because the reference period is not the same (12 months for Table 9.1 and 24 months for Figure 9.1) and because only sickness generating significant expenditures are considered in Figure 9.1.
Overall, HB owners – in particular informal ones – frequently suffer from shocks. The most frequent source of large and unexpected expenditures are idiosyncratic shocks, and health problems are by far the most common type of shock.

1.3. Coping mechanisms and potential vicious circles

How do HB owners react when faced with such adverse events? The findings of the HB&IS survey presented in Figure 9.2 confirm previous empirical results (Sauerborn et al., 1996; MacIntyre et al., 2006) on the type and frequency of the coping strategies: (1) using cash or savings – which covers the full costs for a small minority of the households only; (2) borrowing from family, friends or money lenders; and (3) selling assets.

<table>
<thead>
<tr>
<th>By age</th>
<th>Informal HBs</th>
<th>Formal HBs</th>
<th>By profit quartile</th>
<th>Informal HBs</th>
<th>Formal HBs</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-29</td>
<td>31.9</td>
<td>31.7</td>
<td>Q1</td>
<td>58.4</td>
<td>53.1</td>
</tr>
<tr>
<td>30-45</td>
<td>36.3</td>
<td>34.2</td>
<td>Q2</td>
<td>41.8</td>
<td>52.5</td>
</tr>
<tr>
<td>46-60</td>
<td>48.2</td>
<td>47.3</td>
<td>Q3</td>
<td>33.6</td>
<td>37.2</td>
</tr>
<tr>
<td>&gt; 60</td>
<td>73.5</td>
<td>58.5</td>
<td>Q4</td>
<td>30.1</td>
<td>29.7</td>
</tr>
<tr>
<td>Total</td>
<td>43.3</td>
<td>40.7</td>
<td>Total</td>
<td>43.3</td>
<td>40.7</td>
</tr>
</tbody>
</table>

Source: 2014/15 HB&IS survey; VASS-CAF & IRD-DIAL; authors’ calculations
More than half of the HB owners who experienced adverse events in the past 24 months had to use their own cash or savings, and 39 per cent of the informal and 31 per cent of the formal HB owners had to borrow additional money, raising concerns about possible crowd-out effects for other business-related loans. Almost half of the HB owners who faced a shock (45 per cent) had to cut expenditures. While a portion of these expenditures was devoted to consumption, a portion might have been business related, which means the cut in expenditures could have a lasting influence on the HBs. Eventually, close to 9 per cent of the HB owners who had faced a shock had to sell productive assets, which may hinder their capacity to generate income in the medium and long run. In the medium run, expenditures also have an impact on the labour supply at 17 per cent of the informal HBs and 10 per cent of the formal HBs since additional family members had to start working at the household business or elsewhere. Adverse events themselves, but also the resulting coping strategies, can thus have lasting negative effects on HBs.

As the vulnerability factors are mainly related to shocks that affect HB owners rather than their businesses, social protection schemes might have positive externalities that favour HB development if they effectively protect individuals against the consequences of those risks.
2. SOCIAL PROTECTION AND THE INFORMAL SECTOR

The inclusion of the informal sector in both of the major components of the social protection scheme (pensions and health insurance) is challenging by nature. As put by Castel and Gian (2010), part of the challenge lies in “designing an efficient collection of contributions and linking them with sufficient benefits while the majority of the jobs are […] in unregistered household businesses, implying limited information on economic activity.” One of the main outcomes of the HB&IS survey in this regard is to provide direct information about the extent to which existing schemes include HB owners, the reasons behind individual adhesion (or lack thereof) and the effectiveness of the coverage for insured individuals.

Health insurance and social insurance in Vietnam date back to 1992 and 1995 respectively. The mandatory part of the scheme, largely considered to be the core, covers public sector workers and private sector workers who have been employed for more than three months and have a labour contract. In practice these categories amount to a relatively small share of the total number of workers, as the vast majority of jobs are found in the agricultural and HB sectors, and many private and public sector workers have no contract. Voluntary schemes were accordingly introduced: health insurance in 2005 and social insurance in 2008. Vietnam is willing to develop a comprehensive system of health and social insurance and plans on achieving universal coverage of health insurance, which means covering 70 per cent of the population, by 2015. The results of the HB&IS survey serve to evaluate the progress of the scheme in terms of efficiently including informal sector workers.

2.1. Pension system

People are eligible to receive a retirement pension if they (1) retire after having worked in the public sector or as a wage worker in the formal sector, and thereby contributed to the mandatory Vietnamese social security scheme; (2) have contributed to the voluntary scheme established in 2008, or (3) are eligible to receive social assistance.

6. Decision 538/QĐ-TTg dated 29/3/2013 states that 70 per cent of the population should be covered by health insurance in 2015, and 80 per cent in 2020.

7. Unconditional social pensions are provided for people age 80 and above who are not covered by other pensions. Merit pensions are also provided to half a million individuals.
A first indication of the performance of the pension scheme (which is not tackled by the HB&IS survey) is the percentage of the population above 65 years old currently receiving a pension. Figures from the 2012 VHLSS (reported in Castel et al., 2014) indicate that less than 50 per cent of the elderly in the poorest quintiles receive any sort of pension, and those pensions are very low. While indicative of the current needs of the elderly, this approach does not inform about the performance of existing schemes that include future retirees. A second indication, about which this chapter provides new insights, is the share of the working population that is currently contributing to a scheme on which they will rely to get a pension. One fifth (21 per cent) of the workers were covered in 2013, but the majority were wage workers in the formal sector (Ministry of Health, 2013). Participation in the scheme is very low among workers in the informal sector.

The HB&IS survey provide insights into the extent to which the current pension system is credible among HB owners, i.e. whether they consider the social insurance schemes to be plausible sources of future income. Figure 9.3 reports the answers to the question *What will be your source of income when you are old?* Those who stated that they expect to rely on the Vietnamese social security scheme imply not only that the workers contribute to the scheme, but also that they perceive the future pension level to be sufficient. A tiny minority of the household business owners (8 per cent) plan to rely on a pension from the Vietnamese social security scheme, and the percentage is even less (6 per cent) among informal businesses. The overwhelming majority of workers will have to continue working, either at the same job (58 per cent) or another (less tiring) job (37 per cent). The latter option is chosen by workers at informal HBs more often than those at formal HBs (38 and 34 per cent respectively), which is yet another indication of the greater arduousness of their work. 60 per cent of the informal HB owners and 63 per cent of the formal HB owners plan to receive support from family members or use their own savings. This is more widespread among formal workers, perhaps because they have a higher savings capacity.
The inclusion of the informal sector in the pension system has largely failed. Getting individuals who are not formal wage workers to participate will remain on the agenda for the coming years. The reasons why the coverage is so low despite the efforts put into enlarging the scheme have to be better understood. Figure 9.4 shows that two main problems are at stake: a deficit of information on the one hand and a cost problem on the other. There is furthermore a marked difference between formal and informal HBs in the ranking order of reasons for not contributing to the VSS pension scheme. Workers at formal HBs predominantly rely on other sources income or feel that the VSS scheme is too expensive, which agrees with the problematic cost-benefit relationship and issues of trust in the fairness of the system. For workers at informal HBs, affordability, instability of income and awareness are the main reasons they do not participate in the VSS scheme. More than a third of the workers at informal HBs (but only 23 per cent of those at formal HBs) stated that they had never heard about the scheme. Similarly, 36 per cent of the informal HB owners (but only 26 per cent of those at formal HBs) consider the scheme too expensive to join.

Spreading information and enhancing the cost-benefit appraisal of participation could have a marked effect on the participation of HB workers in the pension system.
2.2. Health insurance

Given the high incidence of health problems among informal workers and the potentially large and lasting impact of health expenditures on their business, efficient health insurance coverage has an economic prominence as much as a social one. Along the path of its transition towards a socialist-oriented market economy, Vietnam shifted from a state-funded healthcare system to a privatized user fee system (Nguyen et al., 2012a), where in 2007 out-of-pocket payments represented three quarters of the total healthcare expenditures and absorbed around 5 per cent of the total household consumption on average (Van Doorslaer et al., 2007). Public healthcare is still underfunded and a private component is developing. As a consequence, the cost of healthcare is rapidly increasing, and the inclusiveness of health insurance, as well as its efficiency in covering the costs, is gaining importance and attention.

The HB&IS survey provides estimates of the inclusion of the informal sector in the health insurance schemes and allows monitoring progress in this regard. Previous figures are scarce. Castel and Gian (2010) put forward that in 2006 only 2.5 million
(or 6 per cent) of the informal sector workers and the unemployed had bought health insurance, and that until 2008 overall participation had not changed. Thanks to previous HB&IS surveys, representative figures for the informal sector that are restricted to business owners exist for 2007 and 2009, but only for Hanoi and Ho Chi Minh City. 47 per cent of the HB owners knew about the voluntary scheme in 2007 and 7 per cent were participating. In 2009, less than 22 per cent had any type of health insurance.

Significant progress has been achieved over the past few years. 54 per cent of the household business owners had health insurance in 2014. A significant difference remains between formal and informal business owners: Only half of the informal HB owners and 61 per cent of the formal HB owners are covered. Among the available schemes (see Figure 9.5), the voluntary system was by far the most efficient way to expand health insurance coverage, as more than half of the insured HB owners use it. An important share of the informal HB owners (45 per cent) is covered through the Vietnamese social assistance scheme because they are mainly classified as poor. A large (though lesser) percentage of the formal HB owners are also insured through social assistance (33 per cent). While some workers benefit from the compulsory insurance scheme, thanks to contributing through a previous or current formal job (or because they are included in a family member’s plan), they represent less than 5 per cent of the insured individuals. Private and subsidized schemes are still marginal.

### Table 9.2

**HEALTH INSURANCE COVERAGE AMONG HOUSEHOLD BUSINESS OWNERS: A COMPARISON WITH PREVIOUS FINDINGS (PERCENTAGE)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Formal HBs</th>
<th>Informal HBs</th>
<th>All HBs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007 Hanoi and HCMC</td>
<td>14.8</td>
<td>13.2</td>
<td>13.6</td>
</tr>
<tr>
<td>2009 Hanoi and HCMC</td>
<td>27.3</td>
<td>20.8</td>
<td>21.9</td>
</tr>
<tr>
<td>2014 Hanoi and HCMC</td>
<td>48.1</td>
<td>41.9</td>
<td>43.4</td>
</tr>
<tr>
<td>2014 Whole country</td>
<td>60.9</td>
<td>52.1</td>
<td>54.4</td>
</tr>
</tbody>
</table>

Note: All figures exclude private health insurance.  
Figures from the HB&IS survey also suggest a coverage gap for the near poor. When disaggregating coverage figures by profit quartile (see Table 9.3), which are correlated with household income, it appears that the percentage of insured HB owners decreases along with profit. The lowest quartile of HB owners (which likely includes the poorest individuals) benefit from health insurance mainly through social assistance, and while the richest can afford to participate in the voluntary scheme or buy private insurance, those in between can do neither.

It should be stressed that although the poorest quartile of HBs are better covered than the others, only 30 per cent of them benefit from social assistance. As these are the HB owners who are most affected by sickness (see Table 9.1) and who make a profit that is less than the minimum wage (see Chapter 6), there is a call for extending social assistance towards this highly vulnerable segment of the HB sector or for a reallocation of social assistance. 10 per cent of the quartile of HBs that make the highest profit and 17 per cent of the third quartile benefit from social assistance.

8. Private insurance is almost nonexistent in the sample as only 1.51 per cent of HB owners have it, hence their inclusion in the same category as the compulsory VSS insurance.
The participation of half of the informal business owners in a health insurance scheme is noticeable progress, and it should be stressed that this was achieved thanks to the voluntary scheme. It is still of importance to understand the reasons why so many remain uninsured despite the clearly stated policy objective of achieving universal coverage.

Similar to the reasons given for participating in the pension system, the reasons offered by business owners for not contributing to the voluntary health insurance scheme can be seen in Figure 9.6. First, only a tiny minority of the informal workers were aware of the existence and functions of the voluntary health insurance scheme in 2007 and 2009, and impressive progress has been made in this regard as only 5 per cent stated that they did not know how to join or that joining is too complicated. Second, if universal coverage is to be achieved in the near future, there is an urgent need to rethink the cost of premiums, which are considered too expensive by 44 per cent of the informal HB owners. Third, more than one third of the HB owners without health insurance fall into the classical insurance problem known as adverse selection, i.e. not buying insurance because they are healthy, and thus plan to participate only when they get sick. Last but not least, a small share of the respondents questioned the efficacy of the insurance scheme, and they have not joined the scheme because they feel that the quality of healthcare is insufficient (6 per cent) or because they prefer to choose their doctor or facility (5 per cent) and voluntary health insurance is restrictive in this regard.

9. Figures from the 2007 HB&IS survey indicate that less than half of the HB owners knew of the existence of the voluntary health insurance.
10. Comparable figures, restricted to Hanoi and HCMC, are 6 and 7.9 per cent of the respondents respectively.
Increasing the share of the population included in health insurance schemes is only one aspect of achieving universal coverage. Other aspects include the effectiveness of the health insurance scheme in improving access to quality healthcare and reducing out-of-pocket payments. All are interrelated as workers' perceptions that health insurance does not help improve access to healthcare partly determines whether they participate in the scheme or not. Does health insurance improve healthcare utilisation among HB owners? Figure 9.7 shows the probability of utilising healthcare services (by health insurance status) among individuals who stated that they have had a serious sickness. Healthcare utilisation is higher (85 per cent) among the insured HB owners than among the uninsured ones (68 per cent). However, this suggests that adverse selection is at play as well: Those who subscribed to health insurance seem to have done so because they knew that they were sick.
In addition, overall satisfaction with accessibility and quality is relatively high among the HB owners who have utilised healthcare facilities (see Figure 9.8). In terms of level of satisfaction with several aspects of healthcare utilisation, no marked differences appear between insured and uninsured individuals or between types of insurance scheme. It should, however, be stressed that uninsured individuals are slightly more satisfied than insured ones as regards the overall quality of care, the procedures and the waiting time. This difference was expected given that several types of health insurance (in particular in the framework of social assistance) are tied to certain healthcare facilities, the quality of which has raised concern. An explanation for the smallness of the satisfaction gap could be that uninsured individuals, given the average income in the population considered, cannot afford to go to healthcare facilities other than the insured ones anyway. One dimension in which satisfaction remains relatively low (64 per cent on average) is the complexity of the referral system that is required to access healthcare, i.e. the need to get a written order from a primary doctor to access a specialist. Being insured seems to ease some constraints given the higher level of satisfaction among those who are insured.
Last but not least, the purpose of health insurance is to efficiently reduce the health expenditures of individuals. It is also a concern from an economic point of view if health expenditures have the potential to hurt HB activity. Table 9.3 provides the average total of health expenditures over the past 12 months before the survey, including payments not covered by insurance and all additional payments, e.g. for medicine and gifts for doctors. This provides a comparative picture of the level of out-of-pocket payments (OOP) by type of insurance. It also relates it to the annual profit generated by the businesses\textsuperscript{11} by calculating the percentage of the profit that these payments represent.

Health problems have the potential to generate large expenditures for a household, and that might in turn impact HBs. Indeed, among informal HBs, OOP health expenditures by individuals using healthcare facilities amount to 41 per cent of the profit generated by their business. The percentage is higher among insured informal HB operators (47 per cent) as they expect to be reimbursed for a portion of these expenditures, but it

\textsuperscript{11} These figures do not measure the final weight of health expenditures since some of these payments will eventually be reimbursed by insurance.
is also large (28 per cent) among the uninsured. In other words, informal HBs are particularly vulnerable to health shocks and the expenditures they involve. Equivalent figures for formal HBs are less of a concern as health expenditures represent 14 per cent of the annual profit (up to 15 per cent among the insured) earned by formal HBs on average. The higher profits among formal HBs explain a large part of this difference.

The existence of health insurance does make a difference among HB owners, especially informal HBs, in the sense that they spend more on healthcare when they are covered, which implies that some individuals who are not covered cannot afford treatment. But the main (and worrying) message is that the levels of OOP health payments are overall very high in Vietnam. They amount to such a large percentage of a HB’s profit that they are likely to affect their operations or even threaten their sustainability. Health insurance is thus one of the key elements needed to reduce vulnerability among household businesses.

High levels of OOP health payments may translate into reduced expenditures for a business and trigger varied coping strategies that can lead to permanent income loss. A final way to evaluate the efficiency of the health insurance scheme is to compare the coping strategies of individuals who are seriously ill according to their insurance status (see Figure 9.9).

Insurance status is linked to household income to a large extent, and selection into insurance prevents the drawing of any causal conclusions. However, Figure 9.9 shows that insured individuals have a lower propensity to cut expenditures or sell productive assets, knowing that both measures can lead to impoverishment. A lower likelihood to sell productive assets was observed only among owners insured through the VSS (compulsory or voluntary), suggesting that those who receive social assistance are probably too poor to not sell assets when they have large health expenditures.
CONCLUSION

Household businesses are vulnerable to a variety of factors. Their small size, together with their entanglement with the household budget, makes them particularly likely to suffer from the consequences of shocks that affect them directly. Some shocks that are experienced by and affect the owner are related to a HB’s activity, some are related to the owner’s personal life, and some are experienced by members of the owner’s family in the same household. Results from the 2014/15 HB&IS survey show that these types of shocks are frequent: In the past 24 months, 30 per cent of the HB owners had significant expenditures after a shock, and they were related to healthcare in three cases out of four. The long-term adverse effects of these shocks can be further aggravated depending on the coping strategy adopted: 9 per cent of the respondents had to sell productive assets.

Social insurance against risks has been on the policy agenda in recent years, especially the objective of reaching universal coverage of health insurance. Of the major challenges raised, the inclusion of the informal sector is not the least. The results from
this chapter are thus relevant from a policy perspective and the message is positive: Impressive progress has been made in increasing health insurance coverage. More than half (54 per cent) of the HB owners are insured, and this improvement was made possible thanks to the combination of the voluntary scheme and social assistance programmes.

Further progress towards reaching universal coverage would benefit from a redefinition of the cost, which is currently not affordable for the poorest households, and an extension of social assistance. The cost of health insurance is indeed the main obstacle preventing informal HBs from buying health insurance. As a consequence, 38 per cent of the poorest HBs are not covered by any kind of health insurance, although they are the most vulnerable. The coverage of health insurance for these HBs could be improved by an enlargement – or a better allocation – of social assistance. More than two thirds of the poorest quartile of HBs do not benefit from social assistance, while a non-negligible share of the HBs that earn the highest profit do. In addition, the long-term sustainability of the voluntary scheme is questioned by the observed phenomenon of adverse selection. It appears that the voluntary scheme is mostly subscribed to by the less healthy HB owners. Raising awareness among the HB owners who are currently healthy about the importance of being covered against health risks and thus encouraging them to contribute to the voluntary scheme would increase the sustainability of the scheme and make funds available for better reimbursement of health expenditures or for increasing the coverage of social assistance.

Concerning the pension scheme included in social protection, progress has been particularly low as participation in this scheme is almost non-existent in the HB sector. This chapter shows that inclusion in the pension scheme could be improved by providing better information about the scheme, which thus far remains largely unknown. But the lack of information is not the only thing hindering the spread of this scheme. To informal HB owners, subscription to this scheme seems unaffordable, while formal HB owners find the cost-benefit relationship to be problematic. They prefer to rely on other schemes that may be more attractive or more trustworthy.
### APPENDIX

#### TABLE 9.A. SICKNESS AND LABOUR INPUT: VARIATION (LAST YEAR) IN THE AVERAGE NUMBER OF HOURS WORKED PER WORKER AND THE NUMBER OF DAYS WORKED IN THE LAST MONTH

<table>
<thead>
<tr>
<th>Informal HBs %</th>
<th>Formal HBs %</th>
<th>All (number of days worked)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sick</td>
<td>Not sick</td>
</tr>
<tr>
<td>Increased</td>
<td>8.5</td>
<td>8.2</td>
</tr>
<tr>
<td>Decreased</td>
<td>25.0</td>
<td>19.3</td>
</tr>
<tr>
<td>No change</td>
<td>66.6</td>
<td>72.5</td>
</tr>
</tbody>
</table>

Source: 2014 HB&IS survey, VASS-CAF & IRD-DIAL; authors' calculations