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(April 2014)

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WORKING PAPER

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The views expressed in this paper are those of the authors and not of the institutes they are attached with.

Abbreviation

CIEM:	Central Institute for Economic Management
FHB:	Formal Household Business
GDP:	Gross Domestic Product
GSO:	General Statistics Office
ICLS:	International Conference of Labor Statisticians
IHB:	Informal Household Business
ILO:	International Labor Organization
LFS:	Labor Force Survey
RRR:	Relative Risk Reduction
SOEs:	State-Owned Enterprises
VHLSS:	Vietnam Household Living Standard Survey
VND:	Vietnam Dong
WB:	World Bank
WIEGO:	Women in Informal Employment: Globalizing and Organizing
WTO:	World Trade Organization

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Summary

The informal sector plays an important role in employment creation and poverty reduction among female laborers in Vietnam. Currently, around 70 percent to 80 percent of women in Vietnam work in the informal sector, of which about 60 percent are in the agriculture and 20 percent are in the non-agricultural sectors that are mostly affiliated with small-size production and service units.

By investigating the employment, earnings, and social protection policy on female labor in Vietnam's informal sector, this research is able to answer the following research questions:

- 1) How important is the role of female labor in the informal sector?
- 2) What are the important factors that influence job opportunities for women in the informal sector?
- 3) What are the policy implications on female labor in Vietnam's informal sector?
- 4) What are the causes of work insecurities among females in Vietnam's informal sector?
- 5) What areas of social protection are most needed by women workers?
- 6) How does one address these principal needs for social protection among female workers?

The research in this study found that women workers in the informal sector often have low income and thus do not have the ability to pay for their children's tuition fees and health services and cannot protect themselves from shocks or emergencies. They not only lack social security, social benefits and adequate laws, but also have difficulties in accessing infrastructure and social public services, financing, physical assets, and land. They have a limited voice in planning policies that directly affect themselves.

Immigrants, where women also comprise a large number, often search jobs in the informal sector that do not have social protection and face many risks.

Female employees in the informal sector often have low and unstable incomes and high poverty. Those who deal with housework are assigned many tasks but do not get a salary nor are they given time to study and improve their knowledge. Female hawkers often risk their physical safety and health. Given the same job, women have lower incomes than the men in both formal and informal sectors.

The study also found that---consistent with those of studies in many countries--- education and skill are important factors in productivity, and can drive up female workers' income. Gender inequality exists in both the overall labor market and the informal labor sector. For one, there is a significant income gap between female and male workers in Vietnam's labor market. Likewise, female workers in urban areas also have higher earnings than those in rural areas. Those in labor-intensive sectors tend to have lower earnings in comparison with those in non-labor-intensive industries.

Marital status and immigration significantly impact the earnings of females in the informal sector. Findings on the self-employed workers are similar as those of wage earners, except in the area of skill (Skill turned out to have an insignificant effect on female labor, but this outcome was attributed to the quality of the questionnaires, which did not include all the relevant skills of self-employed workers.).

Female workers in the informal sector lack access to formal childcare services because of the high costs involved. They often rely on family or neighbors for help with child care. They also bring their children to their workplace, as there is no kindergarten-level schooling in the informal sector.

Also, these same female employees often face greater risks of falling ill than males in either the informal or formal sector but only a few have a health insurance, given their low and unstable income. Their workplace lacks lighting and ventilation, and might even have unsafe facilities.

The research concludes that as it coexists with the formal group, the informal sector should be recognized as the natural development of the economy rather than the compulsory registration. Here, the government should work to simplify the registration procedures, treat all businesses equally, and avoid imposing high taxes. It is also important to institutionalize laws such as those on Social Insurance, Unemployment

Insurance and Gender Equality, create policy and legal frameworks and promote gender equality in labor.

Risks of losing jobs and income cuts are also getting higher, thus putting female workers among those who might find themselves unemployed. Thus, these policies should be able to address the issues:

- 1) Complete labor market policies that support both men and women, improve the social welfare system and diversify the social insurance and health insurance.
- 2) Review and amend the ineffective health insurance provisions for informal female workers. It is necessary to provide financial support to families with women and pregnant mother.
- 3) Create conditions that will improve the competitiveness of female workers, especially vocational training policies and human resource development.
- 4) Improve safety and health standards especially for female workers, giving priority to the enforcement of the Law on Labor and Law on Social Insurance.

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1 INTRODUCTION

Since the launch of the reform policy in 1986, Vietnam has made outstanding socio-economic progress. As a result, the country successfully joined the global economy by becoming a World Trade Organization (WTO) member in 2007.

The Vietnamese economy is recognized as one of the world's most successful transitional economies, both for its formal and informal sectors. The development of the formal sector, however, is at the expense of the informal sector. The country's informal sector is important and dynamic, accounting for a majority of the self-employed locals, although they are challenged by low earnings and poor labor conditions. Specifically, the female labor force, which accounts for a large portion of such sector is large and discriminated and has inadequate social protection.

Women labor itself has been seen as a significant resource for strengthening the nation's socio-economic development. Therefore, the government implemented various policies aimed at human development, creating favorable conditions for all participants, both male and female. While these promoted and enhanced the potential of female workers, the informal sector is still faced with many difficulties and challenges.

This research thus aims to analyse the employment, earnings, and state of social protection in the informal sector in Vietnam. The concept of social protection, which refers to both basic and economic securities, is broad. It includes a network of methods to actively

protect individuals, families, and communities against risks. In this research, social protection includes measures such as social allowance, insurance (health insurance, unemployment insurance and social insurance), social welfare, and social security.

This project tries to investigate and identify what causes social insecurities among female workers in the informal sector in Vietnam; what the principal needs for social protection of female workers are; and how to address these principal needs so as to upgrade the quality of this target group's social protection.

The informal sector has become a major source of employment in transitional economies such as Vietnam. Participants include vendors, hawkers, petty traders, the small neighborhood retail store owners and their assistants, the tricycle and pedicab drivers, housewives and homeowners engaged in small businesses and subcontracting jobs, micro and small entrepreneurs and the self-employed (Yuzon 2005). However, its employment sector is largely ignored, rarely supported and even discouraged by the government (Heintz and Vanek 2007; Ray 1978).

2 LITERATURE REVIEW

The term “informal sector” was first proposed by Hart (1973) in a study to describe the traditional sector that includes unskilled and low-income workers in urban Ghana (Hart 1973). Later, the International Labor Organization (ILO) also used this term in the *Kenya Employment Mission Report* in 1972, when referring to the range of small-scale and unregistered economic activities (Chen 2005). The term that probably bears the most similar connotation to "informal sector" is “traditional sector”. Lewis (1954) developed the theoretical model of economic development, where the modern sector is composed of regulated enterprises with stable and

protected employment while the traditional sector consists of small producers, petty trade, and casual jobs.

The concept of the informal sector is ambiguous and disputable (ILO 2002). The comprehension of the term as used today is broader than before. According to the 1972 ILO report, the informal sector includes petty traders, street hawkers, shoe-shine boys, and other “underemployed” groups on the streets of big towns. Recently, the informal sector defined generally by the ILO has the following characteristics: (1) easy entrance; (2) reliance on indigenous resources; (3) family ownership of enterprises; (4) small scale of operation; (5) labor-intensive and adapted technology; (6) skills acquired outside the formal school system; and (7) unregulated and competitive markets.

Because of such ambiguity and confusion in both terminology and related concepts of the informal sector, it is now important to obtain an appropriate conceptual framework that distinguishes the term's activities/sectors.

To recognize the informal production units, the 15th International Conference of Labor Statisticians (ICLS) has recommended that the informal sector definition employ the following criteria: (1) non-registration of “enterprises” (production units); (2) small-size production units in terms of the number of employees; and (3) non-registration of employees. The term “enterprise” here refers to a broader sense. It stands not only for those employee-hired production units but also for those owned and operated by individuals working for their own account with/without help of the other unpaid workers from their family.

For the first above-mentioned criterion, a production unit is regarded as registered/non-registered based on the form of registration as stipulated in national legislations such as the law on enterprises, foreign investment law, etc. It is important to distinguish between the non-registration of production units as provided by national legislations and those regulated by local

registrations. The second criterion pertains to the size of an enterprise in terms of the number of employees, although the ICLS does not specify a threshold number for what it classifies as the informal unit. Thus, this criterion has different thresholds in different countries.

The third criterion refers to the legality of employment as well as the employer's compliance with social security regulations. In many cases, owners of informal-sector production units hire without offering employment contracts nor do they pay social security contributions for their employees. The informal production units can be distinguished into two types: (1) informal own-account enterprises, which may employ unpaid family workers or employees on an occasional basis; and (2) enterprises of informal employers who hire employees on a continuous basis.

In recent years, the ILO and a network called Women in Informal Employment: Globalizing and Organizing (WIEGO) had worked together and contributed to broadening the concept and definition of the informal sector to incorporate certain types of informal employment that were not included in the earlier definition. This attempt to improve the conceptual framework was pursued since the enterprise-based definition of the informal sector adopted by the 15th ICLS was not able to capture all dimensions of informality.

During the 17th ICLS discussion on decent work and the informal economy in 2002, the ILO developed a conceptual framework for employment in the informal sector, relating the enterprise-based concept of the informal sector to a broader concept of informal employment based on job status (ILO 2003). It broke down total employment by either type of production unit (enterprises in the formal/informal sectors, households, etc.), by job status, or by the formal or informal nature of employment (Table 1). It further defined informal employment as the total number of informal jobs, whether carried out in formal sector enterprises, informal sector enterprises, or households during a given reference period.

Table 1: Conceptual Framework: Informal Employment

Production units by type	Own-account workers		Employers		Contributing Family workers	Employees		Members of producers' cooperatives	
	Informal	Formal	Informal	Formal		Informal	Formal	Informal	Formal
Formal Sector enterprises					1	2			
Informal sector enterprises (a)	3		4		5	6	7	8	
Households (b)	9					10			

Source: ILO 2003.

(a) As defined by the 15th International Conference of Labor Statisticians (excluding households employing paid domestic workers).

(b) Households producing goods exclusively for their own final use and households employing paid domestic workers.

Dark grey cells refer to jobs that, by definition, do not exist in the type of production unit in question. Light grey cells refer to formal jobs. Unshaded cells present the various types of informal jobs.

The informal sector, which is prominent in transition economies of former centrally planned countries, has been private, unregistered economic activities that existed outside the mainstream production activities of these nations' economies. Although the private sector was generally negligible in these economies, the informal economy still existed in the form of concealed activities and/or undeclared labor such as those involving the provision of household and personal services, small trading of consumer goods, construction or maintenance of family households.

Since 1986, Vietnam transformed from a centrally planned economy to a market-oriented one. One of the major reforms was to shift government views and policies toward the role of private enterprises (CIEM 1997). Employment and income generation issues were brought to the top of Vietnam's policy agenda (Ronnas 1992). Beginning the 1990s, the number of state enterprises sharply declined while that of the private sector rose, mainly in terms of

household businesses. The state non-farm cooperative sector also gradually evolved into household firms with an average of two employees (Riedel 1995). Such growing support for the private sector---including production, trade as well as services---has created numerous employment opportunities in the informal sector (Adger et al. 2002).

As a result, informal economic activities expanded. Ever since the late 1980s, the informal sector was observed to grow, particularly after a large number of workers were made redundant as part of the state-owned enterprises' reforms. A substantial part among these were female, middle-aged, and low-skilled workers. For many, their next most feasible option was to work as small vendors or engage in low-paying informal household services (Evans 2004).

The existing literature tends to agree on the positive employment-generating effect of the informal sector as well as its contribution to stabilizing the national economy. According to Aihie (2009), Blunch, et al. (2001), and Hang (n.d.), the informal sector offers job opportunities to those with few skills or even undesirable characteristics and increases the income of the most vulnerable groups---i.e., the very low income group. Besides, this sector also provides “wage goods” to the formal sector, which reduces the impact of high inflation and real income fluctuation on fixed wage earners. For example, this sector provides cheap food, labor, raw materials and domestic services to the wage sector (Yuzon 2005).

Human capital plays an important role in ensuring employment in the informal sector as well as running ongoing businesses properly and profitably (Suharto 2002; Yuzon 2005). Edi Suharto (2002) supports this point by giving street traders as an example. He said that so as to succeed in business, street traders rely not only on their natural talent, but on knowledge acquired through formal schooling as well. Competence in reading, writing, and arithmetic is extremely useful for operating small-scale enterprises. Next, managerial skills and micro business sense are needed. However, most of the labors in the informal sector are low skilled

or even unskilled. Wages tend to be paltry and often below the legislated minimum wage level (Blunch et al 2001).

Blunch et al (2001) states that access to markets, resources, and financial sources plays a major role in ensuring employment growth in the informal sector. The lack of resources and financial markets currently prevent job seekers from landing better and more stable jobs. Laborers thus end up in low-paying, menial jobs in the informal sector jobs that do not give any opportunities to improve one's efficiency or knowledge that are needed to gain employment in a better-paying role. Significantly, laborers lack opportunities, are easily exploited by employers, face job insecurity and sexual harassment (in the case of female workers) (Geetika et al 2011; Hang n.d.). Such lack of markets, resources, and financial markets in the informal sector is due to various reasons:

- The informal sector operates outside the institutional and regulatory framework; therefore, enterprises and individuals in this sector meet difficulties in being covered by local and state policies.
- Government policies do not help the informal sector attain a more honourable source of living because these do not pave the way for workers to gain access to funding, training or machines needed to support their work (Geetika et al 2011).
- A majority of the poor and low-income earners do not have access to formal institutions' services. Because they are considered as credit risks, these workers fail to meet collateral requirements as well as the cost of borrowing (Mohd and Jayasooria 2001; Amaral and Quintin 2006).
- Both administrative and bureaucratic factors hinder females in the informal sector from availing of bank loans.

Around 70 percent to 80 percent of women in Vietnam are working in the informal sector, 60 percent of which are in the agriculture sector while 20 percent are in small-size production and service units in non-agricultural industries (Linh 2008). Because of their substantial involvement in employment in the informal sector, female workers are a significant target group for poverty reduction and sustainable employment. However, this sector receives very little attention from local authorities as well as the central government.

In Vietnam, pioneering studies undertaken by the end of the 1990s tried to set a working definition of the informal sector as well as to provide illustrative numbers for Vietnam's case. To distinguish the informal sector activities from their formal counterpart, Le and Nguyen (1997) propose a long list of specific characteristics but stop short of enumerating further the key criteria and the method for measuring the informal sector. Nevertheless, this research has revealed some of the first statistics on Vietnam. For example, it indicates that the informal sector accounted for around 30 percent and 34 percent of Vietnamese GDP in 1993 and 1995, respectively. On more general terms, Vu and Tran (1999) present a review of definitions suggested in some studies or reports on the informal sector in Vietnam in the 1990s.

In 2007, a suitable framework to measure the informal sector and informal employment in Vietnam was designed and implemented. It was developed based on international recommendations but tailored to the Vietnamese context. It thus defined informal employment as “employment with no social security”. In Vietnam, it is compulsory for all enterprises and registered household businesses, regardless of size, to register their permanent employees (with at least a three-month employment contract) with the Vietnam Social Security (VSS). By virtue of this criterion, all employment in the informal sector---and those in the formal sector without social security coverage---is thus considered to be informal employment.

The existing studies on the informal sector and informal employment contain widely varied assessments and conclusions, ranging from the positive to the negative in almost all

socio-economic aspects, including contribution to economic growth, employment creation, poverty reduction, and social and environmental impacts. Despite all these, little attention has been paid to Vietnam's informal economy. Thus, very few studies explicitly addressed the informal sector or “informality” in general. This study does not intend to review all literature written on the informal sector; instead, it will simply focus on select studies to provide some theoretical background on this paper's subject.

3 WOMEN EMPLOYMENT

3.1 Informal Employment for Female Workers in Vietnam

The informal economy accounts for 82 percent of the employed and two-thirds of Vietnam's non-agricultural workers. It also is the huge source of income for the country. According to the 2007 surveys on labor and employment, the informal sector accounts for a large proportion of the jobs and 20 percent of Vietnam's GDP.

According to the General Statistics Office (GSO) (2011), Vietnam has a population of about 87.84 million people, of which 50.54 percent are females. Of the workforce aged 15 and over, there are around 51.4 million workers, 24.93 million (48.5%) of which are female. Despite the huge numbers, female workers are mostly unskilled and untrained, working in labor-intensive sectors such as footwear and textile (78.5%), food manufacturing and processing (66.8%), porcelain and glass (59.2%). Those who participate in the labor market start at an earlier ages than men do. Many women join the labor market right after they graduate from high school or even elementary school.

Overall, unskilled women labor account for 62.9 percent in foreign investment enterprises, 62.6 percent in private enterprises, and 49.1 percent in state-owned enterprises. The qualifications of female labor in the manufacturing facilities are generally lower than those of

male labor (2007 Labor Force Survey by the Ministry of Labor, Invalids and Social Affairs, and authors' calculations).

In 2007, there were over 2.5 million unemployed workers, with women accounting for 51 percent. This shows that women have a lower employment rate than the men. The unemployment rate for both men and women is higher in urban areas. Meanwhile, 88.87 percent of underemployment are found in rural areas, where a large number are female laborers.

In the informal sector, women account for 40 percent of the employed across different fields. While they comprise a high proportion of employment in labor-intensive industries, only a low percentage of female employees work in industries that require technical expertise and management.

3.2 Characteristics and Size of the Informal Sector in Vietnam

The informal sector is quite common in Vietnam in particular and developing countries in general. However, when evaluating the informal sector, one is beset with common research challenges such as conceptual inconsistency, erratic data surveys and respondents' reluctance to admit their self-employment in the informal sector. The concept of informal sector itself is controversial since there is an indistinct demarcation among underground sector, illegal economy, and unrecognized economy. To facilitate the research and evaluation, the 17th ICLS introduced the definition of the informal sector as those composed of unincorporated units that produce goods and services for sale or barter in the market, and are unregistered and non-agricultural (ILO 2000).

Although there are different notions of the informal sector, studies all imply that it includes small-scale trading and manufacturing facilities that are unregistered and not subject to the Labor Law, Enterprise Law, Law on Cooperative; does not pay social insurance; and does not engage in agriculture, forestry and fishery because the characteristics of the informal sector

is very different from agricultural activities in term of farming season, labor organization, income generation and legality.

Informal employment is generally not covered by social insurance; thus, all the employment in the informal sector and select parts of labor in the formal sector employment are considered informal employment (Cling et al2010).

The 15th ICLS defined *employment in the informal sector* as all jobs in informal sector enterprises or all persons who, during a given reference period, were employed in at least one informal sector enterprise, irrespective of their employment status and whether it was their main or secondary job. Later, the 17th ICLS further defined *informal employment* as composed of the total number of informal jobs, whether carried out in formal sector enterprises, informal sector enterprises, or households, during a given reference period (ILO 2003; and ILO n.d.).

In Vietnam, legal frameworks play a central role in identifying the activities of the informal sector in line with international concepts. Decree 88/2006/ND-CP of August 29, 2006 on Individual Household Businesses creates the legal basis for the operation of unincorporated enterprises. There are two basic types of such businesses:

- 1) Individual household businesses that are unregistered as these are exempted under the business registration law. Article 36 of this decree provides that individual household businesses shall not be required to register their businesses if their earnings are lower than the level stipulated by the provincial People's Committee;
- 2) Registered individual household businesses. These businesses must register at the district business registration office that has jurisdiction over the business location. They then shall be granted a registration certificate and tax identification number and are required to open a simple account instead

of a double-entry accounting book. Any individual household business that employs regularly more than 10 employees and/or has two facilities or more shall be required to register the business as an enterprise.

In distinguishing informal sector employment, access to social security---especially social insurance---is the most important basis for evaluation. Pursuant to the Decree 152/2006/ND-CP dated December 22, 2006, all registered businesses and establishments, regardless of size, are required to register their employees under contract for at least a three-month term with the Vietnam Social Insurance Agency. Such criterion appropriately and easily differentiates formal from informal employment and is consistent with Vietnamese and international laws.

The Vietnam Household Living Standards Survey (VHLSS) is a popular form of household survey in developing countries. In the VHLSS questionnaire, questions include those on non-agricultural household employment and business.

According to the Labor Force Survey (LFS) in 2007, the informal sector generated about 11 million jobs, accounting for almost 25 percent primary jobs and nearly 50 percent of non-agricultural employment in Vietnam. In the overall economy, manufacturing and construction have the largest informal sectors, followed by trade and services.

Poor educational background is the fundamental characteristic of informal workers. The average income of informal workers is about 1.1 million VND per month, which is equivalent to the national average level but higher than the average income in the agricultural sector (i.e., higher than farmers').

According to the 2007 LFS and GSO, Vietnam's working-age population consists of about 46.2 million people in 2007, of which nearly 11 million work in the informal sector (23.5% of employed population), second only to agriculture (at 50%), and higher than many

other industries. Up to 47 percent of non-agricultural employment comes from the informal sector.

The informal worker has more than one job: The main job is the main source of income, while the secondary job is the supplementary source of income. Based on the 2007 figures (Table 2), there are 11 million main jobs in the informal sector. On the other hand, of the additional 8.425 million secondary jobs, 76.3 percent are in the agricultural sector. The informal sector, coming in second, has 18.4 percent of all secondary jobs.

Taking both the main and secondary employment together, the informal sector generated approximately 12.5 million jobs, which is 22.7 percent of total employment; nearly 50 percent of non-agricultural employment; and about 63 percent of private non-farm employment.

Table 2: Main and Secondary Jobs by Institutional Sector in Vietnam

Institutional sector	Main jobs		Secondary job		Total	
	Number	Structure, %	Number	Structure, %	Number	Structure, %
Public sector	4,953,600	10.7	186,300	2.2	5,140,000	9.4
Foreign enterprises	907,700	2.0	6,200	0.1	913,900	1.7
Domestic enterprises	2,646,000	5.7	89,500	1.1	2,735,500	5.0
Formal HB	3,583,800	7.8	151,200	1.8	3,735,000	6.8
Informal sector	10,865,800	23.5	1,547,500	18.4	12,413,000	22.7
Agriculture	23,118,100	50	6,427,700	76.3	29,545,000	54.1
Total	46,211,200	100	8,424,800	100	52,636,000	100

Sources: LFS 2007, GSO and authors' calculations.

If one were to look at the primary employment only, the proportion of informal sector vary widely between provinces, with the lowest being 3 percent in Dien Bien province and the highest at 44 percent in Bac Ninh province. The employment rate in the informal sector is

notably negatively correlated or inversely proportional to the employment rate in the agricultural sector (Cling et al. 2010).

Unlike in other countries, workers in Vietnam's informal sector are mainly found in rural areas and in the suburbs (about 67%) rather than in the cities. This may be due to the differences between Vietnam and the World Bank's classification of urban and rural areas as well as the diversification of farmers' income. The average age of the informal labor is equal to the average working age in Vietnam in general, but the discrepancy in the ages between the young and old groups is large. Female workers have an average age that is less than the average working age, although they make up nearly 50 percent of the labor force. This implies that women participate in the labor market earlier than men do.

Informal labor has a relatively low level of education---the lowest among all sectors except agriculture---with only 15.7 percent having completed at least their primary education. Such rate is lower than that in the public sector and foreign enterprises (and only higher than in the agricultural sector). More than 90 percent of workers in the informal sector have no vocational training nor have they finish secondary schooling. Two percent of the labor force in the sector has never gone to school.

According to the Formal Household Business (FHBs) survey, Vietnam's informal sector has low levels of specialization, focusing mainly on trade and services. However, the fact is that, as shown in Table 3, 42.8 percent of workers in the informal sector are in manufacturing and construction; followed by trade (30.9%) and services (26.3%). The informal sector is responsible for over 50 percent of the industrial sector's employment in Vietnam.

Table 3: Job Structure by Institutional Sectors and Industry in Vietnam, %

Institutional Sector	Agriculture	Manufacturing and Construction	Trade	Services	Total

Public sector	-	23.3	2.9	73.8	100
Foreign enterprises	-	86.7	3.5	9.7	100
Domestic enterprises	-	63.4	15.9	20.6	100
Formal HB	-	26.7	43.9	29.4	100
Informal sector	-	42.8	30.9	26.3	100
Agriculture	100	-	-	-	100
Total	100	40.2	22.0	35.7	100

Sources: LFS 2007 and GSO and authors' calculation

All of the over-20 different industries have informal workers except agencies of the Party and monopolistic public enterprises such as the Electricity Group. The commercial sector accounts for one-third of the total employment in the informal sector at 30.9 percent. This is followed by manufacturing (24.1%), construction (17.3%), and accommodation and food services (6.8%) sectors. Up to 80 percent of the employment in the informal sector comes from the four above-mentioned industries. The informal rate---or the proportion of informal employment in each sector---is quite high: 87 percent in services, 75 percent in construction, 64.9 percent in accommodation, and 60.6 percent in trade. It is also slightly higher in the sectors considered as formal such as real estate (37%), professional services (14.9%), and art (47.2%) (Cling et al 2010).

While the average income of informal workers is quite close to the average income of all workers in Vietnam (Table 4), one should note that workers in the informal sector work for longer hours (47.5 hours) than the national average (43.8 hours) and have almost the lowest income (i.e., only higher than farmers' income).

Table 4: Main Job Characteristics by Institutional Sector in Vietnam

Institutional Sector	Seniority (Years)	Wage Workers, %	Social Security, %	Hours/week	Income, 1,000 VND/month
Public sector	11.3	98.7	87.4	44.4	1,717
Foreign enterprises	4.1	99.4	82.8	51	1,622
Domestic enterprises	4.5	92.4	42.8	51.5	1,682
Formal HB	7.2	34.4	1.9	52.4	1,762
Informal sector	8	23.9	0	47.5	1,097
Agriculture	17	7.2	0.1	39.5	652
Total	12.5	30	14.2	43.8	1,060

Sources: LFS 2007, GSO, and authors' calculation.

3.3 Female Workers in Vietnam's Informal Sector: Real situations

The percentage of women and men working in the informal sector vis-à-vis other industrial sectors is nearly similar, at 81.2 percent and 82 percent, respectively. In many industries, women (48%) have a lesser probability of being employed in the informal sector than the men (56.1%). Employment in the informal is relatively low at 44 percent for women--nearly 16percentage points lower than the 59.7 percent for men.

3.3.1 Informal Employment by Industries

Agricultural employment is not counted as informal due to the differences in production characteristics and its seasonal nature. Industrial and service sectors account for a large proportion of employment for female workers. The informal employment for female workers went up from nearly 50 percent in 2004 to 57 percent in 2010, although still lower than the rates for men in the same industries. Informal employment for men grew from 55 percent in 2004 to about 62 percent by 2010. Self-employed female workers in the informal sector focused

primarily on industrial and services. Specifically, there were more than twice female workers in the service sector than in the industry sector. For example, the percentage of informal-sector, self-employed female workers in the industrial and services sectors, respectively, were around 34 percent and 66 percent in 2004; in 2010, the corresponding figures became 28 percent and 72 percent.

The rate of formal industrial employment is lower than that of its counterpart in the informal sector, but the rate of employment in the formal service sector is higher than the employment rate in the informal service sector.

3.3.2 Scale and Distribution of Female Workers by Industry and by Province

Table 5 shows that female labor is distributed evenly among industries, with the highest proportion in foreign businesses (61%), and the lowest in domestic enterprises (40%). Women also work in dangerous and vulnerable jobs but only 24.5 percent are paid---lower than the 35.4 percent for men. In the formal sector, women labor has as many opportunities as men to become paid workers, based on the relative probability of 0.68. By contrast, the relative probability in the informal sector is 0.35; that is, women have less opportunity than men (67%) to become wage workers in the informal sector.

Female workers are over-presented in vulnerable employment: Only 24.5 percent of the females are wage workers, less than the 35.4 percent of male workers. In the informal sector, female workers have the same chance as males to become wage workers, but this indicator is at the lowest rate. (Table 7).

Female workers work as long as the males, except in sectors such as foreign and domestic enterprises. Despite similar working hours, female workers earn a lower income than their male counterparts in all sectors.

Table 5: Socio-Demographic Characteristics of Full time Workers by Institutional Sectors in Vietnam, %

Institutional Sector	Rural	Household Heads	Ethnic Minorities	Female	Age	Upper Secondary Education or Higher
Public sector	43.9	39.3	6.4	45.7	38.1	79.3
Foreign enterprises	56.6	17	2.5	61.2	28.6	51.8
Domestic enterprises	49.2	26.5	4.2	39.5	31.7	47.3
Formal HB	46.0	35.5	6.1	46.5	36.9	31.2
Informal sector	66.9	39.6	3.9	48.7	38.3	15.7
Agriculture	94.1	38.4	22.8	51.6	39.5	9.2
Total	75.2	37.4	13.8	49.4	38.2	23.1

Sources: LFS 2007, GSO and authors' calculations.

3.3.3 Long Working Hours

Female laborers work 42.9 hours a week, nearly two hours fewer than that of men. However, in some industries, women's working time is longer than men's. For instance, in foreign enterprises, women work 51.4 hours while men log in 50.3 hours. In domestic enterprises, the figures are 51.7 and 51.5 hours, respectively.

In the informal sector, there is a small difference in length of working time between men and women (46.8 hours and 48.2 hours, respectively). This difference is not exactly accurate given that (1) The unemployment rates of women and men are roughly equivalent: 4.8 percent for women and 5 percent for men; and (2) Female workers take on second jobs to earn an extra

income. Thus, this seems to indicate that the questionnaire used might have been unable to cover all the specific characteristics of women workers.

3.3.4 *Low Income*

Female labor usually has lower income than men, with the average male workers earning 33 percent more than their female counterparts in all sectors. The income gap between men and women is smallest in the public sector at 7 percent, while quite large in the informal sector (as well as in domestic businesses), at up to 30 percent. The difference, however, is biggest (at 43%) in agriculture and foreign companies. It may be even wider if one were to include unpaid workers, where women comprise a large proportion.

In the non-agricultural household economy, both formal and informal, the number of women who do housework without pay is two times higher than that of men. The invisible unemployment rate in women is likewise higher than in men: 35.2 percent compared with the latter's 25.7 percent. Women have a greater probability of falling into invisible unemployment than men in all sectors except the public sector, where the unemployment rate is relatively low at 3.2 percent for women and 6.4 percent for men. In contrast, the probability for men is three times higher than women in domestic and foreign enterprises: 3.9 percent and 1.4 percent, respectively, in domestic enterprises; 14.2 percent and 5.5 percent in foreign businesses; 22.3 percent and 10.5 percent in the agricultural sector; and 18.8 percent and 14.4 percent in the informal sector.

3.3.5 *Dangerous Jobs*

Women workers are often more underpaid and have dangerous jobs compared to men. According to the ILO, 35.4 percent of male workers are regularly paid, which is about 11 percentage points more than that of female employees (24.5%). In the formal sector, regularly paid employment opportunities are equal for men and women. However, in the household

economy, women are often excluded from equal employment opportunities. In the informal sector, women have a 64 percent lesser probability of becoming paid workers than men based on this statistics: The lowest opportunity for female workers to become paid employees is 12.4 percent while that for men is 34.7 percent (Table 6).

In the informal sector, women workers have a low level of protection while the inequality among them is fairly high. Also, the inequality in income distribution of women in the sector (where the gini coefficient is 0.4) is higher than among men (0.35).

Table 6 further shows that the income inequity is highest in agriculture, where the gini coefficient is 0.53; and lowest in foreign enterprises at 0.28. Income inequality is lower among female labor than male workers in both foreign enterprises and public sector. Meanwhile, the gini ratios are equal for both genders working in domestic enterprises.

Table 6: Labor Market Gender Gap By Institutional Sectors in Vietnam (Main Job)

Institutional sector	Wage worker share, %		Income		Hours		Gini (income)	
	Male	Female	Male	Female	Male	Female	Male	Female
Public sector	98.3	99.4	1,773	1,650	44.8	44	0.337	0.280
Foreign enterprises	99.9	99.3	1,991	1,387	50.3	51.4	0.340	0.270
Domestic enterprises	92.1	93.4	1,850	1,421	51.5	51.7	0.340	0.341
Formal HB	40.4	27.5	1,902	1,594	52	53	0.439	0.478
Informal sector	34.7	12.4	1,233	947	48.2	46.8	0.348	0.404
Agriculture	9.3	5.4	774	538	40.7	38.4	0.565	0.532
Total	35.4	24.5	1,211	902	44.8	42.9	0.491	0.514

Sources: LFS 2007 and GSO and authors' calculation

3.3.6 *Socio-Demographic Characteristics*

Informal employment in rural areas is 32 percentage points higher than that in the urban, mainly due to the high agricultural employment rate in rural areas. In general, the educational level significantly impacts informal employment. That is, the employment rate in the informal sector is lower for those with higher education levels. For example, 96.5 percent of the workers have not completed their primary education, but only 13.7 percent college graduates take informal jobs (Table 7). The higher up the level of education women get, the less likely they are to have informal employment.

Informal employment has inverted U-shaped relationships with age. That is, informal employment is high among young people and low among the middle-aged and high again among the elderly, where more than 60 percent are aged 60 or older. More women over 60 years old participate in the informal employment than men of the same age bracket.

In the study, work quality is represented by the relative risk reduction (RRR) index of which the informal sector is usually lower than 1. This index shows that female laborers usually have fewer contracts, rewards, holidays, and jobs in permanent facilities than men. Given equivalent work hours, women earn 30 percent less than men. While working conditions for men and women in the formal sector are alike, women's income is 18 percent less than men.

Table 7: Informal Employment Rates by Institutional Sectors, Job Status, Area, Education, Age and Gender in Vietnam, %

Institutional Sector	Male	Female	Total	Area	Male	Female	Total
Public sector	15.1	9.1	12.3	Urban	57.2	57.5	57.3
Foreign enterprises	16.1	17.9	17.2	Rural	89.3	89.9	89.6
Domestic enterprises	56.1	48	52.9	Education	Male	Female	Total

Formal HB	50.8	44.7	48	Primary	96.5	96.4	96.5
Informal sector	100	100	100	Lower Secondary	90.8	90.2	90.5
Agriculture	98.8	99.2	99	Upper secondary	68	63.4	66.0
Job status	Male	Female	Total	University	15.3	11.7	13.7
Employer	33.2	32.8	33	Age	Male	Female	Total
Own-account worker	95.9	95.8	95.8	15-24	88.9	82	85.6
Wage worker	59.8	44	53.4	25-29	78.5	80.8	79.6
Family worker	100	100	100	60 and over	92.2	96.6	94.4
Total	81.2	82	81.6	Total	81.2	82	81.6

Sources: LFS 2007 and GSO and authors' calculation

Table 8: Informal Employment and Gender in Vietnam
Relative risk ratios of females over males

Employment	Written Contract	Pay Slip	Public Holidays	Fixed Premises	Fixed Wage	Hours Worked	Income*
All jobs							
Formal	1.01	0.99	0.99	1.04	0.93	1.0	0.82
Informal	0.66	0.64	0.76	0.78	0.59	0.95	0.70
Total	0.89	0.87	0.93	0.93	0.83	0.96	
Wage worker only							
Formal	1.01	1.0	1.0	1.04	0.96	0.99	0.85
Informal	1.32	1.28	1.51	1.47	1.17	0.97	0.76
Total	1.3	1.29	1.36	1.34	1.20	0.97	0.89

Sources: LFS 2007 and GSO and authors' calculation.

*Including unpaid workers

Note: The probability of females have a written contract with a formal job is 1% higher than for males, but it's 34% lower for an informal job.

In the informal sector, women workers are entitled to better working conditions than male workers. Women workers have 17 percent more opportunities than men to receive a fixed salary, 32 percent more chances to strike a labor contract, 47 percent more possibility to work in permanent facilities, and 51 percent more likelihood to enjoy the holidays (Cling et al 2010). The disadvantage of women in the labor market is mainly due to their abounding presence in the industries with unjustifiable work conditions such as unpaid housework, rather than because of the inequality in the types of work.

Own-account workers and homeworkers take a fairly large proportion of the employment structure. In this group, there are more women than men, and many are found in rural than in urban areas.

3.3.7 The level of Education of Female Workers in the Informal Sector

The level of education of wage-earning women in the informal sector is generally low--lower than of their male counterparts in the same sector and much lower than workers in the formal sector. The percentage of informal female labor with no degree was 26.56 percent in 2004, before going down to 25.24 percent in 2010 (Table 9). The biggest proportion of female workers in the informal sector are those who completed primary education, comprising 29.42 percent in 2004 and 29.89 percent in 2010. Those who reached secondary level comprised 23.97 percent in 2004 and 24.78 percent in 2010. The percentage figure for high school-level workers is in the single digit; more so with those in the collegiate or higher level, which accounted for only 3.2 percent in 2004 and 2.01 percent by 2010.

Self-employed females also have a generally low educational attainment. The proportion of those with non-degrees was 23.3 percent in 2004 and 21.41 percent in 2010, while the rate for those with primary education was 32.73 percent in 2004 and 32.33 percent in 2010.

Those with secondary education accounted for 30.64 percent in 2004 and 28.51 percent in 2010. Meanwhile, the educational level of self-employed females in the informal sector is roughly as low as that of wage-earning females in the same sector. However, in the context of economic transition, education does determine the workers' entrepreneurship skills.

Table 9: Educational Levels of Female Employees in Informal Sector

	2004			2006			2008			2010		
Education level	Female	Male	Both									
Formal wage worker												
<i>No degree</i>	1.53	0.93	1.21	0.18		0.09	1.52	1.66	1.59	2.14	1.29	1.71
Primary school	6.67	5.51	6.05	6.54	4.92	5.68	6.10	5.79	5.94	7.11	4.49	5.79
Secondary school	10.94	11.30	11.13	11.23	11.31	11.27	12.36	10.84	11.55	10.98	9.86	10.42
High school	11.49	12.61	12.09	11.97	13.20	12.62	13.12	13.69	13.43	14.57	10.75	12.65
Vocational training school	36.21	34.36	35.21	35.54	35.82	35.69	30.31	33.94	32.23	27.42	33.33	30.40
College and higher	33.15	35.29	34.31	34.53	34.75	34.65	36.58	34.09	35.26	37.78	40.27	39.03
Informal wage worker												
<i>No degree</i>	26.56	20.11	22.47	1.01	0.83	0.90	26.66	18.60	21.52	25.24	19.05	21.24
Primary school	29.42	30.82	30.31	41.93	39.64	40.42	29.19	30.47	30.01	29.89	28.24	28.82
Secondary school	23.97	28.45	26.81	32.69	35.27	34.39	24.70	29.81	27.96	24.78	29.54	27.86
High school	8.80	8.71	8.75	12.50	10.49	11.18	10.02	9.82	9.90	11.16	11.82	11.59
Vocational training school	8.04	9.50	8.97	9.19	11.93	10.99	7.34	9.32	8.61	6.63	9.50	8.49
College and higher	3.20	2.41	2.70	2.67	1.84	2.12	2.09	1.97	2.01	2.31	1.85	2.01
Formal self-employed workers												
<i>No degree</i>	10.78	5.14	8.25	0.92	0.17	0.57	17.70	8.74	13.31	11.41	5.50	8.65

Primary school	24.43	20.04	22.46	30.62	19.00	25.14	25.62	22.01	23.85	24.24	15.70	20.25
Secondary school	31.03	26.42	28.97	32.92	32.47	32.71	26.71	25.89	26.31	30.12	29.53	29.84
High school	19.25	21.28	20.16	20.31	19.69	20.02	15.06	16.02	15.53	18.35	18.26	18.31
Vocational training school	11.06	20.04	15.08	11.08	23.66	17.01	10.25	21.52	15.77	11.53	25.10	17.87
College and higher	3.45	7.09	5.08	4.15	5.01	4.56	4.66	5.83	5.23	4.35	5.91	5.08
Informal self-employed												
<i>No degree</i>	23.3	13.65	19.5	0.52	0.69	0.59	28.89	18.21	24.16	21.41	14.48	18.60
Primary school	32.73	28.78	31.18	42.46	33.79	38.75	27.76	28.19	27.95	32.33	30.00	31.39
Secondary school	30.64	32.52	31.38	38.67	36.63	37.80	25.51	27.61	26.44	28.51	30.64	29.37
High school	7.17	10.11	8.33	10.27	13.95	11.84	8.64	11.58	9.94	11.74	11.20	11.52
Vocational training school	5.32	13.46	8.53	6.43	12.34	8.96	6.08	10.42	8.01	4.59	11.28	7.30
College and higher	0.84	1.48	1	1.66	2.61	2.07	3.12	3.99	3.50	1.42	2.40	1.82

Source: VHLSS various years; and authors' calculations.

4 EARNINGS AND WORKING CONDITIONS FOR FEMALE WORKERS IN THE INFORMAL SECTOR

4.1. Earnings for Female Workers in the Informal Sector

The average hourly income of women workers in the informal sector is much lower than of their peers in the formal sector and of male workers, and even lower than the average of informal workers from both sexes (Table 10). It is also only half the income of formal women workers. In 2004, a female worker in the informal sector earned an average of 3,471.404 VND per hour; in 2010, the number increased to 8,391.426 VND per hour. This, however, is still lower than male informal workers' income of 4,329.526 VND per hour in 2004 and 11,380.55 VND per hour in 2010.

Table 10: Earnings Per Hours (Thousand VND)

Year	2004			2006		
	Female	Male	Both	Female	Male	Both
Formal employees	6.020818	6.899374	6.493887	7.925911	9.056573	8.522363
Informal employees	3.471404	4.329526	4.029256	4.120808	5.344982	4.909749
Formal self-employed	14.68524	19.61129	16.88416	18.62694	23.14833	20.68304
Informal self-employed	6.39606	9.371138	7.569777	8.579896	11.22277	9.624722
2008			2010			
Female	Male	Both	Female	Male	Both	
11.86192	13.61865	12.7844	16.89925	19.98696	18.45632	
5.977983	7.647428	7.06321	8.391426	11.38055	10.36652	
24.26926	31.68433	27.93001	32.13776	47.00799	39.06604	
13.32028	17.16286	15.04131	23.8787	27.79569	25.46994	

Source: VHLSS various years, authors' calculations.

Those in the informal sector but are self-employed have higher hourly incomes. Average hourly earnings of self-employed informal workers were 6,396.06 VND in 2006, rising to 27,795.69 VND in 2010. However, the hourly wage of self-employed females in this sector is still lower than that of male workers in the same sector and much less than those of female and male workers in the formal sector.

According to the VHLSS, there are fewer female than male labor in the informal sector. For example, male informal workers constitute around 65 percent, while their female counterparts account for about 35 percent in 2010 (Table 11). However, the percentage of self-employed females is higher than that of male workers, making up 60 percent in 2006 but dropping to 55.21 percent in 2008. On the other hand, the self-employed males increased from 40 percent in 2006 to approximately 45 percent in 2008.

Table 11: Employment Composition (%)

	2004	2006	2008	2010
Formal employees				
Female	46.05	47.03	47.07	49.57
Male	53.95	52.97	52.93	50.43
Informal employees				
Female	36.54	36.4	36.1	35.35
Male	63.46	63.6	63.9	64.65
Formal self-employed workers				
Female	60.57	54.35	50.63	51.72
Male	39.43	45.65	49.37	48.28
Informal self- employed workers				

Female	55.28	60.5	55.21	54.93
Male	44.72	39.5	44.79	45.07

Source: VHLSS various years, authors' calculations.

In terms of hourly earnings, formal labor income is higher than informal labor income. Such income is greater in urban areas than in rural areas in both the formal and informal sectors. For example, in 2004, the average income of informal workers in rural areas was 3,116 VND per hour, lower than urban workers' 4,314 VND per hour (Table 13). By 2010, the figures became 7,740 VND per hour and 9,893 VND per hour, respectively.

The informal sector's self-employed individuals enjoy an average income that is twice that paid to informal workers. In 2004, self-employed workers earned 6,049 VND per hour in rural areas and 7,229 VND per hour in urban areas. By 2010, the rural figure increased to 22,090 VND per hour while the urban earnings became 32,187 VND per hour.

Table 13: Earnings by Areas (Rural and Urban, in Thousands VND)

Year	2004			2006			2008			2010		
Wage Worker												
	Formal labor											
	Female	Male	Both	Female	Male	Both	Female	Male	Both	Female	Male	Both
Rural	5.947045	5.862123	5.900235	7.368775	7.892458	7.645959	11.22024	11.56282	11.4009	14.70197	15.11651	14.90502
Urban	6.071848	7.683384	6.924678	8.367588	9.984184	9.217499	12.92733	15.66886	14.36308	18.69401	23.57663	21.21101
	Informal labor											
Rural							5.658544					
							7.038826					
	3.116204	3.9882	3.692814	3.747151	4.961364	4.545083	0.2222222	7.515869	6.89913	7.740202	10.72934	9.753328
Urban	4.314644	5.294199	4.922617	4.936676	6.290667	5.766668	7.366639	9.272257	8.51884	9.893378	13.23378	11.99096
Self-employed workers												
	Formal labor											
Rural	12.91193	16.59602	14.61634	17.31545	19.13601	18.16884	23.05476	33.82539	28.52099	25.8583	31.84734	28.63919
Urban	16.35481	22.84909	19.14838	19.8537	26.80788	22.97278	27.10168	34.53799	30.62302	38.41738	63.97336	50.36563
	Informal labor											
Rural	6.049108	8.138626	6.881032	8.579051	11.04473	9.546074	11.89318	15.63255	13.60668	18.669	26.82072	22.09021
Urban	7.229538	12.49163	9.258742	8.640671	11.48013	9.770139	18.38725	23.59749	20.61673	32.71957	31.32403	32.18775

Source: VHLSS various years, authors' calculations

When assessed by region, incomes are found to be better in regions with more favorable natural conditions than in remote and mountainous areas. In 2004, the informal sectors' women workers in the South East earned the highest at 4,510 VND per hour (Table 14). This was followed by rates in the North West at 4,320 VND per hour. By 2010, the income of the same labor group was highest still in the South East at 10,350 VND per hour. This was followed by incomes in the Central Highlands, which was 10,100 VND per hour. The North West, a mountainous and poor area, only got the top position among regions due to the informal female workers' involvement in tourism, and manufacturing and sale of traditional products.

Self-employed informal women workers earn, on average, twice what female informal workers receive. In 2004, self-employed women in the South East enjoyed the highest income at 9,210 VND per hour, followed by those in the Central Highland and the Mekong Delta regions at 6,910 VND per hour and 6,310 VND per hour, respectively. Those in the Red River Delta earned 6,160 VND per hour, while the lowest is the North-Central coastal regions at 4,310 VND per hour in 2004.

In 2010, the highest income of self-employed informal women came from those in the South East (49,410 VND per hour), followed by those in the Red River Delta (28,310 VND per hour), and the North Central Coastal regions (20,610 VND per hour). The average income of female informal workers is higher in some regions due to their association with household production---i.e., processing businesses that export such items as wood, rubber, pepper, coffee, seafood, or services.

Table 14: Earning Per Hour of Informal Workers by Region (Rural and Urban, in Thousands VND)

	2004				2006			
	Formal		Informal		Formal		Informal	
	Female	Male	Female	Male	Female	Male	Female	Male
Wage Worker								
Red river delta	5.35	7.25	3.10	3.93	8.36	10.12	4.40	5.60
North East	5.99	6.26	3.83	4.33	8.73	9.37	4.74	5.17
North West	7.20	6.25	4.32	5.05	6.98	8.11	6.05	6.41
North Central Coast	5.64	5.16	2.73	4.11	7.80	8.41	3.64	4.94
South Central Coast	5.62	6.24	2.88	4.22	9.36	10.84	4.00	6.30
Central Highlands	6.62	8.04	3.00	3.88	10.98	9.50	4.39	5.26
South East	6.39	8.48	4.51	5.27	9.79	13.44	5.64	6.62
Mekong river delta	6.85	6.87	3.25	4.19	9.06	9.51	3.76	5.07
Self-employed workers								
Red river delta	12.89	13.89	6.16	11.03	12.33	18.89	8.39	11.71
North East	8.61	14.71	6.30	7.48	11.44	16.34	9.30	10.11
North West	6.40	30.62	5.00	8.11	27.44	23.39	7.02	12.30
North Central Coast	5.93	8.34	4.31	6.64	10.44	11.54	6.12	9.97
South Central Coast	14.84	16.15	6.01	7.67	28.73	24.67	7.60	13.25
Central Highlands	9.64	13.41	6.91	16.16	10.71	16.06	16.89	11.65
South East	13.36	25.42	9.21	12.20	30.31	33.68	10.22	12.46
Mekong river delta	27.77	28.56	6.31	7.16	19.84	26.82	7.60	10.29
2008				2010				
formal		Informal		formal		informal		
Female	Male	Female	Male	Female	Male	Female	Male	
11.22	12.45	5.14	7.16	17.45	21.46	8.26	12.60	
10.23	11.78	7.28	7.24	16.16	17.91	8.18	10.54	
11.79	12.17	7.37	7.12	21.52	20.46	9.69	11.24	
11.43	14.96	6.76	6.43	14.80	16.55	7.75	10.03	
12.84	13.91	5.87	7.71	15.54	19.23	8.23	10.98	
15.99	14.60	10.22	8.32	21.14	20.29	10.10	11.46	

12.64	15.73	7.19	9.26	15.86	21.96	10.35	12.73
11.93	13.35	4.94	7.45	17.69	17.97	7.11	10.58
18.16	18.42	12.85	14.34	32.60	52.95	28.31	37.60
19.56	33.17	11.21	13.33	21.16	28.87	13.82	16.89
70.15	25.40	4.80	9.42	31.75	34.01	9.78	23.25
15.76	21.43	10.20	11.00	19.32	28.87	17.19	26.94
16.48	17.76	13.52	15.96	22.77	33.33	20.61	29.32
18.11	43.96	13.12	17.72	52.75	54.55	20.18	25.72
36.86	50.75	22.81	37.19	41.12	85.68	49.41	31.18
28.38	33.91	12.16	14.93	33.60	41.80	16.17	22.81

Source: VHLSS various years, authors' calculations

In Vietnam, 27 percent of the workforce is composed of female who act as family breadwinners. That is, the female worker's earnings is the only source of income for her family (World Bank 2009).

4.2 Determinants of Female Labor Income

To incorporate and quantify the effects of any potential factor on labor productivity, a conventional econometric model of earnings equation is used. Earnings of worker i is determined by the equation:

$$Y_i = X_i\beta + \mu_i$$

Where Y_i is a column vector of logarithmic values of hourly wage for individuals; X_i is the vector of person-specific explanatory variables, including demographic variables; B is a vector of unknown parameters; and μ is the error term assumed to be normally distributed.

Vector X includes the characteristics of workers. According to conventional literature, this often includes the level of education, age, and occupation. Dummies of marital status and gender are also present. To control urban/rural variations in wages,

dummy for urban-rural residence is used. By assessing the statistical significance of those variables in the regression, it is possible to compare and figure out which factors could play important roles in determining the informal female labor earnings. The econometric model is used to examine the factors that have an impact on earnings of informal female labor, using primary survey data and data from the VHLSS in 2010. Variables in the earning functions are as follows:

Variable	Explanations
Wage	Wage of individual per hour
L_wage	Log form of wage
Informal	Dummy variable, equal to 1 for informal labor and 0 for formal labor
Immigration	Dummy variable, equal to 0 for individual who registers for residency at his dwelling, and 1 for individual who registers for residency in other place
Gender	Dummy variable, equal to 1 for male and 0 for female
Agetv	Age of individual
Age2	Age square
Edulevel	Levels of education by: no degree to 1, primary to 2, secondary to 3, high school to 4, vocational to 5, college and higher to 6
Urban	Dummy variable, equal to 0 for rural and 1 for urban
Skill	Dummy variable, equal to 0 for unskilled workers and 1 for skilled workers
Mar	Dummy variable, equal to 1 if the current marital status of the individual is married and 1 if the current marital status of individual is never married, widowed, divorced, or separated.
Sectorpar	Dummy variable, equal to 1 for workers (in labor-intensive industry) and equal to 0, if otherwise.

4.2.1 Data

This research also uses data from the VHLSS---a survey designed to study living conditions and poverty and inequality issues---to examine the labor and earnings in the informal sector. It is the most popular household survey with multi-objective studies in developing countries, consisting of all aspects of household economic activities. The survey was done in 1993, 1998, 2002, 2004, 2006, 2008, and 2010. Earlier survey rounds (i.e., in 1993 and 1998) called Vietnam Living Standard Survey (VLSS) were representative of data at the national, rural/urban, and regional levels.

As the VHLSS is not a survey specifically on informal employment and sector, it thus has some shortcomings (e.g., income information is not enough to understand the details on the informal sector, information related to job characteristics is sparse, etc.) when measuring the informal sector. However, it does provide essential information for generating the best proxies (in comparison with other existing surveys) of informality (Cling et al 2010). The VHLSS is probably the most used survey as its data quality is considered reasonably good.

Furthermore, although it was not designed to be a labor survey, the VHLSS has an employment segment (employment status, working hours, migration, and wages of all family members). It still provides an excellent source for studying wage and wage determinants, and the relation of wage to poverty and income inequality at the national and provincial levels. It also offers indicators on labor force participation, overall and by income sources (farm versus non-farm, wage versus non-wage, and by industry and occupation for those in wage employment). Its data can then be used to examine the Vietnamese labor market from the demand and supply sides.

Two types of data are drawn from the VHLSSs for this analysis. First, time series are constructed from the VHLSS rounds done in 2004, 2006, 2008, and 2010. Data here are used in the analysis and detection of labor market trends on female workers in the informal sector. Second, this research uses the latest VHLSS available in 2010 for the earning functions for female workers in the informal sector. Samples are used after discarding the missing observations.

In this study, informal employment includes informal self-employed (those who run their own non-farm household businesses without a business license) and informal waged employees (wage workers) who do not benefit from social allowances. Thus, informal sector jobs are identified from the VHLSS data by looking at information related to both waged workers and self-employed workers in non-farm household businesses.

Finally, while wage workers receive wages as their source of income, self-employed workers, on the other hand, rely on their whole household's earnings because the household members work together. Therefore, this study took the average earnings of the self-employed workers.

4.2.2 Estimation results for wage workers

The conventional Mincerian log earning functions for the whole sample were estimated using data on (1) overall sample; (2) informal labor; and (3) informal female labor in 2010. Results are presented in Table 15.

Table 15: Estimation Results of Earning Function for Wage Workers

Variable	Overall		Informal Female
	(Model 1)	Informal labor (Model 2)	labor (Model 3)
Gender	0.208*** (0.000)	0.284*** (0.000)	
Informal	-0.255 (0.000)		
Agetv	0.045*** (0.000)	0.038*** (0.000)	0.034*** (0.000)
Age2	-0.001*** (0.000)	-0.0005*** (0.000)	-0.00045** (0.000)
Mar	0.060*** (0.000)	0.061*** (0.004)	0.043 (0.225)
Skill	0.171*** (0.000)	0.150*** (0.000)	0.203*** (0.000)
Schooling	0.026*** (0.000)	0.013*** (0.000)	0.019*** (0.000)
Immigration	0.126*** (0.000)	0.152*** (0.000)	0.076 (0.259)
Urban	0.121*** (0.000)	0.096*** (0.000)	0.090*** (0.008)
Sectorpar	-0.175*** (0.000)	-0.203*** (0.000)	-0.229*** (0.000)
Constant	1.191*** (0.000)	1.179*** (0.000)	1.221*** (0.000)
Adjusted R-squared	0.3104	0.156	0.101
Number of Observations	7312	4403	1458

Note: P-value in parentheses
 (*): Statistically significant at 10%

(**): Statistically significant at 5%

(***): Statistically significant at 1%

Source: VHLSS various years, authors' calculations.

In the three cases using three different sets of data, nearly all estimated coefficients are statistically significant with expected signs. There were only two coefficients that are statistically insignificant; namely, marital status (1 if married, 0 if not) and the dummy on immigration (in the case of informal female labor). The results, in general, meet almost all this study's expectations.

In all three earnings equations, it was found that schooling, skill¹ (1 if yes, 0 if not), and *agetv* positively impact workers' earnings. The positive sign of the dummy variable's correlation coefficient for skill implies that the more the individual has been trained and equipped with improved skills, the more she can raise her income. These findings are consistent with the common pattern in many countries. Education and skill often prove to

¹According to VHLSS, *Skill* is a combination of complexity and scope of tasks and responsibilities. In order to understand the meaning of skill, VHLSS also provided certain classifications. Professions are classified based on two main concepts: the concept of the job done before, and the concept of workmanship.

Job is a task and responsibility executed or the means employed to fulfill such task and responsibility by a person that statistics agencies use in the classification of professions. *Workmanship* is the ability to carry out tasks and responsibilities required by a profession. Workmanship has two aspects: *Skill and Specialization*: The latter includes technical aspects required by the profession, machineries manipulated, materials used in production, the type of products and services produced.

To be consistent and comparison with international standards, profession's classification is divided into four general workmanship levels:

- 1) First workmanship level: no technical qualification is required. It's equal to non-skilled job.
- 2) Second workmanship level: equivalent to primary technical level or technical worker. It's equal to low skilled job.
- 3) Third workmanship level: equivalent to vocational training of secondary level or higher. It's equal to medium skilled job
- 4) Fourth workmanship: equivalent to university level or higher. It's high skilled job.

The use of groupings of educational levels for profession classification does not necessarily mean that the tasks and responsibilities required by a profession can only be executed if a person has been formally educated or trained because workmanship of a person can also be accumulated through experience or non-formal education and training. Moreover, it should be emphasized that the profession classification reflects the skill level needed to execute the tasks and responsibilities required by a profession.

be very important in improving productivity and management, which in turn, will bring about more output, hence generating more income.

In the model on overall sample as well as informal labor, gender is statistically significant. There is enough evidence to conclude that gender inequality exists in the labor market in general and informal labor sector in particular. The negative coefficient for gender implies that there is a significant income gap between female and male workers in Vietnam, especially in the informal sector. Results on model 1 and 2 also show that gender is important in generating income. Men receive higher income than women, especially when they are informally employed. Again, such result is quite common in developing countries in Asia such as Vietnam, where men are generally in a better position to access employment opportunities and raise their income than the women.

The negative sign on the urban variable indicates that workers in urban areas tend to have higher earnings than those in rural areas. This is why migrants increasingly move from rural areas to industrial centers. The number of unofficial workers (i.e., not registered with local authorities) in urban areas comprises about 10 percent to 15 percent of the population in Vietnam's cities.

The effect of marital status (presented by dummy variable Mar) on earnings was statistically significant for both the overall sample and the informal labor group, suggesting that earnings of married persons are 6 percent higher than that of divorced/separated and never-married individuals. Such finding can be explained by the social and economic benefits of marriage. Marriage's social benefits include social support during times of stress, which can work to protect one's wellness, manage one's moods, and even encourage one to engage in healthy behaviors. The economic benefits include pooled assets, living in

the same household, access to spousal health insurance, and shared household labor. Also, working married women have median earnings that are somewhat higher than those who have never married or under other marital statuses². Working married women may have a stronger drive and higher responsibility to earn more than those under the other marital statuses.

Similarly, the negative signs of the dummy variables for Sectorpar in all the three earnings equations prove that (assuming other things constant) the more workers work in a labor-intensive industry where women are mainly concentrated, the lesser their income. Labor-intensive industries in this study include food and beverage production, tobacco production, textile, clothing, leather tanning, and leather products including wallets and seat upholstery.

Immigration has a substantial role in improving the earnings of overall labor and informal labor. Other things being equal, migrant workers earn 12.6 percent and 15.2 percent higher than the overall labor sector and informal labor, respectively.

For informal female labor, the first important factor for earnings is skill. Other things being equal, skilled labor earns 20.3 percent more than unskilled labor. Although the years of education and experience have positive effects on the earnings of female labor, such can only raise earnings by 1.9 percent. Location, though, seems to be an important factor affecting earnings of informal female workers. Other things being equal, the gap between the earnings of those who reside in the urban area and those who reside in the rural area is 9 percent.

² According to VHLSS, marital status consists of the following types: Not yet married, Married, Widower/widow, Divorced, and Separated.

The dummy variables for Sectorpar are statistically significant among informal female workers. Such group is paid lesser in labor-intensive industries than in other industries. Vietnamese women are primarily employed in a narrow range of sectors (especially textile, clothing, and services, where access to jobs is easier but wages are often lower and job security is minimal). These are not high-value jobs and generally belong in the informal sector. Thus, these do not provide the benefits normally enjoyed by a full-time employee in the formal sector such as steady wages, adequate occupational health and safety conditions, job security, and social protection. Women mainly hold onto these jobs because these do not require high education and skill.

4.2.3 Estimation Results for Self-Employed Workers

Similarly, the estimation results for self-employed individuals are presented in Table 16.

Table 16: Estimation Results of Earning Function for Self-employed Workers

Variable	Overall (model 4)	informal labor (model 5)	informal Female labor (model 6)
Gender	0.258*** (0.000)	0.262*** (0.000)	
Informal2	-0.392*** (0.000)		
Agetv	0.007 (0.318)	0.018** (0.029)	0.011 (0.307)
Age2	-0.0002** (0.015)	-0.0003 (0.000)	-0.0002* (0.090)

Mar	0.003 (0.951)	-0.027 (0.641)	0.090 (0.197)
Skill	-0.044 (0.387)	-0.112 (0.132)	-0.338*** (0.003)
Schooling	0.025 (0.000)	0.027 (0.000)	0.034 (0.000)
Immigration	0.244 (0.04)	0.303 (0.005)	0.358 (0.014)
Urban10	0.232 (0.000)	0.156 (0.000)	0.197 (0.000)
Constant	2.635 (0.000)	2.087 (0.000)	1.997 (0.000)
<hr/>			
Adjusted R-squared	0.097	0.053	0.036
Number of Observations	4495	2993	1721

Note: P-value in parentheses

(*): Statistically significant at 10%

(**): Statistically significant at 5%

(***): Statistically significant at 1%

Source: VHLSS various years, authors' calculations.

The regression results from the 2010 VHLSS on waged workers and from the VHLSS on self-employed workers are similar. In general, the independent variables influence the level of earnings in the same direction, as expected. However, there are some differences between the results of the two groups (waged worker and self-employed workers). The sign for the gender, informal, agetv, age2, immigration, schooling, and

urban variables are unchanged in the three earlier models in comparison with the above models (Table 16).

Meanwhile, these models' dummy variable for skill is negative although statistically insignificant in the case of both the overall sample and the informal labor group. There is not enough evidence to conclude that the more individuals have improved their skill, the more they see an increase in their earnings. However, because results show that the skill set of female workers is significantly negative, there is reason to suspect that the questionnaire used for this study might have failed to include all the important skills of self-employed workers.

The sign for the schooling variable is positive in the three models. Thus, a high level of education is guaranteed to land one a well-paying job or allow one to run a self-employed activity in the non-farm economy.

4.3 Working Conditions for Female Informal Workers

4.3.1 Working Hours and Overtime Work Situation

According to the Labor Code, employees should work for 40 hours per week. In reality, most workers in general and women workers in particular have to work for more than the stipulated time. Approximately 60 percent of the females and 48.9 percent of the male labor work overtime by over four hours per day. This figure is even much higher in the small manufacturing facilities. Overtime work could negatively affect workers' health, including reproductive health of women workers.

4.3.2 Working Environment and Labor Protection

Working environment is the place where employees perform manufacturing operations and services. Certain elements in this environment can affect workers' health that, in the long-term, may cause the “occupational diseases”. The most recognizable and common elements are dust, toxic gases and wastes, high temperature, and noise. Currently, the working environment in many enterprises is below the regulated standards, with approximately 23 percent of employees, particularly female employees, working in hazardous environments. To ensure the safety and health for workers, the employer shall be responsible for the safety and labor sanitation training and equip female workers with means of protection (GSO 2008).

4.3.3 Health Problems for Female Workers

As prescribed by law, no employer shall employ female workers as of their seventh month of pregnancy to work overtime, at night or in distant locations, and instead should transfer them to lighter assignments. Also, the Labor Code states that female workers who take time off from work for prenatal check-ups or for miscarriage shall be entitled to social security benefits or shall be paid an equivalent amount by the employer. However, the compliance by businesses leaves some room for improvement, as some tend to regularly violate these rules.

5 SOCIAL PROTECTION FOR FEMALE WORKERS IN THE INFORMAL SECTOR

5.1 Social Allowance

Today, social protection is understood more broadly as a network of methods to actively protect individuals, families, and communities against risks, the most important of which is insurance.

Social allowance is one type of social security that may include healthcare; care for women unable to work due to illnesses, disability from work-related accidents, unemployment, pregnancy, or old age; and childcare services. In this regard, there is now an interaction among employees, employers and government on social allowance.

In general, social allowance in the informal sector is lower than that in the formal sector. Specifically, the social allowance for female workers in the informal sector is the lowest. For instance, female workers from the informal sector received 152.48 VND per person worth of allowances for public holidays in 2004 (Table 17). The amount was only one-fourth that of their counterparts in the formal sector who received 657.83 VND per person. In 2008, the number became 238.96 VND per female in the informal sector, about one-sixth of the formal sector's 1,306.91 VND per female.

Table 17: Social allowance

	2004		2006		2008	
	Female	Male	Female	Male	Female	Male
Formal labor						
Public holidays	657.83	899.79	889.88	1228.09	1306.91	1813.82
Social allowances (sickness, workplace accidents, Maternity allowance)	129.32	22.25	121.19	18.65	181.14	16.60
Allowance for domestic and overseas business trips	86.35	460.46	113.16	373.86	152.20	542.76
others (bonuses, uniform, spending on lunches)	846.15	1050.65	1075.79	1436.04	1518.90	1939.70
Informal labor						
Public holidays	152.48	131.94	171.90	161.49	238.96	251.44
Social allowances (sickness, workplace accidents, Maternity allowance)	8.08	2.07	4.52	3.39	22.43	1.73
Allowance for domestic and overseas business trips	12.74	22.06	11.26	21.06	5.27	30.82
others (bonuses, uniform, spending on lunches)	244.15	313.48	333.22	373.90	446.14	607.99

Source: VHLSS various years, authors' calculations; Allowance received in form of absolute value

Social allowances such as those for illnesses, accidents, and pregnancy of female workers in the informal sector are higher than those received by their male counterparts in the same sector but is only one-tenth than what female workers in the formal sector are entitled to.

The allowance for female workers in the informal sector tends to decline: The value was 8,080 VND per person in 2004; 4,520 VND per person in 2006; and 1,730 VND per person in 2008. As the figure involved here is too small, one can even safely state that female workers in the informal sector hardly receive any social allowance at all.

Other allowances for women in the informal sector such as those for domestic and outbound travel, clothing or living, is only 50 percent that of their male counterparts in the same sector and one-fourth that of female workers in the formal sector. In 2004, the allowance for female informal workers was 244.15VND per person, before increasing to 333.22 VND per person in 2006 and 446.14 VND per person in 2008.

5.2 Policies for Social Security, Health Insurance and Social Welfare

In Vietnam's policies and legislations, women and men are equal and protected without any discrimination. In reality, however, the gender difference in implementing the social insurance policy still exists in the following aspects:

- As stipulated in the law, female workers are entitled to pregnancy leave of six months. In practice, though, it is the women workers who volunteer to cut down their leaves to two to three months only for fear of losing their jobs as well as because of their desire to earn more income.
- Processes and procedures in the implementation of the current social insurance are inadequate and cumbersome.

- Policies are designed to prioritize the recruitment and provisional vocational training of female workers. Article 110 of the amended Labor Code (2002) specifies that enterprises must hold provisional training courses for female workers besides the latter's current jobs, so as to improve their hiring qualifications and become a good fit to the physiological characteristics required in the job. In practice, however, only 5 percent of the companies--- mostly the state-owned enterprises--- manage to do abide by the said law.

5.3 Unemployment Insurance

As of August 31, 2011, 9.9 million workers had become part of the nation's social insurance, of which 9.8 million were under compulsory insurance.

In 2009, 5.9 million workers participated in the unemployment insurance. The number increased to 7 million in 2010, and to roughly 7.5 million today. Compared to the compulsory social insurance, the unemployment insurance has fewer members as it does not cover civil servants. Nor does it include workers with labor contracts of less than 12 months and laborers in informal enterprises (i.e., under 10 employees).

By August 2011, about 245,000 employees registered for the unemployment insurance, up from 190,000 in 2010. The number spiked as workers changed employers and in the interim, registered for unemployment insurance with insurance agencies so as to earn the unemployment allowance. Since a number of companies relocated to the suburb or neighboring provinces, employees unwilling to go to the new site decided to end their labor contract.

The Social Insurance Law was formally adopted by the National Assembly on June 29, 2006. By the end of 2010, nearly 20 percent the labor force were covered by the social

insurance. Meanwhile, the Act included the voluntary social insurance to regulate employees in the informal sector effective January 1, 2008. Three years later, only over 90,000 individuals were covered by the compulsory and farming social insurance. The number of participants in voluntary social insurance has been very low from the beginning.

Farmers, self-employed workers (including migrant workers), and workers employed in the private sector (individual household economy), especially in the informal labor, do not participate in the social insurance yet. Although the recent years saw the commercial insurance system thrive and grow---particularly life insurance that attracted informal workers with high incomes---the number of members remains measly.

There are several reasons for the low numbers. Up to 42.5 percent of the poorest respondents surveyed deemed that they have no demand for the product. The number of respondents with the same response tend to rise in the next groups: the near-poor (55.7%), moderate (62.5%), affluent (63%), and rich (66.7%) (MOLISA and VSI 2011).

High premium is also a main reason for a large proportion of the respondents, although its trend is opposite that of the earlier reason. That is, the percentage declines for each economic level starting from the poor group to the rich groups: 22.9 percent (poor), 19.9 percent (near-poor), 13.5 percent (moderate), 14.5 percent (affluent) and 11.1 percent (rich). As per the regulations, a monthly premium of 16 percent of workers' income is deducted as part of the voluntary social insurance fund. Starting in 2010, the rate increases by 2 percent every two years, until it reaches 22 percent. The income that is used as the basis for calculating the social insurance premium may be changed depending on a worker's financial status in each period but should not be lower than the minimum wage prescribed by the government and not higher than 20 months' worth of minimum wage.

Given their low and unstable income, informal workers' participation in social insurance is erratic. The voluntary social insurance premium deducted from their poor monthly income is very small because their income is not even enough for their daily and child-rearing expenses. Furthermore, majority are breadwinners in a family with children and elderly parents. Thus, for many---especially farmers and farming workers with irregular income---the immediate problem is how to have a decent life at the moment rather than in the distant future.

Many people are uninterested in voluntary social insurance because of the prolonged period for premium payment. As regulated, all workers up to 60 years old for men and 55 for women have to pay an insurance premium for a full 20 years. They are required to contribute at least 20 years of premium before they can receive a pension so as to ensure an accumulated value of insurance fund and to avoid any financial imbalance between the present value of workers' contributions and the pension they will receive. Participants in the voluntary social insurance only get an insurance payout after paying their premiums in full and reaching a certain age as prescribed by law.

Meanwhile, provisions in the compulsory social insurance are much more flexible in this aspect. The voluntary social insurance has no stipulations on reducing the retirement age for workers in hazardous or dangerous industries (55 year-old men and 50 year-old women with full 15 years in noxious and dangerous industries) to receive benefits, while participants in compulsory social insurance are entitled to this. This lack of proviso in the voluntary social insurance to reduce the retirement age may limit the number of participants, especially workers coming from harmful and dangerous industries.

The regulation that requires social insurance participants to pay for at least 20 years (or complete the 20 years of contributions if they are missing even less than five years of premium payment) causes a large number of over-45-year-old male workers and over-41-year-old female workers to balk at participating in social insurance.

Low participation in voluntary social insurance is also partly due to informal and rural workers' poor education. After all, poor education influences the perception and access to information on the role of voluntary social insurance. Poor education also affects job and income stability---important factors in one's membership in social insurance (MOLISA and VSI 2011).

In fact, many participants are not fully aware of the role of and concept behind voluntary social insurance because information on social insurance has been disseminated ineffectively. That is information dissemination campaigns on social insurance have not been widely, quickly and evenly implemented in all provinces, and there is a lack of suitable means to directly impact participants in craft villages and services, etc. Unlike in the case of compulsory social insurance, campaigns on the voluntary social insurance are not funded properly. Instead, information dissemination activities focused largely on compulsory social insurance in industrial zones and factories, where there are a high number of employers and paid employees.

In addition, the implementation of the voluntary social insurance is slow. It has only a few agents in districts/villages, with some still encountering difficulties in receiving and processing pensions for migrant workers (MOLISA and VSI 2011).

Vietnam's social insurance system is operated in a casual way and does not even assign a voluntary social insurance number to every member. Therefore, migrant workers,

mainly migrants to urban areas, could not participate in voluntary social insurance without resident registration.

Finally, because Vietnam's tradition dictates that the elderly be taken care of by their children in their old age, the former are not very concerned about getting social insurance for themselves.

6 SOME POLICY IMPLICATIONS AND RECOMMENDATIONS

In a developing country such as Vietnam, informal household businesses (IHBs) are legally recognized even if these have not registered for a business certificate. There are two other forms of registration for IHBs: Tax registration and social insurance, neither of which is obligatory.

In fact, the informal sector should be considered as a sector that demonstrates the natural development of the economy rather than adopts compulsory registration (GSO 2011). Therefore, the solution here is to simplify the registration procedures, and avoid discriminating between businesses and imposing high taxes. The registration procedures should be made clear, transparent and simple so as to encourage businesses to register.

The government has certain policies that support IHBs, especially on capital. However, IHBs refrain from approaching and borrowing from commercial banks due to the latter's complicated procedures. High interest rates can also be a major barrier to IHBs' access to bank loans. Banks, on the other hand, pay little attention to these entrepreneurs possibly because IHBs only involve small-scale loans and bring in low profits. Sadly, the microfinance institutions where the IHBs can approach and borrow money have not been

developed in Vietnam. As a result, many IHBs turn to black market loans with exorbitant interest rates (GSO 2012).

Other kinds of support---such as on technical, accounting training, market approach, competence construction, and information---have likewise been unreliable. Some common policy tools in the formal sector such as minimum salary, social welfare, unemployment insurance, or labor union representatives, were not possible for the informal sector.

6.1 Promote Gender Equality for Informal Female Workers

Female workers often drop out of school and enter the labor market earlier than men do. Consequently, women are often less skilled and have lower education than male workers. Moreover, as wives and mothers, women tend to spend a significant amount of time on their families. As a result, their time for work as well as opportunities to be promoted become limited compared to men's. This gap can be reduced once the government develops strong policies on education and training, and the labor market for female workers.

The risks of losing one's jobs or getting an income cut are also going up, with female workers more at risk of unemployment than the men. It is thus important to institutionalize laws on Social Insurance, Unemployment Insurance and Gender Equality, to create policy and legal frameworks and to promote gender equality in labor.

6.2 Policy Framework for Female Workers in the Informal Sector

As a means to alleviate poverty, it is necessary to encourage social protection and women empowerment in the informal sector. Due to the vulnerable position of women, an organization that serves as a channel to express women's interests and demands is essential. Thus, a female workers' union similar to the one in India should be established.

Social protection policies for individuals until the working age should focus on education and vocational training. It is important, after all, to prepare the future job seekers. When individuals start to join the labor markets, there ought to be social protection policies that will mitigate certain risks in employment. These policies pertain to access to health services, savings, accident and childbirth insurance, and other health services that can increase labor productivity. It is vital to have strict labor regulations on income, wages, basic working conditions for women, and access to growth resources of enterprises (MOLISA and VSI 2011).

Then there is also the protection policies on the social security of the female elderly. Employees in general and female workers in particular are concerned about their financial security in their old age. If the female elderly feels assured about her financial future, then there will be more opportunities to redirect the contributions to childcare instead (MOLISA and VSI 2011).

It is thus necessary to change the approach of social protection policies for female workers. Because there are different occupational groups and different employment statuses, policies should be flexible enough to suit the beneficiaries' working characteristics. For one, female laborers in the informal sector should be able to participate in social insurance and other macro finance services.

6.2.1 *Develop Policies of Equality*

The availability of information on the labor market helps in the planning and adjustment of national plans and policies on employment. To be able to assist informal female workers, it is essential to first improve the market information systems. Enhancing the system will facilitate policymakers' tasks in developing, implementing and monitoring labor market policies and in employment promotion, as well as allow both the employee and the employer to better understand the operations of the labor market. There is also a need to integrate the regional surveys on the informal economy into the national information system in the long term (GSO 2008; and MOLISA and VSI 2011).

As mentioned earlier in this paper, despite the potential contribution of the informal labor to both the society and the economy, it has not received adequate attention from authorities, especially with regard social security policies employment, credit support, vocational training, job search, social insurance, medical insurance, and unemployment insurance.

While compulsory social security policies are relatively well executed in the formal sector, there are many difficulties in implementing the policies in the informal sector and rural areas. There is also still room for improving the voluntary social insurance, given that compulsory social insurance participants account for 20 percent only of the labor force. A well-executed voluntary social security policy can lessen the pressure on workers in the formal economic sectors as they benefit from pensions and other preference during hard times (GSO 2012; and MOLISA and VSI 2011).

Gaps between rural and urban areas seem to be a serious problem, particularly for informal female workers. These differences come in the form of job opportunities,

infrastructure development (roads, irrigation, telecommunication), access to public services such as education and health, and quality of life.

Finally, there is the gender equity as another concern in the informal sector. An earnings gap exists between male and female labor in informal economic activities. All kinds of discrimination that account for most of the income differentials should be subjected to further research and addressed properly by the government.

6.2.2 Insurance Policy

Laborers in the informal sector can be described as those who do not work in economic entities with legal/business status, but in households (especially in rural areas), have high dispersion, move frequently and with low awareness and unclear accounting of income. It is this group that should be given direct access to the voluntary social security. To reach a wider number of informal laborers, the government should facilitate their membership into the voluntary social insurance through these steps:

- 1) Completely manage the voluntary social insurance members: Use the unified social insurance numbering system in Vietnam, where members will have their own identification numbers. In the near future, the use of electronic cards will make the process more flexible and easier in case of employee movements. The government may tap unions (farmers' unions, women unions, youth unions, etc.) to assist members. Meanwhile, commercial insurance entities, which are experienced in creating a marketing network, usually approach each household to assess potential members' situations and ability to pay. Once interested workers enter into a contract with the social insurance agencies (similar to the process with life insurance), the government, on its part, should monitor, consult with and supervise these commercial insurance companies.

- 2) Integrate the voluntary social insurance program with other target programs (e.g., job creation program, poverty reduction program, economic-social development program). The most ideal scenario where it would be easiest to convince female workers in the informal sector to participate in a social insurance is when they finally get a high-value and high-income job, as this means that they would have the extra funds to pay for the voluntary social insurance contributions. Therefore, strategies geared toward expanding the social insurance coverage must be associated with economic development strategies, employment strategies, and poverty alleviation.

To encourage the poor to participate in a voluntary social insurance, there ought to be support mechanisms geared toward the said group. The government can assist by allowing the poor sector a percentage of the contribution or lending to the poor at preferential interest rates. This lending program may be tied with target programs on poverty reduction so as to get the poor to participate in the voluntary social insurance after overcoming poverty. The social security fund needs to be established at the village level and sourced from the state's budget, people's contributions, and international support.

- 3) Intensify the awareness campaign to get the informal sector workers to understand, trust and become a member of the voluntary social insurance.
- 4) The government needs to reduce the required minimum number of membership years in social insurance and still allow members to cover the remaining required contributions if they have not yet reached the minimum tenure. For instance, in China, one can avail of pension payouts if one has been a member for at least 15 years but is also allowed to fast-track the payment of contributions if he/she has not yet reached the minimum number of membership years. Along with this, policymakers may want to also consider reducing the length of time and, subsequently, the amount that members can get.

6.2.3 *Policy of Social Protection*

Workers in the informal sector face several risks but have very little protection. Specifically, there are no laws that regulate the working environment of female laborers. Neither is this group protected by regulations on health and safety. They have no overtime wages, mandated minimum wages, vacation and day off, medical insurance, nor unemployment and childbirth insurance. Their children do not have health insurance or get adequate healthcare. Members have no access to housing loans or educational grants.

Because of their low income, women workers in the informal sector are often unable to pay for their children's tuition fees and family's health needs. They are therefore unprepared for shocks or emergencies. Not only do they lack social security and access to social benefits; they also have difficulties in accessing infrastructure and social public services, financing, physical assets, and land. They have a limited voice in planning policies, even if these policies directly affect them specifically.

Because female laborers in the informal sector often deal with many house chores, they do not have time to study and improve their knowledge. Thus, their income is usually lower than that of men handling the same tasks, whether in the formal or informal sector. They also often face a greater risk of falling ill than male workers but the same low and unstable income render them unable to pay for insurance premiums on a regular basis.

Not surprisingly, because of the high cost of formal child services, children of women in the informal sector are cared for by relatives or friends. Otherwise, the children are brought to work, exposing them to the same dangers in the workplace as their mothers (GSO 2011; MOLISA and VSI 2011).

In all these issues, education plays an important role in protecting women laborers from accidents and illnesses. First, in the workplace, women should be trained to handle

machineries and hazardous materials safely. Second, because education can help alleviate poverty, the government should spend more on education at all levels by building new schools and sending more teachers and teaching equipment to those areas with many poor households. This also requires raising the quality of teaching and learning. Third, upgrading skills through trainings (vocational training, in particular) gives informal female workers a chance at better pay and more stable jobs. Thus, as quality of training is the key, the government should pay attention to training centers, including restructuring the training system and providing subsidies. Raising the quality of training can also emanate from collaboration with universities and international training institutions (GSO 2008; and MOLISA and VSI 2011).

7 CONCLUSION

This research attempts to give an overall picture of the employment, earnings, and social protection policy for female workers in the Vietnam's informal sector for the period of 2004-2012.

Results of the quantitative assessments show that female workers in the informal sector often have low income, thus are unable to pay for their children's tuition fees and family's health services. They not only lack social security and access to social benefits but also have difficulties accessing infrastructure and social public services, financing, physical assets, and land.

Female laborers in the informal sector are often unpaid for the many house chores they do, and have very little time left to improve their knowledge. They are usually paid lower than men in the same line of work in both formal and informal sectors. Female

immigrants, in particular, often find themselves in jobs in the informal sector that do not have social protection, thus exposing them to risks. Worse, they hardly receive social allowance.

Gender inequality exists in Vietnam's labor market in general and informal labor sector in particular. There is a significant income gap between female and male in Vietnam's labor market. Female workers in urban areas also have higher earnings than these in rural areas. Those who work in the labor-intensive sector tend to have lower earnings than those in other sectors. Marital status and immigration significantly impact on the earnings of informal female labor.

Findings on self-employed workers are similar as those of wage earners, except in the skills factor. The effect of female labor's skills is found to be insignificant because the questionnaire used in this study sometimes did not include the self-employed workers' important skills.

Because the cost of formal childcare services is high, female workers in the informal sector often leave their children in the care of family members or neighbors. They also bring their children to work, as there is no kindergarten class offered in the informal sector.

Female employees in the informal sector are at greater risk of falling ill than informal and formal sector's male workers. They often take on jobs in environments with poor lighting and ventilation, and unsafe facilities.

Only a few have health insurance because their income is too low to enable them to pay insurance premiums regularly. Some are too poor that they cannot afford a health insurance.

As this study has some limitations in its analysis, further research is needed. The lack of available data on individuals in the informal sector constraints this paper from further analyzing the real characteristics of and factors affecting female workers in the informal sector. The VHLSS has its shortcomings as it is not a survey specifically focused on the informal sector and female workers. There is thus a need to conduct an individual-level survey on all economic activities of female workers in the informal sector.

In sum, the analysis here has shown that the informal sector plays an important role for female labor in Vietnam's dual economy where the informal and formal sectors coexist. The informal sector should be considered as the natural development of the economy rather than consisting of companies that are mandated to register. To grow the sector, there is a need to simplify the registration procedures, avoid discriminating between businesses and imposing high taxes.

It is important to institutionalize the laws on Social Insurance, Unemployment Insurance, and Gender Equality, to create policy and legal frameworks, and to promote gender equality in labor.

Policies to help female workers cope with unemployment should cover female-specific labor market regulations, social welfare, social insurance, and health insurance. Other policies should also gear toward providing financial support to families with women and pregnant mothers; improving female workers' competitiveness through vocational trainings and human resource development; and enhancing this target group's safety and health standards.

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