

**ROLE OF THE INFORMAL SECTOR IN GENERATING HOUSEHOLD INCOME IN HANOI,
VIETNAM**

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Abstract. This study uses quantitative analysis to investigate the role of informal sector in household earnings and income inequality in the area of Hanoi. Examining two research questions of how informal aspects of household economic activities contribute to the total household income and how they affect income inequality, the study finds that income earned in informal sector is a main source of household income in Hanoi. Moreover, the informal incomes, like informal wages and informal business earnings, are estimated to raise the probability of escaping poverty and to contribute significantly to the reduction of income inequality, especially in peripheral-urban areas of Hanoi.

Keywords: *informal income, household income, Hanoi.*

1. Introduction

Since being intensively studied in 1970s (ILO, 1973) [14], growing informal sector in developing countries has been considered as a transient economic phenomenon that would eventually die out as the economies develop. On the contrary, however, many recent studies have begun to recognize the important role that the informal sector plays in economic development, and they do not treat it any more as just a set of activities of the poor for survival. These viewpoints pay attention to the interaction between informal and formal sectors and identify it as a long-term factor of economic development. They also appreciate the informal sector's role in creating jobs for lower class, reducing poverty, and improving humans' well-being (El Badaoui, 2008; ILO, 2013) [9], [18] in the context of rural-to-urban economic transition in many developing countries.

Given the recent attentions among both academia and policy makers to the informal sector, this study tries to characterize the nature of the informal sector in generating income and alleviating income inequality in Vietnam. We use quantitative analysis to assess the role of informal sector in income-earnings of the residents in Hanoi area, and investigate how the informal earnings may raise the probability of escaping poverty and lessen income inequality of the area. The study is expected to make a contribution in better understanding of the nature of the informal sector in developing countries.

2. Literature review

2.1. Reviews on concepts of the informal sector

Defining informal sector of an economy is not an easy job because of its complicated nature and diversity of forms. Therefore, definition of the informal sector itself has been always subject to controversy. Controversy mainly arises in the area of what the comprehensive concept of the informal sector is, how to operationally measure it, and how we can make distinction between similar terms, like informal economy, or the informal employment etc. International

Labor Conferences (ILC) offered definitions of informal sector as well as informal employment that were intended to be used by labor statistic and national income account. According to the definition, informal sector includes a group of economic units that are comprised of household enterprises, or household business (or, equivalently, unincorporated enterprises owned by households). It was also suggested that the concept of the informal sector should reflect the characteristics of small size and unregistered status of business. The definition looks at if a business is lawfully registered in compliance with acts, laws or regulations of national legislative bodies (15th ICLS, 1993) [15]. This definition, however, came under criticism in that the definition cannot cover all the various aspects of jobs in informal sector. For example, persons engaged in very small-scale self-employment activities and employers as outworkers, sub-contractors and free-lancers are not captured by the definition. Those jobs are all in the grey area between self-employment and wage employment (ILO, 2004) [17]. In addition, the definition fails to facilitate an increasing trend of various forms of non-standard jobs (like seasonal labors, under-3-month or verbal-contract based labor, etc.) in formal economic units which should be included in national income account.

By labor (job) approach, informal employment is defined as “comprising the total number of informal jobs, regardless of whether they are carried out in formal sector enterprises, or in informal sector enterprises, or households, during a given reference period”. According to this approach, the informal job is the employment that is not based on legal and social protection following specific national legislation (17th ICLS, 2003) [16]. However, how to specify the informal sector/employment is still on debate among researchers and policy-makers in different countries and different conceptual frameworks.

Generally, the concept of the informal sector is based on small and unregistered production units, while the concept of the informal employment is on the jobs both inside and outside the informal sector without legal and social protection (Nguyen, 2016) [22]. Additionally, the term of the informal economy refers to “all economic activities by workers and economic units that are - in law or in practice - not covered or insufficiently covered by formal arrangements” (ILC’s 90th Session, ILO, 2004) [17]. In other words, the informal economy includes all units, activities, and workers that belong to informal sector and informal employment as well as their output (Chen, 2012) [2]. In our study, terms of informal sector, informal economy and informal employment are used interchangeably.

Due to the complexity of the informal economy, the 15th ICLS and the 17th ICLS recommended that each country might design its own national measurement considering the country’s circumstance, but at the same time each country should try to conform to the international definition and measurement (ILO, 1993, 2004) [15],[17]. Following the recommendation, Vietnam defined the informal sector as “all private unincorporated enterprises that produce at least some of their goods and services for sale or barter, that are not registered (no business license) and are engaged in non-agricultural activities”; and the informal employment as “employment with no social security (social insurance)” both in informal and formal sectors [3, p.15].

2.2. Reviews on the role of the informal sector

Generally, it is admitted that the informal sector takes a large part of developing economy. Bacchetta et al. (2009) [1] stated that the informal economy was estimated to contribute around 30% to 40% to GDP in developing countries. In many countries in Sub-Saharan

Africa and South Asia, the share of informal workers is as higher as more than 80% in total employment (Garcia Cruz et al., 2013) [11]. When it comes to the relationship between economic development and the informal employment, Cling et al. (2007) [6] reported that when Madagascar's economy achieved rapid and strong growth, the proportion of the informal employment decreased. On the other hand, when Madagascar's economy fell down to an economic crisis, the informal employment's proportion increased.

From an economic activity perspective, the informal sector seems to create plenty of opportunities for people at the household level. Tshuma (2013) [25] discovered that when informal activities were promoted, the probability of poor households escaping from poverty was raised through diversifying households' income sources. Similarly, Misati (2010) [20] contended that the expansion of informal economic activities was an effective channel through which the poor in Sub-Saharan Africa overcome poverty and create wealth. Furthermore, many studies argued that the informal sector was helpful to households to overcome economic crisis because of dynamics and flexibility of the sector. They also found that this sector could work much more effectively when coupled with supports from microfinance programs [10], [1], [8], [21].

3. The informal sector in Vietnam

Based on the HB&IS survey data¹ in 2007 and 2009, many researchers found that Vietnam's informal economy shared the common characteristics with other developing countries' [5], [3], [8], [21]. The informal sector, for example, generated roughly 20% of Vietnam's GDP in 2007 [5]. At household level, in the context of land acquisition and land loss due to urbanization and industrialization, the informal sector played a significant role to diversify the nonfarm income sources. It led to increase household income and decrease income inequality among rural households [24], [7]. Furthermore, thanks to the flexible labor market in the informal sector, Vietnam managed to overcome the economic crisis [3], [21].

In Vietnam, informal sector is the most dynamic in Hanoi and Ho Chi Minh City area (Cling et al., 2011a,b) [3], [4]. The majority of the informal workers in these cities were indigenous local residents. Specifically, in Hanoi, the proportion of migrant workers as opposed to the indigenous locals in informal sector accounted for 8,7% in the total informal employments in urban areas, and its share in peri-urban areas was only 2,6% [23]. This does not support Harris-Todaro's argument that the informal employments were backup-jobs for migrants who could not find work in the formal sector in their hometown [5].

In Hanoi, the informal sector workers are paid low salary, lack of capital, vulnerable to precarious labor conditions and without professional premises. Particularly, although informal household businesses increased from roughly 300,000 in 2007 to 725,000 in 2009, only 16% of them had official premises, 44% used their home to run their business and the rest operated their business on streets, open market or with no specific premises (Demenet et al., 2010). Moreover, the average wage of informal workers was 11,4 thousand VND per hour and 2,365 million VND per month, much lower compared to 15,7 thousand VND per hour and 3,597 million VND per month of formal workers [5].

Despite the disadvantages the informal sector has suffered from, it has significantly contributed to Hanoi's economic growth, poverty reduction and household income improvement. Demenet et al. (2010) [8] found that the informal sector's output accounted for 16,5% of Hanoi's GDP in 2007 and the share grew up to around 18% in 2009. In the period of 2007 to

¹The Household Business & The Informal Sector Survey (HB&IS) in Hanoi (2007) and Ho Chi Minh City (2009) of GSO/IRD-DIAL Project.

2009, informal household businesses' turnover accounted for 62,6% of the total business's turnover in Hanoi. Moreover, this sector's added value occupied 54,8% in the total added value. Remarkably, the study discovered that the informal sector operated much more dynamically in the "Former Hanoi" recording a slight increase in creating the added value per business or trader, while the whole city experienced relatively big drop in the informal sector. Similarly, the labor productivity (added value per labor) increased by around 20,6%, compared with approximately 16,3% of the whole city [3], [4].

4. Data and Methodology

Research question and hypothesis: The objective of this study is to analyze the relationship between the income generated from the informal sector and the total household income in Hanoi, Vietnam. Accordingly, this study attempts to answer research questions: (1) how much does the informal sector contribute to the total household income?; (2) to what extent does the informal sector improve the income inequality? These questions are answered by testing 3 relationships: (1) contribution of the informal income to the total household income; (2) probability of household escaping from poverty by their informal income; (3) decomposition of GINI coefficient by informal income source.

Research region and data used: The study region is Hanoi, the capital of Vietnam. In 2015, Hanoi covers 3.324,5 sq. km with the total population of 7.216 million. Of the total area, the urban area is 417,46 sq. km, accounting for 12,6% of whole city. The proportion of rural population takes 51,2% of the total. It should be noted that the "Former Hanoi", or the "Old Hanoi", was referred to as Hanoi until 2008 with 9 urban districts and 5 suburban districts². The "New Hanoi" known as Hanoi today was established in 2008 as the old Hanoi expanded, covering 12 urban districts, 1 town and 17 rural districts.

The study uses micro-data of Vietnam Household Living Standards Surveys (VHLSS) in 2010, 2012, and 2014. Those surveys contain useful information about households in 8 core dimensions, including (1) household members' demographic characteristics; (2) household members' education level; (3) household members' health status; (4) household incomes; (5) household expenditures; (6) household's durables; (7) housing characteristics; and (8) household's participation in poverty reduction programs or aid schemes.

The VHLSS data was collected by Vietnam General Statistics Office (GSO) in 1992-1993, 1997-1998 and every other year since 2002. The survey used randomized sampling method to collect data in urban as well as rural areas nationwide. The VHLSS data in 2010, 2012, and 2014 covered 46.995 households in 3.133 enumeration areas. Firstly, 3.133 enumeration areas were rotationally selected. 50% of them were re-selected from the previous VHLSS and the rest 50% were newly selected from the master sample. Once the enumeration areas were set, the individual sample households were drawn in following way: 15 households were sampled in each re-selected area and 20 households were drawn in each newly-added area (the 20 households include 15 officially-surveyed households and 5 back-up households). The sample sizes of VHLSS in 2010, 2012, and 2014 in Hanoi were 420 households each. The surveys were conducted through face-to-face interviews with household heads and key commune officials.

² It included Hoan Kiem as city center; 8 urban districts of Dong Da, Ba Dinh, Hai Ba Trung, Tay Ho, Cau Giay, Thanh Xuan, Hoang Mai, Long Bien; and 5 suburban districts of Soc Son, Dong Anh, Tu Liem, Thanh Tri, Gia Lam.

*** Variables: Although VHLSS is a multi-objective survey covering various aspects of household's economic and social activities, it does not provide direct data on the informal sector. Therefore, we like to identify 'informal income' as the income generated from informal sector/employment which can be tracked by the following survey questions: (i) Question 13 (module 4A "Employment"): In jobs, has household member been entitled to (a) Signing a payroll book? (Yes/No); (b) Paid leave/holidays? (Yes/No); and (c) Social insurance? (Yes/No); (ii) Question 7 (module 4C "Non-farm household business"): Has the activity of household registered for business? (Yes, by type of enterprise; Yes, by type of individual household business; No).**

This study considers those works that answer "No" to the above questions as the informal income sources.

*** Data analysis models: The study uses logit regression and Gini decomposition analysis.**

***Logit model for explaining the poor/non-poor: In order to figure out if the informal income helps residents of Hanoi escape poverty, we run a logit regression model. Dependent variable has binary values; 1 when household is non-poor, 0 when poor. The model can be simply written as follows:**

$$P_{(\text{non-poor}=1)} = F_{(\beta_0 + \beta_1 X_1 + \dots + \beta_i X_i)} \quad (1)$$

Where, F represents the logistic functional form; X_1, \dots, X_i are independent variables.

Independent variables are 9 household income sources, including informal wage, informal business income, formal wage, formal business income, crop production income, livestock income, other agricultural income, land renting income and other income.

In the period of 2011 to 2015, the poverty lines set by the Government of Vietnam were 530.000 VND per capita per month (about 25USD) for rural areas and 660.000 VND per capita per month (about 31USD) for urban areas. However, under these poverty lines, the poverty rate in Hanoi was close to zero since the lines were unrealistically low. In fact, such a low income cannot sustain daily livelihood of Hanoi considering high general price level. Therefore, this study uses the international poverty line of 60USD per capita per month which is equal to 1.260.000 VND (based on the exchange rate in this period was 1USD equal to 21.000VND). According to this poverty line, the poverty rate in Hanoi was 29,3% in 2010, 16.67% in 2012, and 7,86% in 2014.

*** Gini decomposition. The income inequality is of interest when it comes to poverty issue of the informal sector. Gini coefficient is one of the most frequently used indices measuring income disparity. Furthermore, decomposing the Gini coefficient is a good way to investigate the degree to which each income source contributes to the overall income inequality.**

The overall income inequality is affected by three factors: (1) the importance of each income source in the total income; (2) the income inequality by each income source; and (3) the correlation between the income source and the total income distribution (Lambert et al., (1993); Heshmati, (2004)). Therefore, by using the method of Gini decomposition, we may estimate how much the overall Gini coefficient would change when income in a particular source changes by one percent. The effect is given by:

$$\frac{S_k G_k R_k}{G} - S_k \quad (2)$$

Where, S_k represents the share of income source k in total income;

G_k is the Gini coefficient in income source k ;

R_k is the correlation between Gini coefficient in income source k and the Gini coefficient in overall income distribution;

G is the overall Gini coefficient prior to the income change, and was represented as:

$$G = \sum_{k=1}^k S_k G_k R_k \quad (3)$$

The study employs the Gini decomposition to estimate how the informal income may play a role in increasing or decreasing of the income inequality. Six income sources are considered in the decomposition: informal income, formal wages, formal business, income from agriculture, income from land renting, and other incomes.

5. Results and discussion

5.1. Identification of informal income in VHLSS

VHLSS provides informal income data in two categories; the income from business (or, the informal business income) and the income from wages/salaries (or, the informal wages/salaries). The informal business income is defined as the income earned by households from unregistered non-farm businesses. Informal wages/salaries are identified as household income from jobs which do not have the signing payroll book, not be paid for leave/holidays and without social insurance.

Cling et al. (2010, 2011a) [3], [4] and Nguyen et al. (2010) [21] reported a rapid growth of informal enterprises and informal jobs in 2007 to 2009 period. The trend continued in the period of 2010 to 2014 as shown in Table 1. The proportion of unregistered enterprises in the total enterprises slightly went down from 68,6% in 2010 to 66,7% in 2012 but increased again to 69,5% in 2014. The percentage of the informal works, which did not have signing payroll book and social insurance, grew from 20,9% and 36% in 2010 to 28,8% and 40,5% in 2014, respectively. Although the informal works showed decreasing trend after 2012, they still accounted for around one third of household members' main jobs in Hanoi.

Table 1: Status of the informal sector in Hanoi, 2010-2014 (unit: %)

Informal sectors	2010	2012	2014
Proportion of households received wages/salaries from household members' main jobs	26.0	30.7	32.5
Of which			
No signing payroll book	20.9	32.1	28.8
Paying for leave/holidays	31.8	36.2	31.5
Without social insurance	36.0	42.3	40.5
Proportion of household having economic activities from non-farm business, services	32.9	34.8	36.9
Of which			
Unregistered enterprise	68.6	66.7	69.5

(Source: VHLSS 2010, 2012, 2014; author's calculation)

The annual income of the unregistered household enterprises was around 1,3 – 1,7 times lower than the formal individual household business, which is consistent with findings from

previous studies [5], [3], [21]. About 80% of informal jobs were created in self-employment, household business and private sector. Moreover, all unregistered enterprises were owned by individual households. These enterprises were operated in various forms, namely retailing (29,5%) and wholesaling (4,5%); business in food and beverages services (16,7%); transport by motorbikes (named as “xe om” in Vietnamese)(11,61%); costume production (5,36%); and other personal services (6,25%) [22].

5.2. Informal income and household incomes

*** Contribution of the informal income to the household incomes.** In 2014, the average income per capita per month in Hanoi reached 3,8 million VND (around 180,6 USD). The data showed that the average income in urban areas was 2 times higher than rural areas. Notably, a trend is that the income gap³ between top 20% and bottom 20% in rural areas is decreasing; the ratio fell from 9,26 times in 2010 to 5,58 times in 2012 and rose again to 6,95. Especially, the trend is stronger in urban areas. The ratio in urban areas decreased significantly from 8,57 times in 2010 to 5,8 times in 2014. This study found that the informal income had a positive impact on the reduction of the income inequality, which will be discussed in section 5.3.

Figure 1 displays the distribution of the household income by income sources in Hanoi from 2010 to 2014. The Figure 1 suggests that the informal income was the second most important source of the household income.

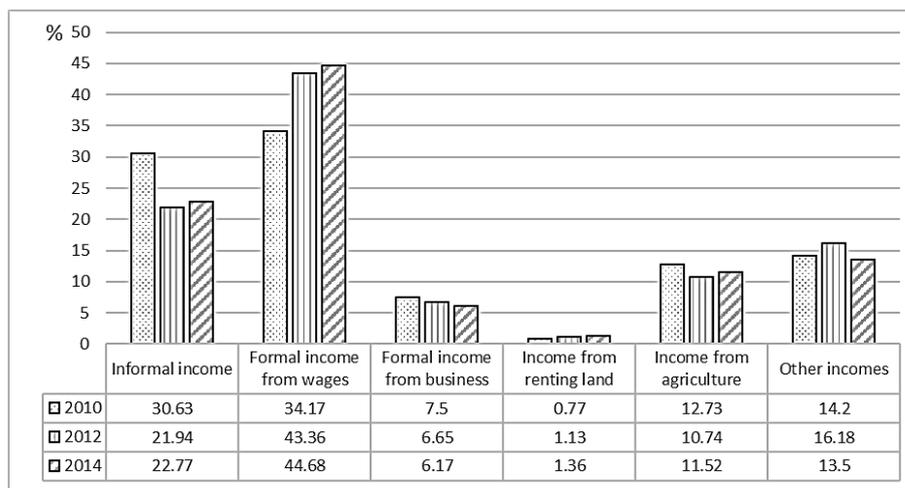


Figure 1. Distribution of household income by income sources in Hanoi, 2010-2014

The informal income’s proportion in the total household income reduced remarkably from 30,6% in 2010 to 22,8% in 2014. However, the informal income still remained as a main source of households’ income in Hanoi, especially in rural areas. As much as about 30% of income of the poorest, nearly poorest and middle classes was generated in the informal sector (Table 2). Moreover, the role of the informal income in urban areas was fairly different from rural areas. Specifically, in urban areas, the informal income was a significant part in the total income of households for the poorest, nearly poorest and middle classes; but it accounted for a small part in the total income of the nearly richest and richest households. For example, in the years of 2010, 2012 and 2014, the informal income contributed to the total income by about 54,9%, 25,9% and 32,6% respectively for the nearly poorest households. On the contrary, the informal income took only about 11%, 4,6% and 8,3% of the total income of households in the richest class. It

³ Income gap is simply calculated by average income of the richest group (20% of richest people) divided by average income of the poorest group (20% of poorest people).

should be noted that the informal income took a significant portion of all income quintiles in rural areas in the period of 2010 to 2014. In the years of 2010, 2012 and 2014, for instance, the informal income contributed about 46,5%, 30,3% and 32,5% to the total income of the nearly poorest households, respectively. It also accounted for 38,3%, 25,5% and 34,5% in the total income of households in the richest class.

Table 2: Contribution of informal income in total household income in Hanoi⁴

(Unit: %)

5 income quintiles	2010			2012			2014		
	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural
Average	30.6	21.1	38.0	21.9	14.9	27.4	22.8	15.0	29.4
1 st quintile	38.4	44.1	37.8	21.2	0.0	22.5	27.7	49.7	25.1
2 nd quintile	48.0	54.9	46.5	29.1	25.9	30.3	32.5	32.6	32.5
3 rd quintile	34.2	39.0	31.5	31.1	22.8	34.8	26.7	23.3	29.4
4 th quintile	18.7	13.1	30.0	20.4	20.7	19.6	14.9	6.1	30.6
5 th quintile	13.9	11.0	38.3	8.0	4.6	25.5	12.0	8.3	34.5

Notes: 1stquintile - 20% of poorest people; 2ndquintile - 20% of nearly poorest people; 3rdquintile - 20% of middle people; 4thquintile - 20% of nearly richest people; 5thquintile - 20% of richest people.

(Source: VHLSS 2010, 2012, 2014, author’s calculation)

Among the informal income types, it was found that informal business income was one of the most important income sources, especially for the middle class and the nearly richest class. The ratios of the informal wages to the informal business income of the average, the middle class and the nearly richest class were 9,5% - 13,2%; 9,2% - 17,5% and 3,4% - 11,5%, respectively (2014).

Generally, in Hanoi, the informal income was one of the primary income sources of households. And the informal business income was a predominant source of the informal income. Notably, the role of informal income was more significant among the middle and under-middle income quintiles. For above-middle income quintiles, the informal income took a small part of the households’ total income in urban areas. However, it contributed considerably in generating household income in rural areas.

***The informal income sources and probability of poverty alleviation.** Table 3 shows the coefficients of logistic regression analysis for likelihood of being non-poor status by income sources in whole city from 2010 to 2014. The analysis result shows that the informal income became increasingly important in reducing poverty over the 2010 to 2014 period in Hanoi. Although the informal wages were found not significant in the year of 2010, the coefficients in 2012 and 2014 were significant and became larger over time. Similarly, the coefficient of the informal business income grew from .0104 (with P-value was equal to 0,063) in 2010 to 0,0194 in 2012, and notably increased to 0,0343 in 2014. It is also worth noting that the role of the

⁴ Contribution of informal income source into total household income is calculated by mean of percentage of informal income in total household income and by 5 quantiles of average income per capital per month.

informal business income in poverty reduction appeared to be more important in rural areas than in cities in 2010 and 2012. But the informal business income became almost equally important both in rural and urban areas in 2014.

Table 3: Logistic regression analysis for probability of non-poor situation by household income sources in Hanoi, 2010-2014

Poor (poor=0; non-poor=1)	2010	2012	2014
Number of obs	420	420	420
LR chi2 (8)	173.18	48.07	52.67
Prob > chi2	0.0000	0.0000	0.0000
Pseudo R2	0.3409	0.1270	0.2278
Log likelihood	-167.3789	-165.1995	-89.2748
Informal wages	.0036	.0163*	.0343*
Informal business	.0104***	.0194*	.0304*
Formal wages	.0295*	.0259*	.0386*
Formal business	.0585*	.0204**	.0304**
Income from crop production	-.0669*	-.0148***	-.0086
Income from livestock	.0079	.0125	.0099
Income from other agriculture	.0313	.0152	.0143
Income from land renting	.0483	.0369	.0569
Other incomes	0	0	0

Notes: * P-value is ≤ 0.01 ; ** P-value is 0.01 to ≤ 0.05 ;

*** P-value is 0.05 to ≤ 0.1 ; Other incomes are omitted because of collinearity.

(Source: VHLSS 2010, 2012, 2014, author’s calculation)

In addition, VHLSS provides the self-assessment on the change of living condition over last 5 years. The survey data reports responses of whether households’ living standard has improved or not in four categories: “substantially increase”, “slightly increase”, “same as before” and “worsened”. We divide the households into 6 groups by the share of the informal income out of the total income to examine if the informal income has an impact on the change of the living standard.

- (1) No (total household income does not contain the informal income);
- (2) <20% (informal income out of the total household income is under 20%);
- (3) 20%-40% (informal income out of the total household income is between 20% and 40%);
- (4) 40%-60% (informal income out of the total household income is between 40% and 60%);
- (5) 60%-80% (informal income in the total household income is between 60% and 80%);
- (6) >80% (informal income accounts for over 80% of the total household income).

Figure 2 shows how much the living condition had changed over the past five years in different groups as of 2014. Among the households earning over 80% of income from informal sector, 22,2% responded by indicating “substantially increase” and about 63,0% responded “slightly increase”. The result suggests that the informal economic activities made a considerable contribution in improving households’ living standards in the period of from 2010 to 2014. Moreover, the result indicates that various income sources help improving households’ living

condition.

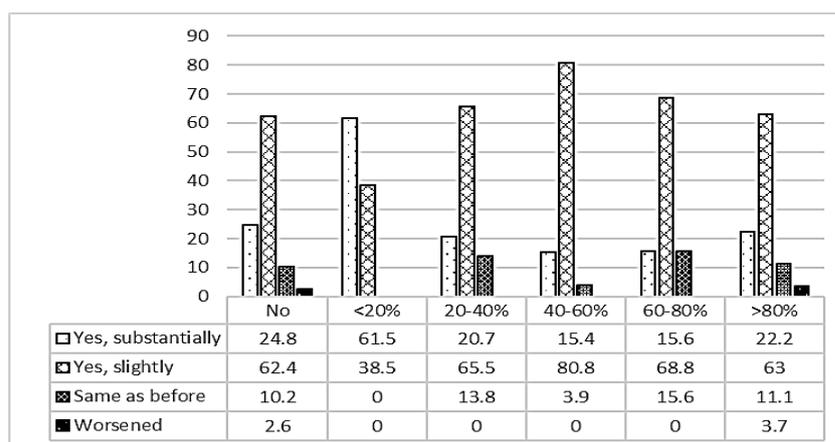


Figure 2: Self-assessment of households about their living condition over past 5 years, 2014

To sum up, the informal income is estimated to make a significant contribution to higher household income leading to escape from poverty in Hanoi in the period of 2010 to 2014. In addition, a self-assessed survey also confirmed that majority of the households earning from the informal sector experienced elevating living standard:

5.3. Informal income and income inequality

Table 4 presents results of Gini decomposition by income sources in Hanoi from 2010 to 2014. The Gini coefficient decreased from 0,439 in 2010 to 0,364 in 2014. Although the Gini coefficients of all income sources were higher than that of the total income, the Gini coefficient in informal income source turned out to be lower than the Gini in total income.

Table 4: Gini decomposition by income sources in Hanoi, 2010-2014

Income sources	2010			2012			2014		
	S_k	G_k	% change	S_k	G_k	% change	S_k	G_k	% change
Informal income	0.251	0.770	-0.097	0.181	0.782	-0.103	0.179	0.773	-0.127
Informal wages	0.124	0.849	-0.064	0.071	0.918	-0.053	0.070	0.919	-0.060
Informal business	0.127	0.884	-0.032	0.109	0.856	-0.051	0.109	0.847	-0.068
Formal wages	0.454	0.735	0.142	0.521	0.650	0.135	0.539	0.625	0.175
Formal business	0.087	0.923	0.007	0.090	0.937	0.045	0.076	0.930	0.023
Agricultural income	0.062	0.822	-0.080	0.071	0.838	-0.060	0.073	0.825	-0.085
Land-renting income	0.013	0.980	0.008	0.020	0.977	0.021	0.027	0.974	0.030
Other incomes	0.133	0.754	0.020	0.117	0.652	-0.037	0.106	0.668	-0.015
Total income		0.439			0.394			0.364	

Notes: S_k : Share of income by income source in the total income

G_k : Gini coefficient by income source

% change: percentage change of the Gini coefficient in response to 1% change of income in each income source.

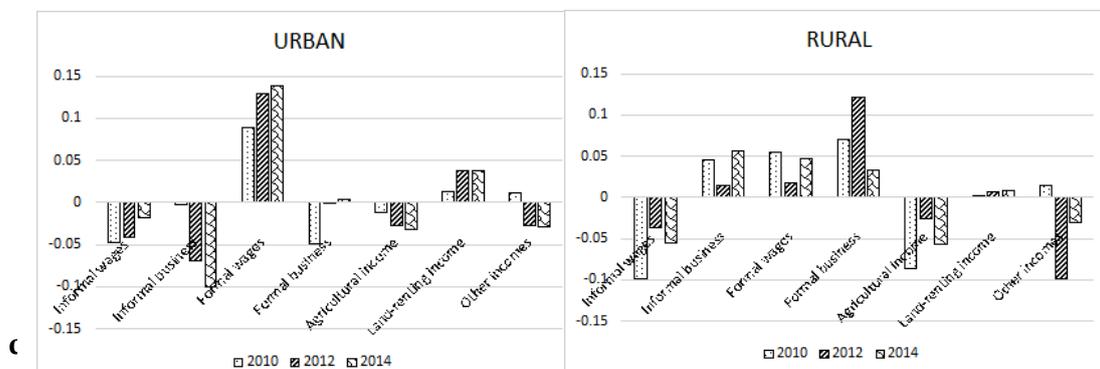
(Source: VHLSS 2010, 2012, 2014, author's calculation)

Despite the fact that the share of the informal income in the total household income

dropped from 0,251 in 2010 to 0,179 in 2014, the informal income appeared to have stronger impact over time in reducing income inequality in Hanoi. Specifically, 1% increase in the informal income is estimated to lead to reduce the Gini coefficient of total income by 0.097 % in 2010 and 0,127 % in 2014.

Examining the impacts of informal income increases by subcategories, informal business income turned out to have a drastic impact in reducing income inequality. One percent increase in informal business income is estimated to reduce the Gini coefficient by 0,032% in 2010, by 0,051% in 2012 and by 0,068 % in 2014. It is also estimated that the Gini coefficient decreases by 0.060% when informal wages increase by 1%. Compared with other incomes, the informal income is identified as the most important factor in reducing income inequality in Hanoi. In 2014, for example, 1% rise in informal income led to 0,127% reduction of the Gini coefficient of the total income, while 1% increase of formal wages gave rise to an increase of Gini coefficient of total income by 0,175%.

Figure 3 illustrates different impacts of increasing informal incomes under various subcategories on the Gini coefficient of total income.



In urban areas, the change in both informal wages and informal business income alleviated the total income inequality in the period of 2010 to 2014. For example, one percent increase in informal wages is estimated to lead the Gini coefficient to decrease by 0,048% in 2010 and 0,018% in 2014. Similarly, the degree of reduction of the Gini coefficient induced by 1% increase in informal business income is estimated to become increasingly greater over time. In rural/suburban area, however, only the informal wages made contribution to the reduction of income disparity. Specifically, one percent change in informal wages is estimated to reduce the Gini coefficient by 0,099 % in 2010, by 0,036 % in 2012 and by 0,055 % in 2014. As the figure shows, informal wages and agricultural income are still the primary means to alleviate income inequality in Hanoi's rural areas.

6. Concluding Remarks

This study analyzes the role of the informal income at household level by investigating the relationship between the informal income and the total household income, probability of being non-poor status for households, and income inequality. Although the share of informal income in the total household income tends to decrease from 2010 to 2014, the informal income still remains as an important part in the total household income in Hanoi, especially among the middle and under-middle households. We found that the informal income also offered an effective opportunity for households to reduce poverty and improve living standards in Hanoi area. Moreover, the informal income produced increasingly more drastic effect on alleviating

income inequality in period of 2010 to 2014. It was also found that both the informal wages and informal business earnings led to a substantial decrease of income disparity in urban areas.

As opposed to the many prior studies that treated informal economic activities as a transient economic phenomenon dying out over time, this study suggests that the informal sector has its own dynamics and so deserves to be treated as an important policy agenda.

Although the informal employment is not explicitly considered in employment policy-making in Vietnam, the informal labor market has been implicitly taken into account in employment related policies. For example, the scheme of MOLISA in 2009, named as “Employee training for rural areas up to 2020”, promoted “vocational training center” in district level and provided vocational training courses for farmers and the poor. Moreover, the Law on Social Insurance 2014 adjusted many regulations and government supports on voluntary social insurance to help informal sector employees.

It is not an easy task to draw effective policies for the informal economic activities because of the inherent characteristics of the area, and at the same time, it should be noted that no one-fit-all solution can deal with various problems associated with the informal sector. Nevertheless, a policy direction may be suggested. Some policies in that direction may include the followings: (1) Accumulating comprehensive data on informal sector/employment to help formulating evidence-based plan; (2) Empowering vocational training programs that are inclusive for informal jobs; (3) Enhancing micro-financial support system for informal business; (4) Improving social security system for informal sector; and (5) Improving informal business regulation.

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