The Determinants of Internal Migration in Vietnam: Could "broad lessons" from empirical literature be learned?

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Abstract

Migration, especially from rural to urban, is one of important factor in social development. This paper examines 7 hypotheses on potential impact of age, human capital, economic earning, economic security, amenities, geographic distance and social capital on migration discussed in Schaffner (2014) for the case of Vietnam. These hypotheses were re-organized to construct a an uniform conceptual framework of determinants of migration decision making. Using various data-sets from many different survey together with empirical results from economic literature, we test these hypothesis one after the other. Our results reveals that (1) young age is a characteristics of migrants but (2) high stock of human capital is not; (3) higher earnings and (4) risk-sharing mechanism are motivations of migration, but (5) amenities is not. (6) Distance does not impact migration decision and (7) social capital' impact is ambiguous. If any, it comes from the network at destination location.

Keywords: Economics of Migration, Internal Migration, Rural-Urban Migration

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1. An Overview of Internal migration in Vietnam

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After 1986 “Doi Moi” Renovation policy reform, Vietnam can be seen as one of the successful countries in the economic transformation process towards a more flexible market economy with high rate of economic growth, significant improvement of life expectancy and fundamental drop of poverty. Among others, urbanization and migration have been important determinants of this impressive development. While Doi Moi policies basically contributed to liberalize labor force and accelerated economic growth, it also had significant impact to social change. The structural adjustment made rural labor more vulnerable and insecure while decollectivization of agricultural production made farmers and villagers more flexible with labor market condition and liberalize their own choice among higher rate of return working locations. As a result, the rural area rapidly became an important labor supply for industrial production in the urban areas.

Since 1990s, migration has been accelerated in significant pace in Vietnam due to the expansion of industrialization process and the surge of inflow FDI. According to Central Population and Housing Census surveys in the year 1989, 1999 and 2009, the number of migrants in the period of 2004-2009 (6,725 thousands of people) increases 375.3% in compare with the period of 1984-1989 (1,415 thousands people) and 50% in compare with the period of 1994-1999 (4,482 thousands people). (CPHC 1991, 2000, 2010)

Among a few flows of migrations, rural-urban migration has accounted for a significant proportion. Indeed, the Central Population and Housing Census 2009 revealed that the rural-urban migration flow in this time includes 1.943 million people from rural to urban and 0.548 million people from urban to rural, made of 1.395 million people in the net flow of migration from the rural area to the urban area. This net flow resulted in 0.23% decrease in the rural population and 0.57% increase in the urban population (CPHC, 2010). Among 6.725 million of internal migrants in the 2009 CPHC data-set, 50.5% is inter-provincial migrants accounting for 4.3% of population, with 53% of female,

25.4% is inter-district migrants accounting for 2.2% of population, with 56.6% of female and 24.1% is intra-district migrants accounting for 2.1% of population with 63.6% of female. In compare with 1989 and 1999 CPHC data, the percentage of inter-provincial migrants surged sharply while the percentage of inter-district and intra-district slight increased or fluctuated at a constant level. According to VARHS data-set, among interviewed households in the rural Vietnam, in the 2012 survey, the percentage of households who have at least one migrant is 18.6 (%). This percentage in the 2014 survey is 19.6 (%). Among the households with at least one migrant, the percentage of household with permanent migrant in the 2012 survey is 22.2 (%) while this percentage in the 2014 survey is 15.0 (%). Regarding the number of household with temporary migrant, the respective numbers are 64.4 (%) and 66.3 (%).

In terms of geographic distribution of migration, Le et al. (2012) constructed a distribution map to illustrate the geographical migration flows from CPHC 2009 data (See Figure 1)

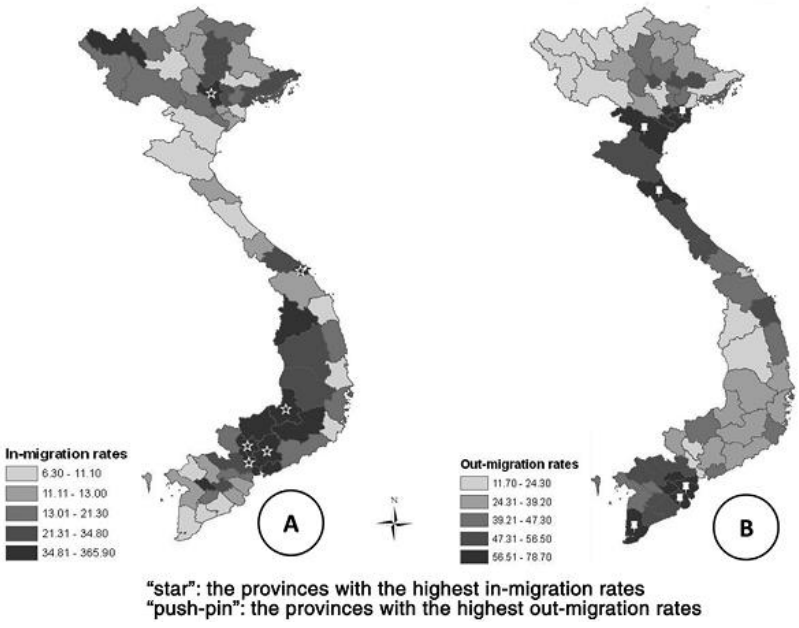


Figure 1: Geography distribution of migration

Note: The map does not include Hoang Sa and Truong Sa regions.

Source : Le et al. (2012) basing on CPHC 2009

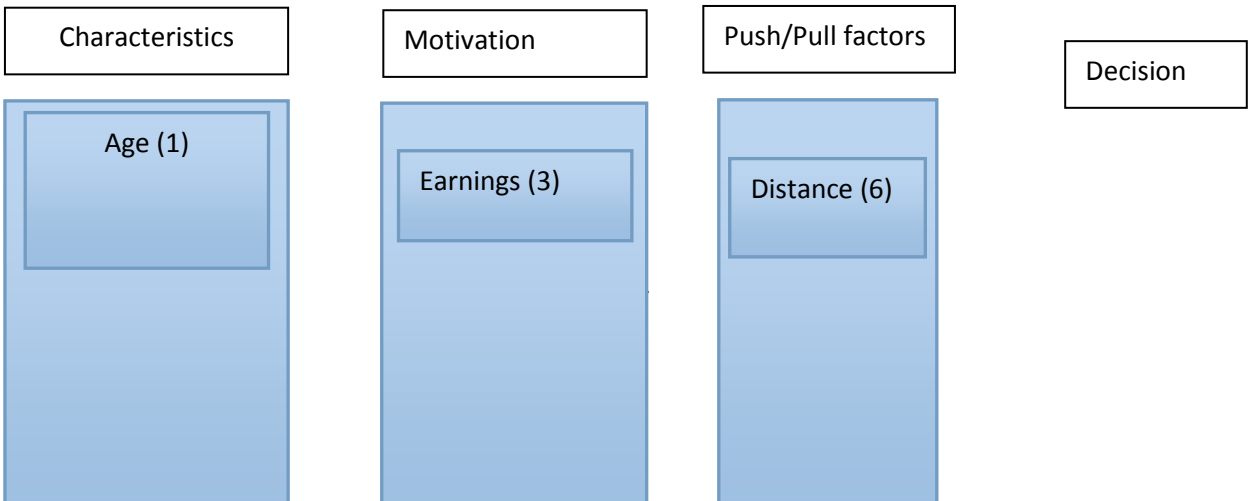
The distribution map showed that the provinces with high in-migration rates were mostly concentrated in the southeast region. Hanoi, Da Nang, Binh Duong, Dong Nai, and Ho Chi Minh City are provinces that have a large number of industrial zones and high in-migration rates. It is hypothesized that the large industrial cities have attracted huge

migration flows from other regions. For instance, the net migration to Ho Chi Minh City has been nearly one million people and half a million people in Binh Duong in 2009. Highest out-migration rates were concentrated in the Red River Delta region (Thai Binh), the north central area (Thanh Hoa, Ha Tinh) and the Mekong River Delta region (Ben Tre, Tra Vinh, and Ca Mau).

2. Research Question, Conceptual Framework and Hypotheses

The main purpose of this paper is to address the so-called seven "broad lessons" about migration decision from empirical studies (Schaffner 2014, p. 222-223) in the case of Vietnam. By rewriting these "lessons" in terms of seven hypotheses, this paper can be serve as an answer to the research question: "What is the main determinants of migration decision in the case of Vietnam?"

Keeping in mind the main purpose, we constructed our own conceptual framework. While the social science literature has extensively investigated the determinants of migration decision from many perspectives, our framework is selectively based on the suggested lessons from Schaffner (2014) with some reference to Harris and Todaro (1970) for conceptualizing the analysis. In particular, among many potential factors discussed in the literature, we select some fundamental blocks for building up our conceptual framework in order to address the research question as well as testing whether the lessons Schaffner (2014) mentioned are hold in the case of Vietnam.



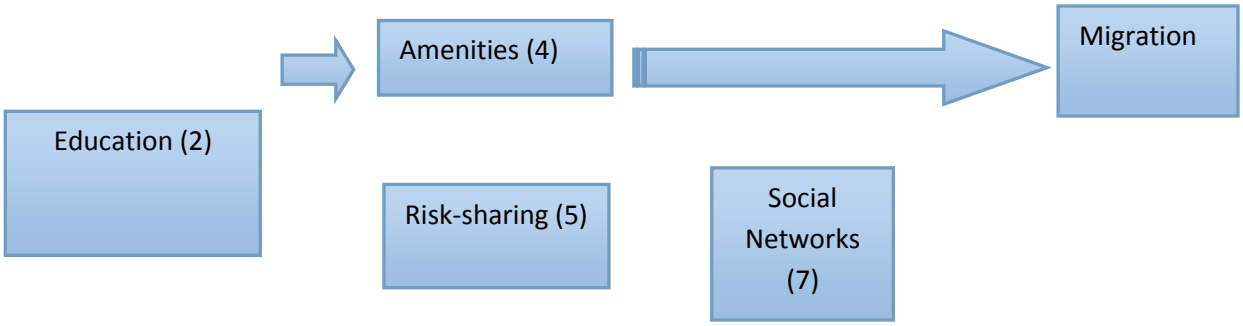


Figure 2: Conceptual Framework for migration decision

More specific, we assume that the expected gains from migration, which make rational individuals or households to decide migration, depend upon some factors including personal characteristics such as age, education level and their own experiences. After considering motivation factors that facilitate or increase their well-being, such as higher earnings, risk-sharing, better living condition and so on, the push and pull factor will involve in their migration decision. This type of the determinants might include the distance between the origin and the destination as well as the social networks that the migrants are bonded to or have to break. Our conceptual framework was presented in Figure 2. It is important to note that our conceptual framework is quite simple and it is designed for a very specific purpose. While including some main blocks of analysis, that does not mean this simple framework covers most of the determinants of migration decision making. A general framework for this issue can be seen in Hagen-Zanker (2008).

To be more formal, this paper will discuss the research question by putting seven statements (or hypotheses) which Schaffner (2014) mentioned as "broad lessons basing on various empirical research" into the consideration for the case of Vietnam. These hypotheses are cited and reordered from Schaffner (2014) as follows:

Hypothesis 1: *"Most migrants are young people."* (Schaffner 2014, p. 222)

Hypothesis 2: *"[M]igration rates are higher among people with more education."* (Schaffner 2014, p. 222)

Hypothesis 3: *"Working-age adults are more likely to migrate when the earnings gap between destination and origin is larger"* (Schaffner 2014, p. 222)

Hypothesis 4: "*Household can also improve their ability to cope with local shock" by sending some members to migrate*. (Schaffner 2014, p. 223)

Hypothesis 5: *"[M]igrants consider the amenities that a location has to offer, such as access to clean water, sanitation, education and other social services as well as labor market condition*." (Schaffner 2014, p. 222)

Hypothesis 6: *"People are much more likely to migrate over very short distances (holding potential income gains constant) than over longer distances."* (Schaffner 2014, p. 222)

Hypothesis 7: "*Social networks in sending locations can slow migration... [while] social networks in destination locations can speed migration flows*". (Schaffner 2014, p. 223)

The linkage among these hypotheses can be seen in the conceptual framework in the Figure 2.

3. Methods and Data

3.1. Methods

In order to examine these hypotheses, we employ descriptive method using secondary data from a few main micro-level surveys implemented in Vietnam, including Central Population and Housing Census (CPHC), Vietnam Household Living Standard Survey (VHLSS), Vietnam Access to Resources Household Survey (VARHS), MOLISA Survey, Migration Survey and so on. The

descriptive data of these data-set can be used as evidence in order to directly reject or support the above hypotheses. For the hypotheses of which the answer still might not be unambiguous, we employ a survey of literature to look for theories and empirical results that might be used to support or reject the concerned hypothesis. That's why we do not separate literature review as an independent section as suggested in traditional academic papers. Instead, we incorporate this part in each sections of testing specific hypothesis. For one who would like to see the literature review of migration in a more structural and systematic way, a detailed discussion can be referred in Hagen-Zanker (2008).

3.2. Data

To our best knowledge, the data of migration in Vietnam is minimal. Some piece of migration information can be observed in CPHC 1989, 1999 and 2009. The CPHC surveys the migration information during the last 5 years until the time of questioning. The limitation of CPHC is that it observes variables for each 10 years period, which is more or less static and does not fully reflect the dynamic of migration issues.

VHLSS is a nationally representative, socio-economic biyearly survey implemented by General Statistics Office of Vietnam since 2002. Before that, VHLSS was implemented in some previous years (1992, 1998) under the name Vietnam Living Standard Survey (VLSS) with the technical and financial support from World Bank and other organizations. Currently, the sample of the survey has covered about 30,000 households on several perspectives of living standard such as income, expenditure, economic activities, healthcare, education, available infrastructure and so on. The limitation of VHLSS is that it is a general survey so it included very modest information about migration.

VARHS is implemented by University of Copenhagen, Central Institute for Economic Management (CIEM), Institute of Labor Science and Social Affairs (ILSSA), and Centre for Agricultural Policy Consulting at Institute of Policy and Strategy for Agriculture and Rural Development (CAP-IPSARD) since 2002. After the first wave in 2002, since 2006 the survey is implemented biyearly in 12 provinces with a increasing sample from 2,324 in 2006 to 3,648 in 2014. The survey produces detailed information about rural households for understanding their behavior, their opportunities and constraints of rural household. It supplements (repeated surveys of the same households – a unique panel dataset) and extends (more questions about land, agriculture, income, spending, assets, investments and so on) to VHLSS from many perspectives. VARHS could fill the gap of VHLSS by providing more useful information and enabling more integrated analysis on migration issue, including extent of migration, characteristics of migrants, livelihood of migrants, remittances, relationship with migrants' families and soon. Unfortunately, VARHS pays more attention on the rural area so the sampling method employed might lead to selection bias when using its sample for statistical inference to behavior of the whole population both in the rural and in the urban areas. So the data from VARHS should be used with other dataset for avoiding this type of bias.

There is another important note on the definition of a migrant before and after 2014 in the VARHS that makes any time-series comparison of migration not really creditable. In 2012 survey and before that, migrant is defined as a person who was a household member in the last 5 years and now is not a household member anymore. Since the 2014 survey, it is defined as a person who was a household member in last 2 years instead.

In the period of April 2012 and August 2014, the Ministry of Labor, Invalids and Social Affairs (or MOLISA) implemented a survey on the situation of the migration from rural to urban and industrial

parks in the context of being WTO member of Vietnam. The survey was carried out in 15 vibrant provinces and cities including Thai Nguyen, Phu Tho, Quang Ninh, Ha Noi, Hai Duong, Hai Phong, Vinh Phuc, Nghe An, Da Nang, Quang Nam, Dac Lac, Lam Dong, Binh Duong, Ho Chi Minh City and Can Tho. The limitation of this survey is that while it payed more attention to rural-urban (and industrial parks) migration even this was the main flow of migration. Besides, it might contain selection-bias for any statistical inference because it actively choose provinces with the best or significant performance of migration activities. Last and not least, the fully data-set from the MOLISA Survey is not made available to the public so only official report from MOLISA can be used for discussion.

2004 Migration Survey is the unique survey of migration that General Statistics Office carried out in the large scale of 11 provinces including Ha Noi, Hai Duong, Hai Phong, Quang Ninh, Gia Lai, Dac Lac, Dac Nong, Lam Dong, Ho Chi Minh City, Binh Duong and Dong Nai in 2004. Unfortunately, this intensive survey was implemented only for the year 2004. Similar to MOLISA Survey, this survey was very selective in its sampling method and the dataset of this survey is not made available to the public. Instead, GSO officially reported the main results of the survey in its publication.

Besides these large-scale official survey, there are some other smaller-scale survey in some independent research projects. The 2008 Migration Impact Survey (2008 MIS) by Institute for Social Development Studies are used in Le et al. (2011) and Le and Tran (2011) that covers 4 provinces Thai Binh, Tien Giang, Ha Noi and Ho Chi Minh city with about 5000 observations. The survey in Nguyen et al. (2015) covering 3 provinces Dac Lac, Thua Thien Hue and Ha Tinh in 3 years 2007, 2008 and 2010 with about 2200 observations. Because the data-sets or official summary of these survey was not made available to the public, we are only able to use the result from the other research for discussion.

4. Hypothesis testing

In this section, we will test the above hypotheses independently by looking at the available data-sets together with the survey of literature.

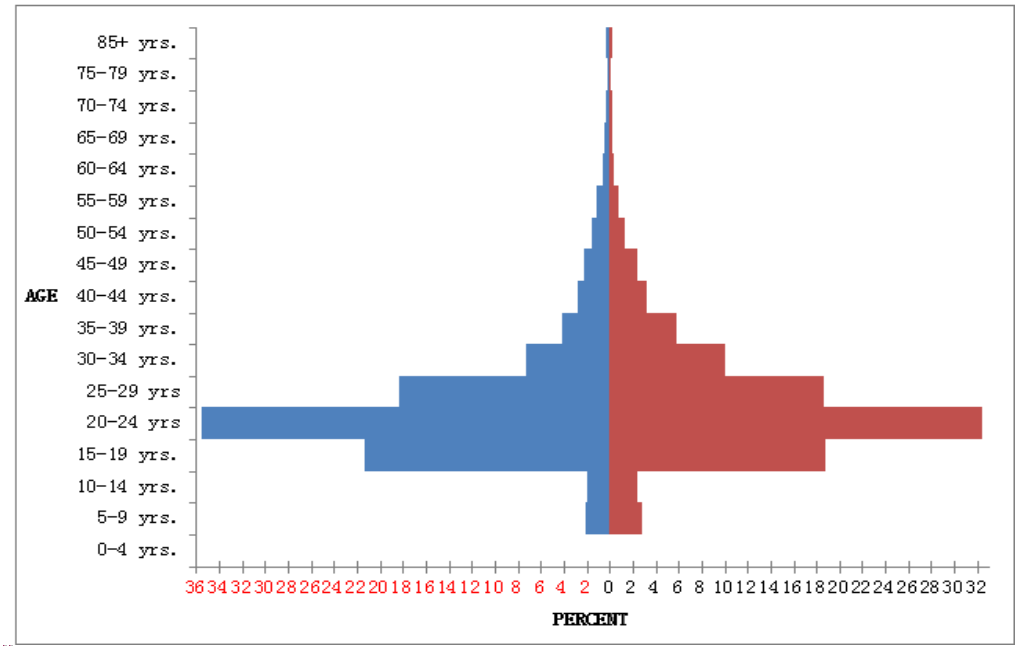
4.1. Characteristics of migrants

Hypothesis 1: Most migrants are young people.

The phenomenon that the probability of migration decreases with age can be explained in the human capital investment model. The migration in this model can be seen as a type of investment with potential future benefits. As a result, young people is expected to enjoy these benefits for longer so after discounting the future benefits to current benefit, it is much easier for young people's benefit of migration to outweigh the cost of migration. In the economic literature, many studies support this hypothesis, for example Harris and Todaro (1970)'s model suggests that younger migrants increase the time period for expected income.

In the CPHC 2009, we found strong evidence to support this hypothesis. The CPHC data showed that in 2009 the median of the age of migrants ranged from 24 (for inter-provincial one) to 26 (for intra-district one). The young pattern of migrants was sufficient for both the case of male and female, even the age of female migrants was slightly lower than male's in all catalogues.

Figure 4: Population Pyramid of rural-urban migration



Source: Author build up basing on CPHC 2009

The Hypothesis 1 is also supported by the sub-set of migration: rural-urban migration. In Figure 4, the population pyramid of internal migrants shows age distribution of both male and female which are mainly concentrated from 15 to 30 years old.

While CPHC data described a firm picture of young migrants in the map of internal migration in Vietnam in 2009, one might question about the dynamic situation of this data over years. The 10 years gap between each wave of CPHC survey made it impossible to observe this pattern. In order to fill in this gap, we explored other available datasets. Interesting, we find out that the hypothesis of young migrants is supported by both VARHS survey and MOLISA survey. For example, Narciso (2014) calculates that in VARHS 2012 the average age of working migrant is 25.39 while in VARHS 2014 this number is 24.5

In general, migrants were not only young, but they also came from younger household. In the VARHS, on average, the age of the head of household with migrant was less than one's of household without migrant 1.67 years-old. Using t-test, we found out that this difference was

statistically significant at 5% significant level. The limitation of VARHS is that it based on rural household survey, so the answer itself might be selection-bias when we do statistical inference beyond rural-urban migration. Taken this limitation into account, we still saw the result from VARHS survey as evidence supporting Hypothesis 1.

Table 1. Age of the head of household with and without migrant

Age of the head	Migrant Household (1)	Non-migrant household (2)	Difference (1) – (2)
In VARHS 2012	41.96	43.66	-1.67**
In VARHS 2014	40.69	44.70	-4.00**

** Significant at 5%

Source: VARHS 2012, 2014

MOLISA survey also supported this hypothesis by presenting that 69.9% labor migrants in the sample was under 30 years old and the average age in the sample is 23. The limitation of using this statistic is that the MOLISA survey data-set is not made available to the public so we can only refer to this number from the summary of MOLISA official report without any double checking.

Basing on these available data and discussion presented above, we conclude that the Hypothesis 1 is supported by the statistical data.

Hypothesis 2: Migration rates are higher among people with more education.

The economic ideas behind this hypothesis is that the more educated people might expected higher rate of return from more dynamic areas. The cost of migration is also lower due to the educated migrants tend to understand the market condition and job opportunities in the new location better much better and they tend to be more adaptable. Harris and Todaro (1970) argued that migrants with a higher level of education have a higher probability of obtaining formal

employment. However, as noted by Schaffner (2014),"[i]n some place, some of the least educated also migrate at high rates, though more commonly on a temporary basis". (Schaffner 2014, pp. 222)

Unfortunately, MOLISA survey tends to reject this hypothesis by arguing that 66.1% labor migrants in their sample has no skill and profession, only 6.5% of them graduated from university. The VARHS survey also presented that 62.4% in 2012 and 63.6% in 2014 data of migrants has no diploma.

Table 2: Professional Training of Migrants

	No diploma	Short-course vocational training	Vocational training	College certificate	University or higher level
VARHS 2012	62.4	13.5	2.4	5.4	16.3
VARHS 2014	63.6	10.3	7.7	8.5	9.9

Source: VARHS 2012, 2014

The weak linkage between migration status and education level can be seen from other studies. For example, using their own survey in 3 province Dac Lac, Thua Thien Hue, Ha Tinh, Nguyen et al. (2015) presented that the probability of labor migration increased with the share of household members with completed secondary education however this result was statistically insignificant. It seems that migration for employment did not necessarily require a higher level of education.

We conclude this hypothesis that the currently available data do not provide evidence supporting this hypothesis.

4.2. Motivation for migration

Hypothesis 3: Working-age adults are more likely to migrate when the earnings gap between destination and origin is larger.

Income or earning is the most important motivation for migration activities. Standard economic model often assumes that individuals or households are rational and they choose among various often of working location for maximize their expected benefits. It explains the mobility of labor, in general, and the rural-urban migration decision, in particular, in the framework of wage differentials, such as in Lewis's dual economy model. Lewis (1954) proposed that in many developing countries, the labor force in the rural area was surplus while the marginal productivity was essentially low, which implied a low marginal return. As a result, there would be a flow of labor from the rural area to the urban area where industrialization process was demanding for high volume of working people. While Lewis's model can be used to explain many case studies, it cannot be applied to the case of Vietnam because its main assumption does not hold. As can be seen from Figure 5A and Figure 5B, the labor market in Vietnam worked in the contrast way: unemployment rate in the urban area is higher than in the rural area while the underemployment rate in rural is higher than in the urban.

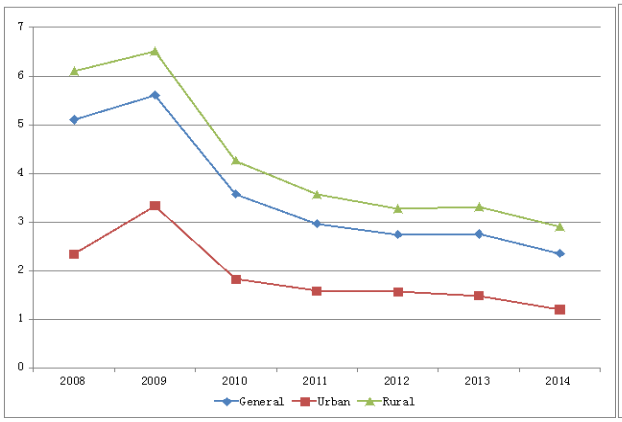


Figure 5A: % of underemployment

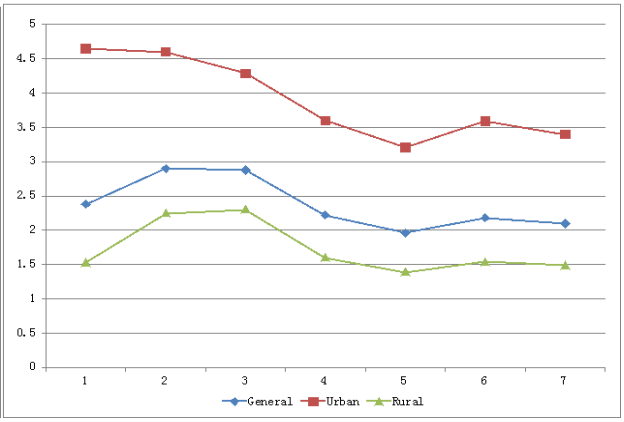


Figure 5B: % of unemployment

Source: General Statistics Office

This fact, together with a number of studies in social science literature, suggests that even when the agricultural sector experiences positive marginal products and the urban unemployment was significantly high, many countries still observe the phenomenon of rural-urban labor migration accelerating. In order to explain this phenomenon, Harris and Todaro (1970) introduced a two sector model with high minimum wage assumption (later being named Harris-Todaro model in economic literature of migration analysis). Harris-Todaro model assumes that individuals migrate to urban sectors with the objective of obtaining employment in the formal sector and that informal sector employment is a transitional phase during which migrants are looking for a more formal job. The model shows that the two sectors are intimately connected through migration and if an additional job is created in the industrial sector at the minimum wage, the expected wage will rise and rural-urban migration will be induced and, as a result, more than one agricultural worker will likely migrate. Hence, the opportunity cost of an industrial worker will exceed the marginal product of an agricultural worker. On the other hand, an increase in agricultural income will induce reverse migration without any reduction of industrial output. Thus, the opportunity cost of labor is lower to the agricultural sector than to the industrial sector. Harris – Todaro model suggests that the main determinant of migration is the expected wage differential between the origin place of residence and the destination.

Does the data of migration in Vietnam support this hypothesis? There are some evidence was provided by data or inside economic literature. For example, directly, the MOLISA survey found out that labor migrants mainly looked for a job with higher paid. 50% of the labor migrants had some types of job at their hometown but they were still in need of migration mainly because of instability and low return from the job at their hometown.

Le et al. (2012) presented that within 2009 CPHC data-set, there was a statistically significant correlation between in-migration rates and monthly income per capita of the host provinces (See Figure 6). This implied that the migration flow was mainly attracted by the expected earnings even though the potentially endogenous problem of this evidence, which we expected to be very minimal, should be taken into account.

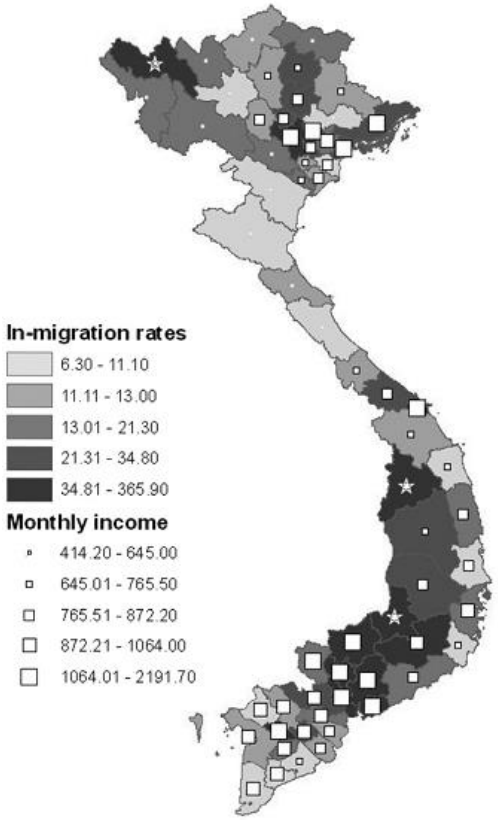


Figure 6: Income- migration distribution

Note: The map does not include Hoang Sa and Truong Sa regions.

Source: Le et al. (2012) basing on CPHC 2009

Le and Nguyen (2011) reported that in their survey, 37% rural labors migrated because they got better job in the urban, 23.3% rural labors migrated because they did not have any land or job in the origin and 18.2% felt not satisfy with their job and income in their origin. Among their own survey, indeed, 88.1% of the interviewees believed that migration had positive impacts on family's income.

Indirectly, in their micro-simulation, Brennan et al. (2012) used a dynamic, non-linear programming model of Vietnam's Agricultural Sector (VAST) developed within the General Algebraic Modeling System (GAMS) framework to observe welfare impacts for different scenarios. Their simulation result suggested that there was a shift from consumption of maize and sweet potato towards high protein foods, meat, milk and seafood reflecting the higher income levels in urban areas. They conclude that the migrants who move to the cities enjoyed higher incomes and consumed more of the income elastic protein foods.

We conclude that there are strong evidence supporting this hypothesis in the case of Vietnam.

Hypothesis 4: Household can also improve their ability to cope with local shock by sending some members to migrate.

The role of household both as an economic unit and as a social grouping for joint decision making in the economic literature of migration started from the so-called "New Economics of Labor Migration" pioneered by Stark and Bloom (1985). This approach shifted rational economic actor from isolated individuals to households or families in which people make collectively decision of few household members for maximizing expected income or minimizing risk through local diversification of household resources. That means migration might be seen as a strategy to cope with risk to household well-being/survival even though household members do not migrate jointly. This argument can be used also in the case of internal migrants, especially for the case of rural-urban migration where the type of risk to income is different significantly. As commented by Lauby and Stark (1988) in their study of women migrants in Philippines, "[a] large proportion of rural-urban migrants in developing countries are unmarried and remit a significant part of their earnings to their parents, thereby reducing the income variance associated with work in agriculture."

Using VARHS 2012 and VARHS 2014 in the case of Vietnam, Narciso (2015) only observed the statistical difference of the percentage of natural shock between migrant household and non-migrant household for the dataset of 2012 (See Table 3). He also found out that both the sock itself and the status of being a remittance recipient household are not correlated with the change of well-being (in terms of per capital food expenditure) but the interaction term between that status and shock was positive and statistically significant. He considered these results as evidence supporting the hypothesis that remittances acted as a shock-coping mechanism.

Table 3: Economic and Natural shock

	Migrant Household (1)	Non-Migrant Household (2)	Difference (1)-(2)
VARHS 2012: Economic shock	16.20%	21.69%	-0.005
VARHS 2012: Natural shock	43.06%	34.94%	0.08***
VARHS 2014: Economic shock	13.09%	14.39%	-0.01
VARHS 2012: Natural shock	25.00%	26.13%	-0.01

**** Significant at 1%*

Source: Narciso (2015) calculated from VARHS 2012 and VARHS 2014

Using their own survey, Nguyen et al. (2015) regressed a non-linear probability model of labor migration decision. Their result showed that both agriculture shock (flooding, droughts, crop pests or livestock diseases) and economic shock (job loss, collapse of business, strong increase of input prices, or strong decrease of output prices) were statistically significant and positively which implied that indeed in Vietnam migration acts as risk-coping mechanism.

We conclude this discussion by declaring that there were strong empirical evidence supporting this hypothesis.

Hypothesis 5: Migrants consider the amenities that a location has to offer, such as access to clean water, sanitation, education and other social services as well as labor market condition.

Economists generally use the term "amenities" to refer to a set of resources and services known as public goods, which, due to their own nature, are not directly traded in markets and are generally not provided by private sector and are distributed unequally among the country. The idea that people migrate in response to spatial difference in amenities was discussed intensively in migration research in developed countries. For example, the famous Tiebout hypothesis proposed that people in general

would "vote by their feet" by migrating to another location with better quality of public goods. The economic sense behind this idea is the notion that individual's utility function might distribute significant weights to goods and services which are not available or not delivered equally in different geographic location. However, this perspective has "generally not [b] applied to the study of migration in developing countries" (Bodvarsson and Van den Bergp 2013, p. 35).

In the case of Vietnam, data from CHPC 2009 (see Table 4) show that migrants generally enjoy better quality in basic needs (housing status, accessing to safe water for drinking and cooking and accessing toilet facilities) in their destination location in compare with non-migrants in the origin.

Table 4: Housing status, Safe water and Toilet facility access

Characteristics	Interprovincial migrants	Inter-district migrants	Intra-district migrants	Non-migrants
Housing status (%)				
Simple	2	3	4	5
Semi-permanent	82	73	78	77
Permanent	16	24	18	17
Safe water	95	92	87	85
Toilet facilities (%)				
None	3	4	7	9
Other (non-hygienic toilet)	13	17	31	42
Hygienic toilet	83	79	63	50

Source: GSO (2011) calculated from sampling survey of CHPC 2009

It should be note that rural-urban migration dominated the flow of migrants. Hence, better basic needs may be a characteristic of living in the urban itself, instead of reflecting any motivation factor in decision model of migrants. It would be biased if we saw this data as evidence to support the hypothesis that amenities were one important determinant of migration decision. One

should see the amenities from other perspectives to avoid this type of bias. We shall look at the perspectives of social services, education, healthcare and working conditions.

However, there is no evidence to persuade that the labor migrants can access better social services at the destination. Under the MOLISA survey, 92.9% of labor migrants confessed that the local destination government and community provided no support for them. Regarding social disorder in the migrants' destination location, MOLISA survey also reported that conflicts between local labor and migrants were a popular phenomenon. 51.3% of labor migrants believed that the insecurity and disorder situation at the destination came from labor migrants themselves while only 21% of them believed that the cause was from local people.

Le and Nguyen (2011) showed that among their own survey, while 78.4% of the interviewees believed that migration had positive impact on living conditions, only 44.7% believed in positive impacts on family member's education, 40.1% believed in the positive impacts on health and 30.4% believed in the positive impacts on social position.

The migrants also seemed not to enjoy amenities in terms of better working conditions. Using 2008 Migration Impact Survey, Le et al. (2011) showed that there was a majority of 94% of migrants found precarious and temporary jobs in the informal sector (that was not protected by Labor Law), particularly 70% of them involved in the so-called 3Ds (Dirty, Dangerous, and Demeaning) job. Only 5% had written labor contract, 3% had health insurance, 2% have social insurance and 9% have accident insurance. The result from MOLISA survey also revealed that 30.5% of labor migrants were in charge of duty that is noisy and dusty polluted while 10.4% of them involved in dangerous work. Besides, the freelance migrants often have no labor contract and have no labor insurance.

Whether migrants enjoy better health care system in their destination? The 2004 Migration Impact Survey identified several health problems including poor general health status, low use of health care services, and lack of knowledge about reproductive health and sexually transmitted infections (STIs). For example, the majority of female migrants with the age from 20 to 29 displayed important misconceptions regarding reproductive health infections (RTIs), STIs, and HIV/AIDS.

We conclude this hypothesis that there was evidence to support the ideas that in compare with the non-migrants, the migrants seem enjoy better amenities in the form of very basic living condition but in other forms they seemingly experienced bad conditions. What's more, enjoying amenities were not the determinants of migration decision and had no correlation with migrants' expectation. We agree with CIEM (2013) that "Migrants are among vulnerable groups, facing many difficulties at their destinations, from finding a formal job, housing to access to social services. They also experienced a number of problems in their local communities, raising "an emergent policy challenge for the Government"."

4.3. Pull/Push factors of migration

Hypothesis 6: People are much more likely to migrate over very short distances (holding potential income gains constant) than over longer distances.

Distance between origin and destination has been seen as an important factor in the early migration models. Zipf (1946) might be one of the first study introducing the gravity type of migration model with distance variable. In this paper, he provided the theoretical reasons for expecting that the inter-community movement of persons between any two communities, P_1 and P_2, that are separated by an easiest transportation-distance, D, will be directly proportionate to the product, $P_1.P_2$, and inversely proportionate to the distance D. Currently, many studies still argued that distance between origin and

destination is a good proxy for the cost of migration. Migration is also believed to be sensitive to extreme distance. This argument led to idea that very short distance might significant impact to migration because of not requiring the migrants broke their current connection with their family and the cost of settle such as transportation, communication and so on would be minimal.

As discussed above, CHPC 2009 survey revealed that among internal migrants, 50.5% of them are inter-provincial, 25.4% of them are inter-district and 24.1% of them are intra-district. This data suggested that the migration flow was not sensitive to the distance between the origin and the destination. VARHS also confirmed this phenomenon. Among working migrants in VARHS 2014 data-set, about 74% is inter-provincial migration while intra-province migration accounted for only 15.3%. The trend that more people involving in inter-provincial than intra-provincial migration tends to reject the hypothesis of the importance of distance in migration decision.

As can be seen from the map of geographic distribution of migration in Figure 1 together with our discussion on the importance of expected economic earnings, it seems that the higher opportunities location was taken into account more seriously than the distance between origin and destination. Consistent with this idea, Le et al. (2012) illustrated that provinces with high monthly income per capita and a high proportion of urban population are more likely to have higher in-migration rates than other provinces. This result can be seen as evidence for the statement that socioeconomic distance had more significant impacts to migration than geography distance.

We conclude this hypothesis that we do not find any evidence supporting this hypothesis. The geographic distance does not have as strong power in explain migration pattern as the socioeconomic ones.

Hypothesis 7: Social networks in sending locations can slow migration while social networks in destination locations can speed migration flows.

Massey (1990) argued that having social ties to someone with migration experience increased the probability of migration. It happened because social networks linked migrants and non-migrants into a system mutual assistance. Migration itself generated network connections in terms of new friends and relations, so network brought about the cumulative causation of migration: every new migrant contributed to the reduction of the cost of migration for a set of non-migrants, that helped some of them to migrate. This new one, in turn, created new network ties for another set of people and further reduction of the cost of migration and so on. "Migration may begin for a variety of reasons, but once the number of migrants reaches a certain level, expanding networks cause the costs of movement to fall and the probability of migration to rise; these trends feed off one another, and over time migration spreads out ward to encompass all segments of a society" (Massey, 1990). A graphic illusion for the relation between migration and network development was provided in the Figure 7.

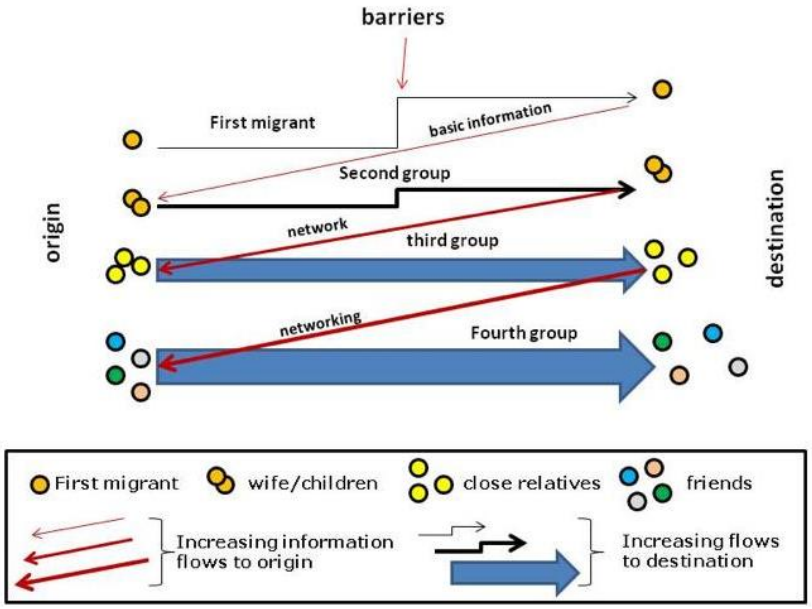


Figure 7: Chain migration and network development

Source: Muñiz-Solari et al. (2010)

Do social network play an important role for migration expansion in the case of Vietnam?

Indeed, there is a little evidence that migrants in Vietnam has set up their social networks facilitating the cumulative causation of migration by attracting friends and relatives from their hometown. 2004 Migration Survey reported that 55% of male migrants and 59% of female migrants had known about their destination from their relatives while 38% of migrants had known this information from their friends. This implied that social networks in *destination location* were important to enhance the probability of migration.

Both VARHS 2012 and VARHS 2014 confirmed that strong social networks in terms of relationship and friends are an important channel for job search of migration. However, VARHS does not separate the social networks of migrants in sending locations and in destinations location. In fact, separating these concepts are difficult due to the overlap and complication of the structural of social network. For example, a male A from the village X migrated to the urban Y. Now he introduced new job in Y to his friend B living in same village X, should this A be counted as sending location networks or destination location network of B? In this discussion, we use the current location of migrants as the base for defining destination or sending social networks. In this example, A is count for destination social network.

In order to see the importance of social network in the sending location, we argued that basing on VARHS 2012 and VARHS 2014 data-sets, there were about 60% of migrants employed job search at the *destination locations* (own investigation or job service, see Table 5). This implied that information from social networks in *sending locations* did not play an important role to the probability of finding a job. This comment was consistent with Nguyen et al. (2015) analysis from their own survey: Households with membership in political or

social organizations in sending location display a larger propensity to migrate but the result was statistically insignificant.

Table 5: Job search channel

	Own Investigation	Relationship/Friends	Job service	Media	Other/ don't know
VARHS 2012	56.2%	30.9%	6.1%	0.5%	6.3%
VARHS 2014	50.9%	33.5%	8.2%	1.5%	6.0%

Source: CIEM (2015) sampling from VARHS 2012, 2014

We conclude this hypothesis that there was weak evidence supporting the idea that social network in destination location facilitating migration while there was no evidence for relation between social network in sending location and migration flow in the case of Vietnam.

5. Conclusion and limitation

This paper examines 7 hypotheses raising in Schaffner (2014) for the case of Vietnam. These hypotheses were re-organized to construct a consistent and uniform conceptual framework of determinants of migration decision making. Using various data-sets from many different survey together with empirical results from economic literature, we test these hypothesis one after the other. Our results reveal that (1) young age is a characteristics of migrants but (2) Human capital is not; (3) higher earnings and (4) risk-sharing mechanism are motivations of migration, but (5) amenities is not. (6) Distance does not impact migration decision and (7) social network' impact is ambiguous. If any, it comes from the network at destination location.

This analysis suffers from many limitations, mainly from the unavailability of the data that constrained us from employing a more concrete and formal analysis of determinants of migration decision. The inconsistence in using various data-sets together with other analysis results made our statement not strong as it should be. A more advanced analysis can be carried out when more

concrete data is available or when we reduce the numbers of hypotheses that are not able to trace from current available data-set.

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