VIETNAM DEVELOPMENT FORUM

SOCIAL ISSUES UNDER ECONOMIC TRANSFORMATION AND INTEGRATION IN VIETNAM

Volume One

Edited by:

GIANG THANH LONG
DUONG KIM HONG

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Giang Thanh Long and Duong Kim Hong
Editors

Chapter 1
Introduction and Summary

Giang Thanh Long and Duong Kim Hong

After twenty years of reform, Vietnam has changed significantly. From a backward, centrally-planned and subsidized economy, it is now in the process of becoming an open, active, and market economy. Grasping the golden opportunity of global integration, Vietnam is trying to use its advantages and resources to develop and make further reforms. Currently, Vietnam is regarded as one of the best performers among developing countries.

However, fast growth and integration have also intensified certain social problems and created new ones. Some problems have become more visible, especially in rapidly urbanizing areas. The problems of street children, prostitution, and HIV/AIDS epidemic transmission are just some of the examples. At the national level, problems in the education system and social welfare, rising inequality, and problems in the life of the elderly population are all pressing questions. With a relatively young population, Vietnam also has to secure job opportunities and quality of labor for the youth. Apart from these, like any other country in socio-economic transformation, Vietnam has to cope with increasing corruption, environmental pollution, a land bubble, and the decline of cultural and spiritual values.

It can be said that Vietnam will not grow and develop sustainably if it does not squarely address these issues which emerge as a consequence of economic development and social reforms. In this context, conducting studies and proposing policy actions for these social issues is a very urgent task. This book, among many others in Vietnam, is published for these purposes. It contains six papers or chapters, each addressing a different topic on the social issues in Vietnam under economic transformation and integration. These papers were revised in light of comments made at numerous workshops and conferences held inside

and outside Vietnam. It is the hope of the editors that the contents of this book will extend beyond those directly involved in the related field of research, and that the book will provide crucial information about the current development of Vietnam's social sector. Following are summaries of these chapters.

The contribution by Duong Kim Hong and Kenichi Ohno in Chapter 2 aims to analyze the problem of street children in Vietnam, which arises from both traditional causes such as the loss and divorce of parents, as well as new causes such as economic incentives. The paper first reviews the existing studies with different definitions and classifications of street children. Then, it uses data collected from different sources, including the surveys by Terre des hommes Foundation in 1992 and 2002 in Hanoi and Ho Chi Minh City, the survey by Nguyen Van Buom and Jonathan Caseley in 1995 in Hanoi, and the survey by the Vietnam Development Forum in 2004 in Hanoi, to compare street children in both cities over time in terms of number, hometown, and types of work.

Going further to see the root causes for such situations, the authors propose a new typology of street children based on causes (broken family, mindset problem, and economic migration) and situations (current protection and future investment). The results indicate that the broken family group is most difficult to assist, while the economic migration group often shows strong desire for study and better life. Moreover, street children are not a homogenous group, and their aspiration is frequently interrupted by various setbacks. It is thus suggested that intervention policies be diversified according to the needs of each type of children. To illustrate in detail, six case studies are presented to show how these causes and situations interact with each other. Although it is admitted that the reality of street children is far more complex than the current analysis, the authors suggest that it is necessary to provide counseling and continuous support to guide children to the right path, and help them to apply their acquired knowledge from education and training to the real situation. Moreover, incentive and assistance to secure a stable job and build a family for each child are much more important tools in policy consideration.

Chapter 3 of the book, written by Nguyen Thi Minh Tam and Le Thi Ha, focuses on one of the most popular and hidden channels for the expanding HIV/AIDS problem in Vietnameae aex workers and waitresses at high risk for

prostitution to analyze their awareness of HIV/AIDS risk, and to propose an intervention model of HIV/AIDS protection for these workers, which in turn helps to mitigate the problem. The paper uses data from a survey in 2005 with 150 sex workers and waitresses, 12 local authority officers, and 18 managers or owners of restaurants and hotels in Quang Ninh province, where the HIV/AIDS problem is extremely serious, and where the highest number of HIV/AIDS-infected people in the country has been recorded. The characteristics of these workers are investigated in terms of age, educational level, hometown, and marital status. It is shown that these workers are young; the majority of them are from rural areas and have only secondary or high school education.

Though HIV/AIDS causes and consequences seem to be well-understood by the respondents, the results ironically reveal that sex workers and waitresses at high risk for prostitution are not well aware of methods to prevent HIV, and managers or owners of restaurants and hotels as well as local authority officers do not pay enough attention to the transmission of the dangerous virus that causes AIDS. For instance, about 70 percent of the workers do not want or like to use condom, though most of them know that it is an effective tool of safe sex to prevent HIV/AID transmission. Exploring in detail with age and educational level, the paper shows that activities outside working hours and priorities in lives of these workers vary significantly. Also, they have several choices when facing difficulties, but relying on family is difficult as they feel ashamed to talk about their job.

From these analyses, the authors suggest that peer clubs, skill-training classes, and personal counseling are crucial to change attitudes and create good habits and behaviors of safe sex for sex workers. For the policy implications, it is recommended that improvements be made in the health care service network, the condom providing network, and the consulting network for women in difficulties, especially for those who are sex workers and waitresses working at high-risk locations. Equally important, local government officials must have the right attitude towards HIV/AIDS prevention and protection, in which they should apply a more realistic plan to apply HIV/AIDS prevention methods for waitresses and sex workers, and also work closely with managers and owners of tourism services and entertainment centers.

Also addressing the economic and social problems of the young pop-

ulation, Chapter 4 by Dang Nguyen Anh analyzes one of the most important issues for the youth in rapid economic transition: work and employment. This paper utilizes the data from the Survey Assessment of Vietnamese Youth (SAVY) in 2003, which was the first nationwide baseline survey of youth undertaken by the Ministry of Health, Vietnam in collaboration with the General Statistics Office of Vietnam, the World Health Organization, and the United Nations Children's Fund. Exploring various characteristics of youth work and employment, the paper shows that different individual and family conditions lead to different work and health-related outcomes among Vietnamese youth.

Gender, age, education, and ethnicity are some of the strong determinants of youth employment. Of greater importance, family characteristics, including paternal occupation, parental availability, and family economic status, serve as crucial factors in determining the youth employment experience. Detailed bivariate and multivariate analyses also indicate that risk-taking behavior of young people is also associated closely with their work status. For instance, out-of-school youth, migrant youth, and those who are unemployed or are job-seekers are most likely to be exposed to health risk behaviors, including smoking and alcoholic drinking. One of the most striking findings of the paper is that about one-third of youth with college/university degrees were looking for employment at the time of SAVY. Among numerous possible factors causing this situation, the author comments that skills taught and knowledge learned are mismatched with those needed by employers in the labor market; in other words, there is weak linkage between the education system and the labor market. Based on these analyses, the author asserts that the conventional understanding of youth as a homogenous group is no longer relevant because the youth is a diverse social demographic group with different characteristics; thus, it is required that policy makers avoid making their decisions on such a misunderstanding, and that policies be specific enough to meet the needs of each of these groups.

Among many policy implications for improving work and employability for the Vietnamese youth, the author emphasizes that policy efforts aimed at poverty reduction, employment promotion, and income generation for families are a need. More importantly, strengthening the linkages between the education system and the labor market to minimize skill mismatches and to match

skills to demand are key conditions to improve youth employability. As such, it is necessary to build capacity and accountability of employment services and job counseling. In addition to work and employment, it is also necessary to deal with the issues related to vulnerability and health of unemployed, migrant, or out-of-school youth. As well as family supports, other specific supports from the whole society are essential for such disadvantaged groups.

The striking finding from the previous paper about limited employability of the youth with college/university degree indicates that comprehensive reforms the tertiary education are a must, and several tasks need to be implemented in order to accomplish these reforms. Dealing with one of the most important issues in reforming the tertiary education, i.e., training of trainers, Nguyen Thi Phuong Hoa presents her analysis in the Chapter 5 of the book. Beginning with an overview of the role of education under globalization and scientific development as a crucial task in developing tertiary education, the author discusses the current situation of the education system in Vietnam in general and tertiary education in particular under different reforms over time.

The statistical data show that the whole system has been significantly diversified; achievements are remarkable, given several difficulties that Vietnam has faced in economic transition. However, the author also points out some serious weaknesses of the system, especially in tertiary education. The drawbacks, including poor research and studying conditions, relatively low qualifications of university teaching staff, low education quality, and weak research capacity, are posing serious social and economic problems as many young people, who compose of an important part of the country's labor force, are unemployed due to the above mentioned mismatches between their acquired knowledge from tertiary education and the required skills of the labor market. For instance, 80 percent of the graduates are working in professions different from the subjects they studied at university (Ho Chi Minh City [HCMC] National University, 2006).

To contend with this situation, the author presents the theory of action research for sustainable reform of the education system, in which six steps need to be exercised thoroughly in different designs of the education system and policy-making processes. More particularly, the author proposes five steps to reform teaching and learning methods in teacher training, in which the quality

of teaching and research is frequently evaluated and adjusted with new objectives.

Along with the economic transformation and integration process of the country, the Vietnamese households have also been influenced by rapid changes in social and economic structure. A research topic of interest for many researchers is to analyze the impact of such changes on poverty, inequality, and welfare of the households. Chapter 6 in the book, contributed by Tran Duy Dong, responds to this research need by utilizing the data from the Vietnam Living Standard Surveys in 1992/93 and 1997/98 and the Vietnam Household Living Standards Survey in 2002 to identify the micro-determinants of household welfare and inequality in Vietnam. In this paper, the author uses the data on per capita real expenditure and per capita real income to pursue his analysis. For the former set of data, the paper applies the methodology of Wodon (1999) to identify the determinants of changes in per capita real expenditure. Six possible factors are examined, including gender and education of household head and region.

The estimated results show that poverty incidence is diverse, depending on household characteristics. For example, communal facilities, such as market availability and electricity, are important in determining living standards of poor households, but they are not determinants of living standards of rich households. Using panel data to explore who gains from economic growth, the author finds that both rural and urban households particularly gained from trade liberalization during the last decade, though their benefits varied by their own characteristics. For the latter data set, the author examines income distribution in Vietnam through growth of real income by constructing ordinary Lorenz and generalized Lorenz curves. The findings indicate that social welfare absolutely increased during 1993–2002 despite the fact that inequality, measured by Gini coefficient, increased in 1993–1998 and decreased in 1998–2002. Going further with the sources of welfare changes, the paper finds that income increase during 1993–1998 outpaced that of 1998–2002, but negative impact of higher inequality in the former period led to an increase in total social welfare only relatively the same as that of the latter period. From these investigations, the author suggests some policy directions in which improvement of communal facilities, building professional skills, and employment services will help Vietnamese

people, particularly the poor, get out of poverty, and will mitigate inequality between regions and areas.

Focusing on another part of the population, Chapter 7 by Giang Thanh Long and Wade Donald Pfau provides general information about the Vietnamese elderly with different aspects on age, gender, marital status, living arrangements, and poverty status. This paper uses the data from the Vietnam Living Standard Surveys in 1992/93, 1997/98 and the Vietnam Household Living Standards Survey in 2002 and 2004 to show the trend of these indicators over time. The estimated results show that the aging of the Vietnamese population could be observed, as the percentage of the elderly people (who are 60 years old and older) in the total population increased during the past decade. The rate was even higher that the projected rate of the United Nations (2005).

The data also show that the urbanization process in Vietnam has continued: the proportion of rural people decreased from more than 80 percent in 1992/93 to about 73 percent in 2004. More importantly, most of the elderly are living in the Red River Delta and Mekong River Delta. In terms of educational level, the estimates show that females of all age ranges generally have disadvantages in comparison with males, and this situation can be seen clearly with decomposition of area (urban and rural) or marital status. Going further with detailed analysis on the elderly households' living arrangements, the paper shows that the traditional (or multi-generational) family structure has been strongly maintained in Vietnam. Elderly people play important role in the households as many of them are heads of the households. This comment is also supported by fact that many elderly people are still working and doing housework for the households. Among elderly dependents of the households, many are living with their married son, and this situation is prevalent in rural areas. One concern pointed out in the paper is that the percentage of elderly living as dependents declined by about 10 percentage points, while the corresponding elderly living in only elderly households increased at the same rate during 1992/93–2004; particularly the percentage of one-elderly households also increased by 3 percentage points in this period. The data of the surveys also indicate that housing conditions, particularly lighting and hygiene, of the elderly households have improved significantly over time.

The last part of this paper presents the estimates of poverty rates

across the population by gender and age. In agreement with information indicated elsewhere in the book, the results show that the overall poverty rate in Vietnam decreased rapidly during the past decade, from about 58 percent in 1992/93 to about 19 percent in 2004. Poverty rates are then decomposed by gender and age in order to see the detailed poverty incidence of different groups of the population. Although it is admitted that the estimates might be biased due to several possibilities, they still indicate that the hardship tends to occur mostly at very later ages. Based on these general results, the authors recommend that social welfare policies need to be specific enough with careful consideration of social and economic factors, so as to protect the elderly from risks under swift economic transformation and integration.

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Chapter 2
Street Children in Vietnam

Interactions of Old and New Causes in a Growing Economy

Duong Kim Hong and Kenichi Ohno

Abstract

The problem of street children in Vietnam arises from the interaction of traditional causes such as the loss or divorce of parents and new causes such as economic incentive. This paper reviews the existing studies for the definition and classification of street children. Changing conditions are compared across time and between Ho Chi Minh City and Hanoi. We then propose a new typology of street children based on causes and situations. Causes are classified into broken family, mindset problem, and economic migration. Situations are divided into current protection and future investment. It is shown that the broken family group is most difficult to assist while the economic migration group often shows strong desire for study and better life. However, their aspiration is frequently interrupted by various setbacks. Since street children are not a homogenous group, intervention must also be diversified according to the needs of each type of children.

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We are aware that this paper still has limitations. The responsibility for any remaining errors rests solely with the two authors. At the same time, we would be very happy to receive any comments or suggestions from the readers of this paper.

1. Introduction

The problem of street children is one of the most pressing social problems in Vietnam in general and in Hanoi and Ho Chi Minh City (HCMC) in particular. The sight of children selling chewing gum in restaurants or shining shoes in street corners has become familiar. People sometimes call them roaming kids or "dust of life." Although the problem is well known, the dynamic mechanism that prompts these children to drop out of school and go selling in the street is yet to be analyzed deeply or comprehensively. Such causes as dire poverty and parents' divorce may be common to the street children problem in all developing countries, but other causes may be unique to Hanoi and HCMC, the two cities experiencing an enormous social and economic transformation.

Children end up on the street for a variety of reasons. For some, the street is an escape from broken families or domestic violence. For others, street life is a means of supplementing family income, passing time, and even having fun. In addition, the breakdown of traditional family values, educational zeal, and community structure leaves a large number of children without necessary care and support for their sound growth and development.

Children who work or live on the streets do not have full knowledge of their rights and are often unaware of risks in unguided urban life. Many of them are under the stress of day-to-day living. Some use alcohol or illegal drugs to relieve the stress and to forget painful experiences. Others are trained to become professional beggars. Still others commit crimes individually or join anti-social gangs. Disabled children may be sold to strangers who force them to beg on streets. Girls seem to be in particular danger as the target of sexual assault and exploitation.

Thanks to the *Doi moi* (renovation) policy, the people's average living standard has improved dramatically since the late 1980s. National statistics show that GDP per capita rose from 156 USD in 1992 to 482 USD in 2002 (General Statistical Office [GSO] 2004). In 1993, 58 percent of the population was under the poverty line[1], but the ratio fell to 37.4 percent in 1998 and to 28.9

[1] The poverty line used here is 1 USD/person/day.

percent in 2002 (GSO 1999, 2004). With these achievements, Vietnam is one of the best performers among the low-income countries. Despite this, fast growth and global integration have also intensified certain traditional social problems and created new ones. As the average income rose, some problems grew to be much worse and more visible. The problem of street children is one of these[2].

Vibrant cities like Hanoi and HCMC generate new opportunities and demands for jobs like house cleaning, shoe shining, and selling petty goods to residents and foreign tourists; urban people are unwilling to perform these jobs. The expectation of cash income encourages rural labor to migrate to the city and supply such services. Working on the street may be more dangerous and tiresome tiring than tilling paddy fields in the countryside, but it is more profitable. Rural people come to cities even though they have to live separately from their families and familiar landscape. In addition, the excitement of urban life as well as opportunities for education, training, and jobs attract young rural people like a magnet. These are the "pulling" forces of rural-urban migration.

With the rapid growth of the national economy, rural life in Vietnam has also changed substantially, sometimes for the better but other times for the worse. The material conditions in villages have improved thanks to better roads, schools, electrification, medical service, and so on. However, new troubles have also arisen. The way of thinking and the education level of many villagers cannot catch up with the speed of social and economic change. Traditional values are weakened while new values to support rural life are slow to emerge. Each farmer has increasingly less land to cultivate due to population pressure and transfer to other uses, which accelerates labor surplus in rural areas. These are the "pushing" forces of rural-urban migration for both adults and children.

Many researchers, officials, and social workers who work directly with disadvantaged children in urban areas. Many studies and reports have been done on this issue with various purposes and methods. Based on this existing work, we would like to analyze the problem of street children further with special attention on the dynamic implications of Vietnam's economic growth.

The rest of the paper is organized as follows. The next section intro-

[2] Other problems that may intensify with economic development include corruption, environmental destruction, land bubble, the rise of materialism, and the decline of cultural and spiritual values.

duces alternative definitions and classifications of street children. Section 3 reviews existing studies of street children in HCMC and Hanoi, including the recent survey conducted by VDF. Section 4 analyzes the causes and situations of street children and the mutual interaction of the two. Dynamic movements among different situations are also discussed. Section 5 presents some case studies of former street children. Section 6 concludes the paper and suggests some issues for future work.

2. Street Children: Who are They?

Street children is the most common term used by international organizations and related agencies to refer to the type of children who are the focus of our study. This term was also adopted in Vietnam and officially used in government ministries and organizations. Recently, however, some Vietnamese government offices started to use the term children wandering and earning on the streets instead of the old term for greater precision. In this paper the term street children continues to be used because it is still widely and internationally accepted and has been used for a long time.

Apart from terminology, there is also the problem of defining these children and counting them in accordance with each definition. In Vietnam at present, no one knows the exact number of children living or working on the street, and estimates vary from one organization to another. Clearly, the problems of definition and counting are closely related. In order to compare the numbers of street children across time and location, it is necessary to use statistics collected under consistent—or at least similar—definitions. Moreover, street children are not a homogeneous group. Each child has a different family background, a different reason for being on the street, a different education level, and different requirements to be fulfilled. An effective categorization will bring a better understanding of the problems and the needs of each group of street children.

2.1. Definitions by the government and international organizations

Street children can be defined in a number of ways. Let us briefly look at some commonly used definitions, namely, those of the Ministry of

Table 1: Classification of street children by Terre des homes Foundation

Category	*Description*
A	Children who have run away from home or have no home; of which A1: Sleeping on the street A2: Sleeping off the street
B	Children sleeping on the street with their family or guardian
C	Children living at home, but working in an "at risk" situation
D	Migrant child workers engaged in casual street activities, of which D1: Sleeping on the street D2: Sleeping off the street
Note: "at risk" means at least one of the following: (1) working at night; (2) engaging in (casual) sex work or pimping; (3) begging; and (4) using or selling drugs.	

Source: Authors compiled from Terre des hommes Foundation (2004: 19)

Labor, Invalids and Social Affairs (MOLISA), the United Nations Children's Fund (UNICEF), and the Terre des hommes Foundation, a Swiss street children NGO operating in Vietnam since 1989.

According to MOLISA, "street children" is one of the ten groups of disadvantaged children[3]. Following the new law of Child care, Protection and Education by the National Assembly in 2004, MOLISA defines street children as "children who leave their families, earn their living by themselves, and have unstable working and living locations; or children wandering on the street with their families" (National Assembly 2004, p. 2). The number of street children in the entire country was estimated to be around 19,000 in 2003, of which 1,500 were estimated to be in Hanoi and nearly 9,000 in HCMC. MOLISA does not classify street children into subcategories.

UNICEF defines street children as children under 18 years old who spend most of their time on the street. UNICEF also presents three subcategories of street children: *street living children, street working children, and the children of street living families*. Street living children are those who have lost ties with their families and live alone on the street. Street working children are those who spend all or most of their time working on the street to earn income for their families or for themselves (they have a home to return to and do not

[3] MOLISA's categorization of disadvantaged children includes (1) orphans and abandoned children; (2) disabled children; (3) chemical- or toxic-affected victims; (4) HIV/AIDS-affected children; (5) working children in hard, toxic or risky conditions; (6) working children who live far away from their family; (7) street children; (8) sexually abused children; (9) drug-addicted children; and (10) law violators.

usually sleep on the street). The children of street living families are those who live with their families on the street.

The definitions and categorization of the Terre des hommes Foundation are similar to those of UNICEF. For this reason, the studies of street children by UNICEF and Terre des hommes should be compatible if proper care is exercised. In its survey conducted in 2000, Terre des hommes Foundation (2004) defines street children as "children under 18 years of age, earning money through casual, street-based activities such as begging, scavenging, peddling, portering, shoe shining, pick-pocketing, petty theft" and who belong to any one of the following categories (Table 1).

In this paper, we basically adopt the definition of the Terre des hommes with slight modification as follows: *street children are children under 18 years of age who regularly earn money through casual, street-based activities.*

2.2. Difficulties in collecting data

Even if all organizations agreed on one common definition and categorization of street children, which is not the case, data collection would not be easy due to the invisibility, mobility, and seasonality of street children.

Invisibility of street children is one of the major difficulties for conducting survey studies. Some child workers are highly visible to any observer: shoe shiners, barrow-pushers, beggars, and vendors of all kinds including trinkets, T-shirts, tourist guide books, chewing gum, and lottery tickets and results. Others are much less visible: those who offer drugs or sexual services and those who only work at night. In Cau Muoi Market in HCMC, for example, there are groups of vegetable scavengers who usually work from midnight to 2:00 a.m. and again from 5:00 a.m. to 7:00 a.m. They sleep during the day. If a street children survey is conducted during the day time, these children are likely to be omitted (Terre des hommes Foundation, 2004).

Many street children move from one location to another in search of customers. Some are willing to go anywhere to find an earning opportunity. Their high mobility creates obvious problems for those who want to count them. Some children also shift from one job to another.

Moreover, street activities are often seasonal. A survey carried out in

summer will give different results from those of a winter survey. The Tet holidays, the Vietnamese New Year, also greatly influences the ebb and flow of street children.

According to Dr. Tran Trong Khue of the Institute of Social Sciences in Ho Chi Minh City (ISSHO) and Dr. Nguyen Thi Thanh Minh of the Committee of Population, Family and Children (CPFC) in HCMC, the *average* number of street children in HCMC in 2003 was around 8,000. However, this number fluctuated significantly during the year. The number of street children is always highest during the summer when children do not have to go to school. The children of poor rural families often take advantage of this spare time to earn extra money for their families. They leave home for urban streets and engage in vending or scavenging. The income that such a child brings home may be as much as ten times what his or her parents earn monthly doing rural jobs[4]. In other words, a child working this way in the summer months can make a sum comparable to the family's entire rural income for the year. Children are willing to trade off their summer vacation for the additional large income they may gain. This is one clear economic explanation for the higher number of street children in big cites in the summer.

Special events like National Independence Day and Seagames 22 (the 22nd South East Asia Games) also affect the number. In preparation for these events, unwanted wanderers are rounded up and "institutionalized" in an effort to beautify the cities. During this time, many street children disappear from their normal locations[5]. Official campaigns like this leave street children with the choice of cleaning up their act entirely or leaving the urban center—often temporarily—for outer and less visible areas. If a survey does not account for these factors, the results can easily be misunderstood.

To obtain a comprehensive view of the dynamics of street children, surveys should ideally be conducted at different times in a year and at different

[4] Information provided at the street children workshop conducted by VDF in HCMC in August 2004. Dr. Minh confirmed that a child from Duc Pho Commune in Quang Ngai Province, where the average monthly income was about 100,000 VND, could earn as much as 300,000 VND per month by selling lottery tickets in HCMC.

[5] Captured street children in Hanoi are sent to Ba Vi and Dong Dau detention centers and those in HCMC are often sent to the School for Teenagers No. 3 in Go Vap District

times of the day. This arrangement permits the researcher to gain detailed information on the movements of street children as well as on average trends. However, most surveys are not conducted this way due to limitations in time, funding, or human resources.

3. Comparing Ho Chi Minh City and Hanoi: Past and Present

Among the surveys on the street children in Vietnam, we have chosen four surveys for comparison. Two were conducted in HCMC while the other two were conducted in Hanoi. Two describe the situations many years ago while the other two are more recent. The four surveys are:

(i) Terre des hommes Foundation, *Children of the Dust in Ho Chi Minh City* (1992). The survey was conducted from January to June 1992.

(ii) Terre des hommes Foundation, *A Study on Street Children in Ho Chi Minh City* (2004). The survey was conducted in 2000 and supplemented by group discussions by service providers in 2002.

(iii) Nguyen Van Buom and Jonathan Caseley, *Survey on the Situation of Street Children in Hanoi* (March 1996). The survey was conducted in November and December 1995.

(iv) *A Survey on Street Children in Hanoi*, conducted by VDF (unpublished). The survey was conducted in June 2004.

3.1. Methodology

The four surveys above share a similar methodology. The only major differences among them are the locality and the size of surveys. In each case, information was gathered by a structured questionnaire followed by individual interviews.

The first survey was conducted by the Terre des hommes Foundation in the first six months of 1992. Seven locations in HCMC were chosen: Ben Nghe area (District 1), Ben Thanh Market area (District 1), Cau Mong, Cau Muoi Market area (District 1), Cho Lon area (District 5), Sai Gon Railway Station (District 3), Western Bus Station area (Binh Chanh District), and Van Thanh Bus Station (Binh Thanh District). In each area, the sample for interview

was chosen randomly. The gender ratio was chosen to be close to the actual ratio of boys and girls on the street. Interviews were conducted by three project officers and volunteers using a questionnaire.

The other Terre des hommes study was conducted in 2000 with elaborate real-time review and adjustments. The research locations included Cau Muoi Market and Cau Mong area, Pham Ngu Lao area, Ben Nghe area, Van Thanh area, Saigon Railway Station area, Cho Lon area, Western Bus Station area, and Ben Thanh Market area. Survey conductors spent eleven days in each area. They initially examined the general profile of the street child community in that area with a view to defining a representative group for individual interviews. Then they pre-tested the structured interview in the field. Following that, a workshop by survey conductors was held to revise the technique. It reviewed the appropriateness of the categorization of street children; the definition and selection of representative groups; and the methods of conducting individual interviews with the children, collecting data, and writing reports. As a result of this review, the questionnaire and interview techniques were modified. Continual support from the Terre des hommes survey coordinator and regular whole-group meetings further facilitated real-time process review.

The survey by Nguyen and Caseley was carried out in 1995 in four urban districts of Hanoi (Hai Ba Trung, Hoan Kiem, Dong Da, and Ba Dinh) and in one rural district of Hanoi (Gia Lam). The survey instrument was a two-part questionnaire completed through two separate meetings with each child. Meetings of all research teams were held weekly to discuss the progress of the survey and to solve any problems each team might have encountered.

The most recent survey was conducted by VDF in June 2004 in four main districts of Hanoi: Hoan Kiem, Hai Ba Trung, Thanh Xuan, and Tay Ho. The survey instrument was a questionnaire. The interviews were conducted by four people, who included one VDF researcher and three social workers of the Youth Volunteer Club of the *Student Magazine of Vietnam*.

Below, we highlight differences between the two cities and shifting trends over time based on these four surveys. Since their sample sizes and survey locations differ, the results are not perfectly comparable and care should be exercised in interpreting the results. Nevertheless, broad pictures should still be valid.

3.2. Trends in number

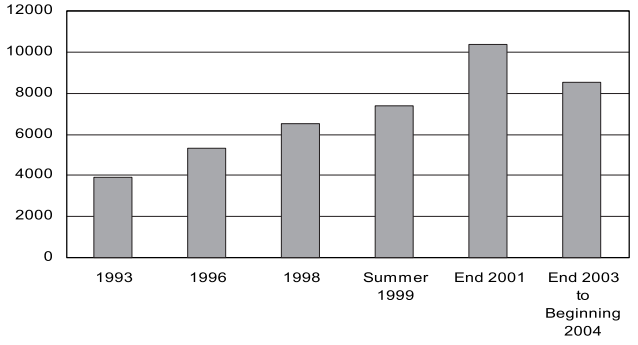
The annual statistical report of MOLISA indicates that the total number of street children in Vietnam increased significantly in recent years. In 1997 there were 13,377 street children. The number rose to 19,047 in 1998 and to 21,016 in 2001. This suggests that the number of new children on the street is higher than the number of children who quit street life and those who are no longer counted as street children because they have grown older. The annual statistical report of MOLISA also shows that street children are concentrated in the two urban centers of Hanoi and HCMC. The number of street children is increasing in both cities although special events like Seagames 22 temporarily decrease their number.

Figure 1 reports the number of street children in HCMC at irregular intervals as reported by the Department of Labor, Invalids and Social Affairs (DOLISA) in HCMC. The increasing trend is consistent with the national data up to 2001, but there was a sudden and significant drop immediately after Seagames 22 and the passage of the new Law on Child Care, Protection and Education by the National Assembly. Whether this reduction is permanent or temporary remains to be seen.

Although it is noted by government officials that the number of street children in Hanoi fell after the program of sending street children back to their hometown was introduced in 2003, the essence of the problem may remain. According to interviews conducted by VDF in 2004, the current number of street children in Hanoi in comparison with that in past years may not have decreased significantly, although the street children may be more scattered and less visible. Some argue that the problem of street children cannot be solved unless its root causes, such as rural poverty, are properly dealt with.

Recently, from our observation, the number of street children in the two big cities, Hanoi and HCMC, has decreased. In some locations like Hoan Kiem lake in Hanoi and Ben Thanh Market area in HCMC, which used to be crowded with street children, there is nearly no sight of wandering children, shoe-shiners, or newspaper sellers. Two reasons can be mentioned. The first is a strictly implemented local government program of collecting street children and wandering people. The second may be the achievements of projects to assist street children.

Figure 1: Street children in Ho Chi Minh City



Source: Department of Labor, Invalids and Social Affairs (DOLISA), Ho Chi Minh City (2004)

In 2005, 5,770 street children received help and support from local authorities with school fees, vocational training, and job introduction. About 2,000 street children had been supported to reunite with their families and nearly 1,900 street children had been back to school. The number of street children in the whole country, especially in Hanoi and HCMC, declined significantly from 9,400 to 7,700 as of late 2005 (Thong tan xa Vietnam, 2006).

In August 2004, MOLISA cooperated with the European Delegation to implement the first phase[6] of the Assistance for Street Children Project in 10 cities and provinces[7]. The project aims to help six groups of beneficiaries: (i) children currently living and working on the streets; (ii) street children who have been resettled but who remain at risk of going back to streets; (iii) children at risk of leaving home and migrating to the cities; (iv) families of resettled street children and families of children at risk; (v) communes/wards with high numbers of children having left home and migrated to the city; and (vi) related organizations/institutions involved in the project activities.

Although the total numbers of supported street children and resettled

[6] The second phase will be implemented in Da Nang and another province and in some districts of Quang Nam, Dong Thap, Long An, and An Giang.

[7] Hanoi, HCMC, Nha Trang, Thanh Hoa, Phu Yen, Quang Ngai, Thua Thien Hue, Hung Yen, Vinh Phuc, and Ha Tinh.

street children have not been collected fully, it is obvious that the project has contributed to decreasing the number of children on the streets. For example, according to the DOLISA of Thanh Hoa province, up to August 2006, thanks to the project, 321 out of 500 street children of Thanh Hoa (64 percent) had resettled with their families, and 1,000 children at risk had been prevented from becoming street children. According to Hoang Hoa commune, in Hoang Hoa commune, Vinh Phuc province, 86 street children of the commune had returned and lived with their families after receiving support in the form of school fees, vocational training, and capital lending. The few street children who remain in Hoang Hoa are predicted to return to their families in the near future.

If this project is successful, by August 2007, there will have been 5,000 street children reached by specialized social workers providing individual counseling services; 1,500 sustainably reunited with their families; 3,000 reaching National Education Standards for their age group; 2,600 gaining access to health care; 760 undertaking vocational education; and 250 provided with alternative care through kinship and foster family arrangements.

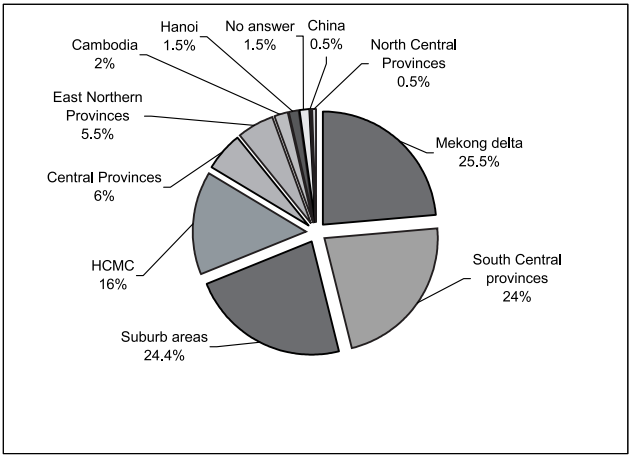
3.3 Where are they from?

It is well known that the vast majority of street children seen in big cities are from rural areas, not from the cities themselves. But if we look closely, there are some differences and trends in the characteristics of street children in HCMC and Hanoi.

According to the survey in 1992, 49.5 percent of the street children in HCMC came from the Mekong Delta and South Central provinces. Together with children from HCMC itself and its vicinity, a vast majority (86 percent) were from the southern half of the country. At that time, northern children and north central children were relatively few (7 percent and 6.5 percent, respectively) (Figure 2).

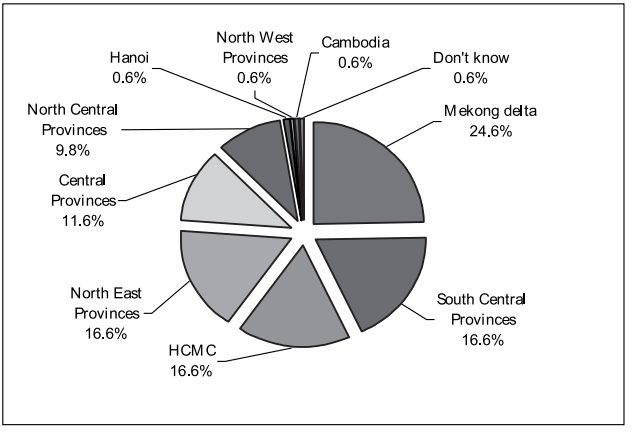
By 2000, the hometowns of street children in HCMC were a little more widely spread, although 74 percent still came from the southern half of the country. Categorizing street children provides more detailed information. More than 70 percent of children in categories A, B and C (see Table 1 above) came from the south and south central parts of the country while more than 60 percent of children in category D (economic motive) came from the north and

Figure 2: Hometowns of HCMC street children in 1992



Source: Terre des hommes Foundation (1992)

Figure 3: Hometowns of HCMC street children in 2000

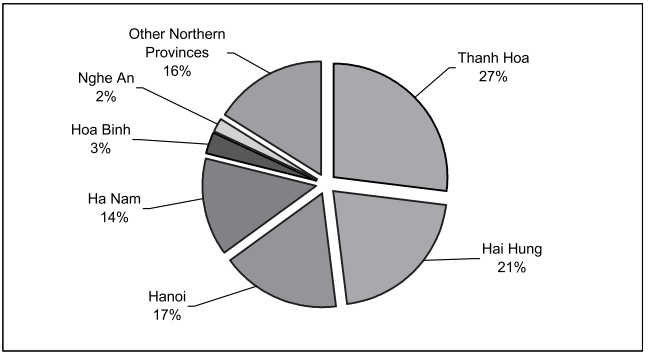


Source: Terre des hommes Foundation (2004)

north central parts. This indicates that, in recent years, most of the northern children in HCMC moved there as migrant workers. Category D children have different attitudes and behavior from the other types because their lives and jobs are more "stable" even though their earnings are generally low (Figure 3).

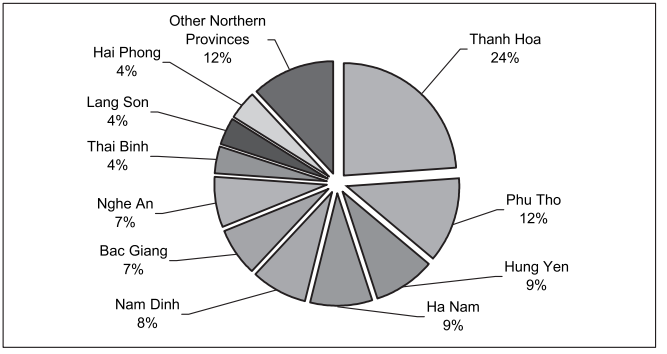
In the survey conducted by Buom and Caseley in Hanoi in 1995, the

Figure 4: Hometowns of Hanoi street children in 1995



Source: Nguyen and Caseley (1996)

Figure 5: Hometowns of Hanoi street children in 2004



Source: Vietnam Development Forum Survey (2004)

largest number of interviewed children came from Thanh Hoa province (27 percent). Children from Hai Hung (now split to Hai Duong and Hung Yen) ranked second (21 percent). Children from Hanoi itself (17 percent) and Ha Nam (14 percent) followed (Figure 4).

Similarly with HCMC, the hometowns of street children in Hanoi shifted somewhat and become more diversified after nine years. The latest distribution of hometowns is shown in Figure 5.

These two surveys confirm what is well known among those working with street children in Hanoi: the majority of working children come from rural

areas and, among them, Thanh Hoa sends the largest number[8]. Even in 2004, the survey could not detect any street children whose native land was in the south of the country[9].

On the contrary, HCMC as the economic hub of Vietnam attracts far more economic migrant workers than Hanoi. There are even some Hanoian and Cambodian children working in the streets of HCMC (0.6 percent each), while in Hanoi we observe no street children from HCMC or foreign countries.

3.4. What do they do?

Generally speaking, jobs that street children undertake most frequently include scavenging, shoe shining, street vending, begging, selling lottery tickets or lottery results, pick-pocketing, and pilfering in the market (in this study we also include illegal activities as "jobs"). Here again, however, we see some differences and trends according to gender, age, location, and survey years.

The most popular jobs for boys are shoe shining, selling lottery tickets, pick-pocketing, and market portering. Meanwhile, girls often engage in selling lottery tickets and street vending. Small children often start with begging and waste scavenging because they are too young to do physically demanding work like portering. Older children like to work as street vendors after they gain certain street life experience. Many of them do more than two jobs at the same time.

The next two diagrams show the occupational distribution of street children in HCMC in 1992 and 2000.

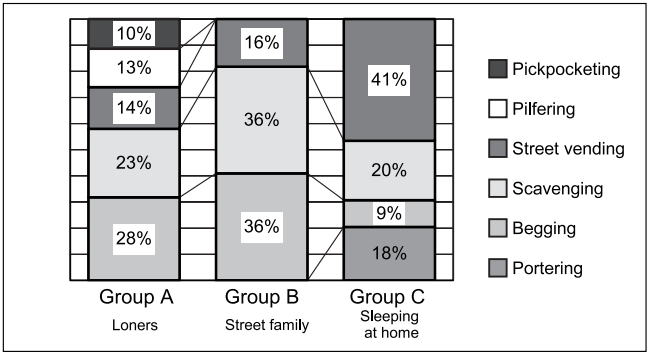
There is a current boom in the selling lottery tickets and shoe shining in HCMC, neither of which existed in the 1992 survey. On the other hand, there has been a significant decrease in begging since that time.

The most common jobs among street boys in Hanoi are shoe shining

[8] Thanh Hoa is a poor coastal province south of Hanoi. It is traditional for Thanh Hoa people to leave their hometown for big cities to make a living. Three villages (Quang Hai, Quang Thai, and Quang Loi) are particularly well known as the homes of many migrants to Hanoi as well as to HCMC.

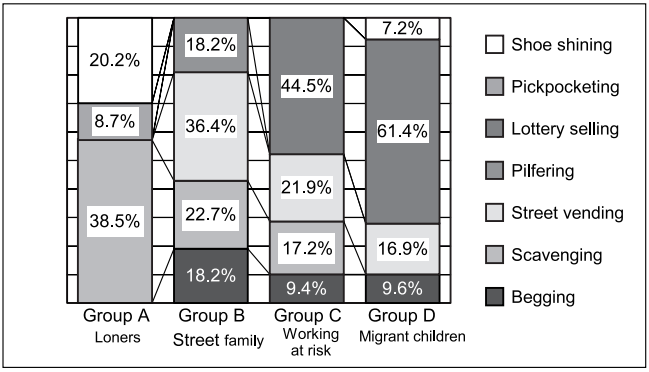
[9] In the southern provinces, if a child has to leave home for urban working life, he or she always goes to HCMC because this city is nearer, transportation is more convenient, and there is a mindset among rural people to favor HCMC over all other cities.

Figure 6: Occupations of HCMC street children in 1992



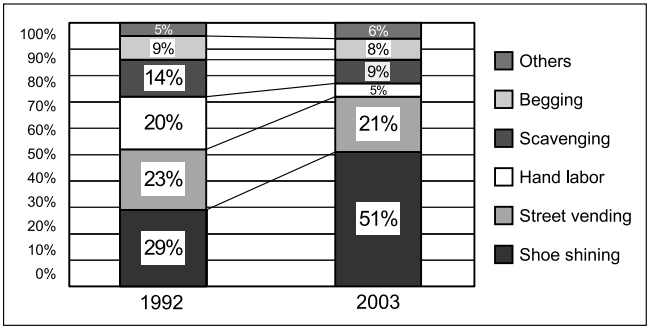
Source: Terre des hommes Foundation (2004)

Figure 7: Occupations of HCMC Street Children in 2000



Source: Terre des hommes Foundation (2004)

Figure 8: Occupations of Hanoi Street Children in 1992 and 2003



Sources: Nguyen and Caseley (1996) and Committee of Population, Family and Children in Hanoi (2003, unpublished).

and lottery result sales. Scavenging and street vending are jobs that girls often do. The survey in 1992 identified the top five jobs for working children, namely, begging (9 percent), scavenging (14 percent), street vending (23 percent), shoe shining (29 percent), and hand labor (20 percent).

The two recent surveys in Hanoi, the one conducted in 2003 (Committee of Population, Family and Children 2003a, 2003b) and the other conducted by VDF in 2004, also confirm that these occupations are the most popular ones.

3.5. A note on lottery tickets

Although the occupations of street children in HCMC and Hanoi mostly overlap, some jobs undertaken by HCMC children are rarely seen in Hanoi, and vice versa. One example is seen in lottery business.

In HCMC, selling lottery tickets is a very popular job for children of every age. The lottery ticket sales system is more "developed" in HCMC with a large number of lottery agents organizing child sellers. The adult sales agents receive lottery tickets from the state-owned lottery company and redistribute them to children. The adult agents bear the business risk and refund children for the unsold portion of lottery tickets at the end of the day. These organizers sometimes provide children with food and sleeping quarters. All profits from selling the lottery tickets belong to the children.

In Hanoi, lottery tickets are sold by small-scale adult agents along the streets. No child is involved as there is no organization to mobilize street children to sell lottery tickets. However, the announcement of lottery ticket results is more "exciting" than it is in HCMC. Every day from 5:30 p.m. to 7:00 p.m., hundreds of children gather at the lottery result centers in Tang Bat Ho Street and Hue Street. They record the results, carbon copy them, and run as fast as they can to every lane and corner of Hanoi to sell them. While each result sheet costs only 500 VND, a child with quick feet can earn 10,000 VND per day on average. In HCMC no child sells lottery ticket results since the results are provided free of charge by any lottery agent right after the results are announced.

4. New Typology Based on Causes and Situations

While the existing classifications of street children, such as the one proposed by the Terre des hommes Foundation (Table 1), are operationally useful in conducting surveys, we need a more structured classification for further analysis. In this section we propose a new typology of street children based on the distinction between causes and situations, and the relationship between them. In considering the situations, it is necessary to separately discuss current deprivation (poverty, health problems, emotional crisis, and so on) and the lack of future investment (education, training, job prospects, and so on).

4.1. Causes

The causes driving school-age children to the street can be divided into three main groups which we shall call *broken family, mindset problem*, and *economic migration*. While these causes are mutually related and overlapping, a main cause can usually be identified for each street child. It is necessary to clearly distinguish them for deeper analysis and proper design of intervention, as we will see below.

Group I: Broken family

This group includes children with extremely difficult family situations such as being orphaned or abandoned as a result of the death, divorce, or separation of the parents; being a victim of domestic violence or sexual abuse; and the like. This is the traditional cause of street children that exists in any developing country with or without economic growth.

The increasing rate of divorce, of which children are always the first victims, is a pressing issue in Vietnamese society. The disintegration of the family is a great shock to them even if one of the parents continues to take care of them. Children abandoned as a result of parents' divorce have to undergo an even greater emotional shock than do those who remain with one parent. Being left with relatives or grandparents, such children are easily discouraged from study and lured by bad friends. Psychological damage is particularly severe when a child loses one or both of the parents when it is very young.

There are approximately 120,000 abandoned children in the country. Another estimate says that 3.4 percent of abandoned children are street chil-

dren. This means that more than 4,000 abandoned children are roaming in the street[10]. From another angle, the recent survey of the Committee of Population, Family and Children in Hanoi (2004) discovered that 12.3 percent of the interviewed children were from a broken family.

Domestic violence is a controversial topic that attracts much attention. There are a variety of definitions and opinions concerning domestic violence. Outdated feudal ideas still permeate relationships between husband and wife as well as between parents and children. Feudal ideology remains relatively strong among rural people. In such cases, family quarrels are common. The majority, both women and men, agree that if the wife does something wrong, the husband has the right to slap her. They believe that, by doing so, the husband is fulfilling his role as the head of the family and as a man.

Domestic violence takes many forms from physical violence such as beating to psychological violence such as scolding, threatening, and making quarrels. Many children leave home because they cannot bear the domestic violence inflicted on them. The most common situations include being beaten by a drunk father or being scolded very severely when a child has done something wrong.

Most of the street children who have left home because of domestic violence are spiritually and emotionally impaired. While in-depth scientific research on the effects of domestic violence on the psychology of street children is lacking, this cause is mentioned in every survey on street children.

Group II: Mindset problem

This is a case where the family enjoys relatively unbroken relations and an average—or at least not destitute—standard of living but still sends children to work in the street due to the wrong attitudes of the parents or of the children themselves.

Some children leave home because they are lured by friends or because they want to savor freedom instead of going to school. Seemingly exciting life in big cities and friends who already know the street life are the

[10] According to MOLISA's data for 2001 as quoted in Committee of Population, Family and Children in Hanoi (2004).

pulling force. For such children, earning money is not the main purpose. Naturally, they easily succumb to social evils like heroin, prostitution, and juvenile delinquency.

However, the mindset problem most often arises on the parent side. Some parents think that cash income is more important than children's education. The temptation of luxurious life breeds and reinforces the wrong attitude of the parents. By preventing their children from going to school and forcing them to work hard for the family, they become a negative constraint on the children's development. It is observed that some parents trade their children's future for nice furniture, electronic appliances, or a new house. Unfortunately, there seems to be a positive correlation between rapid economic growth and the wrong attitude of adults. When the living standard improves day by day, this type of street children tends to increase.

Group III: Economic migration

Children who are forced by dire poverty to migrate to urban areas to earn a living belong to this group. Here, the main cause of migration is economic. The important feature of this group is that the parents do not want their sons or daughters to drop out of school and take to the street, but they feel there is no other choice given their economic situation. The children themselves often want to continue schooling as well. What is important in identifying this group is not whether the child has both parents or has only one parent, but whether or not a family bond and consideration for children's future exist. With proper love, even children raised by only one parent or grandparents will retain the right attitude towards education.

There is no doubt that family poverty is one of the major causes of street children. Due to family poverty, children cannot study and play, lose the care or protection of a guardian, and have to work long hours in unfriendly places. In every survey discussed in Section 3 above, more than 70 percent of the street children answered that they were working in the street because of their family poverty.

Poverty may be the result of a natural disaster, the death or desertion of a bread earner, job loss, illness, injury, divorce, separation, the death of livestock, crop failure, theft, increase in dependents, and so on. Some of these overlap with the problem of broken family discussed above while others are beyond

the control of the household. When they occur, poverty and hunger become inevitable.

4.2. Situations

Each street child is different. Apart from the initial cause that drives the child out onto the street, their life and working styles vary greatly. It is important to clearly distinguish their situations because their needs and required assistance also vary greatly with their situations. This paper proposes to divide the situations that street children face into two dimensions, namely, the degrees *of current protection and investment for future*. For all deprived people, current protection is of utmost concern for the respect for human dignity and ensuring the minimum standard of life. But for children, investment in their future is equally—or even more—crucial.

Current protection

Current protection refers to whether or not the child is protected physically and mentally against various risks now so that his or her daily life is not excessively miserable or threatened. This further breaks down into several contributing factors such as:

1. Physical health (injury, sickness, malnutrition, drug addiction, HIV/AIDS, physical disability, etc.)
2. Mental health (fear, lack of love, trauma, lack of concentration or discipline, mental disability, etc.)
3. Assault risk (bullied, beaten, tortured, raped, detained, sold, etc.)
4. Job hazard (engaged in an "at risk" job—see Table 1)
5. Financial shocks (family needs medicine, being cheated, money is stolen, fined by police, etc.)
6. Shelter (sleep under a roof or outside)
7. Adult protection and guidance (parent, guardian, NGO, etc.)
8. Group protection (work and live in group or alone)

The first two factors (1, 2) describe the present condition of the child while the next three (3, 4, 5) measure the degree of uncontrollable risk to which he or she is subjected. The remaining three factors (6, 7, and 8) help the child to avoid potential problems or deal effectively with the problems that have arisen. While these factors may improve or deteriorate simultaneously, they are in prin-

ciple separate and can take different values for each child. We can say that the child is well protected against imminent risks if these factors are all favorable, and we can make the converse conclusion if they are poor in every direction[11].

Future investment

Another key element in gauging the welfare of children is whether they are receiving adequate education or training in preparation for the future. Without investment in human capital, children cannot expect any bright future or realize any dream, even if they are well fed and protected today. Naturally, therefore, the degree of future investment should be the second dimension in defining their situation. With adequate knowledge and skill, children will have a much greater chance of escaping their current misery through finding a stable and safer job. At the same time, this prospect gives them hope, encouragement, and a new meaning to their tough life at present.

More specifically, future investment can take several forms. If the child has been out of school for a few years or less, returning to formal schooling should be seriously considered. The child should study at least up to the 12th grade and should be given a chance to go to a university if warranted. If this option is not feasible, private tutoring by volunteer teachers and classes offered by NGOs may substitute. For those who have been out of school for a long time and no longer have the aptitude to study for many years, vocational training of shorter duration should be provided. Among general skills, English and computers are very popular among aspiring street children. But they should be combined with more specific vocational training that fits the characteristics of each child. Equally important but frequently neglected is the need to link vocational training to actual jobs. Guidance and assistance in job search are crucial in determining whether learned skills are used productively or wasted.

Some factors may impede the child's investment for the future. The first and perhaps the most common is the financial factor. Most classes and training programs require a fee. If the fee is out of reach of the child, he or she

[11] The Terre des homes Foundation uses some of these situational factors (job hazard, shelter, adult protection) along with what we call causes (broken family, street family [mindset problem], economic migration), in its classification of street children in Table 1 above. In this paper, we prefer to treat causes and situations differently.

is not able to attend.

The second is the time constraint. Even if a course is offered for free, the child still faces a tradeoff between work and knowledge because of the opportunity cost related to time. If the child goes to school, he or she will earn less on the street. Similarly, if the course takes a long time, in terms of hours per day or duration in months or years, the child is less likely to choose to attend—unless sufficient compensation is offered to cover the lost working time. In this sense, financial and time constraints are related.

Third, many street children simply lack the discipline and patience needed to attend a course. The longer they have been on the street, the more this is so.

Fourth, another important factor is the encouragement (or lack of it) from the community surrounding the child. If the child's friends begin to attend a class, he or she is more likely to attend it too. Among fellow street children, the contagion effect is usually very powerful. Similarly, the child will attend classes more regularly if he or she receives constant encouragement from parents or adult acquaintances. On the contrary, however, if the parents actively discourage the child from studying, an obedient child may easily follow this advice. The objection of an unwilling parent is one of the biggest obstacles in sending street children to school or a training program.

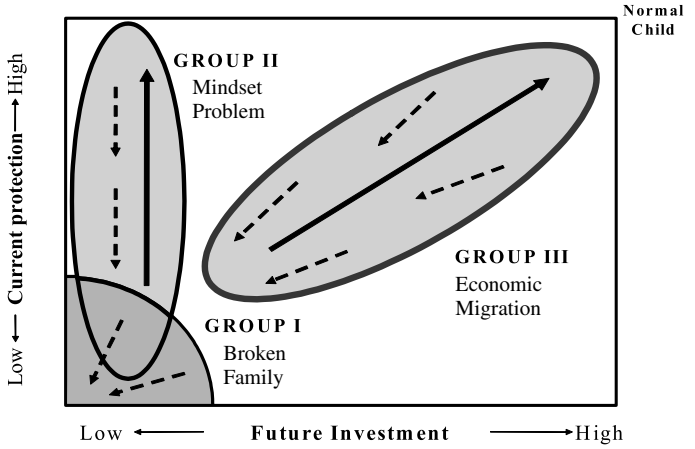
4.3. Correlation and dynamism between causes and situations

Typical situations and aspirations

While all street children face the risky situations of street life, the kind and degree of risks they have to cope with differ significantly depending on the initial cause of becoming street children.

Children from a broken family (Group I in Figure 9) are the least protected against current risks and the most lacking in investment opportunities. Their life situation is often much tougher than street children of other groups. The risks of drug addiction, HIV/AIDS, assault, abuse, sexual exploitation, and other serious troubles are much higher with this group even if they try to protect themselves by roaming and sleeping together (risks are even higher if they are alone). Similarly—and regrettably—the risk of becoming a promoter of social evil rather than its victim is also high. These children are rarely seen to be going to school or receiving vocational training on their own. With a prolonged rough

Figure 9: Current situations and future investment



Note: The vertical and horizontal axes represent the two dimensions of the situation of street children. On the other hand, groups classify street children by their causes. The solid arrow indicates the aspiration of each group while the dashed arrow indicates unexpected setbacks.

Source: Authors' own illustration.

life, they become streetwise and often lose the discipline and patience required to keep regular time and study hard. They are stuck in a difficult position (as illustrated by their location in the lower left corner of Figure 9) and can hardly escape the situation without proper and dedicated intervention.

Children who drop out of school due to the wrong attitude of the parents (Group II) are less deprived, relatively speaking, in the current situation than the children in the first group since their parents can look after them. They are relatively well fed and protected. It is rare to see them severely victimized by street gangs, or even joining such gangs. The biggest problem with this group, however, is the strong opposition of the parents when someone (teacher, social worker, or the children themselves) proposes an education or training program for them. Migrating families work hard to move up from the lower left corner to the upper left corner of the diagram, but they do not invest in the children's future[12].

[12] One NGO assisting street children in Hanoi reports the case of a boy whose parents forbid him to go to school. Driven by the love of learning, he ran away from home to work and study in Hanoi.

Children who migrate for economic reasons (Group III) face least difficulty in comparison with the other two groups, provided that their family ties are basically intact and children retain the right attitude and a strong desire for studying and improving life. Their main or only reason for joining the street life is economic. They often have close contacts with people from the native village and rent a room with previous neighbors. Collective protection provides them with an adequate risk-sharing mechanism against the contingencies of falling ill, running out of money, and the like. Moreover, they are often very eager to return to school or learn useful skills for the future if the opportunity arises; some actually go to school by their own. Their parents normally support their aspiration. Children in this group are equipped with the right attitude and incentive to move not only vertically (upward) but also horizontally (rightward) in Figure 9.

If each street child is given a score between 1 and 10 in both the degree of current protection and of future investment, his or her situation may be identified with a location in this diagram. Contributing factors to current protection include physical and mental health, assault risk, job security, financial situation, shelter, adult protection, and group protection, as explained above. Contributing factors to future investment include the status of schooling, training, access to job information, and proper guidance and counseling by professionals. By giving these scores to street children, it is possible to quantify their plight, identify the group to which they belong, and devise the way to guide them towards the right paths.

However, such measurement also has limitations especially with respect to comparison and aggregation. Two variables may not be able to capture the complexity of the situation each child faces. For example, even if two children score the same in current protection, the first child may have good health but little parental protection, and the second child may have the converse situation. Having the same score does not mean that they suffer from the same problem or need the same intervention. This warning also applies to the scoring in future investment. Additionally, it is difficult to decide how much weight each factor should receive in constructing such a score. Are job security and shelter equally important? Should formal schooling be given more points than vocational training? Or should all factors receive one point each? This conun-

drum defies an easy solution. Any scoring system must therefore resort to some tentative convention.

Even so, giving numerical scores to the situation of each street child may be a good first step towards an objective quantification of his or her plight, supplementing narrative description.

Setbacks

While Group I children are stuck at the lower left corner of Figure 9, Group II children (with their parents) attempt to climb upward, and Group III children want to move closer to the bliss point in the upper right corner where current protection and future investment are both available. But these movements are frequently interrupted by uncontrollable negative shocks that tend to pull the children back to where they started, or worse. These setbacks are indicated in dashed arrows in Figure 9.

Accidental setbacks occur at two levels: individual shocks and macro (or societal) shocks. Shocks that befall the child or the child's family partly overlap with those that initially sent them to the street. They include family problems, financial hardship, sickness, injury, assaults, psychological crisis, drug addiction, HIV/AIDS, and arrest and detention. By contrast, macro shocks affect a broad segment of the society but hit vulnerable groups (including street children) particularly harshly—for example, natural disasters, economic recession, fluctuation in tourism, bird flu and other epidemics, international events that require clean streets, and seasonal business fluctuations. While all street children must cope with both shocks, different groups are impacted differently.

These shocks have immediate and heavily negative influences on Group I children, who are already in the worst situation. This is because they lack the knowledge to avoid such shocks as well as the risk-sharing mechanism to ameliorate the shocks once they occur. As a consequence, they are more vulnerable to sickness, injury, financial hardship, and so forth, and more susceptible to the temptation of social evils. They are caught in a hopeless trap.

Children in Groups II and III are better off in the sense that they have more protection and guidance from the parent or the group to which they belong. But such protection and guidance are neither perfect nor available for

all contingencies. If the shock becomes uncontrollable for the child (or his or her friends or parents), there will be a slippage towards either downward or leftward, or both. The child may become hungry or sick, and may even quit studying. In the worst case, the child may lose the family or group protection and migrate to Group I.

5. Former Street Children: Where are They Now?

5.1. Case studies

No survey has systematically tracked the same children over the years. The number of street children is reported every year and many surveys are conducted to describe the situation at any one point in time, but no study seriously asks the questions of what happens to today's street children when they grow older, whether surveyed children are the same individuals examined in previous surveys, or how many of the children of former street children become a new generation of street children. This paper shares the same weakness as other studies[13]. However, we hope to provide some anecdotal evidence on the long-term aspect of the street children problem so that the reader can sense the breadth of the problem. The information below was acquired through personal contacts that the authors have had in Hanoi and HCMC since the mid-1990s.

Paths traveled by street children to adulthood vary greatly from one child to another. Some youths graduate from the status of precarious hand-to-mouth living to a respectable career in the formal sector. This is achieved through self-effort, good luck, and assistance from people who recognize their latent talent. On the other hand, it is hardly deniable that some unfortunate adolescents fall deeper and deeper into trouble until they destroy themselves or become menaces to society. The majority of street children, however, seem to

[13] One way to track the growth of children consistently is to analyze the records kept by shelters that house former street children until they reach the age of 17 or even above. Many domestic and foreign organizations provide such assistance in Vietnam. However, such data may suffer from a winner's bias because only the relatively successful children are admitted to shelters. There are also many children these shelters do not accept because their conditions are too difficult to manage and their admission would have an undesirable effect on other children.

grow into street adults without meeting a brilliant success or a dreadful end. Lacking education and a stable job, they continue to work in the street, manage to make a living, get married, and raise a family while coping with the same risk and uncertainty of street life they have known for a long time. Whether the children of such street adults will also become street children is an important determining factor of the street children problem in the future. Many street adults genuinely desire to send their children to school and terminate the generational vicious circle, but whether they can do so depends mainly on their financial situation.

As expected from the discussion in Section 4, Group I children have the least chance to move up in the long run. In contrast, it is not uncommon to see Group III children achieve academic and professional success. The prospects of Group II children lie between these two cases. Below, six actual cases are presented for illustration. Each case is classified into one of the three groups based on the most important cause for street life. As noted earlier, however, the three causes overlap and interact with each other. The classification here should be taken as only indicative. The age shown below is according to the western calendar as of the end of 2004.

Miss A—Group I (broken family), age 19

The father of Miss A was a landless farmer in Hung Yen. He married three wives consecutively. Miss A and her elder brother are the children of his third wife. Miss A also had one younger brother but he was "stolen" in his infancy and she says that is why her mother became a little crazy. Miss A has one living half-sister whom she met only once. When Miss A was very young, the family traveled extensively in Vietnam to beg in locations including HCMC, Hue and Hai Phong. In the past, the poor often traveled for free by train. But she does not remember much about these days.

In 1995, when Miss A was ten years old, the family "settled down" in Hanoi. They slept outside the Big Church and continued to beg. The municipal cleaning workers sometimes invited them to take shelter in their make-shift house while they were at work. A foreign priest helped Miss A to go to school up to the sixth grade. Her parents were often caught by police and detained. At one time, she was sent to live with an unmarried young couple. The lady there forced her to sell postcards near Hoan Kiem Lake and to inhale an illegal drug.

Since then, Miss A has been addicted to heroin.

The family subsequently moved to a humble shack in an area of Hanoi inhabited by migrants from outer provinces. Miss A continued to sell in the street, her mother collected waste, and her elder brother was a shoe shiner as well as a thief. Many individuals and NGOs tried to help her without much success. Recently, the father's health deteriorated significantly during his four-year detention at Ba Vi, a detention center. Miss A struggled to obtain the necessary official documents and stamps to get him out.

In early 2004, her father was released from Ba Vi for the reason of terminal weakness. After he passed away and her mother and brother were again caught by the police and sent to Ba Vi, Miss A became homeless. She began to sleep alone outside, wear tattered clothes, and eat the leftover food of others. She fell and injured herself and could no longer go to Hoan Kiem Lake to earn money. She admits that she still can earn money to buy heroin by selling drugs herself. Although she sometimes tries hard to escape from her fate, difficult circumstances and deep psychological wounds have made her distrustful of others. Her stubbornness as well as the lack of future investment makes it extremely difficult for anyone to help her.

Miss B—Group II (economic migration), age 25

When Miss B was eight years old, her parents were divorced and she and her younger sister were sent to live with their grandmother. Miss B went to school in the morning and worked as a baby sitter and house maid in the afternoon. Although she was a very good student and a monitor at school, she had to drop out at the fifth grade because her family was too poor to pay the school fee. Two months later, she left the village for Hanoi with 50,000 VND in her pocket. She has been working in Hanoi for the twelve years since that time.

At first, she bought miscellaneous things in Dong Xuan Market and sold them in the streets. Two years later, she began to study English and simultaneously go to Nguyen Van To school with the help of one foreigner. While continuing to sell in the street, Miss B attended evening classes. To save money, she spent only 1,000 dong on bread for her daily food.

After shifting from one job to another, Miss B became a receptionist at a mini hotel in the Old Quarter of Hanoi. She was very quick to learn new work and gain experience. Her English was better than that of any other street

children. Recognizing her potential, another foreigner offered to be a business partner to open a mini hotel of her own. It met with immediate success. Currently, Miss B is a manager of two mini hotels, both of which are profitable.

Miss B was an economic migrant who did not want to quit school to become a street child in the first place. Although her parents were divorced, she had the spiritual support of her mother and grandmother. She also had an insatiable desire and determination to become an entrepreneur. External financial support was the only thing she needed to realize her dream.

Miss C—Group III (mindset problem), age 18

Miss C and her mother are from a village in Tien Giang, but they usually stay in a rented room in HCMC and sell coconuts in the heart of the city. Miss C has no father but has one brother who is also a coconut seller. She cannot say clearly when she dropped out of school. The mother and the daughter sell chilled coconuts together from early morning to late night or until all merchandise is sold. Sales are better on hot days and they rest on rainy days. Carrying dozens of coconuts, with loads weighing up to 30 kilograms, is a tough job for a young girl. Like other sellers, Miss C is very good at running from the police.

Initially, Miss C spoke only Vietnamese with strong a southern accent. Her writing was poor. But soon she picked up fragments of various languages, including English, German, and Japanese, from foreigners. She likes to throw dirty words at them. Some foreigners like to take her and her friends on a day trip to Mekong. On major holidays like Tet or when major events are held in HCMC, they return to Tien Giang to rest. Their house is simple and decent, and has a TV and a video machine. Miss C hopes to get married with a German boy.

A local NGO in HCMC has tried to send her to an informal English class. A modest financial sum was introduced to compensate for the lost sales because her mother was unsure of the benefit of letting Miss C receive education. Many of her seller friends studied hard and subsequently received assistance in job training and placement, but Miss C skipped classes frequently and finally dropped out. After Seagames 22, it became increasingly difficult to sell in the central districts of HCMC and the NGO sometimes loses track of the family.

Mr. D—Group II (economic migration), age 26 if alive

The father of Mr. D passed away in 1990. Mr. D had no brother or sister. Leaving his mother in Ha Tay, he came to Hanoi in the early 1990s to sell postcards to foreign tourists. Although he had a few friends among the boy sellers, he was basically alone in his work and life because he was the only one from his village. He picked up English on the street and received modest assistance from foreigners to go to English courses. He also went to the driving school but could not complete the lessons due to lack of money. He did not receive any consistent training to get a stable job, so he continued to sell postcards. He was caught by the police and sent to the detention center a few times.

In 1999 he married a seller girl whom he knew for a long time, but his life remained as hard as before. He was addicted to heroin and gradually lost his weight and health. Two years ago, his friends reported his death. The cause was pneumonia related to his drug addiction.

Mrs. E—Group II (economic migration), age 23

In the mid-1990s, Mrs. E came from a village to sell postcards to foreigners in the Hoan Kiem Lake area and send money monthly to her parents. She has both of her parents and three siblings. Her family is poor but not desperately poor in the village. She dropped out of school after the fifth grade and never returned to formal schooling. Because she was in a large group of young female sellers from the same village, she sold and slept with them in a rented room. She received foreigners' help in going to English and sewing classes. Her English improved, but she was not successful in finding a stable job.

As the police crackdown on street vendors intensified over the years, she switched to T-shirt sales away from the Hoan Kiem Lake area. In 1999 she married a boy from the village next to hers and had a baby in the following year. Now Mrs. E and her husband sell T-shirts together on a motorbike all around Hanoi. The couple is still poor but they are happy with each other. However, Mrs. E realizes that their occupation is too unstable with the possibility of official arrest, and wants to find better jobs for herself and her husband. At present, she is seeking financial help from others to send her husband to a driving school. She herself is thinking of opening a small shop but people around her warn that it is a risky move if the shop fails.

Mrs. E feels it unfair that honest sellers like her are often detained

together with thieves, prostitutes, drug addicts and pushers, and other criminals. These sellers are doing what is necessary to survive with no evil intention towards society, she says. Another injustice she can hardly bear is the fact that rich detainees are released quickly while poor people like her must do full time at the detention center. But she knows that her protests are unlikely to be heard.

Mr. F—Group II (economic migration), age 22

Mr. F also came from the country side in a group to sell postcards in the Hoan Kiem Lake area in 1998. His father died and his mother remarried, so he and his younger sister were placed under the care of the grandparents. Although his case may be classified as Group I (broken family), group protection and the existence of grandparents provided some initial security against urban risks.

In his first few years of selling, Mr. F had no future plan; he did not know what he wanted to learn or do. However, as street life became increasingly difficult due to the policy of cleaning up urban centers, he began to think seriously about the next step. After studying travel guidebooks by himself, he became an unofficial tour guide for foreign backpackers. He also sought help for getting a driver's license (he received the money but sent it to his grandparents instead of going to the driving school).

Mr. F was caught by the police this summer. Because he tested positive for heroin, he is now being detained in one of the drug addiction centers in Ba Vi. People like him can be locked up for as many as two years. Some say that this is not too bad for him because he can be treated and has something to eat there. But all agree that many former addicts start using heroin again upon release. His sister, who married another seller recently, sometimes visits him in Ba Vi.

5.2. How to guide street children towards the right paths?

The solution to the street children problem, which must be detailed and realistic, needs to be discussed in full elsewhere. This section can merely present some general suggestions that can be obtained directly from the above analysis. Three mutually related points are given below.

First, a proper mix of current protection and future investment should be available to each street child. A program to create appropriate conditions

must be designed and provided strategically and systematically for each street child. This requires deep understanding and rich experience regarding the street children problem. Assistance should not be casual or ad hoc.

Second, for every group of street children, proper external intervention is required because it is very difficult for the child alone to overcome the barriers to progress. Even in the relatively "easy" case of Group III (economic migrants) with appropriate mindsets, like Miss B above, help from foreigners and fellow Vietnamese were indispensable. For children in Groups I and II, external assistance is even more necessary for guiding them towards the right paths.

Third, for good intervention, analysis and planning based on an effective classification of street children is crucial. As mentioned earlier, street children are not homogeneous. Each child faces a different situation and requires different help. Assistance must be consistent with the type and needs of children. Partial or unsuitable support will not only fail to achieve results but will also waste the time and money of the supporters.

In this regard, Group I (broken family) is most difficult to assist. Children in this group generally lack the necessary attitude and discipline. Therefore, they require all-around, long-term and customized commitment, encouragement, and patience on the part of help providers for both current protection and future investment, and for physical and mental assistance.

The main barrier for children in Group II (mindset problem) is the parent's psychology. As this is difficult to change even with constant persuasion, a special tactic to provide children with an education opportunity is needed. This may require financial incentive for the parent or even temporary separation of the child from the parent. If the children themselves also have the wrong mindset, it is even more difficult to assist them.

Street children in Group III (economic migrants) need financial assistance. Unlike other groups, they are more often equipped with good motivation and family encouragement to overcome the poverty trap. For them, the main assistance can be financial, supplemented by proper counseling and monitoring. While they are the least difficult group to help, careful selection is extremely important. Not all Group III children are honest or highly motivated, so the time and money of the supporters should be allocated to the most serious candidates.

6. Concluding Remarks

The plight of street children in Vietnam is at an early stage in comparison with more "developed" neighboring countries. In Vietnam, mafia-like crime groups of street children are relatively rare. Street children in Vietnam produce a feeling of pity and sadness in the minds of the general public rather than inspiring strong fear and repulsion. If there street children are involved in social evils, we often consider them to be the victims of those evils rather than considering them to be evil makers. We need to effectively tackle the street children problem in Vietnam as soon as possible before it develops into a worse situation.

Studying the interactions of old and new causes in a growing economy is just the starting point of research on street children. For simplicity, we did not want to raise too many issues or questions in this paper, although we were aware that the reality is far more complex. Before closing, we would like to leave a few suggestions for further study. Street children themselves and many social program coordinators agree that there are two important issues that must be addressed seriously. First, there is a need to strengthen our skill in providing counseling work to the children in guiding each child to the right path. Second, after receiving certain education or training, children need additional help in applying their acquired knowledge to the real situation. A training program or a short course is not sufficient. They need more incentive and assistance to secure a stable job and build a family—to live a normal life in society.

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Chapter 3
An Intervention Model of HIV/AIDS Protection for Sex Workers: The Case of Quang Ninh Province

Nguyen Thi Minh Tam and Le Thi Ha

Abstract

The HIV/AIDS epidemic in Vietnam will not be dealt with effectively without strong prevention methods. Controlling HIV via sexual transmission is one of the most pressing requirements as sexual "services" are becoming more and more common in hotels, restaurants, and entertainment centers. A survey to assess the risk awareness of the workers of these establishments was conducted during the year 2005 in Quang Ninh province. Sex workers and waitresses at high risk for prostitution answered 150 questionnaires; while 30 in-depth surveys were conducted with the participation of local authority officers (12 surveys) and owners of restaurants and hotels (18 surveys). The survey results reveal that sex workers and people at high risk for prostitution are not well aware of methods to prevent HIV/AIDS, and restaurant and hotel owners as well as local authority officers do not pay enough attention to the transmission of the dangerous virus that causes AIDS. Their poor awareness of safe sex, especially condom use, is another finding. Psychological interventions, therefore, seem to be appropriate. Peer clubs, skill-training classes, and personal counseling are crucial to change attitudes and create good habits and behaviors of safe sex for sex workers. Based on that and on the generalized results of the in-depth survey, the authors suggest an intervention model of HIV/AIDS transmission prevention to change the attitudes, habits, and behavior of people at high risk for prostitution. Quang Ninh was chosen as the first pilot location because this province has the most serious HIV/AIDS problem with the highest number of HIV/AIDS-infected people in the country.

1. Introduction

Since the early 1990s, the HIV/AIDS epidemic has spread rapidly in Vietnam. In December 1990, the first HIV case was recorded. The total number of HIV infections in Vietnam, calculated up to 19 December 2005, was 103,900. People at the highest risk of HIV infection are injection drug users and sex workers. In 1996, the rate of HIV infection among sex workers was only

0.73 percent, but the rate increased to 6 percent in 2000. It should be noted that statistics are just the tip of the iceberg, because only one-third of the sex workers (16,801 files out of estimated 51,000 sex workers nationwide) are recognized. Therefore, the risk of HIV transmission through sex is very high and very difficult to control.

Finding an appropriate prevention model for sex workers is thus necessary. However, this is a challenging task because almost all sex workers are working as "waitresses" in restaurants, hotels, and entertainment centers. Meeting them to educate them on risk and prevention is very difficult, if not to say nearly impossible, because no one admits to being a sex worker.

There have been a number of studies that focus on sex workers, particularly HIV/AIDS-infected sex workers (see, for instance Do and Le (1995) and Hoang (1998)). However, those studies focused on analyzing the social characteristics, reasons, and current situation of sex workers in relation to HIV/AIDS transmission. There have been no studies on the awareness, attitudes, and behavior of sex workers towards HIV/AIDS prevention, and there also has been no research on finding an intervention model for them.

Therefore, doing research on the topic and building an intervention model of HIV/AIDS transmission prevention for sex workers and people at high risk for prostitution (like waitresses in restaurants, hotels, and entertainment centers) is an urgent need. In this paper, Quang Ninh—specifically Ha Long city and Hon Gai town—is chosen because it is a tourism center attracting many domestic and foreign tourists; there are many restaurants, hotels, and entertainment centers; and as mentioned before, this place has the highest rate of HIV/AIDS-infected people nationwide (572.2 infections/100,000 people).

This paper aims to evaluate the need and to suggest an intervention model of HIV/AIDS prevention for sex workers and waitresses at high risk for prostitution in restaurants, hotels, and entertainment centers. It will focus on the following research tasks and questions: (i) generalize the previous studies on the topic and give an overview of official statistics; (ii) evaluate the awareness, attitudes, and behavior towards HIV/AIDS prevention of sex workers in Quang Ninh; (iii) study the awareness and attitudes of management persons toward HIV/AIDS protection for waitresses at high risk for prostitution; and (iv) suggest an intervention model of HIV/AIDS prevention for sex workers and wait-

resses at high risk.

The rest of this paper is organized as follows. The next section will present our research methodology, in which our survey and data will be described. Section 3 will provide an analysis of the results and policy implications. The last section concludes the paper.

2. Research Methodology

To accomplish the above research tasks and questions, we implemented the following research steps.

First, we collected data from various sources, such as articles, reports, survey results, and official statistics related to HIV/AIDS prevention for sex workers. Then we analyzed those pieces of information.

Second, we conducted a sociological survey of 150 sex workers and waitresses at high risk for prostitution to gather information we would later use to form an intervention model of HIV/AIDS transmission protection for the group. The questionnaires addressed their awareness, attitudes, and behavior towards HIV/AIDS protection. They were collected and analyzed based on frequency, and relationship of age group, education levels, home town, marital status, and region.

Third, we conducted an in-depth survey of managing people about awareness, attitudes, and behavior, such as HIV/AIDS prevention and protection for sex workers and people at high risk. There were 30 in-depth surveys, of which 12 were conducted with local authority officers at the provincial, district, and ward levels. The other 18 were implemented with owners of restaurants, hotels, and entertainment centers.

Despite time and financial constraints as well as difficulties in approaching the people, the research results are reliable and can be a foundation for evaluating the current needs and for building an intervention model of HIV/AIDS prevention for sex workers and waitresses at high risk.

Table 1: Summary of the survey sample

No.	*Characteristics of Respondents*	*Quantity*	*Rate (%)*
1	**Age group**		
	Under 20	46	30.7
	21–25	68	45.3
	26–30	27	18.0
	Over 30	9	6.0
2	**Education level**		
	Primary school	7	4.7
	Secondary school	73	48.7
	High school	46	30.7
	College, university	24	16.0
3	**Home town**		
	City, town	47	31.3
	Rural areas	103	68.7
4	**Marital status**		
	Married	46	30.7
	Single	104	69.3

Source: Authors' estimates from the survey

3. Research Results and Analysis

3.1. An overview of the sample and research results

Prostitution and the HIV/AIDS epidemic have been spreading in Vietnam for the last ten years, and especially after the year 2000. A great deal of research and studies have focused on these topics; some of them focus on HIV/AIDS-infected sex workers, while others investigate characteristics of the HIV/AIDS-infected sex workers. Table 1 shows the survey sample for our research.

3.1.1. Characteristics of sex workers

Sex workers in Vietnam are not a homogeneous group; they vary widely in personal background, ethnic heritage, age, education, occupation, and family situation. About 70 percent of the Vietnamese sex workers are from rural areas. They travel to cities, begin working in high-risk workplaces, and then become sex workers. Most of them are still young, ranging in age from 18 to 25. Of sex workers, 70 percent are under 25. The number of adolescent sex workers is growing higher and higher—especially those working under the name of "waitresses" or "karaoke girls" in entertainment centers. According to an unpublished report on the behavior of sex workers in 2000 with a sample of 2,302 sex workers, the average age of sex workers is 21.9 in Hanoi, and 21.0 in

Hai Phong. The education of sex workers is generally low. Most of them finish secondary school with limited social knowledge. Their jobs are very unstable, and it is quite difficult for them to go back to normal life. Most of them are single or divorced. In general, their families usually have difficulties.

Sex workers are also classified by categories like working location, income, type of customers, and customer amount. There are three main groups: the "high-quality" group (young, beautiful), the "medium-quality" group (popular, majority working in inns, restaurants, etc.), and the "low-quality" group (old, ugly, diseased, and working on streets). Besides, there are also karaoke girls. It should be noted that the most difficult to identify group is unprofessional sex workers (or indirect sex workers). They are waitresses working in entertainment centers and service centers. Some of them have other jobs, but they sometimes still work as sex workers.

The working locations and characteristics of sex workers are also very different, depending on which group they belong to, and how long they have been working. The "career road" of a sex worker can be described as: at the beginning, when they are still young and beautiful, they work under the control of managers in restaurants, bars, karaoke, massage centers, inns, and hotels. Then, when they become older and less beautiful, they are dismissed and become street walkers. The working time is not the same. Most of them (60–70 percent) work for about three years. This shows that the number of sex workers is increasing annually. Old sex workers are replaced by younger workers.

Their income varies widely, depending on their class, working location, their customers, and their age. The older they are, the less their income is. On average, 50 percent of them are paid about 50,000 VND to 100,000 VND for one time. According to the survey result, about 10 percent of sex workers have incomes as much as one million VND per month. However, sex workers cannot receive all the payment. If they work under the management of others, they have to pay for pimping services. "Indirect" sex workers like karaoke girls, waitresses, and massage girls have fewer customers than do professional sex workers, but their income is not less than the professional workers' income because separately from the basic payment, they sometimes receive tips from customers. The attractiveness of the high income makes sex workers find it very difficult to give up their job and go back to normal life.

Another feature of the sex worker group is high mobility: sex workers often change their working location. Because of the high mobility of sex workers, the possibility of HIV transmission is also higher. Higher mobility means greater difficulty for intervention and prevention activities. With a high frequency of working, the possibility of HIV transmission into the community via sex workers is high. The average working frequency of a sex worker is two or three times per day. Some have five or six customers per day.

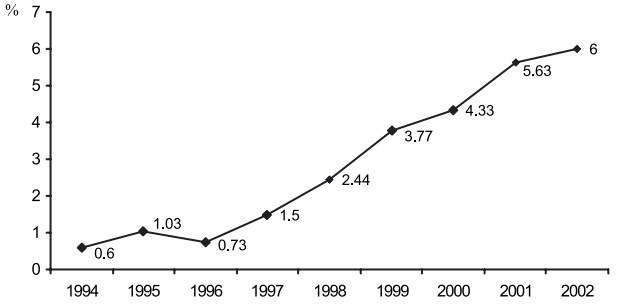
The customer age ranges from 19 to 50. They are divided into two groups. The first group includes those who do not have much money and whose jobs are unstable. They work as motorbike drivers, cyclo riders, etc., and have sex with street walkers. The other group is those who have money and stable jobs, and many of them have sex with the "high-quality" girls. Some of them are public servants; others include pupils and students. Customers are the bridge to transmit HIV from sex workers into the community via their wives or sex partners. Prevention and intervention activities are therefore a very urgent task.

3.1.2. HIV transmission and HIV/AIDS prevention

According to a report of the Ministry of Health (MoH), in 2002, the total amount of accumulated HIV infections in Vietnam was 59,200, of which 4 percent were sex workers. If we look at HIV-infected sex workers as a proportion of total HIV infections, we can see that the percentage of HIV-infected sex workers is increasing annually. Figure 1 indicates the trend of HIV transmission among sex workers.

However, the rate of HIV-infected sex workers in surveyed locations is much higher. For instance, in the Center Number 5 of the Department of Labor, Invalids and Social Affairs (DOLISA) Hanoi, sex workers accounted for 7.8 percent of HIV infection in 1998; in 1999 the rate was 20.2 percent, and in 2000 the rate increased to 31.5 percent. According to the survey result of the project "Community Actions Against AIDS" in 2002, the rate of HIV infections among sex workers was very high in frontier provinces in the south, especially in An Giang province. In this group, the rate of HIV-infected street walkers (24.3 percent) is higher than the rate of HIV-infected sex workers working in restaurants (16.2 percent). However, some studies find that most sex workers are not HIV tested, therefore the actual rate of HIV-infected sex workers is still

Figure 1: HIV infection among sex workers as a percentage of total infections



Source: Ministry of Health (2002)

unknown, and it may be much higher than the recorded rate. Because sex workers are considered a "high risk" group for HIV infection, doing research on sex workers' attitudes and behavior related to HIV/AIDS is very necessary and urgent.

According to the World Health Organization (WHO), a person who has the right knowledge about HIV prevention can mention at least two out of the following three HIV prevention methods: (i) do not have unsafe sex, (ii) use condoms when having sex, and (iii) do not share injection needles. By this definition, the rate of sex workers who have the right knowledge about HIV prevention is rather low (only 51 percent). According to the survey results from a joint project between Vietnam and Germany in 2000, 43.3 percent of sex workers think that they do not have to deal with the risk of HIV transmission, 20.7 percent think that the risk of HIV transmission for them is medium, only 5.2 percent think that they are at high risk of HIV transmission, and 29.8 percent do not know whether or not they are at risk of HIV transmission. At the same time, few sex workers spontaneously get themselves tested for HIV tests. And among those who think that they are at high risk, only 46.7 percent are willing to take an HIV test.

Regarding to the sex behavior related to HIV/AIDS, in most recent studies, sex workers always said that they only used condoms with unfamiliar customers. This means that they rarely use condoms when having sex with close customers or their boyfriends. This should be noted when carrying out interven-

tion programs. The condom use selection of sex workers puts them at the risk of HIV transmission into the community. The joint project between Vietnam and Germany in 2000 also finds that the intervention programs provide sex workers not only condoms, but also counseling and HIV testing services.

Apart from transmission through having sex, the transmission of HIV among and from sex workers when they share injection needles is also a problem. Among drug-addicted sex workers, many of them use drugs by injection. There is a relationship between the rate of HIV infection and the rate of drug injection. It can be said that sex workers are facing a double risk of HIV transmission: they are at the risk of HIV being transmitted from their customers and from those who share their injection needles. Once they are infected, they will transmit the HIV into the community.

Coping with the situation, many propaganda programs and intervention programs have been conducted. However, most of them are just pilot programs and there are difficulties in the legal framework and traditional cultural values. The results of those programs show that sex workers received condoms and counseling services are few. Similarly, few of them have opportunities for HIV tests and sexually transmitted disease (STD) checking for sex workers. This reveals another need not only to change the attitudes and behavior of sex workers, but also to change the attitudes and behavior of the community, especially the local authority managers.

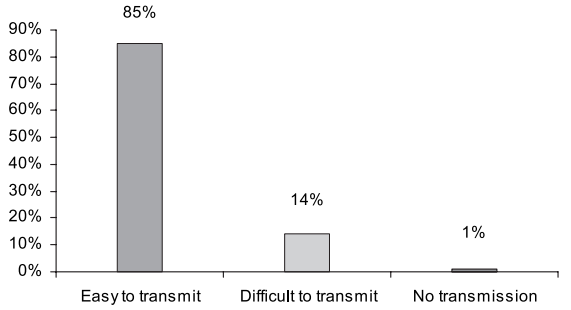
3.2. Awareness of sex workers and waitresses at high risk of HIV/AIDS transmission and HIV/AIDS prevention

3.2.1. Awareness of the risk of HIV/AIDS transmission

The survey shows that the majority of respondents are aware of the danger of HIV/AIDS, and of the possibility of HIV/AIDS transmission prevention and of the prevention function of using condoms.

To be precise, 96.7 percent respondents are aware of the danger of HIV/AIDS. This shows that the propaganda about HIV/AIDS is effective and has a good impact on the awareness of sex workers and waitresses at high risk. However, some people who have levels of low education cannot be fully aware of the danger of HIV/AIDS (five people, accounting for 3.3 percent, think that

Figure 2: Awareness about sexual transmission possibility of HIV/AIDS



Source: Authors' estimates from the survey

HIV/AIDS is not a dangerous disease; four of them finished secondary school). Their thinking will their decision to use or not use HIV/AIDS prevention methods.

Regarding the respondents' awareness about the transmission of HIV/AIDS through sex, Figure 2 shows that 15 percent think that HIV/AIDS is not easily transmitted, and even cannot be transmitted through sex. It can be concluded that many people are not fully aware of the possibility sexual transmission of HIV/AIDS. It is more dangerous when the sex workers and waitresses in restaurants, bars, and entertainment centers—who are at high risk—are not aware of the danger of the epidemic. When they are not aware of the danger of unsafe sex, the possibility of HIV transmission into the community is very high.

If we look at the background and the answers of the respondents, we will see a significant difference between rural and urban respondents. Only 76.3 percent of rural sex workers and waitresses think that HIV/AIDS can be sexually transmitted, while 92.4 percent of urban respondents know about this. Therefore, it can also be concluded that the propaganda about the HIV/AIDS epidemic is conducted better in urban areas than in rural areas.

Although most respondents think that HIV/AIDS is avoidable, their knowledge about prevention methods is very poor; even some of them even believe incorrect information. The wrong understanding about HIV/AIDS prevention will lead to discriminative attitudes toward HIV-infected people (nearly 76 percent of the respondents). Some people believed that HIV could be transmitted through kissing, even holding or shaking hands. In Table 2, among the

Table 2: Awareness of HIV/AIDS protection methods

No.	*Prevention Methods*	*Number*	*%*
1	Maintaining monogamous sexual relationship with partner	145	96.7
2	Using condoms when having sex	135	90.0
3	Not sharing injection tools	114	76.0
4	HIV-infected mother should not have baby	111	74.0
5	Not kissing, not holding or shaking hands with HIV/AIDS-infected people	37	24.7
6	Others	4	2.7

Source: Authors' estimates from the survey

prevention methods, having safe sex to protect oneself from HIV transmission (maintaining monogamous sexual relationship with partner and using condoms) was selected by most respondents.

However, 62 percent of the respondents think that HIV/AIDS is avoidable and preventable even when they have sex with many people. Therefore, it is clear that these respondents are over confident that they will be safe in any case.

3.2.2. Awareness, attitudes, and behavior of the interviewees towards the method of using condoms to avoid sexual transmission

The above section discussed the survey results about the awareness of sex workers and waitresses at high risk about HIV/AIDS prevention methods. Awareness about the prevention function of condoms was also discussed. We will next go into more depth on the results, focusing on the awareness, attitudes, and behavior towards the use of condoms to prevent sexual transmission of HIV/AIDS.

The survey shows that different people have different awareness, attitudes, and behavior towards using condoms, and also different difficulties in using condoms. Only 2 out of 150 respondents do not know about the prevention function of condoms. This means 98.7 percent—a sweeping majority—know that using condoms is an effective method to prevent HIV/AIDS sexual transmission. However, respondents' attitudes towards using condoms do not correspond with their awareness. Although 98.7 percent are aware of the importance and function of condoms, only 68.0 percent want to use them. This means that 30.7 percent do not want to use condoms (see Table 3 for more detail).

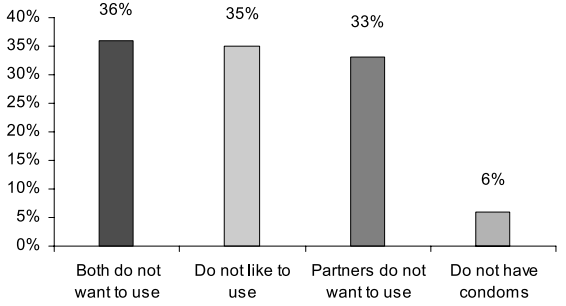
Why do some people not want to use condoms? There are many rea-

Table 3: Differences in awareness and attitudes towards condoms for preventing HIV/AIDS

Awareness and Attitude	*Yes (%)*	*No (%)*
Aware about HIV/AIDS prevention function of condoms	98.7	1.3
Want to use condoms when having sex	68.0	32.0

Source: Authors' estimates from the survey

Figure 3: Reasons for not using condoms



Source: Authors' estimates from the survey

Table 4: Right to decide to use or not to use condoms

Self Decision	*Number*	*%*
Yes	108	72
No	42	28

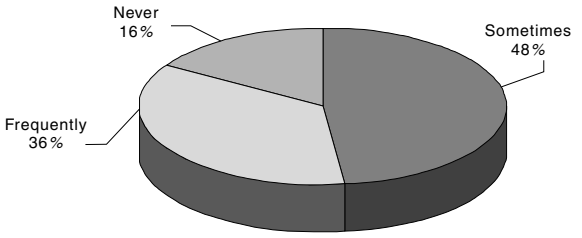
Source: Authors' estimates from the survey

sons. According to the survey, 36 percent said that both they and their partners do not want to use condoms; 35 percent do not want to use condoms because they do not like to use them; 33 percent do not use condoms because their sex partners do not want to use them; and only 6 percent answered that they do not use condoms because they do not have any (Figure 3).

These results indicate that people do not use condoms because of subjective reasons—not because of objective reasons like lack of accessibility (Table 4). Therefore, consulting activities are necessary to persuade them to use condoms. The aims should be (i) to persuade them to use condoms and (ii) to equip them with skills to persuade their partners to agree to use condoms.

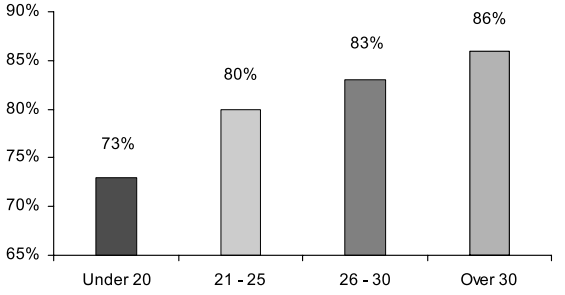
Regarding the question of frequency of using condoms, only 36 percent use condoms frequently. Nearly two-thirds of the respondents answered

Figure 4: Frequency of condom use



Source: Authors' estimates from the survey

Figure 5: Ability of deciding to use condoms, by age group



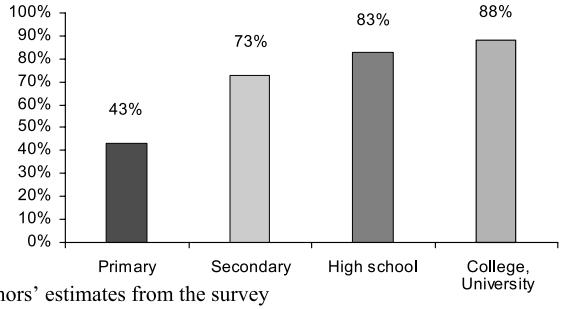
Source: Authors' estimates from the survey

that they sometimes use or never use condoms (Figure 4).

To sum up, there is a wide variety among the attitudes of sex workers towards condom use. As mentioned above, 96.7 percent are aware of the danger of HIV/AIDS, and 85.0 percent know that HIV/AIDS is easily sexually transmitted. Although 98.7 percent know that using condoms is an effective method to prevent HIV/AIDS transmission, only 68.0 percent want to use condoms and only 36.0 percent use condoms frequently. Therefore, about one-third do not want to use condoms and nearly two-thirds do not use condoms frequently.

It can be concluded that propaganda activities should focus not only on the danger of HIV/AIDS, its transmission possibility, and prevention methods, but also on personal consulting, group discussion, experience exchange activities, club activities, and other activities for sex workers in order to change

Figure 6: Ability of self-decision making to use condoms, by educational level



Source: Authors' estimates from the survey

their attitudes and behavior.

The survey also shows that the decision of not using condoms depend not only on sex workers but also on their partners and the surrounding conditions. Therefore, analyzing the answers shows that each person's freedom to use condoms is not the same; 28 percent cannot decide by themselves whether or not to use condoms.

If we consider the age of the respondents in analyzing their condom use, we can also see that there is a relationship between age and the decision to use condoms. The older they are, the greater their ability to decide whether to use condoms (Figure 5). The experience of sex workers may explain this result. When they are more experienced, they are more skillful in persuading their partners to use condoms.

If the answers are analyzed with consideration to education level, we can see that the higher the education level is, the more ability the sex workers can persuade their sex partners to use condoms (Figure 6). The ability to decide to use condoms among those who have college or university education level is double that of those who finished only primary school (88 percent and 43 percent, respectively). Therefore, intervention activities should focus more on those who have low education levels because their ability and awareness about condom use is limited.

One of the reasons confirmed by 31.7 percent of respondents for not using condoms is that they are not able to persuade their sex partners. There-

Table 5: Difficulty in persuading sex partners to use condoms, by age

No	*Have difficulty or not*	*Under 20*	*21-25*	*26-30*	*Over 30*
1	Yes (%)	34.4	34.4	28.3	17.2
2	No (%)	65.6	65.6	71.7	82.8

Source: Authors' estimates from the survey

Table 6: Difficulty in persuading sex partners to use condoms, by educational level

No	*Have difficulty*	*Primary*	*Secondary*	*High school*	*College, University*
1	Yes (%)	71.4	31.6	27.1	26.5
2	No (%)	28.6	63.9	72.9	73.5

Source: Authors' estimates from the survey

Table 7: Awareness of the reasons for not using condoms

No	*Reasons*	*Number*	*%*
1	Unaware of the epidemic	132	88.0
2	Do not want to use	105	70.0
3	Do not know how to persuade sex partners	85	56.7
4	Do not have condoms	37	24.7
5	Not allowed to use condoms	29	19.3
6	Others	7	4.7

Source: Authors' estimates from the survey

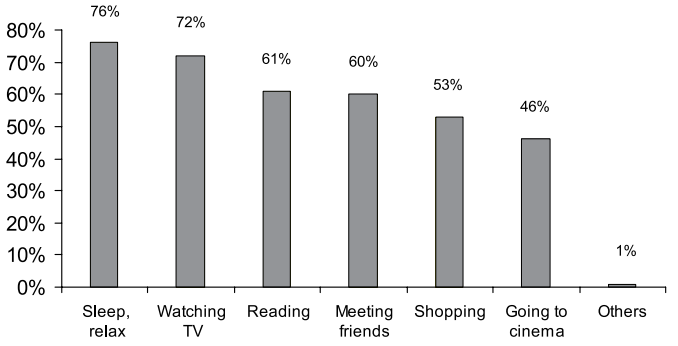
fore, persuading partners to use condoms is not simple for normal sex workers, especially for young ones (Table 5), and ones who have low education levels (Table 6).

When being asked about the reason of not using condoms, 88 percent think that people do not use condoms because they are not well aware of the transmission of the virus behind the HIV/AIDS epidemic. Two other reasons are that people do not want to use condoms and that they do not know how to persuade partners to use condoms (Table 7).

Analyzing the answers by age group helps to conclude that age (related to experience) has an impact on the ability to persuade sex partners to use condoms. Counseling is especially necessary for those under 30. Also, as we have seen, higher education levels mean a greater ability to persuade sex partners to use condoms. The survey results show that the persuading ability of those who finish college or university is up to three or six times higher than that of those who finish only primary education.

Two answers, "do not have condoms" and "not allowed to use condoms," were also mentioned. About 20 percent of the respondents chose these

Figure 7: Activities in spare time



Source: Authors' estimates from the survey

Table 8: Activities outside working hours, by educational level

Unit: %

No	*Activities*	*Primary*	*Secondary*	*High school*	*College, University*
1	Sleeping, relaxing	71.4	81.5	73.6	64.7
2	Watching TV	71.4	74.0	70.7	70.6
3	Reading	42.9	55.5	65.0	70.6
4	Meeting friends	28.6	61.3	60.7	61.8
5	Shopping	57.1	51.3	53.6	55.9
6	Going to cinema	42.9	40.3	49.3	52.9
7	Others	0	1.7	1.4	0

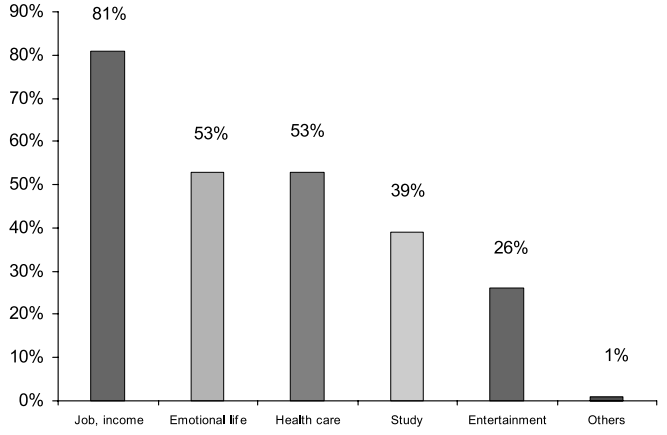
Source: Authors' estimates from the survey

two answers. However, these are reasons of the surrounding conditions, and although they should not be neglected when encouraging people to use condoms. The respondents think that they are less important than the three reasons mentioned above. Therefore, it is essential to focus on psychological changes like the changes in awareness, attitudes, behavior, and persuading ability. The second focus should be on improving the surrounding conditions like providing condoms and persuading managers to allow sex workers to use condoms.

3.2.3. Needs and desires of the sex workers, and proposal of an intervention model to prevent HIV/AIDS transmission

The purpose of the survey is to gain information to form a proper intervention model through which to reduce HIV/AIDS transmission among and from sex workers. Therefore, studying their needs and desires is very important. The needs, desires, and habits of the respondents could be under-

Figure 8: Priority of waitresses for their lives



Source: Authors' estimates from the survey

Table 9: Priority of waitresses, by age

Unit: %

No	*Desire*	*Under 20*	*21–25*	*26–30*	*Over 30*
1	Job, income	90.0	75.8	81.1	75.9
2	Emotional life	50.0	52.3	49.0	75.9
3	Health care	54.4	44.5	54.7	82.8
4	Studying	23.3	46.1	45.3	48.3
5	Entertainment	25.6	22.7	22.6	48.3
6	Others	0	0	1.9	3.5

Source: Authors' estimates from the survey

Table 10: Priority of waitresses, by educational level

Unit: %

No	*Expectation*	*Primary*	*Secondary*	*High school*	*College, University*
1	Job, income	85.7	91.6	77.1	58.8
2	Emotional life	42.9	55.5	55.0	41.2
3	Health care	14.3	58.0	52.9	44.1
4	Studying	14.3	32.8	39.3	67.7
5	Entertainment	42.9	28.6	23.6	23.5
6	Others	0	0.8	0.7	0

Source: Authors' estimates from the survey

stood through a series of questions about how they use their spare time. Figure 7 and Table 8 present our survey results from these questions.

The most popular activity in spare time is sleeping and relaxing. Respondents also spend their free time on watching TV, reading, meeting friends, shopping, and going to the cinema or theatre. Although they do not

have as much free time as their managers said, they still participate in many activities and have demand for communication and entertainment. However, if we analyze relationship of these answers with other factors, we can see differences in the demands, preferences, and habits of each group. For instance, activities chosen in free time vary across educational level. The results show that those who have a primary education level rarely participate in activities outside, whereas those who have higher education levels, such as those with college and university education, are likely to participate in many other activities. When they have free time, they prefer reading and shopping to sleeping and relaxing.

The habits of different groups should be focused on when organizing intervention activities. However, when being asked about their current priority, most of the interviewees replied that their desire was job and income first, then emotional life, and next their health (Figure 8). Entertainment was the last priority.

The survey data also indicate great differences in the desires of each group, divided by age (Table 9) and educational level (Table 10).

Table 9 shows that respondents who are over 30 pay more attention to health care, emotional life, and entertainment than do the other groups. Respondents in the under-20 group pay more attention to job and income, and little attention to studying and nearly no attention to other activities. It can be said that if intervention activities, such as counseling activities, club activities, and peer education activities, are carried out, the under-20 group will be the most difficult group to attract.

In Table 10, the group of low education level (primary school) pay most attention to entertainment and least attention to studying and health care. The group of higher education (college, university) pay most attention to studying and least attention to income. The two groups of secondary and high school education levels pay most attention to job and income, and then to emotional life and health care. These differences in priority should be taken into consideration to organize proper intervention activities. At the same time, it is necessary to pay attention to integrative activities, such as propaganda programs, education programs, supporting programs, and entertainment programs. These activities should be organized in order to be attractive enough for all ages and education levels.

Table 11: Answers to the question "When you have difficulty, who will you go to for help, consulting, or support?"

No	*Solutions*	*Number*	*%*
1	Family	91	60.7
2	Friends at workplace	62	41.3
3	Solve by yourself	56	37.3
4	Friends from the same hometown	46	30.7
5	Managers	18	12.0
6	Others	5	3.3

Source: Authors' estimates from the survey

Table 12: Preferred club activities, by age

Unit: %

No	*Preferred activities*	*Under 20*	*21–25*	*26–30*	*Over 30*	*All*
1	Health care consultation	66.7	70.6	67.3	64.3	60.0
2	Cultural activities	58.7	65.1	57.7	82.1	56.0
3	Sport activities	53.3	59.6	61.5	71.4	52.3
4	Health check, treatment	45.3	50.5	46.2	64.3	46.3
5	AIDS prevention propaganda	50.7	45.0	61.5	71.4	43.7
6	Providing condoms	41.3	41.3	44.2	57.1	38.3
7	Counseling when having difficulty	36.0	40.4	38.5	67.9	36.7

Source: Authors' estimates from the survey

Because of the characteristics of their occupation, sex workers cope with a great deal of trouble and problems in daily life. But when they have difficulties, from whom will they seek help or support? Those who they will go to for help are the ones who have the most influence on the behavior and attitudes of sex workers or waitresses. Intervention must be more effective through such people. Respondents deal with difficulty in several ways.

As the most popular solution, the majority (60.7 percent) will seek family's help to share their difficulty (Table 11). It is traditional for Vietnamese people to seek family's help when they have difficulty. The majority understand and are aware of the value of their family in dealing with their personal problems. However, it is not certain that they do receive the help from their family because many of them are living far away from their families and are not able to return to their family when they have difficulty. Actually, many of them feel ashamed of their occupation and feel that they cannot return to their families. Some of them even avoid contacting their families. Perhaps due to this situation, 41.3 percent chose friends at their workplace, instead of their families, to share their difficulties. The other 30.7 percent share difficulty with friends who come from the same hometown. An intervention model of peer education in

Table 13: Expectation about intervention activities, by educational level

Unit:%

No	*Expected activities*	*Primary*	*Secondary*	*High school*	*College, University*
1	Health care consultant	16.7	68.9	71.3	63.3
2	Cultural activities	66.7	64.2	63.1	63.3
3	Sport activities	83.3	56.6	59.8	63.3
4	Health check, treatment	16.7	50.9	54.1	60.0
5	AIDS prevention propaganda	50.0	50.1	52.5	33.3
6	Providing condoms	33.3	47.2	42.6	36.7
7	Counseling when have difficulty	16.7	34.9	46.7	50.0

Source: Authors' estimates from the survey

clubs would be appropriate in this case. According to the survey results, 88 percent are willing to participate in clubs.

However, among those who want to participate in club activities, expectations differ widely (Table 12). Health care and consulting activities are expected by most respondents. Other expectations are cultural activities, sport activities, AIDS propaganda, free health check and treatment, providing condoms, and life consultants. Collected data, however, indicated that there were different expectations of waitresses in groups depending on age and educational level. The group of those over 30 want to attend all the club's activities. Younger people want to attend fewer activities, especially the group of people who are under 20.

Regarding to the education level (Table 13), the group of those who have low education level (primary) pays most attention to sport activities and cultural activities, but little attention to health care. The college and university group pays more attention to AIDS prevention propaganda and condom supplying, but they do not pay attention to free health care. The other two groups pay most attention to health care consultant.

It can be affirmed that when organizing club activities, we should consider the characteristics and expectations of the respondents at different ages with different education levels in order to make the intervention activities more effective.

3.3. Influences of the authorities over sex workers and waitresses at high risk in terms of HIV/AIDS prevention

Intervention activities will be more effective if both the sex workers and their managers are approached in terms of awareness, attitudes, and behavior. Table 4 shows that 28 percent of the respondents said that they could not

decide to use or not to use condoms by themselves. This points to the fact that surrounding conditions have a significant influence on the safety of their sexual behavior. This was the reason for us to study the managers' impact on HIV/AIDS prevention for sex workers. Therefore, the surveyors conducted an in-depth survey with the two groups of managers. The first group includes local government officers and union members who are directly managing the sex workers, and the second group includes owners of hotels, motels, inns, restaurants, karaoke entertainment centers, etc.

First, we can see that, at the macro level, local authorities have a great impact on policy application. The effectiveness of the HIV/AIDS prevention activities depends much on how the local authorities understand prostitution; the possibility of HIV transmission depends on whether their awareness is equivalent to their attitudes or behavior. Thus, the direct managers of sex workers are those who may change the behavior of sex workers. Data in Table 7 indicate that 19.3 percent of sex workers said that they did not use condoms because they were not allowed to use them, and the results in Table 11 indicate that 12.0 percent would seek the help of their managers when they have problems. Therefore, it is clear that the awareness, attitudes, and behavior of masters of restaurants, hotels, and entertainment centers will have impact on the awareness and attitudes of sex workers towards HIV/AIDS prevention and sexual behavior.

3.4. Local authority officers, associations, and unions

3.4.1. Awareness of prostitution and disguised prostitution

The majority of the authority officers were worried about the prostitution increase, especially that of disguised prostitution in tourism centers. A police officer in Quang Ninh said, "Quang Ninh is a developing tourism center. It attracts many tourists and prostitution is unavoidable. However, the prostitution activities are all disguised and very difficult to discover. Normally, sex workers and customers make a deal over the telephone and then they hire a motel or hotel to have sex, and so it is quite difficult to control and manage. Disguised prostitution surely exists but is hard to identify."

Some of the sex workers in disguised prostitution here are waitresses working in restaurants, bars, and entertainment centers. A woman union's offi-

cer said, "Waitresses easily change their occupation and become sex workers because of their working environment. They may not prostitute at their working places but they can go somewhere else."

All the local officers and officers at unions and associations confirmed that disguised prostitution has become popular with call girls working in hotels and motels. A difficulty in controlling the waitresses is that most of them come from other provinces and they work temporarily in bars, hotels, motels, and entertainment centers. Many of waitresses do not even register their residence and they do not have any personal papers. In order to manage these people, we need a comprehensive management solution with the support of information technology to maintain the database. If such a database is established, an officer of a department of prevention of social evil stated, "wherever sex workers are arrested, police will know how many times they have been arrested, and how to treat them."

3.4.2. Awareness of the possibility of HIV/AIDS transmission among sex workers, and the necessity to apply prevention methods to prevent HIV/AIDS for sex workers

Prostitution—and especially disguised prostitution—is becoming more popular. It seems that prostitution activities have grown to exceed the managing ability of authority officers. People are worrying about the transmission of HIV/AIDS in their community because of the uncontrollable development of prostitution and disguised prostitution. Most government officers surveyed agreed that the possibility of HIV/AIDS transmission from sex workers through disguised prostitution is a high risk for the community. A medical officer shared that "the HIV/AIDS infection rate in Quang Ninh is the highest nationwide, and it is 10 times higher than the average rate of the whole country. The number of infected people in Quang Ninh is second highest after Ho Chi Minh City. It is obvious that besides drug addiction and injection, prostitution is another high possibility of HIV/AIDS transmission. Especially, the possibility of HIV/AIDS-infected waitresses working in restaurants, bars, karaoke establishments, hotels, motels, and entertainment centers is very high, ranking second after the possibility of drug addicted people." Results of many in-depth interviews also show that risks from sex workers all stem from unsafe sexual

behavior. So waitresses at high risk should also be educated in HIV/AIDS prevention programs. One medical officer at the ward level said that "if waitresses at high risk are not protected from HIV/AIDS, they will become a risk for the community. And the way of transmission from them is unsafe sex."

A ward-level authority officer also warned that "we must prevent HIV transmission from infected sex workers and warn infected people about their transmission possibility." He also cited a letter written by an HIV-infected sex worker before she committed suicide. She said that she had transmitted HIV to many foreign people. However, she did not mention how many Vietnamese people had received HIV from her.

Some interviewed local officers said that even if prostitution is prohibited by the government, it still exists. Therefore, to protect the community from the dangerous risk, we must apply prevention methods for both the community and sex workers.

3.4.3. Attitudes towards prevention method application for sex workers and waitresses at high risk

Authority officers are all aware of the danger of HIV/AIDS among sex workers. They all support HIV/AIDS prevention programs for sex workers and waitresses at high risk for prostitution. Among the prevention methods, the first method to be mentioned is management by authorities and government. Polices must manage and control all profiles of waitresses working in restaurants, bars, karaoke establishments, hotels, motels, and entertainment centers. For restaurant, hotel, and entertainment center owners, they must guarantee that there will not be any kind of prostitution in their business. Administrative management should be improved. To limit the number of sex workers, if waitresses at high risk do not have personal papers, they will not be allowed to register their temporary residence.

The second method is propaganda. Propaganda programs should be conducted to approach both sex workers and sex buyers. Peer group propaganda is also necessary, especially for those who have low education levels. Peer propaganda should be focused more on unskilled laborers in Bai Chay and Cam Pha towns because most of them are working away from their families, and they will easily spend money on prostitution.

The third method is condom use encouragement programs. A medical officer said that "not everyone is aware of the importance of condom use. Condoms are provided for free in all hotels and motels but not all sex buyers want to use condoms. Staff at hotels, motels, and entertainment centers may work as sex workers but they do not have sex at their working places—they do it somewhere else. Therefore, approaching them is quite difficult. Propaganda programs should be strengthened and improved in order to protect the community and the sex workers."

Another medical officer shared that condom providing is also a sensitive issue. People must understand that giving them condoms does not mean to encourage them to have sex, but to protect them from sexually transmitted diseases.

In addition, a socio-economic method to prevent HIV/AIDS infection is job creation. Women should be given priority in finding a suitable job. Vocational training for sex workers is necessary in order to give them a chance to integrate into the community and have a normal life.

Another proposed method is to provide free health care services for waitresses at high risk. These services would be put in place to discover whether or not they are HIV-infected, and if they are infected, to provide them appropriate support. Free health care should be combined with other activities like club activities, propaganda programs to improve awareness towards HIV/AIDS prevention, and providing condoms to prevent HIV/AIDS transmission into community.

3.4.4. Main proposals: Free health care and condoms provision

Free health examination and treatment for waitresses at high risk are very essential. The first reason is that they are always hesitant to go to medical centers for health examination and treatment. The second reason is that they cannot afford medical services. The third reason is that through health examination, authority officers can discover whether or not they are HIV/AIDS-infected, and if they are infected, they will receive appropriate solutions to prevent HIV/AIDS transmission.

Many ideas we heard in the surveys held in common that health examination and treatment are not only the demand of waitresses at high risk

but also the demand of the whole society. It should be noted that free health care provided by the masters or managers of restaurants, bars, or entertainment centers is nearly a farce. Therefore, financially supported health care programs are necessary. Even if the health care is provided with financial support, many sex workers dare not to go because they do not want others to know that they are sex workers, and that they have diseases.

When waitresses are healthy, they can still work. But when they diagnosed to be diseased, they will be dismissed. The situation of dismissed sex workers is very miserable; the time after being dismissed is the time they most need help and support. Propaganda programs should focus on these people to support them in time. Sex workers should be informed of an address for urgent care that they can visit whenever they have difficulty. If one person is helped and supported in a time of trouble, that person's friends and peers will come to that address too when they have troubles. This is a peer education method.

In contrast to the wide agreement we found regarding health care, opinions about how to provide condoms are very different. There are three main groups with different suggestions. The first group said that condoms should be provided through masters—the managers of restaurants, hotels, and entertainment centers, and that the condoms should be provided with appropriate propaganda. The second group thought that condoms should be provided directly to sex workers and waitresses. Providing condoms at a consulting office is another opinion, put forward with the reason that visits to such an office are the most suitable time for propaganda.

Because prostitution is illegal, approaching sex workers is very difficult; to provide them condoms is also not easy. Second, it is illegal to support prostitution or any prostitution-related activities. Therefore, from the outside, providing sex workers with condoms seems to be illegal. Third, providing condoms will be rejected by restaurants, bars, and entertainment centers in most cases.

A police officer said that "another difficulty when providing condoms is a psychological dilemma. If there are condoms in restaurants, bars, and entertainment centers, people may think that they are encouraging prostitution. But if there is no condom, it will be difficult to prevent HIV/AIDS."

Although the difficulties are identified, all interviewees agreed that it

is essential to prevent HIV/AIDS transmission for sex workers and waitresses at high risk.

3.5. Managers and owners of restaurants, bars, hotels, and entertainment centers

3.5.1. Awareness and attitude towards HIV/AIDS prevention for waitresses

In every in-depth interview, managers and owners of restaurants, bars, hotels, and entertainment centers all confirmed that HIV/AIDS was very dangerous and incurable. A director of a hotel in Ha Long said that "HIV/AIDS is still a pressing problem in our society. It is easily transmitted. The latent time of AIDS is long. If we do not know how to protect ourselves from HIV/AIDS, we will face the risk of being infected by HIV/AIDS."

These interviewees are aware of the two ways of HIV transmission: through injected drug use and through unsafe sexual behavior. Many of them said that it was necessary to protect and prevent their female staff members from HIV/AIDS because their prevention and protection also means the protection and prevention for the whole society. However, many interviewees thought that it was not necessary to prevent HIV for their waitresses because they believed that these workers have no relations with HIV/AIDS. Currently, there are no prevention and protection methods available in their locations.

Some sympathized with HIV-infected waitresses if such workers were working in their locations. They understood that if they neglected and drove away such employees, the infected waitresses would become more dangerous for society. However, many did not express such sympathy.

It can be concluded that some of the interviewees had good attitudes toward HIV/AIDS prevention and protection, while others did not.

3.5.2. Attitudes of managers towards applying prevention methods for waitresses

Some interviewees think that providing regular and periodical health examination for staff is very good. But the frequency must depend on their financial ability and other conditions. Some interviewees said that, if these examinations are provided by a government agency, it would be better.

About condom provision, interviewees have many different ideas.

Some think that condoms should not be provided in hotels or entertainment centers because doing so may unintentionally encourage prostitution. Another reason is that if condoms are provided freely in hotels and entertainment centers, sex workers may think that the hotels and entertainment centers agree and support them to have sex there.

For those hotels and entertainment centers who would agree to provide condoms at their locations, they suggested that condoms should be given in an appropriate way, such as keeping them in the medicine box. Customers could then use them at their own discretion.

3.6. Proposed intervention model for sex workers and waitresses at high risk

3.6.1. Suggestions from local authorities

In in-depth interviews and the discussion among members of the research group, local authorities suggested that there should be educational and supporting activities in the forms of clubs, peer groups, "friend-help-friend" groups, health care, and examination programs.

One interviewee emphasized that education and supporting activities for waitresses in hotels and entertainment centers are essential, but there will be one problem that no one would admit to being a sex worker. Therefore, the interviewee said, encouraging people to attend these activities is very difficult. On the other hand, sharing work time for attending public activities like that may not be supported by their bosses.

Another suggestion was that we should focus on creating clubs, such as a young mother club, female youth club, or health care club, to attract high-risk people to attend. Condoms would be provided freely in these clubs. If activities were conducted in this way, infected people would not feel that they are treated differently from normal people and they would be more encouraged to attend. Club officers should be sensitive and enthusiastic because sex workers and waitresses at high risk often have a complex about their jobs and situations.

It was suggested that the activities of clubs be diversified, and that, if possible, vocational training be combined with other activities because sex workers need a stable profession in order to return to normal life. Some appro-

priate activities might include flower arranging and cooking.

We heard many different opinions about the number of club members. Some think that because high-risk waitresses are those who are very difficult to approach to attract them to attend the club activities, clubs should be organized right at their locations. In order to be effective, some said that clubs should be limited to 6–10 core members.

Others think that the size of the clubs should be neither too small nor too big. Clubs should not be too big because their activities therefore would be very well-known, which is not attractive for hesitant people like sex workers. On the other hand, if there are only a few members, clubs' activities would not be attractive enough. Some think that an appropriate number of club members should be about 20. Others think that the number of club members must depend on the situation in each province, and that there should be about 30 to 50 members in a club.

Clubs' activities should be under the control of local authority. The participation and support from women's unions, the Department of Tourism, the police, HIV/AIDS Prevention Committees, and ward committees are necessary.

3.6.2. Opinions of the mangers of restaurants, hotels, and entertainment centers

According to the results of the in-depth surveys with managers of restaurants, hotels, and entertainment centers, many of them supported the idea of organizing clubs for sex workers and waitresses at high-risk. In an opinion echoed by others, one interviewee said, "To prevent HIV/AIDS in hotels and in the community, we are willing to provide conditions for those who want to attend clubs. But we will not be able to force them to attend these activities." Some others went further, with one saying "We will support and allow our waitresses to attend activities for HIV/AIDS prevention. If these activities are effective, we may financially support them to make it become more effective."

Some mangers also understand that the importance of clubs' activities is not only in HIV/AIDS prevention but also in awareness improvement of their staff.

One hotel manager in Quang Ninh also highly evaluated the role of clubs in educating and managing waitresses. This manager said that, "we also

remind them and try to persuade them to attend such activities, but we did not know how to say persuasively as we are not professionals and so they did not understand. Therefore, if they attend clubs, they would understand and could receive the necessary knowledge." However, there are some opposite opinions. For example, "We are too busy with our business. We have no time for other things. And if our staff members have spare time, they need to sleep instead of going to clubs."

For these people, propaganda and persuading activities are necessary. Some further suggestions for clubs' activities include:

- Club organization: A manager of a hotel in Ha Long suggested, "Because hotel staff members work by shifts, clubs should be organized at the proper time and location. The activities should be changed frequently to be attractive."
- Club member: It is suggested that the core members should be female. Each hotel or entertainment center should choose for themselves one or two core members to attend in turn because they cannot go to the club at the same time. They still have to work. Some people think that the members should be not only staff working in hotels or entertainment centers, but also from other organizations. More members will mean more active and interesting activities.
- Activity content: It should focus on HIV/AIDS prevention propaganda because people go to clubs for consultation about HIV/AIDS prevention. A hotel manager said, "For the purposes of HIV/AIDS prevention and prostitution prevention, I think that clubs are necessary but the locations must be appropriate and integrated with other organizations' activities."

Therefore, it is obvious that though there are some different opinions, most hotel and entertainment centers agreed with the idea of establishing clubs. However, they do not have a clear picture of appropriate club activities.

4. Concluding Remarks and Recommendations

Following are our findings and recommendations for HIV/AIDS prevention for sex workers and waitresses at high risk.

1. Sex workers working in hotels, entertainment centers, and massage cen-

ters are many. However, their awareness about HIV/AIDS prevention is rather low. Their managers do not pay enough attention to protect their staff from the epidemic.

2. Almost all waitresses interviewed in the survey were aware of the danger of HIV/AIDS transmission and the function of condoms in HIV/AIDS prevention. However, many people are not fully aware of the transmission possibilities of HIV/AIDS and prevention methods. The majority of new waitresses have a good awareness about sexual transmission possibility of HIV/AIDS. Some interviewees have incorrect understanding and then have discriminative attitudes towards infected people.
3. There is a difference between awareness, attitudes and priority versus self-decision making ability. There is also a gap between the ability to persuade sex partners to use condoms and condom use to prevent HIV/AIDS. According to the survey data, the awareness of respondents about HIV/AIDS is rather high. But their attitudes towards prevention method application are significantly lower: safe sexual behaviors are not paid much attention. Therefore, in the propaganda programs of HIV/AIDS prevention, improving awareness is not enough. The more important thing is to change their attitudes and behavior.
4. In addition to good propaganda programs about the danger of HIV/AIDS, its transmission possibility, and HIV/AIDS prevention methods, we should also apply psychological methods. Activities which require individual participation like clubs, peer education groups, and personal consultation to change attitudes, to provide living skills, and to create necessary habits and behavior are important.
5. The most important factor in applying condom use encouragement among sex workers is psychological impact. That means to change their awareness, attitudes, behavior, and ability to persuade their sex partners to use condoms. Creating good surrounding conditions is essential. Surrounding conditions are the availability of condoms and the agreement of their boss for them to use condoms when they have sex.
6. In addition to families, friends are the ones whom sex workers seek for help when they have trouble. Therefore, peer clubs for waitresses would be very effective.

7. Knowledge provision, life skill training, health support, and entertainment activities like singing, sports, flower arranging, and cooking should be integrated in clubs' activities. Classes should be designed in order to be suitable for those who have different education levels.
8. The content of education and activities of clubs for waitresses and peer groups should prioritize knowledge about HIV/AIDS prevention, about HIV transmission risks with all types of sex partners, and about the ability to persuade their partners to use condoms. It is necessary to maintain the availability of condoms. Periodical health examination is necessary to detect infections early.
9. Improvements should be made in the health care service network, the condom providing network, and the consulting network for women in difficulty, especially for those who are sex workers and waitresses working at high-risk locations. Government and local authority support needs to be mobilized.
10. Local government officials must have the right attitude towards HIV/AIDS prevention and protection. Apart from that, they should apply a more realistic plan to apply AIDS prevention methods among waitresses and sex workers.
11. The role of hotel and entertainment managers is important. They will have a direct impact on the decision and possibility to attend clubs for sex workers and waitresses working at their locations.
12. In order to implement effectively intervention models for sex workers and waitresses, government officials and social unions must cooperate to mobilize these women to participate in club activities. Medical centers should provide condoms to them and support them in health care services. Police should pay more attention to security at high-risk locations.

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Appendix 1: Survey Questionnaires

Dear friend!

To give a hand to women's health care, we would like to ask for your cooperation in answering the following questions. Please tick the answer(s) that you think most suitable, or please give your opinions for the questions with special requirements.

Your cooperation is highly appreciated!

1. Do your current job have a bad effect on your health?

1. Yes 2. No

2. Do you think that HIV/AIDS is a dangerous disease and that infected people may die of it?

1. Yes 2. No

3. What do you think about the possibility of HIV/AIDS sexual transmission?

1. Easy
2. Difficult
3. Impossible

4. Are you afraid of being infected?

1. Yes 2. No

5. Do you think that HIV/AIDS is preventable?

1. Yes 2. No

If yes, how?

1. Monogamous relationship with partner
2. Not kissing, not holding or shaking hands with HIV/AIDS-infected people
3. Using condoms when having sex
4. Not sharing injection tools
5. HIV-infected mother should not have baby
6. Others (in detail please): _____

6. Using condoms when having sex is an effective method to prevent HIV/AIDS transmission. Did you know that?

1. Yes 2. No

7. Why do you think people do not use condoms when they have sex?

1. Not aware of the transmission of this disease
2. They are not allowed to use
3. They do not know how to persuade their sex partners
4. They do not have condoms
5. They do not want to use condoms
6. Other reasons (please list): _____

8. Do you want to use condoms when having sex?

1. Yes 2. No

9. How frequently do you use condoms when having sex?

1. Very frequently
2. Sometimes
3. Never

10. Are you allowed to use condoms when having sex?

1. Yes 2. No

11. Do you often have difficulty in persuading your sex partners to use condoms when having sex?

1. Yes 2. No

12. Are you encouraged to use condoms when having sex?

1. Yes 2. No

13. According to your observation, how often does a sex worker have sex per day?

1. 0–2 times
2. 3–10 times
3. Over 10 times

14. Which do you think is more difficult when having sex? (please choose one option only)

1. To persuade sex partners to use condoms
2. To persuade managers to let you use condoms

15. Do you think that it is still possible to prevent HIV/AIDS when having sex with many different people?

1. Yes 2. No

If yes, please list how to prevent: _____

16. Would you like to attend club activities with your peers?

1. Yes 2. No

If yes, which ones do you prefer?

1. Singing, dancing
2. Sport activities
3. Health care consultation
4. Free health examination and treatment
5. AIDS prevention and protection propaganda
6. Condom introduction and provision
7. Life skill training
8. Others (please list): _____

17. What do you often do when you have spare time ?

1. Relax
2. Read
3. Watch TV
4. Shop
5. Meet friends
6. Go to cinema
7. Others

18. When you have problem, who do you go to for help?

1. Friends from the same province
2. Colleagues
3. Boss
4. Family
5. No one (solve yourself)
6. Others

19. What is your highest priority now?

1. Emotional life
2. Job, income
3. Health care
4. Studying
5. Entertainment
6. Others

20. Please let us know some more about you:

Age: Under 20 From 21 to 25 From 26 to 30 Over 30

Education level:	Primary school	Secondary school
High school	University, college	
Your hometown:	City, town	Rural area
Marital status:	Married	Single

Thank you very much for your cooperation and we wish you good health!

Appendix 2: In-depth Interview Questions for Local Government Officials

1. Is there any prostitution in your location? If yes, how serious is it? And where is the most popular location?
2. How do you evaluate the possibility of AIDS infection possibility of waitresses in hotels and entertainment centers?
3. Do you think that if sex workers are not protected against HIV/AIDS transmission, they would be a risk for the whole community? Why or why not?
4. Do you agree with the opinion that even if the government forbids prostitution, we should not neglect the risk of HIV/AIDS-infected sex workers and it is necessary to apply prevention methods? Please list some methods that you know.
5. In your opinion, what are the obstacles in applying HIV/AIDS prevention methods?
6. In your opinion, does condom provision for sex workers and waitresses eliminate the transmission possibility of HIV/AIDS? If you think so, how should condoms be provided?
7. To prevent prostitution and AIDS, do you think that it is necessary to have social activities like clubs, education activities, and supporting activities for sex workers and waitresses at high risk? If you agree, how should we organize these activities?
8. Do you have any opinion about HIV/AIDS prevention for sex workers and waitresses at high risk?
9. Do you have any recommendation for the government to improve the effect of HIV/AIDS prevention activities for the community in general and for sex workers in particular?

Appendix 3: In-depth Interview Questions for Managers in Hotels and Entertainment Centers

1. What do you think about HIV/AIDS prevention and protection of your staff, especially your female staff members?
2. How do you evaluate the need for periodical health examination and for health examination of your staff? Is it necessary to have supporting health care services to help waitresses?
3. If there were any HIV/AIDS-infected people among your young staff members, what would you do?
4. In your opinion, is it necessary for managers of hotels and entertainment centers to provide conditions or to participate in condom provision activities to stop the epidemic? If you think it is necessary, what are the advantages and disadvantages in your location?
5. As a manager, which prevention methods do you apply to prevent HIV/AIDS transmission in your location?
6. To prevent HIV/AIDS and prostitution, do you think that it is necessary to have social activities to gather waitresses to provide them help and support? Which models do you think are suitable?
7. According to your observation, do waitresses have time, and do they really want to attend these activities? Which models do you think are suitable?
8. If they have that need, how should the activities be organized to be effective (member number, content of the activities, location)?
9. Do you have any interesting ideas about HIV/AIDS prevention for waitresses working in hotels, restaurants, and entertainment centers?
10. Do you have any recommendation for the government to improve the effect of HIV/AIDS prevention activities for the community in general and for sex workers in particular?

Chapter 4
Youth Work and Employment in Vietnam

Dang Nguyen Anh

Abstract

This paper utilizes the data from the Survey Assessment of Vietnamese Youth (SAVY) to outline the current situation of work and employment of Vietnamese youths, arguing that their school-to-work transition is quite limited. With a special focus on identifying risk and protective factors during the school-to-work transition of youth, the paper examines the health risk behaviors of youth groups with different work experience and the ability of young people to be employed given their demand for jobs, skills, training, and capability to work. The findings reveal that the family in which a young person lives serves as an important factor in determining the youth employment experience. The paper concludes with policy implications aimed at improving the current situation of youth work and employment in Vietnam as the country enters into a new phase of development.

1. Introduction

Although a considerable amount of information and data relating to youth and employment does exist in the form of various surveys as well as other scattered sources within Vietnam, there has been no comprehensive analysis of national-level data. Despite the seriousness of the youth unemployment and underemployment problem, there is limited information about work experience and health outcomes associated with it for young people in Vietnam. This paper is aimed at filling this gap. It is prepared with the belief that if we know what improves outcomes for our youth, we can then put into place policies, programs and services that take advantage of existing opportunities while avoiding some of the risks along the way. The following objectives are pursued in brief.

- Provide scientific evidence of policy discourse and issues regarding youth employment in Vietnam,

- Assess differentials in the level and patterns of youth work and employment,
- Identify risk and protective factors during the school-to-work transition of young people,
- Examine the health risk behaviors of youth groups with different work experience and employability, and
- Draw conclusions and policy implications of the research findings for the formulation of the National Comprehensive Strategy on Youth and Adolescent Health in Vietnam.

2. Overview of Youth Work and Employment in Vietnam

In Vietnam, youth—persons aged 15–24—account for one-fourth of the total population. This social demographic group made up 22 percent of the labor force in 2003, with relatively equal proportions of women and men (Ministry of Labor, War Invalids and Social Affairs [MOLISA], 2004). They have great potential to build on the socio-economic successes of the past 20 years of reforms. Youth have formed the backbone of Vietnam's economic success throughout the decade. About two-thirds (67 percent) of youth aged 15–24 work on small family farms and in the informal sector—work characterized by low quality, underemployment, insecurity and safety hazards (General Statistics Office of Vietnam [GSO], 2002).

Since the *Doi moi* (renovation), which was officially introduced in 1986, Vietnam has shifted from a centrally–planned system to a socialist-oriented market economy. Measures were introduced to open up the economy to international markets. The policies called for a multi-sector economy, trade liberalization, foreign direct investment and other reforms. The rapid diversification of economic activities has led to increased incomes and improved living conditions. Real GDP growth has been achieved at 7–8 percent per annum since the 1990s. The proportion of people with per capita expenditure under the poverty line dropped dramatically by 30 percentage points in just over a decade (World Bank, 2004). The market transition in Vietnam has brought increased job opportunities for the working population, of which young people form the majority.

The transition to a market economy in Vietnam involved a drastic

turn in the labor and job markets. It is important to note that these positive results achieved from Doi moi would have had both direct and indirect effects on employment, equity and social welfare. In spite of the new opportunities and diversification that open up economic opportunities, a shift toward a market economy also involves changes resulting in job losses and layoffs for many workers. The transition places new constraints on young people who find themselves caught between old and new social norms and values. As a result, their expectations and perceptions of work diverge. A good job is not just a source of income; it also provides economic standing, self-esteem, status and social capital. Unless girls find good jobs, their bargaining power in marriage and control over their fertility will remain limited. In addition to skills and educational achievement, the work participation of youth has significant implications for their development.

Employment has become a major concern for young people. Youth unemployment and underemployment have increased rather than decreased in Vietnam (United Nations [UN], 2003). According to official data (MOLISA, 2004), the country's youth unemployment rate was over 14 percent in 2003 with sharp gender and regional differentials. The age group 15–24 years old forms the bulk of the unemployed young people (26 percent). Young people aged 15–24 find it more difficult to get jobs than do adults (25 years of age and above). For the country as a whole, youth in the labor force are twice as likely to be unemployed than the adult population. Youth unemployment accounts for 45 percent of all unemployment in Vietnam. The high levels of unemployment and underemployment in rural areas have resulted in out-migration from agricultural sectors to urban centers. Migrant youth may have special problems in obtaining employment as they are more likely to leave school at early ages and enter low-paid and unskilled jobs.

However, the unemployment statistics do not reveal the severity of the situation. The large size of the youth labor force and the increase in the labor age population continue to bring heavy employment pressures. The rate of growth of employment is 2.5 percent per annum while the rate of growth of the labor force is 3.3 percent per annum. The difference can be defined as new additions to the unemployed population. The number of youth entering the labor market is still estimated at 1.4 million each year. This does not include

Table 1: Unemployment rate by sex and age group in Vietnam, 1999

Age group	*Total*	*Male*	*Female*
15–19	10.9	11.9	10.1
20–24	6.6	7.2	5.9
25–29	3.5	3.7	3.2
30–34	2.3	2.6	2.0
35–39	1.9	2.4	1.3
40–44	1.8	2.4	1.1
45–49	1.7	2.4	1.0
50–54	2.0	2.8	1.1
55–59	1.8	2.4	1.2
60+	2.3	2.4	2.1
ALL	4.0	4.4	3.5

Source: GSO (2002)

Table 2: Underemployment rate by rural/urban: Vietnam, 2003

Age group	*Total*	*Rural*	*Urban*
15–19	9.9	10.2	7.5
20–24	8.6	9.5	5.2
25–29	6.9	7.9	4.0
30–34	6.8	7.6	4.4
35–39	6.5	7.3	4.1
40–44	6.0	6.8	3.9
45–49	5.5	6.3	3.7
50–54	5.4	6.2	3.3
55–59	4.4	4.7	3.6
60+	2.3	2.2	2.8
ALL	7.0	7.5	4.4

Source: MOLISA (2004)

those still unemployed from the preceding year (International Labour Office [ILO], 2002). Young entrants into the labor market face severe competition in finding suitable job opportunities. At the heart of the problem is the quantity and quality of work available to young people in Vietnam today.

Many out-of-school youth are working to earn a living for their families in low paid work and petty trade. Apart from low productivity, a lack of job opportunities can have significant social consequences. Experience from other countries shows that unemployment can lead to a life of violence, drug abuse, vandalism, crime and other social problems. Early school leavers without regular employment may turn to risky avenues for income and livelihoods such as prostitution and crime. Some become victims of HIV/AIDS and human trafficking.

It is important to look at unemployment rates for individuals at all ages in addressing the labor force participation of youth. Using the most recent population census data in Vietnam, Table 1 gives unemployment rates by sex and age in 1999. The highest rates of unemployment are found among males and females 15–19 years of age, followed by the age group of 20–24. Males are relatively more likely to be unemployed than females in all age groups. Unemployment rates for people aged 15–19 are somewhat difficult to interpret because lower unemployment rates are associated with higher school attendance. However, the high rates shown in the table clearly indicate that young people are seeking work opportunities and are often failing to find them.

The situation of underemployment is not encouraging. Underemployed workers are those who are employed but are willing and able to work more. As shown in Table 2, the total number of underemployed workers accounted for about 7 percent of the labor force nationwide. Rural workers are more likely to be underemployed than urban workers (7.4 percent and 4.4 percent, respectively). Notably, the underemployment rates are highest for the 15–19 and 20–24 age groups, regardless of rural-urban differenrials. As younger workers are more likely to be underemployed than older workers, the policy challenge for youth employment is to provide more job opportunities for underemployed youth so as to help them work full time.

Throughout the process of *Doi moi*, significant policy efforts have been made by the Communist Party and the Government of Vietnam to address problems related to employment in general, and youth employment in particular. Issues of youth work and employment are addressed within general labor and employment policies which aim to reduce the proportion of the unemployed in the economy. To this end, initiatives currently taken by the government to create employment for youth include direct investment to generate new jobs through various national socio-economic development programs, provision of assitance in the form of loan credit, promotion of the human resources for young people, provision of boarding schools for ethnic minority youth, enhanced universal education, and vocational training programs.

The government of Vietnam understands that investing in young people is investing in the future. As a part of the Socio-economic Development Strategy for Vietnam (2001–2010), the *Vietnam Youth Development Strategy by*

2010 has outlined the government's approach to tackling youth issues (Vietnam Youth's Union, 2003). The main objective of the strategy is to strengthen education and support for young people in Vietnam. The first phase identifies five key programs: (i) employment for youth; (ii) enhancing the education level and professional skills for youth; (iii) developing young scientific capability in order to upgrade the science and technology qualifications of youth; (iv) fighting crime and social evils among young people; and (v) building up the political stance, revolutionary ethics, and socialist patriotism for young people. In addition to the Vietnam Youth Development Strategy, a number of other laws and policies are in place, focusing on youth development, employability and encouragement of support for young talents. They can be identified as the Comprehensive Poverty Reduction and Growth Strategy (CPRGS), the implementation of the New Enterprise Law, vocational training programs, and others which aim directly or indirectly at entrepreneurship, vocational training, job and income generation, and poverty reduction for young people.

Despite these sound policies and programs, Vietnam has been characterized by a high unemployment rate in urban areas, serious underemployment in the countryside, a very high proportion of agricultural labor, a remarkably low ratio of skilled labor, and a large amount of manual labor (ILO, 2002). Too frequently, a lack of skills and opportunities force Vietnamese youth to accept inadequate jobs. About 94 percent of the total youth population had no vocational and technical skills in 1999. Initial results from the Survey Assessment of Vietnamese Youth (SAVY) undertaken in late 2003 show that only 5 percent of young people from ethnic minorities have ever had any vocational training, compared to 21 percent of their Kinh majority counterparts (MOH *et al*., 2005). Because of their geographical isolation, lower levels of education and training, and limited off-farm opportunities, rural and ethnic minority youth have little exposure to vocational training, employment opportunities, and job generation initiatives.

Vietnam's growth rates of the past twenty years of Doi moi have not yielded the expected quantity and quality of new jobs and stable employment. There are many more new job seekers than the number of jobs created each year. To a certain extent, youth unemployment is a reflection of the overall unemployment situation, which in turn is a reflection of the weakness of the

economy wherein the private sector is slowly developed. Although privatization invites investment and growth, increased competition continues to force both the state-owned and private enterprises to streamline their staff. The non-state sector still plays an insignificant role in the rural economy, which is largely dominated by agricultural production.

While competition among young people for decent jobs has been increasing, there is a significant mismatch between the skills and knowledge of young people and the demands of employers. Employers are usually hesitant to hire youth with no or little work experience. It is easier and cheaper to hire skilled adults than to provide inexperienced and untested young people with new training. Where the work is skilled, recruitment is even more competitive. Although academic degree holders are often not in great demand, appropriate skills training is highly regarded by employers. The problem is exacerbated by several flaws of the current education and training system as well as the lack of coordination between the educational and vocational training sector and employment sector (MOLISA, 2004). Moreover, inadequate services on job counseling further limit the ability of young people to make informed and appropriate career choices.

3. Descriptions of the Data Source

The present in-depth analysis examines relevant factors associated with employment of the Vietnamese youth. The importance of employment for young people for subsequent development as well as the central role of the family in raising children through the years of life has provided the rationale for undertaking such an analysis. We frame the analysis in terms of identifying and assessing factors associated with work status and employment experience of young people. It is vital to differentiate the experience of young people, their work, and their relative positions in the labor market.

Much of the analysis below draws heavily from SAVY, which is one of the first nationally representative surveys on a wide range of issues for Vietnamese youth (MOH *et al*., 2005). While it is impossible to establish time-order causality between outcome and independent variables due to the cross-sectional nature of the SAVY data, results from bivariate analysis are a starting point for

shedding light on how youth employment experience differs depending on individual characteristics and familial conditions. Then, statistically associated factors are assessed using multivariate analysis techniques. The analysis will allow us to control the confounding effects and identify factors that may prevent young people from being employed, getting jobs, or receiving vocational training.

Despite its national coverage and representation, SAVY provides no information about working conditions, unpaid work, and time-use data, which would allow us to explore youth employment in a more comprehensive fashion. Data on communities were not collected by SAVY, except for the information on type of current residence. It is important, therefore, that youth employment patterns from SAVY be linked or compared with those obtained from earlier surveys as well as from future surveys in order to assess changes in youth employment in relation to the intensive market transitions

Using the risk and protection model for Vietnamese adolescents (Blum, 2004), two different sets of underlying factors can be defined as pertaining to youth work and employment. The first set is various individual characteristics including gender, age, ethnicity, marital status, education, health status, and indicators of their transition to adulthood, such as experience of child labor and economic migration. In addition, the initiation of risk-taking behavior, such as substance use, may lead youth to drop out of school and as a result may force youth into the labor market. The second set of factors of concern is the parental status and familial conditions that can influence youth employment and work-related outcomes. At the family level, we are particularly interested in examining factors related to parents and households that affect the school-work transition and employability of youth. For example, many in Vietnam would argue that high status of parents and family can lead to a better position for children in the labor market. The research findings reported below will therefore provide important background and identify factors for considering the basic policy directions with regard to the linkages among youth employment, schooling, health, and well-being.

4. Analysis Results and Discussion

4.1. Characteristics of youth work and employment

4.1.1. Paid work experience

The paid work participation rate of Vietnamese youth is presented in Table 3.

Table 3: Youth's paid work by individual and familial characteristics, Vietnam, 2003

Characteristics	*Sub-group*	*Experience of paid work*		
		Mean age at time of first job (years)	*Percentage ever having worked (%)*	*Currently working (%)*
Gender	Female	18	52.1	32.6
	Male	17	57.7	37.7
Age group	14–17	14	32.3	15.2
	18–21	18	64.6	41.6
	22–25	19	85.7	65.7
Marital status	Married	18	80.9	56.8
	Single	17	50.0	31.1
Educational attainment	Primary	16	75.4	54.8
	Lower Sec.	17	50.0	30.5
	Higher Sec.	19	44.0	24.0
	College/Univ	21	71.5	51.5
Ever worked as a child laborer	Yes	13	100.0	55.4
	No	18	0.0	66.5
Ever migrated to earn a living	Yes	17	98.2	69.3
	No	18	47.9	29.7
Substance use*	Yes	17	68.8	46.7
	No	17	45.1	27.0
Premarital sex	Yes	18	83.9	62.0
	No	17	52.5	32.9
Poor physical or mental health	Yes	17	58.9	38.1
	No	17	48.2	30.3
Ethnicity	Kinh	18	55.0	35.8
	Other	16	54.3	31.9
Family economic status	Low	17	61.8	39.1
	Middle	17	55.0	34.8
	High	19	44.1	29.9
Living parents	One dead	17	66.6	47.0
	Both alive	17	53.6	33.9
Number of siblings	1	18	69.1	45.7
	2–3	17	49.4	31.9
	4+	17	54.3	33.3
Paternal occupation	Professional	20	49.2	31.6
	Unskilled	17	55.2	37.9
	Agricuture	17	55.7	34.4
	Unemployed	18	68.4	50.0
Type of place of current residence	City	19	53.8	39.2
	Town	18	49.5	32.2
	Rural	17	55.8	34.9
ALL		17.4	54.9	35.2
N [number of cases]		4,161	7,584	4,087

Note: * Includes use of heroin, illicit drugs, alcohol, and tobacco
Source: SAVY 2003

The figures provide information on the mean age of respondents when they entered their first job, in addition to showing the rates of labor force participation across subgroups at the time of the survey and over the lives of respondents. From the table, we can see that the age at which young people in Vietnam start working for pay varies with individual characteristics. Overall, entry into the labor market comes at a relatively young age (17.4 years). Males and those currently married begin paid employment at an earlier age than their female and never-married counterparts. The results suggest that single youth stay at school for a longer duration of time before leaving for work.

The mean age of beginning paid work increases significantly with the levels of education, suggesting that the lower the education, the earlier young people start to work. It is likely that school dropouts have to support themselves and their families in a paid job. Children who worked when they were young had to leave school and thus have a lower level of educational attainment. The demand to work for family survival and the cost of education are key reasons for dropping out of school and entering the labor market.

The prevalence of substance use is measured by the proportion of youth who have ever used the substances. Additional information collected by SAVY revealed that 41 percent of the survey respondents reported trying alcohol or smoking, although only 0.5 percent reported use of heroin and illicit drugs. There is, however, no correlation between the age at which young people began working and their substance use and health condition. Young people with poor health, physically or mentally, tended to join the labor market at the same age as others. Compared to their peers, young people having premarital sex started working relatively late.

As the results show, youth who are members of ethnic minorities tend to start working earlier than *Kinh* people (16 and 18 years, respectively). As expected, young people from families with low economic status began working at a much earlier age. However, the mean ages for beginning work are not significantly different between those living in families with or without both parents. Young people who are only children tend to enter the labor market at a later age (18 years).

Reflecting social status, the occupations of the parents can influence the age at which their children begin to work. Children of a professional start

working much later compared with children of unskilled or agricultural workers (20 and 17 years, respectively). Children of unemployed fathers also started to work later, possibly because of fewer job opportunities. The age that young people begin to work increases from rural areas to towns and to cities. Young people living in rural areas started working at younger ages than urban youth. The results suggest that in the countryside young people are more likely to face economic hardships and drop out of school. These results also reflect the movement of young educated people from the countryside to towns and cities for their higher education.

Turning to the youth experience of paid work, the results show that 35 percent of the respondents worked at the time SAVY was taken in 2003. Also, more than half (55 percent) of the total respondents had worked for pay at some time during their lives. The patterns of respondents who had ever worked and were currently working are fairly similar across individual and familial characteristics. Generally, the proportion of youth who had worked before was about 20 percentage points higher than the the proportion who were working at the time of the survey. This suggests that some young people had started working for pay at early ages but left the labor market for a number of reasons. The lower level of currently working youth may also indicate the low capacity of job creation and poor absorption of young workers in the formal labor market. If seasonal or informal work had been asked and included in the data, the level of working youth might have been higher. In fact, some young people hold part-time work for pay while they are still in school, but they may not report this as work. To some extent, the measurement of work may also be influenced by what youth consider to be work. Many young people who work casually in the informal economy do not actually think of themselves as "working."

Youth work differs significantly by gender, age and marital status. The level of labor force participation is higher for the married group, and increases dramatically with age. Conversely, the labor force participation of youth declines with increases in general education. In other words, leaving school at an early age pushes young people into the labor market. Although the level of youth employment is high for the most educated group (college/university level), it is notable that only half of this group was working at the time of SAVY. The rest of them might still have been searching for suitable jobs. The

results indicate some difficulties in skill mismatching for university graduates in the present job market.

Not surprisingly, a very high proportion of young people reporting economic migration or child labor experience have ever worked for pay (Table 3). Moreover, two notable findings emerge with some particular subgroups. First, youth's experiences with risk-taking behaviors, such as substance use or premarital sex, are associated with higher rates of work. One reason might be that young people who leave school and begin to work may be more independent from their families. This could allow them more freedom to experiment with substances and sex. Second, a relatively higher proportion of young people with poor health work for pay. Why these associations exist is not clear; however, it is evident that education is protective against a range of health risk behaviors. Conversely, those who are at risk for early school leaving and early work may also be at risk for a range of other health compromising experiences. Poor health, substance use, and initiation of premarital sex can operate as harmful factors for youth's exposure to risk at work and during their transition to adulthood. More research needs to be directed at untangling the complex relationship between these factors and job outcomes.

The results show that young people living in families where both parents are living are less likely to be in paid employment. The higher the economic status of the family, the less likely are youth to work and vice versa. Likewise, children of unemployed fathers with many children are more likely to be employed than those whose fathers have a job and have fewer children. These results are reasonable given that the economic hardships of families push young people into the labor market.

Work experience of young people is also affected by whether they live in urban centers or rural areas. Compared to rural youth, those living in cities or towns are more likely to participate in paid work at higher participation rates. Most of this difference is attributed to the urban opportunities to work for pay and for youths to earn cash income for themselves and for their families.

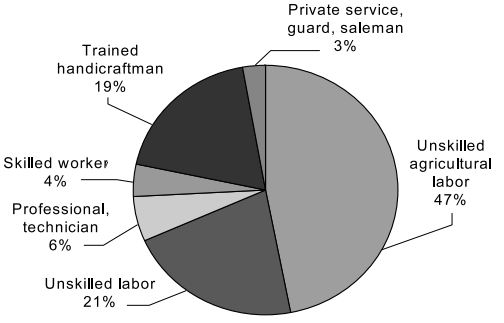
4.1.2. Occupation and industry

We now focus on occupations and industry that young people reported in the survey. The information reveals sectors where young people are work-

ing for pay. The analysis refers to working youth. About 46 percent of the respondents, who reported not working for pay at the time of SAVY, are excluded in this analysis. In terms of occupation, two-thirds (68 percent) of working youth fall within the occupational categories of "simple" jobs (i.e., unskilled labor in agriculture or non-agriculture activities). Trained handicraft workers make up the second-largest classification of young workers.

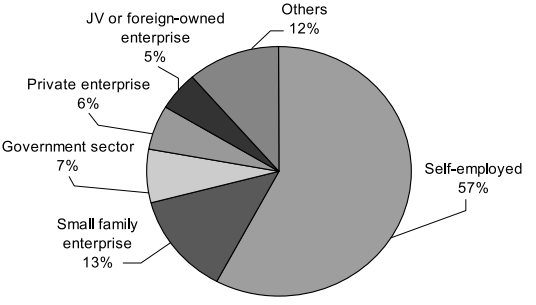
Vietnam is primarily a rural economy with 75 percent of people living in rural areas and agriculture remaining a dominant economic sector. This is reflected in the pattern of youth employment as reported in SAVY. Figure 1

Figure 1: Current paid work of youth by industry and sector in Vietnam, 2003



Source: SAVY 2003

Figure 2: Current paid work of youth by occupation in Vietnam, 2003



Source: SAVY 2003

demonstrates that a majority of youth in Vietnam is engaged in farming and that most young workers lack skills. Their work is the least likely to be recognized as valuable as skilled workers and diminishing their income. This suggests that more resources are needed to engage young people in skill-training, and to create jobs.

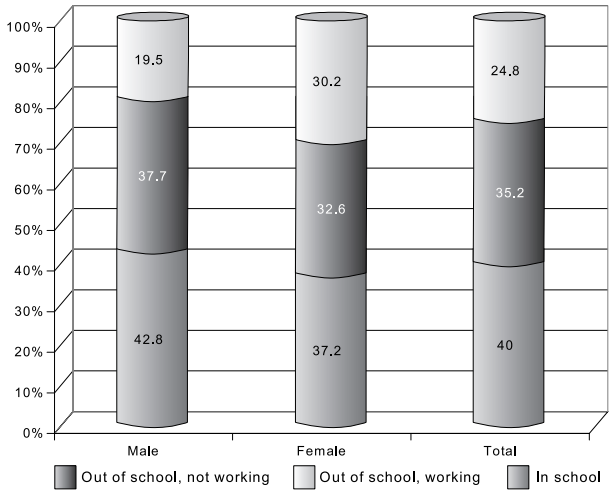
As shown in Figure 2, the majority (57 percent) of working youth engaged in the labor force are self-employed, mainly in farming, while 13 percent of working youth are involved in small family enterprises. Additional information from the SAVY data reveals that two-thirds of the self-employed youth worked as unskilled agricultural workers at the time of the survey. They seem to be on the low end of the pay scale and are faced with the most disadvantage and hardship. The remainders of working youth are classified in other institutional sectors.

The figures show that private sector and joint-venture sectors each accounts for less than 6 percent of working youth, suggesting that limited opportunities are open to young workers. Even the government sector provides only 7 percent of jobs for currently working youth. It appears that various benefits associated with government work—cash income, skill development, social status, experience, and development opportunities—are not open to most young people today. As reforms to the public and private sector continue, the rate of state employment for youth is likely to decline further.

4.1.3. School and work

School in addition to work is an important activity for young people. Education is important for both human development and life skill development. However, as youths are often the main sources of social security and strong labor for their families, parents deploy young people for work. According to the SAVY results, 20 percent of school drop-outs leave school as a result of the labor demand for supporting the family. The SAVY data reveal that only 40 percent of youth were in school at the time of the survey, including those at college or university. About 35 percent were out of school but were working. Interestingly, 25 percent of the respondents were neither attending school nor working. A much higher proportion of females (30 percent) than males (19.5 percent) belongs to this category (Figure 3).

Figure 3: Schooling and work status of female and male youth aged 14–25, Vietnam, 2003



Source: SAVY 2003

The large proportion of young people not working and out of school is a concern from a policy perspective. Why are the youth neither working nor studying? Does a lack of opportunities for employment put them in such a situation? Does the demand for work in the household keep them from attending school? According to SAVY data, about 4 percent of the respondents never went to school, and 20 percent of the out-of-school youth reported that they left school because of obligations to work for family survival.

We next identify the characteristics of the three different groups of youth as reported in SAVY: at school, at work, and neither studying nor working. Table 4 presents the distribution of the three groups in school-to-work transitions. The group of currently in-school youth includes mainly single, female teenagers aged 14–17, with secondary education. Very few in this group had migrated for economic reasons, although about 46 percent had experience with child labor. Members of this group have better health, lower risk-taking behaviors, and live in families with relatively higher economic status. Those in school are more likely to live with living parents, and their fathers are more likely to be professionals.

In contrast, the group of out-of-school youth who are not working tends to be young adult males aged 18–25. Most have a primary or lower sec-

Table 4: Percentage distribution of youth by school-work status, and individual and familial characteristics, Vietnam, 2003

Characteristics	*Sub-group*	*Youth group*		
		In school only	*Out of school, not working*	*Out of school, working*
Gender	Female	53.5	39.2	53.7
	Male	46.5	60.8	46.3
Age group	14–17	78.8	25.4	19.3
	18–21	19.4	46.9	39.4
	22–25	1.8	27.7	41.3
Marital status	Married	0.2	27.2	25.5
	Single	99.8	70.8	74.5
Educational attainment	Primary	3.0	28.1	27.9
	Lower Sec.	57.2	44.9	43.9
	Higher Sec.	34.5	22.6	18.1
	College/Univ	5.3	23.9	10.1
Ever worked as a child laborer	Yes	45.9	18.2	21.0
	No	54.1	81.8	79.0
Ever migrated to earn a living	Yes	1.4	14.9	27.1
	No	98.6	85.1	72.9
Substance use *	Yes	28.3	42.9	54.8
	No	71.7	57.1	45.2
Premarital sex	Yes	1.2	9.7	13.4
	No	98.8	90.3	86.6
Poor physical or mental health	Yes	56.8	9.7	13.4
	No	43.2	90.3	86.6
Ethnicity	Kinh	88.2	76.6	86.0
	Other	11.8	23.4	14.0
Family economic status	Low	26.0	45.9	39.8
	Middle	42.3	38.4	40.1
	High	31.7	15.7	20.1
Living parents	One dead	6.0	11.3	11.3
	Both alive	94.0	88.7	88.7
Number of siblings	1	10.0	29.5	29.5
	2–3	62.9	40.0	40.0
	4+	27.1	30.5	30.5
Paternal occupation	Professional	32.9	20.3	20.3
	Unskilled	11.6	8.9	8.9
	Agricuture	51.2	65.2	65.2
	Unemployed	4.4	5.6	5.6
Type of place of current residence	City	14.9	7.1	7.1
	Town	13.9	8.7	8.7
	Rural	71.2	84.2	84.2
ALL		40.0	24.8	35.2
N [number of cases]		3,036	1,882	2,666

Note: * Includes use of heroin, illicit drugs, alcohol, or tobacco. Percentage is totalled by column for each of the variables.

Source: SAVY 2003

ondary education, although a number of them hold college or university degrees. The high proportion of college and university graduates in this group indicates a mismatch between current human resources and labor market demands in Vietnamese society. Compared to their counterparts in the first group, members of this group are more likely to have migrated in search of

work. A greater proportion of them live in low-income families with only one living parent. Their fathers tend either to be unemployed or to work as unskilled farmers in rural areas.

The third group includes youth who already dropped out or finished school, and who at the time of the survey were working for pay. Members of this group share mixed characteristics with those of the other two groups. In particular, they are mainly single females of older ages who generally have a primary or lower secondary education. Many young people with paid employment have migrated for economic reasons. A small proportion of them have experienced substance use and premarital sex.

Employed youth tend to live in families with average economic status; their fathers are more likely to be unemployed or to work in low-skilled jobs. Like the in-school group, and compared to the second group, more members of this group currently reside in urban areas than in rural ones.

Compared with their counterparts and especially with in-school youth, those who are not in school or in employment have many more risks and many fewer protective factors than their peers. Youth without links to social institutions at school and work may be less protected in the transition from school to work. The fact that one out of four youth are in this category should be a concern for policy makers.

4.2. Youth employability

4.2.1. Current status of youth employability

The concept of employability contains two major aspects: the competence and skills for the current market (or the supply side) and the access to employment opportunities (on the demand side) (see Appendix 1). It must be emphasized that there are several different youth labor markets. SAVY provides information on job search and vocational training for young people as part of an examination of employability of Vietnamese youth.

Table 5 displays the rates of job search and vocational training among young people as reported in SAVY. Of the total sample, about 15 percent reported that they were looking for jobs at the time of the survey. There are no significant differences in the rates of job search across gender, marital status, and ethnicity. The likelihood that young people are engaged in job search

Table 5: Youth employability by individual and familial characteristics, Vietnam 2003

Characteristics	*Sub-group*	*Job search and Employability*		
		Currently looking for job	*Ever received job training*	*Got a job with the training*
Gender	Female	15.4	18.1	66.5
	Male	15.8	19.7	67.8
Age group	14–17	7.2	8.2	33.1
	18–21	22.9	24.7	68.8
	22–25	21.6	32.0	67.6
Marital status	Married	13.9	22.6	74.1
	Single	15.9	18.2	64.8
Educational attainment	Primary	17.3	12.4	78.9
	Lower Sec.	12.1	17.6	71.6
	Higher Sec.	16.5	23.6	58.0
	College/Univ	30.8	35.9	58.7
Ever worked as a child laborer	Yes	20.0	12.1	70.7
	No	22.4	31.1	78.1
Ever migrated to earn a living	Yes	29.5	28.7	77.7
	No	13.4	17.3	71.7
Substance use*	Yes	20.5	24.8	69.5
	No	12.1	14.8	63.8
Premarital sex	Yes	23.4	32.6	69.1
	No	14.9	17.7	66.8
Poor physical or mental health	Yes	17.4	18.5	64.4
	No	12.5	19.6	71.3
Ethnicity	Kinh	15.9	21.1	67.7
	Other	14.1	6.5	52.5
Family economic status	Low	17.4	12.4	64.4
	Middle	15.1	20.4	72.9
	High	13.7	26.3	60.9
Living parents	One dead	22.0	19.9	75.0
	Both alive	14.9	18.8	66.1
Number of siblings	1	13.9	23.5	68.9
	2–3	15.7	19.4	66.5
	4+	16.6	14.5	65.5
Paternal occupation	Professional	14.4	23.9	63.9
	Unskilled	16.8	21.4	60.9
	Agricuture	15.3	15.0	69.1
	Unemployed	20.5	29.1	74.3
Type of place of current residence	City	18.4	28.9	64.6
	Town	13.8	23.9	68.0
	Rural	15.4	18.9	67.6
ALL		15.6	19.0	67.1
N [number of cases]		7,585	7,585	1,012

Note: * Includes use of heroin, illicit drugs, alcohol, or tobacco
Source: SAVY 2003

increases with age, number of siblings in the household, and levels of educational attainment. Notably, 31 percent of youth with college/university degrees were looking for employment at the time of the SAVY, suggesting that there may be some weaknesses in systems for education, training, and placement. Although there are also factors on the demand side, there is a general consensus that the skills taught and knowledge learned are mismatched in Vietnam with

those needed by employers in the labor market. This continues to pose a problem for young people. Most youth want to go to university and see higher education as the ticket to the future. Over 90 percent of the current school children want to enter university, as reported by SAVY; however, enterprises and employers are not committed to employ them as they tend to value experience over academic coursework. More and more jobs today do not require an academic education. Unless changes are made, this will continue to be a big problem in the future.

The SAVY results also show that higher proportions of young people with poor health or risk-taking behaviors look for jobs as compared to those without such behaviors. Not surprisingly, young people living with only one parent are more likely to search for jobs, and the demand for employment among youth decreases with increasing family economic status and father's occupational status. A relatively higher proportion of urban youth look for jobs compared to their counterparts living in towns or rural areas.

Turning to job training, 19 percent of the respondents have been involved in vocational training with 13.4 percent of the total sample having completed such training and 5.6 percent in the process of being trained. As shown in Table 5, there are again significant differences in the rates of job training by gender and marital status. However, a fairly small proportion of ethnic minority youth received job training as compared to the Kinh youth. This is probably due to limited access of these groups to training facilities. Other groups facing difficulties in gaining access to vocational training are: those aged 14–17 years old, young people with little education, youth who have been in child labor, those from poor families, and rural youth.

Of those who had received vocational training, two-thirds (67 percent) found a job with the skills they were provided. One-third (33 percent) could not find the job for which they had received training. The SAVY data do not indicate whether these young people already had a job when they received the training. However, the data can show the varying experiences in youth employability. The better-employed youth include those of older ages (18–25) and those with primary or lower secondary education. They are more likely to be Kinh youth and living in rural families with low or average economic status. Noteworthy is that the rate of employability among children of farmers is high-

est. These results are not surprising as they reflect the type of work and job training that young people receive. As already mentioned, rather than become unemployed, these young people become self-employed or work in small family enterprises. The SAVY data do not, however, specify the types and contents of vocational training or the actual skills and knowledge youth received.

4.2.2. Youth's aspirations and attitude toward work

Despite the severity of the other challenges facing the young generation, 50 percent of young people identify employment as the most important issue relating to their future. Two-fifths (41 percent) of SAVY respondents recommended that the government's highest priority should be increasing opportunities for jobs in terms of improving the lives of youth. Education alone is clearly not the answer for young people's successful transition from school to work.

It is worth mentioning that the aspirations and attitude toward work among the young are not significantly different for different groups defined by individual and family characteristics (results not shown). This suggests that young people today, regardless of their differences, are all concerned about employment opportunities and decent jobs. It is important that more efforts should be put into job creation in Vietnam by more effectively linking education and training to economic growth and the global economy.

4.2.3. Youth schooling, employment, and health

Given the cross-sectional nature of the SAVY data, the present analysis examines the correlation—not the causal relationship—between employment and health. Specifically, what is the relationship between being out of school, unemployed, or employed with a range of health risk behaviors such as substance use, premarital sex, and contraceptive practice? To the best of our knowledge, this is the first study to look at the links among these variables.

The results in Table 6 indicate that young females are less likely to be exposed to risks than are young males. Youth who are in school are less likely to experience substance use, premarital sex, and poor health. The pattern is similar for young men and young women. The results suggest that schooling is a protective factor. Unfortunately, the sample was too small to look at differences in contraceptive use.

Table 6: Health risk behavior of different youth groups by gender, Vietnam, 2003

Youth group	*Health risk behaviors (%)*			
	*Substance use**	*Premarital sex*	*Poor physical/ mental health*	*Not using contraceptives*
MALE				
In school	36.0	3.2	55.1	96.8
Out of school	70.3	18.1	67.4	96.2
FEMALE				
In school	21.8	0.2	59.9	95.5
Out of school	32.3	6.6	64.9	94.3
MALE				
Unemployed	60.5	16.1	71.8	96.8
Job seeker	74.5	20.3	71.3	96.8
Other	51.1	9.6	59.9	96.4
FEMALE				
Unemployed	35.8	3.4	68.7	93.9
Job seeker	36.9	3.2	67.6	97.8
Other	26.6	4.2	62.0	94.4
MALE				
Ever migrated	78.3	20.1	72.3	98.4
Other	49.5	9.3	59.5	96.1
FEMALE				
Ever migrated	38.1	5.1	67.9	95.3
Other	27.0	3.9	62.3	94.7

Note: * Includes use of heroin, illicit drugs, alcohol, or tobacco
Source: SAVY 2003

Young males who are currently looking for jobs are most likely to be exposed to health risk behaviors. The level of substance use among male youth is double that among female youth. Those who are unemployed or who are looking for jobs tend to experience premarital sex and poor health. Likewise, male migrants are likely to be most exposed to these risks. In general, it becomes clear that migrant youth, the unemployed, those looking for jobs, and those who are out of school are most vulnerable. Effective measures must be taken to safeguard these youth groups from health risks and enhance their development.

4.3. Factors associated with youth employment and employability: Multivariate results

Although the above descriptive analysis has partly described relationships between youth characteristics and employment outcomes, our main goal in multivariate analyses is to identify key factors associated with youth employment and to gauge their net effects, controlling for the confounding factors.

Table 7: Factors associated with the probabilities of youth work, job search, and vocational training in Vietnam, 2003

Covariates	Sub-group	Odd ratios [exp(β)]		
		Currently working	Currently looking for job	Ever received job training
Gender	Female *(Ref)*	--	--	--
	Male	1.18 *	0.80 *	0.95
Age group	14–17 *(Ref)*	--	--	--
	18–21	5.04 *	3.47 *	3.89 *
	22–25	12.85 *	3.76 *	6.50 *
Marital status	Married *(Ref)*	--	--	--
	Single	1.21	1.93 *	1.48 *
Educational attainment	Primary *(Ref)*	--	--	--
	Lower Sec.	0.70 *	1.16	2.42 *
	Higher Sec.	0.36 *	1.44 *	2.17 *
	College/Univ	0.58 *	2.79 *	1.81 *
Ever worked as a child laborer	Yes	4.48 *	1.89 *	0.98
	No *(Ref)*	--	--	--
Ever migrated to earn a living	Yes	2.56 *	1.90 *	1.42 *
	No *(Ref)*	--	--	--
Substance use	Yes	1.33 *	1.31 *	1.18 *
	No *(Ref)*	--	--	--
Premarital sex	Yes	1.20	1.20	1.45 *
	No *(Ref)*	--	--	--
Poor physical or mental health	Yes	1.18	1.35 *	0.97
	No *(Ref)*	--	--	--
Ethnicity	Kinh	1.82 *	1.23 *	2.71 *
	Other *(Ref)*	--	--	--
Family economic status	Low *(Ref)*	--	--	--
	Middle	0.93	0.75 *	1.29 *
	High	0.70 *	0.49 *	1.33 *
Living parents	One dead	1.13	1.29 *	0.94
	Both alive *(Ref)*	--	--	--
Number of siblings	1 *(Ref)*	--	--	--
	2–3	1.19	1.28 *	0.88
	4+	1.12	1.41 *	0.78 *
Paternal occupation	Professional	1.02	0.92	1.36 *
	Unskilled	1.26 *	1.15	1.28 *
	Agricuture *(Ref)*	--	--	--
	Unemployed	1.50 *	1.10	1.25
Type of place of current residence	City	1.48 *	1.12	1.16
	Town	1.11	0.92	1.30 *
	Rural *(Ref)*	--	--	--
N [number of cases]		7,584	7,584	7,584

Notes: (Ref) indicates reference group; * indicates $p<0.05$
Source: SAVY 2003

Two main aims are involved here. The first is to assess whether there are systematic variations in employment outcomes among different groups of young people. The second is to better understand how school status affects work experience. To do this the analysis will explore the relationships between employment and other factors. We ask whether the effects of individual characteristics are shaped by family status, particularly that of the fathers. In this sec-

tion, due to space limitations, we present the regression estimates of the multivariate analysis. The model specifications are presented in detail in Appendix 2. Readers unfamiliar with regression techniques might wish to skip the figures and proceed to the below summary of the findings.

Table 7 summarizes the results of a series of regression estimates that identify factors associated with the probabilities of work, job search, and job training among Vietnamese youth as reported in SAVY. Estimated odd ratios are used with levels of statistical significance chosen at $p<0.05$. A value of odd ratios greater than 1 indicates that members of the sub-group of youth have a higher likelihood of work, job search, and job training. On the other hand, a value under 1 suggests that those belonging to the sub-group have lower probabilities to work for pay, to look for jobs, and to receive job training.

The probability to work is higher for males than for females. The probability is significantly increased with the age of youths but decreases with higher levels of education. Notably consistent with the bivariate analysis, the greatest odds ratio of those young people with university degrees currently looking for jobs suggests that this group of university graduates represents a hidden unemployment problem. The supply of academic degree holders has actually exceeded the demand of employers and society.

Ethnicity and types of place of residence also significantly affect the probability to work: Kinh youth and urban youth were more likely to be in employment. The patterns of effects also show that young people who have been in child labor and who have migrated for economic opportunities are more likely to be currently working. Perhaps early childhood work and previous experience of economic migration can provide young people with labor market practice. They are more likely to currently work or look for jobs, which could subsequently lead to increased work experience, making it easier to find employment.

Among the covariates describing the family characteristics of the young person, the multivariate results show that economic status is negatively associated with the probability to work. The higher the status, the lower the likelihood for youth to work, other things being equal. For example, young people living in families with high economic status are 30 percent less likely to work for pay than those from families with low economic status. This suggests

that youth from better-off families tend to be in higher education and hence not at work. The results also show that living with or without both living parents is not a significant predictor of youth employment. Other aspects such as number of siblings do not show a significant influence on work in the multivariate results.

Closer examination of data on youth employment shows that males are less likely to be looking for a job, suggesting the gender gap in the labor market. Among indicators of school-to-work transition and transition to adulthood, the effect of marital status is significant with single persons being more likely to be job seekers. The probability that a young person is seeking employment increases significantly with age and education. Young people having earlier experience with child labor and economic migration are more likely to look for jobs, though many of them are currently working. To some extent, the obtained results have suggested that both underemployment and demand for better jobs are always primary concerns of young people today.

Interestingly, there is no significant statistical difference in young people's probability to look for jobs by paternal occupation and place of residence. In general, where the household is located is not an important factor in determining the likelihood of job search. These results point to the high demand for work and suggest that youth unemployment has become a critical problem in society for rural and urban regions alike.

The effects of individual and familial factors on job training are somewhat different from their effects on youth work and job search. Controlling for other factors, gender difference in job training disappears. While the likelihood of receiving job training increases with age, it declines with higher education. This may be due to the fact that youth in general education are less likely to receive job training, whereas those who drop out of school are more likely to seek job training.

Not surprisingly, family economic status is strongly associated with job training. The relationship proves to be linear in that the higher the status, the higher the probability of a youth's receiving job training. Children of non-farming fathers have a higher probability to be trained vocationally and hence have a higher chance of being employed. Children of farmers are likely to find jobs on the farm that do not require outside training. The effects are statistically strong-

ly significant. Except for the group of youth living in towns, there are no differences in access to job training opportunities between rural and urban youths.

5. Conclusion and Policy Implications

The evidence that rigorously quantifies youth employment and their school-to-work transition is quite limited. The strength of the analysis presented here is twofold: First, we present a comprehensive analysis linking youth employment to schooling and employment to health. Second, the regression analysis, although very limited in scope as is any multivariate model, does attempt to capture some of the complexity of the factors affecting youth work status and employability. The results are thus more robust than any bivariate analysis performed in previous descriptive studies. The obtained results have confirmed many of the factors included in recent nationwide policy discourse regarding youth employment.

The market transition in Vietnam involved a drastic turn in young people's transition from school to work. Today, Vietnamese youth generally enter the labor force out of economic necessity in order to help reduce the vulnerability of their households and their own livelihoods. Our analysis explored the aspect that different individual and family conditions lead to different work and health-related outcomes among Vietnamese youth. The significance of a number of important factors—such as gender, age, education, ethnicity, and family economic status—suggests that these factors are strong determinants of youth employment. To a large extent, they define the supply-side structure of the youth labor market. Certain disadvantaged groups of youth such as single females, the relatively young, and those living with one living parent in poor families are more likely to look for jobs today. Being either unemployed or underemployed, these groups of youth wish to improve their situation by looking for employment and suitable jobs.

The results of our analyses, both bivariate and multivariate, strongly suggest that family serves as an important factor in determining the youth employment experience. In fact, the family in which a young person lives is the strongest predictor of his or her future in the job market. The significant effects of paternal occupation, parental availability, and family economic status are

notable in the analytical results. The probability to work is reduced when young people live in better-off families. Likelihood to receive job training is enhanced when the father is in a professional or technical job, when the youth belongs to the *Kinh* group, and when the youth is residing in urban centers. Families can provide significant social and financial supports to enable the favorable transition from school to work for young people. All these factors combine to make the placement and promotion of their employment easier in the labor market.

The strength of the analysis is also reflected in the statistically significant effects of factors reflecting young people's transition from school to work and to adulthood. Young people's risk-taking behavior has also associated closely with their work status. One piece of evidence is the fact that large proportions of unemployed youth try smoking and alcoholic drinking (which are acceptable behaviors among adults) and that they begin to initiate these behaviors during their school-to-work transition. Specifically, out-of-school youth, migrant youth, and those who are unemployed or are job-seekers are most likely to be exposed to health risk behaviors. This means that in the near future, the prevalence of risk-taking behaviors and subsequent health outcomes will probably increase with youth leaving school or the parental home and engaging more in work for pay. To prevent such a trend, effective measures and information that are strong enough to change their attitudes and behavior should be reinforced.

The overall results of the present analysis suggest that not only will a scientific study of the subject help improve our knowledge of the determinants of youth employment, but it will also provide us with reliable evidence to design policies to assist young people in today's labor market. In some ways, the study results confirm and strengthen the current policy directions concerning youth employment. Following are policy implications drawn from the findings within this paper.

First, the youth is a diverse social demographic group with different characteristics such as age, gender, marital status, ethnic origin, levels of education, siblings and parents, family conditions, and place of residence. The conventional understanding of youth as a homogenous group is no longer relevant: it is imperative for policy and program planners to avoid basing their decisions on such a misunderstanding. Policies must be therefore specific enough to meet the needs of each of these groups. The formulation of policies for youth, includ-

ing employment policies, should recognize that young people (between the ages of 14 and 25) include different social and demographic groups, have different needs, and are shaped by different sets of factors in their school-to-work transition. Their pathways to employment and health development are also diverse.

Second, given the disproportion of youth currently working in small family business and self-employed in the agricultural sector, it is important to coordinate with local authorities and communities to help young people start and improve their own businesses. This includes the generation of job opportunities through small and medium enterprise development. For example, traditional craft production in the Red River Delta provinces should be developed and linked to international export markets to create proper jobs with adequate incomes, ensuring non-farming income for rural youth and their families. It is also important to make it easy to start and run enterprises through training and credit to provide more and better jobs for young women and men. As young people are often the only source of social security of their families, the need of parents to deploy their young children to work is salient and critical. Too often availability of jobs is limited to the most educated and urban residents, sidelining young females, ethnic minorities, and rural youths. Reducing socio-economic differences should be a policy priority. Efforts aimed at poverty reduction, employment promotion, and income generation for families can limit the need for children to seek economic livelihoods.

Third, enhancing the employability of Vietnamese youth first requires the strengthening of the macro-level linkages between the education system and the labor market. Education and academic degrees are only a means to an end and are not an end in themselves. The need to improve the quality of education, as well as the need to adapt curricula in schools and vocational centers to produce the appropriate skills and job experience as demanded by employers and competitiveness of the labor market, has already been discussed. Employability requires new sets of appropriate skills which are usable in labor markets. In order to address these issues, it will be necessary to build capacity and accountability of employment services and job counseling and to improve the linkages of job training to labor market needs.

Fourth, minimizing skill mismatches and matching skills to demand is a key to improving youth employability. The high proportion of university

graduates currently looking for jobs and the fact that only over half of them are in a job with the training they received indicate the huge gap between supply and demand for education, training, and experience in the rapidly changing labor market in Vietnam. A central policy issue is the mismatch between the expectations and reality of the labor market. At present, university education and obtaining academic degrees remain highly desired by young people and their parents as the ticket to the future. Although practical skills rather than textbook knowledge are required in today's labor market, vocational training is perceived as being less prestigious because it does not help young people to become state officials or to achieve upward mobility in the society. As a result, those with university and higher education are more likely to be unemployed or work at jobs unsuitable to their education. The labor market tends to value experience over academic qualifications. Policy makers should consider lowering the investment in expanding or constructing new colleges and universities. Effective messages, better information, and job orientation should therefore be provided to young people, their peers, and their families in order to change attitudes and behaviors about education and training.

Fifth, effectively addressing youth employment also needs a comprehensive approach to overcome specific risks increasingly faced by certain disadvantaged groups of youth. Issues related to vulnerability and health of unemployed, migrant, or out-of-school youth are key policy concerns. In this regard, the issue of gender is particularly interesting as the results show the relatively higher health risks for young males. While it is necessary to provide special support to help raise the status of these disadvantaged groups of youth in the labor market, it is very important to reduce harmful aspects of their exposure to health risks. In the current context, the family and its support system—both financial and human—is essential for young people who are leaving school and in the process of entering the labor market.

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Appendix 1: Key Concepts of Employment in this Paper

Employment: According to Article 13, Chapter II of the Labour Code of Vietnam, "any working activities which generate income and are not prohibited by laws are recognized as employment." Employment can be defined in the forms of: (1) employment which is paid in cash or in kind or by mutual help, (2) self-employment to earn income for oneself, or (3) activities of production, business and service for one's own family and no wage or salary is received.

Employed: Employed are all persons aged 15 and over in the labor force and those who are defined as being involved in one or more of the above-mentioned forms of employment in the last seven days. Employed youth refer to those aged 15–24 who are involved in employment in the labor force.

Employability: This concept refers to the ability of a person to be employed given his/her demand for jobs, skills, training, and capability to work. The concept of employability contains two major aspects: the competence and the access to employment opportunities. Vocational training is usually a means to help young people to achieve their career goals. Youth employability relates to the ability of young people in obtaining jobs in the labor market.

Unemployed: Unemployed are all persons aged 15 and over who were not employed during the last seven days and (1) had actively looked for work and (2) had been available. Because of lack of skills, and the hurdle associated with obtaining the first job, the level of youth unemployment has always been higher than the rate of general unemployment.

Underemployment: The state of employed persons who were employed but worked less than 36 hours in the last seven days and would have been available for work if the job had been available.

Labor force: Labor force or economically active population includes all people who are at age 15 or above and are employed, and those who are not employed but able to work and have a demand for a job. In this regard, those outside the labor force refer to the economically inactive population that includes all people who are aged 15 or above but who are excluded

from the employed component and from the unemployed.

Working age people: People at the working age outside the labor force (equivalent to economically inactive population at the working age) include all people who are of working age (men aged from 15 to 60 and women from 15 to 55) and are excluded from the employed component and from the unemployed.

Economically inactive people: People who are economically inactive include those who are going to school, are serving as housekeepers for their own families, are old or ailing for a long time, are handicapped, or are unable to work.

Appendix 2: Model Descriptions of Multivariate Analysis

Three observed outcomes (work, employment, and vocational training) can be treated as dependent variables for inclusion in the multivariate regression models.

The first variable indicates whether or not the respondent was working for pay at the time of the survey. The second dependent variable is whether the respondent was looking for a job, which reflects the access to the job market among youth. The third work-related variable indicates whether the respondent received any vocational/job training. This variable allows us to compare two groups of young people: those who have received some form of vocational training and those who have not.

As such, all three variables are binary; they are coded 1 with a positive response and 0 with a negative response. The independent variables may be classified into the following two groups: measures of socioeconomic characteristics of the individual youth and those of the family. A macro-level factor, such as type of current place of residence, works as a control variable in the statistical models. The analysis is applied to all surveyed young people who were interviewed in the Survey Assessment on Vietnamese Youth (SAVY).

Because the dependent variables are binary, logistic regression models can be used. The model to be estimated for each measure of work-related behaviors can be specified as follows:

$$log\ [p/(1-p)] = a + \beta_i X_i + \varepsilon_i, \quad (1)$$

where

- $log\ [p/(1-p)]$ is the log odds of the health care behavior, which represents the dependent variable,
- a is the intercept,
- β_i is the estimated regression coefficient,
- X_i is the independent variable whose effect is examined, and
- ε_i is the regression disturbance term.

The variables included in the model represent the effect of a wide range of factors influencing youth work and employment. We assume that X_i are statistically exogenous to ε_i so that equation (1) would produce consistent

estimates of the β_i as well as their standard errors. This is a strong and potentially objectionable assumption. For categorical variables, a positive coefficient indicates an increase in the log odds for the particular category relative to a reference category, while a negative coefficient indicates decreased log odds. By exponentiating the coefficients we obtain estimates of the relative odds (odd ratios) associated with a particular category of a covariate of interest. We use z test to assess the significance of the impact of individual variables on the odds of being employed, looking for jobs, or receiving vocational training as opposed to the reference category. Using the SPSS/Win, we have estimated the models using the above-described equation (1).

Chapter 5
Sustainable Education Development under Globalization, and the Reforms of Teaching and Learning Methods in Teacher Training

Nguyen Thi Phuong Hoa

Abstract

Beginning with some considerations about the relationship between globalization and education, the particular significance of the tertiary education sector for a developing society like that in Vietnam is addressed. A glance at the Vietnamese record of educational reforms in general and in tertiary education in particular reveals considerable successes as well as huge challenges. While reform needs and reform goals are scarcely controversial, the basic problem of all reform attempts is how to achieve sustainable development of the educational system. In order to launch a proven and sustainable reform scheme, we recommend an action research approach. Some strategic starting points are given combining the approach of self learning reform with research methods. This combination promises an improvement of the scientific level of teacher training institutions in their core tasks, i.e. providing students continual encouragements and innovative learning abilities.

1. Education in the Context of Globalization

The term "globalization" was first used in social science and was found for the first time in *Encyclopaedia Britannica* in 1961. Since 1990, after socialism collapsed in Eastern Europe and the Cold War ended, the process of economic globalization has been developing rapidly and the term has continued to gain popularity.

Though the terminology of globalization began to be used as late as mentioned above, the sign of globalization process was appeared as early as the 15th century—a time of numerous exploration cruises, of which a well known example is the first cruise around the world of Ferdinand Magellan, who discovered trade routes among the Asian, American, and African continents. Mod-

ern globalization is known as an increasingly international integration in all fields of economics, culture and society. It has impacts on every individual, society, organization, and state. Technological progress, especially new technologies in telecommunication, and transportation as well as free trade policies in international trade are main reasons for its dissemination. Theodore Levitt (1925–2006), a German immigrant who was a professor in Harvard University, was the first to provide a definition of globalization from the viewpoint of economic policy makers in "The Globalization of Markets" in 1983.

From an economic viewpoint, globalization is characterized by a set of changes in economic structure, leading to basic changes in international labor allocation in recent years. It results in rapid growth of the global economy. Globalization can be described with the five following factors.

- New technologies, especially computer technology and transportation systems, rationalized at the highest level, have opened new opportunities to meet the demand for goods and services all over the world.
- Because opportunities also mean pressure, what were independent activities of each nation in the past have been narrowed down and replaced by the activities of international corporations, who are considered as global players. These corporations choose to invest in the locations where they can get the most benefits. Their investment decision does not depend on the viewpoint of the nation they invest in.
- Therefore, an international financial system appears. Billions of US dollars can be transferred through this system in a few seconds without any national control or management. The independent actors are now the largest economies in the world.
- The global labor allocation process enters a new period in which the labor force is supplied to the market where the supply and demand relation is most convenient. This results in the direct competition in labor supply among countries and regions, for instance, between the European and the Asian countries. The traditional production, agriculture production, and natural resource exploitation have all fallen into global competition where each country can have its own impact in certain conditions.
- A final factor is the appearance of information and telecommunication technologies a few decades ago. They have become innovative sectors

which strongly spurred the growth of the global economic system.

Modern science marks a new step in human history. Intellectual and technological innovations are achievements of modern sciences; and as such, to meet the requirements of globalization, all the countries, including the most developed ones, need to have broad and deep scientific knowledge and applied experience. The capability to understand modern sciences as well as the ability to develop these sciences further are basic conditions to modernize the society (Evers *et al*., 2004).

All of the above characteristics of globalization show that economics is the field in which globalization happens most strongly. However, globalization brings much more than economic impacts to a nation. Actually, all fields of politics are affected by globalization. Furthermore, the development of culture and society follow global trends.

Although the above development trends are still new and at their beginning steps, all these trends are indispensable. All countries must follow this development model, regardless of their current development level. Any country which goes against this model—even partly—must pay a high price. Such a country's natural resources will become exhausted and the country will lag behind desperately. This goes especially for countries which are currently prosperous thanks to their rich natural resources but which are not willing to integrate their traditional values into global trends. For all countries, the time to adapt to this model is dwindling. Urgency is particularly high for the developing countries, which have to take fast reform and strive for sustainable results simultaneously. In the current globalization context, developing countries that want to modernize will no longer be able to apply the old European development model, which required decades—amounting to centuries—to move from agricultural production, to industrial production, to a service society, and then to the knowledge society based on electronic information and telecommunication technology. Now, emerging countries have to develop all fields at the same time, prioritizing the preconditions of knowledge production (Cetto, 2006).

With this understanding, the relationship between education and successful modernization under the context of globalization becomes clear. This relation has been the central topic in the theory of human capital (Organisation for Economic Co-operation and Development [OECD], 2002). The theory

proves that investment in education and training increases the economic productivity of the labor force. For developing countries in the context of the globalizing world, improving the simple labor skills is not enough because under the impact of changes in the international division of labor, some professions will disappear or change significantly. Therefore, the labor in the new context of globalization must, through education, be equipped with new skills and capabilities. Moreover, although developing countries undergoing cultural and social changes will cope with many difficulties in the integration process, these difficulties can be basically addressed by education. The theory of social capital explains this situation in detail. A publication in 2002 by Putnam (Putnam, 2002) —the most influential theorist of the social capital theory—indicates that social capital is constituted of social organizing capabilities comprising trust, norms, and cooperation. These are the main elements for societies to improve their capability to act in their parts and as a whole. For developing countries and countries who are stepping into the developed country community, investment in education and training is the basic material of the knowledge economy. Under the challenges of globalization, that material will become more and more meaningful (Temple, 2000).

The analysis of the relation between education and economic development reveals that all countries that want to achieve continuous social progress must be brave enough to apply a strong investment policy for education and training. While the western developed countries experienced many generations before they had developed their self-organizing capability and set up distribution structures in the way of social welfare states, developing countries do not have such advantages. What developing countries have is limited experience in innovation and development. In addition, they sometimes have to face dramatic changes in their societies. These changes are shuffling the solidarity tradition of agricultural societies and jeopardizing the cohesion of the whole community. Under these conditions it is understandable that great investments in social resources are more important for these countries than for the developed countries in the West. Therefore, the simple development models must be replaced by ones which discover and open new ways valuable for the future. Sustainable development is not to exploit and consume all the natural and social resources; conversely, it is to create conditions to integrate into the

globalization process in both economic and cultural fields (World Commission on the Social Dimension of Globalization, 2004).

From the above analysis, within the requirements for education policies, these three trends must be taken into consideration:

(i) In the globalization wave, we can see a similarity at the global level in terms of education purposes, contents, and standards, regardless of the characteristics of each nation. Education as a future investment for the young generation must contribute to create and develop action capability, awareness ability, and the ability to understand profoundly complicated relationships in social life and professional life; it must encourage creativeness in thinking and acting. The characteristics of each nation must be defined in the content of education; this content reflects the special characteristics of each nation, including language, local and regional cultural traditions, and the living conditions influenced by natural geographic factors. However, there is a growing trend of the "global curriculum," in which a popular international language (like English) will be taught early; the curricula of mathematics, natural sciences, and IT are equivalent. There are two issues that are important to the education standards: one is similarity in educational level structure from kindergarten to tertiary education, and the other is time and qualification requirements. An experimental system to measure education and training results has been developed for the past 15 years (OECD, 2004). The standards, process and methods were applied to measure the education and training results that have great impacts on national education systems. Moreover, some international comparative studies have put the national education systems into a global competition to which no nation can be indifferent.

(ii) Traditional models to develop education systems have established a certain order. It starts from eradicating illiteracy and moves to building higher degrees for a more complete education system. Decades are needed to build a complete education system, but under the pressure of globalization, such a process is not feasible. In order to join and succeed in global competition, and to reform the nation rapidly, each nation must give priority to elementary education because it is the foundation for other higher education levels. With great efforts in a short time, devel-

oping countries must achieve a common global education level to make social advances as rapidly as possible.

(iii) The core factor of the knowledge society, which is replacing the industrial society, is sciences. If developing countries want to modernize their economy, they must develop their own scientific system because this system is the key to international competition. Because global cooperation activities will follow scientific rules and will be based on thoughts, through exchanges among scientific workers, developing countries that want to advance to higher levels cannot escape the general trend of making things scientific on a global scale. In the knowledge economy, as scientific know-how is the most expensive in the global market, developing countries must quickly establish scientific production for themselves.

2. Scientific Development as an Important Task in Tertiary Education

When we consider the importance of tertiary education development to establish a particular effective science system for a country, we are talking about the core factor of sustainable development under globalization pressure (Knight, 2004). Apart from this pressure, and because of the high price of imported knowledge, each country must develop its own knowledge and creativeness with its own internal resources within its own scientific system. Long before economic globalization, the sciences were internationalized. In the relationship between globalization and sustainability, this affirmation is very meaningful, as demonstrated in the four following points:

- While the economic, cultural, and political impacts of globalization may partly fall in violent conflict with national and regional traditions and create new social conflicts and dependences, global linkages in the scientific field do not lead to similar problems and risks.
- Scientific advances will occur only in very small part under the conditions of national and regional competition. It is obvious that building a science infrastructure is very costly, but this investment will promise a linkage with the intellectual treasure of the world, and will enable the most effective participation in scientific debates beyond national and cultural bor-

ders. Finally, the working experiences, wherever they are gained, will be evaluated scientifically, and then popularized in the society.

- When we talk about sciences, we mention knowledge and awareness as "basic components." These components have very specific characters: they are always symbolic and flexible, depending on location, time, situation, and reality. In addition, they are immaterial, and thus relatively stable. Physically, knowledge can be destroyed only when all knowledge documents are destroyed and all people who hold knowledge in themselves are killed. Knowledge and awareness are common property. They cannot disappear. They remain intact when they are shared, so knowledge should be disseminated. In short, sciences are related to the entities which are very different from goods and service products.
- The above characteristics make the sciences with their achievements a very important factor for the future of human society. Even errors can have scientific effectiveness. Any scientific viewpoint on teaching and learning can be analyzed in serious scientific debates and can then be verified through the teaching and learning practice. Such competition will verify the solidity of these teaching and learning viewpoints.

A fact that should not be neglected is that patents, copyrights of intellectual property, and scientific human resources are all very expensive. However, knowledge and creativeness do not have specific and separate cultural or national characteristics. Therefore, science development is the best way for a nation to make the most of its own unlimited human resources. Through this utilization, the nation can integrate into the global knowledge society.

3. Education Reform in Vietnam: Achievements and Challenges

3.1. Education system in Vietnam: An overview

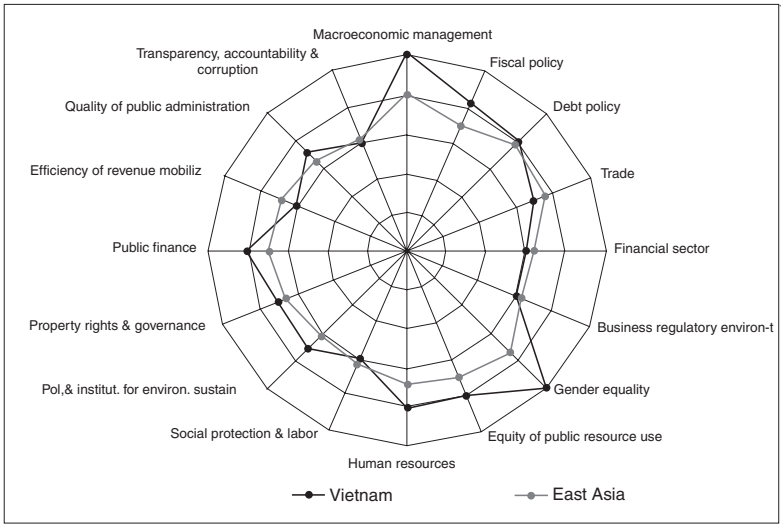
Where does Vietnam stand? It is not easy to answer this question because the statistical reports about the Vietnamese education system are not sufficient. In addition, the survey methods and reliability of the statistical data are not persuasive. In the following we use statistical data from the World Bank (World Bank 2006).

In 2005, there were about 48,000 kindergartens and nursery schools accommodating about 2.75 million children, among them 421,000 children aged from 3 months to 3 years old (accounting for 15 percent of the total children at the same age) go to nursery schools and 2.3 million to kindergartens (accounting for 58 percent of the total children at the same age). By 2010, the kindergarten and nursery school system should be expanded to receive 18 percent of the total children under 3 years old and 67 percent of the 3–5-year-old children.

Also in 2005, there were 7.77 million children from 6 to 11 years old (accounting for 98 percent of the total children at the same age) attending five-year elementary schools. In the education system, there are 14,000 elementary schools and 1,000 elementary and secondary-combined schools. In comparison with the data at the beginning of this decade, the numbers of both pupils and schools are lower. Two reasons can be mentioned. Firstly, in Vietnam the birth rate has decreased. Secondly, there are fewer and fewer pupils at higher ages attending elementary school. A few years ago, under the pressure of illiteracy eradication programs, the rate of pupils at higher ages attending elementary schools was very high. One of the development goals for 2010 is that 99 percent of the pupils at elementary school age are going to school. A second goal is that full-day schooling is established. The third goal is that pupils from the age of three are beginning to learn foreign languages, and the number of the pupils, who have to repeat their classes, will be reduced significantly.

Like in other countries, secondary education in Vietnam is divided into lower secondary school (from 6^{th} to 9^{th} form) and the upper secondary school (from 10^{th} to 12^{th} form). When pupils graduate elementary school, they can enter secondary school. When pupils graduate secondary school, they have to pass an examination to enter high school. In the 2004–2005 school-year, there were 6.7 million pupils attending 10,000 secondary schools and 2.8 million pupils attending 2,224 high schools. While the curricula for both elementary and secondary schools are standardized nationwide, the curriculum for high schools is divided into a general curriculum and a special curriculum for those who specialize in some certain subjects (science, social science, or arts) from the 2006–2007 school year on. The latter can be introduced by single schools, approved by the District Ministry of Education and Training. By 2010, secondary schools must be able to take all students at secondary school age. Half of

Figure 1: Vietnam vs. East Asia in Development



Source: World Bank (2006) as quoted by McCarty (2006)

lower secondary graduates will continue to the high school level. To meet these goals, the number of form repeaters must be lowered, and the number of school drop-outs must be reduced.

Vocational training has three levels: primary (duration under one year), intermediate, and college (each level lasts from one to three years). In 2005, there were 1,688 vocational training schools. There are many managing agencies of these vocational training schools. Most of the vocational training schools are under the management of the Ministry of Education and Training (MOET). Some others are under the management of the military. There are also private and foreign-supported vocational training institutions. In general, vocational training schools and centers in Vietnam are still weak and cannot meet the demand. By 2010, each province or city must have at least one vocational training school and the training contents must be improved to a higher level to meet the increasing demand of the economy. Thirty percent of the secondary graduate students and 10 percent of the high school graduates should enter vocational training schools and centers.

This information reveals from nursery level to high school level that

Vietnamese education has achieved a higher level than would be expected based on its economic status (United Nations Educational, Scientific, and Cultural Organization [UNESCO], 2003). The education is impressive in terms of both the achievements and the growth rate. Along with such good achievements, some severe weaknesses are being addressed through strong reform efforts in all education sectors (Tran, 2002). Compared with the neighboring countries in the region, Vietnam has achieved significant progress, and this statement is supported by Figure 1.

Priority for education in Vietnam also illustrates the appropriate insights about substantial investments in education, which have helped many developing countries to succeed. The Republic of Korea is an example. Thirty years ago, it was at the low development level as Afghanistan. Now, it is one of the most competitive Asian economies, and it scores at the top of the leading nations in international education (OECD, 2007). Annual financial investment into education in South Korea is as high as the investment of the United States of America (US). The Republic of Korea also stands at the third position among OECD countries and OECD countries' partners, after Israel and Ireland (OECD, 2007). There is a similar trend in Taiwan (China) and The People's Republic of China. This level of investment affirms the importance of education in globalization, including tertiary education, which plays an increasingly important role. Therefore, to develop and integrate into the globalization process, Vietnam must invest in tertiary education both financially and intellectually.

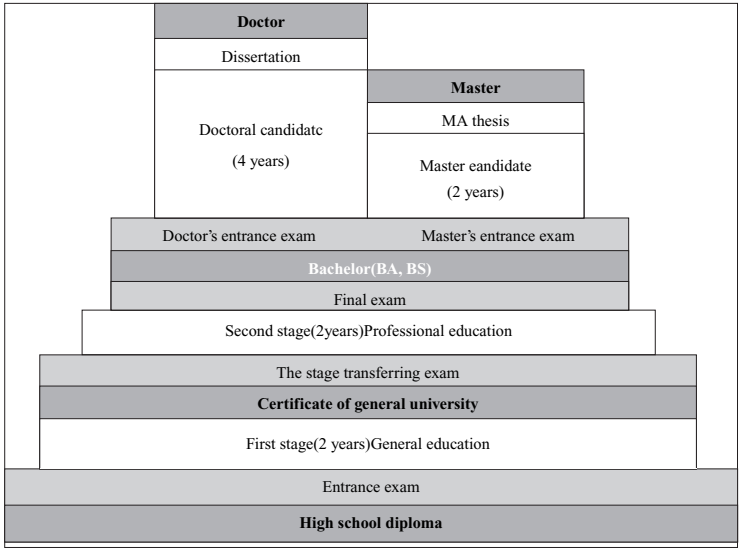
Vietnam's tertiary education system has been restructured and improved comprehensively from its low starting level at the end of the last century. The initial reform in education started in the North after Vietnam gained independence and then in the whole country, after the Vietnam War against the US ended. At that time, Vietnam's tertiary education structure was copied from the education model of the Soviet Union. There were a series of small scientific institutions, which were highly specialized, mono-disciplinary, and with low linkages between teaching and doing research. To suit the centrally planned economy, universities were put under the management of relevant ministries (Kelly, 2000). The education bill from 1998 opened this structure, delivered increased autonomy to the universities, and articulated a modern understanding of the close connection of research and academic teaching. Since the middle of

the 1990s, five new universities were established by mergers of smaller universities. These new universities were Hanoi National University, Ho Chi Minh City National University, Da Nang University, Hue University, and Thai Nguyen University. These universities all follow the worldwide models of multi-disciplinary campus-universities. Applying the government resolution Number 14/2005 on basic and comprehensive reform in tertiary education, MOET has recently taken further action. It set up a reform plan to carry out reforms based on successful international experiences. One of the tasks is to remove the central ministerial steering mechanism for universities by self-management and self-responsibility. This is a basic reform effort to address the inborn stagnation of centrally run universities in Vietnam.

There are two levels in the tertiary education system in Vietnam—undergraduate and graduate levels—with a variety of studying time options and entrance conditions (Institute of International Education, 2004). Undergraduate education is divided into two levels: (i) college level (requires 2–3 years or 1.5–2 years, depending on the entrance levels of the students) and (ii) university level, which has two phases and lasts for 4–6 years, depending on each profession. The first phase lasts for 1 or 2 years, in which students study general subjects. The second phase focuses on professional study. Graduate education includes (i) master's degree, which lasts for 1.5–2 years, and mainly focuses on professional training and (ii) doctorial degree, which lasts for 2–4 years for students with master's degrees, and 4 years for students with bachelor's degrees.

Figure 2 shows the basic structure of Vietnam's education system, although it may vary depending on the individual university. The diagram also indicates that while the level classification is in accordance with the current global trends, the trust of higher levels in the education quality of lower levels is quite poor because there are plenty of entrance examinations. The existence of so many entrance examinations in Vietnam reveals weaknesses of quality all over the education system. These examinations are an attempt to compensate for a lack of accredited standards by an inefficient comprehensive control system. Although examinations create high pressure for students and lecturers, their results do not indicate the real study performance of students. Therefore, the reform of the examination scheme throughout the education system is another important task in modernizing education in general and tertiary educa-

Figure 2: The Vietnamese education system



Source: Nguyen (1999)

tion in particular.

In Vietnam there are seven types of universities. They differ by their graduations and their administrative competence. These types are:

- Multi-professional universities, following the western tertiary education models,
- Teacher-training universities and colleges,
- Technical and industrial universities with different numbers of disciplines,
- Universities related to economic branches, public institutions, and professions like universities for agriculture, forestry and fishery; military and public service; architecture; journalism; and communication,
- Medical and pharmaceutical universities,
- Culture and art universities and universities for sports, and
- Open universities, open institutes, and private universities.

Though the administrative homogeneity of tertiary education in Vietnam is making progress the institutional landscape is still very fragmented. Some universities are under the management of the local departments of education and training or provincial people's committees. However the general com-

petence standards of MOET are arduously imposed. This causes laborious coordination and approval procedures and reinforces bureaucracy, which is widespread in Vietnam. Moreover, the country's tertiary education system is facing an uncoordinated growth of different study programs and specializations without consistency in curricula between universities.

In the study year 2004–2005, there were 1.3 million students enrolled in 230 universities and colleges and 35,000 master and doctoral students participating in 122 different programs. Because the demand for education is much higher than the supply, private and open universities and colleges, where students often have to pay high study fees, are successfully offering many programs to meet the demand.

High targets have been set up in the tertiary education development plan. However, implementation plans have not been put down in detail. According to the governmental action plan, the following performance must be achieved in tertiary education reform by 2010 (Social Republic of Viet Nam, 2002).

- Time, entrance condition required, and graduation of all levels of tertiary education system must be consistent nationwide
- Vietnam's tertiary education system must come closer to the international standards. "Major trends and achievements and development experiences in higher education in the world at the end of the 20th century and the beginning of the 21st century represent the second grounds for Vietnam's education policies. It is always considered an important task to review successful educational development policies in other countries so that they can be applied creatively to the concrete situations in Vietnam. Thanks to this approach, perceptions and ways of thinking have been gained…In the world of globalization and economic integration, the Government supports the expansion of international relations to exchange views, ideas, experiences, advanced progresses in researches, studies, technologies and to enhance mutual understanding among peoples for peace, friendship and co-operation. International co-operation provides opportunities to mobilize external resources for the development of higher education" (Ministry of Education and Training, Higher Education Department, 2006).
- Quality improvements must be implemented basically and comprehensively in all aspects: equipment for all universities, curricula, teaching meth-

ods, evaluation, and cooperation with foreign university partners. The most competitive universities should be cultivated to become academic centers of excellence.

- Research activities in universities must be developed and fostered. Quality of teaching and learning should be improved. Research results should be applied in reality and knowledge and technology transfer must be increased. Tertiary education should effectively combine training, research, and knowledge transfer to increase the adaptability of graduates with the labor market requirements, and to decrease the high unemployment rate of graduates.
- Management for tertiary education must be improved: standards and accreditation should be implemented, resources should be used more effectively and education statistics must be more comprehensive, reliable and topical.
- By 2010, the number of students should increase from 140 in 2005 (World Bank, 2006: 19) to 200 per 10,000 citizens, the number of master students must increase to 38,000, and the number of doctoral students must increase to 15,000. The proportion of lecturers in universities holding master's degrees will be increased to 40 percent (in 2000, it was only 27 percent), and doctoral degrees must be held by 25 percent (in 2000, it was 18 percent).

Vietnam needs to travel a long way to catch up with the developed regional and global education level in overcoming its own weaknesses in education. Some of the main weaknesses are presented in the next section.

3.2. Weaknesses and challenges of the education system in Vietnam

3.2.1.Research and studying conditions (Nguyen 2007, forthcoming)

- The current curricula for students now are overloaded in terms of contents. This is also a weakness in some other countries because lecturer and management agencies (ministries, departments, universities) always want to provide students as much knowledge as possible. But in fact, students' time and ability to learn all the taught knowledge and skills are limited. Another curriculum weakness is that almost all subjects focus on theory and that many subject curricula are too detailed. Students often are weak

in generalizing their knowledge and in transferring it to practical problems. Vietnam's lecturers often fail to convey to their students broad knowledge and a consolidated understanding about a profession or a field. Vietnamese students study much but focus only on their narrow profession. Moreover, the information provided in the lecture is sometimes out of date. All these weaknesses can be seen in the curriculum contents of any university.

- Another weakness is the traditional routine learning methodology. Students keep following the pre-set "recipes," like in cooking. They follow exactly what they are told by their lecturers. Lecturers are practicing teacher-centered methods and students learn by heart the lecture contents without sufficient understanding. In exams students are evaluated through their memory performance. Students are weak at research. They do not know how to select a research topic, to set up a research plan, to choose a research methodology and to evaluate the formulation of a research question, even during the initial steps.
- Vietnamese students are industrious in studying, not least because of the pressure of the examinations. From the first day of school, they get used to stressful learning programs. They have to attend classes outside school to get more knowledge and skills to pass the examinations. Students in Vietnam nowadays seem to have only one way to enter a promising personal future: passing the university entrance exam. Therefore, the pressure of the university entrance exam is very high. Students bring their study habits from high school to university. They do not have time to develop a new learning behavior or find innovative ways to approach a topic. They also do not have time or experience to learn from their faults. It can be said that students study because they have to cope with the exams and passing these exams is their main purpose. As a result students often know a stunning number of facts without any appropriate understanding of the overarching meaning and importance. At all levels from school to university, the necessary creative virtues for students are not paid enough attention. Far too little progress is thus made in core competencies like self-confidence, independence, ability to be critical, and social and communicative skills.

3.2.2.University lecturers

The qualifications of many university lecturers are rather low and heterogeneous. Normally the better lecturers with good professionalism are gathered in the big universities in the cities. There are many older lecturers with limited command of their subject. Most of them graduated from universities in Eastern Europe decades ago and have had no chance to upgrade their knowledge so far (Tipton *et al*., 2003). The targets of education development of Vietnam to 2010 described above are indicating that, even when Vietnam achieves these targets, the level of Vietnam's tertiary education will be still far from an internationally competitive system.

Deputy Prime Minister Pham Gia Khiem said in a conference about tertiary reform in June 2004 that the education infrastructure of universities in Vietnam was thirty years behind that of other developed countries (Vietnam News, 2004). The main reasons for the poor performance of many universities are: low payment, shortage of research resources, and lack of scientific cooperation with other universities (especially foreign ones). Another reason is the weakness in foreign language ability of many Vietnamese lecturers. Despite the common problem of language difficulty, many Vietnamese students have graduated from both foreign and domestic universities with excellent scientific achievements. However, only few of them are willing to work in Vietnamese universities because doing so would not give them much chance to develop their future and career. Therefore, improving the professionalism and scientific performance of university lecturers is as important as it is difficult to achieve (Tran, 2006).

Another problem related to the limited professionalism of university lecturers is a particular trouble affecting many university courses. Students sometimes bribe lecturers directly or indirectly to get higher marks or to pass the exams. Addressing this problem is part of the resolute governmental fight on corruption (Asian Development Bank and OECD, 2006). However, the real situation is mostly concealed and outside the view of the broad public (Tran, 1999). Recently, some cases in violating exam regulations have been reported on some newspapers and people were very disappointed (Hoang, 2006).

3.2.3.Quality problems

Quality of tertiary education is always a hot topic in open debates about education reform (see, for instance, Ha, 2006). Apart from the above mentioned points, an underdeveloped quality understanding in education is another reason for the quality deficits. A nationwide system of indicators for obligatory standards was developed only in late 2004 to accredit universities, departments, and study courses (Ngo, 2006). New and modern insights of a reasonable understanding of quality are elbowing arduously against traditional input-concentrated approaches. According to this new view for educational processes, quality is the difference between intention and delivered resources on the one hand and the evaluated results on the other hand. To follow this understanding, it is necessary to identify the input-output-quality. Since there is not a consistent standard system with international comparability applied for the whole country, the scoring for students' achievements have limited value. Students holding excellent degrees may not really be excellent. This discrepancy is often worsened by the already mentioned problem of illegal acquisition of faked or purchased degrees.

The high unemployment of graduates in Vietnam is caused considerably by universities' quality deficits and their lacking willingness to meet the needs of the economy. According to the statistical data of the Ministry of Labour, Invalids and Social Affairs (MOLISA) dated on 5th May, 2006, 80 percent of the graduates are working in professions different from the subject they studied at university (Ho Chi Minh City [HCMC] National University, 2006). Because enterprises do not believe in the training and certificate quality coming from the universities, they only recruit students after an additional qualification in specialized training institutions providing them urgently needed core competencies like independence, responsibility, creativeness, and foreign language abilities.

3.2.4.Weaknesses in research

There is a traditional and considerable gap between teaching and research in universities in Vietnam. Most of universities consider teaching as their first priority. Only when the tertiary education reform was implemented recently, the strong connection between teaching and research was imposed.

Enhancing of research activities inside universities is demanded as is networking with independent research institutes outside. Hanoi National University and HCMC National University are being developed into centers of excellence. Vietnam has a long road to go before reaching a research level at which universities play a key role in the country's further development and where modern teaching stems back to the lecturers' own research practice. Most universities in Vietnam lack research infrastructure like labs and information equipment, and many libraries are in poor condition. Many subjects are based only on outdated curricula. Many lecturers do not have their own research experiences. Only small research projects are generally carried out in universities. In "An Open Letter to the new Minister of MOET", Professor Ha Van Thinh wrote that "in the past five years, lecturers of HCMC National University had written only 1.7 articles on average, and only one research paper submitted to a global copyright organization had received a copyright."* This is a common problem of all universities in Vietnam, not only the problem of HCMC National University. The national science communities are gathered in the research institutes of the Vietnam Academy of Sciences and Technologies (VAST) and the Vietnam Academy of Social Sciences and Humanities (VASSH). Meanwhile, many university lecturers do not participate in any scientific discourse (Anon, 2006). Corresponding to this, international networking is also poor, caused not least by insufficient language capabilities. The latter is the main reason for failure to exploit the opportunities given by accessing the huge and relatively cheap Internet sources and communication platforms.

4. Sustainable Reforms through Action Research

The weaknesses and restrictions discussed above been deeply rooted for a long time in Vietnam's education system; they are revealed very clearly in all education levels. In the Vietnamese training establishment, there is not yet *a new learning culture*, called also a *future-oriented learning culture*, corresponding to the present level of development of science and technology as well as to

* Laodong Newspaper, No.181, July 03, 2006

the demands of the times. Firstly it must be affirmed that the traditional Vietnamese learning culture has two salient characteristics: it is scholastic and reproductive, and it serves the purpose of examinations almost exclusively. This learning culture hinders reform efforts being carried out actively in Vietnamese education, particularly in tertiary education. Of course, it is not too difficult to find out where the most pressing problem is and which models are suitable to apply. The most difficult thing is creating a proper learning culture. If the learning culture does not change—especially in tertiary education—the reform effort cannot be as effective as expected. Moreover, the achievement of the education system has not been able to meet the development requirements of the society in the context of globalization. As mentioned above, there is no shortage of suitable and future-oriented initiatives on reform. These initiatives are all able to meet the requirements of sustainable changes. Nevertheless, when implementing these tasks, we have to take into account the barriers of usual habits and behavior in Vietnamese traditional society.

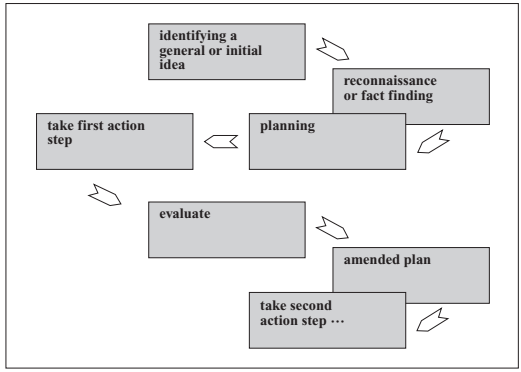
Under the conditions of national development and globalization pressures, all fundamental reforms must rapidly show their impact and effectiveness. Therefore, it will not be enough if after setting up reasonable and necessary reform targets we only wait for their slow and progressive realization through growing generations. Beyond that, we should be more active in implementing the reform targets: reforms must be implemented first where there are unsuitable routines and traditional sluggishness and where there are opportunities for new reform experiences and sustainable effectiveness.

Because such action plans require concrete actions by people, it will be unreasonable if at the beginning we design a plan and try to apply to the whole country. The most important task is to encourage as many as possible of those working in training establishments to have meaningful changes in their attitudes and behaviors suitable to the particularities of every specific domain.

For instance, if we want to effectively carry out sustainable reform in a central area of tertiary education, which is studying sciences scientifically in universities, we should have programs and plans which can meet the following conditions:

- Must be implemented in a certain location (university, department, and subject) and should be able to point out a clear action plan for all

Figure 3: Action Research



Source: Smith (2001)

participants.

- Could be implemented with current available conditions and human resources.
- Must be oriented directly to the most pressing problems about which nearly all members are concerned.
- Must be able to create a new studying habit which can be applied in all circumstances
- Must have a clear potential for sustainable development. First priority is not how to achieve the targets but how to get sustainable changes in attitudes, habits and actions.
- Must take into account complicated social issues, benefit conflicts among members, and how to link all the members and encourage them to contribute to their organization. Should also identify clearly the responsibilities and encourage studying activities for long term purposes.

Action research is a theory with an increasing impact on sustainable reform. This theory can satisfy all of the above criteria. It was first developed in the 1940s by Lewin, a German and American socio-psychologist. This theory focused on finding sustainable solutions to the problems of social research and reform. Lewin's viewpoint was that direct participants in the reforms must participate in an action program, in which action steps are planned carefully and comprehensively. Figure 3 shows all the steps in that process.

Each action has six factors, which are created successively and are related to one another. Observing the order of these steps will ensure achievement of the target. This theory is associated with learning through experience, elaborated by Dewey (1938) and later recognized by the education science with the planned social action model. Based on this theory, many research alternatives can be implemented to directly change the social activities. Moreover, it can be applied in all social fields (Zuber-Skerritt, 1996). While the theory of action research is not applied equally in all western countries as it has been largely preferred in the UK and Australia (Action Research Resources, 2007), it seems to be very effective in implementing reform projects in developing countries (Huizer, 1997).

This theory's special point, which helps distinguish it from traditional experimental social research, is that its research objects are not external passive objects; they are acting subjects who study their own activities themselves. In other words, the research subject systematically studies his or her own activities; the research objectives are the activities of the subjects who carry out this research, aiming at sustainably changing themselves and the action system in which they participate based on their expected targets. The basic schema describes the cycle of realizing research based on action research theory following the spiral in which each grade comprises six steps with the following contents (O'Brien, 1998).

- Step 1: A given situation should be changed, so it is studied by researchers or participants (or insiders) and then the core issue is identified and expressed clearly and exactly.
- Step 2: Collect information to be able to describe carefully the core of the research issue.
- Step 3: Discuss solutions and build a tool kit to evaluate; systematically study steps to solve the problem.
- Step 4: Test the most promising solutions.
- Step 5: Evaluate the achieved results together.
- Step 6: Analyze the achievements, find new problems to be solved in the next steps.

The next step will be a higher level in the spiral and another process will begin similarly. Action research occurs continuously in this pattern.

The techniques here are rather simple. The researchers do not study the actions and behaviors of the research objects (other people), and then based on research results explain and show the research objects what they should and should not do. Instead, the researchers—or the insiders—do the research about their own behaviors, actions, and problems and then find solutions to those problems. By learning how to solve their own problems, the researchers will be able to improve their own behaviors and actions with their own exclusive strategies. They do not need outside influence. Like in any other systematic and positive studying activities, results can be achieved only with certain conditions. The direct participants must have a certain autonomy and be equipped with basic professional qualifications, for example, methods for organizing gradual project implementation and systematic measures in supervising the process of project implementation. Indirect participants must actively support this process.

If the above-mentioned conditions are met, all the criteria of sustainable reform will be satisfied. Of course, this theory can only be applied to specific aspects or fields, where concrete experience can be learnt. This is also a issue of the theory of action research: at first it has only local influence. Like all other bottom-up strategies, it also faces the question of how to make the strategy's impact reach beyond the limit of direct participants. In contrast, all experience drawn from top-down reform indicates that such reforms may lead to structural changes or changes in actions and behaviors. However, such top-down reforms also reveal that stimulations from outside often meet obstacles and become ineffective where there exist sluggish conservative routines and ingrained behaviors. In such cases, there is no chance for "learning by doing" as indicated by the theory of action research.

The two reform orientations (top-down and bottom-up) are neither opposite nor exclusive to each other; they should supplement each other effectively in order that the reform can deploy its effect more widely. In addition, the bottom-up reform strategy, as mentioned in the theory of action research, needs to have appropriate conditions in terms of organization structure (the independence of each member, conditions and ability to approach information, current conditions to experiment with the reform and avoid unnecessary risks) to be able to develop itself.

The two basic factors of action research, to study a) systematically

through b) practicing research on subjects' own actions, are finding their ideal realization environment where just these purposes are institutionalized: in education institutions in general (Hermes, 2001) and in universities in particular. Finally, the real problems here are to teach and to learn with strict scientific methods and for both the lecturers and students to keep studying and researching continuously (Nguyen and Muszynski, 2004).

This is the most successful studying strategy developed so far. In the scope of this study, we will expect an improvement in studying method, not a good studying result. Strict scientific rules, systematic analysis, and correct answers covering effective and long-term studying models are all the strengths of the model discussed in this paper.

5. Framework Concept for Reforming Teaching and Learning Methods in Teacher Training

The set of principles of action research reveals a simple to understand strategy for sustainably reforming teacher training institutions in their core tasks: self-researching the subject's own actions in improving teaching and learning methods as a scientific learning process.

The research problem is not imposed from outside but is an issue coming from inside the participating actors. The action subjects are studying themselves and the research object is the subjects' own doing. The order of necessary steps in an action research project can be shown briefly as follows:

- Step 1: Define which current teaching/learning methods in a concrete study subject/course/study task are problematic from the viewpoints of the persons directly affected (students and lecturers) and what should be changed in which direction.
- Step 2: Find out what the main obstacles are to overcome the defined problems.
- Step 3: Decide what the new teaching/learning methods should look like, how they could be carried out, and how to analyze with scientific methods the experiences which are made and what could be a concrete and feasible reform project.
- Step 4: Carry out the reform project, which is simultaneously accompanied

by self-research based on scientific standards.

- Step 5: Evaluate the achieved results of the project in terms of: (i) the experiences and insights achieved and (ii) whether the empirical research results reflect the process of the project adequately. Is there any major difference between the experience of the participants and the scientific evaluation?
- Step 6: Determine what has been achieved by the results regarding the initial project goals. How can we improve the accompanying research in using additional or modified problem formulation or empirical instruments? What should be the connecting project?

As discussed briefly regarding action research projects, some conditions are required to implement such projects. Firstly, apart from the direct participation of students and lecturers, we need the supportive participation of authorities and service providers inside the university. This participation is especially important for sustainability. Another important prerequisite is a qualification of all directly affected persons. They have to learn beforehand how to recognize and apply:

(i) The basic methods to practice team activities in partial independence (the concrete targets are not pre-set, the implementation method is not regulated, and there is no continuous outside supervision),
(ii) Methods and techniques for empirical research on a basic level, and
(iii) Careful documentation of the project courses and easy-to-understand reporting for everyone outside the project.

The mentioned methods, instruments and techniques are easy to learn in a short time on the necessary basic level and can be made available for students and lecturers of all subject areas. By doing so, the benefits of the project will be much greater in comparison to the efforts undertaken. Thanks to their excellent learning capacity, scientific self-learning projects have the potential to enable any institution—especially teacher training institutions—to become a learning institution at all levels.

This paper is not the place to deal with the framework conditions for necessary content elements, pragmatism, and project design. These conditions should be considered and paid careful attention in the action research project (see for details in Nguyen and Muszynski, 2004). In order to have sustainable reform in tertiary education in Vietnam in general and in teacher training in par-

ticular, the following closing remarks should be focused upon.

- Self-researching reform projects suits well to developing countries like Vietnam because the process can be applied under limited conditions of equipment and qualified human resources, like the situation of teacher training institutions in Vietnam.
- Adaptability with current available and restricted conditions and little supplementary requirements is possible because these projects do not need great scientific efforts and achievements. The scientific results do not provide the learning success. Rather, the experiences from carrying out the project are important. Even errors and mistakes can be fruitful learning elements.
- Reform processes are always reflected in detail through the accompanying scientific research; the whole project always remains under the command of the participants. It is their own problem, addressed and controlled by themselves, which is a much better approach than being confronted with instructions from outside. It has been empirically established that externally motivated reform requests suffer from short expiry dates.
- Action research projects also bring multiple valuable sub-results. If these projects are implemented effectively, the reform work will bring students, lecturers, management, and service suppliers together so that effective and innovative communication structures will spread and a common understanding about the university's goals can be found.

Even if these projects have not been successful in all aspects at the beginning, the mid- and long-term learning achievements are still meaningful. Finally, it should be underlined again that the purpose of the projects described above is not to create a "definitely reformed" teacher training institution but an institution with better learning capacity—an institution that is able to conduct self-reforms continuously.

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Chapter 6
Micro-determinants of Household Welfare, Social Welfare, and Inequality in Vietnam

Tran Duy Dong

Abstract

This paper adopts the methodology of Wodon (1999) and applies it to the data from the Vietnam (Household) Living Standard Surveys in order to identify the micro-determinants of household welfare, social welfare, and inequality in Vietnam during the period 1993–2002. We find that, on average, Vietnamese people enjoyed an absolutely improved standard of living during the study period. At the same time, social welfare was also improved remarkably from 1993 to 2002 in absolute terms. However, the increase in income was accompanied by a rapid rise of inequality during 1993–1998, and a slight decrease in inequality during 1998–2002. The study reconfirms the determinants of the Vietnamese household welfare that were found in previous studies, in which occupation, educational level of the household head, and the geographical location where the households reside are still important factors.

1. Introduction

The Vietnamese government has notched up substantial achievements in economic growth as well as in the reduction of poverty. Those results have been achieved by the reform of a number of policies since the early of 1990s. Booming trade was marked by the deregulation in the trade regime in the early 1990s. The country actively joined free trade area and economic cooperation organizations such as the ASEAN Free Trade Area (AFTA) in 1995 and the Asia-Pacific Economic Cooperation (APEC) in 1998; Vietnam signed bilateral trade agreements with important partners like the European Union in 1992 and the United States in 2000. In addition, foreign direct investment also was legalized in 1987. The private sector was recognized as an important sector by the

enactment of the Law on Enterprise in 2000. The privatization process of state-owned enterprises, though it has not proceeded as expected, has still contributed positively to the corporate sector. In the agricultural sector, land rights were granted to individuals and farmers were allowed to trade their products in the market without any restriction. In addition, the government adopted policies for budgetary reform and financial sector reform in an attempt to produce macro-economic stability, which facilitates economic growth. With such reforms, Vietnam has achieved a remarkable average economic growth rate of 7.5 percent since 1990 (General Statistics Office [GSO], 2004). This growth has absolutely increased household welfare and reduced the poverty rate (Glewwe *et al*., 2000).

The impact of economic growth and trade liberalization on poverty and inequality as well as household welfare in Vietnam has been a topic of interest for many researchers. Notable studies include Glewwe *et al*. (2000), Justino and Julie (2003), Niimi *et al*. (2003), and Seshan (2005). A common point in the studies that have been completed is that they only cover the period 1993–1998 because they are based on two Vietnam Living Standard Surveys (VLSS): VLSS9293 and VLSS9798. In these surveys the evidence of the positive impact of economic growth on household welfare and equality was relatively clear to observe because in the early 1990s the country had just started its transition from a highly centrally planned economy, in which most Vietnamese people were living in poverty, to a socialist-oriented market economy. Starting in 1998, however, the impact of economic growth on household welfare and equality appears to be mixed and is more difficult to identify because from this time the government strongly deregulated a number of restrictive trade policies to implement its commitments for entry to the AFTA and to prepare to enter the World Trade Organization (WTO). Since 1998, in parallel with a more open trade regime, Vietnam has also had to deal with a number of trade claims from other countries, such as for an anti-dumping price of fish by the United States and for shrimp by the European Union. These claims are likely to have negative impacts on households.

No comprehensive academic analysis of this period is yet available. Furthermore, no study has yet been attempted to investigate the changes in social welfare induced by economic growth during the period 1993–2002. This

is an important area for policy makers; analysis of the impact of economic policies at different points in time on households would provide a basis for policy adjustment.

Such an analysis is conducted in this paper using the most up-to-date household data from VLSS9293, VLSS9798, and the Vietnam Household Living Standard Survey 2002 (VHLSS2002). The next section of this paper describes these surveys in detail. The third section of the paper investigates the micro-determinants of Vietnamese household welfare in 1993–2002 and highlights the differences in welfare received among different households and socio-economic groups. The fourth section uses the dominance theories of Lorenz and Generalized Lorenz, as well as the social evaluation functions to examine the dynamics of social welfare and trace out the sources of changes in equality. Some concluding remarks are provided in the last section.

2. The Vietnam (Household) Living Standard Surveys (VLSS and VHLSS)

Three surveys were carried out by the General Statistics Office (GSO) of Vietnam in the past fifteen years. The first survey was carried out in 1992–93 (namely, VLSS9293) by the cooperation of the State Planning Committee and the GSO, with financial contributions from the United Nations Development Program (UNDP) and the Swedish International Development Agency (SIDA) and technical assistance from the World Bank. This survey covered 4,800 households nationwide and included a household survey, a community survey, and a market price survey. In the household survey, topics covered included household size and composition, health, anthropometric measures of nutrition, education, housing characteristics, migration, employment, non-farm enterprises, agriculture, other income, expenditure and food consumption, ownership of consumer durables, and savings and credit.

The second survey was conducted between December 1997 and December 1998 (namely, VLSS9798) by the GSO, with financial support from the UNDP and SIDA and technical assistance from the World Bank. Like VLSS9293, this survey included a household survey, a community survey, and a market price survey. Different from VLSS9293, in VLSS9798 a

survey of health centers was added. The household questionnaire covered the same topics as the VLSS9293 and was administrated to 6,000 households. Interestingly, about 4,302 households which were interviewed in VLSS9293 again participated in VLSS9798, creating a panel data which is a good source for analysis.

The Vietnam Household Living Standards Survey was carried out in 2002 (VHLSS2002) by the GSO with financial support from the Japanese Bank for International Cooperation (JBIC) and technical assistance from the World Bank. The VHLSS2002 was divided into two parts. In the first part, a small questionnaire (36 pages) was administered to about 60,000 households and a large questionnaire (43 pages) was administered to a smaller sample of about 15,000 households. The large questionnaire has an expenditure module, allowing calculation of more reliable expenditure-based estimates of living standards. The large VHLSS2002 questionnaire is similar to the VLSS questionnaire except that some modules are not included (anthropometrics, migration, and savings and credit) and most of the other modules are simplified. Moreover, the household questionnaire in VHLSS2002 is also simplified compared with the previous ones. However, the household questionnaire in VHLSS2002 has a significant advantage in that it combines the main sections of two surveys: the household economic survey and the household living standards survey. Thus, indicators in VHLSS2002 are still compatible with previous surveys.

3. Micro-determinants of Household Welfare and Welfare Growth

3.1. Expenditure data

The following paragraphs explain briefly how total household expenditure is computed, based on data collected from the surveys.

Total annual expenditure consists of five components:

- Consumption expenditure on food and nonfood (nondurable goods)
- Value of home-product food consumed
- Value of goods in-kind received (such as food and housing) beside wages
- Estimated used value of durable goods owned by the household

- Rental value of the dwelling occupied by the household.

To collect information, the interviewer asks household representatives for their household expenditure on 45 food items and the value of foodstuffs produced and consumed by the household. It is noted that the Tet holidays, the Vietnamese New Year, are a special event for every household, and people therefore tend to spend more on these days (approximately 2 weeks). Since some goods consumed on these days are different from usual days, additional questionnaires are given to obtain information of expenditure on Tet holidays and other holidays (mostly weekend days). Expenditure on 68 nonfood items as well as expenditure on health, education and utility expenditure are also collected. In some cases, employees may also receive goods and services from their employer in addition to their wages. Such payments were also considered as expenditure and are added to consumption expenditure.

Durable goods, once purchased, will certainly increase the well-being of a household for a certain period of time. Of course, the well-being cannot be completely utilized in the year of purchase. This purchase value of the well-being (consumption) therefore should be divided for the years following the year of purchase, using depreciation rates. The depreciation rates are computed based on current value and purchased value. These rates are used to calculate the value of 13 different kinds of durable goods. Finally, the annual rental value of housing also makes up a large portion of expenditure and is added to the expenditure of households. Since the number of households which rent dwellings at a market rate is relatively small, for the sake of simplicity the annual rental value is assumed to be 3 percent of the current estimated value of the dwelling. Summing up the above consumption expenditures yields a good measure of household welfare. Because the price of a good differs across the regions within the country, total consumption expenditure is adjusted using a regional prices table. Finally, the real total expenditure is then divided by household size to obtain real per capita household expenditure.

3.2. Methodology

The model used is adapted from Wodon (1999). The determinants of household welfare[1] can be established by a multiple regression as follows.

$$\log (y_i)] = \beta_i X_i + u_i, \quad (1)$$

where $\log (y_i)$ is log of real expenditure per capita; and X_i are categorical variables presenting characteristics of households which likely affect the expenditure per capita[2].

According to Wodon (1999), due to the properties of the linear regressions, the expected consumption levels of households obtained by conditioning on the household's sample mean must equal the actual mean values observed in the sample. This then provides a good way to examine the impact of household characteristics and the return to these characteristics on growth. If X_M is denoted as the mean characteristics of all households, the growth in household per capita expenditure from time t to time $t+1$ can be decomposed as follows:

$$Growth \approx E^{t+1}[\log(Y_M)] - E^{t}[\log(Y_M)] = (\beta_M^{t+1} - \beta_M^{t}) X^{t}_{M} + \beta_M^{t}(X_M^{t+1} - X^{t}_{M}) + U. \quad (2)$$

In equation (2), $(\beta_M^{t+1} - \beta_M^{t}) X^{t}_{M}$ represents the impact of changes of returns to those characteristics; $\beta_M^{t}(X_M^{t+1} - X^{t}_{M})$ represents the impact of changing characteristics of the household.

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[1] Expenditure is chosen as proxy for household welfare because expenditure is a good proxy for permanent income and thus also for long-term average well-being (Balisacan et al., 2003). For example, a low-income household can withdraw its savings or borrow money to consume and maintain its relative living standard. In contrast, a high-income but highly indebted household has to cut down on part of its income to pay off the debt. Moreover, data on expenditure are less difficult to gather than those on income, especially for developing countries where self-employed individuals are reluctant to provide their earnings precisely. Thus, in this study, as notably used before, household expenditure per capita also is employed as an approximation for household welfare.

[2] In this paper, independent variables used include: (1) Sex of the household head (Male or Female); (2) Area in which household resides (Urban or Rural); (3) Regions (divided into 8 regions: Red River Delta, North East, North West, North Central Coast, South Central Coast, Central Highlands, South East, and Mekong River Delta); (4) Education level of household head (categorized in seven levels: Never, Primary School, Junior High School, High School, Technical Training, Vocational Training, and College or Higher); (5) Occupation of household head (categorized in seven kinds of jobs, including White Collar, Sales/Service, Agriculture, Skilled Worker, Unskilled Worker, and Other Not Working); (6) Ethnicity of household head (actually, there are 54 ethnic majorities in the country, but for the sake of simplicity, ethnicity is divided in three groups: Vietnamese, Chinese, and Others); (7) Religion of household head (like ethnicity, religion is classified into 3 main religious affiliations: Buddhist, None, and Others); and (8) Other variables such as age and age-square of household head as well as log of household size are also added.

3.3. Utilizing cross-sectional data for analysis

The cross-sectional estimates using data from VLSS9293, VLSS9798, and VLHSS2002 are shown in Table 1. There were no difference in expenditure between the households with male heads and the ones with female heads; the fact that the coefficients of household heads are male in all three years shows no statistical significance. Yet, the ethnicity of household heads appears to be an important factor.

The Chinese account for only a small portion of the population (1.85 percent in VLSS9293) but had higher living standards than did the Vietnamese. Specifically, households with heads who are Chinese spent 24 percent[3] more in 1993 and about 19.5 percent more in 1998 than households headed by Vietnamese. Households headed by minorities other than the Chinese had lower standards of living when compared to Vietnamese households.

It is unsurprising that we found higher spending in households located in the urban areas than those of the rural areas. Table 1 also highlights that people living in regions other than the North Central Coast, with the exception of the North West region and the Central Highlands region in 2002, enjoyed a higher well-being than those of the North Central Coast region; however, the degree of benefit diminished during the period 1993–1998 except for in the South East region. In detail, in 1993, expenditure per capita of households in the South East was 57 percent higher than those of the base region—the North Central Coast; in 1998, the difference was up to around 66 percent and about 50 percent in 2002. For the Mekong River Delta region, the expenditure of households in 1998 was still higher than that of the North Central Coast region but it decreased at its sharpest rate from 53 percent in 1993 to 25 percent in 1998. This decrease was probably due to the severe typhoon in late 1997, although the difference had recovered only slightly to 28 percent by 2002.

The results show the returns of education in a trend as expected: higher education levels correlate with higher standards of living. For example, in

[3] Since the dependent variable is in the form of a logarithm, the difference is *exp(coefficient)*. Here, exp(0.2145) =1.239, so that the difference is nearly 24 percent. Other comparisons are made in the same way

Table 1: Micro-determinants of welfare in Vietnamese households, 1993–2002

	1992–1993			1997–1998			2002		
	Coef.	**St. Err.**	**Mean**	**Coef.**	**St. Err.**	**Mean**	**Coef.**	**St. Err.**	**Mean**
HH Head Gender									
HH Head is Male	0.021	0.018	0.7312	0.022	0.0147	0.7293	-0.0094	0.0094	0.7638
(HH Head is Female)									
HH Head Ethnicity									
(Vietnamese)									
Chinese	0.2145**	0.0637	0.0185	0.1782**	0.047	0.0218	0.0008	0.0398	0.0071
Other	-0.2498**	0.0237	0.1177	-0.2862**	0.019	0.1165	-0.0303**	0.0117	0.138
Region									
Red River Delta	0.1176**	0.0205	0.24	0.0966**	0.0209	0.1958	0.1883**	0.0136	0.215
North East	0.0898**	0.0235	0.14	0.03124	0.024	0.1218	0.0321*	0.0143	0.1479
North West	0.1311**	0.0364	0.0267	-0.0741*	0.0375	0.0213	-0.2506**	0.0212	0.0351
(North Central Coast)									
South Central Coast	0.2197**	0.0296	0.0933	0.1068**	0.0244	0.1047	0.1225**	0.0166	0.0933
Central Highlands	0.3007**	0.0588	0.02	0.0637***	0.0365	0.046	-0.1004**	0.0208	0.0572
South East	0.4523**	0.0296	0.14	0.5041**	0.0232	0.2068	0.4055**	0.0166	0.1244
Mekong River Delta	0.4267**	0.0234	0.2067	0.2259**	0.0214	0.1853	0.2443**	0.0137	0.2132
Area									
Urban	0.3299**	0.022	0.2	0.3688**	0.0185	0.2883	0.6844**	0.0108	0.2339
(Rural)									
HH Head Education									
Never	-0.1815**	0.0257	0.3611	-0.1630**	0.0169	0.3962	0.0053	0.011	0.3207
(Primary School)									
Junior High School	0.0558**	0.0188	0.2338	0.0684**	0.0177	0.2052	0.0131	0.011	0.2429
High School	0.1919**	0.0336	0.0467	0.1834**	0.0283	0.055	0.0540**	0.0161	0.0779
Technical Training	0.1060**	0.032	0.0461	0.2128**	0.0305	0.067	0.0619*	0.0289	0.0237
Vocational Training	0.2811**	0.0334	0.0465	0.1466**	0.0294	0.0518	0.0041	0.0201	0.0393
University or Higher	0.4125**	0.0533	0.0216	0.4162**	0.0442	0.0338	0.0787**	0.0227	0.0368
HH Head Occupation									
White Collar	0.2158**	0.0256	0.1102	0.2285**	0.0275	0.0758	0.0029	0.016	0.0687
Sales/Service	0.1752**	0.0423	0.0304	0.2231**	0.0233	0.1057	0.0211	0.133	0.1047
(Agriculture)									
Skilled Worker	0.1615**	0.0452	0.0314	0.1219**	0.0235	0.1008	0.0119	0.0142	0.0979
Unskilled Worker	0.0707**	0.0271	0.0767	-0.0950**	0.0247	0.062	-0.0119	0.0161	0.0808
Other not working	0.0906**	0.0284	0.1067	0.0550***	0.024	0.1204	0.0051	0.0121	0.1329
Log HHsize	-0.2585	0.0175	1.501	-0.364**	0.0171	1.46	-0.2720**	0.0102	1.4106
HH Head age	0.0211**	0.0034	45.3438	0.0236**	0.0034	48.0128	-0.0042*	0.0019	47.55
HH Head age square	-0.00015**	3.6E-05	2271.64	-0.00018**	3.5E-05	2494.82	0.000037*	1.8E-05	2465.1
Constant	6.53**	0.0758		7.36**	0.0813		8.05**	0.0534	
	Obs: 4999, R-squared=0.46			Obs: 5999, R-squared=0.52			Obs: 29532, R-squared=0.36		

Note: Dependent variable is log of total expenditure per capita
:denotes significant level at 1%; *: denotes significant level at 5%; *: denotes significant level at 10%
- Regressions with robust standard errors.
Source: Author's calculations

1993, households with the heads completing a university or higher degree spent 51 percent more than those in which the heads only finished primary school. The same difference also was found in 1998. Less improvement was seen in households with the heads having a high school degree. They only spent 21 and

19 percent in 1993 and 1998, respectively—spending which was higher than those households with heads who only finished primary school. In 2002, these differences were still evident but the magnitudes were much smaller.

Usually, it is expected that people involved in white collar jobs or business work as well as skilled laborers have a higher standard of living compared with those engaged in agricultural and blue collar jobs. The findings of Vietnamese households during this period, without exception, support this expectation. As shown in Table 1, individuals living in households with a head who had a white collar job or a job related to sales/services had a higher expenditure per capita compared to those of the reference occupation—agriculture—and also benefited more than those living in households with a head working in other job categories. However, in 2002 the differences in spending between households with the head being farmers or working in the agricultural sector and other jobs were not evident. It is possibly the case that in 2002, households headed by farmers and other agricultural employees were gradually catching up with the expenditure levels of households of other occupational categories. However, in order to come to a precise conclusion, this finding should be further investigated by using panel data as well as incorporating data of the three surveys, which are estimated in the following sections.

It is worth noting that the "other not working" category in the regression includes not only the unemployed but also those who were retired and not working for any reason (e.g., illness, leave) at the time of interviewing. Hence, one may find that the households headed by individuals adhering to this group had higher living standards than those of the base category.

The age of the household head also affected the expenditure of that household, with higher spending for older household heads, but negative coefficients of *age_square* of the household head in the regressions imply that this disparity will actually decrease at a certain age, which is what we expected.

Importantly, one should be careful when interpreting negative coefficients of the variable *LogHHsize* without taking account of the estimate of equivalence scales as suggested by Deaton (1997). This does not mean that households with more members tend to have lower expenditure per capita than do those with fewer members: if we substitute total expenditure per capita with another welfare indicator and divide total household expenditure by "adult-

scale equivalents," the result is likely to change (Wodon, 1999; Glewwe et al., 2000).

3.4. Micro-determinants of expenditure growth

Table 2 presents micro-determinants of expenditure growth of the two periods 1993–1998 and 1998–2002 using (2) in the methodology based on the results of Table 1.

Table 2: Micro-determinants of expenditure growth

	Change 1993–1998		*Change 1998–2002*	
	Return	***Characteristics***	***Return***	***Characteristics***
HH Head Gender	**0.0007**	**-0.00004**	**-0.0229**	**0.00076**
HH Head is Male	0.0007	-0.00004	-0.0229	0.00076
(HH Head is Female)				
HH Head Ethnicity	**-0.005**	**0.001**	**0.0259**	**-0.00877**
(Vietnamese)				
Chinese	-0.0007	0.00071	-0.0039	-0.00262
Other	-0.0043	0.0003	0.0298	-0.00615
Region	**-0.0682**	**0.0239**	**-0.0086**	**-0.03409**
Red River Delta	-0.005	-0.0052	0.018	0.00185
North East	-0.0082	-0.00163	0.0001	0.00082
North West	-0.0055	-0.00071	-0.0038	-0.00102
(North Central Coast)				
South Central Coast	-0.0105	0.0025	0.0016	-0.00122
Central Highlands	-0.0047	0.00782	-0.0075	0.00071
South East	0.0073	0.03021	-0.0204	-0.04154
Mekong River Delta	-0.0415	-0.00913	0.0034	0.0063
Area	**0.0078**	**0.0291**	**0.091**	**-0.0201**
Urban	0.0078	0.02913	0.091	-0.02006
(Rural)				
HH Head Education	**0.008**	**0.0024**	**0.0193**	**0.0093**
Never	0.0067	-0.00637	0.0667	0.01231
(Primary School)				
Junior High School	0.0029	-0.0016	-0.0113	0.00258
High School	-0.0004	0.00159	-0.0071	0.0042
Technical Training	0.0049	0.00222	-0.0101	-0.00921
Vocational Training	-0.0063	0.00149	-0.0074	-0.00183
University or Higher	0.0001	0.00503	-0.0114	0.00125
HH Head Occupation	**-0.0149**	**0.0172**	**-0.0504**	**-0.0033**
White Collar	0.0014	-0.00742	-0.0171	-0.00162
Sales/Service	0.0015	0.01319	-0.0214	-0.00022
(Agriculture)				
Skilled Worker	-0.0012	0.01121	-0.0111	-0.00035
Unskilled Worker	-0.0127	-0.00104	0.0052	-0.00179
Other not working	-0.0038	0.00124	-0.006	0.00069
Log HHsize	**-0.1584**	**0.0106**	**0.1343**	**0.01798**
HH Head age	**0.1134**	**0.05632**	**-1.3348**	**-0.01092**
HH Head age square	**-0.0681**	**-0.03348**	**0.5414**	**0.00535**

Note: Total sum may not be equal due to rounding
Source: Author's calculations

According to the approximation in (2), change of return to characteristics equals to $(\beta_M^{t+1}-\beta_M^t)X^t_M$, and thus change of return to a characteristic during period 1993-1998 equals to the coefficient of that characteristic in 1998 minus the coefficient of that characteristic in 1993 and multiplied by the mean of that characteristic in 1993 (as shown in Table 1). Moreover, based on (2) we can see that the change due to change in characteristic equals to $\beta_M^t(X_M^{t+1}-X^t_M)$, and thus change in characteristic of a characteristic during the period 1993-1998 equals to the mean of that characteristic in 1998 minus the mean of that characteristic in 1993 multiplied by the coefficient of that characteristic in 1993. Calculations for other characteristics of period 1998-2002 are made in the same way.

From Table 2, some important things are noted. Most changes in expenditure per capita in eight regions were due to changes in the returns to living in different regions in both periods.

The same story held for education and occupation. Most changes in expenditure per capita associated with education and occupation of the household head were attributed to the change in returns to these characteristics rather than the changing of those characteristics. The results are understandable since over time more household heads completing a higher degree of schooling will put pressure on the wage market.

Similarly, the change in expenditure attributed to gender and ethnicity also came mostly from changes in the returns to those characteristics

3.5. Pooling data for analysis

From the regressions of cross-sectional data, we can only examine the determinants of household expenditure in a single year. By pooling samples collected from the same population at different periods, we can earn more accurate estimators and test statistics with more power when compared to samples of single cross-sectional data because we can take advantage of the large sample size at different points in time. The VLSS9293, VLSS9798, and VHLSS2002 covered 4,799, 5,999, and 29,532 households, respectively, so that the pooled sample covers 40,330 households in three years, which is a large sample for deriving more precise estimators.

As can be seen in Table 3, which reports the results of the regres-

Table 3: Results of regression using the pooled data of VLSS9293, VLSS9798, and VHLSS2002

	Combined data 1993–2002		
	Coefficient	**Robust Std. Err**	**t-value**
HH Head Gender			
HH Head is Male	-0.0215**	0.0062	-3.46
(HH Head is Female)			
HH Head Ethnicity			
(Vietnamese)			
Chinese	0.0168	0.0263	0.64
Other	-0.0673**	0.0078	-8.57
Region			
Red River Delta	0.1477**	0.009	16.39
North East	0.0075	0.0094	0.8
North West	-0.1935**	0.0145	-13.29
(North Central Coast)			
South Central Coast	0.1089**	0.0112	9.72
Central Highlands	-0.0412*	0.0139	-2.96
South East	0.3787**	0.0105	35.98
Mekong River Delta	0.2322**	0.0089	25.83
Area			
Urban	0.6359**	0.0069	91.18
(Rural)			
HH Head Education			
Never	-0.0593**	0.0071	-8.3
(Primary School)			
Junior High School	0.0082	0.0072	1.14
High School	0.0836**	0.011	7.61
Technical Training	0.0421**	0.0148	2.84
Vocational Training	0.0406**	0.0129	3.15
University or Higher	0.1359**	0.0158	8.58
HH Head Occupation			
White Collar	0.0856**	0.0103	8.27
Sales/Service	0.0848**	0.009	9.41
(Agriculture)			
Skilled Worker	0.0709**	0.0092	7.96
Unskilled Worker	0.0047	0.01	0.47
Other not working	0.0259**	0.0081	3.19
Log HHsize	-0.2949**	0.0063	-46.57
HH Head age	0.0073**	0.0012	6.04
HH Head age square	-0.00005**	0.000012	-4.68
Constant	7.73**	0.0313	246.32
	R-squared = 0.35; No of Obs: 40330		

Note: Dependent variable is total consumption per capita
*: denotes significant at 5%; **: denotes significant at 1%; ***: denotes significant at 10%
- Regressions with robust standard errors
Source: Author's calculations

sions, the findings are consistent with those obtained in cross-sectional regressions in terms of the sign as well as the magnitude of each categorical variable: occupation, education of the household heads, and geographical locations were important determinants of expenditure deriving from economic growth. The

type of occupation and level of education of the head defined the degree to which the household gained benefits from economic growth.

There is only difference in that households headed by males had lower standards of living compared to those headed by females. This result differs from the finding in the cross-sectional regressions with no statistical significance for this variable, suggesting that the returns to this category fluctuated over time.

3.6. Which characteristics determine the consumption of households in different socio-economic groups?

By using an econometric method, we are able to find out which characteristics determine the differences of expenditure between the poor and the rich households, or in other words, among socio-economic groups during the period.

Since VLSS9293 contains communal characteristics of the rural areas only, there is no such data on the urban areas and thus we cannot take advantage of the panel data. In the VLSS9798 commune data were collected in both rural and urban areas, so in this section only data from the VLSS9798 are used to investigate the determinants of household welfare of different socio-economic households. The regression results with the addition of communal characteristics[4] are put in the same table for analysis.

Table 4 reports the results of the regressions of each quintile. One important finding is that for poor households (households belonging to the 1st and 2nd quintiles) and the middle class (the 3rd quintile), factors, such as the level of education of the head and the region where the household resides, as well as communal facilities, such as market and electricity, are important for determining its living standard. For rich households (households belonging to

[4] Commune near a factory (apply value 1 for a commune which has at least one factory nearby; 0 if there no factory near the commune); Commune having traditional handicraft (apply value 1 for a commune which has traditional handicraft; 0 if there is no traditional handicraft); Road passable by cars (apply value 1 for a commune if there is a road that cars can use; 0 if there is a road but cars cannot use it); Electricity (apply value 1 if commune has electricity; 0 if electricity is not supplied in the commune); Market (apply value 1 if there is at least one market in the commune; 0 if there is no market in the commune); and Water-way transportation (apply value 1 if the commune has water-way transportation; 0 if there is no water-way transportation).

Table 4: Results of regressions for different quintiles of expenditure

Category	*Quintile 1 (Poorest)*	*Quintile 2*	*Quintile 3*	*Quintile 4*	*Quintile 5 (Richest)*
HH Head Gender					
HH Head is Male	0.0141	-0.0062	0.0016	-0.0146	-0.0099
(HH Head is Female)					
HH Head Ethnicity					
(Vietnamese)					
Chinese	-0.1233	0.0473	0.0177	0.0260	0.1072
Other	-0.0552**	-0.0019	-0.0361**	-0.0125	-0.1085**
HH Head Religion					
Buddhist	-0.0185	0.0049	0.0137	0.0105	-0.0371
(None)					
Other	0.01	-0.0055	-0.0096	0.0098	0.0059
Region					
Northern Uplands	-0.0095	-0.0151	-0.0044	0.0098	-0.1318*
Red River Delta	-0.0088	0.011	0.0236*	0.0179	-0.0644
(North Central)					
Central Coast	-0.0721*	-0.0035	-0.0115	0.0131	0.0127
Central Highlands	-0.1441**	0.0124	0.0226***	0.0242	0.014
South East	0.0592	-0.0179	0.0147	0.0340*	0.0646
Mekong River Delta	0.0686***	-0.0247***	0.0294*	0.0282***	0.086
Area					
Urban	0.0084	-0.0154	0.0022	0.0044	0.0438
(Rural)					
HH Head Education					
Never	-0.060**	-0.0139	-0.0151***	-0.0234*	-0.035
(Primary School)					
Junior High School	0.0158	0.0023	0.0004	0.0077	-0.0108
High School	0.0683*	0.0169	-0.0004	0.0174	0.0850***
Technical Training	0.0444	0.0076	0.0207	0.0226	0.0849***
Vocational Training	0.0408	0.0269***	0.0045	0.0024	0.067
University or Higher	-0.1116*	0.0456	0.0652*	0.0375	0.1149*
HH Head Occupation					
White Collar	0.0241	0.0162	0.0163	0.0287*	0.0398
Sales/Service	0.0425	0.0272*	0.0164	0.0116	0.0718*
(Agriculture)					
Skilled Worker	0.0384	-0.0057	-0.0015	0.0294*	0.0439
Unskilled Worker	-0.0124	0.011	-0.0202	-0.0178	-0.0065
Other not working	0.0304	0.0209***	0.0006	0.0078	0.0592
Log HHsize	-0.0846**	-0.0206*	-0.0163*	-0.031	-0.1328*
HH Head age	0.0059	0.0002	0.0035**	0.003	0.0088
HH Head age square	-0.00004	-2.64E-06	-0.00003**	-0.00003	-0.00009***
Commune characteristics					
Factory nearby commune	-0.0154	0.0203**	0.0130*	0.0027	-0.0262
(No Factory)					
Traditional handicraft	-0.0398*	0.0022	-0.0033	0.005	-0.0347
(No traditional handicraft in commune)					
Car passable asphalt road	0.0145	-0.0009	0.0067	-0.0018	-0.0219
(No car passable road)					
Market	0.0449**	0.0096	0.0123***	0.0049	0.0008
(No market)					
Electricity	0.0783**	0.0104	0.029*	0.0131	0.0426

(No electricity)					
Water-way transportation	0.0335	0.0243*	-0.0182**	-0.015	-0.1144
(No water way)					
Constant	6.95**	7.4**	7.5**	7.9**	8.4**
R-square	0.2	0.08	0.11	0.08	0.14

Note: Dependent variable is log of total consumption per capita
*: denotes significant at 5%; **: denotes significant at 1%; ***: denotes significant at 10%
- Regression with robust standard-error
Source: Author's calculations

the 4th and 5th quintiles) the level of education and type of job of the head are more important in defining their living standards. Communal characteristics, such as the availability of a market or electricity, play no role in affecting their expenditure because most of the rich are living in urban areas, so facilities, such as electricity and market, are common, while in rural area those facilities are important. For example, in the poorest quintile, households headed by an individual who has completed high school spent 7 percent more than households with the head completing only primary school. Interestingly, in the poorest quintile households headed by someone having a university or higher degree had a lower standard of living compared to those of households headed by someone having only a primary school degree. Similarly, households living in areas where there was a market and electricity spent 4.6 percent and 8.1 percent more, respectively, than households residing in areas without such facilities.

Regarding ethnicity, most quintiles show that households with the head being of an ethnic minority had lower standards of living when compared to those headed by Vietnamese. For all quintiles, gender and religion of the head show no impact on the expenditure of the households.

Importantly, when one looks at the results, one may notice that in some cases, the R-squared values are somewhat small. Statistically, the value of R-squared represents how much variance of the dependent variable can be collectively explained by the independent variables. Since the number of households included in VLSS9798 is 5,999 households, but only 4,818 households qualified for the test, these households were divided into 5 small samples based on expenditure quintiles and then the regressions were done with each sample. This way of regression further lowered the number of households involved in

each regression, which then obviously affected the precision of the regressions. This suggests that a more adequate answer about the determinants of expenditure per capita of each expenditure quintile can only be obtained from much larger datasets, which we can obtain in the cross-sectional regressions (Vijverberg, 1998 and Tran, 2000).

3.7. Who benefits from economic growth?

For a poor country like Vietnam where the disparity of development between rural and urban areas is huge, it is expected that some determinants of expenditure in rural areas will differ from those of urban areas. For example, in urban areas, facilities like electricity, roads and telecommunications are common, but for rural areas, especially for mountainous areas, accessing those kinds of facilities is not easy, not only because of their limited financial capacity but also because of the shortage of those facilities, which is likely affected by the policies of the government. Therefore, it is essential to find out which characteristics determine the consumption of the rural areas (in which most of the poor reside), which then will help us to draw up policy suggestions. Moreover, in previous sections, we can only indicate the determinants of consumption of households or in other words, we could only state that the living standard of households attached to certain characteristics of the heads was higher or lower when compared to other households. One thing we have not still investigated is what kind of households gained more benefit from economic growth (or in other words, enjoyed improved consumption) when compared to other households during the period. Since 4,302 households were interviewed in both VLSS9293 and VLSS9798, this question can be answered by regressing the change of real expenditure per capita between two years 1993 and 1998 on the pre-determined characteristics of households in 1993. In order to have a more insightful image, some different variables from the previous sections are added into regressions including:

- Number of HH members working in exporting industry is total number of members of each household working in exporting industry[5]
- Number of HH members working in importing industry is total number of members of each household working in importing industry[6]
- Number of HH members working in service industry is total number of members of each household working in service industry[7].

Table 5: Results of panel data regression for rural and urban areas

	Rural areas		*Urban areas*		*All sample*
	Coefficient (Model 1)	*Coefficient (Model 2)*	*Coefficient (Model 1)*	*Coefficient (Model 2)*	*Coefficient*
HH Head Gender					
HH Head is Male	-0.0546**	-0.015	-0.0322	-0.0193	-0.0399**
(HH Head is Female)					
HH Head Ethnicity					
(Vietnamese)					
Chinese	-0.1211	-0.1001	-0.0541	-0.0062	0.0025
Other	-0.0571*	-0.04987*	-0.0206	-0.0605	-0.0814**
HH Head Religion					
Buddhist	0.0594**	0.0566**	-0.1149**	-0.1279	0.0203
(None)					
Other	-0.0545***	-0.0594*	-0.1111	-0.1093	-0.0543*
Region					
Northern Uplands	-0.0739	-0.0724*	-0.0618	-0.0351	-0.0366
Red River Delta	0.0306	0.0049	-0.1887**	-0.1487*	0.0005
(North Central)					
Central Coast	-0.0925**	-0.0863**	-0.1361*	-0.0659	-0.0412
Central Highlands	0.0386	0.0699	(dropped)	(dropped)	0.061
South East	0.1281**	0.1486**	-0.0276	0.0639	0.134**
Mekong River Delta	-0.1431**	-0.1291**	-0.1848*	-	-0.1573**
				0.1220***	
HH Head Education					
Never	0.0068	0.0049	0.0168	0.0149	-0.0031
(Primary School)					
Junior High School	0.0572**	0.0591**	0.1177*	0.1246*	0.0786**
High School	0.0871*	0.0643***	0.1429*	0.1309***	0.0930**
Technical Training	0.0878**	0.0896**	0.0741	0.0689	0.0990**
Vocational Training	-0.01	-0.0097	0.0298	0.0151	0.035
University or Higher	0.3529**	0.3760**	0.1862**	0.1776**	0.274**

[5] Export industry includes agriculture, fishing, food processing, garments and textiles, shoes and leather, wood products and furniture, and electrical and electronic products.

[6] Import industry includes tobacco, paper, coke, petroleum products, chemicals and chemical products, rubber and plastics products, other non-metallic mineral products, basic metals, fabricated metal products, machinery and equipment, and transportation vehicles.

[7] Service industry includes forestry, mining, printing, and other services.

HH Head Occupation					
White Collar	-0.0508***	-	0.0602	-	-
Sales/Service	-0.1199***	-	0.0801	-	-
(Agriculture)		-		-	-
Skilled Worker	-0.1427**	-	0.0987	-	-
Unskilled Worker	-0.0037	-	0.006	-	-
Other not working	-0.0212	-	0.1046***	-	-
Log HHsize	0.1397**	-	0.1519**	-	-
HH Head age	0.0036	0.0097*	-0.0045	-0.0031	0.0078*
HH Head age square	-0.00003	-0.0001**	0.00003	0.000028	-0.00008*
Commune characteristics					
Factory nearby commune	-0.0257	-0.0301	-	-	-
(No Factory)					
Traditional handicraft in commune	0.0138	0.0106	-	-	-
(No traditional handicraft)					
Car passable road	0.1205**	0.1120**	-	-	-
(No car passable road)					
Market	-0.0064	-0.0114	-	-	-
(No market)					
Electricity	0.0078	0.0195	-	-	-
(No electricity)					
Cultivated land per capita	-0.00004**	-0.00004**	-	-	-
Trade variables					
Number of HH members working in export industry	-	0.0275**	-	0.0197	0.0223**
Number of HH members working in import industry	-	-0.0036	-	-0.0089	0.004
Number of HH members working in service industry	-	-0.011	-	0.0111	0.0185***
Constant	-0.0118	0.0082	0.4159*	0.5358**	0.1347*
No. of Obs.	3494	3389	808	779	4168
R-squared	0.1052	0.096	0.095	0.065	0.063

Note: Dependent variable is log of change of real total consumption per capita
*: denotes significant at 5%; **: denotes significant at 1%; ***: denotes significant at 10%
- Since there are no urban data on Central Highlands in VLSS9293, it is dropped from the regression in the urban areas.
- Regressions with robust standard error
Source: Author's calculations

3.7.1. In rural areas

As can be seen in Table 5, in the rural areas households with the head having a higher level education improved their living standard by a greater margin from 1993 to 1998 than those where the household head had a lower level of education. For example, households headed by individuals having a university or higher degree improved their expenditure 42 percentage points[8] *ceteris*

[8] Exp(0.3529)=1.423. Since the dependent variable is log of the change in expenditure between two years, the improvement is about 42 percentage points. Other comparisons are done in the same way.

paribus higher than those headed by someone having a primary school degree.

Regarding region, households situated in the South East regions experienced improvement in consumption 13 percentage points more than households in the reference region—the North Central region. Those households in the Mekong River Delta improved their standard of living 15.4 percentage points less than households in the North Central region, which is consistent with what we found in the previous sections.

Turning to occupation of the household head, we find that households with the head having a job such as white collar, skilled worker, or work in the sales/service sector and being skilled workers improved their standards of living less than those involved in the agricultural sector in both years. In detail, households with the head involved in agricultural jobs improved their expenditure 5.2, 12.7, and 15.3 percentage points more than those with the head having a white collar, skilled and sales/services job, and being skilled laborers, respectively. This means that during period 1993–1998, economic growth rewarded more benefit for the farmer and those working in the agriculture sector. This still appears to be a good finding since most households involved in agriculture were poor.

Other findings are that households headed by a female improved their welfare more than those headed by a male. Households headed by ethnicities other than Chinese experienced a lower improvement in welfare when compared to those headed by the Vietnamese.

Regarding religious characteristics, those households headed by someone adhering to no religion improved their welfare 6.1 percentage points less than those with the head adhering to Buddhism, but 5.6 percentage points more than those with the head adhering to a religion other than Buddhism.

Turning to communal characteristics, only the coefficient of the road passable by cars variable shows a positive statistical significance, meaning that individuals residing in communes having at least one road passable by car improved their welfare 12.8 percentage points more than those living in communes without any road passable by car. This is understandable because communes with roads passing through have more chances to trade with other communes.

Interestingly, communes with more cultivated land per capita had a lower standard of living, which is contrary to the conventional thought that because households in rural areas given more cultivated land can diversify their

crop as well as increase their output, they should improve their living standard more than those with less cultivated land. This finding is difficult to interpret on the face of the data.

3.7.2. In urban areas

Regarding education and region characteristics, findings are consistent with those found in rural areas. However, there were differences in that in urban areas, occupation, ethnicity, and religion of the head of households showed no statistical significance in the period 1993–1998. The exception was households with the head adhering to Buddhism, which improved their welfare less than those with the head adhering to no religion.

Trade variables are presented in Model 2. Note that, in Model 2, some variables (i.e., *hhsize* and *occupation of HH Head*) are dropped from the regression because they likely auto-correlate with the variable *number of household members*, which would lead to inconsistent results if included.

The results show that there was strong impact of trade liberalization on household welfare. As is evident, trade liberalization actually rewarded greater benefits to those working in the exporting industries as both coefficients of *Number* of *HH members working in the exporting industry* in the regression with rural area sample and all sample are statistically significant at 1 percent. On average, those working in the export industry increased 2.75 percentage points from 1993 to 1998. This result is expected because the export turnovers increased remarkably from 1993 to 1998, from US$4 billion in 1994 to US$9.4 billion in 1998 (GSO, 2001), which certainly brought positive effects to those people working in the industry. Also, there is evidence that those working in the service sector also improved their well-being from 1993 to 1998. Meanwhile, there is no evidence of the improvement for those people working in the importing sector.

4. Economic Growth, Social Welfare, and Equality

4.1. Income data and related issues

Household income in these surveys came from five main sources: wages, agriculture, non-farm self employment, remittances, and other incomes.

Wage incomes include cash and in-kind revenues that household members received from both main and secondary jobs during the most recent 12 months. Agriculture income comes from farm and non-farm work, in which non-farm work includes producing fishery and other water products as well as processing crop products. Because in some cases, cost and revenue from agricultural work are calculated in quantity and not in cash as normally is the case, they were then converted into Vietnamese dong using the respective prices collected by the price questionnaires. Income from non-farm self employment was collected from data on non-farm self employment. Remittances were collected based on the questionnaires on assistance received by household members during the most recent 12 months. Finally, other income includes income from government subsidies, pensions, scholarships, insurance payments, and interest.

If income is to be used to compare social welfare at different points of time, the income used for analysis should be real income. To make income of different years comparable, household income from the three surveys first is divided by the monthly overall price index at January 1998 prices. Moreover, in one survey, the prices were different among regions, thus the income once again is deflated by the regional price indices, which were obtained in the price questionnaires, to derive real income. The real income of a household then is divided by its number of household members to obtain real income per capita.

In many studies because of the shortage of data, gross income at household level was adopted to examine the changes of inequality and well-being of households. However, this method may lead to incorrect estimates since households differ from one another in size as well as composition. Thus, it is difficult to identify whether a small household with lower income is poorer than a large household with higher income. The more accurate judgment should be based on real income per capita. Luckily, in these surveys, data are collected from each household member, and thus we can use real income per capita, which is calculated as discussed above, for the purpose of ranking the levels of household welfare.

Nevertheless, as pointed out by Deaton (1997), and Chatterijee *et al*. (2003), using real income per capita as a unit for welfare comparison, although

appearing more advantageous when compared to unadjusted income (i.e., gross income), is still likely to provide inappropriate results since the needs of household members are distinctive from each other if one classifies them by characteristics such as sex or age. The problem is completely resolved if an equivalent-adult scale is used to adjust real income.

In practice, equivalent-adult scales were employed in many studies using various methods, such as the consumption pattern or nutrition requirements. Unfortunately, to my best knowledge, no equivalent-adult scale has been applied in Vietnamese studies, and constructing a new equivalent-adult scale is beyond the scope of this study. Thus, I assign the same weight to each household member or in other words, weight equal to 1 assigned for each household member. The income used for analysis is real income per capita and the deciles used in the analysis represent 10 percent of the population, not 10 percent of the households.

4.2. Methodology

In contrast to the previous section, income data of the surveys are taken advantage of to identify the changes of inequality among social economic groups and then an attempt is made to investigate the changes of level of social welfare by both ordinal and cardinal methods. The former method is based on the dominances of ordinary Lorenz and general Lorenz curves, while the latter follows the social evaluation function, which provides the complete welfare ordering of income distributions. Moreover, with the help of the cardinal method, the sources of the changes of level of social welfare which come from inequality and mean income effects are brought out. In this paper, social welfare is measured by income. Thus, strictly speaking, it refers to economic welfare.

The method for ranking a pair of income distributions with the same mean based on welfare grounds was introduced by Atkinson (1970). According to his study, of the two income distributions with the same mean income, the distribution of the dominating Lorenz curve has a higher level of per capita social welfare. It means that a Lorenz curve dominates the other Lorenz curve if its opposition is nearer the egalitarian curve. This expression can be described by the theorem below.

Theorem 1: Given Z(y) and Z'(y) are two income distributions with the same mean income [9] μ and have density functions z(y) and z'(y) respectively, in the interval , $0 \le p \le 1$, we have:

$$L_Z(p) \ge L_{Z'}(p) \Leftrightarrow \int_0^\infty u(y)z(y)dy \ge \int_0^\infty u(y)z'(y)dy \quad (3)$$

for all utility function satisfying $u'(y) > 0$ and $u''(y) < 0$[10], where L_Z and L_Z' are Lorenz curves constructed from distribution $Z(y)$ and $Z'(y)$, respectively.

However, in reality, the application of this theorem appears to be limited because we are usually more interested in comparing the social welfare of two societies at a given point in time, or investigating welfare changes of a society over time. The mean incomes are not likely to be the same in these situations. In addition, the ordinary Lorenz cannot accurately explain the welfare ordering of the two distributions if their Lorenz curves cross each other. The reason is simply that we may find two concave utilities which then bring about different orderings.

In order to rank distributions with different mean incomes, Theorem 1 was revised by Shorrocks (1983) based on the generalized Lorenz (GL) curve. If the Lorenz curve of a distribution with mean μ is L(p) then the GL of that distribution is defined as μ L(p). Theorem 2 can be stated as follows.

Theorem 2: Given Z(y) and Z'(y) are two income distributions with the mean income μ' and and have density functions z(y) and z'(y) respectively, in the interval $0 \le p \le 1$, we have:

$$\mu L(p) \ge \mu' L(p) \Leftrightarrow \int_0^\infty u(y)z(y)dy \ge \int_0^\infty u(y)z'(y)dy \quad (4)$$

for all strictly concave utility functions.

While the GL curve dominance can resolve the limitation of the ordinary Lorenz curve in comparing two distributions with different mean incomes, it still cannot completely resolve the remaining limitation of the ordinary Lorenz curve, i.e., the intersection of the two Lorenz curves, because it is possible that GL curves may also cross each other at other points, thereby generating

[9] It is noted that the theorem is true when the dominating Lorenz curve has a higher level of mean income.

[10] In assumption of the view point of an income seeking and inequality adverse person.

other different welfare rankings of the two distributions. Thus, one important point is worth noting that both the ordinary Lorenz and the generalized Lorenz curves provide only partial ordering of income distributions. However, there is a difference between the two curves in that the ordinary Lorenz curve provides the relative economic positions among population groups (the poorest to richest group), while the generalized Lorenz curve presents the absolute economic positions of the same population.

Because both the Lorenz and GL curves can provide only partial welfare ordering of income distributions, we must rely on a cardinal social evaluation function through assigning specific values to all possible income distributions in order to obtain a complete ranking based on welfare grounds. The abbreviated social evaluation function was introduced to help evaluate the social welfare with small arguments that summarize the complete income distribution. The function is formed as:

$$v = v(\bar{y}, \phi), \tag{5}$$

where $\bar{y}$ is the average income of the society, and $\phi = \phi(y_1, y_2 ... y_n)$ is the measure of inequality. Equation (5) satisfies the following conditions:

$$\frac{\partial v}{\partial \bar{y}} > 0 \text{ and } \frac{\partial v}{\partial \phi} < 0 \ . \tag{6}$$

The conditions provided in (6) imply that when the average income increases, social welfare increases holding inequality unchanged; and holding the average income unchanged, when inequality increases, social welfare decreases.

Sen (1976) introduced a social evaluation function (SEF) which shows the relationship between the average income of a society and its inequality indicator, which is represented by the Gini coefficient as follows.

$$v = \bar{y}(1 - T), \tag{7}$$

where T is the Gini coefficient of the income distribution. Equation (7) also satisfies the conditions in (6).

Therefore, we can investigate the changes of the social welfare over time by differentiating equation (5) with respect to

time t to get $\frac{dv}{dt} = \frac{\partial v}{\partial \bar{y}} \frac{d\bar{y}}{dt} + \frac{\partial v}{\partial \bar{\phi}} \frac{d\phi}{dt}$.

If the same derivation is applied to equation (7), we obtain:

$$\frac{dv}{dt} = (1-T)\frac{d\bar{y}}{dt} - \bar{y}\frac{dT}{dt}. \quad (8)$$

For the changes between two discrete points in time, equation (8) can be approximated as follows.

$$\Delta v \approx (1-T)\Delta \bar{y} - \bar{y}\Delta T, \quad (9)$$

where $\Delta v = v_t - v_{t-1}; \Delta \bar{y} = \bar{y}_t - \bar{y}_{t-1}$, and $\Delta T = T_t - T_{t-1}$.

The former part of equation (9) denotes the changes of social welfare due to the changes of efficiency, and the latter part presents the changes due to changes of equity.

4.3. Empirical results and analysis

4.3.1. Ordinary Lorenz curve

First, it is necessary to reiterate that in this study, we constructed the Lorenz curve based on cumulative shares of income per capita in the various deciles of population instead of cumulative share of income as an ordinary Lorenz curve.

Table 6: Ordinates of ordinary Lorenz curves

Decile	*Cumulative income (%) per capita*		
	1993	*1998*	*2002*
Lowest	1.51	1.81	2.23
Second	4.94	4.97	5.97
Third	9.62	9.16	10.77
Fourth	15.39	14.31	16.55
Fifth	22.33	20.57	23.39
Sixth	30.61	28.15	31.38
Seventh	40.5	37.39	40.85
Eighth	52.58	49.08	52.53
Ninth	68.21	64.92	67.97
Top	100	100	100
Gini	***0.38***	***0.45***	***0.41***

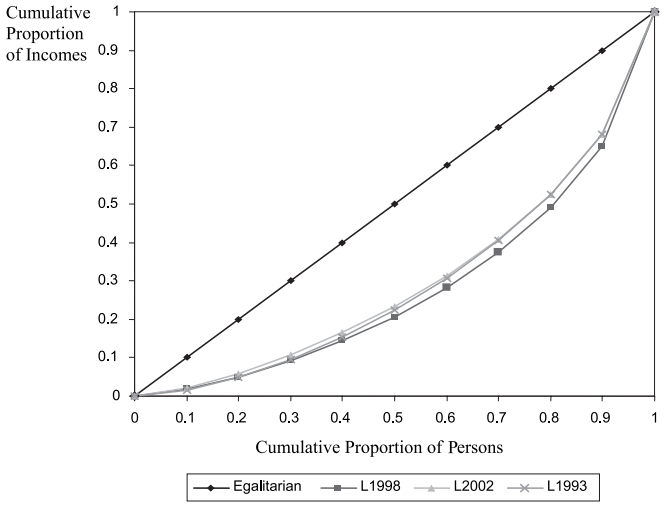
Source: Author's calculations

Table 7: Relative income shares

Decile	*1993*	*1998*	*2002*
Lowest	1.51	1.81	2.23
Second	3.43	3.17	3.73
Third	4.69	4.19	4.8
Fourth	5.77	5.15	5.78
Fifth	6.94	6.26	6.84
Sixth	8.28	7.59	7.99
Seventh	9.89	9.23	9.47
Eighth	12.09	11.69	11.68
Ninth	15.63	15.84	15.44
Top	31.79	35.08	32.03

Source: Author's calculations

Figure 1: Ordinary Lorenz curve



Source: Author's calculations

In order to build the Lorenz curve, we first calculate the sum of real income per capita of each decile. After having all the sums of the deciles, we obtain the total sum of cumulative income per capita by adding the sum of real income per capita of all quintiles.

The sum of real income per capita of each decile is then divided by the total sum of cumulative income per capita to obtain the real income per capita share of each decile. The share of each decile then is cumulatively added

from the poorest to the richest decile to form Table 6. Based on Table 6, we can easily draw the ordinary Lorenz curve, which is described by Figure 1.

From Table 6, if we look at the Gini coefficients of three years, we can see that inequality increased sharply from 1993 to 1998 but declined considerably from 1998 to 2002. This means that in 1993 and 2002, generally the relative position of the bottom 90 percent of the population was better off when compared to that of 1998 with the only exception being for the lowest decile, for which the income share was lower in 1993 when compared to that of 1998 (Table 7).

For social welfare ranking, because the mean income changed across the period, we are unable to make any judgment on the social welfare among these years if we only base this on the dominance of the ordinary Lorenz curves (Theorem 1). However, we can draw some general statements on inequality from the ordinary Lorenz curves.

Figure 1 shows that the Lorenz curves of the year 2002 absolutely dominated those of the year 1998. Thus, we can conclude that inequality in 2002 was greatly improved when compared to that of 1998 by any inequality measure which satisfies the Pigou-Dalton transfer condition. Note that, Pigou-Dalton transfer sensitivity implies that under this criterion, the transfer of income from the rich to the poor reduces the measured inequality. While the Lorenz curve of 1993 dominates that of 1998 from the 2nd to 10th deciles and only crosses at the bottom decile, there is also no doubt that inequality in 1993 was lower than that of 1998 by any inequality measure which satisfies the transfer condition. For the two years 1993 and 2002, since the Lorenz curve of 2002 dominates that of 1993 up to the 5th decile but is dominated by 1993 at the remaining deciles, the inequality comparison of the two curves can be judged only by looking at the size of their Gini coefficients.

For more details of the inequality comparison, we must look at Table 7, which presents the relative income share of different population deciles. For the top decile, the relative income share increased sharply from 31.79 percent in 1993 to 35.08 percent in 1998 but decreased to 32.03 percent in 2002, while the bottom decile experienced an increased though modest trend across the time. For the remaining deciles, the relative incomes decreased from 1993 to 1998, but then increased slightly.

Because the mean income changed during this period, we cannot

compare the social welfare of these years using the ordinary Lorenz curve. Thereby, in order to evaluate social welfare we must rely on the GL curve discussed in Theorem 2.

4.3.2. Generalized Lorenz (GL) curve

Since $GL\left(\frac{i}{P}\right)=\frac{\sum_{i=1}^{n} y_i}{P}$ or $GL\left(\frac{i}{P}\right)=\frac{\sum_{i=1}^{n} y_i}{Y}*\frac{Y}{P}=L\left(\frac{i}{P}\right)*\bar{y}$, the GL ordinates belong to the range (0; $\bar{y}$), where $\bar{y}$ is the mean income of the distribution; i = 1,…, n is the position of each person in the income distribution; P is total number of individuals in the distribution; y_i is the income of i^{th} person in the distribution; and $\sum_{i=1}^{n} y_i$ is cumulated income up to the i^{th} person. In this paper, we will construct GL as follows. First, we calculate the mean income per capita of each year and then multiply these numbers with the cumulative income share in Table 6 to obtain Table 8. The real mean income per capita of 1993, 1998, and 2002 are 2,048,200; 3,121,600; and 3,881,600 Vietnamese Dong (VND), respectively.

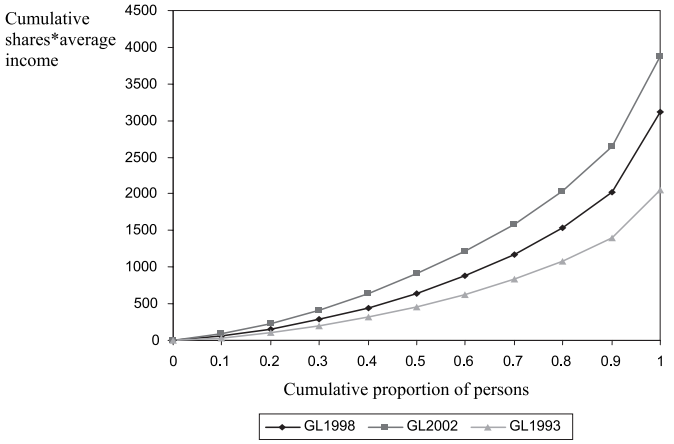
It is important to note that the numbers presented in Table 8 are not the average income of the cumulative proportion of population. The GL curves for the three years, drawn based on Table 8, are presented in Figure 2. The figure shows that the curve of GL2002 absolutely dominates those of GL1998 and

Table 8: Ordinates of generalized Lorenz curves

Cumulative Real Income Per Unit Person (1000 VND)			
Decile	**1993**	**1998**	**2002**
Lowest	30.92	56.35	86.59
Second	101.1	155.19	231.56
Third	197.12	285.94	417.98
Fourth	315.21	446.61	642.52
Fifth	457.41	641.98	907.87
Sixth	626.96	878.83	1218.01
Seventh	829.43	1167.06	1585.7
Eight	1077	1532.13	2039.18
Ninth	1397.09	2026.47	2638.39
Top	2048.2	3121.6	3881.6

Source: Author's calculations

Figure 2: Generalized Lorenz curves



Source: Author's calculations

Table 9: Change in social welfare in Vietnam, 1993–2002

Year	*Real Mean Income (1,000 VND)*	*Gini Coefficient*	*Social Welfare*
1993	2048.2	0.38	1269.884
1998	3121.6	0.45	1716.88
2002	3881.6	0.41	2290.144

Source: Author's calculations

GL1993. Thus, according to Theorem 2, social welfare in 2002 was higher when compared to that of 1998 and that of 1993 for all strictly concave utility functions. In the case of 1998 and 1993, the curve of GL1998 also dominates GL1993, meaning that total social welfare of 1998 also improved against that of 1993. At this point, we can conclude that the economic growth increased social welfare from 1993 to 2002.

These judgments are reconfirmed in Table 8. The cumulative real incomes of all deciles in 2002 were higher when compared to those of 1998 and 1993. The same statement can be made for 1998 in comparison with 1993.

While the GL curve dominances in this paper provide complete[11] orderings of social welfare of the period, it is still essential to have concrete

[11] Actually, Vietnam in this study is a special case because no GL curves cross each other. If the GL curves cross each other, we have to rely on a cardinal social evaluation function for complete ordering comparison.

estimated values of the social welfare, which can be calculated based on equation (6). The estimated values are reported in Table 9 for comparison. Social welfare absolutely increased during the period, from 1269.8 (in 1993) to 1716.8 (in 1998) and then to 2290.1 (in 2002), despite the fact that inequality first increased in the period 1993–1998 but fell in the period 1998–2002.

The results also reveal that in the early period of trade liberalization (1993–1998), the income increase sharply outpaced that of the period 1998–2002, but the negative impact of higher inequality in 1993–1998 led to an increase in total social welfare only relatively the same as that in 1998–2002, which is examined in more detail in Table 10.

Table 10 presents compositions of the changes of social welfare during the periods, which are calculated by equation (8). For the first period 1993–1998, mean income increased with the rise in inequality. While the former had a positive impact on total social welfare, the latter had an affect in the opposite direction. However, the combination of the two effects still led to an increase in social welfare.

Turning to the period 1998–2002, the combination of the two positive effects of the increase of real mean income, accompanied by a decline in inequality, increased total social welfare absolutely to levels well above those of the period 1993–1998.

Finally, for the whole period from 1993–2002, we find that mean income increased remarkably with a slight increase in inequality; the magnitude of the former was much bigger than that of the latter, which then led to an increase of total social welfare.

In short, using the dominance of Lorenz and generalized Lorenz curves, we find that economic growth—for which trade liberalization contributed the most—increased the real cumulative income per capita of all population deciles, which then led to increases in social welfare during the period 1993–2002. The estimates show that in the period 1993–1998, the increase in income was accompanied by a rapid rise in inequality, while in the latter period (1998–2002), income increased in parallel with greater equality in income. Moreover, with the help of the social evaluation function, we are able to have a complete welfare ranking of the income distributions of the three years in the period, showing an increasing trend from 1993 to 2002. Also, the sources of

Table 10: Sources of change in welfare

	1993–1998	*1998–2002*	*1993–2002*
Welfare Change	446.996	573.264	1020.26
Mean Income Change	1073.4	760	1833.4
Inequality Change	0.07	-0.04	0.03
Due to Mean $(1-T)\Delta\bar{y}$	665.508	418	1081.706
Due to Inequality ($-\bar{y}\Delta\bar{T}$)	-143.374	124.864	-116.448

Source: Author's calculations

changes of social welfare were brought out in the paper.

5. Concluding Remarks

The decision of the government to adopt *Doi moi* (renovation) policies in 1986 appears to have been a good one which brought about big changes in the standard of living of the Vietnamese people. Social welfare also improved remarkably from 1993 to 2002 in absolute terms. However, the increase in income was also accompanied by a rapid rise of inequality from 1993 to 1998 while the inequality fell slightly in the latter part of the period 1998–2002. Thus, social welfare increased more in the period 1998–2002 in comparison to that of 1993–1998.

There was evidence that the benefits were not equally distributed among the Vietnamese households. An examination by expenditure data shows that those living in communes with facilities such as electricity, a market, and a road passable by cars were able to make the most of opportunities from economic growth and improve their standard of living more than those living in communes without such facilities were able to do. This finding emphasized the importance of such facilities in improving the living standard of the poor.

Economic growth provided greater benefits for those people with higher levels of education and those working in the export industry. Individuals involved in the service sector such as in white collar or sales/service jobs or those who had professional skills benefited from a higher absolute living stan-

dard than farmers and others engaged in agriculture. However, utilizing the panel data we also found the good news that there is evidence that the living standards of farmers improved more than those of people from other sectors from 1993–1998.

Geographical location appeared to play an important role in determining the welfare of households, with more benefits for those living in the South East and the Red River Delta regions while other regions like North Central, Northern Uplands, and Central Highlands, where most of the poor and ethnic minorities resided, received fewer benefits from economic growth.

The findings reveal the imbalance in development among regions and in different welfare received between the poor and the rich, and between rural and urban areas in the country, suggesting that the less developed regions and the poor deserve to be made a higher priority in the policies of the government.

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Chapter 7
The Elderly Population in Vietnam during Economic Transformation: An Overview

Giang Thanh Long and Wade Donald Pfau

Abstract

Many studies have suggested that under the context of high economic growth and strong flows of laborers from rural to urban areas, living arrangements of elderly people, particularly elderly women, and family relations will be more vulnerable to a variety of social and economic risks. This paper, using the Vietnam (Household) Living Standard Surveys for 1992/93, 1997/98, 2002, and 2004, will examine the issue by decomposing the elderly population in Vietnam with regard to various aspects of aging. With an investigation of numerous variables such as education, household living arrangements, and housing conditions, it is found that family structures have generally been maintained in Vietnam, although social and economic contexts have changed rapidly since Doi moi. We find a relatively high proportion of elderly people living with their children, particularly their married sons. In addition, the elderly are not simply dependents in the households; indeed, they are still contributing to the households in various ways. A detailed decomposition of data on the elderly people, however, shows that women have certain disadvantages in comparison with men due to lower education, higher levels of widowhood, and living alone. There is also a big disparity between elderly people living in urban and rural areas, and between the elderly populations of different regions. Another striking finding is that during the past decade, the poverty rates for elderly people were actually lower than those for nonelderly people, and the highest poverty rates occurred among very young or very old people.

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1. Introduction

The elderly populations in many countries are growing and will continue to grow in the coming years, both in absolute numbers and as a percentage of the population. According to the medium-variant population projections of the United Nations (2004), there are about 610 million people aged 60 and over (or 10 percent of the world population in 2000), and this number is expected to grow to around 1.9 billion people (or 22 percent of the world population) in 2050. These demographic trends have mostly resulted from decreasing fertility rates and increasing life expectancy. In addition to such demographic changes, some studies on the elderly population, such as those of Mason (1992) and Schwarz (2003), raised a concern that economic transformation with urbanization and increasing migration might weaken the traditional family structure, which would leave more elderly people without the traditional support and care from their families.

Vietnam, as one of the fastest growing economies in the world, is indeed experiencing the changes just described. The medium-variant projections of the United Nations (2004) indicate that the elderly population in Vietnam will increase significantly from 7.5 percent of the total population in 2005 to about 26 percent in 2050. The demographic dependency ratio will be driven mostly by the elderly dependency ratio as the child population will increase at a slower pace. Of the current elderly population, a majority are living in rural and disadvantaged areas. Moreover, swift economic transformation since *Doi moi* has had significant impacts on all areas of society, especially with the changes of economic structure from agriculture-based to industrial production, and urbanization with strong flows of laborers from rural to urban areas. Though great successes, such as rapid poverty reduction and considerable improvement of living standards, have been widely acknowledged, many groups of people, including the elderly, are still living in poor and vulnerable conditions (Le *et al*., 2005). Given the low coverage of the social security systems in Vietnam, the situation may become worse if there is not an appropriate response from the government to these continuing changes. Therefore, studies of various social and economic aspects of the elderly population need to be carried out so as to enable appropriate responses for the social welfare policies.

Guided by such research needs, this paper seeks to quantify the extent and the evolution of the elderly population in Vietnam by using the Vietnam (Household) Living Standards Surveys for 1992/93, 1997/98, 2002, and 2004. Specifically, the paper will answer such questions as how are the living arrangements of the elderly changing; are the elderly contributing to their households, and are there important differences between regions of the country, or between urban and rural residents?

To accomplish these goals, we first review the existing studies on the elderly population in Vietnam. Then, we present our data and methodology, as well as advantages and limitations of the data. This is followed by our analysis and implications for social welfare policies. The last section will present concluding remarks and directions for further studies.

In providing an overview of the Vietnamese elderly population during economic transformation, some key findings of this paper include:

- The elderly population has grown during the past decade, as has the number of elderly living alone.
- We consider three types of elderly households: those where an elderly person is the head of the household, where the elderly is dependent on others, and where the elderly is living alone. We find that the increase in the elderly living alone was offsetting households where the elderly were dependent on others.
- Women experience more disadvantages, such as widowhood and lack of education.
- Data on working status and housework show that the elderly people were still active contributors to the households in various ways.
- Poverty rates have been falling in each of the surveys, though the highest poverty rates remained among the very young and very old.
- Housing conditions for the elderly have significantly improved over time.
- Generally, the elderly of Vietnam did not face a situation worse than that faced by younger people. Family bonds appeared to remain strong, and the elderly were taken care of.
- Age 60 is too young to be defined as elderly. The hardships of old age do not come until later ages.

2. Previous Studies on the Elderly Population in Vietnam: A Review

Research on the elderly population in Vietnam has grown rapidly in the past decade, and different survey data have been used to analyze the elderly people and their households. For example, Hirschman and Vu (1996) used the 1991 Vietnam Life History Survey, which was a survey of 403 households during January–March 1991 in four areas, i.e., a rural village and an urban area in northern Vietnam (in the Red River Delta), and a rural village and an urban area in southern Vietnam (in the Mekong River Delta). The purpose of their study was to analyze the impacts of Confucian thought on contemporary family and household structure, and find out how these impacts varied between the two regions.

Another set of two regional surveys on Vietnamese persons aged 60 and over has been used extensively by many studies, such as Truong *et al*. (1997) and Knodel *et al*. (2000). These surveys, which were conducted in the Red River Delta (including Hanoi) in 1996, and in Ho Chi Minh City (HCMC) and its six adjacent provinces in 1997, could provide various information about rural and urban diversity, household composition, and household relations in terms of support and care.

In addition to the above microdata surveys, a variety of studies also used larger survey samples to accomplish their research goals. Bui *et al*. (1999) used the 1994 Vietnam Inter-censal Demographic Survey in combination with those regional surveys to explore living arrangements of the elderly in two regions. To compare living arrangements of the elderly and their households over time, Knodel and Truong (2002) used the 5 percent public use sample of the 1989 Census and the 3 percent public use sample of the 1999 Census. More recently, Barbieri (2006) used the 3 percent public use sample of the 1999 Census and the Vietnam Living Standard Survey (VLSS) 1997/98 to analyze rates of coresidence and flows of remittances between the elderly and their children.

Some common trends emerged from these studies even though they drew on numerous surveys with different sizes and characteristics. First, the population showed a clear aging process that was faster than official population projections by the United Nations (Knodel and Truong, 2002). By marital sta-

tus, all of the studies showed that majority of the elderly people (over 95 percent) were married or widowed, and widowhood was more common among rural residents and women (Truong *et al*., 1997). In terms of education, which was measured by schooling and literacy, the studies also indicated that the female elderly were much more disadvantaged than were their male peers, and urban residents had higher educational levels than did their rural counterparts (Friedman *et al*., 2002).

Second, living arrangements of the elderly and their households indicated that family relations remained strong in Vietnam despite substantial changes in social and economic conditions. The studies all indicated that only a small share of the elderly were living alone, and most were living with or nearby their children. Also, coresidence rates did vary between regions and areas (Hirschman and Vu, 1996; Bui *et al*., 1999; Friedman et al., 2002). Among those who were living with adult children, a majority preferred to live with married sons, particularly in the Red River Delta (Knodel *et al*., 2000). In addition, coresidence depended on marital status of the elderly, e.g., both non-married men and non-married women were considerably more likely to live with a married child than were their currently married counterparts (Friedman *et al*., 2002). Among those who were not living with children, men were more likely to live with a spouse, and women were more likely to live alone (Barbieri, 2006). Similarly, Knodel *et al*. (2000) showed that more than half of non-coresident elderly in the north and over two-thirds in the south lived adjacent to or very near to a child. The situation for the childless elderly was not worse as they lived with an adult relative or spouse, and only 12 percent of them in the north and a third of them in the south lived alone.

Also relevant to family relations is the support and care between the elderly and their children. Hirschman and Vu (1996) found a relatively high frequency of visiting or making contacts between adult children and their parents. About 60 percent of adult children who lived nearby their parents saw them daily, and most of the rest saw them at least once a week. Truong *et al*. (1997) found that exchanges of food, clothes, and other goods were fairly common between elderly parents and their children in all regions, and economic support from within the family was more important than non-family support. Similar findings also indicated in Bui *et al*. (1999) that family support from both coresi-

dent and non-coresident children was the main source of support and care for the elderly (42 percent in the north and 66 percent in the south). The type of support showed regional difference, as foodstuff was popular in the north, while cash was substantial in the south. Knodel *et al*. (2000) also showed that children frequently provided material support to their parents, and that there was regional difference in support type and child proximity to parents. A U-shaped relationship was observed for such provision and child proximity to parents, and it was even more pronounced for regular provision of money and expensive goods. Evaluating family support with such questions as whether a child is an important source of the elderly's income, and material transfers (food or money) from children to parents, Friedman *et al*. (2002) showed that southern elderly were more likely to report that children were main contributors to household income than were northern elderly, and nonmarried elderly were more likely to claim a child as a main contributor than were married elderly. Moreover, the study indicated that in general that there was no clear gender pattern in the receipt of intergenerational support by the Vietnamese elderly. By exploring gender and coresidence factors, Barbieri (2006) observed that remittance was a major alternative form of support from children to their parents; about 20 percent of the elderly had received remittance from a non-coresident child in the previous 12 months, 16 percent from a son, and 12 percent from a daughter. Sons tended to send support more often than did daughters (25 percent vs. less than 20 percent of all elderly households), and older elderly received support more often than did younger elderly. Further, with multivariate analysis, the study confirmed that women were more likely than were men to receive from both sons and daughters (in contrast to the findings of Friedman *et al*., 2002), and the non-coresident elderly were more likely to receive than were the ones coresiding with children. Urban and wealthier elderly were more likely to receive support from their children than were their rural and poor peers. The study then suggested that intensification of migration did not jeopardize intergenerational solidarities and that children continued to support their elderly parents, particularly in vulnerable cases.

One common and critical finding from these studies was that only a modest percentage of elderly people received pensions or welfare payments, and such payments were rarely a main source of income (Bui *et al*. 1999;

Knodel and Truong, 2002). Particularly, the relative dependence of non-married elderly women on non-pension state payments, which were small and less frequently paid, indicated their relative vulnerability to social and economic risks. If family support gradually erodes, maintaining the livelihood of such people could become a greater public policy need.

A third common trend that emerged was that many elderly people remained active, either working for various types of enterprises or doing housework. Bui *et al*. (1999) pointed out that the working rate of the elderly was 41 percent for the north and 35 percent for the south. By gender, Friedman *et al*. (2002) showed that there was almost no gender difference in the elderly working rate in the north (42 percent for men vs. 41 percent for women), but a significant difference in the south (46 percent for men vs. 28 percent for women). Both economic structure and culture could help explain these regional differences. In addition, Knodel and Truong (2002) found that women were less economically active for all older age groups, but were active in housework. Also, economic activity rates among older people in urban areas were considerably lower than those of their rural peers.

Fourth, living conditions for the elderly have clearly been improving over time. The results from Knodel and Truong (2002) showed that housing conditions significantly improved. More elderly people, particularly in rural areas, were likely to access mass media such as TV and radio, use better toilets, and have electricity as the main source of lighting.

Although these existing studies could provide informative and thorough measures on living arrangements of the Vietnamese elderly, they did not make a distinction between the elderly who were household heads and those who were dependents in the household, except for the study by Hirschman and Vu (1996). This distinction is potentially quite important. As indicated in many studies on the family relations in elderly households, such as Schwarz (2003) and HelpAge International (2004), the elderly would feel confident if they could control some resources, and family members would not consider them as a burden. Distinguishing the role of elderly people in their households will help to show how they are treated when their economic and social status changes.

Moreover, the reviewed studies also did not provide any information about the poverty status of the Vietnamese elderly over time. Analysis of the

elderly's poverty incidence will provide useful information about their vulnerability relative to that of the rest of the population. This information can then help the government in making appropriate social welfare policies to protect the elderly from various social and economic risks. Data limitations might be one of the reasons for such missing analysis in the existing studies.

3. Data and Methodology

We use the Vietnam (Household) Living Standard Surveys for the years 1992/93, 1997/98, 2002, and 2004. These surveys were conducted by the General Statistics Office of Vietnam (GSO), along with other international agencies as a part of the World Bank's Living Standard Measurement Surveys. Detailed descriptions of these surveys can be found in numerous research reports, such as Grosh and Glewwe (1998), GSO (2004 a, b), and World Bank (2000, 2001, and 2005).

The surveys are organized by household, but they also include some characteristics for individuals in the household, such as age, gender, relationship to household head, marital status, working status, salary, health, and education. This structure lets us identify the elderly people as well as the households that include elderly people. In this paper, we consider the elderly as people who are at least 60 years old, and the elderly households are those with at least one elderly person. Table 1 provides information on the sample sizes for the four surveys.

At the household level, the surveys provide extensive data on sources of income, business and agricultural enterprises, detailed household expenditures, ownership of consumer durables, poverty incidence, poverty alleviation programs, wealth, and housing conditions. The households are representative of the entire Vietnamese population, both urban and rural, and across the regions, so that we can provide an overview of the elderly population for Vietnam as a whole.

The data has some limitations. Firstly, we generally only have information about relatives who live in the same household (particularly in the later surveys), and therefore it is difficult to identify other relatives who may be living nearby or migrating to other areas. These relatives are extremely important

Table 1: Number of households and individuals in the V(H)LSS

Year	*Number of Households*	*Number of Individuals*
1992/93	4,800 (1,514)	24,068 (2,047)
1997/98	6,002 (2,121)	28,633 (2,860)
2002	29,530 (8,759)	132,384 (11,940)
2004	9,189 (2,784)	39,696 (3,806)

Note: The number of elderly households and the number of elderly people are in parentheses.
Source: Authors' calculation from VLSS 1992/93 & 1997/98, and VHLSS 2002 & 2004

when we consider their support from/to the elderly people. Thus, for instance, while we know about receipt of remittances, we cannot say what percentage of non-coresident children provide them. Secondly, besides wages, most income sources are only identified at the household level, so it is not clear which member is the source of the income. Wealth data is also only available at the household level. This limits the analysis of intra-household sharing. Thirdly, some survey questions change over time. This includes questions in which the answer categories change. Also, some interesting questions only appear in the earlier surveys (e.g., a list of children living outside the household, a detailed list of remittances sent and received by the household, and individualized information about health status), while other interesting questions are not added until the later surveys (mainly, detailed information about a variety of income sources for the household). This inconsistent structure again limits our comparative study between years.

We will analyze our research objectives by using simple tabulations of data for each survey to observe trends over time. Since data are representative for the entire Vietnamese population, we can observe changes in living arrangements and other characteristics of the Vietnamese elderly during the past decade as they experienced profound social and economic changes.

4. Results and Analysis

The elderly population will be analyzed along different aspects, such as gender, age, areas, and regions. We consider general characteristics of the population, living arrangements, working status, housing conditions, and poverty situation.

4.1. General characteristics of the population

Table 2 provides general information about the Vietnamese population with regard to the elderly and nonelderly. First, we can observe aging of the population in Vietnam, as the percent of the population in the older age brackets grew over time. For instance, the percentage of the population aged 80 and older grew from 0.73 percent in 1992/93 to 1.5 percent in 2004.

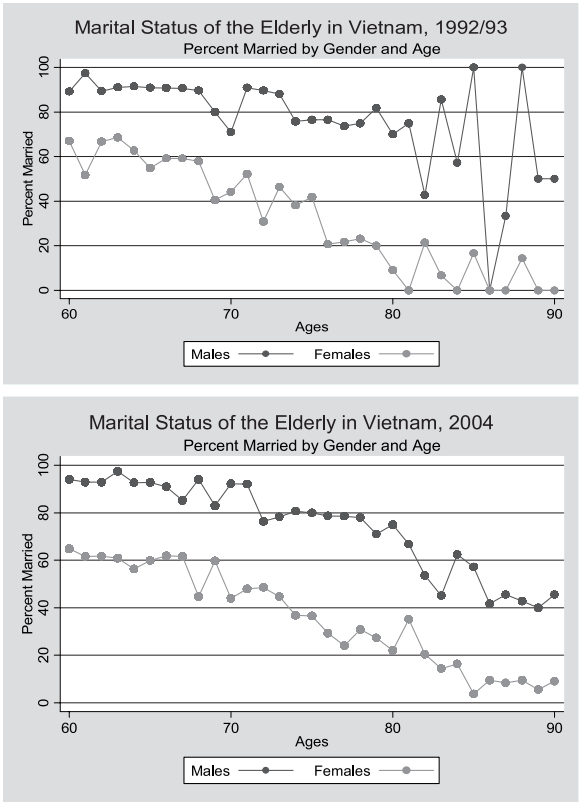
We also find that the elderly population accounted for 9.9 percent of the whole population in 2004, and this figure was slightly higher than the projections of the United Nations (2004), at only 7.5 percent. Along with the aging process, we also could see an increasing percentage in the elderly population of females (from 56.81 percent in 1992/93 to 58.42 percent in 2004) and of widows (from 33.9 percent in 1992/93 to 36.99 percent in 2004).

Table 2: Demographic characteristics of the Vietnamese population
(Percentages across demographic categories)

	1992/93 VLSS		1997/98 VLSS		2002 VHLSS		2004 VHLSS	
	Non-elderly	Elderly	Non-elderly	Elderly	Non-elderly	Elderly	Non-elderly	Elderly
Population								
Number (mil. people)			68,147,981	7,658,661	69,521,434	7,081,223	71,665,846	7,875,604
Percent	91.49	8.51	89.9	10.1	90.76	9.24	90.1	9.9
Region								
Red River Delta	19.89%	23.95%	19.15%	23.78%	21.56%	25.35%	21.67%	25.78%
North East	14.42%	13.11%	15.19%	13.73%	11.96%	10.89%	11.69%	10.46%
North West	2.72%	1.83%	2.97%	1.73%	2.76%	2.13%	3.12%	1.93%
North Central Coast	12.74%	13%	13.76%	14.48%	13.35%	13.87%	13.17%	12.59%
South Central Coast	9.3%	10.89%	8.46%	8.68%	8.35%	9.79%	8.56%	9.93%
Central Highlands	2.34%	2.03%	2.89%	1.85%	6%	4.01%	5.18%	3.4%
South East	16.13%	13.61%	15.92%	15.56%	14.64%	14.03%	16.26%	15.37%
Mekong River Delta	22.45%	21.52%	21.64%	20.2%	21.38%	19.94%	20.35%	20.55%
Urban / Rural Status								
Rural	80.31%	77.73%	77.96%	74.06%	76.76%	76.83%	74.23%	73.33%
Urban	19.69%	22.27%	22.04%	25.94%	23.24%	23.17%	25.77%	26.67%
Marital Status								
Married	54.37%	64.04%	52.09%	61.63%	41.73%	61.69%	56.12%	60.51%
Widowed	2.35%	33.9%	2.17%	35.81%	1.52%	36.44%	2.08%	36.99%
Otherwise Not Married	43.29%	2.05%	45.74%	2.56%	56.75%	1.87%	41.8%	2.5%
Gender								
Male	48.71%	43.19%	49.16%	41.93%	50.23%	42.79%	50.3%	41.58%
Female	51.29%	56.81%	50.84%	58.07%	49.77%	57.21%	49.7%	58.42%
Age Range								
Less than 60	91.49%		89.9%		90.76%		90.1%	
60 – 64	3.07%		2.97%		2.46%		2.65%	
65 – 69	2.07%		2.79%		2.29%		2.27%	
70 – 74	1.72%		2.02%		1.97%		2.07%	
75 – 79	0.92%		1.3%		1.26%		1.41%	
80 – 89	0.66%		0.9%		1.08%		1.27%	
90 and Older	0.07%		0.11%		0.18%		0.23%	

Source: Authors' calculation from VLSS 1992/93 & 1997/98, and VHLSS 2002 & 2004

Figure 1: Marital status of the Vietnamese elderly, 1992/93 & 2004



Source: Authors' calculation from VLSS 1992/93 and VHLSS 2004

The data also show that the majority of the elderly lived in rural areas (over 70 percent), but this percentage decreased over time on account of increasing urbanization. In addition, the data show that almost half of the elderly population was living in the Red River Delta and the Mekong River Delta, where agriculture-based activities are still popular. By marital status, most of the elderly people were married or widowed (over 97 percent). Figure 1 shows that the elderly women were less likely to be married than elderly men. As explained in Knodel and Truong (2002), the situation could be attributable to several factors, including differences in life expectancy between males and females. Widowhood is common among rural residents and women.

Table 3: Educational background of the elderly population
Question: Can person read and write? (Percent who answer "Yes")

	VLSS 1992/3	VLSS 1997/8	VHLSS 2002	VHLSS 2004
Regions				
Red River Delta	55.39%	64.08%	62.38%	61.25%
North East	52.83%	54.66%	55.29%	56.58%
North West	25.24%	29.07%	32.25%	36.75%
North Central Coast	61.74%	58.87%	56.98%	57.48%
South Central Coast	53.64%	58.04%	63.05%	61.73%
Central Highlands	29.27%	37.08%	42.65%	46.91%
South East	60%	57.81%	61.66%	64.26%
Mekong River Delta	51.04%	56.41%	57.02%	59.61%
Rural/Urban				
Rural	50.16%	55.47%	56.89%	57.18%
Urban	70.31%	66.48%	65.23%	64.63%
Marital Status				
Married	65.77%	69.44%	69.02%	71.12%
Widowed	33.58%	40.67%	43.1%	46.34%
Otherwise Not Married	48.78%	52.25%	50%	58.12%
Gender				
Male	79.5%	79.86%	77.35%	77.84%
Female	35.45%	44.36%	49.6%	51.7%
Age				
60 – 64	67.52%	74.64%	71.19%	69.93%
65 – 69	58.82%	65.48%	66.08%	68.41%
70 – 74	46.44%	51.73%	57.66%	62.92%
75 – 79	37.33%	40.77%	50.71%	51.26%
80 – 89	28.76%	29.86%	33.73%	40.92%
90 and Older	11.76%	14.72%	23.1%	36.12%

Source: Authors' calculation from VLSS 1992/93 & 1997/98, and VHLSS 2002 & 2004

As indicated in Table 3, educational background of the elderly people, which is measured by reading and writing ability, varied with gender, marital status, area, and region.

By gender, the estimated results show that the elderly women had a clear disadvantage in comparison with their male peers, although the gap between males and females was getting smaller. Moreover, urban residents and younger elderly had stronger educational backgrounds than did their rural and older counterparts. By marital status, the data indicate that the widowed elderly tended to have lower educational backgrounds than the married and nonmarried elderly, and the married elderly had the highest rate of reading and writing ability. One critical detail can be seen if we look at educational gap between regions. The elderly in poor regions such as the North West and the Central Highlands, which are isolated and remote areas, had the lowest rates of reading and writing ability, and this situation might in turn prevent them from accessing social services.

Table 4: Living arrangements of the Vietnamese population
(Percentages across demographic categories)

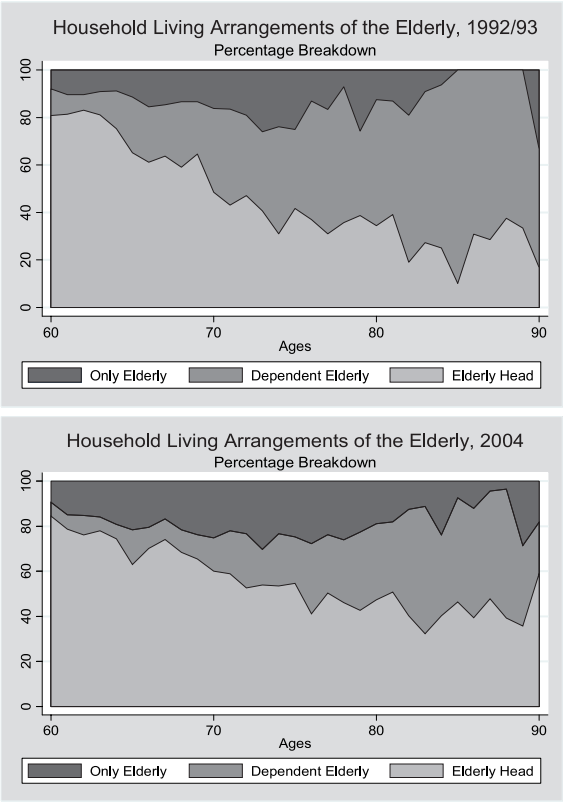
	1992/93	1997/98	2002	2004
Percentage of Total Population Living in Each Type of Household				
No Elderly	67.77%	65.99%	70.03%	68.78%
Elderly Head with Nonelderly	18.78%	18.4%	19.62%	20.18%
Dependent Elderly	12.3%	13.75%	8.64%	8.99%
Only Elderly	1.14%	1.86%	1.72%	2.05%
Percentage of Elderly Living in Each Type of Household				
Elderly Head with Nonelderly	59.36%	54.92%	63.39%	61.61%
Dependent Elderly	27.21%	27%	18.04%	17.72%
Only Elderly	13.43%	18.39%	18.57%	20.67%
Percentage of Elderly Living in Each Type of Household (More Detail)				
Only One Elderly Person	3.47%	4.93%	5.29%	5.62%
Only Elderly Married Couple	9.48%	12.73%	12.48%	14.41%
Other Group of Only Elderly	0.49%	0.73%	0.8%	0.63%
Elderly Spouse of Nonelderly	2.59%	2.26%	2.59%	2.28%
Elderly Head, Unmarried Son	6.64%	7.12%	7.14%	8.23%
Elderly Head, Married Son	9.82%	10.67%	15.91%	4.11%
Elderly Head, Unmarried Daughter	6.4%	5.5%	7.2%	5.99%
Elderly Head, Married Daughter	1.42%	1.41%	2.23%	1.3%
Elderly Head with Multiple Children	27.8%	23.62%	23.5%	35.54%
Elderly Head, Other Situation	4.69%	4.34%	4.81%	4.53%
Elderly Dependent, Unmarried Son	1.03%	0.91%	0.45%	0.27%
Elderly Dependent, Married Son	17.73%	17.59%	14.27%	13.3%
Elderly Dependent, Unmarried Daughter	1.95%	2.3%	0.9%	0.79%
Elderly Dependent, Married Daughter	1.03%	1.53%	1.2%	1.43%
Elderly Dependent, Grandchildren	0.68%	0.74%	0.82%	1.09%
Elderly Dependent, Other Situation	4.79%	3.63%	0.41%	0.49%
Only ONE Elderly Person (Living Alone)				
Male	15.49%	18.4%	24.32%	18.84%
Female	84.51%	81.6%	75.68%	81.16%
Rural	80%	82.91%	82.85%	77.94%
Urban	20%	17.09%	17.15%	22.06%

Source: Authors' calculation from VLSS 1992/93 & 1997/98, and VHLSS 2002 & 2004

4.2. Family structure of elderly households

Table 4 provides information about household living arrangements in the surveys. About 70 percent of the population lived in nonelderly households, and the remaining 30 percent lived in elderly households. The majority of elderly lived in households where an elderly person was the household head (over 60 percent). In those households, it would be more reasonable to think of children as more dependent on their elderly parents, than vice versa. The fact that many households with an elderly head still had multiple children living at home supports this argument.

Figure 2: Living arrangements of the elderly households, 1992/93 & 2004



Source: Authors' calculation from VLSS 1992/93 and VHLSS 2004

A potentially worriedsome trend, meanwhile, is what appears to be a shift over time from households with dependent elderly to only elderly households. The percentage of the elderly living as dependents declined from 27.21 percent in 1992/93 to 17.72 percent in 2004, while the corresponding elderly living in only elderly households increased from 13.43 percent to 20.67 percent in the same period. Figure 2 shows this situation in graphical terms, illustrating that the percentage of dependent elderly was squeezed at all ages.

Meanwhile, the percentage of elderly in the one-person elderly households grew from 3.47 percent in 1992/93 to 5.62 percent in 2004. This situation was prevalent among female and rural residents. For instance, about 80 percent of the elderly who lived alone were female, and also 80 percent of them lived in

Table 5: Working status of the Vietnamese population
(Percentage of individuals engaging in work across demographic categories, for those aged 20 and older)

	1992/93 VLSS		1997/98 VLSS		2002 VLSS		2004 VLSS	
Age	20 – 59	60+	20 – 59	60+	20 – 59	60+	20 – 59	60+
Region								
Red River Delta	85.8%	43.4%	89.7%	51.1%	92.5%	47.7%	91.9%	48.4%
North East	90.1%	44.2%	91.6%	42.6%	94.9%	49.3%	93.5%	51.4%
North West	89.3%	48.6%	93.3%	53.7%	96.3%	45.5%	96.1%	46.9%
North Central Coast	89.2%	58.7%	91.1%	51.6%	94.3%	51.7%	90.8%	48.2%
South Central Coast	82.2%	36.8%	87.9%	51.0%	91.8%	58.9%	89.5%	54.6%
Central Highlands	91.0%	51.2%	94.4%	45.6%	94.7%	50.3%	92.0%	39.5%
South East	76.0%	34.9%	78.6%	33.6%	85.3%	26.2%	83.6%	28.3%
Mekong River Delta	82.3%	44.1%	85.7%	43.7%	90.0%	41.3%	88.7%	38.8%
Urban / Rural Status								
Rural	86.0%	47.4%	90.2%	50.0%	94.2%	50.5%	92.7%	49.1%
Urban	78.1%	32.2%	79.3%	33.5%	83.7%	28.0%	82.6%	29.8%
Marital Status								
Married	85.2%	52.5%	90.0%	56.2%	94.9%	55.8%	94.0%	54.9%
Widowed	76.5%	27.1%	80.8%	27.4%	86.8%	27.1%	86.5%	26.3%
Otherwise Not Married	79.2%	38.1%	79.9%	49.8%	80.0%	52.1%	76.6%	40.0%
Gender								
Male	86.5%	49.7%	88.8%	51.6%	93.5%	50.8%	92.1%	50.6%
Female	81.2%	39.0%	86.1%	41.5%	89.6%	41.2%	87.6%	39.2%
Age Range								
60 – 64		61.1%		66.3%		66.2%		64.5%
65 – 69		48.8%		52.3%		57.4%		56.9%
70 – 74		34.1%		38.5%		40.8%		39.8%
75 – 79		19.5%		25.9%		26.0%		27.8%
80 – 89		8.2%		8.7%		9.7%		10.1%
90 and Older		0.0%		0.0%		3.2%		1.8%
Household Elderly / Nonelderly Mix								
No Elderly	84.5%	---	87.9%	---	91.9%	---	90.3%	---
Elderly Head with Nonelderly	78.9%	51.4%	83.8%	57.2%	88.9%	48.7%	86.9%	46.8%
Dependent Elderly	86.5%	18.0%	89.9%	15.0%	92.7%	16.0%	90.7%	12.9%
Only Elderly	---	60.7%	---	56.0%	---	62.1%	---	61.2%

Source: Authors' calculation from VLSS 1992/93 & 1997/98, and VHLSS 2002 & 2004

rural areas. Given various social and economic disadvantages of the female elderly in comparison with their male counterparts, the situation calls for social policy makers to give more attention to effective social welfare policies for the elderly females, such as education and income generation (United Nations Development Programme, 2002).

Among the dependent elderly, over time the vast majority were found living with their married sons. There were significant differences between rural and urban areas regarding this situation: the percentage of dependent elderly living with a married son in rural areas remained the same, while it decreased

over time in urban areas. This difference could be explained by various reasons, including different characteristics of working and living styles between areas.

Table 4 also shows that this trend also held, but to a much lesser extent, in the households where an elderly person was the household head.

4.3. Working status and housework of elderly people

Table 5 shows information about the working status of the elderly. We can see that many elderly remained active, and they were working either for salary or for the household's agricultural and/or other enterprises. The average working rate was about 45 percent.

By area, rural dwellers had significantly higher working rates than did

Table 6: Housework among the Vietnamese elderly
(Percentage of elderly engaging in housework across demographic categories, followed by mean hours of housework per day, conditional on doing housework)

	2002 VHLSS		2004 VHLSS	
	Engaging in Housework	Hours	Engaging in Housework	Hours
Region				
Red River Delta	72.5%	2.17	73.4%	2.20
North East	71.5%	2.09	75.2%	1.94
North West	65.4%	2.14	68.5%	1.81
North Central Coast	69.6%	2.11	71.1%	2.02
South Central Coast	71.5%	1.95	70.9%	1.96
Central Highlands	67.1%	2.30	63.3%	2.09
South East	57.9%	2.73	68.3%	2.40
Mekong River Delta	56.2%	2.35	57.9%	2.26
Urban / Rural Status				
Rural	68.6%	2.15	69.4%	2.32
Urban	58.2%	2.57	66.5%	2.10
Marital Status				
Married	70.6%	2.14	73.8%	2.10
Widowed	58.4%	2.40	59.5%	2.24
Otherwise Not Married	72.7%	2.42	78.1%	2.41
Gender				
Male	56.9%	1.87	60.1%	1.80
Female	73.2%	2.45	74.7%	2.36
Age Range				
60 – 64	81.4%	2.36	84.2%	2.39
65 – 69	74.5%	2.26	77.5%	2.15
70 – 74	67.7%	2.15	68.3%	2.04
75 – 79	56.2%	2.07	63.8%	1.85
80 – 89	31.3%	2.03	36.3%	1.97
90 and Older	17.7%	2.09	12.9%	1.62
Household Elderly / Nonelderly Mix				
Elderly Head with Nonelderly	66.6%	2.27	69.8%	2.16
Dependent Elderly	45.8%	2.15	44.6%	1.90
Only Elderly	84.7%	2.17	85.2%	2.23

Source: Authors' calculation from VHLSS 2002 & 2004

their urban counterparts. This situation could be explained by the fact that many rural elderly people were engaged in agriculture-based activities. By gender, the elderly females were less economically active than their male peers. In addition, married and non-married people were more active than widows. Higher employment rates were also found among the elderly in households with an elderly head or with only elderly members. In dependent elderly households, less than 20 percent of the elderly worked. This evidence might imply that elderly who faced the most trouble working (either health problems or disability) were able to rely on their children for help. By age, the elderly aged from 60 to 64 maintained an over 60 percent employment rate, and this percentage gradually decreased with increasing age. In summary, lower employment rates could be found among urban dwellers, widows, women, those over age 70, and elderly who lived as dependents in households.

Table 6 shows the data on housework among the Vietnamese elderly. Generally, the same trends found for working status also apply to housework, but the extent of the differences tends to be smaller. The exception is that women did much more housework than men.

4.4. Housing conditions of elderly households

The surveys contain many indicators that can be used to evaluate the housing conditions of the elderly households. We use the following indicators: (1) housing structures, (2) sources of drinking and cooking water, (3) toilet usage, and (4) sources of lighting. Table 7 presents data on the housing conditions of the elderly households through four surveys. We can observe that there were improvements in all areas, most notably in the widespread adoption of electric lighting for homes.

Housing structures have improved over time. The percentage of temporary houses decreased from 29.25 percent in 1992/93 to 18.83 percent in 2004, while the percentage of houses with bathroom, kitchen, and toilet (BKT) increased in the same period, particularly for the houses with shared bathroom, kitchen, and toilet (from 1.91 percent to 10.51 percent).

Over the decade, the elderly households had more chances to access better water sources for drinking and cooking, which in turn might be good for their health. Percentage of the elderly households using an individual tap

Table 7: Housing conditions for the Vietnamese elderly
(Percentage of elderly households)

	1992/93	1997/98	2002	2004
Housing Structures				
Villas	---	---	---	0.18%
House with private bathroom, kitchen & toilet (BKT)	4.11%	6.33%	7.54%	6.85%
House with shared bathroom, kitchen & toilet (BKT)	1.91%	1.93%	8.66%	10.51%
Semi-permanent house	52.57%	62.57%	64.47%	63.63%
Permanent house	12.16%	8.19%	---	---
Temporary	29.25%	20.98%	19.33%	18.83%
Sources of Drinking & Cooking Water				
Private water tap	10.24%	11.17%	12.03%	14.72%
Public water tap	2.87%	3.08%	4.05%	3.31%
Deep drill well	3.36%	18.51%	27.22%	22.29%
Hand-dug constructed well (various types)	51%	33.22%	31.95%	32.38%
Bought water	---	---	0.59%	0.45%
Filtered spring water	---	0.28%	0.85%	0.55%
River, lake, and pond	18.5%	9.91%	9.66%	7.49%
Rain water	13.2%	10.62%	9.13%	9.95%
Other	1.09%	13.21%	4.52%	8.86%
Toilet Usage				
Flush toilet with septic tank	12.81%	15.5%	18.68%	25.44%
Double vault compost latrine	10.98%	12.79%	22.75%	21.24%
Toilet directly over water	--	9.13%	12.83%	11.56%
Other (Simple toilet)	55.78%	45.69%	29.28%	27.31%
No toilet	20.43%	16.89%	16.46%	14.45%
Sources of Lighting				
Electricity	52.13%	80.67%	86.73%	93.8%
Battery lamps	0.49%	1.16%	1.62%	0.6%
Gas, oil, and kerosene lamps	46.49%	17.33%	9.77%	4.23%
Other	0.59%	0.84%	1.88%	1.37%

Source: Authors' calculation from VLSS 1992/93 & 1997/98, and VHLSS 2002 & 2004

increased (from 10 percent in 1992/93 to 14 percent in 2004). There were, however, still many elderly households relying on natural water sources such as spring water, rain water, and water from rivers, lakes and ponds.

Hygiene conditions in terms of toilets were also significantly improved over the past decade. As can be seen in Table 7, more modern toilet types were used in the elderly households, e.g., the percentage using flush toilets with septic tanks increased from 12.88 percent in 1992/93 to 25.44 percent in 2004, while the percentage using simple toilets decreased substantially from 55.78 percent to 24.13 percent in the same period. Nevertheless, about 15 percent of elderly households did not have any toilet, which might harm their health through bad hygiene conditions.

One of the most substantial improvements during the period was the increased percentage of elderly households using electricity as the main source

of lighting. It increased from 52.13 percent in 1992/93 to almost 94 percent in 2004. The improvement resulted from the rural electrification program promoted by the government since the late 1990s. At the same time, the percentage of the elderly households using gas, oil, and kerosene lamps decreased significantly from 46.49 percent in 1993 to only 4.23 percent in 2004.

4.5. Poverty status of the elderly and their households

We follow the GSO to calculate per capita expenditures-based poverty rates. The GSO method is to calculate the minimum expenditures needed to

Table 8: Poverty lines from General Statistics Office of Vietnam

Year	*Poverty Lines by Per Capita Real Expenditures*
1992/93	1,160 thousand dong/year
1997/98	1,790 thousand dong/year
2002	1,917 thousand dong/year
2004	2,077 thousand dong/year

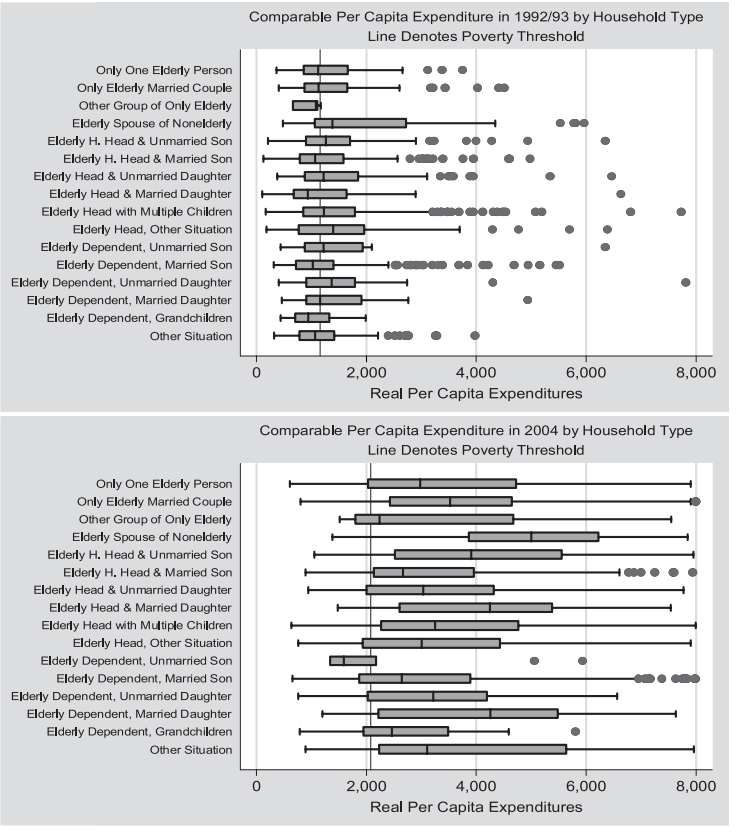
Source: Authors adopted from VLSS 1992/93 & 1997/98, and VHLSS 2002 & 2004

Table 9: Official poverty rates for Vietnamese population
(Percentages across demographic categories)

Survey	**1992/93 VLSS**		**1997/98 VLSS**		**2002 VLSS**		**2004 VLSS**	
	Non-elderly	Elderly	Non-elderly	Elderly	Non-elderly	Elderly	Non-elderly	Elderly
Population								
Total	58.4%	48.9%	38.3%	29.5%	29.2%	25.4%	19.4%	17.9%
Aggregate	57.6%		37.4%		28.9%		19.3%	
Region								
Red River Delta	62.0%	54.8%	29.3%	23.8%	22.4%	22.6%	11.7%	16.3%
North East	79.2%	74.3%	56.6%	47.4%	38.6%	37.2%	29.7%	25.2%
North West	81.6%	70.3%	73.0%	78.5%	68.4%	63.7%	58.9%	53.2%
North Central Coast	75.2%	67.4%	49.7%	34.7%	44.5%	38.3%	32.0%	31.2%
South Central Coast	48.0%	40.0%	34.8%	31.3%	25.1%	26.7%	18.7%	21.6%
Central Highlands	61.8%	53.7%	58.0%	56.8%	52.2%	44.7%	30.6%	24.1%
South East	41.0%	27.3%	14.1%	7.8%	10.9%	7.2%	5.6%	2.8%
Mekong River Delta	48.2%	34.5%	37.7%	29.4%	23.9%	17.9%	16.0%	13.1%
Urban / Rural Status								
Rural	67.1%	58.1%	46.4%	37.0%	36.0%	31.2%	24.9%	22.8%
Urban	25.5%	19.6%	9.3%	7.9%	6.7%	6.2%	3.6%	4.3%
Marital Status								
Married	56.9%	47.8%	35.8%	27.4%	26.7%	24.8%	17.2%	15.8%
Widowed	53.6%	50.6%	34.7%	33.5%	27.2%	26.6%	20.0%	21.3%
Otherwise Not Married	50.1%	54.8%	31.9%	22.9%	31.1%	23.9%	15.5%	16.9%
Gender								
Male	58.6%	48.3%	37.9%	27.5%	28.6%	24.2%	19.1%	16.4%
Female	58.1%	49.4%	38.7%	30.9%	29.8%	26.3%	19.7%	18.9%

Source: Authors' calculation from VLSS 1992/93 & 1997/98, and VHLSS 2002 & 2004

Figure 3: Poverty status of the elderly households by household living arrangements, 1992/93 & 2004



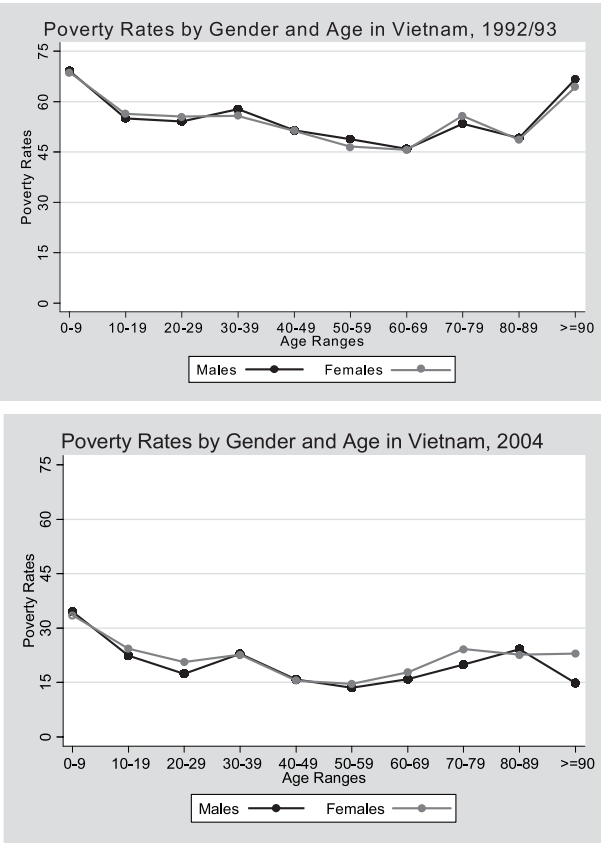
Source: Authors' calculation from VLSS 1992/93 and VHLSS 2004

satisfy basic nutritional and living needs. Moreover, this method provides an absolute poverty line that stays constant in real terms over time. Table 8 shows the GSO poverty lines over time.

Table 9 provides our estimates of poverty rates in Vietnam for different categories. Poverty rates decreased dramatically across Vietnam over the study period (57.6 percent overall in 1992/93 to 19.3 percent overall in 2004).

Although poverty rates reduced impressively in all regions, they remained high in the North West and the Central Highlands. The situation indicates that the government should promote poverty reduction programs more

Figure 4: Poverty rates by gender and age in Vietnam, 1992/93 & 2004



Source: Authors' calculation from VLSS 1992/93 and VHLSS 2004

effectively in these regions. In addition, it is also clear that regional disparities remained over time.

By area, we see that poverty rates reduced substantially in both urban and rural areas. For instance, elderly poverty rates decreased from 58.1 percent to 22.8 percent in rural areas, and from 19.6 percent to 4.3 percent in urban areas between 1992/93 and 2004. Despite dramatic improvements, poverty consistently remained higher in rural areas.

By marital status and gender, the differences among the groups were small, but married people and males tended to have slightly lower poverty rates than those of their counterparts.

With regard to living arrangements, Figure 3 shows the distribution of per capita expenditures in comparison to the poverty thresholds. Although the figure illustrates the impressive gains in poverty reduction, no particular pattern for poverty rates among various living arrangements emerged.

One of the most important matters for social welfare is to address the relative poverty and vulnerability of various groups in Vietnam. By looking at the poverty rates for different age groups, we found one of the striking results was that poverty rates of the elderly were actually lower than those of the nonelderly. Figure 4 provides further evidence of this trend.

In Figure 4, poverty rates present a U-shaped pattern across the age distribution with the highest rates occurring at the youngest and oldest ages, and the lowest poverty rates occurring in the 50s and 60s. This means that, for the current elderly population in Vietnam, the age of 60 might be too young to be defined as elderly, as hardship tends to occur mostly at later ages.

Although the above information illustrates in detail the official poverty incidence of the elderly population in Vietnam, the official measure has potential biases. As indicated in a variety of studies on measurements of elderly poverty, such as Schwarz (2003) and Barrientos (2006), such poverty measures are only established for the household as a whole rather than for particular individuals. Therefore, it is quite difficult to analyze the elderly's relative poverty and vulnerability in comparison with that of the rest of the population. In order to get more detailed information about the poverty of elderly people, a number of indicators, such as family composition and control of family resources, need to be taken into account. Also, large households may bear less burden than the official measures suggest because of economies of scale in their expenditures for housing and other goods, and when this is accounted for along with the fact that elderly households are generally smaller, we may see a rise in elderly poverty relative to the rest of the population. We will further explore these issues in subsequent research.

5. Concluding Remarks

Like many countries in the world, the aging process of the population in Vietnam is taking place more rapidly than official population projections, such as the one by the United Nations (2004). An aging society that is also undergoing rapid social and economic changes produces a potential concern for public policy. Using the Vietnam (Household) Living Standard Surveys for 1992/93 to 2004, we examined the elderly population of Vietnam with attention to various aspects of aging to identify the potential stresses.

By investigating such indicators among the elderly as education, household living arrangements, and housing conditions, we found that family relations remained strong in Vietnam despite profound social and economic changes. We found a relatively high proportion of elderly people living with their children. In addition, the elderly were not simply dependents in the households; they contributed significantly to the households in various ways. Their housing conditions and standard of living have also improved over time.

Despite the general improvements, however, the detailed decomposition of data shows that many disparities remained within the elderly population. Disadvantages remained for women, for those in rural areas, and especially in particular regions of the country. Given the current social security system with low coverage of the population, the elderly people might face a variety of social and economic risks as societal circumstances continue to change.

In the next step of research on the elderly population in Vietnam, we will explore in more detail income and poverty issues, in order to pursue our keen interest in Vietnamese pension reform issues. We will consider how a non-contributory pension scheme might operate and benefit the Vietnamese elderly.

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