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# **The Elderly Population in Vietnam during Economic Transformation: An Overview**

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## **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 the elderly people, particularly elderly women, and familial relations will be more vulnerable to a variety of social and economic risks. This paper, using the Vietnam (Household) Living Standard Surveys from 1993 to 2004, will examine the issue by decomposing the elderly population in Vietnam in association with various aspects of aging. With an investigation of numerous variables such as education, household living arrangements, and housing conditions, it is found that familial relations have been maintained strongly 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 married sons. In addition, they are not simply dependents in the households; conversely, they are still contributing to the households in various ways. The 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 gap between elderly people living in urban and rural areas, and between regions in term of poverty. Another striking finding is that, during the past decade, poverty rates of the elderly people were actually lower than that of nonelderly people, and the highest poverty rates occurred with very young or very old people. This situation indicates a necessity for promoting social welfare policies from the government.

**Key words:** elderly population, gender, household living standard survey, Vietnam

**JEL Classification:** J14, J16

# THE ELDERLY POPULATION IN VIETNAM DURING ECONOMIC TRANSFORMATION: AN OVERVIEW

## 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% of the world population in 2000), and this number is expected to grow to around 1.9 billion people (or 22% of the world population) in 2050. These demographic trends have mostly resulted from decreasing mortality rates, decreasing fertility rates, and increasing life expectancy. In addition to such demographic changes, some studies on the elderly population such as 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 Bach Duong 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 thoroughly so as to understand appropriate responses for the social welfare policies.

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

To accomplish these goals, we firstly 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 policy implications for social welfare policies. The last part 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:

- We confirm that, during the past decade, the elderly population was growing, as were the number of elderly who were living alone.
- We consider three types of elderly households, including those where an elderly person is the head of the household, where the elderly is dependent on others, and where the elderly are living alone. We found that the increase in the elderly living alone was offsetting households where the elderly were dependent on others.
- Women had more disadvantaged situations than their male counterparts such as higher widowhood.
- Data on working status and housework show that the elderly people were still active contributors of the household in various ways.
- Poverty rates have been falling in each of the surveys, though the highest poverty rates remained among the extreme young and extreme old.
- Housing conditions significantly improved overtime.
- Generally, the elderly of Vietnam did not face a worse situation than younger people. Family bonds appeared to remain strong, and the elderly were taken care of.
- Defining elderly at age 60 is too young. The hardships of old-age do not come until later ages.

## **2. 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 were 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 Red River Delta), and a rural village and an urban area in southern Vietnam (in Mekong River Delta). The purpose of their study was to analyze the impacts of the Confucian thoughts on contemporary family and household structure, and how those impacts varied between two regions.

Another set of two regional surveys on Vietnamese persons aged 60 and over have been used extensively by many studies such as Truong Si Anh et al. (1997) and Knodel et al. (2000). Those 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 The Cuong 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 overtime, Knodel and Truong (2000) used the 5 percent public use sample of the 1989 Census and the 3 percent public use sample of the 1999 Census.

More recently, Babieri (2006) used the 3 percent public use sample of the 1999 Census and the Vietnam Living Standard Survey (VLSS) 1997/8 to analyze rates of coresidence and flows of remittances between the elderly and their children.

Even though these studies drew on numerous surveys with different sizes and characteristics, some common trends emerged. First, the population showed a clear aging process that faster than official population projections by the United Nations (Knodel and Truong, 2000). By marital status, all of the existing 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 Si Anh 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 their male peers, and urban residents had higher educational levels than their rural counterparts (Knodel and Truong, 1997; Friedman et al., 2002).

Second, living arrangements of the elderly and their households indicated that familial 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 The Cuong 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 women were considerably more likely to live with a married child than were their currently married counterparts (Friedman et al., 2002: 5). 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 (Babieri, 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 either 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 familial relations is the support and care between the elderly and their children. Hirschman and Vu (1996) found a relative 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 Si Anh et al. (1997) found that exchanges of food, clothes, and other goods were fairly common between elderly parents and their child(ren) in all regions, and economic support from within the family was more important than non-familial support. Similar findings were also indicated in Bui The Cuong et al. (1999) that family support from both coresident and non-coresident children were the main sources of support and care for the elderly (42 percent and 66 percent in the north and the south, respectively), and the type of support showed regional difference, as foodstuff was popular in the north, while cash was substantial in the south. Furthermore, Knodel et al. (2000) showed that children frequently provided material support to their parents, and 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 (2000: 93). Evaluating familial support with such questions as whether a child is an important source of the elderly's income, and material transfers (food or money) from child(ren) 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 (2002: 8). Moreover, it was indicated in general that there was almost no clear gender pattern in the receipt of intergenerational support by the Vietnamese elderly. By exploring gender and coresidence factors, Babieri (2006) implied that remittance was a major alternative form of support from child(ren) to their parents, in which about 20 percent of the elderly received remittance from a non-coresident child in the previous 12 months, 16 percent from a son, and 12 percent from a daughter (2006: 23). Sons tended to send support more often than daughters (25 percent vs. less than 20 percent of all elderly households), and older elderly received more often than the younger elderly. Further with multivariate analysis, the study confirmed that women were more likely to receive from both sons and daughters than men (in contrast to the findings of Friedman et al., 2002), and the non-coresident elderly were more likely to receive than the ones coresiding with children. The urban and wealthier elderly were more likely to receive supports from their children than the rural and poor peers. The study then suggested that intensification of migration did not jeopardize intergenerational solidarities and 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 The Cuong et al. 1999; Knodel and Truong, 2000). 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.

Third, many elderly people remained active, either working for various types of enterprises or by housework. Bui The Cuong et al. (1999) pointed out that the working rate of the elderly was respectively 41 percent and 35 percent for the north and the south. By gender, Friedman et al. (2002) showed that there was almost no gender difference 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 active for housework. Also, economic activity rates among older people in urban areas were considerably lower than that 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 the elderly who were dependents in the household, except the study by Hirschman and Vu (1996). These differences are potentially quite important. As indicated in many studies on the familial relations in the elderly households, such as Schwarz (2003) and Gorman (2004), the elderly would feel confident if they could control some resources, and family members would not consider them as burden. Distinguishing the role of the elderly people in their households will help to see 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 relative vulnerability with the rest of the population, so as to indicate appropriate social welfare policies for the government. One of the reasons for such missing analysis in the existing studies might be due to data limitations.

### 3. DATA AND METHODOLOGY

In this paper, 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, marriage 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 four surveys.

*Table 1. Number of Households and Individuals in Four Surveys*

<i>Year</i>	<i>Number of Households</i>	<i>Number of Individuals</i>
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 1992/3 & 1997/8, and VHLSS 2002 & 2004*

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, 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.

There are some limitations with the data. 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 when we consider their supports 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 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.

In this paper, 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 with profound social and economic changes.

#### **4. ESTIMATED RESULTS AND ANALYSIS**

In this paper, the elderly population will be analyzed along different aspects, such as gender, age, areas, and regions. Prior to the information about living arrangements of the elderly in Vietnam, we will firstly provide information about general characteristics of the Vietnamese population, for both the nonelderly and elderly. We will also consider their contributions to the household, housing conditions, and poverty status.

##### **4.1. General Characteristics of the Population**

Table A-1 provides general information about the Vietnamese population, with regard to the elderly and nonelderly. First, we can observe aging in Vietnam as the percent of the population in older age brackets grew through time. For instance, the percentage of the population aged 80 and older grew from 8.55 percent in 1992/93 to 15.14 percent in 2004.

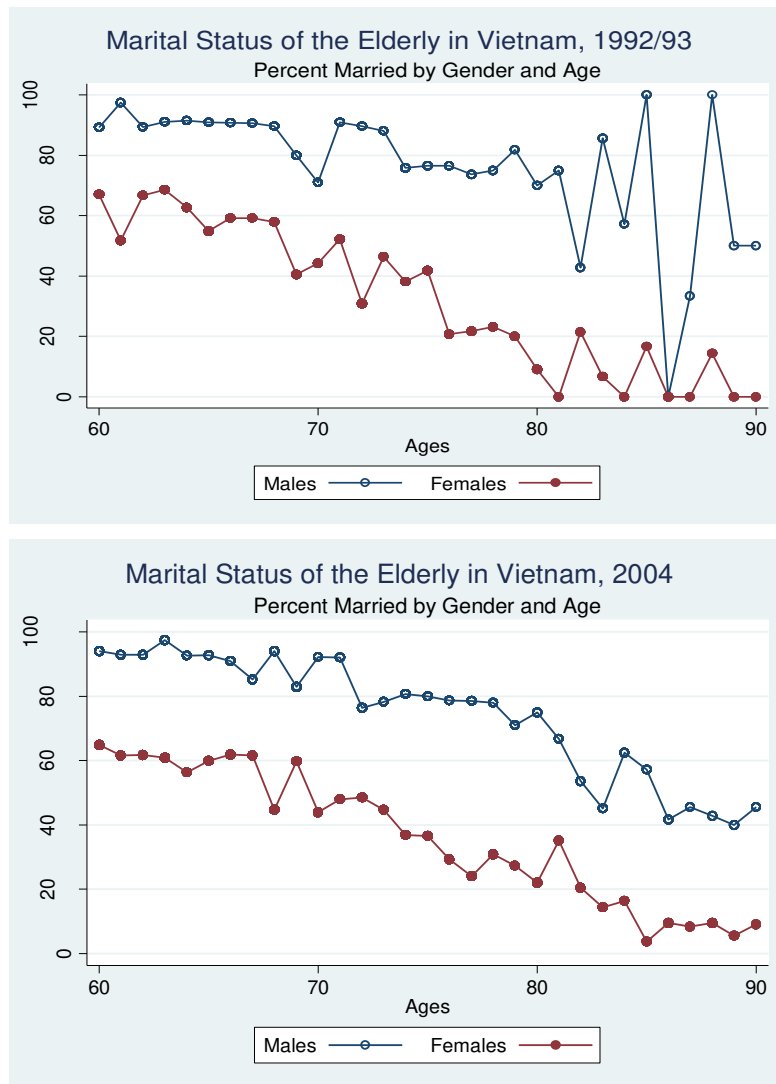
*// Table A-1 is about here //*

Similarly to Knodel and Truong (2002), the estimation shows that aging process in Vietnam was slightly faster than the projections of the United Nations (2004) as 9.9 percent of the population was elderly in 2004. Along with the aging process, we also could see an increasing percentage of females and of widows in the population (from 56.81 percent in 1992/93 to 58.42 percent in 2004 for the former, and from 33.9 percent in 1992/93 to 36.99 percent in 2004 for the latter).

The data also show that the majority of the elderly were living in rural areas (over 70 percent), but this percentage decreased over time, which could be explained partially by the urbanization process in Vietnam. In addition, the data show that almost half of the elderly population were living in the Red River Delta and the Mekong River Delta, where agriculture-based activities were still popular. By marital status, most of the elderly people were married or widowed (over 97 percent), and this finding is also similar to that of other studies such as Knodel and Truong (2002). Figure 1 shows that the elderly women were less likely to be married than elderly men. As explained in Knodel and Truong (1997: 2), the situation could be attributable to several factors, including differences in life expectancy and mortality rates between males and females. This figure could explain a similar finding by Truong Si Anh et al., (1997) that widowhood was popular among rural residents and women.



**Figure 1. Marital Status of the Elderly in Vietnam, 1992/93 & 2004**



Source: Authors' calculation from VLSS 1992/3 and VHLSS 2004

As indicated in Table A-2, educational background of the elderly people, which is measured by reading and writing ability, varied with gender, marital status, area, and region.

**// Table A-2 is about here //**

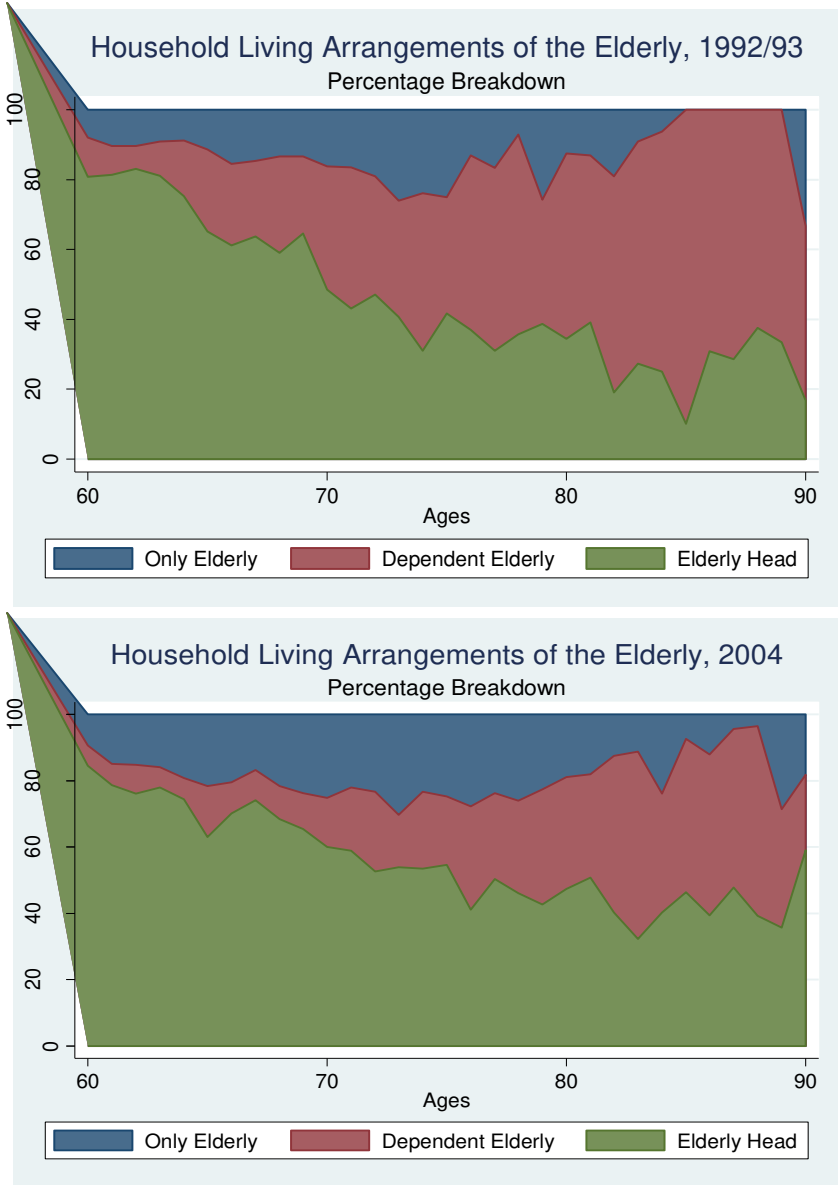
By gender, similarly to Truong Si Anh et al. (1997) and Friedman et al. (2002), the estimated results show that the elderly women had a clear disadvantage in comparison with their male peers, although the gap between males and females was getting smaller. Moreover, urban residents and younger elderly had better educational background than their rural and older counterparts. By marital status, the data indicate that the widowed elderly tended to have lower educational background than the married and nonmarried elderly, and the married elderly had the highest rate of reading and writing ability. One critical thing can be seen if we look at educational gap between regions. It is shown that the elderly in poor regions such as the North West and the Central Highlands, who were living in isolated and remote areas, had the lowest rate of reading and writing ability, and this situation might in turn prevent them from accessing social services.

**4.2. Familial Structure of the Elderly Households**

Table A-3 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.

*// Table A-3 is about here //*

**Figure 2. Household Living Arrangements of the Elderly, 1992/93 & 2004**



*Source: Authors' calculation from VLSS 1992/3 and VHLSS 2004*

A potentially worrisome 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, as the percentage of dependent elderly was squeezed at all ages. Meanwhile, the percentage of elderly who were living alone grew from 3.47 percent in 1992/93 to 5.62 percent in 2004. The situation of living alone was prevalent among female and rural residents, and this finding is the same as that in Truong Si Anh et al. (1997).

Among the dependent elderly, over time the vast majority were found living with their married sons. Table A-3 shows significant difference between rural and urban areas regarding this situation, in which percentage of dependent elderly living with married son in rural areas was almost 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, and also the influence of the Confucian thoughts in familial relations. This finding is also the same as that of previous studies on Vietnam, and that of Chen (1998) for Taiwan, and Lin (2001) for China. However, though it is rural phenomenon, this result is different from that of Knodel and Napaporn (1997), which indicated that Thai elderly people had preference to live with married daughter.

Table A-3 also implies 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 the Elderly People**

Table A-4 shows the information about 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.

*// Table A-4 is about here //*

By area, rural dwellers had significantly higher working rates than their urban counterparts, and this situation could be explained by the fact that many rural elderly people were engaged in agriculture-based activities. By gender, the elderly female were less economically active than their male peers, and this finding is the same as Knodel and Truong (2002). In addition, married and non-married people were more substantially 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. This similar conclusion could also be found in Babieri (2006). By age, the elderly aged from 60 to 64 maintained over 60 percent employment rates, and this percentage gradually decreased with increasing age. In summary, lower employment rates could be found among urban dwellers, widows, and women, those over age 70, and those elderly who lived as dependents in households.

*// Table A-5 is about here //*

Table A-5 shows the data on housework among the Vietnamese elderly. Generally, the same trends found for working status could 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. This situation was also confirmed in Knodel and Truong (2002).

#### **4.4. Housing Conditions of the Elderly Households**

In the surveys, there are many indicators that can be used to evaluate the housing conditions of the elderly households. In this paper, we use the following indicators: (1) housing structures, (2) sources of drinking and cooking water, (3) toilet usage, and (4) sources of lighting. Table A-6 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.

*// Table A-6 is about here //*

In term of housing structures, it can be seen obviously that they 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 BKT (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 individual tap increased (from 10 percent in 1993 to 14 percent in 2004, although the number of households increased). 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 term of toilets were also significantly improved over the past decade. As can be seen in Table A-6, 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 in 1992/93 to 24.13 percent in 2004. 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 a 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 late 1990s. At the same time, 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**

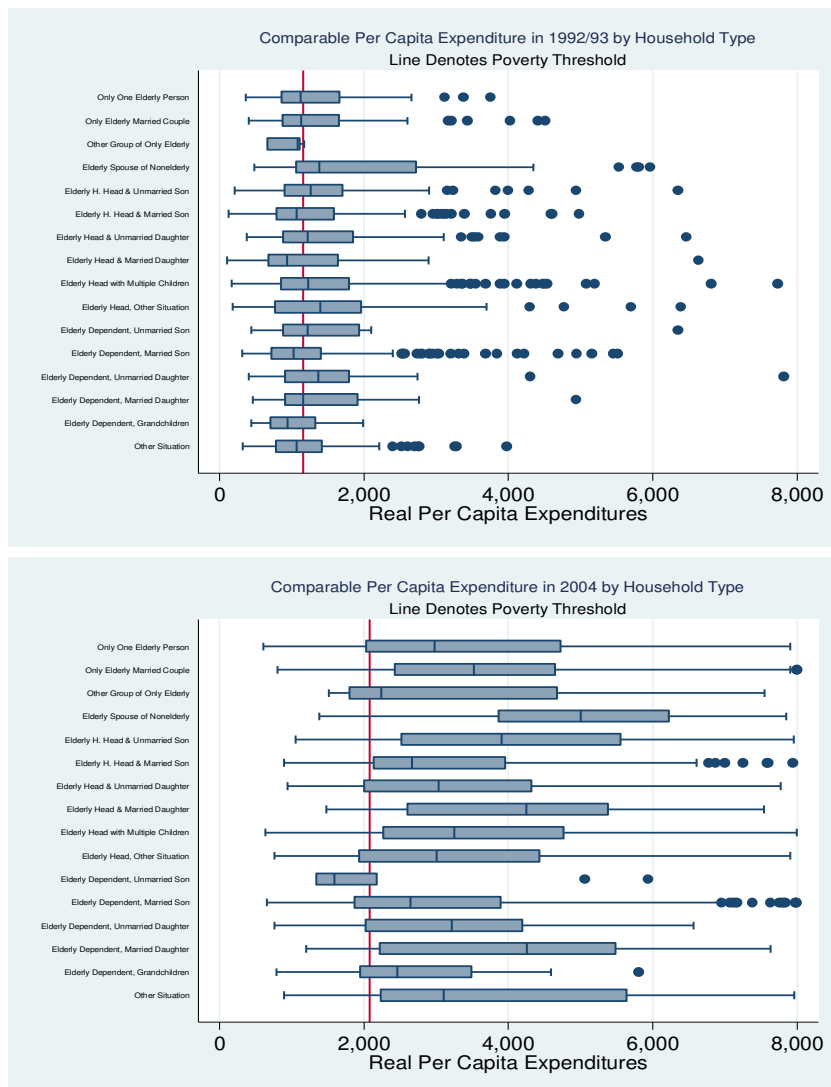
In this paper, we follow Vietnam's General Statistics Office (GSO) to calculate per capita expenditures-based poverty rates. The GSO method is to calculate the minimum expenditures needed to satisfy basic nutritional and living needs. Moreover, this method provides an absolute poverty line that stays constant in real terms over time. Table 2 shows the GSO poverty lines over time.

**Table 2. GSO Poverty Lines**

<i>V(H)LSS</i>	<i>Poverty Lines by Per Capita Real Expenditures</i>
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: VLSS 1992/3 & 1997/8, and VHLSS 2002 & 2004

**Figure 3. Poverty Status of the Elderly Households by Living Types, 1992/93 & 2004**



Source: Authors' calculation from VLSS 1992/3 and VHLSS 2004

Table A-7 provides our estimates of poverty rates in Vietnam for different categories. As can be seen, poverty rates decreased dramatically across Vietnam since the first survey (57.6 percent overall in 1992/93 to 19.3 percent overall in 2004).

*// Table A-7 is about here //*

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 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 high in rural areas.

By marital status and gender, the differences among three groups were small, but married people and males tended to have slightly lower poverty rates than their counterparts.

With regard to living arrangements, Figure 3 shows distribution of per capita expenditures in comparison to the poverty thresholds. The figure illustrates the impressive gains in poverty reduction, though 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 by different age groups, we found one of the striking results was that poverty rates of the elderly were actually lower than that 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, defining elderly at the age of 60 might be too young, and hardship tends to occur mostly at later ages, particularly the extremely old. Any social welfare policy of the government should take this fact into account.

Although the above information illustrates in detail the current poverty incidence of the elderly population in Vietnam, there are still potential bias for such information. As indicated in a variety of studies on measurements of elderly poverty, such as Schwarz (2003) and Barrientos (2006), such poverty measure is only established for household as a whole rather than for particular individuals. In order to get more detailed information about poverty of the elderly people, a number of indicators, such as family composition and control power of family resources, need to be taken into account. For the next step of the paper, we will explore poverty incidence of the elderly population in Vietnam with such information.

**Figure 4. Poverty Rates by Gender and Age in Vietnam, 1992/93 & 2004**



Source: Authors' calculation from VLSS 1992/3 and VHLSS 2004

## 5. CONCLUDING REMARKS

Like many countries in the world, the aging process in Vietnam is taking more rapidly than official population projections, such as United Nations (2004), and this is thanked to the impressive successes in social and economic aspects resulted from *Doi moi*. An aging society that is also undergoing rapid social and economic changes produces a potential concern for public policy. This paper, using the Vietnam (Household) Living Standard Surveys from 1992/93 to 2004 aims to examine the elderly population of Vietnam with various aspects of aging to identify the potential stresses.

Investigation of such indicators of the elderly as education, household living arrangements, and housing conditions, the paper found that familial relations remained strong in Vietnam under 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; conversely, they still contributed significantly to the households in various ways. Their housing conditions and standard of living were also improved over time.

However, despite the general improvements, the detailed decomposition of data shows that many disparities remained among 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 well as societal circumstances continue to change.

Although the paper provided useful information about the elderly population in Vietnam in the past decade, it could not avoid some limitations. One of the most important limitations is that it did not provide information about income sources of the elderly individuals and households. This piece of information is crucial as it can help to analyze economic relations and motivation among family members in the elderly households, which in turn can help to analyze how the role of the elderly in their households changes over time. In addition, due to limitations of poverty measure, the paper also could not provide satisfactory results on the poverty incidence of the elderly population.

In the next step of research on the elderly population in Vietnam, we will explore in more detail about income and poverty issues in order to pursue our keen interest in the Vietnamese pension reform issues. We will consider how a non-contributory pension (NCP) scheme might operate and benefit the Vietnamese elderly.



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**TABLE A-1**  
**Demographic Characteristics of the Vietnamese Population**  
**Percentages Across Demographic Categories**

	1992/93 VLSS		1997/98 VLSS		2002 VLSS		2004 VLSS	
	Nonelderly	Elderly	Nonelderly	Elderly	Nonelderly	Elderly	Nonelderly	Elderly
<b>Population</b>								
Number			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
<b>Region</b>								
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
<b>Urban / Rural Status</b>								
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
<b>Marital Status</b>								
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
<b>Gender</b>								
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
<b>Age Range</b>								
60 - 64		36.15		29.42		26.6		26.77
65 - 69		24.33		27.63		24.79		22.94
70 - 74		20.18		20.01		21.32		20.87
75 - 79		10.8		12.89		13.69		14.28
80 - 89		7.72		8.96		11.65		12.82
90 and Older		0.83		1.09		1.94		2.32

*Source: Authors' calculation from VLSS 1992/3 & 1997/8, and VHLSS 2002 & 2004*

**TABLE A-2**  
**Educational Background of the Elderly Population**  
**Question: Can person read and write? (Percent of who answer “Yes”)**

<i>Regions</i>	<b>VLSS 1992/3</b>	<b>VLSS 1997/8</b>	<b>VHLSS 2002</b>	<b>VHLSS 2004</b>
Red River Delta				
North East	55.39	64.08	62.38	61.25
North West	52.83	54.66	55.29	56.58
North Central Coast	25.24	29.07	32.25	36.75
South Central Coast	61.74	58.87	56.98	57.48
Central Highlands	53.64	58.04	63.05	61.73
South East	29.27	37.08	42.65	46.91
Mekong River Delta	60	57.81	61.66	64.26
	51.04	56.41	57.02	59.61
<i>Rural/Urban</i>				
Rural	50.16	55.47	56.89	57.18
Urban	70.31	66.48	65.23	64.63
<i>Marital Status</i>				
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
<i>Gender</i>				
Male	79.5	79.86	77.35	77.84
Female	35.45	44.36	49.6	51.7
<i>Age</i>				
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 1992/3 & 1997/8, and VHLSS 2002 & 2004*

**TABLE A-3**  
**Living Arrangements of the Vietnamese Population**  
**Percentages Across Demographic Categories**

	1992/93	1997/98	2002	2004
<b>Percentage of Total Population Living in Each Type of Household</b>				
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
<b>Percentage of Elderly Living in Each Type of Household</b>				
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
<b>Percentage of Elderly Living in Each Type of Household (More Detail)</b>				
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
<b>Only ONE Elderly Person (Living Alone)</b>				
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

Types of Households	1992/93		1997/98		2002		2004	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Elderly Head, Unmarried Son	7.32	4.44	1.33	1.70	6.51	9.47	8.14	9.71
Elderly Head, Married Son	10.44	8.22	3.77	2.91	15.30	14.43	4.47	3.27
Elderly Head, Unmarried Daughter	6.87	5.11	0.99	1.43	6.98	6.96	5.75	6.00
Elderly Head, Married Daughter	1.27	2.00	0.42	0.64	1.93	3.18	1.39	1.09
Elderly Head with Multiple Children	25.84	36.22	11.30	18.84	21.30	28.86	33.00	41.55
Elderly Head, Other Situation	4.46	5.56	1.02	1.00	4.73	5.51	4.74	3.49
Elderly Dependent, Unmarried Son	1.08	0.67	0.35	0.58	0.52	0.33	0.31	0.33
Elderly Dependent, Married Son	17.82	15.56	10.75	8.57	17.78	8.18	16.59	8.40
Elderly Dependent, Unmarried Daughter	1.78	2.44	0.71	0.82	0.84	1.04	0.55	1.09
Elderly Dependent, Married Daughter	0.95	1.33	0.52	1.96	1.09	2.40	1.14	2.40

Source: Authors' calculation from VLSS 1992/3 & 1997/8, and VHLSS 2002 & 2004

**TABLE A-4**  
**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	Age 60+	Age 20 - 59	Age 60+	Age 20 - 59	Age 60+	Age 20 - 59	Age 60+
<b>Region</b>								
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%
<b>Urban / Rural Status</b>								
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%
<b>Marital Status</b>								
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%
<b>Gender</b>								
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%
<b>Age Range</b>								
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%
<b>Household Elderly / Nonelderly Mix</b>								
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 1992/3 & 1997/8, and VHLSS 2002 & 2004

**TABLE A-5**  
**Housework Among the Elderly of Vietnam**  
**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	
	Housework?	Hours	Housework?	Hours
<b>Region</b>				
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
<b>Urban / Rural Status</b>				
Rural	68.6%	2.15	69.4%	2.32
Urban	58.2%	2.57	66.5%	2.10
<b>Marital Status</b>				
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
<b>Gender</b>				
Male	56.9%	1.87	60.1%	1.80
Female	73.2%	2.45	74.7%	2.36
<b>Age Range</b>				
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
<b>Household Elderly / Nonelderly Mix</b>				
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*

**TABLE A-6**  
**Housing Conditions for the Vietnamese Elderly**  
**Percentage of the Elderly Household**

	1992/93	1997/98	2002	2004
<b>Housing Structures</b>				
Villas	---	---	---	0.18
House with private BKT	4.11	6.33	7.54	6.85
House with shared 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
<b>Sources of Drinking &amp; Cooking Water</b>				
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
<b>Toilet Usage</b>				
Flush toilet with septic tank	12.81	15.5	18.68	25.44
Suilabh	--	---	3.44	3.18
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	25.84	24.13
No toilet	20.43	16.89	16.46	14.45
<b>Sources of Lighting</b>				
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 1992/3 & 1997/8, and VHLSS 2002 & 2004*



**TABLE A-7**  
**Official Poverty Rates for the Vietnamese Population**  
**Percentages Across Demographic Categories**

	1992/93 VLSS		1997/98 VLSS		2002 VLSS		2004 VLSS	
	Nonelderly	Elderly	Nonelderly	Elderly	Nonelderly	Elderly	Nonelderly	Elderly
<b>Population</b>								
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%	
<b>Region</b>								
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%
<b>Urban / Rural Status</b>								
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%
<b>Marital Status</b>								
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%
<b>Gender</b>								
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 1992/3 & 1997/8, and VHLSS 2002 & 2004*