

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

<i>Year</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

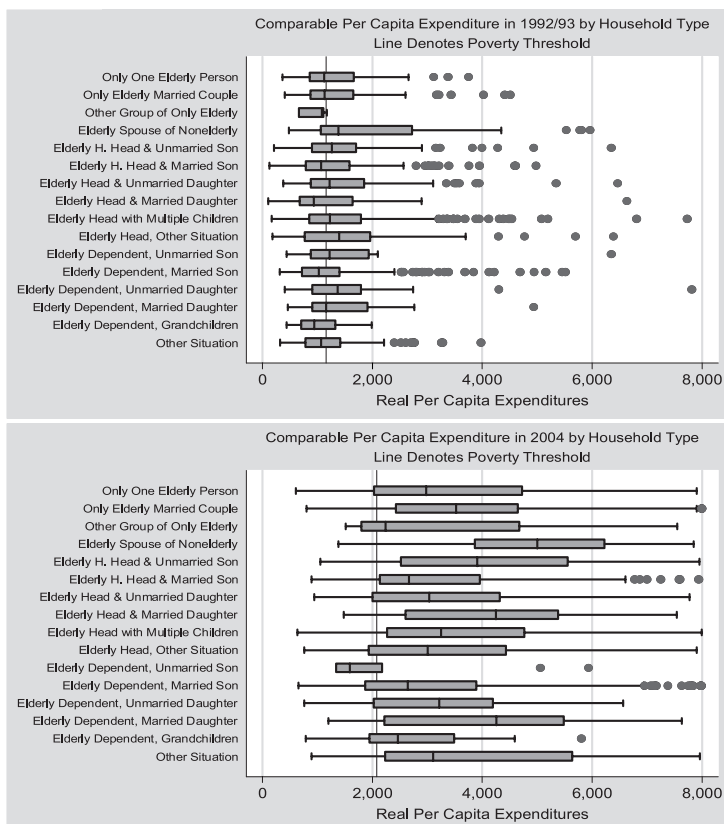
Source: Authors adopted from VLSS 1992/93 & 1997/98, and VHLSS 2002 & 2004

*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



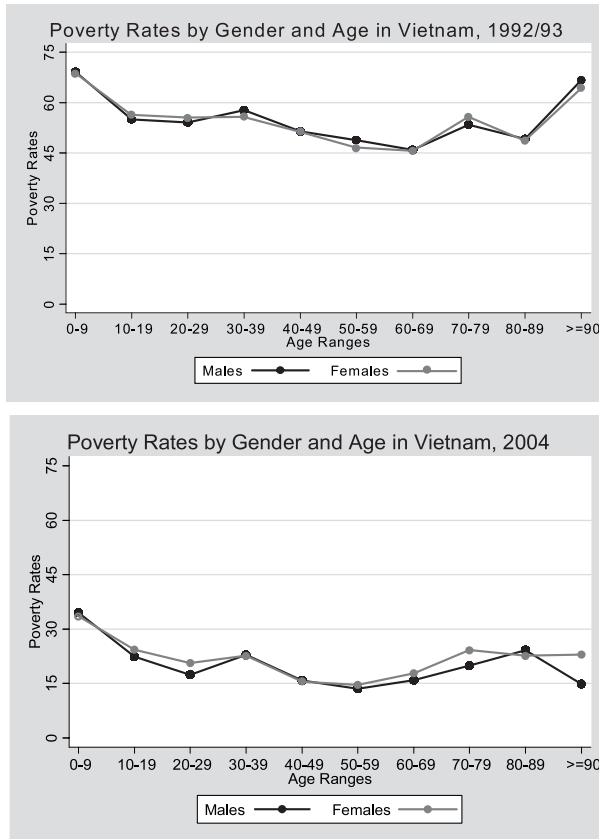
Source: Authors' calculation from VLSS 1992/93 and VHLSS 2004

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.

References

- Barbieri, M. 2006. “*Doi moi* and the Elderly: Intergenerational Support under Strain of Reforms.” Paper prepared for presentation at the 2006 Population of America Association Meeting, Los Angeles, March 30–April 1, 2006.

- Barrientos, A. 2006. "Poverty Reduction: The Missing Piece of Pension Reform in Latin America." *Social Policy & Administration* 40, no. 4: 369–384.
- Bui, T. C.; S. A. Truong; D. Goodkind; J. Knodel; and J. Friedman. 1999. "Vietnamese Elderly amidst Transformations of Social Welfare Policy." Research Report No. 99-436. Ann Arbor, Michigan: Population Studies Center (PSC), University of Michigan.
- Friedman, J.; J. Knodel; T. C. Bui; and S. A. Truong. 2002. "Gender and Intergenerational Exchange in Vietnam." PSC Research Report No. 02-529. Ann Arbor, Michigan: Population Studies Center (PSC), University of Michigan.
- General Statistics Office of Vietnam (GSO). 2004a. "General Introduction of Vietnam Household Living Standard Survey 2002 (VHLSS2002)." Mimeo.
- _____. 2004b. "Main Differences between VLSS 1992/1993, VLSS 1997/1998, and VHLSS 2001/2002." Mimeo.
- Grosh, M. E., and P. Glewwe. 1998. "Data Watch: The World Bank's Living Standards Measurement Study Household Surveys." *Journal of Economic Perspectives* 12, no. 1: 187–196.
- HelpAge International. 2004. *Age and Security: How Social Pension Can Deliver Effective Aid to Poor Older People and Their Families*. London: HelpAge International.
- Hirschman, C., and M. L. Vu. 1996. "Family and Household Structure in Vietnam: Some Glimpses from a Recent Survey." *Pacific Affairs*, Summer 1996. Retrieved from http://www.findarticles.com/p/articles/mi_qa3680/is_199607/ai_n8751166 on June 11, 2006.
- Knodel, J.; J. Friedman; S. A. Truong; and T. C. Bui. 2000. "Intergenerational Exchanges in Vietnam: Family Size, Sex Composition, and the Location of Children." *Population Studies* 54, no. 1: 89–104.
- Knodel, J., and S. A. Truong. 2002. "Vietnam's Older Population: The View from Census." PSC Research Report No. 02-523. Ann Arbor, Michigan: Population Studies Center (PSC), University of Michigan.
- Le, B. D.; N. A. Dang; T. H. Khuat; H. T. Le; and R. L. Bach. 2005. *Social Protection for the Most Needy in Vietnam*. Hanoi: The World Publishing House.
- Mason, K. O. 1992. "Family Change and Support of the Elderly in Asia: What do We Know?" *Asia Pacific Population Journal* 7, no. 3: 13–32. Retrieved from <http://www.unescap.org/ESID/psis/population/journal/1992/v07n3a2.htm> on

- June 11, 2006.
- Schwarz, A. 2003. "Old Age Security and Social Pensions.," Social Protection, World Bank. Washington D.C: World Bank, mimeo.
- Truong, S. A.; T. C. Bui; D. Goodkind; and J. Knodel. 1997. "Living Arrangements, Patrilineality, and Sources of Support among Elderly Vietnamese." *Asia-Pacific Population Journal* 12, no. 4: 69–88. Retrieved from <http://www.unescap.org/esid/psis/population/journal/1997/v12n4a5.htm> on June 11, 2006.
- United Nations. 2005. *World Population Prospects: The 2004 Revision Population Database*. Retrieved from <http://esa.un.org/unpp/index.asp?panel=1> on June 11, 2006.
- United Nations Development Programme (UNDP). 2002. *Gender Differences in the Transitional Economy of Vietnam*. Hanoi: UNDP Vietnam.
- World Bank. 2000. "Vietnam Living Standards Survey (VLSS), 1992-1993: Basic Information." Poverty and Human Resources Division, World Bank. (Updated from 1994 version.)
- _____. 2001. "Vietnam Living Standards Survey (VLSS), 1997-1998: Basic Information." Poverty and Human Resources Division, World Bank.
- _____. 2005. "The 2002 and 2004 Vietnam Living Standards Surveys (VHLSS 2002 and 2004)." Presentation to introduce two surveys by the World Bank Vietnam. Retrieved from http://www.worldbank.org.vn/data/VHLSS2002_2004.ppt on June 11, 2006.