

# Gender Differences in Financial Sources and Perceived Financial Satisfaction Among Older People in Vietnam

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## **Abstract**

*This paper aims to show differences between older men and women in terms of financial sources for their living, as well as to examine determinants associated with perceived financial satisfaction of older men and women in Vietnam. The Chow tests show that urban and rural older people were not different in perceived financial satisfaction, while male and female people clearly were. Two separate logistic regression models for male and female older people were applied to discover determining factors of their perceived financial satisfaction. The findings generally showed that older women usually had lower probability for financial satisfaction than did men. Educational level, living area, and financial factors for both males and females played significant roles in making older people satisfied with their financial situations. The paper also indicates that there was a higher probability of financial satisfaction for those who received financial support from their children. The results also imply that there was no relationship between the work situation of older people and their perceived financial satisfaction, although working in later life could help older people increase their income.*

**Keywords:** Aging; gender; financial satisfaction; older people; Vietnam.

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## 1. Introduction

As a result of continuing fertility reduction and increase in life expectancy at birth, the population in many developing countries is aging at a high pace. Population aging is nowadays viewed as one of the most important challenges for most of the world with its social and economic consequences. According to the United Nations (2013), the population aged 60 and above is the fastest growing and is forecast to reach 1.6 billion in 2020 and 2.2 billion in 2050, and the majority of older people will live in low-income countries. In terms of percentage of the total population, older people will account for 32% of the population by 2050. In fact, the twenty-first century will witness even more rapid aging than did the past century. The older population is increasing more rapidly in developing countries as an inevitable process.

In the context of the ASEAN region, the proportion of older people over 60 years in South-east Asia will triple in the period from 2000 to 2050 (United Nations, 2013). And Vietnam is not excepted from this mainstream trend. It is possible to say that aging of the Vietnamese population has become more prevalent, especially in the past three decades. Statistics for the period between 1979 and 2009 indicate that the older population had the highest growth rate, while the child population experienced a downward trend, and therefore the aging rate is more rapid than ever. In comparison with the respective populations in 1979, the child population rose by 0.98 times in 2009, but the older population increased by nearly three times (Nguyen, 2010). Moreover, UNFPA (2011) indicated that it would take Vietnam less than 20 years to move from an “aging” (when peo-

ple aged 65 and over account for 7 percent of the total population) to an “aged” population (when people aged 65 and over account for 14 percent of the total population), which is less than that for Japan (26 years) and Thailand (22 years) – these two being considered as the fastest aging populations in the region.

The quality of later life is reflected in many aspects. In Vietnam, older people are still confronting health problems, poverty, environmental and social care issues as an unavoidable consequence of demographic and social changes in the context of an aging population. Especially, despite the nationwide development of social protection systems in recent years, financial issues always have bad effects on the lives of the Vietnamese. In addition to exploring the financial sources of older people, it is also important to understand how older people are satisfied with their financial situations. In another aspect, elderly men and women are particularly different in various socio-economic and health perspectives (see, for instance, Giang and Pfau, 2009; Dam ed., 2011; Nguyen and Giang, 2012), and thus it is also crucial to explore how older men and women are different in terms of their financial sources for living and their financial satisfaction.

To the best of our knowledge, there have been no studies exploring these issues for older people in Vietnam. Being motivated by both academic and policy perspectives, this paper will examine how older men and women have different financial sources, and how various individual and household factors influence their perceived financial satisfaction. The paper is organized as follows: In Section 2, we will provide a literature review on the perceived

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financial satisfaction of older people. We will discuss data sets and methodology in Section 3, while findings and discussion will be presented in Section 4. The last section will provide some policy recommendations to improve the financial satisfaction of older people in Vietnam.

## **2. Review of literature**

Financial satisfaction is one of many domains of life that impact on an individual's well-being. Over the last three decades, financial satisfaction and its relationship to many aspects of life have attracted considerable attention from gerontologists and researchers from other disciplines (see, for example, Liang et al., 1980; Bowling, 1995; Keith, 1993).

### ***Definition of financial satisfaction***

Financial satisfaction cannot be solely explained by individual income resources as economic variables. The effect of, psychological factors of the old aged as well as social and daily life variables, must also be mentioned. For this reason, financial satisfaction has a variety of approaches.

According to Hira and Mugenda (1998), financial satisfaction was a common variable in models predicting life satisfaction and other measures of subjective well-being. It is reasonable to suppose that a sense of financial well-being, stems from not only subjective and objective measures of the financial situation but also from how a person perceives objective attributes of their financial situation after comparing those attributes against certain standards of comparison (Porter and Garman, 1993). Financial satisfaction is defined as the subjective evaluation of the degree to which one's financial resources are adequate versus inadequate, or satisfactory versus unsatisfactory (Andrews

and Withey, 1976). Besides, financial satisfaction variables have been measured differently by various proxies such as perception of past and future financial outcomes and perception of income adequacy (Keith, 1985), and satisfaction in regards of overall economic circumstances, including debt, savings and income (Hira et al., 1993).

Meanwhile, Burholt and Windle (2006) viewed financial satisfaction from sole financial factors. Their research findings showed that the financial satisfaction measure captured perception of resources in reserve (i.e., future financial satisfaction: the ability to afford emergencies, bills, luxuries and other future needs), current material resources (i.e., current financial satisfaction: whether resources met current needs, and how well off the person was compared with the other of the same age) and the security afforded by the home (i.e., a safe and decent place to live). The first two dimensions of financial satisfaction were also used as measures in their own right (Burholt and Windle, 2006).

Zurlo (2009) conducted research on the relationship between the characteristics of adults aged 51 and over and their financial well-being. In this study, self-rated financial satisfaction is a subjective measure of financial well-being. In addition, financial satisfaction could be considered as a "mediator" between wealth and degree of happiness, and played a vital role in the domain of overall individual well-being (Easterlin, 2006; Layard, 2006; as cited by Chuan et al. 2012). In addition, Hira and Mugenda (1998) showed that perceived financial satisfaction included satisfaction with regular monetary savings, current debt level, family's

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current financial situation, ability to meet long-term financial goals, ability to meet financial emergencies, and money management skills.

From all aspects to be considered, financial satisfaction of older people in this paper is also considered as a psychological, social and economic perception of their financial status. In short, financial satisfaction is a perspective of the older well-being regarding combination of monetary condition and quality of later-life condition.

#### *A review of studies on older people's financial satisfaction*

Hong and Swanson (1995) studied the financial satisfaction of women aged 55 and above, using data from the Survey of Consumer Finances in 1977 and 1989, which was a national survey conducted by the Survey Research Center of the University of Michigan, with the data collected from personal interviews with a large number of randomly selected households in the U.S. There were three measures used (household income, emergency fund adequacy, and debt-to-income ratio) to examine factors impacting on the household financial well-being of older women. The models were also chosen carefully and differentially with each measure of financial status. To be specific, ordinary least squares (OLS) was chosen for the model of household income, while Tobit models were selected for the models of emergency fund adequacy and total debt-to-income ratio factors. In this research, some major factors were identified, including human capital and work-related (such as the number of years of formal education, working status) and socio-economic characteristics (such as home ownership, race, the number of children under 18, whether the

respondent resided on a farm or ranch). OLS results showed that educated, currently employed, and married respondents tended to reach a higher income level in both 1977 and 1989. For emergency fund adequacy, educated, older, and white women who possessed a home had a higher level of emergency funds in the 1989 data; however, it was not significant in the 1977 model. For the ratios of debt-to-income, the results of tobit analysis indicated that employed, older, non-married, and white women had a lower level of debt relative to their income, while homeowners had a higher debt-to-income ratio in 1989. In short, the research showed the factors contributing to the financial well-being of individuals and households by a complex measure combined from income, emergency fund adequacy and debt-to-income.

To determine different predictors of financial satisfaction among retirees and non-retirees, Hira and Mugenda (1998) measured perceived financial satisfaction as satisfaction in such various respects as savings, debt, financial goals, and money management skills. They used data collected from 529 respondents with a mean age of 50 during the autumn of 1995 to 2000 through the Services of Survey Sampling of Connecticut Iowans. The answers from respondents were recorded in a range from 'very dissatisfied' to 'very satisfied' with five degrees of satisfaction. In this research, such predictors contributing to financial satisfaction were income, marital status, self-image, comparative financial situation, financial concerns, and spending behavior. An ordered logistic regression model was used to establish the differences between retirees and non-retirees in financial satisfaction. Among non-retirees, the

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results showed significant and positive correlations between financial satisfaction and various socio-economic characteristics (such as age, marital status, education, and household income). It implied that the older, married and more educated, and those with higher incomes, were at a higher level of financial satisfaction. The results also indicated positive relations between financial satisfaction and self-image and comparative financial situation, while financial status had a negative correlation with financial concerns and spending behavior. Among retirees, respondents who possessed low self-image, financial concerns, or bad spending behaviors were less satisfied with their financial status. Positive correlations to financial satisfaction were found in their perception of their comparative financial situation variables. Unlike the non-retirees, age, marital status and education were not significant variables in the model of financial satisfaction. In conclusion, for both the retirees and non-retirees, financial satisfaction was significantly correlated with respondents' perception of their comparative situation (i.e., compared to past income and the income of other families), financial concerns, and spending behavior.

With regard to the financial factors, data from England, Scotland and Wales were used in JRF Findings (2006), which examined the relationship between material resources and financial satisfaction of older people. Findings indicated that private sources of income (such as interest and insurance payments, business income and rent) were a part of material resources and had a positive impact on financial satisfaction. In contrast, a low level of material resources had a negative impact on later life satisfaction. In re-

gard to age and satisfaction with financial status, the report also indicated that an increase in age was correlated with a decrease in material resources and thus people had lower financial satisfaction in their older ages than they did in their younger ages.

In order to examine the cause of financial satisfaction in old age, Hansen et al., (2008) focused on the question: "A satisfaction paradox or a result of accumulated wealth?". They reviewed various studies that showed the relationship between income and fiscal satisfaction was positive but moderate in magnitude, and the reason for this moderate correlation was that perceptions of financial satisfaction depended more on relative than absolute income (compared to past income or the income of relevant others, for instance) while another possibility was a satisfaction paradox. Using data from the first wave of the Norwegian Life Course, Aging, and Generation Study (NorLAG) with a sample of 4,169 people, respondents' perception of financial satisfaction was collected by the question: "How would you describe your present financial situation" and were categorized into five degrees in the answer: "great financial difficulties", "some problems", "must be careful, but I get by", "good", "very good". Hansen et al., (2008) examined the so-called 'satisfaction paradox' or 'satisfied poor' phenomenon to see whether older people were more financially satisfied than the non-elderly while their earning was substantially less than mid-age persons. For age and financial satisfaction, they adopted analysis of variance (ANOVA) to test the significance of differences between financial means and financial satisfaction across three age groups (40-52, 53-

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66, and 67-80) from samples of persons aged 40-80 from 30 Norwegian municipalities. The authors found that there was a positive linear relationship between age and financial satisfaction. The results from an OLS regression for financial satisfaction on financial variables (such as income, asset, and debts) by age and gender showed that there was a higher level of financial satisfaction along with age as debts considerably decreased and financial assets increased along with a higher tendency to save. In addition, assets and debt might be vital sources of financial satisfaction for two reasons: first, assets and debt directly influenced the amount of disposable money presently available; second, assets and debt impacted on the future finance of older people, which had a big effect on their psychology in regard to their financial status. The authors also proved that high satisfaction among older people, even with poor income conditions, did not completely apply to the majority of older people, but only to among elders with a low level of income and wealth.

In the research on personal attributes and the financial well-being of older adults, Zurlo (2009) explored the relationship between the attributes of older people and their financial well-being (which was measured by financial satisfaction). The research in the United States by the University of Michigan's Health and Retirement Study (HRS) applied a mediation model and an ordered logistic regression to test with a panel dataset conducted every two years with all older adults over 50. Financial satisfaction is a composite measure that averages the responses to two psychological questions about degrees of satisfaction with present financial situation and degrees of difficulty in

meeting monthly payments. Independent variables include age, age-squared, gender, education, race, health status, income, and working status. Besides, there is the presence of mediating variables with perceived constraints and personal mastery for control beliefs. The results of an ordered logistic regression analysis showed that variables for age, age-square and female were not statistically significant with financial satisfaction. Variables for education, medium-long-term planning horizon, log of income, and work for pay were positively and statistically significant, while unmarried, non-white and fair-poor health status were negatively and statistically significant for financial satisfaction. Results of the mediation analysis indicated that the mediating variables contributed to the relationship between the personal attributes and financial satisfaction of older adults in each of the four mediation models for more detailed analysis of control beliefs.

Hariharan (2012) conducted research on the economic satisfaction of older people in rural Tamil Nadu (India). With a dataset from 160 elderly people (including 80 males and 80 females who were contacted through household surveys) in Madurai District of Tamil Nadu, the author used multiple linear regression analysis to assess the effect of socio-demographic characteristics on the economic satisfaction of older people. The measure of financial satisfaction was simply the income level after age 60. As a result, marital status and family type of the older people were seen as the most positive significant variables for an increase in financial satisfaction. In contrast, living arrangement showed as the most negative significant factor, followed by education. Age, gender, and work-

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ing status were also witnessed as positive signs, implying an increase in these variables would lead to economic satisfaction. Moreover, sufficient economic support from their children and lack of physical support, to some extent, had significant impacts on older people's financial satisfaction.

In order to explore the relationship between intergenerational financial resource transfer and financial satisfaction of urban older Malaysians, Chuan et al. (2012) used the sample of older persons aged 50 or over and residing in the State of Selangor from the 2010 Census. Financial transfer includes financial assistance among the family members, i.e., financial assistance from children to parents (CTP) and parents to children (PTC). Principal Component Analysis (PCA) was conducted, in which the dependent variable was the financial satisfaction (constructed from the answer about the financial status of respondents) and the independent variables were self-confidence toward family, self-confidence toward society, emotional status, children to parent, and parent to children. Four independent variables, except the children-to-parent variable, showed a positive relationship with financial satisfaction at a 1% level of significance. Interestingly, this study showed that parents who had a higher level of financial satisfaction tended to provide greater financial assistance to their children, but there was no evidence to support the relationship between financial satisfaction and financial support from children to their parents.

### **3. Data and methodology**

#### ***3.1. Data***

In order to pursue the aforementioned research questions, this paper will use two sets of

data, i.e., the Vietnam Household Living Standard Survey (VHLSS) in 2012 and the Vietnam Aging Survey (VNAS) in 2011 (Vietnam Women Union, 2012).

The VHLSS 2012 was conducted at the household level, but included a number of individual characteristics such as age, gender, relationship to the household head, marital status, work status, and educational attainment. Such data let us identify an older person (aged 60 and over) and a household with at least one older person). The VHLSS 2012 surveyed about 9,400 households with about 3,978 older people. The survey is representative at a national level, as well as for urban and rural areas. At the household level, the survey provides information on the sources of income, household expenditure, ownership of consumer durables, business and agricultural activities, poverty incidence, participation in poverty alleviation programs, social insurance, wealth, and housing conditions. Nevertheless, the data have some critical limitations. Most of the income sources are only identified at the household level, so it is not clear which member is the source of household income. Similarly, expenditure is identified at the household level and there are no equivalence scales for different household members, so we do not know who is spending, and can only identify expenditure per capita within the household. Wealth data are also available only at the household level, so it is difficult to analyze intra-household transfers

The VNAS 2011 was the first nationally representative survey on the older population in Vietnam. The survey was conducted with a sample of 4,007 people aged 50 and above, who were chosen from the data of the Popu-

lation and Housing Census in 2009 using the proportional to population size (PPS) sampling method. Among these people, there were 2,789 older people (aged 60 and over): by gender, 1,683 older people were women and 1,106 older people were men; by ethnicity, 2,443 were Kinh and 346 were ethnic minorities; by area, there were 2,050 living in rural areas and 739 in urban areas (Vietnam Women Union, 2012). The survey included useful information in regard to individuals (such as age, gender, marital status, and working status), family life (e.g., living arrangements, family relationships, and care and being cared), and the social relationship of the elderly (e.g., access to social policies, and participation in social, cultural activities). Together with the household data, the survey consisted of data on household living conditions (such as housing, sanitary condition, and possession of assets) and financial circumstances. In particular, financial factors include information about land ownership, debts, and assets of older people's household.

In regard to the financial satisfaction of older people, VNAS 2011 is a reliable source of data with detailed information about socio-economic as well as financial factors. To be specific, information regarding financial satisfaction comes from the question: "Is your income/financial support sufficient for your daily needs?". VNAS 2011 recorded the answer with four degrees of assessment: "Rarely or never enough"; "Sometimes not enough"; "Enough"; and "More than enough".

### 3.2. Methodology

To provide a general picture of the income sources of older people in Vietnam, we will use both VHLSS 2012 and VNAS 2011 where data

are available.

To identify factors determining the financial satisfaction of older people, we will use VNAS 2011 because VHLSS 2012 did not have any questions relating to the financial satisfaction of older people. Specifically, we will apply a binary logistic model for older men and women in order to identify underlying factors of their financial satisfaction, as follows:

$$FS = \beta_i X_i + \mu_i \quad (1)$$

Where:

$FS$  represents financial satisfaction, in which older people are satisfied with their financial status (or  $FS = 1$ ) if they chose either of the two answers "Enough" and "More than enough", while they are dissatisfied with their financial status (or  $FS = 0$ ) if they chose the other two answers "Rarely or never enough" and "Sometimes not enough".

$i$  is older people  $i$ ;

$X_i$  is different set of independent variables, including individual and household characteristics, for older people  $i$ ;

$\beta_i$  is corresponding coefficients; and

$\mu_i$  show measurement error term, and is assumed to follow normal distribution.

Besides, for each dummy variable sub-group, one sub-group will be selected as the reference group. For instance, the variable 'working status' covers two sub-groups (still working and not working). The 'not working' sub group will be chosen as the reference group. For this strategy, a negative sign and statistically significant coefficient implies that the comparative group is less likely to have impact on the financial satisfaction among older people than the reference group. In contrast, a positive and statistically



significant coefficient indicates that the comparative group is more likely to have influence on older people's financial satisfaction than the reference one does.

In order to assess the magnitude of each variable on financial satisfaction, we will compute the marginal effects of variables respectively as follows:

$$\text{Marginal Effect } FS_i = Pr(Y|X_p, FS_i=1) - Pr(y|X_p, FS_i=0) \quad (2)$$

Marginal effects show the impacts of each factor on the changes in financial satisfaction while other factors are kept constant. With the changes in financial satisfaction over the changes in the single independent variable, the model will analyze the role of each determinant of financial satisfaction for Vietnamese older people.

### 3.3. Description of variables

#### *Dependent variable*

The financial satisfaction of older people is represented by *FS* as discussed above. In VNAS 2011, there were 2,739 respondents to the question on financial satisfaction (meaning that the response rate was 98.2%).

#### *Independent variables*

The independent variables are presented in Table 1.

- *Age*: Most recent studies indicate that an increase in age correlates with an increase in financial satisfaction, despite drops in income and material resources compared with younger people (see, for instance, Hansen et al., 2008; and Zurlo, 2009). It is possible to say that older people are not solely interested in income having a high weight in their view of financial issues, which might lead to a positive relationship between age and perceived financial satisfaction. Age is not assessed in chronological years and is not used as a continuous variable. This study will divide age into three categories: 60-69 (young old), 70-79 (middle old), and 80 and over (the oldest old). In our analysis, the first group is considered as the reference one.

- *Living area*: Rural and urban environments have different effects on living arrangements, thinking, living style and many other social elements. That is the reason why it is an important determinant for any research, and studies on the financial satisfaction of older people are not excluded. The VNAS 2011 indicates that 68 percent of older people in Vietnam were living in rural areas.

**Table 1: Independent variables**

Individual Characteristics	Financial Factors
1. Age	1. Children-to-parents financial support
2. Gender	2. Parents-to-children financial support
3. Marital status	3. Other land ownership
4. Residential Area	4. Having any financial assets
5. Education & Training	5. Having any debt
6. Working Status	
7. House ownership	

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- *Marital status*: For older people, marital status has a significant impact on their psychology as well as their financial condition. For instance, JRF Findings (2006) asserted that married older people were more likely to have higher levels of marital resources and to reach greater levels of financial satisfaction than others. Also, Hariharan (2012) indicated that marital status was found to be the most positive significant variable for increasing the economic satisfaction of older people living in rural areas. Hong and Swanson (1995) found that married older women had higher incomes than non-married ones. For this reason, marital status is seen as an indispensable variable explaining the perceived financial satisfaction of older people. In this paper, the same as Hira and Mugenda (1998) categorized marital status, we will consider two groups of older people in terms of marital status, in which currently married older people are coded by 1, while others (including single, widow, divorced, and separated) are coded by 0 and are considered as the reference group.

- *Education level*: In their research on the relationship between the material resources and well-being of older people, Burholt and Windle (2006) concluded that education influenced job opportunities, savings, pensions and other financial factors (as cited in JRF Findings, 2006). Also, Hong and Swanson (1995) drew from their logistic model that a higher education level helped women reach a better level of financial status. Hira and Mugenda (1998) also concluded that less educated non-retirees were correlated with a lower income. On the other hand, Hariharan (2012) showed that there was a negative relationship between financial

satisfaction and education among the elderly in rural Tamin. In this paper, education is categorized into high school and more and under high school and less, in which the former is the reference group.

- *Working status*: Working brings money, happiness, and experience to people. For older people, working does not mean that they feel happy, have more money and are satisfied with their financial condition. Possibly, older people are still working due to being dissatisfied with their financial circumstances. In addition, more working results in less time spent on older people's families and favorite activities, which might generate bad psychological consequences. Agreeing with this view, JRF Findings (2006) showed that working or being employed partially contributes to material resources (including employment status, property, savings and occupational pension) but was not important for financial well-being. In this paper, working is categorized into not-working (as the reference group) and working.

- *House ownership*: Information regarding the ownership rights of an older person with their household has a specific role in their perceived financial satisfaction. It is undeniable that older people having their own houses will reduce rental fees for housing, leading to stable psychology, which in turn helps them avoid psychological and monetary burdens. The role of house ownership is also present in the research of Hong and Swanson (1995), in which house ownership did not significantly impact on household income but it did impact on emergency fund adequacy and the ratio of total debt to total income. In this paper, the presence of this variable in the logistic model is used to

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examine whether house ownership impacts on financial satisfaction, in which ‘Not an owner of the house’ is the reference group.

- *Support to children:* Giving monetary assistance to children may help older people reach a higher level of financial satisfaction. For instance, Chuan et al. (2012) indicated that both financial transfers from parents to children (PTC) and children to parents (CTP) are important factors determining older Malaysians’ financial satisfaction. In the VNAS 2011, information about support to children is indicated in the question “Has there been any financial support from you to your children in the last 12 months?”. In our model, the group of older people responding with ‘No’ to this question will be the reference group.

- *Receiving monetary support from children:* Similar to the above variable, the VNAS 2011 has a question about receiving monetary support, i.e., “Has there been any financial assistance from your children to you in the last 12 months?”. In our model, the group of older people responding with ‘No’ to this question will be the reference group.

- *Other land ownership:* This is another important factor representing the financial wealth of older people. In all previous studies, this factor was not considered. In this paper, we will examine the contribution of this indicator to the financial satisfaction of older people in Vietnam. The information for this variable is derived from a question, i.e., “Do you possess any other land/premises (outside the land/house on/ in which you are living)?”. In our model, the group of older people responding with ‘No’ to this question will be the reference group.

- *Having financial assets and having debts:*

These are two very important factors relating to the financial condition of any older people. For older people, both assets and debts influence the amount of disposable money presently available as well as the economic concerns and financial plan for the future (Hansen et al., 2008). While saving enhances the financial ability of an elder, debts put them under high pressure from financial problems. Therefore, saving and debt possess inverse impacts on perceived financial satisfaction. In this paper, we derive the information for this variable from respective questions on whether older people’s households have assets and have debts. Similar to other aforementioned variables, the group of older people responding with ‘No’ to these questions will be the reference group in our analysis.

## **4. Findings and analysis**

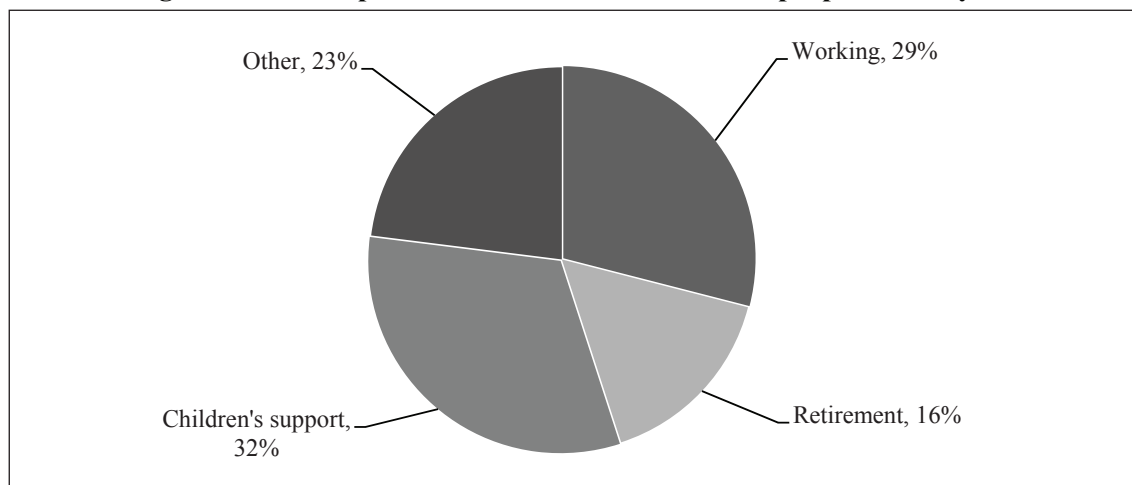
### **4.1. Financial sources of older people**

Figure 1 presents the most important financial sources of older people in their daily lives. Working and children’s support accounted for about 60%, while retirement and other social allowance benefits accounted for only 16%.

Table 2 shows gender differences in receiving private income transfers, which include domestic remittances, international remittances, intra-household support (cash or in-kind), and transfers from other sources (such as charities, NGO, etc.). Across the private transfer categories, both older men and women in rural areas had significantly higher rates of receipt than their urban counterparts. However, in terms of living area, there were no significant differences between older men and women when comparing all private transfer categories.

In regard to age, all the private transfer cate-

**Figure 1: Most important financial sources of older people for daily life**



Source: Authors' calculations, using VNAS 2011

**Table 2: Percentage of older persons receiving income from private transfers**

	Men					Women				
	Domestic remittances	International remittances	Intra-household support (cash or in-kind)	Transfers from charities, NGO, etc.	Total (any)	Domestic remittances	International remittances	Intra-household support (cash or in-kind)	Transfers from charities, NGO, etc.	Total (any)
<b>Area</b>										
Urban	29.42	44.85	32.06	23.99	29.15	30.68	47.79	30.86	23.7	30.42
Rural	70.58	55.15	67.94	76.01	70.85	69.32	52.21	69.14	76.3	69.58
<b>Age group</b>										
60-64	30.98	42.64	24.02	42.4	33.21	26.94	26.87	29.5	25.83	26.31
65-69	19.4	17.3	17.37	14.93	18.43	19.02	24.29	26.53	19.31	19.48
70-74	17.93	13.06	16.88	18.02	17.58	19.27	21.42	17.56	16.46	18.66
75-79	14.74	13.46	16.13	7.08	13.71	12.65	15.81	18.54	14.43	13.32
80-84	9.95	9.4	17.91	7.84	9.98	11.64	4.22	6.2	13.63	11.83
85-89	4.92	4.15	3.84	6.76	5.17	6.27	5.15	1.68	5.72	6.4
90+	2.07	0	3.85	2.98	1.92	4.2	2.23	0	4.63	4
<b>Expenditure quintile</b>										
Q1 (poorest)	17.85	9.57	9.63	23.62	17.84	21.61	9.6	17.83	27.38	21.55
Q2	19	7.69	20.92	21.21	19	17.05	12.58	29.48	19.2	18.01
Q3	22.72	12.99	25.37	17.89	22.48	22.5	16.21	10.86	19.58	21.53
Q4	23.25	27.96	19.99	17.67	21.91	19.51	16.31	24.32	15.59	19.25
Q5 (wealthiest)	17.19	41.79	24.1	19.61	18.76	19.34	45.3	17.51	18.25	19.66
Total	100	100	100	100	100	100	100	100	100	100
N	5,406	509	430	1,502	7,100	5,574	590	450	1,648	7,442

Source: Authors' calculations, using VHLSS 2012

**Table 3: Percentage of older persons receiving income from capital and/or assets**

	Men			Women		
	Capital	Assets	Total (any)	Capital	Assets	Total (any)
<b>Area</b>						
Urban	55.49	53.77	55.41	57.89	56.91	57.80
Rural	44.51	46.23	44.59	42.11	43.09	42.20
<b>Age group</b>						
60-64	35.74	53.76	36.88	30.37	34.24	30.65
65-69	16.54	10.20	16.10	22.01	17.84	21.91
70-74	21.48	14.32	21.00	19.96	9.05	19.23
75-79	19.14	4.37	18.00	12.48	3.00	11.79
80-84	4.41	17.34	5.53	10.49	16.96	10.42
85-89	1.29	0.00	1.19	2.59	18.90	4.09
90+	1.40	0.00	1.29	2.09	0.00	1.93
<b>Expenditure quintile</b>						
Q1 (poorest)	2.03	0.00	1.87	1.56	0.00	1.44
Q2	4.48	0.00	4.13	6.49	13.00	7.15
Q3	19.59	0.00	18.04	13.76	4.45	13.09
Q4	23.73	39.17	24.58	18.82	36.08	19.71
Q5 (wealthiest)	50.16	69.83	51.37	59.38	46.47	58.61
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
N	1,373	138	1,486	1,444	164	1,577

Source: Authors' calculations, using VHLSS 2012

gories show that, for both older men and women, younger people had higher rates of receipt than did older people.

For the expenditure quintile, there were significant differences between people – both older men and women – in the first quintile (the poorest) and the fifth quintile (the richest) in receiving international remittances.

Table 3 presents the percentage of older men and women receiving income from capital (such as interest, dividends, and profit) and assets (such as renting out property, land, or other assets). In regard to living area, both older men and women living in urban areas had significantly higher rates of receiving income from capital and assets than did those living in rural

areas.

The same as income sources from private transfers, younger people tended to have a higher rate of receiving income from capital and assets than those at more advanced ages.

In terms of the expenditure quintile, there were large differences between the poorest and the richest in receiving income from capital and assets.

Table 4 shows the percentage of older people receiving income from work.

For both older men and women, those living in rural areas were more heavily reliant on income from work than those living in urban areas. Urban men had a higher rate of income from work than did their urban counterpart,

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**Table 4: Percentage of older persons receiving income from work**

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	Men	Women
<b>Area</b>		
Urban	23.75	19.71
Rural	76.25	80.29
<b>Age group</b>		
60-64	45.79	55.81
65-69	28.58	14.04
70-74	16.47	18.38
75-79	6.08	5.58
80-84	2.96	5.91
85-89	0.11	0.27
90+	0.00	0.00
<b>Pension receipt</b>		
No pension	63.46	63.78
Receives pension		
<i>Receives contributory pension</i>	5.51	2.68
<i>Receives non-contributory pension</i>	17.57	21.13
<b>Total</b>	<b>100</b>	<b>100</b>
N	451	525

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Source: Authors' calculations, using VNAS 2011

while a contrasting situation was observed in rural areas.

In terms of age, as working capacity reduces along with more advanced age, younger people had significantly higher rates of receiving income from work than did older people, especially those at very advanced ages.

Persons - both older men and women - who did not have any pensions had much higher rates of receiving income from work than did pension receivers. Between people receiving pensions, for both older men and women, those having contributory benefits had significantly lower rates of receiving income from work than did those having non-contributory benefits. This could be elucidated by the fact that

the former usually had higher incomes than did the latter.

#### **4.2. Older people's financial satisfaction**

Table 5 provides the results about the older people's financial satisfaction by age, sex and area. It indicates that the majority of older people in all groups are dissatisfied with their finances. It is possible to say that the older people aged 80 and over had positive feelings (40.6 percent) about their financial circumstance, while the opposite was true in the two younger groups. Interestingly, the results implied that male and female people had quite similar rates for financial satisfaction (37 percent and 37.8 percent, respectively). Meanwhile, the difference between rural and urban was clearer with

**Table 5: Older people's financial satisfaction, by age, sex and area**

	Total	Age			Sex		Area	
		60-69	70-79	80+	Male	Female	Urban	Rural
Dissatisfied (%)	62.5	60.8	66.8	59.4	63.0	62.2	50.3	68.3
Satisfied (%)	37.5	39.2	33.2	40.6	37.0	37.8	49.7	31.7
Total	100	100	100	100	100	100	100	100

Source: Authors' calculations from VNAS 2011

the satisfaction rate for urban people 49.7 percent and that of the rural people 31.7 percent. The percentages between the three ranges of age groups shows a big gap between the group of people who are satisfied and the others in rural areas.

On other determinants of financial satisfaction, Table 6 shows information regarding marital status, level of education, and working status. Again, in all categories, the rates of people who were satisfied with their financial circumstances were smaller than those for people who were dissatisfied. Outstandingly, the statistical number of people who reached a higher level of education was different from other categories. The results show that 53.6 percent of people who had a high school and above level felt satisfied with their financial situation. This might

indicate that education has a positive contribution to the financial satisfaction of older people.

In regard to financial flows from children, Table 7 indicates that around 40% of older people who got financial support from their children improved their ability for financial satisfaction, and those who gave financial support to their children had the same rate. On the other hand, older people who did not have any financial flows with their children suffered a higher rate of dissatisfaction. Such a finding implies a close relationship between older people's financial satisfaction and their financial flows with their children.

Financial factors are also represented by financial assets and debts. Table 8 shows clearly that the majority of older people (59 percent) who possessed financial assets were satisfied

**Table 6: Older people's financial satisfaction, by marital status, education level and working status**

	Total	Marital status		Education and training		Working status	
		Married	Non-Married	Under high school	High school & more	Still working	Not working
Dissatisfied (%)	62.5	61.8	64.2	65.5	46.4	64.4	61.3
Satisfied (%)	37.5	38.2	35.8	34.5	53.6	35.6	38.7
Total	100	100	100	100	100	100	100

Source: Authors' calculations from VNAS 2011

**Table 7: Older people's financial satisfaction, by mutual support and land ownership**

	Total	Parent's support		Children's support		Land ownership	
		YES	NO	YES	NO	YES	NO
Dissatisfied (%)	62.5	57.1	63.4	59.5	70.5	57.7	63.8
Satisfied (%)	37.5	42.9	36.6	40.5	29.5	42.3	36.2
Total	100	100	100	100	100	100	100

Source: Authors' calculations from VNAS 2011

**Table 8: Older people's financial satisfaction, by assets and debts (%)**

Financial satisfaction	Total	Financial Assets		Debts	
		YES	NO	YES	NO
Dissatisfied	62.5	41.00	65.1	76.5	56.5
Satisfied	37.5	59.00	34.9	23.5	43.5
Total	100	100	100	100	100

Source: Authors' calculations from VNAS 2011

with their financial situation. Meanwhile, 76.5 percent of older people whose households had debts felt financial dissatisfaction.

#### **4.3. Determinants of older people's financial satisfaction**

Before conducting the binary logistic regression, we adopt the Chow tests to find out the exact way to analyze the impact of independent variables. Chow tests are used with the hypotheses about differences between rural and urban and male and female in the regression. The result of tests for differences in regression with two groups (who live in urban areas and live in rural areas) indicate that we cannot reject the hypothesis which puts rural and urban in the same model. However, the Chow tests (Rural – Urban Chow test:  $\text{Chi}2(13) = 64.42$  where  $\text{Prob} > \text{Chi}2 = 0.0000$ ; Male – Female Chow test:

$\text{Chi}2(13) = 12.30$  where  $\text{Prob} > \text{Chi}2 = 0.5031$ ) for the gender differences implies that we have to use two separate logistic models (one for older women, and the other for older men). For this reason, this paper will apply two separate logistic regression models for males and females to estimate the impact of determinants of financial satisfaction.

To examine financial satisfaction, the factors relating to background as well as daily life of older people are important indicators. The regression shows valuable information across the impact of the independent variables respectively (Table 9).

The impacts of a higher age are hardly answered with models for males and females. For males, Model 1 witnesses a positive and significant impact on the group aged 80 and over



**Table 9: Determinants of older people's financial satisfaction**

	Model 1 (Male)	Model 2 (Female)
<b>Individual Characteristics</b>		
Age		
60-69 (ref.)	-	-
70-79	0.278	-0.680***
80+	0.517*	-0.167
Marital status		
Non-married (ref.)	-	-
Married	0.104	0.015
Residential Area		
Rural (ref.)	-	-
Urban	0.424*	0.687***
Education level		
High school and more (ref.)	-	-
Under High school	-0.439*	-1.063***
Working status		
Non-working(ref.)	-	-
Working	0.261	0.067
House ownership		
No (ref.)	-	-
Yes	0.094	-0.623***
<b>Financial Factors</b>		
Children-to-parents supports		
No (ref.)	-	-
Yes	0.572**	0.556***
Parent-to-children supports		
No (ref.)	-	-
Yes	0.453	0.061
Other land ownership		
No (ref.)	-	-
Yes	0.321	0.557*
Having any financial assets		
No (ref.)	-	-
Yes	0.419	1.028***
Having any debt		
No (ref.)	-	-
Yes	-0.440	-1.148***

Notes: \*, \*\*, \*\*\* denote statistically significant Beta coefficient at the 10, 5 and 1 percent significance level respectively; (ref.) denotes the reference groups.

Source: Authors' calculations, using VNAS 2011

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on financial satisfaction. The results imply that this group was more likely to be satisfied with their finances than was the group of the males aged 60-69. Despite the lack of a specific impact on those aged 70-79, we may see that the higher age group had a higher chance for financial satisfaction for males in Vietnam. The results for men were the same as those found in previous studies. For example, Burholt and Windle (2006) revealed that an increase in age correlated with an increasing change in financial satisfaction, despite decreases in material resources. Also, Hansen et al. (2008) agreed that older people were more financially satisfied than the none-elderly, while their earning is substantially less than mid-age persons.

The opposite is true in Model 2. Negative signs and a high level of statistical significance (at a 1 percent level) imply that women, who are aged 70-79, were more likely to experience financial dissatisfaction than the younger females. Thus, for females, more advanced aged females might have lower possibilities for financial satisfaction. This is in contrast with results from previous studies. Zurlo (2009) indicated age and females are positively significant factors for the financial satisfaction of older people.

The results indicate that marital status and working status were less likely to have significant impacts on the financial satisfaction of older people. For both models, married or non-married variables could not be seen as determinants of financial satisfaction, where all coefficients for both men and women are not statistically significant. This is different from the results of Hariharan (2012), in which marital status was the most significant variable in

increasing the financial well-being of rural older people.

In both models, working status did not show any statistically significant impacts on the financial satisfaction of older people. This implies that working was not an important determinant of the perceived financial satisfaction, despite it being an important source of income for older people. This result was also found in Burholt and Windle (2006), in which working or being employed was not important for the financial well-being of older people.

In terms of house ownership, the regression hardly shows a statistically significant result for males. In contrast, the model for females shows that house ownership has a negative and statistically significant impact on financial satisfaction (at a 1 percent level). This means that women owning houses were less likely to be satisfied with their financial status. Hong and Swanson (1995) provided a similar finding.

In regard to living areas, the results from both models show that older people living in urban areas expressed more satisfaction with their financial circumstances than did those living in rural areas. More importantly, the residential area was a statistically significant determinant of older females' financial satisfaction.

Interestingly, education level was statistically significant in both models. In particular, male and female older people having education at high school and higher levels were more likely to be financially satisfied than those having education at a lower than high school level. This result was the same as that of Hira and Mugneda (1998) and Zurlo (2009).

While age and urban living had significant and positive impacts on the financial satisfac-

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tion of male older people, those with an education at under high school level were less likely to be satisfied with their financial situation. For females, except marital status and working status, most of their individual characteristics were statistically significant. In particular, financial satisfaction among women was negatively related to age, a low level of education and house ownership.

For the children financial flows, coefficients of variable Children-to-parents support (CTP) are significant at a 1-percent level and are positive in both models. The results show that older people who received financial assistance from their children felt more satisfied than did those who received nothing from their children. This means that financial support from children played an important role in the financial satisfaction of the Vietnamese older people.

Conversely, financial support from older people to their children was not statistically significant in both models. Therefore, it is possible to say financial transfers from older people to their children hardly contributed to their financial satisfaction.

For the issues relating to allocating and using financial resources, while having financial assets was not significant in the male model, the logistic model for females shows a high level of significance and a positive impact on financial satisfaction. Thus, women having savings were more likely to feel satisfied with their financial status.

Similarly, although having debt is an important variable, the regression for males shows no statistically significant result. For women, the results again indicate a highly significant level for this variable. While owning additional land

is not a statistically significant variable for older men, it is positively and significantly related to financial satisfaction for older women. This result was also found in Hong and Swanson (1995), Hira and Mugneda (1998), Burholt and Windle (2006), and Hansen (2008). While debt is always seen as a negative factor for financial satisfaction, owning financial assets (such as savings, interest and insurance payments, and rent) positively influences older people's financial satisfaction.

Table 10 shows the results for marginal effect models, which imply magnitude of impact as well as level of probability. In regard to the age of older people, males aged 80 and over had a 12.3 percent higher probability of financial satisfaction than those aged 60-69. The opposite is true in Model 2 (for females), in which females aged 70-79 had a 14.9 percent less probability of financial satisfaction than those aged 60-69.

It is also shown that male and female persons living in urban areas had a 9.9 percent and a 16.2 percent higher probability of financial satisfaction than their counterparts living in rural areas, respectively.

Education level had a clear impact on older people's financial satisfaction. It is shown that a lower level of education made both males and females have a 10.4 percent and a 25.9 percent lower probability of financial satisfaction than those with a higher level of education, respectively. These results are similar to those found in Hira and Mugneda (1998).

Women owning houses had a 14.9 percent lower probability to be financially satisfied than their counterparts. This is also found in Hong and Swanson (1995). For additional land ownership, women were more likely to be sat-

**Table 10: Marginal effects for financial satisfaction**

	<b>Model 1 (Male)</b>	<b>Model 2 (Female)</b>
<b>Individual Characteristics</b>		
Age		
60-69 (ref.)	-	-
70-79	0.065	-0.149***
80+	0.123*	-0.038
Marital status		
Non-married (ref.-single, divorced, widowed, others)	-	-
Married	0.024	0.0034
Residential Area		
Rural (ref.)	-	-
Urban	0.099**	0.162***
Education level		
High school and more (ref)	-	-
Under High school	-0.104*	-0.259***
Working status		
No working (ref.)	-	-
Still working	0.06	0.015
House ownership		
No (ref.)	-	-
Yes	0.021	-0.149***
<b>Financial Factors</b>		
Children-to-parents support		
No (ref.)	-	-
Yes	0.126***	0.122***
Parent-to-children support		
No (ref.)	-	-
Yes	0.107	0.014
Other land ownership		
No (ref.)	-	-
Yes	0.075	0.133*
Having any financial assets		
No (ref.)	-	-
Yes	0.100	0.249***
Having any debt		
No (ref.)	-	-
Yes	0.098	-0.24***

Notes: \*, \*\*, \*\*\* denote statistically significant Beta coefficient at the 10, 5 and 1 percent significance level respectively; (ref.) denotes the reference groups. -. Dy/dx is for discrete change of dummy variable from 0 to 1

Source: Authors' calculations, using VNAS 2011

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isfied with their financial circumstance when having other land outside where they regularly lived. In particular, older women having additional land had a 13.3 percent higher probability of financial satisfaction than those having no additional land.

Receiving financial support from children made a 12.6 percent (for males) and a 12.3 percent (for females) higher probability of financial satisfaction than those having not received anything from their children.

Having financial assets made women have a 24.9 percent probability of financial satisfaction than those having no financial assets. In contrast, having debt had a negative impact on the financial satisfaction of older women as they had a 24.1 percent lower probability of financial satisfaction than those having no debts. These results are similar to those in Hira and Mugneda (1998) and Hansen et al. (2008).

### **5. Concluding remarks and policy recommendations**

The major findings above lead to timely policy recommendations to improve financial satisfaction among older people in Vietnam. The policy recommendations derived from our findings are as follows:

First of all, there is a need to improve the financial situation of older females. Vietnamese women are less satisfied with their financial situation when they become older. This problem derives from gender inequality, women are always disadvantaged in accessing sources, opportunities, and income discrimination. Therefore, there is definitely a difference between the financial satisfaction of males and females, in which females suffer a more adverse situation. For this trend, the nationwide social protection

system needs to pay more attention to the financial problems of older women. To be more specific, we should first conduct a gender-equality campaign to ease the disadvantage of women in all aspects, and then focus on generating source opportunities for women such as work, loans, and fiscal aids. Besides, policies for financial problems among older people in Vietnam need to put females at a higher priority.

Second, differences in financial satisfaction between urban and rural areas also suggest some important changes in policies. Urban living has a considerable impact on the ability to reach financial satisfaction for both men and women. Older persons who live in urban areas are more likely to feel satisfied with their financial condition than those who live in rural areas. As a result, policies for development in rural areas have to be conducted not only for the development of living conditions and production, but also for the financial problems of older people. Older persons in rural areas need more help for their financial condition. In addition, people who live in urban areas have good opportunities to take care of their parents physically and mentally, but this is very difficult in rural areas where children always live far from their family. Also, as from the findings above, financial support from children to their parents is really important for the financial satisfaction of older people as a result of marginal effects calculation. That is the reason why the policies regarding creating work in rural areas have to be improved and reinforced as an indirect way to change the financial well-being of rural people, including the elderly.

In addition, from the regression results, working in late life is not a solution to improv-

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ing the degree of financial satisfaction among Vietnamese elders, as in this paper's findings. Meanwhile, the effects of education and training are positive determinants for financial satisfaction improvement. Therefore, instead of finding ways to create more jobs for older people, the policies have to focus on education and training during their younger period. Especially, the high school and above level of education need to attract more attention because this paper has provided evidence that older people who did not complete high school level have less chance to feel satisfied with their financial condition in late life. For this reason, policies need to provide the utmost support for people to reach high school level and higher by providing scholarships for enrolling in high school and by providing financial incentives for families having high school students.

Importantly, as in the above findings, debt and financial assets play important roles in the financial satisfaction of female elders. For this reason, micro-finance systems need to be reinforced in Vietnam, which will help to improve the financial satisfaction of women by generating financial assets and decreasing the burden of debt. In addition, policies for supporting people to pay off their debt and favorable loans with lower rates of interest have to be adopted to help older people in general as well as older

women in particular.

All things considered, to improve the financial satisfaction of older people in Vietnam, we have to focus on issues related to gender inequality, policies for developing rural areas, creating jobs for the younger rather than for the elder, high school support and applying financial solutions from other countries.

Although the authors tried to include as many possible explanatory variables to distinguish the underlying factors of financial satisfaction of older men and women, the paper could not avoid some limitations. First, the paper searched for determinants on their own rather than for interactions between variables, and thus it could not explain clearly some findings, such as why working did not affect financial satisfaction and owning a house made older women feel less satisfied with their financial situation. These anomalies should be explored further with other socio-economic status (SES) variables. Second, without a panel or longitudinal information on older men and women, it was difficult to expose some key important variables (such as health status) as well as control time-variant factors in order to have more persuasive explanations. These issues will be taken into account when available data allows.

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