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RETIREMENT SAVINGS AND TYPES OF INVESTMENT ASSETS AMONG  
NEAR-RETIREEES AGED 51 - 64: HOW DO WOMEN INVEST  
DIFFERENTLY THAN MEN?

by

Katrina R. Nye

A thesis submitted in partial fulfillment  
of the requirements for the degree

of

MASTER OF SCIENCE

in

Family, Consumer, and Human Development  
(Consumer Sciences)

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UTAH STATE UNIVERSTIY  
Logan, Utah

2008

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## ABSTRACT

Retirement Savings and Types of Investment Assets Among Near-Retirees Aged 51 – 64:  
How Do Women Invest Differently Than Men?

by

Katrina R. Nye, Master of Science

Utah State University, 2008

Major Professor: Dr. Yoon G. Lee  
Department: Family, Consumer, and Human Development

The purpose of this study was to examine the financial portfolios of near-retiree women and compare their assets to near-retiree men. This study also investigated how economic and demographic factors were associated with the probability of holding aggressive assets and the level of savings. Socioeconomic variables were used to create a profile of the investment behaviors and to examine the level of savings among near-retiree women and men. Specific variables key to the study included household income, age, marital status, education, race, and self-reported health of near-retiree women and men.

The descriptive statistics indicated that overall, average levels of all asset categories for the female group were much lower than they were for the male group among near-retirees. According to the findings of this study, women tended to invest in

safer assets such as CDs, savings bonds, and T-bills rather than in more aggressive assets such as stocks, business assets, and real estate assets.

The results from both the logistic regression and Ordinary least squares regression analyses indicated that gender had no statistically significant impact on the investment and savings behavior among near-retirees aged 51 - 64. However, household income, age, marital status, education, race, and the self-reported health status of near-retirees were all significant determinants of the investment and saving behavior among near-retirees aged 51 - 64. For example, near-retirees, with higher income, older, married, higher education, Whites, and in good health, were more likely to own aggressive assets and reported higher level of savings as compared to other near-retirees.

This study also explored socioeconomic factors associated with the level of savings among near-retiree women aged 51 - 64. The findings of this study indicated that household income, age, education, and race were significant determinants of the level of savings among near-retiree women aged 51 - 64. The results of the OLS regression analysis showed that women with lower income, younger, less education, and non-Whites reported lower levels of savings than did other women. Implications of the findings, limitations of the current study, and suggestions for future study were presented in the final section.

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Katrina R. Nye

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## CHAPTER I

### INTRODUCTION

The economic well-being of most Americans has improved dramatically since the 1960s (Clark, Burkhauser, Moon, Quinn, & Smeeding, 2004; Karamcheva & Munnell, 2007; Munnell, 2004b). According to the U. S. Department of Labor - Bureau of Labor Statistics (2007a), the unemployment rate in 2007 was 4.6% as compared to a high of 10.8% in the early 1980s and an average rate of 7 to 9% during that decade. Poverty rates have also decreased significantly since the late 1950s from 18.5% to a current rate of 9.8% for families (U.S. Census Bureau, 2007). Even though poverty rates and unemployment rates have decreased significantly, an area of concern for many financial educators, financial planners, and policy makers is the aging population and the accumulation of retirement savings; particularly near-retiree households (Butricia, Iams, & Smith, 2003).

People are living longer than earlier generations due to immunizations, preventative health care, public health interventions, and more advanced medical procedures (Dollemore, 2006; Hodes, 2001; National Institute of Aging, 2007). In the 1930s, the life expectancy rate for people age 65 was 12 years for men and 13 years for women and, currently, the life expectancy rate beyond retirement is 16 years for men and 19 years for women (Munnell, 2004a). As reported in an Administration on Aging publication using U.S. Census Bureau data for 2006, people reaching age 65 have an average life expectancy of an additional 19.8 years for females and 16.8 years for males. Life expectancy rates are at a record high and continue to rise (Center for Disease Control, 2005). With modern technological advances and better medical treatments, life

expectancy rates beyond retirement are expected to increase to an estimated 20 years (males) and 23 years (females) by 2080 (Munnell).

Modern advances have also improved work place safety resulting in fewer deaths to workers (Asche, 2007). With a larger portion of the population (approximately 76 million people) in the baby boom cohort (those born between 1946 & 1964), most of the overall population will consist of elderly retirees (Butrica et al., 2003). In 2005, the older population of persons 65 and older amounted to 36.8 million which represented approximately 12.4% of the American population (Administration on Aging, 2006). One in every eight people is a member of the aging population (Butrica et al.). The 65 and older age group will increase from 35 million in 2000 to 40 million in 2010 and then to 55 million in 2020 (Administration on Aging). The age cohort 85 and older is also projected to increase from 4.2 million in 2000 to 6.1 million in 2010 and then to 7.3 million in 2020 (Administration on Aging).

Because of longer life spans, Americans must focus more of their attention on financial security and preparing for retirement. Preparing for retirement at any age is a challenge that needs immediate attention due to the fact that many pre-retirees are not adequately prepared for a lengthy retirement. Many retirees underestimate life expectancy rates; therefore, they do not plan retirement accumulation amounts appropriately. If retirees underestimate life expectancy rates, they may outlive accumulated assets resulting in being unprepared to meet financial obligations during retirement. According to the American Academy of Actuaries (2002), 67% of women

and 55% of men underestimate their longevity. Understanding the effect that longer life spans create for retirees is crucial when preparing for the future.

It is recommended that retirees should plan on having approximately 70% of their pre-retirement income per year throughout retirement (Munnell & Soto, 2005). This is known as the replacement rate which is defined as the ratio of post-retirement income to pre-retirement income (Munnell & Soto). Replacement rates are useful when assessing how well retirees can maintain their pre-retirement levels of consumption throughout retirement. Knowing the replacement rate is important for near-retirees when they are planning and saving for the future.

Unfortunately, the rate of savings is low for many pre-retirees. According to the 2007 Retirement Confidence Survey (RCS), almost half of workers saving for retirement had an accumulated amount of less than \$25,000 in personal savings (not including the value of their home or any defined-benefit plan; Helman, Greenwald, VanDerhei, & Copeland, 2007). The survey also reported that seven in ten workers indicated that their assets amounted to less than \$10,000. Merrill Lynch & Co (2004) also reported that 56% of pre-retirees indicated that their primary source of income during retirement will come from personal savings or a 401(k) account; however, most respondents had only accumulated an average savings amount of \$51,000.

Another issue that cripples future retirees is the switch from defined-benefits plans to defined-contribution plans. Defined-benefit plans help protect workers from outliving their assets during retirement; however, many companies no longer offer this retirement option (Clark et al., 2004). Many workers are counting on employer-provided

benefits throughout retirement; however, only 41% of workers indicated that they or their spouse currently have a defined-contribution plan (Helman et al., 2007).

According to the 2004 Survey of Consumer Finances, only 11% of all participants contributed the maximum amount to their 401(k) accounts (Munnell & Sunden, 2006). Not only are employees losing all the accumulated interest that could be growing, but they are also losing all the employer matched amounts as well. Munnell & Sunden reported that approximately 17% of workers have also experienced a reduction in retirement benefits offered by their employer. Workers age 55 and older were more likely to report this reduction in benefits; unfortunately, it is the near-retirees that need this additional assistance more. The future may be very challenging for those retirees that did not accumulate enough personal savings or 401(k) amounts today.

### Women and Retirement Savings

Overall, women do not have financial knowledge to help them plan appropriately for retirement as their male counterparts have (Glass & Kilpatrick, 1998). Some women may feel inadequate when making important retirement decisions. With the shift to defined-contribution plans, employers are putting more responsibilities back onto the employee themselves to save for retirement. This may be challenging for those women that are not receiving these benefits due to part-time employment or full-time jobs that don't offer such crucial benefits.

A majority of the elderly population will consist of women. It was reported that older women, 65 and older, outnumbered older men at 21.4 million women, compared to

15.4 million men (Administration on Aging, 2006). In addition, half of older women (those 75 and older) live alone. Men are more likely to be married than are women. Though people are living longer, many women will be living longer but will also be living alone. Approximately, 30% of noninstitutionalized older people live alone (7.7 million women and 2.9 million men; Administration on Aging).

Preparing for financial security has never been an easy task for any individual, but it seems to be particularly difficult for the female population due to low wages, less workforce participation, and fewer retirement benefits. Women live longer than their male counterparts (19.8 and 16.8, respectively; Administration on Aging, 2006), have lower pension coverage (Bajtelsmit et al., 2005; Block, 2006; Rappaport, 2007), and a longer tradition of not managing the family finances. Women also tend to have part-time jobs or jobs with inadequate retirement benefits, and more time out of the workforce caring for children. Women, today, are retiring earlier, living longer, and leaving the workforce with 40% less savings than men (Buffa, 1995).

### Need for Study

Many Americans are not saving money, especially the appropriate funds towards retirement. There is an increased number of people approaching retirement age that may be well below the savings levels. Korczyk (2001) stated that many working Americans, including baby boomers, do not know how much they need to have saved for retirement, let alone how much they have in their investment portfolio. It was also noted that only 43% of workers reported they have tried to calculate how much money is needed by the

time they retire in order to live comfortably during retirement (Employee Benefit Research Institute & Greenwald & Associates, 2007).

Many women do not know how much is realistically needed to retire comfortably. Alcon (1999) reported that only 36% of women have calculated how much money they need to save in order to retire and remain in a similar state of comfort. Alcon also noted that 46% of women have no idea how much money they need in order to retire, while 22% of men do not know how much money they need. Women are significantly lacking in knowledge regarding financial aspects (Alcon).

A study conducted by the National Center on Women and Aging found that many women fear making mistakes when planning for retirement (Alcon, 1999). Feelings of inadequacy and intimidation overwhelm some women into complete denial of the importance of planning for the future. Women often have left the management of the family income to someone else while their priority lay with caring for the family members rather than the future.

Other research also shows that men and women differ significantly when it comes to investing (Bajtelsmit & Bernasek, 1996). There is a difference in knowledge, attitudes, and behavior regarding money aspects. Women tend to save less, know less about investing, and invest more conservatively than men. Women tend to characterize their risk tolerance as low compared to men. Risk tolerance also varies depending on age, education, and income (Bajtelsmit & Bernasek). Younger, more educated women, tend to be less risk averse than their older, less educated female counterparts.



Many women are not educated on the various types of investment vehicles that are available for consumers. Women are more familiar with financial options such as CDs and savings bonds, which unfortunately, do not have as great of a return as the more aggressive mutual funds, stocks, annuities, and corporate and municipal bonds. Women understand CDs and savings bonds, but lack the appropriate knowledge with more aggressive investments. Women mistakenly assume that because they can manage the household budget, they can also understand the long-term asset building strategies that men are typically more familiar with (Alcon, 1999).

Women have come a long way the last few decades as compared to earlier generations of women. They are living longer and obtaining better educations and employment, but women still earn less than their male counterparts, take more time out of the workforce for child rearing, are more likely to live alone in old age, and suffer more chronic health conditions than their husbands or male peers (Alcon, 1999). Women live longer in retirement, but have less income and assets to spread over a longer period of time. Many women face these realities and challenges without the confidence in their investment strategies of basic financial concepts, particularly regarding future financial planning.

The retirement system is based on working earnings causing women to be left without enough resources because of the limited time in the workforce and lower overall lifetime earnings. Women tend to outlive their male counterparts; unfortunately, many women are also outliving their limited retirement accounts leaving many women poor in old age (Munnell, 2004b). Women are living longer and saving less for retirement;

therefore, a new study on women's retirement savings is important and needed in order to educate women on the importance of proper investing for retirement.

### Objectives of the Study

This study examines the financial portfolios of near-retiree women aged 51 - 64 and compares their assets to near-retiree men aged 51 - 64. This study also investigates how economic and demographic factors are associated with the probability of holding aggressive assets and the level of savings. There are four main objectives to this study: (1) To examine the type of assets and level of savings of near-retiree women; (2) To compare the type of assets and level of savings of near-retiree women as compared to near-retiree men; (3) To investigate the factors associated with the probability of holding aggressive assets among near-retiree women; and (4) To explore the factors associated with the level of savings among near-retiree women.

### Research Questions

To accomplish the four objectives, the following research questions are considered in this study:

1. a. How much do women have saved/invested in the near-retirement stage?
  - b. How does the level of savings of women differ from that of men in the near-retirement stage?
2. a. What type of investment assets do near-retiree women hold in their financial portfolios – how much do they hold in aggressive assets?

- b. How does the financial portfolio of women differ from that of men in the near-retirement stage? How does the distribution of financial assets (e.g., CDs, checking accounts, stocks, bonds, real estate assets, automobiles, and home equity) differ between women and men in the near-retirement stage?
3. What socioeconomic factors are associated with the probability of holding aggressive assets (stocks and mutual funds) among near-retiree women aged 51 – 64?
4. What socioeconomic factors contribute to the level of savings among near-retiree women aged 51 - 64?

#### Benefits of the Study

Retirement planning is very difficult for many people, but it is crucial for women that are entering the near-retirement stage. Since this study investigates the factors associated with the types of aggressive versus safe assets, the findings of this study are beneficial to professionals, financial educators, and planners when they educate individuals, in particular women, to make better investment decisions. Financial planners and educators can better address this problem and work with clients to gain control of their financial situations and invest their money more appropriately, particularly with women.

The findings of this study also benefit policy makers in important retirement policy decisions to assist with the distribution of limited resources to appropriate educational programs for women, and to allocate financial subsidies to women living at or near poverty levels. Adequate retirement savings is a problem that is not going to get

easier for future retirees and young workers, especially women; thus, this study may assist women near the retirement stage when making decisions for retirement, particularly how and where to invest (safe assets or aggressive assets).

In addition, this study may aid researchers who are interested in women and retirement issues. Since the aging issue is often discussed as a woman's issue, understanding retirement savings and retirement preparedness among near-retiree women is critical; thus, the findings of this study contribute to future progression of research in the personal or family finance area, especially with issues regarding women.

## CHAPTER II

### LITERATURE REVIEW

This section begins with the role of public programs as a retirement income source and followed by the changes in pensions from defined-benefit plans to defined-contribution plans such as 401(k) accounts. This chapter also includes literature related to retirement savings issue by socioeconomic factors (e.g., gender, age, income, marital status, education, race, and health). The last section of this chapter presents the conceptual framework of this study and a set of hypotheses.

#### Public Programs

##### *Role of Public Sector*

The role of the public sector, the government, is guaranteeing that peoples' rights are protected and enforced, both ethically and financially. The government collects taxes and provides public goods to everyone without exclusion. The government also intervenes in the economics of aging by establishing property right guarantees, subsidizes savings, and provides social insurance and minimum income protections (Clark et al., 2004).

In 1974, ERISA (Employee Retirement Income Security Act) provided workers with an insurance that guaranteed pension plans during retirement. The government requires employers to meet certain standards to participate in programs such as this. ERISA guards against pension funds running out during retirement and does not tolerate

discrimination for minority workers that are eligible for company pensions (Clark et al., 2004).

The government encourages individual savings; therefore, it grants tax exclusions for pension plan contributions and allows earnings to grow tax-free, which helps with the accumulation levels to be much higher. Without these government subsidies to individuals, saving levels would be much lower. The government withholds taxes from paychecks of employees for a social insurance program called Social Security. The government offers Medicare to the elderly to assist with medical expenses (Clark et al., 2004).

The role of government program is to provide its citizens with financial protection; however, the future of the programs such as Social Security and Medicare is uncertain for future retirees. Therefore, it is imperative that individuals educate themselves and others on the importance of retirement planning and saving. The price of goods and services, especially health care, will increase more and more leaving less money for other basic needs. Near-retirees must plan better for a longer lifespan in retirement by participating in and contributing in their defined-contribution plans.

### *Social Security*

When Social Security was first enacted in 1935, the retirement age was set to 65. Life expectancy rates were 12 years for men and 13 years for women. At that time, the probability of a young man in his 20s actually surviving to age 65 was approximately 60% (women was 67%). Social Security was intended to serve as an income source

during the retirement years; however, with an increased population boom entering retirement soon, the future of Social Security is rather discouraging (Munnell, 2004a).

With longer post-retirement years expected in the near future and millions of retirees, experts are projecting the Social Security system to be completely extinguished by 2041 and Medicare gone by 2020 (Rappaport, 2007). With many baby boomers expecting to retire soon, the likelihood of any Social Security benefits available in the future is dismal. The decline in Social Security benefits will lead to more poverty stricken future women retirees. Because women live longer, their retirement savings must last longer in order to sustain them through their life; however, the amount of retirement money saved is low in comparison to men.

Older people receive retirement income from several different sources including labor earnings, benefits from government and employer-sponsored pension programs, their own personal accumulated savings (bonds, stocks, savings accounts, and real estate), and Social Security. Approximately 86% of people aged 65 through 69 receive Social Security benefits as an income source, while 93% of those 85 and older rely on Social Security benefits as an income source. An additional important fact to note is that in the poorest 40% of older people, Social Security provides over 80% of all their money income (Clark et al., 2004).

Social Security is an overwhelming important money source for many retired individuals. If experts are correct in their projections regarding the exhaustion of Social Security funds (Rappaport, 2007) and retirees are depending on Social Security benefits so heavily, many future retirees will be left without any benefits to meet their financial

obligations during retirement years. Personal savings through 401(k)'s and other investments will need to be the focus of potential retirees and financial planners.

### *Medicare*

Medicare is a medical insurance program for elderly citizens who may no longer have employer-sponsored insurance coverage. Medicare pays for inpatient hospital services, skilled nursing facilities, home health care, hospice care, physician and outpatient hospital services, and prescription drugs (Munnell, 2007). Without the Medicare program, many elderly retirees would not receive the medical attention that they need. Approximately 75% of the costs of Medicare come from the government's revenues of withholding taxes. The other 25% comes from monthly premiums paid by beneficiaries. With rising health care costs, the future of Medicare is very bleak while some experts project it to be exhausted by 2020 (Munnell).

Medicare costs are projected to increase faster than that of Social Security due to increased health care costs. In fact, health care costs will continue to grow faster than income of retirees (Paulson et al., 2007). Medicare will require additional money in the future from the working population, but is not expected to be enough to cover the added expenses and the large amount of baby boomers entering retirement.

Additionally, rising Medicare costs would require retirees to face an 18.5% increase in income tax rates by 2040. Retirees are also facing higher premiums and co-payments to help recover some of the deficit caused by increased costs (Munnell, 2007). Both Medicare and Social Security costs are projected to grow significantly faster than the economy over the next few decades, but the income from taxes for these programs is



not projected to increase as quickly (Paulson et al., 2007). As much as retirees may be dependent on the benefits of Medicare, there simply may not be enough income left over to cover the basic necessities during retirement.

### Pensions – 401(k) Accounts

Over the last two decades, pension coverage has shifted from defined-benefit plans to defined-contribution plans. In a defined-benefit plan, an employee receives a pension based on years of service and earnings prior to retirement. The contributions usually come primarily from the employer. The benefits are paid out over the employee's remaining lifetime. Defined-contribution plans, the most common being 401(k) plans, are similar to a savings account. The employee, and often the employer, will contribute a specific amount or percentage of earnings into the account (Munnell & Sass, 2005).

An important aspect of the shift to defined-contribution plans is that employees can take the accumulated money with them when they shift jobs. In a defined-benefit plan, employees lost all pension benefits when shifting jobs. This could be detrimental to any near-retiree that shifts jobs just prior to retirement leaving them with no retirement savings. With a defined-contribution plan, a near-retiree employee can move the benefits with them from job to job through a roll-over plan and avoid high tax penalties for early withdrawal (Munnell & Sass, 2005).

In 1981, approximately 60% of employees with pensions relied on defined-benefit plans, but in 2001, nearly 60% of employees relied solely on defined-contribution plans

or 401(k) plans (Munnell & Sass, 2005). With the shift from defined-benefit plans to defined-contribution plans, it has directed the responsibility to employees to make contributions to their retirement accounts; therefore, it is critical that near-retirees participate in retirement plans especially if their employer matches any contributions.

Some major mistakes that employees in defined-contribution plans make are not fully contributing to the plan, failing to diversify, over investing in their own company stock, and making wrong decisions by cashing out 401(k) balances instead of rolling over to an IRA or their new employer's 401(k) plan. However, the 2004 Survey of Consumer Finances reported that 21% of eligible workers failed to participate in defined-contribution plans (Munnell & Sunden, 2006).

Contributions to 401(k) plans are one of the most important forms of retirement savings (Poterba, Venti, & Wise, 2000). Since 401(k) plans have been introduced in the early 1980s, their levels of contributions have expanded rapidly and continuously. More and more employers are offering 401(k) plans to their employees while some companies even match the employee contribution amounts allowing the savings levels to increase even quicker.

Some pre-retirees choose to continue to work above age 65 instead of leaving the labor force. Working longer not only reduces the number of retirement years that financial support is needed, but it also increases the time for accumulation of retirement assets. If an employee contributes to a 401(k) retirement plan, longer time in the workforce creates a larger retirement savings amount. If an employer contributes or matches the contribution, the amount saved increases even more. The typical

contribution rate for an employee is 6% of their salary with an employer match of 3% (Munnell & Sunden, 2006). Five additional years in the work force can increase projected retirement benefits noticeably, particularly if employers are matching contributions. Working five more years can increase a 50-50 stock-bond portfolio approximately 16% (from \$102,800 to \$119,300) (Poterba et al., 2000; Munnell & Sunden, 2006).

In 1980, almost 92% of pension plan contributions were to traditional employer-provided plans and about 64% were to conventional defined-benefit plans. Today, approximately 60% of contributions are to personal retirement accounts including 401(k) accounts, IRA's, and Keogh plans. Over 76% of contributions are to retirement plans that are controlled by individuals and their own contributions; therefore, it is crucial that employees participate in these investment plans (Poterba et al., 2000). It is also crucial that employees avoid retirement pitfalls of making bad investment decisions such as not diversifying or over investing in their own company (Munnell & Sunden, 2006).

### Gender

Women must be financially educated on the importance of retirement savings since many of them will be left inadequately prepared to meet their future financial obligations. Women are more concerned about retirement and less confident about their money management abilities than men (Phoenix Home Life Mutual Insurance Co., 1997). Women are less prepared for retirement due to factors such as more time out of the workforce caring for children, less full-time employment with employer-sponsored

benefits, and lower wages. According to Munnell (2004b), near-retiree women are much more at a disadvantage since their traditional gender roles during their lifetimes have left them with less income and less accumulated wealth. Many of these women have left the financial planning to someone else, such as a husband, while their priorities were with the children or other pressing matters.

A crucial area of interest pertaining to women and retirement is lifetime earning levels and labor force participation rates. A significant labor market change in recent decades has been the increasing number of women in the labor force. In 2006, the labor force participation rate for women aged 16 and over was 56.6%, while that of men was 70.1% (U.S. Department of Labor - Bureau of Labor Statistics, 2007b). Since World War II, more women are in the labor force than previous generations; however, women's labor force participation rate is still low in comparison to men (Clark et al., 2004).

Even though there are more working women today, women still have lower average earnings when compared to their male counterparts. For every dollar that a man earns, a woman is only earning 77 cents according to the U.S. Census Bureau (DeNavas-Walt, Proctor, & Smith, 2007). Also, the median earnings for full-time workers in 2006 were \$42,261 for men and \$32,515 for women. The economic outlook for working Americans has improved dramatically as compared to earlier generations; however, women still have lower lifetime earning rates when compared to males. Women that are employed full-time earn approximately 25% less than men (Munnell, 2004b).

Women also have fewer years in the workforce as compared to men, 32 and 44 respectively, to care for children and other important matters (Rappaport, 2007). With

less labor force participation and less overall earnings but longer life spans, women's retirement accounts must be larger than men's in order to sustain them through retirement years since women live longer than men.

With the shift from defined-benefit plans to defined-contribution plans, more women are likely to enter retirement with benefits (Munnell & Sass, 2005). Since women tend to have more short-tenured jobs as compared to males, defined-contribution plans can move with them from job to job. In the past, women have relied heavily on Social Security, but with the ability to participate in defined-contribution plans, women can better prepare themselves for retirement. However, it is imperative that women participate in these retirement benefits.

Another factor that hurts all retirees, but especially women, is inflation. Inflation decreases the purchasing power of the dollar making money worth less in the future than what it is worth today (Munnell, 2004b). Since women may live up to approximately 20 years after retirement, the dollar value in the future is much less than its current rate. Due to this natural economic tendency, retirement savings will be worth even less in the future. For some women, the future may be very financially challenging.

Women typically work more part-time jobs in comparison to males (26% versus 11% respectively) which decreases working wages and amount of hours worked. Since the inception of the birth control pill in the 1960s, more women have been able to control when and how many children they have. There are still many women, however, that exit the work-force temporarily or permanently to care for children while their husbands remain in the workforce. Due to a temporary leave of absence for child-rearing or other

similar situations, the median number of years worked by women in 2000 was 32 as compared to 44 years worked by men (Munnell, 2004b).

A major concern is the availability of retirement benefits to working women. Since many women work part-time jobs or occupations unlikely to offer employer-sponsored retirement benefits, their savings toward retirement is little or non-existent through a defined-contribution (401(k), Keogh) plan. Women must be forced to invest on their own through other savings programs. This may be very difficult due to lower overall earning wages.

#### Age

Many baby boomers will be entering retirement in the next 10 years; the first cohort of boomers will be entering retirement in 2010. However, there may be many that are not financially prepared enough to meet their needs. Many baby boomers do not know how much they have saved or how to plan to meet their needs (Korczyk, 2001). Additionally, nearly two-thirds of workers do not know what their goals should be because they do not know how much to save. Financial planners suggest having at least 70% of current income saved up for every retirement year projected. Many boomers are expecting to live on a Social Security payment that may not be enough to meet their basic needs during retirement such as medical expenses (“Boomers Unprepared,” 2003). Saving for retirement is crucial for all workers, particularly for baby boomers close to retirement age.

Baby boomers grew up in a different era than previous generations. Most of them were too young, some not even born yet, to remember the Great Depression. Baby boomers have seen considerable changes in earnings and work patterns, retirement policy, and the economy. Baby boomers will also retire under different pension plans than previous generations and face different Social Security retirement policies. Many baby boomers will not be able to retire with full benefits until age 66 while younger boomers will have to wait until age 67 causing some workers to remain longer in the workforce than originally anticipated (Butrica et al., 2003).

Although baby boomers have seen many changes as compared to current retirees, there is a greater importance to save for retirement due to increased life expectancies, increased medical expenses, and an anticipated exhaustion of Social Security and Medicare benefits. Some baby boomers are also taking more debt into retirement than previous generations requiring an even larger savings amount (Baek & DeVaney, 2004). While there will be an increased amount of baby boomers entering retirement, there will also be an increased strain on Social Security, health care, and other social institutions (DeVaney, 1995). Baby boomers must either continue working longer into retirement or save more money in order to meet their financial obligations.

A particular area of interest among the baby boomer cohort is the women sector. According to Baek and DeVaney (2004), female baby boomers that had a low income level and low education levels were less likely to be financially prepared for retirement than their male counterparts. Baby boomer women will make up a large portion of the

retirement population (one in eight); however, many of them are not adequately prepared to meet their financial obligations.

### Income

Income is a factor that affects the level of savings among near-retiree households. DeVaney and Chiremba (2005) found several factors that had positive relationships with retirement savings behavior among near-retirees such as age, education, risk tolerance, and income. They found that households with more income were more likely to hold larger amounts of retirement savings than households with lower income levels. As income levels increased, the levels of retirement savings increased.

Another study by Glass and Kilpatrick (1998) found that there was a positive relationship between the levels of income and the level of savings for retirement. As the level of income increased, the level of retirement savings also increased among the near-retiree households. There was a strong relationship between these two variables. They found that as income increased the rate of diversification of aggressive assets increased by 8.9%. Glass and Kilpatrick concluded that women with more income were more likely to have higher levels of retirement savings.

Households that have lower income levels are more likely to experience financial risk in addition to lower savings levels for retirement. Butricia et al. (2003) found that households with lower income levels experienced more economic and financial hardships than households with higher income levels. Although mean and median income levels are projected to increase across the near-retiree cohorts, not everyone will be equally well



off in the baby boomer cohorts. Higher income levels were found to have a positive relationship among higher level of savings for retirement. Income is a crucial aspect toward a sufficient level of savings toward retirement. The higher the income levels, the more likely there is a retirement savings plan in place for retirement.

### Marital Status

Families of today no longer fit the mold of the family of earlier generations. It is estimated that approximately 50% of couples will separate from their spouse (O'Neill, 1992). Retirement savings affects all women, but has different consequences across the various categories of women (married, divorced, never-married, and widowed). Economic situations have improved since earlier years, but it is still a concern for pre-retiree women, especially for those that are not married. According to Munnell (2004b), 18% of nonmarried women fell below the poverty line in 2000. This is an alarming group of vulnerable women with a bleak outlook during retirement.

Several studies indicate that today's population is comprised of a large portion of elderly people, particularly those over the age of 50 (Administration on Aging, 2006; Butrica et al., 2003; Munnell, 2004a). Of that population group, 30% of all households are made up of nonmarried women aged 65 - 69 and 60% aged 85 and over (Administration on Aging). This summarizes that a large portion of our population will consist of elderly nonmarried women that are poor or near-poor. This could greatly impact our economy in the near future.

Single women are typically divorced while caring for children with limited financial assistance from an ex-husband. After divorce, women may suffer a 73% decrease in their living standard, while men experience an increase of 42% (O'Neill, 1992). Because of limited financial resources, nonmarried women could not save as much toward retirement as their married women cohort may.

Nonmarried women are much worse off financially than married women who profit from their husband's retirement benefits. Compared to the 28% of poverty-stricken nonmarried women, only 7% of married women aged 65 – 69 were poor or near-poor (Munnell, 2004b). Non-married women have much less of a financial advantage in regards to retirement savings.

According to Ozawa and Lee (2006), nonmarried women struggle to even meet immediate financial obligations; whereas, married couple households find it easier to save a larger portion of their income toward retirement. While married households tend to have a higher net worth, nonmarried women were more “asset poor” (those whose net worth is smaller than three times the poverty-line monthly income; Ozawa & Lee). Ozawa & Lee noted that as many as 63% of female-headed households were asset poor.

In addition, nonmarried or female-headed households have lower income levels than married women. Ozawa and Lee (2006) found that the median income of female-headed households was \$22,000, while married couples' median income was \$55,000 – more than double. Although the total amount of debt held by nonmarried women is smaller than married women (\$27,100 and \$79,876 respectively), total debt-to-total assets for non-married women was higher than married women (23.6% and 18.5%,

respectively) (Ozawa & Lee). Income levels are such a crucial measurement in regards to retirement savings for women; unfortunately, income levels for nonmarried women are not high enough to sustain a comfortable living standard throughout retirement.

While married women can partially depend on their husband's Social Security benefits, there will be a significant cut after his death. Nonmarried women will have no spousal benefits to rely on after retirement. Thus, it is critical for nonmarried women to additionally save for retirement or to stay longer in the workforce. Marital status is a critical factor that determines economic well-being among elderly women.

#### Other Sociodemographic and Economic Factors

##### *Education*

Previous research has indicated that more educated individuals earn more money and education was positively related to retirement savings behaviors (DeVaney & Chiremba, 2005; Ozawa & Lee, 2006). In addition, more educated people have more knowledge regarding investments and retirement accounts (Ozawa & Lee). The accumulation of net worth increases with levels of income and levels of income increases due to education attainment. Less education translates into lower earnings resulting in less accumulated retirement savings (Karamcheva & Munnell, 2007). In fact, Ozawa and Tseng (2000) found that the net worth of people with at least some college education was 435% greater than the net worth of those people with an elementary school education. According to Baek and DeVaney (2004), women with a lower level of education were less likely to be financially prepared for retirement. The risk of living in poverty is lower

for workers with more education (U.S. Department of Labor – Bureau of Labor Statistics, 1997).

Education is a huge economic factor for women, but especially Black women. College education had the greatest impact on the net worth value of Black women. The net worth value of Black women with some college education was approximately 1024% greater than the net worth of Black women with an elementary school education (Ozawa & Tseng, 2000).

By investing in their human capital through education and job-related training, women would increase their economic condition; therefore, their financial outlook during retirement will increase substantially (Ozawa & Lum, 1998). For women, what really counts is education (Ozawa & Tseng, 2000).

### *Race*

Race is a factor that affects savings. Studies show that White households are more likely to be financially prepared for retirement over non-White people; in particular women (DeVaney & Chiremba, 2005; Ozawa & Hong, 2006). Non-White women are not saving enough money toward retirement and will have less earnings and income from assets (Ozawa & Lee, 2006). Non-White women are less likely to have personal savings or hold a retirement account in comparison to White women (DeVaney & Chiremeba).

The net worth of Black people is much lower than White people. For example the median net worth of Black families was \$45,000 as compared to Whites at \$59,999, a difference of 42%. It was also reported that in 1992, the median net worth of White men was \$144,214, White women was \$85,911, Black men was \$18,785, and Black women

was \$15,452. There was also an obvious decrease in net worth with elderly Black women (Ozawa & Tseng, 2000).

One factor that could explain the difference in net worth between Blacks and Whites could be attributed to the amount of inherited wealth from their own parents or other relatives. Black families also tend to have more liquid assets (bank checking accounts and saving accounts) than other types of assets (business assets and home equity) that generate a greater rate of return. With both a decreased net worth and lower lifetime earnings, which directly affects net worth, Black Americans could have less money allocated toward retirement savings (Ozawa & Tseng, 2000).

Elderly White women and Black women, alike, have lower lifetime earnings, more part-time jobs or jobs with fewer retirement benefits, and less time in the labor force, but Black women have even less Social Security benefits to rely on during retirement (Hogan & Perrucci, 2006; Ozawa & Tseng, 2000). Black women are at a disadvantage in both employment and retirement income because they lack the resources in order to build a suitable retirement nest egg (Hogan & Perrucci).

Taylor and Lockery (1995) noted that through tracking cohorts of Black youth, working income through the life span could be evaluated. They speculated that Black youths typically worked in “dead-end” jobs and occupations in the secondary labor market where few benefits were given. The types of jobs held by Black individuals could lead to consequences of poor work histories, unemployment and underemployment in adulthood; therefore, they could face economic difficulties during retirement years.

With a lifetime of fewer earnings, part-time jobs or jobs with little or no benefits, and less time in the work force for Black women, Black women held 90% smaller net worth levels than did White women (Ozawa & Tseng, 2000). The lack of defined-contribution plans during the adult years may force many Black elderly women to work longer into retirement years. There will be many poor or near-poor elderly women, but many more poor or near-poor Black women struggling to survive.

### *Health Status*

Health status is an important factor that could affect savings behavior. Poor physical health is often a reason why women leave the work force (Moen, 1996). Because women are out of the work force due to extended illnesses, they may receive less retirement benefits. In addition, being in poor or fair health would tend to decrease the value of market time to the extent that it reduces one's ability to perform tasks or even learn new tasks providing more job advancements (Green, 2005). Investing in one's health is very important and should be practiced throughout the lifetime (DeVaney & Chen, 2003).

Poor individuals are more prone to unhealthy lifestyles such as enhanced risk factors (drugs or alcohol) and less access to health care, including preventative care and maternity care. Poor individuals also tend to live in less healthy environments and work in more physically demanding jobs which may result in an unexpected earlier retirement (Deaton & Paxson, 1998). Those that reported healthier lifestyles typically were associated with higher productivity which may be rewarded with higher pay. In addition, women enjoying a healthier lifestyle also increase the probability that she is employed

resulting in more time to accumulate retirement savings (Green, 2005). Elderly women with poor health dissave at high rates. Solda, Hurd, Rodgers, and Wallace (1997) explained that those with poor health have high medical expenses and may anticipate dying soon; therefore, may choose to consume their resources quickly.

## Conceptual Framework

### *Life Cycle Savings Theory*

The process of aging, from birth to death, can be depicted as an economic model called the Life Cycle Savings model. Throughout a person's life of income and expenditures, decisions are made which ultimately affect retirement. The basis of the Life Cycle Savings model is that expenditures exceed income in both early adulthood (before age 20 – 25) and in later years (retirement after age 60 – 65) while income exceeds expenditures in middle adulthood (Bryant, 1990).

Young individuals expect low incomes due to completing an education and then beginning a career. Young workers expect their incomes to rise as experience and responsibility is obtained through employment. During middle adulthood, income exceeds expenditures due to completed education and a stable career. This is the time period when it is expected that workers are repaying loans and saving for retirement. Workers must save enough money so that at the time of retirement, they can live off the accumulated savings until death (Clark et al., 2004). During the retirement stage of the life cycle, expenditures exceed income as in the early adulthood stage. Retirees will consume accumulated income that was saved during middle adulthood.

Not only do individuals expect a stream of income in the future, but it is also expected that the stream of income will vary over the life cycle (Bryant, 1990). Although individuals expect incomes to vary, there is less variation in consumption patterns over the life cycle. Individuals continue the need to be fed, clothed, and housed. There is a need to shift resources from periods of high income to periods of lower income in order to provide consumption needs. This is done through borrowing from the future through student loans, mortgage payments, etc. in order to provide for current consumption. During times of high income, saving for future consumption and paying back past debt is expected. Households with the same total resources will demand the same goods and services each year, some may require more while some may require less, but each household will try to have a constant consumption stream over the life cycle.

This study looks at the savings behaviors and accumulations of individuals in the near-retirement stage of the life cycle. The life cycle savings model provides a conceptual framework of this study to what extent individuals in the near-retirement stage have or don't have savings that can support their retirement years. Based on findings of previous studies and the life cycle savings model, the following set of hypotheses can be developed.

## Hypotheses

### *Gender*

Munnell (2004b) reported that in 2006, the median earnings for full-time working men was \$42,261 while women's earnings were \$32,515. In addition, Munnell also



indicated that 26% of women work part-time in comparison to 11% of men. Due to more part-time employment, fewer retirement benefits were available to women. Since women live longer than men, women must accumulate a higher level of savings; however women are leaving the work force with 40% less savings than men (Buffa, 1995). Thus, this study hypothesizes that near-retiree women will have lower levels of savings than near-retiree men.

Many women are not educated on the various types of investment vehicles that are available and women are more familiar with certificates of deposit and savings bonds instead of investing in aggressive assets such as mutual funds, stocks, annuities, and corporate and municipal bonds. Bajtelsmit and Bernasek (1996) found that women and men differ in investment decisions and women tend to save less, know less about investing, and invest more conservatively than men. Alcon (1999) also noted that women can manage household budgets well; however, they lack the appropriate knowledge with riskier investments. This study, therefore, hypothesizes that women will be less likely to invest in aggressive assets than men (H1-a) and that women will have lower level of savings than men (H1-b).

### *Age*

Many baby boomers will not be able to retire until age 66, while younger boomers will have to wait until age 67 due to low levels of accumulated retirement savings (Butricia et al., 2003). More and more baby boomers are taking higher debt loads into retirement than previous generations (Baek & DeVaney, 2004). Baby boomers will make up a large portion of the population; however, many of them are not prepared for

retirement (Baek & DeVaney). Using the 2000 HRS data, the baby boomers were those individuals aged 51 – 54 in year 2000 and non-boomers were those aged 55 – 64 in year 2000. Therefore, this study hypothesizes that there will be a negative relationship between age and the level of savings among near-retiree women. In other words, baby boomer women (ages 51 – 54) will have lower level of savings than non-boomer women (ages 55 – 64; H2).

### *Income*

In previous research, it was found that households with higher income levels were more likely to be financially prepared for retirement than households with lower income levels (DeVaney & Chiremba, 2005). Glass and Kilpatrick (1998) also found that the savings levels increased as income increased for near-retiree households. In particular, Glass and Kilpatrick stated that women with more income were more likely to have higher levels of retirement savings. Household income among near-retiree women can have a significant task in the accumulation of retirement savings; therefore, it is hypothesized that there will be a positive relationship between income and the level of savings among near-retiree women (H3).

### *Marital Status*

Munnell (2004b) reported that single women were not entitled to a portion of their husband's benefits that married women will use during retirement; therefore, non-married women were financially worse off than married women in retirement. Munnell also reported that 28% of single older women were either poor or near poor. Therefore, this

study hypothesizes that non-married women will have a lower level of savings than their married counterparts (H4).

#### *Education*

Previous research has indicated that more educated people had more knowledge regarding retirement savings and investments (DeVaney & Chiremba, 2005; Ozawa & Lee, 2006). Baek and DeVaney (2004) found that women with less education had lower levels of accumulated retirement savings and were less prepared for retirement. Therefore, this study hypothesizes that education level will be positively related to the level of savings among near-retiree women (H5).

#### *Race*

Based on the literature, White households are more likely to be financially prepared for retirement than non-White households (DeVaney & Chiremba, 2005; Ozawa & Hong, 2006). Non-White women had lower net worth levels and lower earnings than White women (Ozawa & Tseng, 2000). Therefore, this study hypothesizes that non-White near-retiree women will have a lower level of savings than White near-retiree women (H6).

#### *Health Status*

According to Moen (1996), poor health was often a factor associated with individuals leaving the work force. Poor health tends to decrease the time in the work force; as a result, it reduced the ability for job advancement or pay raises (Green, 2005). Green also reported that healthier individuals worked longer; therefore, they were able to accumulate

higher levels of savings. Therefore, this study hypothesizes that near-retiree women with poor health will have a lower level of savings than near-retiree women with excellent health (H7).

The hypotheses of this study can be summarized as the following:

H1: (a) Women will be less likely to invest in aggressive assets than men.

(b) Women will have a lower level of savings than men.

H2: Baby boomer women will have a lower level of savings than non boomer women.

H3: There will be a positive relationship between household income and the level of savings among near-retiree women.

H4: Non-married women will have a lower level of savings than married women.

H5: There will be a positive relationship between the level of education and the level of savings among near-retiree women.

H6: Non-Whites will have a lower level of savings than White near-retiree women.

H7: Near-retiree women with poor health will have a lower level of savings than near- retiree women with excellent health.

## CHAPTER III

### METHODS

Women must accumulate enough retirement savings to last throughout an extended retirement period in comparison to men but still generate enough income to live comfortable. This study seeks to answer the questions: how much less do near-retiree women aged 51 - 64 save than near-retiree men aged 51 - 64 and how do women invest differently than men? While focusing on gender differences in saving and investment behavior, this study also investigates how socio-economic characteristics influence the saving and investment behavior among individuals in the near-retirement stage. This chapter provides a description of the data and sample, data analysis, and definitions of the variables for the study.

#### Data and Sample

##### *Data*

Data for the study are drawn from the 2000 Health and Retirement Study (HRS). The HRS is a nationally representative, longitudinal survey of individuals over 50 years of age. The main goal of the HRS is to provide data that enable research and analysis in support of policies on retirement, savings, and economic well-being of older households. This study utilizes the 2000 Rand HRS data file which is a cleaned version of the Health and Retirement Study (HRS). The Rand HRS file was developed by the Rand Center for the Study of Aging with funding from the National Institute on Aging (NIA) and Social Security Administration (SSA).

### *Sample*

Using the 2000 Rand HRS data file, the sample for this study includes households headed by near-retirees aged 51 - 64. With respect to sample selection, observations for which there are missing values for one or more of the variables used in the analysis were dropped. This procedure results in a study sample of 7,922 individuals aged 51 - 64 in the 2000 Rand HRS data. This study selected individuals aged 51 - 64 as near-retirees and resulted in near-retiree women ( $n = 4,525$ ) and near-retiree men ( $n = 3,397$ ).

### Data Analysis

Percentages, means, and medians were calculated for all variables in the analyses to obtain the descriptive statistics of the study sample. The  $t$  tests and chi-square tests were conducted to understand the differences in the socio-demographic and economic characteristics between near-retiree women and men aged 51 - 64. The  $t$  tests were performed to present the differences in the average dollar value in stocks, checking and savings accounts, CDs, savings bonds, and T-bills, bonds, real estate assets, the net value of the primary home, and net worth between near-retiree women and men aged 51 - 64.

Logistic regression analyses were conducted to identify factors associated with the likelihood of holding aggressive assets among near-retiree women and men aged 51 - 64. Ordinary least squares (OLS) regression analyses were performed to investigate socio-economic factors that influence level of savings among near-retiree women and men aged 51 - 64. SAS software, version 8.2, was used for statistical analyses.

## Variables

### *Dependent Variables*

In the multivariate logistic regression model, the dependent variable measured the likelihood of holding aggressive assets (i.e., stocks). In this study, a binary variable (1 if have dollar amounts in stocks; 0 otherwise) was created in the logistic regression models for the total sample ( $N = 7,922$ ), female sample ( $n = 4,525$ ), and male sample ( $n = 3,397$ ). To measure the level of household savings among near-retiree women and men aged 51 - 64, this study included the level of net worth as the dependent variable in the OLS regression models for the total sample, female sample, and male sample.

### *Explanatory Variables*

The main purpose of this study was to understand how much less do near-retiree women save than men for retirement and how do women invest differently than near-retiree men. To identify the effects of gender on the likelihood of holding stocks and the level of net worth, dummy categorical variables for gender (females and males) were included in both the logistic and OLS regression models. Variables reflecting the socio-economic characteristics of near-retiree women and near-retiree men consisted of household income, age, marital status, education, race, and self-reported health. The measurements of the explanatory variables in the multivariate analyses are presented in Table 1.

More specifically, as for the gender variable, male was the reference category and female was included in both the Logistic and OLS regression models. Income was a

Table 1

*Variable Measurements (N=7,922)*

Variables	Measurement
<i>Dependent Variables</i>	
Stock ownership	1 if have dollar amounts in stocks, 0 if otherwise
Net worth	Total of all assets - all debts
<i>Explanatory Variables</i>	
Gender:	
(Male)	1 if male, 0 if otherwise
Female	1 if female, 0 if otherwise
Income	Continuous, total household income
Age:	
Boomer	1 if ages 51 - 54, 0 if otherwise
(Non-boomer)	1 if ages 55 - 64, 0 if otherwise
Marital Status:	
(Married)	1 if married, 0 if otherwise
Divorced	1 if divorced/separated, 0 if otherwise
Widowed	1 if widowed, 0 if otherwise
Never-married	1 if never-married, 0 if otherwise
Education:	
(Less than high school)	1 if less than high school, 0 if otherwise
High school	1 if high school graduates, 0 if otherwise
Some college	1 if some college education, 0 if otherwise
College education	1 if college graduates or advanced, 0 if otherwise
Race:	
(White)	1 if Whites, 0 if otherwise
Non-White	1 if Blacks, Hispanics, Asians, others, 0 if otherwise
Self-reported health:	
Fair/poor	1 if fair/poor, 0 if otherwise
Good	1 if good, 0 if otherwise
Very good	1 if very good, 0 if otherwise
(Excellent)	1 if excellent, 0 if otherwise

*Note.* Reference categories in the multivariate analyses are presented in parentheses.



continuous variable which was the dollar value of total household income. Age was a categorical variable: baby boomer (ages 51 - 54 = reference category) and non-boomer (ages 55 - 64). Other socio-demographic characteristics included marital status [(married = reference category), divorced/separated, widowed, and never-married]; education [(less than high school = reference category), high school graduate, some college education, and college graduate or advanced degree]; race [(Whites = reference category), non-Whites including Blacks, Hispanics, and Asians/others]; and health status [(excellent = reference category), fair/poor, good, and very good].

## CHAPTER IV

### RESULTS

The first purpose of this study is to examine what types of assets near-retiree women hold and to what extent near-retiree women have accumulated savings as compared to their male counterparts. The second purpose of this study is to investigate what socioeconomic factors (income, age, marital status, race, education, and health) are associated with the holdings of aggressive assets and level of savings among near-retiree women and men aged 51 - 64. This chapter reports the results of *t* tests, chi-square tests, logistic regression analyses, and OLS regression analyses.

#### Socioeconomic Profiles of Near-Retiree Women and Men

Table 2 profiles the socio-economic characteristics of near-retiree women and men in this study. Except for self-reported health, there were significant differences in all socio-economic characteristics (income, age, marital status, education, and race) between near-retiree women and men. The average household income of the male group (\$74,697) was much higher than for the female group (\$60,641). Both the female and male samples of this study included a higher proportion of older households (non-boomers aged 55 - 64) than younger households (boomers aged 51 - 54).

Table 2 reports the marital status of the female and male sample in the study. Overall, the samples of this study include a higher proportion of married individuals than divorced, widowed, and never-married individuals. As for education, there was a higher proportion of men than women in the category of college education. There were slightly

Table 2

*Socio-Economic Profiles of Women and Men Aged 51-64*

Variables	Women (n = 4,525)	Men (n = 3,397)	Test Statistics
Income	\$60,641 <sup>a</sup> \$41,160 <sup>b</sup>	\$74,697 \$53,200	t = 5.90***
Age:			
Boomer (51 - 54)	20.4%	15.3%	$\chi^2=34.570^{***}$
Non-boomer (55 - 64)	79.6%	84.7%	
Marital Status:			
Married	72.3%	84.5%	$\chi^2=237.221^{***}$
Divorced	14.3%	10.4%	
Widowed	10.5%	2.5%	
Never-married	2.9%	2.6%	
Education:			
Less than high school	24.6%	24.3%	$\chi^2=77.039^{***}$
High school	34.8%	28.9%	
Some college	22.8%	21.3%	
College education	17.8%	25.5%	
Race:			
White	80.3%	83.3%	$\chi^2=11.645^{***}$
Non-White	19.7%	16.7%	
Self-reported health:			
Fair/poor	22.3%	21.4%	$\chi^2=7.046$
Good	27.9%	30.6%	
Very good	33.0%	32.1%	
Excellent	16.8%	15.9%	

<sup>a</sup> Mean Level, <sup>b</sup> Median Level

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

more women than men with a high school education (34.8% women and 28.9% men). Table 2 shows that 80.3% of the females were White, while 83.3% of the male sample was White. Overall, the majority of the study sample consisted of White women and men versus non-White women and men.

Based on the results of the  $t$  tests and chi-square tests in Table 2, it can be summarized that men had higher levels of mean income than women; there was a higher proportion of non-boomer women and men (those aged 55 - 64) than boomer women and men (those aged 51 - 54); there was a higher proportion of married women and men than divorced, widowed, or never married women and men; there was a higher proportion of women and men at the high school education level than any other level in the education category; and there was a higher proportion of White women and men than non-White women and men.

### Financial Profiles of Near-Retiree Women and Men

#### *Levels of Assets for Near-Retirees*

Table 3 compares dollar holdings for near-retiree women and men. The results of the  $t$  tests report that there was statistical significance in the differences in the average dollar value in IRAs, transportation assets, business equity, and net worth between near-retiree women and men. However, there was no statistical significance in the difference of the average dollar value in stocks, checking and savings accounts, CDs, savings bonds, and T-bills, bonds, other savings, other real estate, and the net value of the primary home between near-retiree women and men in this study.

Table 3 shows that the average level of dollar amounts in stocks for the female group was \$56,456, while that in checking and savings accounts was \$17,562. The average level of dollar amounts in CDs, savings bonds, and T-bills was \$9,024 among near-retiree women, while that in bonds was \$5,371. The average level of dollar holdings in IRA accounts was \$59,803. The level of dollar holdings in other savings was \$10,084. The average level of dollar holdings in transportation was \$15,243. The level of dollar holdings in business assets was \$31,186 for near-retiree women. The average level of dollar holdings in other real estate for near-retiree women was \$42,328. Near-retiree women reported that the average level of dollar holdings in the primary home was \$98,911. The average value of net worth for near-retiree women was \$341,961.

Table 3 reports that the average level of dollar amounts in stocks for men in this study was \$72,440, while that in checking and savings accounts was \$19,415. The average level of dollar amounts in CDs, savings bonds, and T-bills was \$7,546. However, the average level of dollar holdings in bonds was only \$5,576. The dollar holdings in IRA accounts show a relatively higher level with an average of \$68,158. Table 3 indicates that an average level of dollar holdings in other savings was \$11,925 and the level of dollar holdings in transportation was \$19,076. The average level of dollar holdings in business assets was \$45,129 and that in other real estate was \$53,536. The males report that the average level of dollar holdings in the primary home was \$106,002 and the average value of net worth was \$404,227.

Table 3

*Financial Profiles of Women and Men Aged 51-64 (N = 7,922)*

Variables	Women (n = 4,525)	Men (n = 3,397)	Test Statistics
Stocks	\$56,456	\$72,440	$t = 1.41$
Checking/Saving accounts	\$17,562	\$19,415	$t = 1.56$
CD/Savings bonds/T-bills	\$9,024	\$7,546	$t = 1.27$
Bonds	\$5,371	\$5,576	$t = .17$
Total IRA	\$59,803	\$68,158	$t = 2.07^*$
Other savings	\$10,084	\$11,925	$t = 1.02$
Transportation	\$15,243	\$19,076	$t = 3.03^{***}$
Business assets	\$31,186	\$45,129	$t = 1.89^*$
Other real estate	\$42,328	\$53,536	$t = 1.23$
Home equity: net value of primary home	\$98,911	\$106,002	$t = .92$
Net worth	\$341,961	\$404,227	$t = 2.22^*$

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\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

*Types of Assets Owned by Near-Retirees*

Table 3-1 compares types of assets owned by near-retiree women and men. Table 3-1 indicates the percent of women and men who reported dollar amounts for each asset category. It can be seen that 33.4% of near-retiree women held stocks and 86.7% of them had holdings in checking and savings accounts. It shows that 22.8% of near-retiree women had holdings in CDs, savings bonds, and T-bills. Only 6.9% of them had holdings in bonds. There were 44.4% of near-retiree women that had holdings in IRA accounts. Only 17.7% of the women sample reported dollar holdings in other savings. There were 89.7% of near-retiree women that had transportation. Only 10.8% of the female sample had holdings in business assets. There were 20.6% of near-retiree women households that had holdings in other real estate in this study. There were 84.2% of near-retiree female households that reported home ownership. Most of the females (95.8%) reported a positive net worth value.

Table 3-1 indicates that only 36.2% of males had dollar holdings in stocks and 86.6% of them had holdings in checking and savings accounts. It shows that 22.7% of males had holdings in CDs, savings bonds, and T-bills. However, only 7.0% of them had holdings in bonds. There were 46.7% of males that indicated they had holdings in IRA accounts and 18.1% of them reported that they had holdings in other savings. There were 93.2% of near-retiree men that had transportation. Thirteen percent of males indicated that they had holdings in business assets. There were 23.1% of males that reported holdings in other real estate. There were 85.2% of males that reported home ownership. Most of the males (96.7%) reported a positive net worth value.

Table 3-1

*Asset Ownership of Near-Retiree Women and Men Aged 51-64 (N = 7,922)*

Variables	Women (n = 4,525)	Men (n = 3,397)
Stocks	33.4%	36.2%
Checking/Saving accounts	86.7%	86.6%
CD/Savings bonds/T-bills	22.8%	22.7%
Bonds	6.9%	7.0%
Total IRAs	44.4%	46.7%
Other savings	17.7%	18.1%
Transportation	89.7%	93.2%
Business assets	10.8%	13%
Other real estate	20.6%	23.1%
Home equity: net value of primary home	84.2%	85.2%
Net worth	95.8%	96.7%



*A Comparison of Financial Assets  
Between Near-Retiree Women and Men*

Table 3 shows the results of the *t* tests, indicating that the average level of dollar amounts in stocks for the female group was \$56,456, while that for the male group was \$72,440. Table 3-1 shows that a relatively higher portion of the male group than the female group owned stocks. However, based on the results of the *t* tests, the average dollar value of stocks was not statistically significant between women and men.

Table 3 indicates that the average levels of all asset categories for the men group were much greater than they were for the women group except CDs, savings bonds, and T-bills. The average levels of CDs, savings bonds, and T-bills were \$9,024 and \$7,546 for female and male groups, respectively. The average level of dollar amounts in checking and savings accounts for males was \$19,415 and the average level of dollar amounts was \$17,562 for females.

The average levels of dollar amounts in bonds were \$5,576 for males and \$5,371 for females. The average levels of dollar amounts in IRA accounts were \$68,158 for males and \$59,803 for females. The average level of dollar amounts in other savings was \$11,925 for males, whereas that of females was \$10,084. The average levels of dollar amounts in transportation were \$19,076 for males and \$15,243 for females.

The average levels of dollar amounts in business assets were \$45,129 for males and \$31,186 for females. The average levels of dollars amounts in other real estate were \$53,536 for males and \$42,328 for females. The average levels of net value in the primary home were \$106,002 for males and \$98,911 for females. The average level of

net worth for males was \$404,227, while females reported an average level of net worth as \$341,961.

According to Table 3-1, the percentages of both groups that had asset holdings in the various financial asset categories were greater for males in all areas except for checking and savings accounts and CDs, savings bonds, and T-bills. It was reported that 36.2% of males owned stocks and 33.4% of females owned stocks. Bonds were the lowest asset category for both males and females. The mean values of bonds for both groups were also similar at about \$5,400. It was reported that 46.7% of males and 44.4% of females had dollar holdings in IRA accounts. It was reported that 23.1% of males had dollar holdings in real estate and 20.6% of females had holdings in real estate.

It can be summarized that the majority of the study sample had dollar values in checking and savings accounts; however, less than half of both the female and male groups had dollar amounts in IRAs. A small portion of both the female and male groups had dollar amounts in bonds in their asset holdings. Approximately 7% of both the female and male groups reported dollar amounts in bonds. Most of the female and male groups were homeowners.

#### Logit Results of the Likelihood of Owning Aggressive Assets

##### *Total Sample*

Table 4 presents factors affecting the likelihood of owning aggressive assets for near-retirees aged 51 - 64. This study hypothesized that women were less likely to invest in aggressive assets than men (Hypothesis 1-a). However, there was no statistical

significant difference in the coefficient associated with gender; thus, Hypothesis 1-a was not supported. On the other hand, the results of the logistic regression analysis indicated that income, income squared, age, marital status, education, race, and self-reported health were all statistically significant predictors of the likelihood of owning aggressive assets for near-retirees aged 51 - 64.

The relationship between household income and the likelihood of having aggressive assets among near retirees was significant and positive. The likelihood of owning aggressive assets increased as the level of household income increased. Since the coefficient associated with the income squared term was significant and negative, it can be said that there is a curvilinear relationship between income and the likelihood of holding aggressive assets among near-retirees.

The results of the logistic regression analysis indicated that near-retirees aged 51 - 54 (boomers) were less likely to own aggressive assets than were near-retirees aged 55 - 64 (non-boomers). In fact, boomers were 21% less likely to own aggressive assets than were non-boomers. Table 4 reports that marital status was a predictor of the likelihood of having aggressive assets. Divorced, widowed, and never married near-retirees were less likely to own aggressive assets than were married near-retirees. Specifically, the odds ratio showed that compared to married near-retirees, divorced, widowed, and never married near-retirees were 47%, 27%, and 30% less likely to own aggressive assets, respectively.

The findings from Table 4 also indicate that as compared to near-retirees with less than a high school education, near-retirees with at least a high school diploma were 152%

Table 4

*Logistic Regression Results for Aggressive Asset Ownership  
Among Near-Retirees (N = 7,922)*

Variable	Parameter Estimate	p-value		Odds Ratio
Income	7.3 E - 6	0.0001	***	1.000
Income squared	-1.3 E - 4	0.0001	***	1.000
Gender: (Male)				
Female	0.0711	0.1895		1.074
Age: (Non-boomer, aged 55 - 64)				
Boomer, aged 51 - 54	-0.2414	0.0004	***	0.786
Marital Status: (Married)				
Divorced	-0.6367	0.0001	***	0.529
Widowed	-0.3136	0.0070	**	0.731
Never married	-0.3539	0.0402	*	0.702
Education: (Less than high)				
High school	0.9243	0.0001	***	2.520
Some college	1.2021	0.0001	***	3.327
College education	1.5320	0.0001	***	4.627
Race: (White)				
Non-White	-0.7680	0.0001	***	0.464
Self-reported health: (Excellent)				
Fair/poor	-0.7229	0.0001	***	0.485
Good	-0.3873	0.0001	***	0.679
Very good	-0.0412	0.5791		0.960
Intercept	-1.5955	.0001	***	
	Log Likelihood	8625.335		
	$\chi^2$	1593.0035***		

Note. Reference categories are presented in parentheses.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

more likely to have aggressive asset ownership, while near-retirees with some college education or a college education were 233% and 363% more likely to have aggressive assets, respectively. The higher level of education near-retirees obtained, the more likely they were to own aggressive assets.

As compared to White near-retirees, non-White near-retirees were less likely to have aggressive asset ownership. The odds ratio shows that non-White near-retirees were 54% less likely to own aggressive assets than were White near-retirees. The results also show that as compared to near-retirees in excellent health, those who reported fair/poor or good health were 51% and 32%, respectively, less likely to have aggressive assets. The poorer they reported their health status, the less likely they were to own aggressive assets.

#### *Female Sample*

This study examined the likelihood of women in the retirement stage owning aggressive assets and emphasized how they have saved for retirement. Table 4-1 presents factors affecting the likelihood of owning aggressive assets for near-retiree women aged 51 - 64. The results of the logistic regression analysis indicated that income, income squared, age, marital status, education, race, and self-reported health were all statistically significant predictors of the likelihood of owning aggressive assets among near-retiree women.

The relationship between household income and the likelihood of having aggressive assets among near-retiree women was significant and positive. That is, the likelihood of owning aggressive assets increased as the level of household income increased. The coefficient associated with the income squared term was significant and

negative. Thus, it can be said that as the level of income continued to increase, the likelihood of holding aggressive assets decreased at a certain point.

The results of the logistic regression analysis indicated that near-retiree women aged 51 - 54 (boomers) were less likely to own aggressive assets than were near-retiree women aged 55 - 64 (non-boomers). The odds ratio showed that boomer women were 23% less likely to own aggressive assets than were older non-boomer women.

Table 4-1 indicated that marital status was a predictor of aggressive asset ownership. Divorced near-retiree women were less likely to own aggressive assets than were their married counterparts. The odds ratio showed that compared to married near-retiree women, divorced near-retiree women were 45% less likely to own aggressive assets than their married counterparts. The results of the logistic regression analysis indicated that compared to married near-retiree women, widowed and never married near-retiree women were less likely to own aggressive assets than married near-retiree women; however, the results were not statistically significant.

The findings from Table 4-1 also suggest that as compared to near-retiree women with less than a high school education, near-retiree women with at least a high school diploma were 150% more likely to own aggressive assets, while near-retiree women with some college education or a college education were 214% and 315% more likely to have aggressive assets, respectively. The higher the education levels among near-retiree women, the more likely women in the near retirement stage were to own aggressive assets.

Table 4-1 shows that compared to White near-retiree women, non-White near-

Table 4-1

*Logistic Regression Results for Aggressive Asset Ownership  
Among Near-Retiree Women (n = 4,525)*

Variable	Parameter estimate	p-value		Odds ratio
Income	1.1 E - 5	0.0001	***	1.000
Income squared	-8.7 E - 4	0.0001	***	0.999
Age: (Non-boomer, aged 55 - 64)				
Boomer, aged 51 - 54	-0.2638	0.0030	***	0.768
Marital Status: (Married)				
Divorced	-0.5944	0.0001	***	0.552
Widowed	-0.2054	0.1154		0.814
Never married	-0.3014	0.1930		0.740
Education: (Less than high)				
High school	0.9162	0.0001	***	2.500
Some college	1.1449	0.0001	***	3.142
College education	1.4222	0.0001	***	4.146
Race: (White)				
Non-White	-0.8128	0.0001	***	0.444
Self-reported health: (Excellent)				
Fair/poor	-0.8237	0.0001	***	0.439
Good	-0.4485	0.0001	***	0.639
Very good	-0.0166	0.8664		0.984
Intercept	-1.6732	.0001	***	
Log Likelihood	4761.766			
$\chi^2$	1003.7573	***		

*Note.* Reference categories are presented in parentheses.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

retiree women were less likely to own aggressive assets. The odds ratio showed that non-White near-retiree women were 56% less likely to own aggressive assets than were White near-retiree women aged 51 - 64. The results also indicated that as compared to near-retiree women in excellent health, those who reported fair/poor and good health were 56% and 36%, respectively, less likely to own aggressive assets. The poorer the self-reported health among near-retiree women, the less likely they owned aggressive assets.

### *Male Sample*

Table 4-2 presents factors affecting the likelihood of owning aggressive assets among near-retiree men aged 51 - 64. Similar to the results of the logistic regression analysis for near-retiree women, the results of the logistic regression analysis for near-retiree men indicated that income, income squared, age, marital status, education, race, and self-reported health, were all statistically significant predictors of the likelihood of near-retiree men owning aggressive assets. Based on the findings of the logistic regression analysis, the significant socioeconomic factors affecting the likelihood of having aggressive assets were similar between near-retiree women and men.

Similar to the results of the female sample, the likelihood of owning aggressive assets increased as the level of household income increased among near-retiree men. The coefficient associated with the income squared term was significant and negative. Thus, it can be said that there is a curvilinear relationship between income and the likelihood of holding aggressive assets among near-retiree men.

The age of near-retiree men was also statistically significant in predicting aggressive asset ownership. Table 4-2 shows that near-retiree men aged 51 - 54



(boomers) were less likely to own aggressive assets than were near-retiree men aged 55 - 64 (non-boomers). Boomer men were 21% less likely to own aggressive assets than were older non-boomer men.

Table 4-2 reported that marital status was a significant predictor of owning aggressive assets among near-retiree men. Similar to the results of the female sample, only the coefficient associated with divorce was statistically significant, indicating that divorced near-retiree men were less likely to own aggressive assets than were married near-retiree men. The odds ratio reported that compared to near-retiree married men, divorced near-retiree men were 41% less likely to own aggressive assets.

The findings from Table 4-2 also indicated that as compared to near-retiree men with less than a high school education, near-retiree men with at least a high school diploma were 143% more likely to own aggressive assets, while near-retiree men with some college education or a college education were 240% and 375% more likely to have aggressive assets, respectively. The higher the level of education that near-retiree men obtained, the more likely they were to own aggressive assets.

The race of near-retiree men was a significant predictor of having aggressive assets. Table 4-2 indicated that compared to White near-retiree men, non-White near-retiree men were less likely to own aggressive assets. The odds ratio indicated that non-White near-retiree men were 49% less likely to own aggressive assets than were White near-retiree men. The findings also indicated that as compared to near-retiree men in excellent health, those who reported fair/poor or good health were 41% and 24% less likely to own aggressive assets. The poorer near-retiree men reported their health status,

Table 4-2

*Logistic Regression Results for Aggressive Asset Ownership  
Among Near-Retiree Men (n = 3,397)*

Variable	Parameter estimate	p-value		Odds ratio
Income	6.8 E - 6	0.0001	***	1.000
Income squared	-1.2 E - 4	0.0001	***	1.000
Age: (Non-boomer, aged 55 - 64)				
Boomer, aged 51 - 54	-0.2372	0.0311	*	0.789
Marital Status: (Married)				
Divorced	-0.5340	0.0002	***	0.586
Widowed	-0.3373	0.2365		0.714
Never married	-0.2676	0.3080		0.765
Education: (Less than high)				
High school	0.8894	0.0001	***	2.434
Some college	1.2222	0.0001	***	3.395
College education	1.5575	0.0001	***	4.747
Race: (White)				
Non-White	-0.6735	0.0001	***	0.510
Self-reported health: (Excellent)				
Fair/poor	-0.5229	0.0002	***	0.593
Good	-0.2814	0.0183	*	0.755
Very good	-0.0623	0.5874		0.940
Intercept	-1.6472	.0001	***	
Log Likelihood		3805.643		
$\chi^2$		640.6295	***	

*Note.* Reference categories are presented in parentheses.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

the less likely they were to own aggressive assets.

### OLS Results of Net Worth

#### *Total Sample*

This study attempted to understand how near-retiree women saved; how the levels of savings were different between near-retiree women and men; and what factors were associated with the levels of savings among near-retiree women and men. Table 5 reports the OLS results of net worth to measure the level of savings among near-retirees aged 51 - 64, and the results show significant factors that determine the levels of net worth for individuals in the near-retirement stage. The adjusted *R* squared is .36, indicating that the independent variables in the model (income, income squared, gender, age, marital status, education, race, and self-reported health) explained about 36% of the variance in net worth. The *F*-statistics indicated that the model of independent variables is appropriate for understanding the level of net worth. Among the socioeconomic characteristics, household income, boomers aged 51 - 54, divorced, high school, some college, college education, non-White, fair/poor health, and good health were the significant factors that affected the levels of net worth for near-retirees aged 51 - 64.

This study hypothesized that women would have lower levels of savings than did men (Hypothesis 1-b). However, the coefficient associated with females was not statistically significant, indicating that there was no significant difference between near-retiree women and near-retiree men in the level of net worth. Therefore, Hypothesis 1-b was not supported.

The OLS results reported that the effects of income on the level of net worth show significant and positive effects. It shows that net worth increased as household income increased. For every one dollar in income increase, there was an increase of three dollars in net worth. The coefficient associated with the income squared term was significant and positive. Thus, it can be said that as household income continued to increase, near-retirees increased their level of savings. It is evident that boomer near-retirees (aged 51 - 54) had significantly lower amounts of net worth than did non-boomer near-retirees (aged 55 - 64). Boomer near-retirees had approximately \$129,399 less in net worth than did non-boomer near-retirees.

Marital status could be an important factor in predicting the level of savings among near-retirees. Table 5 shows that the coefficient associated with the dummy variable of the divorced in the model was statistically significant, indicating that all else being equal, divorced near-retirees held significantly \$101,144 less in net worth than did married near-retirees.

Education shows a significant and positive impact on the level of savings among near-retirees. It can be said that all else being equal, near-retirees with a college education or post high school education held higher levels of net worth compared to near-retirees with no high school diploma. Race of the retirees was significant, indicating that all else being equal, non-White near-retirees had \$137,850 less in net worth than did White near-retirees. Table 5 shows the significant effect of self-reported health status on the level of net worth among near-retirees. It can be said that compared to near-retirees with excellent health, near-retirees with poorer health had lower levels of net worth.

Table 5

*OLS Results of Net Worth Among Near-Retirees (N = 7,922)*

Variable	Parameter estimate	Standard error	p-value
Income	3.013	0.160	0.000***
Income squared	121.128	4.696	0.000***
Gender: (Male)			
Female	18,343	21,861	0.401
Age: (Non-boomer, aged 55 - 64)			
Boomer, aged 51 - 54	-129,399	27,708	0.000***
Marital Status: (Married)			
Divorced	-101,144	32,923	0.002***
Widowed	-25,141	42,825	0.557
Never married	-90,279	65,420	0.167
Education: (Less than high)			
High school	86,151	29,107	0.003**
Some college	133,749	32,254	0.000***
College education	204,052	34,741	0.000***
Race: (White)			
Non-White	-137,850	28,086	0.000***
Self-reported health: (Excellent)			
Fair/poor	-106,348	36,528	0.003**
Good	-87,069	33,379	0.009**
Very Good	-23,341	32,080	0.466
Intercept	160,317	39,218	0.000***
	F-Value	315.68***	
	Adjusted R <sup>2</sup>	0.36	

*Note.* Reference categories are presented in parentheses.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Near-retirees with fair/poor health or good health had \$106,348 and \$87,069 less dollars in net worth than near-retirees with excellent health.

### *Female Sample*

Table 5-1 reports the OLS results of net worth and shows significant factors affecting the levels of net worth for women in the near-retirement stage. The adjusted *R* squared is .15, indicating that the independent variables in the model (income, income squared, age, marital status, education, race, and self-reported health) explained approximately 15% of the variance in net worth for near-retiree women. The *F*-statistics indicated that the model of independent variables is appropriate for understanding the level of net worth among near-retiree women. Among the socioeconomic characteristics, household income, income squared, female heads aged 51 - 54 boomers), some college, college education, and non-White were the significant factors that affected the levels of net worth for near-retiree women.

This study hypothesized that there would be a positive relationship between age and the level of savings among near-retiree women (H2). The OLS results reported that boomer near-retiree women (aged 51 - 54) had significantly lower amounts of net worth than did non-boomer women (aged 55 - 64). Boomer near-retiree women had approximately \$118,595 less dollars of net worth than did non-boomer near-retiree women; therefore, Hypothesis 2 was supported.

It was hypothesized that there would be a positive relationship between income and the level of savings among near-retiree women (H3). The results of the OLS regression analysis reported that the effects of income on the level of net worth show a

Table 5-1

*OLS Results of Net Worth Among Near-Retiree Women (n = 4,525)*

Variable	Parameter estimate	Standard error	p-value
Income	4.81	0.31	0.000***
Income squared	-116.39	30.21	0.000***
Age: (Non-boomer, aged 55 - 64)			
Boomer, aged 51 - 54	-118,595	32,603	0.000***
Marital Status: (Married)			
Divorced	-74,195	39,415	0.059
Widowed	18,032	44,549	0.685
Never married	-85,321	78,992	0.280
Education: (Less than high)			
High school	48,842	35,417	0.167
Some college	108,142	39,577	0.006**
College education	123,438	45,201	0.006**
Race: (White)			
Non-White	-122,182	33,961	0.000***
Self-reported health: (Excellent)			
Fair/poor	-62,836	44,860	0.161
Good	-60,096	41,296	0.145
Very Good	4,354.34	39,167	0.911
Intercept	87,921	47,290	0.063
F-Value	63.51***		
Adjusted R <sup>2</sup>	0.15		

*Note.* Reference categories are presented in parentheses.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

significant and positive, indicating that net worth increased as household income increased. It was reported that for every one dollar increase in income, there was an increase of \$4.81 in net worth among near-retiree women; therefore, Hypothesis 3 was supported. The coefficient associated with the income squared term was significant, but an opposite direction. This result indicated that the relationship between household income and the level of savings is non-linear among near-retiree women. In other words, it can be said that as the household income continued to increase, the level of savings decreased at a certain point.

It was hypothesized that never-married women would have lower level of savings than married women (H4). However the results of the OLS regression analysis report no statistical significant differences among divorced, widowed, and never married near-retiree women. Therefore, Hypothesis 4 was not supported.

It was hypothesized that there would be a positive relationship between education and the level of savings (H5). The results of the OLS regression analysis indicated that the effect of education on the level of savings was significant and positive among near-retiree women. From Table 5-1, it can be said that all else being equal, near-retiree women with a college education or post high school education reported higher levels of net worth compared to near-retiree women with no high school education. Therefore, Hypothesis 5 was supported.

It was hypothesized that non-Whites would have lower level of savings than White near-retiree women (H6). The OLS results indicated that race of near-retiree women was significant, indicating that all else being equal, non-White near-retiree



women held \$122,182 less in net worth than did White near-retiree women. Therefore, Hypothesis 6 was supported.

It was hypothesized that near-retiree women with poor health would have lower level of savings than near-retiree women with excellent health (H7). Table 5-1 shows that as the level of self-reported health increased, the level of savings increased among near-retiree women; however, the coefficients associated with dummy variables for self-reported health status were not statistically significant. Therefore, Hypothesis 7 was not supported.

#### *Male Sample*

This study explored how the levels of savings were different between near-retiree women and men. Table 5-2 reports the OLS results of net worth and shows significant factors that determine the levels of net worth for men in the near-retirement stage. The adjusted *R* squared is .49, indicating that the independent variables in the model (income, income squared, age, marital status, education, race, and self-reported health) explained approximately 49% of the variance in net worth among near-retiree men. The *F*-statistics indicated that the model of independent variables is appropriate for understanding the level of net worth among near-retiree men. Among the socio-economic characteristics, household income, male heads aged 51 - 54 (boomers), high school, some college, college education, non-White, fair/poor health, and good health were the significant factors that affected the level of net worth for near-retiree men aged 51 - 64.

The OLS results from Table 5-2 reported that the effect of household income on the level of net worth was significant and positive, indicating that net worth increased as

household income increased among near-retiree men. For every one dollar in income increase, there was an increase of three dollars in net worth among near-retiree men. Unlike the female sample, the coefficient associated with the income squared term was significant and positive indicating that the relationship between household income and the level of savings is linear for near-retiree men. It can be said that as household income increased, the level of savings continued to increase.

Table 5-2 reported that boomer near-retiree men (aged 51 - 54) had significantly lower amounts of net worth than did non-boomer near-retiree men (aged 55 - 64). Boomer near-retiree men had \$162,000 less in net worth than did their non-boomer counterparts. While comparing the results of the age impact on the level of savings, it can be said that both boomer near-retiree women and men had significantly lower amounts of net worth than did their non-boomer counterparts.

Marital status was considered as important factor in predicting the level of net worth among near-retiree men. Similar to the results from the female sample, the results of the OLS regression analysis indicated that there was no statistical significance among divorced, widowed, or never married near-retiree men as compared to married near-retiree men in predicting net worth.

Education shows a significant and positive impact on the level of savings among near-retiree men. Table 5-2 reported that all else being equal, near-retiree men with a high school education, post high school education, and a college education reported higher levels of net worth as compared to near-retiree men with no high school diploma. The results of the OLS regression analyses for both the female and male samples

Table 5-2

*OLS Results of Net Worth Among Near-Retiree Men (n = 3,397)*

Variable	Parameter estimate	Standard error	p-value
Income	3.04	0.25	0.000***
Income squared	123.02	6.09	0.000***
Age: (Non-boomer, aged 55 - 64)			
Boomer, aged 51 - 54	-162,000	48,990	0.001***
Marital Status: (Married)			
Divorced	-64,314	58,122	0.268
Widowed	-25,154	112,496	0.823
Never married	-25,958	111,758	0.816
Education: (Less than high)			
High school	114,028	48,974	0.020*
Some college	131,996	53,733	0.014**
College education	224,190	54,965	0.000***
Race: (White)			
Non-White	-140,328	47,816	0.003**
Self-reported health: (Excellent)			
Fair/poor	-123,983	60,861	0.041*
Good	-106,673	54,954	0.052*
Very Good	-55,728	53,599	0.298
Intercept	164,758	61,527	0.007**
	F-Value	247.48***	
	Adjusted R <sup>2</sup>	0.49	

*Note.* Reference categories are presented in parentheses.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

indicated that those with higher levels of education reported higher levels of net worth than did their less educated counterparts.

Race of near-retiree men was significant for males. Table 5-2 showed that all else being equal, non-White near-retiree men had \$140,328 less in net worth than their White male near-retiree counterparts. While comparing the results of the female sample, it can be said that both near-retiree non-White women and men had significantly lower levels of savings than their White counterparts. The OLS regression analysis also showed the significant effect of self-reported health status on the level of net worth among near-retiree men. It reported that compared to near-retiree men with excellent health, near-retiree men with fair/poor health and good health had lower levels of net worth. Near-retiree men with fair/poor health and good health, respectively, had \$123,983 and \$106,673 less in net worth than near-retiree men with excellent health. However, among near-retiree women, there was no statistical significance in self-reported health.

## CHAPTER V

### SUMMARY, IMPLICATIONS, AND CONCLUSIONS

This study examined the types of assets and level of savings among near-retiree women, while comparing the types of assets and level of savings with those of near-retiree men. This study also examined the effects of gender on the likelihood of holding aggressive assets and the levels of savings among near-retirees in the multivariate analyses. This study further investigated the factors associated with the likelihood of holding aggressive assets and the levels of savings among near-retiree women aged 51-64. This section provides summary, implications, limitations of the current study, suggestions for future study, and conclusions of this study.

#### Summary

The descriptive statistics indicated that overall, average levels of all asset categories for the female group were lower than they were for the male group among near-retirees. According to the findings of this study, women tended to invest in safer assets such as CDs, savings bonds, and T-bills than in more aggressive assets such as stocks, business assets, and real estate assets.

The results of the logistic regression analysis indicated that gender had no statistically significant impact on the likelihood of owning aggressive assets among near-retirees aged 51 - 64. Based on the OLS results, this study also found that gender had no statistically significant impact on the level of net worth among near-retirees aged 51 - 64. Thus, the findings of this study do not support both Hypothesis 1-a (Women will be less

likely to invest in aggressive assets than men) and Hypothesis 1-b (Women will have lower level of savings than men). It can be said that there were no differences in the likelihood of holding aggressive assets and levels of savings between women and men.

This study explored factors associated with the likelihood of owning aggressive assets among near-retiree women aged 51 - 64. Based on the logistic regression analysis, this study found that boomer women (aged 51 - 54) were less likely to own aggressive assets; divorced women were less likely to own aggressive assets; less educated women were less likely to own aggressive assets; Black, Hispanic, Asian women were less likely to have aggressive assets; and women with poor health were less likely to own aggressive assets than other near-retiree women.

This study investigated what factors were associated with the level of savings among near-retiree women aged 51 - 64. The findings of this study suggested that income, age, education, and race were significant determinants of the level of savings among near-retiree women aged 51 - 64. Thus, the results of this study support Hypothesis 2 (There will be a positive relationship between age and the level of savings among near-retiree women); Hypothesis 3 (There will be a positive relationship between income and the level of savings among near-retiree women); Hypothesis 5 (There will be a positive relationship between level of education and the level of savings among near-retiree women); and Hypothesis 6 (Non-Whites will have lower level of savings than White near-retiree women).

Based on the results of the OLS regression analysis, this study found that near-retiree women with higher income, older women, highly educated women, and women

with good health reported higher levels of savings. For example, as income increased, the level of net worth increased for near-retiree women; boomer women aged 51 - 54 had lower levels of net worth compared to older non-boomer women aged 55 - 64; the higher the levels of education near-retiree women obtained, the higher the levels of net worth were reported; and non-White near-retiree women had lower dollars in net worth as compared to Whites. However, marital status and self-reported health status were not found to be significant factors that determined the levels of net worth among near-retiree women.

### Implications of the Study

According to this study, higher income levels of near-retiree women reported a higher likelihood of owning aggressive assets and having higher levels of net worth. Higher income resulted in higher levels of net worth that could produce an adequate retirement nest egg; therefore, it is important that women earn as much as possible throughout the working years in order to sustain them through retirement. It is also important that women work in career fields where there is the potential for employers to contribute to 401(k) accounts and offer benefits such as health insurance.

The findings of this study may benefit professionals, financial educators, and planners in assisting women to make better investment decisions, particularly with their 401(k) accounts, stocks, and IRAs. These investment vehicles may be unfamiliar to some women; therefore, educators and planners must provide more knowledge about stocks or other investment vehicles that may generate higher returns in the future. Financial

educators need to help women invest their money more appropriately since women have longer life spans.

The findings of this study may assist policy makers in making important retirement policy decisions. This study indicated that women with some college education or a college education were significantly more likely to have a higher level of net worth; therefore, obtaining higher levels of education is critical to women's financial situations. The government may offer additional financial assistance to women to help encourage furthering their education levels since this may increase net worth values.

Since women with some college or a college education were more likely to have higher levels of retirement savings, it is important for the government to develop or emphasize women's education in general; therefore, there may be less women living on government subsidies such as welfare and Medicare. It is also important to educate young women in high school or those beginning college on the importance of an education, along with basic financial knowledge.

This study found that women with good health conditions had higher levels of net worth. Women with little or no health insurance may be more likely to have a negative net worth; therefore, they may need additional government assistance in order to meet their financial and medical obligations. The government may offer additional health care benefits to underinsured women or women completely without insurance to help ensure better health conditions.

This study may offer some insight as to what socioeconomic factors are related to retirement savings among near-retiree women. This study found women with lower



income levels, divorced women, those with lower levels of education, Black, Hispanic, Asian, and other women, and women with poorer health reported lower levels of retirement savings. Researchers interested in women and personal financial issues might be interested in the findings of this study.

### Limitations of the Study

There were some limitations in this study. This study examined the financial portfolios of near-retiree women as compared to those of near-retiree men. However, while comparing the financial assets between males and females among near-retirees, this study was not able to measure the pure investment behavior of women since some of the women from the study were married and their investment decisions may reflect their husbands' investment decisions. This could lead to limitations because it was not a pure comparison of women's and men's savings or investment behaviors. Therefore, it was difficult for one to understand married women's financial behavior since it could be influenced by a husband's financial knowledge.

Another limitation of this study could be attributed to using information from the HRS 2000 data. It may be beneficial for one to use a most recent data set to understand savings or investment behavior among near-retiree women in a future study. Nonetheless, information from the 2000 HRS data could still be useful in evaluating and interpreting what financial assets near-retiree women held and what socioeconomic factors affected the level of savings for near-retiree women. The findings of the 2000 HRS data could be used as a baseline for future research with similar research topics.

### Recommendations for Future Research

Since there are many baby boomer women entering the retirement stage or beginning to enter the retirement stage, further research should be done in baby boomer women's retirement and savings behavior. This study utilized the 2000 HRS data that included baby boomer women, those aged 51 - 54. However, using more recent data such as the 2006 HRS data, a future study would analyze how baby boomer women are continuing to build a retirement nest egg to sustain them throughout their lifetime.

This study investigated how near-retiree women saved for retirement, while measuring the level of net worth and aggressive assets; however, it could be useful for researchers to continuously study how women invest in different retirement saving vehicles such as IRAs, 401(k) accounts, mutual funds, and others. Therefore, to better understand how women utilize different types of investment tools, future research might need to measure other investment tools such as IRAs, 401(k) accounts, mutual funds, and bonds since these are popular retirement saving tools.

This study has limitations in interpreting the financial behavior of near-retiree women. It is unclear for one to understand investment behavior of women in married households which might not be their own decisions. Therefore, future research could design a study that measures the pure investment behavior of women while analyzing a sample of women who are the financial managers in the married-couple household. By comparing nonmarried women with married women who are the financial manager of the household, there may be a more accurate indication as to how near-retiree women are prepared for retirement.

## Conclusions

Many Americans are not saving appropriate funds toward their retirement years, particularly women. Some women may be entering retirement without enough money to last throughout the retirement years. Further education of women on the importance of saving appropriately for retirement is an issue. This study may help to educate women on the importance of saving for retirement, but also educate women to allocate the appropriate funds in investments that create higher returns such as stocks. According to the findings of this study, women tended to invest in safer assets such as CDs, savings bonds, and T-bills than in more aggressive assets such as stocks and mutual funds. Therefore, it is important to educate women on the importance of appropriate allocation of financial resources toward retirement that will generate a higher return to last throughout the longevity of the retirement years.

It is crucial that less educated women are taught about the importance of saving for retirement since this study found that women with no college education had lower levels of net worth and were less likely to own aggressive assets as compared to women with a college education. It was also reported that non-Whites such as Black, Hispanic, Asian, and other near-retiree women had lower levels of net worth and were less likely to own aggressive assets as compared to White women. Therefore, it is important to educate non-White women about the importance of saving for retirement years and investing in aggressive assets such as stocks and mutual funds. It was also found that women with poor health conditions were less likely to own aggressive assets; therefore, it

is important to educate women with poor health to invest appropriately for retirement even if their finances may be primarily focused toward current medical bills.

There are positive things happening in the financial world on educating both women and men on various investment vehicles such as government sponsored financial workshops, better tax incentives for retirement savings, and more awareness on the importance of retirement savings. However, there is still much work to be done to fully educate women on retirement savings particularly those with lower education levels, non-White women, and women with poor health conditions. The retirement stage is a period in time when many Americans hope to enjoy life and their posterity, but if people, particularly women, are not fully prepared; the retirement years may be dismal and financially challenging.

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