WHAT MAKES RETIREES HAPPY?

By Keith A. Bender and Natalia A. Jivan^{*}

Introduction

Economic well-being in retirement has been of increasing interest for economic researchers. The policy implications are large. As the baby boom generation nears retirement, understanding the factors that determine economic well-being enables policymakers to evaluate and possibly reform present retirement institutions, such as public and private pension programs. Of particular interest in this field has been the focus on retirement income adequacy, that is, the financial resources retirees need to be above some minimal level.

While this area of research is important, focusing on just the economic well-being of individuals may miss other factors that influence overall welfare. Indeed, there has been a lack of research on other aspects of well-being for retirees in the economics literature. This brief attempts to fill this void by examining the determinants of the overall well-being of retirees, using the 2000 Health and Retirement Study.

The *brief* is organized as follows. The next section reviews the economics literature on well-being measures. The second section explains the data used in the analysis presented in this brief, while the third section reviews the results. A final section summarizes the study and offers areas of future research.

Findings from Previous Studies

Measures of retiree well-being have focused primarily on two economic measures: retirement income and wealth.¹ Research on these measures often attempts to identify factors that lead to higher levels of income or wealth, assuming that more money leads to increased overall well-being.² Other research examines the changes in these measures for retirees as they age.³

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Economic well-being, however, is only one dimension of overall well-being. Recent surveys summarize the mounting research on overall wellbeing (as measured by happiness or life satisfaction).⁴ While many studies have explored the determinants of life satisfaction,⁵ only a couple have focused directly on the well-being of retirees. However, several studies have addressed related areas, namely the interrelationship of happiness and labor force status, age, and pensions. These will be reviewed first before studies that directly examine retirement satisfaction.

Labor Force Status and Well-being

Recent studies examine the role of labor force status, particularly unemployment, on life satisfaction. They find that unemployment lowers life satisfaction, even after controlling for income.⁶ According to one study, unemployment is the single most important negative influence on life satisfaction, more important even than divorce.⁷ Studies that look specifically at the influence of retirement on life satisfaction provide some evidence that retirees are more satisfied with their lives than workers.⁸

Financial security is only one factor in determining how satisifed retirees are with their lives.

Age and Well-Being

Another common finding is that the relationship between age and happiness varies over the life span. It is generally found to be U-shaped, that is, higher for younger and older individuals.⁹ These two age groups may have more alternatives for the use of their time compared to those of prime working age (e.g. education for the young and retirement for the old). Older people, in particular, may enjoy a greater sense of well-being because of the availability of Social Security and private pension benefits that provide them with income after they retire.

Pensions and Satisfaction

For many retirees, pensions provide a significant percentage of income in retirement.¹⁰ Therefore, their generosity should affect happiness. Other pension characteristics besides generosity may also be influential. Indeed, one study finds that increased pension accruals lead to lower job satisfaction.¹¹ The interpretation of this counterintuitive finding is that since receipt of pension benefits is risky (either because of accrual risk or job termination risk) higher accruals lead to more risk taken on by workers which in turn lowers their job satisfaction. If this theory is true, pension characteristics that are correlated with risk may play a role in the life satisfaction of retirees. Therefore, retirees with relatively risky defined contribution pensions may have lower well-being compared to those with relatively low-risk defined benefit plans, although satisfaction should still be higher than those with no pension.

Retirement Satisfaction Research

Three studies have directly examined retirement satisfaction. The first uses the 1992 Health and Retirement Study (HRS) to examine the relative importance of "push" (e.g. poor health) and "pull" (e.g. leisure) factors on retirement satisfaction.¹² The study finds that push factors are more important for those who are involuntarily retired, and pull factors tend to be more important for those voluntarily retired. However, many economic controls are excluded from this study.

The second study also uses the 1992 HRS to examine the role of financial planning and expectations on retirement satisfaction.¹³ Although it examines a limited number of factors, it does find a strong positive relationship between retirement planning and eventual retirement satisfaction and a negative relationship between being retired involuntarily and retirement satisfaction.

The final study looking at retirement satisfaction uses the 2000 HRS to examine the role of annuities and wealth on both retirement satisfaction and measures of depression.¹⁴ Again, the list of determinants is limited, but the study finds that annuities from pensions increase retirement satisfaction and reduce the number of depression symptoms, while Social Security reliance (as measured by how much Social Security contributes to total income) has no significant effect on either well-being measure. The study, however, does not control for other sources of income or wealth or for the voluntariness of retirement.

Data Used To Examine Retiree Well-Being

The data for this study come from the Health and Retirement Study, started in 1992 as a nationally representative sample of the U.S. 51 to 61-year-old population who are re-interviewed every other year. This study uses the 2000 wave of the data.

Measures of Retiree Well-Being

If a person reports being fully retired in 2000, they are asked two questions regarding well-being during retirement. The most direct question is "All in all, would you say that your retirement has turned out to be very satisfying, moderately satisfying, or not at all satisfying?" Table 1 contains the tabulation of the answers to this retirement satisfaction question. About 60 percent of retirees are very satisfied with their retirement, with another third considering their retirement moderately satisfying. Approximately eight percent are not satisfied with their retirement.

The second question is somewhat less direct, as it asks the respondent to compare retirement wellbeing to well-being just before retirement: "Thinking about your retirement years compared to the years just before you retired, would you say the retirement years have been better, about the same, or not as good?" Again, Table 1 shows that a majority find that retirement is better than the years just before retirement, where 32.9 percent find it about the same, and 16.9 percent experience lower well-being in retirement than before retirement.

Table 1. Most Individuals Are Satisfied With TheirLives in Retirement

Responses to Retirement Well-Being Questions from the 2000 Health and Retirement Study*

Satisfaction with Retirement		Retirement Compared to Pre-Retirement	
Not at all satisfying	7.5%	Not as good	16.9%
Moderately satisfying	32.4%	About the same	32.9%
Very Satisfying	60.1%	Better	50.3%

Source: 2000 Health and Retirement Study and Authors' Calculations based on sample weights.

*Note: Figures represent the data sample used by the authors.

Factors That May Affect Retiree Well-Being

The first set of factors that may influence retiree well-being are demographic characteristics, such as gender, education, and age. Although there are no strong expectations regarding the effect of these characteristics on retirement satisfaction, if the process that determines retirement and job satisfaction is similar, we might expect women to have a higher level of well-being in retirement (as they generally have higher job satisfaction).¹⁵ We also might expect a U-shaped relationship between retirement satisfaction and age or possibly just a positive relationship since the group we are studying is in the upward-sloping portion of the U.

The next set of factors concerns economic measures of well-being: pension characteristics, income, and wealth information. Several variables capture the type of pension a retiree has. If retirees are risk averse, then it is likely that those with defined contribution pensions might have lower retirement satisfaction than those with the more secure defined benefit pensions. Of course, having any pension should increase well-being over those with no pension.¹⁶ Other variables control for household income and wealth from a variety of sources: Social Security retirement benefits, defined benefit pensions, defined contribution pensions and household financial assets. Increases in these income and wealth variables, often used to measure economic well-being, are expected to increase subjective well-being.

The third set of factors capture other influences on well-being. The extent to which people retire voluntarily might be influential for two reasons. First, if individuals are forced to retire early, e.g. because of economic or health reasons, they may retire before they are financially or psychologically ready, which could lead to lower well-being compared to those who voluntarily retire. Second, those who are forced to retire may actually be unemployed. Previous research shows that nonworking older workers face more constraints reentering the labor market, meaning that some of the retired could be "discouraged workers," that is, people willing to work but who decide to drop out of the labor force.¹⁷ Given that unemployment decreases life satisfaction, as noted above, forced retirement would lead to lower retiree well-being.

Other factors such as health should influence the ability to enjoy the additional leisure time that retirement affords. Likewise, access to health insurance should increase well-being. If spouses prefer sharing leisure time with each other, whether the spouse is retired may increase the well-being of the respondent.¹⁸ The working status of the respondent may also influence well-being. The direction of the effect is unclear, however. As the labor force status/life satisfaction research discussed above shows, individuals who work often have higher life satisfaction even after controlling for the extra income from working. On the other hand, if a retiree is forced to work because of a lack of income, there may be a negative effect of work on retirement well-being.¹⁹

The impact of the above factors on each of the two HRS questions on retiree well-being was

analyzed using standard statistical techniques. The general methodology used here is described in the full paper from which this brief is derived.²⁰

Results

The results described in this section concern the two different measures of well-being from the questions in the HRS: 1) retiree satisfaction; and 2) retirement well-being compared to pre-retirement well-being. Figures 1 and 2 present selected results.²¹

Retiree Satisfaction

First, we examined the influence of selected factors on the HRS question regarding how satisfied individuals are in retirement. The results show how each factor affects the probability that a respondent is in the highest category of retirement satisfaction (see Figure 1). The results in Panel A of Figure 1 show that older retirees have higher retirement satisfaction than those who are under 62 years old, with the marginal effects of the 70 to 74 and 75+ age groups being 12.2 and 17.3 percent higher for being in the highest satisfaction category compared to

Figure 1. Retirees Who Are Most Satisfied Tend to be Older, Have Traditional Pension Coverage and the Flexibilty to Choose When to Retire

Change in Probability of Being in Highest Category of Retirement Satisfaction, 2000, Selected Results.



Panel A. Demographic variables





Source: Authors' calculations (ordered probit estimation) using sample data from the 2000 wave of the HRS.

Note: Comparison groups: age under 62 years; unmarried; female; having no pension; having no health insurance; spouse not working; respondent not working; having good, very good or excellent health; and voluntarily retired.

those who are under 62 years old. This finding is consistent with the "right hand" portion of the familiar U-shaped age-satisfaction relationship. Being married increases the probability of being in the highest category by 3.3 percent. As in the job satisfaction literature, male retirees have lower retirement satisfaction than female retirees, all other things equal, although the marginal effect is small and statistically insignificant.

The next set of variables measure any effects of pension characteristics, income sources and net household wealth. The type of pension plays an important role, as it does in the job satisfaction literature. As shown in Panel B of Figure 1, having a defined benefit pension plan increases the probability of being in the highest satisfaction category by 5.6 percent compared to those with no pensions. Having just a defined contribution pension increases the probability of being in the highest job satisfaction category by 4.6 percent. However, the effect of defined contribution plans is statistically insignificant. When defined contribution plans are combined with defined benefit plans, the positive effect of having a pension plan jumps to 9 percent, possibly showing that people with more than one plan feel more secure in retirement. While having a defined benefit plan guarantees a steady income flow, having a defined contribution plan gives participants a chance to have higher income in the future due to good market performance.

Income and wealth do increase retirement satisfaction. Defined benefit pension wealth, defined contribution pension wealth, Social Security, non-financial and financial wealth all increase retirement satisfaction. However, only defined benefit wealth, non-financial and financial wealth have statistically significant effects. In all cases, the marginal effects are relatively small with a \$1,000 rise in income or a \$10,000 rise in wealth increasing the probability of being in the highest satisfaction category by less than one percent.

Many of the rest of the variables have statistically significant influences on retirement satisfaction. As found previously, compared to those who voluntarily retired, those who were forced or partially forced to retire had lower retirement satisfaction.²² This finding may reflect that retirement happened before people expected it.²³ The marginal effects for these variables are relatively large. As shown in Panel C of Figure 1, interestingly, having non-government health insurance or a combination of government and private health insurance increases satisfaction (by 10.1 and 3.5 percent respectively for the highest satisfaction category) compared to those without health insurance. Having government health

insurance (e.g. Medicare, Medicaid, etc.) does not have a significant effect on retirement satisfaction. Even holding earned income constant, working increases retirement satisfaction, although having a spouse working reduces retirement satisfaction, indicating that spouses prefer the companionship of being retired together. Likewise, having fair or poor health leads to lower retirement satisfaction compared to those in good, very good or excellent health (by magnitudes of 19.7 percent). However, the most influential determinant is the voluntariness of the retirement decision. Those who are forced to retire are 30.2 percent less likely to report being in the highest satisfaction category (half of the 61.4 percent predicted probability of being in that category) while those who were partially forced to retire are 20.6 percent less likely to be in that category.

The flexibility to choose when to retire appears to significantly improve retirement satisfaction.

Retiree Comparative Well-Being

Next, we look at the impact of various factors on the retirement comparison measure of well-being. The results show how each factor affects the likelihood that a respondent reported that his retirement years are better than the years just before retirement (see Figure 2 — Panels A, B, and C). The results are generally similar to the satisfaction results, although there are important differences. Those who are 65 or older report higher well-being. Being married makes it more likely that a respondent feels that retirement is better than pre-retirement years, although gender plays no statistically significant effect. Unlike retirement satisfaction, income and wealth measures have no significant effect on this measure of well-being, although those individuals who have both a defined benefit plan and a defined contribution plan have higher well-being. Having government insurance or a combination of private and government health insurance has a significant negative effect. A working respondent experiences higher well-being, while self-reported health has a similar pattern as above. As before, whether or not people retired voluntarily strongly influences wellbeing, although the magnitudes of the marginal effects are smaller than before (23.7 and 11.8 percent less likely to be in the top comparison category for the forced and partially forced, respectively).

Are the Voluntarily Retired Different?

One of the most consistent significant determinants of well-being is the voluntariness of retirement. ²⁴ Therefore separate analyses are estimated for the voluntarily and involuntarily retired. Males who are voluntarily retired experience lower retirement satisfaction, but there are no differences by gender for the involuntarily retired. On the other hand, pension characteristics play a larger role for the involuntarily retired, likely due to the fact that they were not able to accumulate their expected pension account balances and the lower risk afforded by defined benefit or combination plans therefore relatively highly valued. While defined benefit and defined contribution wealth are more significant for the involuntarily retired, financial and nonfinancial wealth and income influence satisfaction

more among the voluntarily retired group. Health and health insurance influence both groups in similar directions.

Contrasted with the retirement satisfaction measure, the retirement comparison measure of well-being shows fewer differences between those who retire voluntarily and those who do not. Now the gender difference for the voluntarily retired disappears, although males who are retired involuntarily report higher well-being than females. Age has no significant impact for those who retire voluntarily. For those who retire involuntarily, older age is associated with a higher level of satisfaction compared to pre-retirement years. Different pension characteristics do not have any significant impact on the well-being of either group. Health and private health insurance sources have effects in a generally similar direction for both groups.²⁵

Figure 2. Retirees With the Highest Level of Well-Being Tend to Be Older, Have More Than One Type of Pension Plan and the Flexibility to Choose When to Retire.



Change in Probability of Being in Highest Category of Well-Being Comparison, 2000, Selected Results.

Source: Authors' calculations (ordered probit estimation) using sample weighted data from the 2000 wave of the HRS.

Note: Comparison groups: age under 62 years; unmarried, female; having no penions, having no health insurance; spouse not working; respondent not working; having good, very good or excellent health; and voluntarily retired.

Conclusion

Understanding the factors that determine wellbeing of retirees is an important economic and policy topic. Although most previous studies look at only economic well-being, this study examines a broader measure of well-being to see if other determinants are important. The results show that while economic well-being (as measured by income and wealth) does increase overall well-being, the effect is relatively small. It is interesting to note that having a defined benefit plan that provides a lifetime annuity has a positive impact on the well-being of retirees, compared to having no pension or even just a defined contribution plan.

On the other hand, two other factors stand out as having a more important effect on well-being. The first is the reason for retirement. If individuals say that they voluntarily retired, they express much higher levels of well-being compared to those who did not voluntarily retire. It is likely that if they retired before they had expected to, they may not have completed financial or psychological preparations for retirement, leading to lower wellbeing in retirement. Indeed, the effects of involuntary retirement may actually be greater than reported here since the involuntarily retired also have lower levels of income which would decrease satisfaction even further. The second major factor is health. Unsurprisingly, those with poor health also experience dramatically lower levels of well-being. Although neither of these factors is controllable from a policy point of view, they do indicate areas where more research could be done to help assure higher levels of well-being for retirees.

Endnotes

- 1 For information on retirement income as a measure of well-being, see Andrews (1993) and Radner (1998). Also, OECD (2001) offers an interesting comparison of economic well-being of retirees across nine OECD countries. For information on wealth as a measure of wellbeing, see Levine et al. (2000).
- 2 Of course, income per se is not likely to increase well-being. However, it can purchase goods and services that increase well-being. Therefore investigating consumption patterns of the retired, as in Bahizi (2003), might be an even better indicator of well-being.
- 3 See, for example, Haveman et al. (2003).
- 4 Frey and Stutzer (2002a and 2002b).
- 5 For example, see van Praag et al. (2002).
- 6 Gerlach and Stephan (1996), Theodossiou (1998), and Winkelman and Winkelman (1998).
- 7 Clark and Oswald (1994).
- 8 Charles (2002) finds a positive relationship between retirement and life satisfaction among men while Wottiez and Theeuwes (1998) find higher life satisfaction among early retirees only.
- 9 See, for example, Clark and Oswald (1996).
- 10 Wiatrowski (1993).
- 11 Luchak and Gellatly (2002). See Hamermesh (2001) for a more general review of the economics literature on job satisfaction.
- 12 Shultz et al. (1998).
- 13 Elder and Rudolph (1999).
- 14 Panis (2004).
- 15 That women have higher job satisfaction than men, all things equal, is one of the more robust findings in the economics of job satisfaction literature (Clark and Oswald, 1996). It is typically explained by expectations. If women expect that labor market outcomes are generally bad for women (perhaps because of labor market discrimination), their expectations are more easily filled than men, leading to higher job satisfaction. More recent research (Bender, Donohue, and Heywood, 2005) offers a different explanation, namely that the positive relationship is caused by women desiring and sorting into jobs that offer more flexibility.

- 16 This is a similar argument to Panis (2004) who examined relative Social Security reliance. For a detailed examination of the impact of pension coverage on retirement decisions, see Munnell, et al. (2004).
- 17 Osberg (1993) and Chan and Stevens (2001).
- 18 See Maestas (2002) for more on spousal preferences for sharing leisure time and Groot and van den Brink (2002) for a discussion of the other links between life satisfaction and marriage.
- 19 The previous discussion identifies differences in what economists and people in general consider retirement. Economists define retirement as a withdrawal from the labor force, while individuals tend to consider it as a separation from a longstanding or career job regardless of their present labor force status. Since this is the way that the HRS interprets retirement, this brief will also use this definition. In any case, most of the regression results continue to hold if the analysis is applied to only those who fit the economist's definition and are not currently employed.
- 20 See Bender (2004) for the methodology. Although the variable specification here is similar, it is not exactly the same as in Bender (2004). All ordered probit regressions here include the following variables: gender, marital status, age, education, pension type, Social Security retirement wealth, defined benefit pension wealth, defined contribution pension wealth, net household financial and nonfinancial wealth, total household income, sources of current income, self-reported health status, voluntariness of retirement, respondent and spousal work status, health insurance type, region of residence, and cut points.
- 21 Full results are available from the authors.
- 22 Previous studies include Shultz et al. (1998) and Elder and Rudolph (1999).
- 23 On a related issue, Dwyer and Hu (2000) examine the role of retirement expectations, unexpected health shocks and changes in the decision to retire.
- 24 Since there were relatively few individuals who reported partially forced/partially wanting to retire, all of these individuals are identified as being "forced" to retire.
- 25 Unfortunately, there is no information in the HRS to say why individuals are involuntarily retired, which might shed further light on this issue.

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CENTER FOR RETIREMENT RESEARCH AT BOSTON COLLEGE

About the Center

The Center for Retirement Research at Boston College, part of a consortium that includes parallel centers at the University of Michigan and the National Bureau of Economic Research, was established in 1998 through a grant from the Social Security Administration. The goals of the Center are to promote research on retirement issues, to transmit new findings to the policy community and the public, to help train new scholars, and to broaden access to valuable data sources. Through these initiatives, the Center hopes to forge a strong link between the academic and policy communities around an issue of critical importance to the nation's future.

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