

## Retirement Happiness Analysis in Bayelsa State, Nigeria

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**Abstract**

The paper examines the nexus between some components of wealth and happiness of retirees in Bayelsa state – Nigeria. It utilized a sample of 338 retirees in Bayelsa State. Wealth accumulation was further disaggregated into four components: money (financial wealth), status (social wealth), freedom (time wealth) and health (physical wealth). The Logistic and the Probit regression were utilized in data analysis. It was found that financial wealth (money), social wealth (status), and health (physical wealth) had a positive and significant impact on retiree happiness, while freedom (time wealth) had a positive and insignificant impact on retiree happiness. It was also found that financial (money) wealth and social (status) wealth had a complementary effect on retiree happiness. Also, health (physical wealth) and freedom (time wealth) had a significant complementary effect on retiree happiness. The result also showed that early or timely payment of retiree benefits, the age at which retirees retire from active service, and the level at retirement had a significant impact on retiree happiness. Full implementation of minimum wages and timely payment of allowances and other welfare packages, including health and annual leave benefits due workers are needed to ensure that workers accumulate more money in good health before retirement. Early payment of gratuities and increase in the retirement age from 65 years to 70 years across all levels of workers in every category of work is recommended for retirement happiness in Bayelsa State.

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### **Background to the Study**

Retirement is a journey-end experience of all civil and public servants who have worked and contributed to any society's growth and development at a particular age in someone's life. Retirement policy differ from country to country. Some countries retirement age is 65 years, while others are either less or above. Interestingly and more worrisome is the manner with which retirement has become public discourse and concern in recent times. Questions have been raised especially as to what happens at retirement. Fundamentally, questions that are often asked are; are retirees happier and satisfied at retirement? What makes a retiree happier and satisfied? Economic well-being at retirement has been of increasing interest for economic researchers. It has become a critical issue of concern to both the working age and dependents. Thus, understanding the factors that determines socio-economic well-being shall assist policy makers to formulate, evaluate and implement retirement programmes and policies. Retirement age differs from country to country. In Nigeria, employment in the public sector is subject to a mandatory retirement age of 60 years or 35 years of service. However, there are sector-specific exceptions as to the age of retirement.

In Africa and particularly Nigeria, for instance, the compulsory retirement age of academic staff in a university is 65 years for non-professors and 70 years for professors. Though, employees in most cases, reduces or under-declare ages to enable them remain in service due to reason(s) best known to them. What constitute happiness to retirees have been a big question unanswered. While individual preferences differ as to what makes a retiree happier, happiness at retirement could be a function of several factors, including wealth. Wealth is not restricted to just money, but consists of many other components such as health, relationships, finances, and time. These could be broken down into four categories which are: Money (Financial Wealth); Status (Social Wealth); Freedom (Time Wealth) and Health (Physical Wealth). What constitutes happiness to retirees amongst these factors depends on individual preference.

Bayelsa State has eight (8) local government areas. These local government areas have Seven Thousand, Fifty-Six (7,056) total population of pensioners as at June 2021. It is a composition of mainstream, head of services/permanent secretaries and post primary. The 7,056 pensioners are made up of: Brass LGA - 398; Ekeremor LGA – 446; Kolokuma/Opokuma LGA – 809; Nembe LGA – 659; Ogbia LGA – 1201; Sagbama LGA – 752; Southern Ijaw LGA – 1489; and Yenagoa LGA – 1302 respectively.

### **Statement of the Problem**

In a report of the National Association of Pension Funds (NAPF) holds that three-quarters (70%) of employees say that being financially secure would make them happier at retirement. Thus, financial security was voted above all other essential ingredients for happiness in retirement, including good health (69%), being able to travel (48%) and being surrounded by family and friends (45%). NAPF chief executive, Joanne Segar, said “In the retirement happiness stakes, wealth edges ahead of health because it lays the foundation for future life after work”. While this area of research is important and critical, more worrisome is the concentration on economic well-being of retirees which may likely miss out other important

factors that could determine the happiness of retirees in Nigeria and Bayelsa State in particular. This study disintegrated wealth to include financial, social, health and freedom. The factor of wealth that makes a retiree in Bayelsa State happier is unclear. There is a lack of a scientific study of wealth and retirement happiness, particularly for Bayelsa State. The paper, therefore, seeks to examine the nexus between wealth and happiness of retirees in Bayelsa State, with specific objectives to: (1) examine the relationship between financial wealth and retirement happiness in Bayelsa State; (2) assess the relationship between social wealth and retirement happiness in Bayelsa State; (3) determine the relationship between physical wealth and retirement happiness in Bayelsa State; and (4) examine the relationship between time wealth and retirement happiness in Bayelsa State. Though, there are a few studies of retirees' happiness in Bayelsa State that focused on one or two components of wealth. Hence, our study concentrated on four components of wealth which are; financial, social, health and freedom as composition of wealth.

### **Theoretical framework**

This study hinges on the Good Life theory as it relates closely to this work.

#### **The Good Life: Desire Theory**

Desire theory holds that a happy person is one who gets what they want. It places the judgment of happiness on the one doing the wanting, because while your neighbour may want a nicer car or new boyfriend/girlfriend and view those things as a road to happiness, you may be wanting anything from a day off and a chocolate shake to a better job and a new boyfriend/girlfriend.

This theory is considered better than Hedonism. It holds that happiness is a matter of getting what you want with the content of the want left to the person who does the wanting. James Griffin in 1986 while proffering answers to questions raised from utilitarianism views of the social good as some kind of aggregate of individual well-being. Griffin's answer provided two outcomes. One answer attaches value to pleasurable states of mind, the other to the fulfillment of desire. Griffin favours desire-fulfillment, arguing that we can and do desire things that we can never experience. While Hedonism holds that the preponderance of pleasure over pain is the recipe for happiness even if this is not what one desires most. However, Desire theory holds that that fulfillment of a desire contributes to one's happiness, regardless of the amount of pleasure (displeasure).

### **Empirical Literature**

Similar studies have been conducted in other parts of the world, especially the study of Thuku (2013) who assessed how pre-retirement preparation influences retirement happiness in Kenya, with a view to making appropriate recommendations to improve the quality of life during retirement. The study was conducted in Nyeri County, Kenya using randomly selected retirees. Data was collected using questionnaire and analyzed using the Statistical Package for Social Sciences (SPSS). The study found that; age, gender, marital status, parents' socioeconomic status, availability of retirement information, monthly income, retirement planning and the availability of reliable social support systems significantly influenced retirement happiness. The study recommended that all employees be provided with retirement planning information and counselling on how to cope with post-retirement social,

physiological and financial challenges. This study is appreciated; however, it is different from our study in many dimensions. One, the variables used, the location of study and the period of study. Our study was conducted in Bayelsa State, Nigeria and focused on four variables such as; financial wealth, social wealth, physical wealth and freedom wealth on retirement happiness of retirees in Bayelsa State.

Calvo, Haverstick and Sass (2009) explored the factors that affect an individual's happiness while transitioning into retirement. Using longitudinal data from the Health and Retirement Study, the study explored what shapes the change in happiness between the last wave of full employment and the first wave of full retirement. Results suggest that what matters is not the type of transition (gradual retirement or cold turkey), but whether people perceive the transition as chosen or forced. Again, we have benefitted from the study, however, it has a divergent perspective from our study that concentrated on four variables that attracts happiness at one's retirement life which includes; financial wealth, social wealth, physical wealth and freedom wealth on retirement happiness.

Kesavayuth, Rosenman and Zikos (2016) investigated how two sources of individual heterogeneity—personality and gender—impact the well-being effects of retirement. Using data on older men and women from the British Household Panel Survey and its continuation, Understanding Society. They estimated the causal effect of retirement on satisfaction with overall life and domains of life in the presence of personality characteristics. They found that retirement increases leisure satisfaction of both males and females but not necessarily life satisfaction and income satisfaction. They further showed that certain personality characteristics affect the well-being of female retirees, while for males, personality does not seem to matter in how they cope with retirement. This study is also different from our work in terms of choices of variables used and direction of the study.

## **Methodology**

### **The Study Area**

This study was carried out in Bayelsa State. It is one of the 36 states of Nigeria that was carved out of Rivers State in 1996. The State has boundaries with Rivers State to the West and North-West and Delta State to the East and South-East. The Gulf of Guinea lies to its South. Bayelsa State covers an area of 9,415.8 square kilometers. The State lies at latitude 4°45' north and longitude 6°05' east. According to the National Population Commission's 2006 report, the population of the state is put at 1,704,515, which is made up of 874,083 males and 830,432 females clustered in eight local government areas (Annual Abstract of Statistics, 2012).

### **The population of the Study**

The population of the study is retirees in Bayelsa State. It comprises retirees in ministries, Departments, Agencies and other government-owned institutions across the state. As of the time of carrying out the study, the population of retirees (pensioners) was 7,056 (Bayelsa State Pension Board, 2021).

### Sample and Sampling Technique

A sample of 400 retirees were selected for the study. 50 retirees were randomly selected from each of the eight local government areas in the state, therefore, making a total sample of 400 respondents. A structured questionnaire was used as the instrument for data collection. The designed instrument includes multiple-choice closed- and open-ended questions.

### Model Specification

The Logistic Regression model was employed to analyze objectives one and two, which are to examine the effect of financial wealth and social (status) wealth respectively on retirement happiness. The functional form of the model is presented as follows:

$$\text{Logit}(\text{Rethapines}_i) = h(\text{Finwealth}, \text{Socwealth}, \text{Retbenefit}, \text{Marstatus}, \text{Gender}, \text{Age}, \text{Level}) \quad (1)$$

Where *Rethapines* is the likelihood of a retiree in the  $i^{\text{th}}$  household being happy at retirement, and  $pi/(1 - \text{Rethapines}_i)$  is the odds ratio (OR) for a retiree being happy at retirement. *Finwealth* is the financial wealth of a retiree and *Socwealth* is the social (status) wealth of a retiree. *Retbenefit* represents the payment of retirement benefits, *Retage* is the age at retirement, *Marstatus* represents the marital status of a retiree, *Gender* is the gender of a retiree in the  $i^{\text{th}}$  household and *level* is the level at retirement. *Finwealth*, *Socwealth*, *Retbenefit*, *Marstatus* and *Level* are expected to have a direct relationship with *Rethapines*, while *Gender* and *Retage* could have a direct or inverse relationship with the dependent variable. In other to capture the complementarity or otherwise of financial and social (status) wealth – that is, if financial wealth and social (status) wealth have complementary (substitution) effects on the retirement happiness of retirees, we interact the financial wealth and social (status) wealth and re-specify equation (1) as:

$$\text{Logit}(\text{Rethapines}_i) = \varphi_0 + \varphi_1 \text{Finwealth} + \varphi_2 \text{Socwealth} + \varphi_3 \text{Finwealth} * \text{Socwealth} + \varphi_4 \text{Retbenefit} + \varphi_5 \text{Marstatus} + \varphi_6 \text{Gender} + \varphi_7 \text{Retage} + \varphi_8 \text{Level} + e_{1i} \quad (2)$$

Where *Finwealth* \* *Socwealth* is the interaction term of financial wealth and social (status) wealth, while  $e_{1i}$  represents the error term. Other variables remained as defined earlier. The signs and significance of the interaction variable coefficient will determine if financial wealth and social (status) wealth are complementarity or substitutes. If the coefficient for financial wealth is positive, for example, and the coefficient for the interaction term is negative, then, it means that financial wealth and social (status) wealth have a substitution effect on retirement happiness. On the contrary, if the coefficient for financial wealth is negative and the interaction term is positive or if both are positive, then, it implies that financial wealth and social (status) wealth have a complementary effect on retirement happiness.

A Probit Regression model will also be estimated to perform a robustness check of the estimates. The Probit Regression model is as follows:

$$\text{Probit}(\text{Rethapines}_i) = \beta_0 + \beta_1 \text{Finwealth} + \beta_2 \text{Socwealth} + \beta_3 \text{Finwealth} * \text{Socwealth} + \beta_4 \text{Retbenefit} + \beta_5 \text{Marstatus} + \beta_6 \text{Gender} + \beta_7 \text{Retage} + \beta_8 \text{Level} + e_{2i} \quad (3)$$

Where  $\text{Prob}(\text{Rethapines}_i)$  is the probability of a retiree in the  $i^{\text{th}}$  household being happy at retirement.  $\beta_i (i = 1, 2, 3, \dots, 8)$  are the regression parameters to be estimated, while  $e_{2i}$  represents the error term. The variables are the same as in equation (2) above.

Also, to examine the effect of time (freedom) wealth and physical (health) wealth on retirement happiness, we employed the logistic regression model:

$$\text{Logit}(\text{Rethapines}_i) = h(\text{Timewealth}, \text{Healthwealth}, \text{Retbenefit}, \text{Marstatus}, \text{Gender}, \text{Retage}, \text{Level}) \quad (4)$$

Where  $\text{Rethapines}_i$  is the likelihood of a retiree in the  $i^{\text{th}}$  household being happy at retirement, and  $pi/(1 - \text{Rethapines}_i)$  is the odds ratio (OR) for a retiree being happy at retirement.  $\text{Timewealth}$  is the time (freedom) wealth of a retiree, and  $\text{Healthwealth}$  is the health (physical) wealth of a retiree.  $\text{Retbenefit}$  represents the payment of retirement benefits,  $\text{Retage}$  is the age at retirement,  $\text{Marstatus}$  represents the marital status of a retiree,  $\text{Gender}$  is the gender of a retiree in the  $i^{\text{th}}$  household and  $\text{Level}$  is the level at retirement.  $\text{Timewealth}$ ,  $\text{Healthwealth}$ ,  $\text{Retbenefit}$ ,  $\text{Marstatus}$ , and  $\text{Level}$  are expected to have a direct relationship with  $\text{Rethapines}_i$ , while  $\text{Gender}$  and  $\text{Retage}$  could have a direct or inverse relationship with the dependent variable.

In order to capture the complementarity or otherwise of time (freedom) wealth and health (physical) wealth – that is, if time (freedom) wealth and health (physical) wealth have complementary (substitution) effects on the retirement happiness of retirees, we interact the two wealth variables and re-specify equation (4) as:

$$\text{Logit}(\text{Rethapines}_i) = \gamma_0 + \gamma_1 \text{Timewealth} + \gamma_2 \text{Healthwealth} + \gamma_3 \text{Timewealth} * \text{Healthwealth} + \gamma_4 \text{Retbenefit} + \gamma_5 \text{Marstatus} + \gamma_6 \text{Gender} + \gamma_7 \text{Retage} + \gamma_8 \text{Level} + e_{3i} \quad (5)$$

Where  $\text{Finwealth} * \text{Socwealth}$  is the interaction term of time (freedom) wealth and health (physical) wealth, while  $e_{3i}$  represents the error term. Other variables remained as defined earlier.

The signs and significance of the interaction variable coefficient will determine if time (freedom) wealth and health (physical) wealth are complementarity or substitutes. If the coefficient for time wealth is positive, for example, and the coefficient for the interaction term is negative, then, it means that time (freedom) wealth and health (physical) wealth have a substitution effect on retirement happiness. On the contrary, if the coefficient for time wealth is negative and the interaction term is positive or if both are positive, then, it implies that time (freedom) wealth and health (physical) wealth have a complementary effect on retirement happiness.

A Probit Regression model will also be estimated to ensure the robustness of the results. The Probit Regression model is as follows:

$$\begin{aligned} \text{Probit}(\text{Rethapines}_i) = & a_0 + a_1\text{Timewealth} + a_2\text{Healthwealth} + a_3\text{Timewealth} * \\ & \text{Healthwealth} + a_4 \text{Retbenefit} + a_5\text{Marstatus} + a_6\text{Gender} + a_7\text{Retage} + \\ & a_8\text{Level} + e_{4i} \end{aligned} \quad (6)$$

Where  $\text{Prob}(\text{Rethapines}_i)$  is the probability of a retiree in the  $i^{\text{th}}$  household being happy at retirement.  $a_i$  ( $i = 1, 2, 3, \dots, 4$ ) are the regression parameters to be estimated, while  $e_{4i}$  represents the error term. The variables are the same as in equation (5) above.

The logit models would be estimated using the covariance-formula estimator. It is based on the maximum likelihood theory. This Estimation Technique is efficient and appropriate as long as the distribution of retirement happiness can be approximated, using a theoretical model such as a density function  $f(x, \theta)$ . An advantage of the Maximum likelihood estimators is that it is mostly asymptotically unbiased and normally distributed with variances as provided by the Cramer-Rao bound (Jędrzejczak and Kubacki, 2013). On the other hand, the Probit models will be estimated, using the quasi-maximum likelihood estimator (QLME) introduced by Papke and Wooldridge (2008). The estimator is based on the assumption of a normal distribution of the errors and is also considered to be homoscedastic and may otherwise be inconsistent.

## Results and Discussion

### Demographic Characteristics of the Respondents

A total of 400 questionnaires were distributed but 338 were retrieved and recorded and analyzed. We begin the analysis with the demographic characteristics of the respondents. Table 1 reports the demographic characteristics of the respondents.

**Table 1:** Descriptive profiles of the respondents

	Frequency	%
<b>Area of residence</b>		
Rural	123	36.39
Semi-rural	169	50.00
Urban	46	13.61
<b>Total</b>	<b>338</b>	<b>100.00</b>
<b>Gender</b>		
Male	236	69.82
Female	102	30.18
<b>Total</b>	<b>338</b>	<b>100.00</b>
<b>Age</b>		
Below 30 years	1	0.30
40 to 49 years	5	1.48
50 to 59 years	21	6.21
60 to 69 years	133	39.35
70 years and above	178	52.66
<b>Total</b>	<b>338</b>	<b>100.00</b>
<b>Marital status</b>		
Single	5	1.48
Married	235	69.53
Divorced	55	16.27
Widowed	43	12.72
<b>Total</b>	<b>338</b>	<b>100.00</b>

**Source:** Author's computation, 2022

123 or 36.39% of the respondents reside in rural areas, and 169 or 50% of the respondents reside in semi-rural areas. Those whose areas of residence are urban are 46, representing 13.61% of the total respondents. Therefore, the majority of the respondents reside in semi-rural areas. As regard the gender of the respondents, 236 or 69.82% are males, while 102 or 30.18% are females. This indicates that the majority of the respondents were males. Of the age respondents, 1 or 0.30% respondents were between the ages of 30 to 39 years, while those between the ages of 40 to 49 years were 5 or 1.48%. 21 or 6.21% of the respondents were between the ages of 50 to 59 years, and those between 60 to 69 years were 133 or 39.35%. Those who are 70 years and above are 178, representing 52.66% of the total respondents. This means the majority of the respondents are above the age of 70 years and above. 5 or 1.48% of the respondents were single, while 235 or 69.53% were married. Those who were divorced were 55 or 16.27%, and 43 or 12.72% of the respondents were widowed. This also means that majority of the respondents were married at the time of carrying out this study.

Other characteristics of the respondents were also examined and presented in Figure 1. The analysis showed that 6 or 1.78% of the retirees retired at level 4, 17 or 5.03% of the retirees retired at level 5, while 63 or 18.64% of the retirees retired at level 10. Those who retired at level 12 are 110 or 32.54%, and 73 or 21.60% of the retirees retired at level 13. Also, 32 retirees or



9.47% of the retirees retired at level 14, 20 of the retirees or 5.92% of the retirees retired at level 15, while those who retired at level 17 were 17 or 5.03% of the total respondents. Thus, based on the respondents' level at retirement, the majority of the retirees retired at level 12.

For the category of retirees, 63.91 of the sampled retirees were in the mainstream, while those that were in the primary sector were 31.95%. The retirees who were HOS/permanent secretaries were 4.14% of the total respondents. This reveals that the majority of the retirees were in the mainstream.

**Figure 1:** Other characteristics of the respondents



Source: Plot by the author

Concerning the happiness of the retirees, the analysis shows that 65.38% of the respondents were happy as retirees, while 34.62% of the retirees were not happy. This is an indication that the majority of the retirees were happy as retirees. An examination of the reasons for being happy for those that were happy as retirees showed that 18 or 8.14% were happy because of peace of mind, while 40 or 18.10% of the retirees said that they were happy because they offered good services at their time of service. Those who said they were happy because they did their part during their time at service were 62, representing 23.53% of the total respondents. 61 or 27.60% of the retirees said that they were happy because they are resting fully now, while 22 or 22.62% of the retirees were happy because of their accomplishments. This means that majority of the retirees were happy because they are resting fully now.

For those who were not happy as retirees, 23 or 19.83% said they were not happy because there is no income anymore, while 5 retirees, representing 4.31% of the total respondents said they were not happy because they were owed salaries outside the pension. For retirees who said that they were not happy because of delay in payment of pension were 88 or 75.86%. This showed that most of the retirees who were not happy as retired were because of delay in payment of pension gratuity.

Concerning the views of retirees on what it means to be wealthy, it was found that 33.43% of the retirees see wealth as health (physical wealth), while 39.94% of the retiree's viewed wealth as money (financial wealth). Retirees who defined wealth from the perspective of freedom (time wealth) were 13.31%, and those who viewed wealth from the perspective of status (social wealth) were also 13.31%. This means that the majority of retirees viewed wealth from the perspective of money (financial wealth).

#### **Impact of Money (Financial Wealth) and Status (Social Wealth) on Retiree Happiness**

The impact of money (financial wealth) and status (social wealth) on retiree happiness was examined, using the Logistic Regression model. Also, for the robustness of findings, a Probit model was estimated. Table 2 reports the regression estimates. Column (1) reports the odds ratios of the logistic regression with the z-values and p-values in parenthesis. Column (2), on the other hand, reports the coefficients of the Probit regression with the z-values and p-values in parenthesis.

**Table 2:** Estimates of the impact of financial (money) and social (status) wealth on retiree happiness in Bayelsa state

Retiree Happiness	(1)	(2)
	<b>Logistic Regression</b>	<b>Probit Regression</b>
Financial Wealth	0.9970 (z = 4.01) (p = 0.000)	0.0274 (z = 3.10) (p = 0.000)
Social Wealth	0.8273 (z = 2.76) (p = 0.002)	0.1127 (z = 2.74) (p = 0.003)
Payment of retirement benefits	0.5933 (z = 2.06) (p = 0.039)	0.3265 (z = 2.09) (p = 0.036)
Financial Wealth* Social Wealth	0.7754 (z = 2.81) (p = 0.000)	0.1592 (z = 2.83) (p = 0.000)
Marital Status	0.9152 (z = 2.53) (p = 0.006)	0.0540 (z = 2.54) (p = 0.005)
Gender	1.0944 (z = 0.35) (p = 0.729)	0.0571 (z = 0.36) (p = 0.719)
Age at retirement	0.6081 (z = 4.53) (p = 0.000)	0.3241 (z = 4.62) (p = 0.000)
Level at retirement	1.1629 (z = 2.89) (p = 0.000)	0.0927 (z = 2.83) (p = 0.000)
Constant	2.2486 (z = 1.21) (p = 0.228)	0.5148 (z = 2.26) (p = 0.044)
	<b>Logistic Regression</b>	<b>Probit regression</b>
Pseudo R2	0.6256	0.0262
LR chi2(11)	21.17	11.41
Prob > chi2	0.000	0.1793
_hat	-0.83 (z = -0.94) (p = 0.346)	-0.86 (p = -1.00) (p = 0.316)
_hatsq	1.56 (z = 1.17) (p = 0.430)	2.51 (p = 2.27) (p = 0.023)
<b>Probit model goodness-of-fit test</b>		
Pearson chi2(2301)	194.24 (p = 0.3243)	194.34 (p = 0.3225)

**Source:** Author's computation, 2022

Financial wealth (money) showed a positive and significant coefficient of 0.9970 in column (1). This means that an increase in financial wealth brings about a 1.00% increase in retiree happiness. In addition, in column (2), the results showed a positive coefficient of 0.0274 with z-value and p-value of 3.10 and 0.000, therefore, confirming the results in column (1).

Social wealth (status) also showed a positive coefficient of 0.8273 with a significant z-value and p-value of 2.76 and 0.002 in column (1). Thus, any additional social wealth (status) acquired results in a significant increase in retiree happiness. A similar result also showed up in column (2). Social wealth has a 0.11% positive and significant impact on retiree happiness.

The interaction coefficient of financial wealth and social wealth is 0.7754 with a z-value of 2.81 and a p-value of 0.000 in column (1). Since the coefficients for both financial wealth and the interaction term are positive, then, financial wealth and social (status) wealth have a complementary effect on retirement happiness. Financial wealth and social wealth jointly lead to a 0.78% additional significant increase in retiree happiness in column (1). The results in column (2) are similar to column (1), therefore, supporting the results in column (1).

The coefficient for payment of retirement benefits is 0.5933 in column (1) with a significant z-value and p-value. This means that early or timely payment of retiree benefits brings about 0.59% additional happiness at the retirement of retirees. The result is similar in column (2), also showing the positive and significant impact of payment of retirement benefits on retiree happiness. Both in columns (1) and (2), the coefficient of marital status is positive and significant. This means that marital status has a positive and significant impact on retiree happiness in columns (1) and (2).

Gender showed a coefficient of 1.0944 with an insignificant z-value of 0.35 in column (1). Also, in column (2), the coefficient of gender is positive (0.0571) with a z-value of 0.36. This means that the gender of the retiree has a positive and insignificant impact on retiree happiness.

Similarly, age at retirement showed a coefficient of 0.6081 with a z-value of 4.53 in column (1). A similar result also showed up in column (2) with a positive coefficient of 0.3245 and a z-value of 4.62. Therefore, any additional year at the retirement age leads to 0.61% additional happiness for the retirement of retirees. Furthermore, the level at retirement showed a coefficient of 1.1629 with a z-value of 2.89 in column (1). This means that the level at retirement has a positive and significant impact on retiree happiness. The coefficient is also positive and significant in column (2), therefore, supporting the result in column (1).

The Pseudo  $R^2$  shown in column (1) shows that the variables in the model account for about a 62.56% change in retiree happiness. The likelihood chi-square value of 21.17 ( $p = 0.000$ ) points out that the variables jointly significantly affect retiree happiness. Also, the p-value for hatsq is 0.430. The non-significant hatsq means good regression model adequacy. Also, the insignificant Hosmer-Lemeshow goodness of fit test confirms the overall goodness of fit of the regression model. The test results in column (1) are similar to column (2).

### **Impact of Health (Physical Wealth) and Freedom (Time Wealth) on Retiree Happiness**

The impact of health (physical wealth) and freedom (time wealth) on retiree happiness were examined, using the Logistic Regression model. Also, to ensure the robustness of the findings, a Probit model was estimated. Table 3 presents the regression estimates. Column (1) presents the odds ratios of the logistic regression with the z-values and p-values in parenthesis. Column (2), on the other hand, reports the coefficients of the Probit regression with the z-values and p-values in parenthesis.

**Table 3:** Estimates of the impact of health (physical wealth) and freedom (time wealth) on retiree happiness in Bayelsa state

Retiree Happiness	(1)	(2)
	<b>Logistic Regression</b>	<b>Probit Regression</b>
Health (physical wealth)	0.5886 (z = 3.15) (p = 0.000)	0.3264 (z = 3.14) (p = 0.000)
Freedom (time wealth)	0.9612 (z = 0.10) (p = 0.917)	0.0277 (z = 0.12) (p = 0.905)
Payment of retirement benefits	0.5789 (z = 2.13) (p = 0.033)	0.3408 (z = 2.16) (p = 0.031)
Financial Wealth* Social Wealth	1.6132 (z = 2.89) (p = 0.000)	0.2919 (z = 2.88) (p = 0.000)
Marital Status	0.9202 (z = 2.50) (p = 0.004)	0.0489 (z = 2.48) (p = 0.007)
Gender	1.1151 (z = 0.42) (p = 0.676)	0.0693 (z = 0.44) (p = 0.662)
Age at retirement	0.6140 (z = 3.52) (p = 0.001)	0.3162 (z = 1.61) (p = 0.108)
Level at retirement	1.1743 (z = 3.92) (p = 0.000)	0.0988 (z = 3.94) (p = 0.000)
Constant	2.0989 (z = 1.13) (p = 0.260)	0.4699 (z = 1.17) (p = 0.243)
	<b>Logistic Regression</b>	<b>Probit regression</b>
Pseudo R2	0.6270	0.6262
LR chi2(11)	51.76	51.41
Prob > chi2	0.000	0.0000
_hat	0.29 (z = 0.37) (p = 0.712)	0.15 (z = 0.20) (p = 0.841)
_hatsq	0.60 (z = 0.98) (p = 0.327)	1.14 (z = 1.17) (p = 0.241)
<b>Probit model goodness-of-fit test</b>		
Pearson chi2(2301)	174.44 (p = 0.0839)	174.60 (p = 0.0826)

**Source:** Author's computation, 2022

Health (physical wealth) showed a positive and significant coefficient of 0.5886 in column (1). This means that an increase in health (physical wealth) brings about a 0.59% increase in retiree happiness. Also, in column (2), the result showed a positive coefficient of 0.33% with z-value and p-value of 3.14 and 0.000. Therefore, confirming the result in column (1).

Freedom (time wealth) also showed a positive coefficient of 0.9612 with an insignificant z-value and p-value of 0.10 and 0.917 in column (1). Thus, any additional Freedom (time wealth) acquired results in an insignificant increase in retiree happiness. A similar result also showed up in column (2). Freedom (time wealth) has a 0.03% positive and insignificant impact on retiree happiness.

The interaction coefficient of freedom (time wealth) and health (physical wealth) is 1.6132 with a z-value of 2.89 and a p-value of 0.000 in column (1). Since the coefficients for both health (physical wealth), and the interaction term are positive, then, health (physical wealth) and freedom (time wealth) have a complementary effect on retiree happiness. Health (physical wealth) and freedom (time wealth) jointly lead to a 1.61% additional significant increase in retiree happiness in column (1). The result in column (2) is similar to column (1), therefore, supporting the result in column (1).

The coefficient for payment of retirement benefits is 0.5789 in column (1) with a significant z-value and p-value. This means that early or timely payment of retiree benefits brings about 0.58% additional happiness at the retirement of retirees. The result is similar in column (2), also showing the positive and significant impact of payment of retirement benefits on retiree happiness. Both in columns (1) and (2), the coefficient of marital status is positive and significant. This means that marital status has a positive and significant impact on retiree happiness in columns (1) and (2).

Gender showed a coefficient of 1.1151 with an insignificant z-value of 0.42 in column (1). Also, in column (2), the coefficient of gender is positive (0.0693) with a z-value of 0.44. This means that the gender of the retiree has a positive and insignificant impact on retiree happiness. Also, age at retirement showed a coefficient of 0.6140 with a z-value of 3.52 in column (1). Therefore, any additional year at the retirement age leads to 0.61% additional happiness for the retirement of retirees. A similar result also showed up in column (2) with a positive coefficient of 0.3162, but, with an insignificant z-value of 1.61.

The level of retirement showed a coefficient of 1.1743 with a z-value of 3.92 in column (1). This means that the level at retirement has a positive and significant impact on retiree happiness. The coefficient is also positive and significant in column (2), therefore, supporting the result in column (1).

The Pseudo  $R^2$  shown in column (1) shows that the variables in the model account for about 62.70% change in retiree happiness. The likelihood chi-square value of 51.76 ( $p = 0.000$ ) points out that the variables jointly significantly affect retiree happiness. Also, the p-value for hatsq is 0.327. The non-significant hatsq means good regression model adequacy. Also, the insignificant Hosmer-Lemeshow goodness of fit test confirms the overall goodness of fit of the regression model.

### **Policy Implications of the Findings**

The finding that financial wealth (money) had a positive and significant impact on retiree happiness means that workers who acquire financial wealth (accumulate or have enough money) during their active service years are happy at retirement. They are happy as retirees. Similarly, the finding that social wealth (status) has a positive and significant impact on retiree happiness implies that social wealth (status) such as respect from the community after retirement, as well as a good name at retirement, contributes significantly to the happiness of retirees at retirement. The finding that financial wealth and social (status) wealth have a

complementary effect on retirement happiness means that financial wealth and social (status) wealth jointly increase the happiness of retirees at retirement. With the achievement of the two, retirees could be happier in retirement.

Also, Health (physical wealth) had a positive and significant impact on retiree happiness. This implies that good health makes retirees happy in retirement. Working out their physical health would not in any way bring about happiness at retirement. Freedom (time wealth) had a positive and insignificant impact on retiree happiness. This implies that workers do not consider the working age or the time at service as enslavement. Lack of freedom of time to spend, and how they want, when and with whom they wish to spend with did not significantly affect their happiness at retirement. However, health (physical wealth) and freedom (time wealth) significantly jointly affect the retirement happiness of retirees.

It was also found that early or timely payment of retiree benefits and the level of retirement had a significant impact on retiree happiness. This finding implies that at retirement, retirees are happy when retiree benefits are paid early or timely and if they are given the rightful level at work (the due promotion before retirement). The age at which retirees retire from active service is also a significant deterrent of retirement happiness at retirement. In this regard, our finding implies that retirees who stay longer in service before retirement are happier. In other words, longer service years contribute meaningfully to their happiness at retirement.

### **Conclusion and Recommendations**

The study examined the relationship between wealth accumulation and the happiness of retirees in Bayelsa state. Based on the findings, the study concludes that wealth accumulation significantly determined the happiness of retirees in Bayelsa state. Financial wealth, social wealth, and physical wealth positively and significantly affect the retirement happiness of retirees in Bayelsa state. Time wealth also affects retirement happiness of retirees, but the effect is insignificant. Financial wealth and social (status) wealth jointly increase the happiness of retirees at retirement. Health (physical wealth) and freedom (time wealth) also significantly jointly affect the retirement happiness of retirees. Other variables such as early or timely payment of retiree benefits, the level at retirement, and the age at which retirees retire from active service also play a significant role in the happiness of retirees in Bayelsa state.

Full implementation of the minimum wage and timely payment of allowances and other welfare packages, including health and annual leave benefits due workers are needed to ensure that workers accumulate more money in good health before retirement. This requires efficient fiscal planning (including the enhancement of links between the processes of wage determination, and fiscal frameworks) to ensure appropriate and adequate financing of the wage bill, and the flexibility to adjust promotion to the rightful levels for staff that are due for it. Experience has shown that state governments across the country have faced challenges in these areas. Also, to enable workers to acquire social (status) wealth, trust in the public system has to be built such that public servants will be regarded in their communities. The worker(s) should be diligent and prioritize dignity to fetch a good name for themselves during their active service years. These would complement financial wealth (money) to promote happiness in retirement. Early or timely payment of retiree benefits, as well as an increase in

the retirement age from 65 years to 70 years across all levels of workers in every category of work, is also recommended for retiree happiness after retirement.

### References

Abramowska-Kmon, A & Latkowski, W. (2021). The impact of retirement on happiness and loneliness in Poland-evidence from panel data, *International Journal of Environmental Research and Public Health* 18(18).

Annual Abstract of Statistics (2012)

Bayelsa State Pension Board (2021)

Calvo, E, Haverstick, K & Sass, S. A. (2009). Gradual retirement, sense of control and retirees' happiness, *Research on Aging* 31(1):112-135.

Jędrzejczak, A. & Kubacki, J. (2013), Estimation of income inequality and the poverty rate in Poland, by region and family type. *Statistics in Transition New Series, Autumn*, 214(3), 359 – 378.

Kesavayuth, D, Rosenman, R. & Zikos, V. (2016). *Retirement, personality and well-being: Economic Inquiry*; 54(2).

Martin E. P. Seligman & Royzman, E. D (2003). *Authentic happiness*, New York: Free Press.

Papke, L. E. & Wooldridge, J. M. (2008), Panel data methods for fractional response variables with an application to test pass rates. *Journal of Econometrics*, 145(1-2), 121 – 133

Thuku, W. Pauline (2013). Influence of retirement preparation on happiness in retirement: A case of Nyeri County, Kenya, *International Journal of educational research*; 1(3):1-20