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Income and Subjective Financial Well-Being as Determining Factors of Life Satisfaction

Dickason (Koekemoer), Z. Munyai, L. S. Ferreira, S. J.
North West University, South Africa
Zandri.Dickason@nwu.ac.za, lsmunyai@gmail.com, 23261048@nwu.ac.za

Abstract: The purpose of the investment is to improve the current level of life satisfaction by achieving investment goals. Investors tend to attain high levels of life satisfaction when their investment goals are achieved and lower levels of life satisfaction when goals are far from achievement. The idiosyncratic characteristics of an individual may often hamper the achievement of investment goals and ultimately influence the level of life satisfaction. These characteristics can either contribute towards low life satisfaction or high life satisfaction. Income and the subjective financial well-being play a determining role in whether an investor has a positive or negative life satisfaction. Hence, the aim of this study was to determine whether income and subjective financial well-being have an influence on the life satisfaction of investors. The results of this study reveal that a strong relationship exists between income, financial well-being, and life satisfaction. Investors who perceived themselves, to have high financial well-being were more likely to have high life satisfaction. On the contrary, investors with low perceived financial well-being were more likely to have low life satisfaction. Similar results were observed for income and life satisfaction since a positive relationship was also found.

Keywords: *Life satisfaction, income, subjective financial well-being, investors, South Africa*

1. Introduction

A good life arguably appears to be something most individuals in the world strive to achieve. Thus, the ultimate goals sought out by human beings are happiness. Merkle, Egan, and Davies (2015) maintain that the happiness of investors is often perceived only as a consequence of spending opportunities that originate from the returns of investing. What constitutes a good quality of life, satisfaction with life as well as financial well-being remains to be variant in a wide range of research studies. According to Boyce, Brown, and Moore (2010) happiness and money are understood to be interrelated, therefore ultimate happiness should be derived from higher income. In contrast, the study by Ericson and Vinson (2012) indicated that the high correlation between income and life satisfaction exist. Cohn, Fredrickson, Brown, Mikels, and Conway (2009) stated that findings have disputed the life satisfaction and positive emotions relation, implying that individuals become happy because they have acquired living resources, rather than feeling better.

A question related to a good quality of life has always existed for decades. Unique approaches had been used to construct it in the past. There are various measures utilised to determine the level of life satisfaction of individuals. According to Diener and Ryan (2009) measures such as self-report had been widely used to evaluate life satisfaction of individuals which is subjective. During the last decade, new developments have emerged in the field of human well-being. Numerous studies have attempted to explain life satisfaction and found that it is mostly formulated by affect and cognitive factors. Pavot and Diener (2008), support that satisfaction with life involves judgement which can be evaluated. Levels of life satisfaction do change due to a change in information sources utilized when creating judgements of life satisfaction (Schimmack, Diener, & Oishi, 2002). Other research studies have found that satisfaction with life is influenced by other life domains such as marriage (Bernard, 1972), race-related stress and income (Utsey, Payne, Jackson, & Jones, 2002).

Life domains such as job satisfaction, housing satisfaction and financial satisfaction represent an individual`s life judgement about satisfaction with their lives. Tang, Chen, Zhang, and Tang (2018) defined financial well-being as investors' adoption of behaviour in regards with money to formulate fundamental concerns and decide on strategies that will accomplish great happiness and financial goals. An assumption exists that happiness comes from having money. Kahneman and Deaton (2010) argue that it only life evaluation that can be improved by high income, whereas emotional well-being cannot. As identified by the regret theory, a good investment decision that yields good returns or meets an investors expectation brings a sense of happiness. However, a number of studies show that significant differences do exist, albeit findings are somewhat contradictory. The income hypothesis theory also suggested that people are only concerned about income comparison with others in a social economy in an attempt to compare their satisfaction with life (Boyce et al., 2010).

It can be argued that extensive research with regard to investors' life satisfaction is needed, thus of importance in order to inform potential investors and those individuals planning to venture into the world of investing in the future (Zhang & Howell, 2011). In South Africa, there is limited research that has been conducted regarding investors' life satisfaction and their financial well-being. Dickason, Nel, and Ferreira (2017) and Ferreira, (2018) noted that South African male investors have high satisfaction with life compared to female counterparts. The knowledge of income, satisfaction with life and financial well-being of investors is important in order to understand their investment decisions. Moreover, satisfaction with life serves as a crucial factor for the good quality of human lives, thus contributing towards the methods of improving the lives of people (Diener & Ryan, 2009). In recent years, there has been an increasing interest in satisfaction with life data analysis. Krueger and Schkade (2008) maintain that between the year 2000 and 2006, many books and over 157 studies have been released about life satisfaction data. Despite numerous theories, a relation between research and theory is still required for an improvement in the field of well-being (Diener & Ryan, 2009). However, for the purpose of this research paper emphasise the influence of income and subjective well-being on satisfaction with life. Therefore, this paper aims to investigate how personal income levels and subjective financial well-being may influence the life satisfaction of investors.

2. Literature Review

The state of being wealthy, healthy and happy is mostly derived from the Aristotelian view, which follows a notion that every human being strives towards achieving the goal of eudemonia which is commonly used as well-being (Dodge, Daly, Huyton, & Sanders, 2012). Defining subjective well-being requires one to consider that it consists of dimensions which formulate it. Earlier studies such as Cantril (1965) attempted to define well-being through a psychological approach, whereby pleasant emotions should surpass unpleasant ones in order to feel satisfied with life. A considerable amount of literature has been published on well-being. Most of these studies seem to agree that well-being is composed of three classifications or categories. Firstly, Kruger (2011) argued that well-being originates from individual experiences, thus naturally becomes subjective. Secondly, it involves positive factors not merely negative aspects. Finally, it is not limited to a single domain of life, but also includes other different domains of life. In contrast, Diener, Kahneman, and Helliwell (2010) believe that subjective well-being consists of satisfaction with life, absence of unpleasant and presence of pleasant effect. Whereby, affect represent emotions and moods, whereas satisfaction with life brings up the cognitive aspect. Rath and Harter (2010) findings from many previous studies led to a discovery of emerged five distinguishable statistical components of well-being, which are interrelated and universal in nature. These components are as follow according to Rath and Harter (2010):

- Career Well-being: Being fond of your daily activities and use of time.
- Financial Well-being: Enhancing your financial security and reducing stress by effective management of your economic life.
- Social Well-being: Having love as well as relationships that are strong in your life.
- Physical Well-being: Maintaining sufficient energy and excellent health in order to be productive each day.
- Community Well-being: Being able to participate and contribute towards making the community you live in a better place.

The above-listed components are dimensions of well-being and are the ultimate goals of individuals in life. A myriad of attempts has been made to measure well-being to determine the various levels. The measures vary in terms of use but have the same goal of achieving certain findings. Some of the measures include that of Pavot and Diener (2008). The life satisfaction scale, which, Krueger and Schkade (2008) provided five items are related (Cantril, 1965). Although these measures are important and widely used in the well-being study field, Diener and Ryan (2009) have observed some shortcomings of biasedness in terms of self-report measures indicating that a variance setback with the method may be encountered in the results. Thus, many researchers made use of other alternative self-report approaches that include but not limited to facial measures.

More recent research by Xiao (2014), provided that subjective well-being involves three components such as life satisfaction, negative and positive effect. It is believed that life satisfaction is the broad concept that comprise of judgmental factors about an individual`s life. In terms of investor life satisfaction, Merkle et al. (2015) found that investors tend to be happy when they have achieved success in trading through the active decision making rather than passive decision making. In addition, Merkle et al. (2015) contends that investor life satisfaction can be derived from relative comparison amongst investors. Thus, generated overspending, but closely applied to the performance of the investment. A vast number of theories in the field of well-being have been developed. Diener and Ryan (2009) provided that based on social comparison theory, an individual compares oneself with another to determine whether their lives are valuable. Furthermore, social comparison theory used to be a most commonly used estimator of life satisfaction in various domains of life. According to an investigation by Diener and Ryan (2009) Telic theories exist as well, whereby life satisfaction is achieved when an individual reach a specific goal. A significant relationship between the traits of an individual (age, education and income) and financial well-being was found positive, while, a negative relationship with debts and a number of children was found in past research studies.

Yin-Fah, Masud, Hamid, and Paim (2010) believe that this explains that an individual is fully aware of their resources and how they can utilize these resources in the present and future. Kruger (2011) defines financial well-being as being able to spend on others not just on oneself, thus making a major difference in life as a whole. Furthermore, this researcher goes on to say that when this has been done, there is a link explained between well-being and money since those individuals with high level of social and career well-being often prosper when it comes to their overall well-being. In contrast, the study by Goldsmith (2005) indicated that financial well-being is the ability to protect oneself and family against risks of bankruptcy, illnesses, unemployment and also having adequate finance. According to Taft, Hosein, and Mehrizi (2013) researchers have different views about the definitions of financial well-being due to varying attitudes. Kruger (2011) maintains that having high-income levels enable individuals to buy pleasant experiences repeatedly not only for oneself but for others as well which stimulates happiness, thus this explains the link between financial well-being, income and satisfaction with life. In addition, the investigation concerning financial well-being has been conducted in the past since it has been regarded as a crucial quality of life factor (Taft et al., 2013).

3. Methodology

The following sections within the methodology represent the research approach and instrument used, the sample size, formulated hypothesis and statistical analysis.

Research Instrument: A quantitative research approach was utilised for this study, making use of a questionnaire which comprised of two sections. The focus of the first section was a collection of investors` information in terms of their incomes ranging from (<R200 000, R200 000 – R400 000, R401 000 – R600 000, R601 000 – R800 000, >R800 000) by which investors regardless of gender was used for the study. Diener, Inglehart, and Tay (2013), maintains that measurement scales are generally assumed to be reliable; thus, when conducted using same condition similar scores are attained. The focus of the second section was utilisation of satisfaction with life scale measure to determine investors` life satisfaction as well as subjective financial well-being (well-being as perceived by investors). According to Pavot and Diener (2008) the main intent of satisfaction with life scale is to evaluate the level of life satisfaction based on an individual`s self-report. A Likert scale with seven maximum points obtained from Pavot and Diener (2008) study was utilized for investor responses, whereby one point is strongly disagree, and seven points strongly agree.

Research Sample Selection: South African investors are the main population target for this study since it is a vital group for research. Permission was granted by the investment company in South Africa for data collection using the client base of the company. Simple random sampling was used as means for sample selection since a complete list of population members could be drawn at random, whereby each investor had an equal opportunity to be chosen. A sample of 600 participants (n=600) participated out of their own free will in an online questionnaire. The sample size is similar to previous studies of Taft et al. (2013) who used 300 participants. Zhang and Howell (2011) also made use of over 600 participants. The sample of this study was satisfactory based on the requirements for the statistical analysis. It is recommended that investment companies incorporate satisfaction with life and financial well-being scales into their risk profiles and these will have an effect on investors' investment choices.

Hypothesis: Based on this study background, prior scholars had found that higher income increases happiness, therefore, higher satisfaction with life; on the other hand, other scholars found contrasting evidence. The hypothesis was contrived in accordance with this study`s primary objective:

$\boldsymbol{H_0}$: *There is no relationship between financial well-being and satisfaction with life*
$\boldsymbol{H_{a1}}$: *There is a relationship between financial well-being and satisfaction with life*
$\boldsymbol{H_0}$: *There is no relationship between income and satisfaction with life*
$\boldsymbol{H_{a2}}$: *There is a relationship between income and satisfaction with life*

Statistical Analysis: Cross-tabulations and logistic binary regression were used for descriptive statistics of this study to test how income and financial well-being influence the satisfaction with life of South African investors. The estimated logistic regression is represented by the following equation:

$$\boldsymbol{SWL_i = \alpha_0 + \alpha_1 FWB + \alpha_2 INC + \mu_1} \tag{1}$$

The satisfaction with life (SWL) scale was used to create the dependent variable, whereby $\boldsymbol{SWL_i}$ presents dichotomous dependent variable – South African investors` satisfaction with life (1 is for positive satisfaction with life whereas 0 is for negative satisfaction with life). Past researchers have discovered that income and financial well-being have an influence on satisfaction with life, hence the use of satisfaction with life as the dependent variable (Pavot & Diener, 2013). The variable $\boldsymbol{\alpha_0}$ represent the constant, the coefficients are represented by $\boldsymbol{\alpha_1}$ and $\boldsymbol{\alpha_2}$, while the error term is given by $\boldsymbol{\mu_1}$. Two independent variables were created, whereby $\boldsymbol{\alpha_1 FWB}$ is given as the financial well-being of investors and $\boldsymbol{\alpha_2 INC}$ represent annual income level (0 = <R200 000, 1 = R200 000 - R400 000, 2 = R401 000 - R600 000, 3 = R601 000 - R800 000, 4 = >R800 00).

4. Empirical Results and Discussion

Descriptive Statistics and Correlation Analysis: Table 1 indicates the descriptive statistics of investors' life satisfaction whereas Table 2 illustrates the correlation analysis between income, financial well-being and life satisfaction.

Table 1: Satisfaction with Life Descriptive Statistics

Construct	No of questions	Average inter-term correlation	Standard Deviation	Skewness	Kurtosis	Cronbach`s Alpha
Satisfaction with life	5	0.611	1.427	-0.373	-0.683	0.887

Table 1 represents the Cronbach alpha above 0.8, which explains that the satisfaction with life scale is valid (Dickason et al., 2017). Diener et al. (2013) provided that 0.8 and above Cronbach alpha indicates the reliability and validity of the scale.

Table 2: Correlation between Income, Financial Well-Being and Life Satisfaction

Non-Parametric Correlation		Satisfaction with life	Financial well-being
Financial well-being	Pearson Correlation	0.588	
	Sig. (2-tailed)	0.000*	
Income	Pearson Correlation	0.272	0.359
	Sig. (2-tailed)	0.000*	0.000*

*Correlation is significant at 0.01, level (2-tailed)

A significant relationship was found between financial well-being and satisfaction with life (r = 0.588, p < 0.001). As a result, the null hypothesis is rejected and the alternative hypothesis concluded with a strong strength relationship indicating practical significance. From Table 2 it can be concluded that a significant relationship exists between income and satisfaction with life (r = 0.272, p < 0.001). As a result, the alternative hypothesis is concluded with a small strength relationship. A significant relationship was also found between income and financial well-being (r = 0.359, p < 0.001). A medium strength relationship is identified between income and financial well-being where the null hypothesis is rejected and alternative hypothesis concluded. These results are in line with that of Ericson and Vinson (2012) whereby they concluded that high correlation exists between income and satisfaction with life, however, potentially differs from country to country. This study concluded that a relationship exists between income, satisfaction with life and financial well-being, however, satisfaction with life and financial well-being indicated a stronger relationship compared to income and satisfaction with life.

Investors' Life Satisfaction According to Income Categories: Table 3 indicates the cross-tabulation of the investors' life satisfaction based on investors' income categories according to financial well-being.

Table 3: Annual Income, Financial Well-Being and Life Satisfaction Cross Tabulation

Annual Income	Financial well-being	Satisfaction with life Low	High	Pearson Chi-Square
	Low	83.3%	16.7%	
R0-R200 000	Average	41.3%	58.7%	0.000***
	High	30.0%	70.0%	
	Low	85.7%	13.4%	
R200 001-R400 000	Average	51.2%	48.8%	0.000***
	High	11.8%	88.2%	
	Low	71.0%	29.0%	
R400 001-R600 000	Average	55.0%	45.0%	0.000***
	High	17.2%	82.8%	
	Low	58.5%	41.2%	
R600 001-R800 000	Average	40.7%	59.3%	0.338
	High	33.3%	66.7%	
	Low	83.3%	16.7%	
More than R800 001	Average	43.5%	56.5%	0.000***
	High	10.0%	90.0%	

*p<0.10; **p < 0.05; *** p <0.01

Table 3 categorises investors' life satisfaction into low life satisfaction and high life satisfaction in terms of their annual income and financial well-being. In the income category R0-R200 000 per annum, 83.3 percent of investors with low financial well-being also indicated low life satisfaction. Whereas, 70.0 percent of investors in this income category that indicated high financial well-being correlates with high life satisfaction. A statistical difference was found (p < 0.01) for this income category. In the income category R0-R200 000 per annum, 83.3 percent of investors with low financial well-being also indicated low life satisfaction. Whereas, 70.0 percent of investors in this income category that indicated high financial well-being correlates with high life satisfaction. For all other annual income groups, R200 000- R800 000, a lower perceived financial well-being was associated with lower life satisfaction, and a higher perceived financial well-being was associated with a higher satisfaction with life. A statistical difference was found (p < 0.01) for the income category of more than R800 001. Majority (83.3%) of the investors that indicated they have a low life satisfaction also indicated low financial well-being whereas 90.0 percent of the investors with a high life satisfaction also indicated high financial well-being. These results are similar to that of Boyce et al. (2010) that stated income is interrelated with happiness, thus higher income increases satisfaction with life.

Binary Logistic Regression: Table 4 indicates the results found for the binary logistic regression in terms of the influence of income categories and financial well-being on investors' life satisfaction.

Table 4: Binary Logistic Regression Results

Variable	B	S.E.	Wald	DF	Sig.	Exp(B)
Financial well-being (low)			103.793	2	0.000*	
Financial well-being (average)	2.903	0.297	95.601	1	0.000*	0.055
Financial well-being (high)	1.390	0.273	25.927	1	0.000*	0.249
R0 – R200 000			2.879	4	0.578	
R200 001 – R400 000	0.343	0.366	0.880	1	0.348	0.709
R400 001 – R600 000	-0.440	0.356	1.523	1	0.217	0.644
R600 001 – R800 000	-0.290	0.388	0.558	1	0.455	0.748
More than R800 001	0.028	0.437	0.004	1	0.950	0.028
Constant	1.794	0.355	25.489	1	0.000*	6.012

For this binary regression model, the Omnibus test for model coefficients was significant at 1 percent with a Chi-Square value of 153.877. Moreover, the Naglkerke R-squared test indicated that model coefficients explain 30.2 percent of the variation in investors' life satisfaction. The negative beta value (-0.180) for the equation suggests that an inverse relationship exists between the dependent and independent variables considering financial well-being, investors with average financial well-being are more likely to be satisfied with their lives than investors with low financial well-being. The p-value was significant at the 1 percent level and it can be concluded that investors with average financial well-being are 94.5 percent more likely to be satisfied with their lives compared to investors with low financial well-being. Moreover, investors with high financial well-being levels are more 75.1 percent more likely to be satisfied with their lives compared to low financial well-being investors.

These results confirm the research conducted by Kruger (2011) and Taft et al. (2013) who established a theoretical link between income, financial well-being and satisfaction with life. From the second independent variable, annual income, it can be seen in Table 4 that investors earning an annual income between R200 001-R400 000 are more likely to be satisfied with their lives than investors earning an annual income of less than R200 000. Moreover, investors earning an annual income of more than R800 001 are 97.2 percent more likely to be satisfied with their lives compared to investors earning less than R200 000 per annum. These results are therefore in line with the assumption that higher income leads to enhanced satisfaction with life as seen in the study of Ferreira (2018). Studies conducted by Boyce et al. (2010) also found a relationship between, therefore ultimate happiness should be derived from higher income.

5. Conclusion

Life satisfaction is the utmost goal of any individual. Despite the risks incorporated in investment, financial stability can be created through investment. Thus, high income can expand the investors` life choices leading to satisfaction with life. There are other life domains and demographic factors that influence satisfaction with life of investor; nonetheless they do not form a pivotal part of this study. The primary objective of the study was to analyse the relationship between income, satisfaction with life and financial well-being in the context of South African investors. The finding from this study was similar to previous research. This explains the inter-linkage between satisfaction with life and financial well-being of investors. In terms of income and life satisfaction of investors, a distinct trend of a relationship has been found, whereby an increase in the level of income prompts a strong positive life satisfaction. Moreover, it can also be concluded that high-income investors tend to have high financial well-being levels that correlate with high life satisfaction levels. Investors with high-income levels and high financial well-being levels tend to be more satisfied with their lives which can result in investors making more optimistic investment decisions.

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