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THE INFLUENCE OF DEMOGRAPHIC FACTORS ON SOUTH AFRICAN INVESTORS' LIFE SATISFACTION

Abstract:

Satisfaction with life is not always a set concept and may vary according to the demography of investors. Demographical factors can classify investors into various categories of life satisfaction, which can ultimately impact investment decisions. The level of life satisfaction can influence investment by causing a deviation between expected and actual investment choices. Gender can be grouped between males and females with different investment decisions based on each group's satisfaction with life. The aim of this study is to determine the satisfaction with life of investors considering their gender, age group, ethnicity, income group and marital status. The results of the study show that male investors are more likely to have a positive life satisfaction and make optimistic investment choices compared to female investors. Investors who are older than 50 years of age, married or earn more than R700 000 annually are more likely to have a positive life satisfaction and make more optimistic investment choices, while investors with a negative life satisfaction are more likely to make pessimistic investment choices.

Keywords:

Satisfaction with life, investors, demographic factors, investment choices

JEL Classification: G00, M50, G29

1. Introduction

According to Marx *et al.* (2013:3), an investment is the commitment of funds where current consumption is postponed. The main aim of an investment is to create value and wealth for individual investors. Participating in investment can be both exciting and profitable, but will only be considered rewarding if the investor has some level of financial knowledge and skill. As with everything in life, reward comes with risk, which requires the presence of rational emotional reactions. Despite the fact that risk is a theoretical concept, an individual's inherent perception and understanding of the risk-reward trade-off, to some measure, is cultured by life experience (Crouhy *et al.*, 2014:5). Due to a lack in knowledge and skill, many investors choose to make use of investment brokerage companies to assist with the investment process. The aim of such companies is to maximise returns in such a fashion as to minimise risk without having to sacrifice return, according to the investors risk profile (Marx *et al.*, 2013:265). The achievement of this aim is only possible if a complete and accurate risk profile of the individual investor can be completed (Rachev *et al.*, 2011:5). A fundamental risk profile consists first of the demographical factors of the investor such as age, gender, race, marital status and income. Secondly, the financial objectives are set according the short-, medium- and long-term goals of investors. These investment goals are not only related to the level of risk that the investor is able and willing to tolerate, but reflect the financial security, current life style and desired level of life satisfaction (Marx *et al.*, 2013:265).

Investors, like any other individuals, have a strong desire to understand what is meant by a good life and aim to achieve this goal through investment. In social sciences, the characteristics of a good quality of life include factors such as affection from others, self-insight, pleasure and financial stability (Diener, 2000:34). Subjective well-being SWB is based on subjective evaluations, which are dependent on several domains. These evaluations, positive or negative, include the following domains, namely satisfaction with life scale (SWLS) (overall life), satisfaction with individual domains (work or relationships), positive affect and negative affect (reactions of joy and sadness to life events and interest and engagements). It is important to note that SWB can be measured objectively in terms of verbal and non-verbal behaviours (Diener & Ryan, 2009:392). (SWB) is a distinct measure that measures SWL using individual perceptions based on their own personal life experiences. Perceptions tend to be a more accurate measure of actual feelings, which can be regarded as a direct reference to actual experiences (Diener, 2000:36). In order to measure SWB, the common measure of self-report is used where respondents typically indicate an overall life satisfaction (SWLS) or how much certain feelings are being experienced (Diener, 2000:34).

For investors, the level of SWL can be greater when they experience many pleasant and few unpleasant emotions involved in their investment activities (Diener, 2000:34). A good investment has the ability to increase the quality of life of an investor over the long run. If a deviation exists between the desired level of life satisfaction and current life satisfaction, investment decisions may be influenced. On the other hand, the overall

level of life satisfaction of an investor can have positive or negative effects on investment decisions. This poses a challenge for investment companies when profiling investors. Investment companies propose the best investment opportunities for investors based on their risk profile, however, the risk profile does not give an indication of which of the investment choices the investor will choose (Mayo, 2000:182). It, therefore, is imperative for both individual investors and investment companies to understand a risk profile and the role of SWL in order to make more knowledgeable investment decisions.

2. Literature review

Within this study, the paradigm of a good life has been labelled SWB and in everyday terms, happiness. Research that is more extensive is being conducted on SWB as researchers desire to investigate SWB of individuals as perceived by the individuals themselves (Krueger & Sckade, 2008:1833). Both cognitive and affective evaluations are incorporated into SWB as individuals evaluate their own lives on an everyday basis. Many other factors can be used to rate a good life, however, SWB focusses on an individual's own rating of their SWL.

Research by Diener (2002:35) suggests that individuals who are happy tend to be happy most of the time. On the other hand, individuals who constantly seek ecstasy tend to be unhappy most of the time and disappointed with their current position. These individuals may take frequent decisions to change or exit their current career, relationship, or take alternative financial decisions to improve SWL. However, since the SWL outlook is already negative, these changes in financial decisions tend to be pessimistic and rarely improve the individual's current position (Diener *et al.*, 1991:119). Overall, individuals with a positive life satisfaction tend to be optimistic when making important decisions; whereas, individuals with a negative life satisfaction tend to be pessimistic when making decisions (Diener, 2000:35).

According to Baltes and Mayer (1999), demographical factors such as health, financial status and age affect the individual's well-being and possible changes in these variables can be reflected in their life satisfaction status. Diener (1984) states that income and subjective well-being correlate within certain countries; it is argued whether the correlation is relative (Easterlin, 1995) or absolute (Veenhoven, 1988). From the absolute perspective, it is reasoned that income ensures that certain universal needs are met and, as a result, income, for lower level income groups, causes SWB (Diener *et al.*, 1993). The relative argument states that the effect of income or other resources is based on changeable standards typically derived from expectations, social comparisons and habits. Positional status indicates that there is a positive association that can be obtained between life satisfaction and perceived relative income, as supported in the viewpoint in international and South African research (Easterlin, 1995:35-48; 2001:465-484; Posel & Casale, 2011:195-223; Botha, 2013). From previous research studies conducted by Diener *et al.* (1985) within countries, a small

positive relationship was found between income and SWL. On average, it was concluded that wealthy individuals are happier than those who are underprivileged. Previous studies concluded that individuals who have a positive life satisfaction would be more keen to take on investments, which might lead to a stronger financial position. Furthermore, individuals with a negative life satisfaction would be more adverse or pessimistic with regards to investments (Ruperton *et al.*, 2016:5).

In terms of gender, Shirazi and Khan (2013:111) in their research found that males experience higher life satisfaction than females. Moreover, Shirazi and Khan (2013:109) confirm in their study that people with life-long marriages seem to be more satisfied with their lives. Campbell *et al.* (1976) conclude that marriage is regarded as a resource that fosters life satisfaction at all ages. Being young and unmarried is accepted for the young adult population, while being unmarried during middle years is less accepted as life stability expectations occur. On average, married men present greater happiness and life satisfaction than widowed, divorced, separated or never married men (Glenn, 1975:595). In addition, married women tend to display little or no greater happiness and life satisfaction than unmarried women. Glenn (1975:595) concludes from research that among married people men are more satisfied with life than women are.

From a racial perspective, Kannemeyer (2016:16) states that Whites appear to have higher levels of life satisfaction consistently over time, whereas African people have lower life satisfaction than the Coloured population, confirming that Coloured people have lower life satisfaction than White people. According to George *et al.* (1985:212), young Africans have a lower level of life satisfaction than young Whites. Previous studies conducted on age and SWL indicated that the relationship between the two variables is weak and differs across studies (George *et al.*, 1985:211). Thieme and Dittrich (2015:14) highlight the fact that older people are more satisfied with their lives than younger people are. Research conducted by Diener and Ryan (2009:397) conclude that life satisfaction increases for people aged between 40-65 years. Life satisfaction decreases for individuals just before death due to their physical and functional impairment (Wilhelmson *et al.*, 2013:32).

3. Methodology

3.1. Research purpose and design

The primary objective of this study is to determine whether demographical factors such as age, gender, ethnicity, marital status and income play a role in the life satisfaction of South African investors. Hence, the study followed a quantitative research approach whereby a two section questionnaire was utilised. The inquiry endorsed a positivist world view generally associated with a quantitative study. This research paradigm was adopted due to the observation of variables and empirical testing of prior theory (Goulding, 2005:293; Creswell & Plano Clark, 2011:72). The first section enquired about

the demographics of investors; whereas, the second section investigated the satisfaction with life of the individual investors.

3.2. Research instrument

An electronic questionnaire was sent through to individual investors. The aspects of one's happiness can be evaluated by self-reporting where the perception of individuals is captured using a numeric score of one's overall quality of life. Previous theories regarding subjective well-being assign to each life satisfaction score a meaning, which is directed to the objective circumstances of a person's experiences. In order to compile a score relevant to one's life satisfaction, the individual's situation is reviewed by weighing each facet objectively in order to calculate a total score (Kannemeyer, 2016). Baird *et al.* (2010) states that if the scoring system is true, this scale should be deemed feasible for accounting a large section between person variation in self-assessed well-being by using demographic variables. Therefore, a seven-point Likert scale was used to rate the life satisfaction questions, which ranged from (1) strongly disagree to (7) strongly agree. The five-factor SWL scale (derived from 48 items) focused on emotional as well as judgemental aspects. Diener *et al.* (1985) indicates a 0.82 correlation coefficient and an alpha value of 0.87. Pavot and Diener (1993) mention that the idea of using a seven-point scale is to measure the degree of satisfaction of individual investors compared to overall life and to obtain a level of stability in an individuals' life. A total score lower than 21 indicated a negative satisfaction with life and a score higher than 21 indicated a positive satisfaction with life (Kannemeyer, 2016). A total score of 21 indicates a neutral point in life satisfaction.

3.3. Research sample

The target population for this study consisted of all South African investors since research in this target population group imparts valuable research. A South African investment company granted gatekeeper permission for the collection of data using the company's client base. The sample was selected by simple random sampling since a complete list of the members of a population could be drawn at random where each investor had the same probability of being selected. A sample of 1171 participants ($n = 1171$) were selected, where participants participated in an online questionnaire out of their own free will.

3.4. Hypothesis

The following hypotheses were formulated to achieve the primary objective of this study:

Null hypothesis 1 (H^0): mean of male SWL = mean of female SWL

Null hypothesis 2 (H^0): mean SWL of race 1 = mean SWL of race 2

Null hypothesis 3 (H^0): mean SWL of age 1 = mean SWL of age 2

Null hypothesis 4 (H^0): mean SWL of income 1 = mean SWL of income 2

Null hypothesis 5 (H^0): mean SWL of marital status 1 = SWL of marital status 2

The abovementioned hypotheses state that there is no difference between the demographical factors and the satisfaction with life of individual investors in South Africa.

3.5. Statistical analysis

The statistical analysis of this study made use of descriptive statistics such as cross tabulations as well as logistic regressions to test how gender, ethnicity, age, income and marriage status may affect the risk tolerance levels of South African investors. The following equation represents the estimated logistic regression:

$$SWL_i = \phi_0 + \phi_1 GEN + \phi_2 AGE + \phi_3 RAC + \phi_4 INC + \phi_5 MAR + \varepsilon_i \quad (1)$$

The dependant variable was created using the SWL scale, where SWL_i represents dichotomous dependant variable – the satisfaction with life of South African investors (0 for negative satisfaction with life and 1 for positive satisfaction with life). The variable ϕ_0 gives the constant, $\phi_1, \phi_2 \dots \phi_5$ are the estimated coefficients, while ε_i represents the error term. Five independent variables were created; $\phi_1 GEN$ was given as the gender of investors (1=males, 0=female); $\phi_2 AGE$ shows the age category of investors; $\phi_3 RAC$ represents the ethnicity of the investors (1=African, 2=White, 3=Coloured, 4=Asian); $\phi_4 INC$ indicates the annual income level (1=<R100 000, 2=R100 001-R300 000, 3=R300 001-R500 000, 4=R500 001-R700 000, 5=>R700 000). The final independent variable $\phi_5 MAR$ represents the marriage status of the individual investors (0=never married, 1=married, 2=no longer married).

4. Empirical results

4.1. Demographical background of participants

This section elaborates upon the demographical background of the sample. The majority of participants were female (53.38%) while only 46.62 percent represented male investors. The ethnic distribution shows that the majority of the participants were White (63.71%), while the remaining percentage comprised African (19.64%), Coloured (8.03%) and Asian (8.62%). The age distribution indicated that 23.83 percent of the participants are between the ages of 16-34 years, while 35.10 percent are between the ages of 35-49 years and, lastly, 41.07 percent represent investors older than 50 years. Based on the income distribution, 14.52 percent of investors earn less than R100 000

annually. The majority of the investors (36.13%) earn an annual income between R100 001-R300 000. The remainder of the income groups, R300 001-R500 000 (23.48%), R500 001-R700 000 (13.24%) and >R700 001 (12.65%), all had comparable distributions. Lastly, considering the marital status, the sample consisted mostly of married participants (59.78%), followed by participants that have never been married (25.11%) and, lastly, by participants who are no longer married (15.11%).

4.2. Investor satisfaction with life according to all demographics

Table 1 indicates the cross tabulation of the investors life satisfaction according to gender, ethnicity, age, income and marital status.

Table 1: Cross tabulation of investor life satisfaction

Variable	Category	Satisfaction with life		Pearson chi-square
		Negative life satisfaction	Positive life satisfaction	
Gender	Male	36.4%	63.6%	0.001* (10.772)
	Female	45.9%	54.1%	
Ethnicity	African	46.5%	53.3%	0.015** (10.499)
	White	38.5%	61.5%	
	Coloured	53.2%	46.8%	
	Asian	41.6%	58.4%	
Age	16-34	45.9%	54.1%	0.000* (20.802)
	35-49	47.7%	52.3%	
	50+	33.7%	58.5%	
Income	<R100 000	53.5%	46.5%	0.000* (48.604)
	R100 001-R300 000	49.2%	50.8%	
	R300 001-R500 000	35.6%	54.4%	
	R500 001-R700 000	36.1%	63.9%	
	>R700 001	22.3%	77.7%	
Marital status	Never married	49.7%	50.3%	0.000* (17.654)
	Married	36.6%	63.4%	
	No longer married	47.5%	52.5%	

*Significant at 1% level of significance **5% level of significance ***10% level of significance

The life satisfaction of investors was divided into a negative life satisfaction category and a positive life satisfaction category. In view of gender, the high Pearson chi-square value of 10.772 with a p-value of 0.001 indicates a statistical difference between the satisfaction with life of male and female investors in South Africa. Results further indicate that that more male investors have a positive life satisfaction (63.6%) when compared to female investors (54.1%). Only a third (36.4%) of male investors has a negative life satisfaction compared to females (45.9%). In terms of ethnicity a statistical difference exists between African, White, Coloured and Asian, considering the high chi-square value (10.499) and a significant P-value (0.015). Considering all four ethnicity groups, more White investors (61.5%) have a positive satisfaction with life. Coloured

investors have the largest (53.21%) negative life satisfaction. Table 1, furthermore, provides a statistical difference between the three age categories with a high chi-square and a significant p-value (0.000) at 1 percent. Investors older than 50 years of age (72.6%) had the highest positive life satisfaction. The majority of investors between the ages of 16-34 had a positive life satisfaction (54.1%) when compared to the age group 35-49 (52.3%). The statistical difference between income groups was also significant and a clear relationship exists between annual income level and satisfaction with life. Results indicate that as income increases the higher the satisfaction with life. Investors earning an income between R100 001-R300 000 had the highest negative life satisfaction (53.5%); whereas, investors earning more than R700 001 had the highest positive life satisfaction (77.7%). The results also indicate a statistical difference between marital groups with a high chi-square value (17.654) and a p-value (0.000) significant at 1 percent. Results indicate that married investors had the highest positive satisfaction with life (63.4%).

4.3. Binary logistic regression results

Table 2 indicates the results found for the logistic regression of the influence of demographical factors on the satisfaction of life considering South African investors.

Table 2: Binary logistic regression of investor life satisfaction

Variable	Beta	Std. Error	Wald	df	Sig.	Exp (B)
Age 50+ (Ref. group)			14.277	2	0.001*	
16-34	-0.329	0.179	3.370	1	0.066***	0.720
35-49	-0.554	0.147	14.269	1	0.000*	0.575
Gender (Male)	0.057	0.130	0.196	1	0.658	1.059
No longer married (Ref. group)			7.020	2	0.030**	
Never married	0.168	0.216	0.606	1	0.436	1.183
Married	0.424	0.178	5.657	1	0.017**	1.529
>R700 001 (Ref. group)			31.958	4	0.000*	
<R100 000	-1.210	0.256	22.398	1	0.000*	0.298
R100 001-R300 000	-1.107	0.222	24.889	1	0.000*	0.331
R300 001-R500 000	-0.681	0.231	8.708	1	0.003*	0.506
R500 001-R700 000	-0.648	0.255	6.441	1	0.011**	0.523
Asian (Ref. groups)			2.959	3	0.398	
African	0.034	0.162	0.044	1	0.834	1.034
White	-0.360	0.256	1.988	1	0.159	0.697
Coloured	0.017	0.250	0.004	1	0.947	1.017
-2 Log likelihood 1536.809			Omnibus Test 75.620			
Hosmer & Lemeshow 9.706 (0.286)			P-value 0.000			
Nagelkerke R-squared 0.084						

*Significant at 1% level of significance, **5% level of significance, ***10% level of significance

Table 2 makes reference to the Omnibus test for model coefficients where the test was significant at 1 percent with a chi-square value of 75.620. Consequently, the model is significantly better and passed the goodness-of-fit model as a P-value = 0.286 was obtained, which is greater than the 0.05 significance level. The Nagelkerke R-squared test as indicated in Table 2 also suggests that the model coefficients explain 8.4 percent of the variation in investor satisfaction with life.

The table also illustrates the difference among the satisfaction with life among different age groups. The age group 50+ years was entered as the reference group. The p-value (0.001) for investors 50+ years concluded that the null hypothesis (coefficients=0) could be rejected at a 1 percent level of significance. This indicates that there is indeed a difference between the satisfaction with life of investors considering their age. Considering the age group 16-34 years, these investors are less likely to have a positive life satisfaction since a negative coefficient was found (-0.329). However, the p-value of 0.066 is significant at a 10 percent level of significance. For investors between the age of 35-49 years a large negative coefficient was obtained (-0.554) with an odds ratio (0.575-1) indicating that investors between the age of 35-49 are 43 percent less likely to have a positive life satisfaction than investors older than 50 years of age and will make more pessimistic investment choices. The research by Thieme and Dittrich (2015:14) is in line with these results as their research highlighted the fact that older people are more satisfied with their lives than younger people are and will react optimistically in terms of investment choices. Research conducted by Diener and Ryan (2009:397) also concludes that satisfaction with life increases for people aged between 40-65 years.

Considering gender, male investors are more likely to have a positive life satisfaction compared to female investors since a positive coefficient (0.057) was present. However, the p-value (0.658) for gender suggests that gender has a non-significant influence on the satisfaction with life of South African investors. In this case, the null-hypothesis was accepted. These results also prove to be similar to cross tabulation results of Table 1. Marital status was entered with no longer married as the reference group where a p-value of 0.03, which is significant at 5 percent, was obtained. For both married (0.424) investors and never married (0.168) investors positive coefficients were obtained; however, for never married investors, the p-value (0.436) was not significant. Married investors had a positive coefficient of 0.436 and a statistical difference with a p-value of 0.017 at 5 percent significance level. The odds ratio (1.529-1) suggests that married investors are 53 percent more likely to have a positive satisfaction with life than no longer married investors are and will react optimistically in terms of investment choices. These results concur with those of Campbell *et al.* (1976) who conclude that marriage is regarded as a resource that fosters life satisfaction at all ages.

A statistical difference also exists between the satisfaction of life of investors with different annual income levels as a p-value of 0.000 was obtained and is significant at a 1 percent level. Large negative coefficients were found for income levels less than

R100 001 (-1.210), R100 000-R300 000 (-1.107) and R300 001-R500 000 (-0.681), suggesting that these groups are less likely to have a positive life satisfaction compared to investors in the R700 000+ annual income group. The p-values for these categories were significant at 1 percent suggesting that these income groups have a significant influence on the satisfaction of life of investors. Investors who earn less than R100 000 annually are 70 percent (0.298-1) less likely to have a positive life satisfaction. Investors earning between R300 001-R500 000 annually are 50 percent less likely to have a positive life satisfaction compared to investors who earn an annual income above R700 000. The p-value for income group R500 001-R700 000 (0.094) was significant at the 5 percent level of significance. The explanation to these results stems from the assumption that individuals with higher income levels are more satisfied with their lives. Results are similar to the research done by Diener (1984) who found that income and subjective well-being correlate within certain countries. Income ensures that certain universal needs are met and as a result, income, for lower level income groups, cause subjective well-being (Diener *et al.*, 1993).

Ethnicity was entered into the binary regression with four categories, where Asian was used as the reference group. The p-value (0.398) for Asian investors, however, concludes that the null hypothesis (coefficients=0) could not be rejected. This indicates that there is no statistically significant difference between the satisfaction of life of African investors, White investors, Coloured investors and Asian investors.

5. Conclusion

The overriding objective of an investor is to create wealth in order to enhance the satisfaction of the quality of life. Satisfaction with life is not always a set concept and may vary according to the demography of investors. Demographic factors can group investors into various categories of life satisfaction, which can ultimately impact investment decisions. The level of life satisfaction can influence investment by causing a deviation between expected and actual investment choices. The primary objective of this study was to determine whether demographical factors such as age, gender, ethnicity, marital status and income play a role in the life satisfaction of South African investors.

The first demographical factor, age, played a significant role as a significant difference between the satisfaction with life of investors considering their age was found. Older investors were more likely to have a positive life satisfaction than younger investors were. Considering gender, male investors are more likely to have a positive life satisfaction compared to female investors since a positive coefficient (0.057) was present. However, the p-value for gender suggested that gender has a non-significant influence on the satisfaction with life of South African investors. Married investors had a positive coefficient and a statistical difference, which suggests that married investors are more likely to have a positive satisfaction with life than no longer married investors

are. Investors with these demographical characteristics will react optimistically in terms of investment choices.

The statistical difference between income groups was also significant and a clear relationship exists between annual income level and satisfaction with life. Results indicate that as income increases the higher the satisfaction with life becomes, since income ensures that certain universal needs are met. The above results for age, gender, marital status and income were in line with previous research concerning satisfaction with life. In terms of ethnicity, no statistically significant difference exists between the satisfaction of life of African investors, White investors, Coloured investors and Asian investors. This result was contrary to previous research, which found a difference between investors from different ethnic groups.

Recommendations for further research may be to measure SWL before investment and after an investment decision have taken place. This study also makes the recommendation to investment companies to include the SWL in their investor risk profiles. By incorporating SWL, investment companies may have more refined investment options to offer their individual investors.

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