

## **Impact of Psychosocial Factors on Sustainability of Stock Investors' Inclination: A Case of the South Pacific Stock Market**

Saliya Candauda Arachchige<sup>1</sup>

### **Abstract**

Previous research has documented that psycho-cognitive resources and socioeconomic status have significant influences on investment behavior in financial assets. Drawing from the positive psychosocial perspective, I hypothesized that positive enterprising personality mediates the influence of individual characteristics on investment behavior. I tested this hypothesis in the Structural Equation Modeling (SEM) framework using a purposive sample of potential stock investors in Fiji. The theoretical framework and analytical procedures, I introduce here, can also be used to discover additional factors influencing investment inclination and then estimate the predictors of stock market investments in other developing countries with similar socioeconomic contexts, for example, Sri Lanka. The results revealed that four latent factors (Intuition, Education and knowledge, Sociocultural norms, and Enterprising personality) are distinct dimensions of investment inclination together with the maturity factor (Age) towards stock investments. The findings could broaden our understanding about the direct and indirect impact of psychosocial characteristics on stock market participation through positive, personal resources such as an enterprising personality. The findings will be useful for financial service providers and regulators in designing educational programs for different levels of maturity, knowledge, and education, to enhance enterprising personality qualities amongst people generally, and inculcate positive attitudes towards stock investments in the young through high school curricula and mass-awareness programs.

**Keywords:** Enterprising personality, Fiji, Investment behavior, Investment inclination, Psychosocial resources, Social sustainability, Sri Lanka, Stock market participation.

---

<sup>1</sup>Senior Lecturer (HG), SLIIT Business School, Sri Lanka Institute of Information Technology, Malabe, Sri Lanka. Email: [saliya.a@slit.lk](mailto:saliya.a@slit.lk)

## **Introduction**

The South Pacific Stock Market (SPX in Fiji) is experiencing a prolonged sluggishness, while individual participation in financial markets elsewhere has risen sharply in recent times (see (Fufa and Kim 2018; Pan and Mishra 2018; Akhtar and Das 2019; Matadeen 2019; Ho 2019). The investor participation in SPX is extremely low with only 19 000+ retail shareholders (< 0.1% of the population), compared to 100 000+ shareholders (> 8% of the population) in the Stock Exchange of Mauritius (SPSE 2018). Mauritius had similar macroeconomic indicators in the 1980s after independence from the British colonial masters (Prasad 2014). The average free float of the SPX seems critically low (20% of the total shareholdings) compared to 70% in the SEM. By 2019, the Mauritius stock market had crossed the Rs. 400 billion mark in market capitalization, which represented 83% of the GDP compared to 28% of the SPX in Fiji (Stock Exchange of Mauritius, 2019; Saliya, 2020; 2021). Thus, there is a need for greater participation of individual investors in channeling money into equities, which is a vital source of capital for corporates. Our target group discussions with three licensed stockbrokers in Fiji revealed that they deal with only a few hundred clients totaling fewer than 2000 individuals suggesting that only a flimsy 1000+ shareholders are active in the SPX. This situation, I believe, is a phenomenon worthy of investigation. Although a few econometric studies have been conducted on this tiny stock market, no psycho-behavioral-finance study is available to the best of our knowledge.

There has been a lot of research on determinants of stock market development from macroeconomic and institutional viewpoints such as demand and supply forces, market liquidity, the efficient transaction-processing, intrinsic value, institutional support, and regulatory issues, etc. (see El-Wassal 2005; Saliya, 2020; Scatizzi 2006; Yartey 2010; Ho and Iyke 2017; Pan and Mishra 2018). Apart from macroeconomic and institutional factors, the stock market development may also depend on the extent (the number of participants), the nature of stock investors (institutional and retail), and the level of participation (the trading volumes as well as the vibrancy). Studies about the levels and the nature of the investors' inclination towards stock market participation are rare to the best of

our knowledge. To fill this gap, I conducted this research focusing on stock investors' individual psychosocial characteristics, behavior; stock market participation (SMP) from the retail perspective; and individual stock investors.

Taking a step further, in recent times few researchers have identified predictors of SMP using behavioral theories such as the Theory of Planned Behavior (Akthar and Das 2019). However, the association between the actual investment behavior and the investment inclination has rarely been investigated. This study encapsulated important psychosocial factors and examined their association with the investment inclination towards SMP behavior.

Previous research on behavioral finance has provided mixed findings about investment decisions in financial assets listed in stock markets. Some behavioral finance researchers (for example, Chun and Ming 2009; Rubaltelli et al. 2010) assert that stock market investment requires clear thinking and a rational mind. While some other researchers (for example, Escobari and Jafarinejad 2018; Chen et al. 2020; Kocaarslan 2020) suggest stock investors need to be high-risk-takers. Further, Cillo et al. (2018) show that national culture moderates the relationship between innovativeness and large individual investors' stock holding decisions. These findings call for further investigation of personal resources relevant to stock market participation. Particularly, there is a growing interest in enterprising personality (ENP) as a personal resource required for inclination and participation in stock market investments (Vasile 2018). Persons who have an ENP, which is one of the six personality types presented by John L. Holland, are described as people who are energetic, ambitious, enthusiastic, adventurous, and performing for economic gain (Holland 1997).

### **Methodology and Experimental Design**

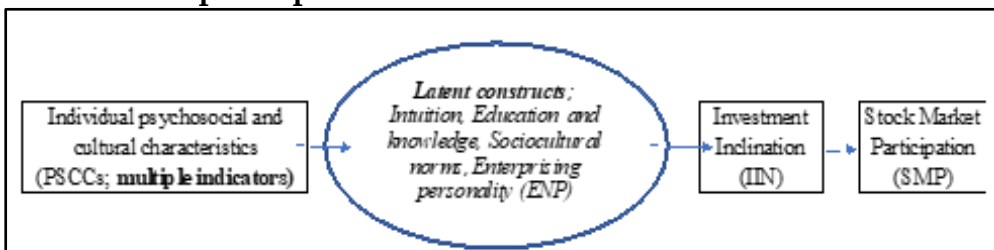
Many theories have been published on psychological and sociological factors to explain individual investors' investment decisions (Clark-Murphy and Soutar 2004; Kumar and Lim 2008; Seasholes and Zhu 2010; Korniotis and Kumar 2011; Barber and Odean 2011). Sarwar and Afaf (2016) showed that psychological factors have stronger effects on investors' decision making than do economic factors. However, the potential mediating role of psychosocial resources has been rarely

explored in relation to SMP behavior. Also, particularly in social behavioral science, there is a growing interest in using 'resource focused models' to assess psychosocial pathways leading to behavioral outcomes. Consistent with this perspective, previous studies have used psychosocial resources, such as mastery (Pearlin et al. 1981), hardiness (Kobosa 1979), self-efficacy (Bandura 1992), and sense of coherence (Antonovsky 1979), to capture different dimensions of one's positive psychological resources influencing his/her behavior. Accordingly, Klapper, et al. (2015) have shown that psychosocial resources have positive consequences for individual psycho-behavioral and socioeconomic outcomes, and I expect a similar mediating role for psychosocial resources (e.g., ENP) about SMP outcomes.

### Assumptions

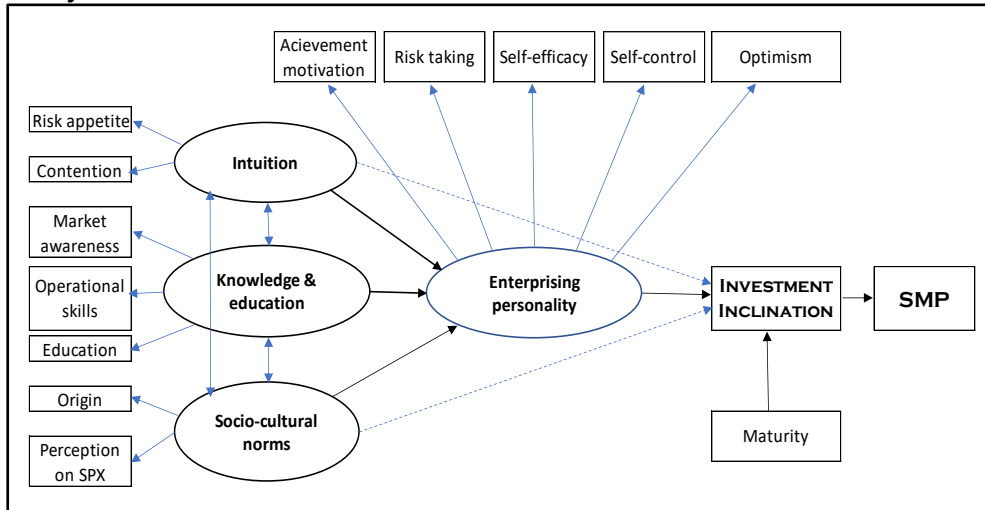
Structural Equation Models (SEM) have two components: the measurement component and the structural component. The measurement component defines latent constructs that reflect study concepts with multiple indicators. In the present analysis, I define the latent constructs of individual psychosocial and cultural characteristics (PSCCs, captured by multiple dimensions) which are hypothesized to influence enterprising personality (ENP). ENP is hypothesized to influence investment inclination (IIN). In turn, I expect IIN to drive individuals towards stock market participation (SMP) as demonstrated in Figure 1. That is, my primary aim is to investigate the roles of ENP and IIN as the key resource mechanism (mediators) linking PSCCs to SMP. Figure 2 presents the theoretical framework for the study.

**Figure 1: Influencing process of investment inclination towards stock market participation**



Source: Author's compilation

**Figure 2: The theoretical framework and hypothesized pathway analysis**



Source: Author's compilation

In addition, maturity (Age) is hypothesized to directly influence IIN. I will discuss each of these constructs in the paragraphs that follow.

## Individual psychosocial and cultural characteristics (PSCCs) influencing ENP

### Intuition

Intuition means an accumulation of attitudes triggering inclinations to believe (Wilder 1967; Earlenbaugh and Molyneux 2009). Intuitive thinking is defined as automatic, fast, effortless, unconscious, and based on vast amounts of prior experience (Hogarth 2001), and demonstrates an integration of information and feelings in a cumulative manner (Hogarth 2001; Glöckner and Betsch 2008). Intuitive processes have little or no information-processing costs (Hogarth and Karelaia 2007) and empower individuals to justify their behavior quickly and rationally (Glöckner and Betsch 2008; Saliya, 2018; Saliya and Yahanpath, 2017). Finally, intuition is typically contrasted with deliberation which describes slow, effortful, stepwise, and mostly rule-governed processes (Horstmann et al. 2009). According to Hunjra et al. (2016), the main determinants of choice of investment are propensity of risk, framing of problem, asymmetry of information, and perception of risk. Connecting intuition to common sense, Yurttadur and Ozcelik (2019) reveal that the investment

behavior of people is directed by common sense but with an overconfidence tendency. Based on these findings, I anticipate that intuition, as captured by the instinctive feelings of respondents, will be positively associated with IIN directly and/or indirectly affecting SMP. As Martínez-Loredo et al. (2018) point out, because the trait of 'risk-taking' contributes to the development of ENP, I hypothesize that: The individual's intuitive characteristics influence IIN through ENP towards SMP.

### **Education and Knowledge**

Financial knowledge can be defined as information that is acquired through learning, organizing, representing, and storing in the memory (Wang 2009). Past studies have suggested that good financial behavior is often associated with higher levels of financial knowledge (Edmiston and Gillett-Fisher 2006). McEwen and Gianaros (2010) argue that less educated youth are more likely to engage in risk behaviors which are also linked to poor health, and investment behavior too. Therefore, I embedded the level of education to the knowledge dimension which I hypothesized would influence the IIN via ENP. However, there is limited literature illustrating the relationship between financial knowledge and taking risks while making an investment (Wang 2009). Research has suggested that financial knowledge is comprised of two basic components, namely, objective financial knowledge and subjective financial knowledge (Wang 2009). Objective financial knowledge facilitates acquisition of knowledge, whereas subjective financial knowledge increases the degree of reliability of the existing knowledge.

Financial knowledge is crucial in a scenario when financial markets have complex financial products. It has been observed that financial ignorance can have disastrous results, for instance: ending up with bigger debts and higher interest rates on loans (Lusardi and de Bassa Scheresberg 2013), and more borrowing and less saving. On the other hand, people who have financial knowledge are better in terms of financial management (Lusardi and de Bassa Scheresberg 2013). These individuals are more likely to diversify risk by spreading their funds across different financial assets (Abreu and Mendes 2010). Financial knowledge might also lead an individual to sharpen their financial skills and attitudes (Hassan Al-Tamimi and Anood Bin Kalli 2009).

Campbell (2006) linked low SMP to little knowledge of stocks and the working of the stock market in general, while Xia et al. (2014) confirm this by showing a positive correlation between financial literacy and SMP. Therefore, I hypothesize that: Education and knowledge influence IIN through ENP towards SMP.

### **Socio-Cultural Norms**

Hofstede's (1980, 2001) seminal work shows how cultural values at individual or societal levels are influenced by national culture which is supposedly represented by four quantifiable dimensions: uncertainty-avoidance, individualism, masculinity, and power distance. The dimension of uncertainty-avoidance represents a preference for certainty and discomfort with unstructured or ambiguous situations – like investment activities in highly volatile stock markets. In other work, Cillo et al. (2018) tested the relationship between innovativeness and individual investors' SMP and found that national culture moderates this relationship. Also, Hong et al. (2004) suggest that peers have a large impact on the SMP of an individual, while Brown et al. (2008) show that individuals are more likely to invest in stocks when their peers participate because of perceived social pressure to act uniformly (Ajzen 1991; East 1993). However, Cuong and Jian (2014) argue that, even though intention is largely affected by factors like suggestions from friends (Socio-cultural) and availability of funds, psychological factors like overconfidence (intuition), optimism and risk-attitude (factors of ENP) were more important determinants of IIN. By separating these attributes into Socio-cultural, Intuitive and ENP dimensions, I anticipate that Socio-cultural factors, as captured by ethnicity (origin) and perceived importance of the SPX on the Fijian people, will have significant association with IIN through ENP and towards SMP. Moreover, because entrepreneurial intention and activities are commonly attributed to the interaction of Socio-cultural values and attitudes (Thornton et al. 2011; Hopp and Stephan 2012; Saliya and Jayasinghe 2016; 2017), I hypothesize that: Socio-cultural factors influence IIN through ENP towards SMP.

### **Maturity**

It is argued that elderly individuals typically show more maturity with longer social experiences and are cautious about their savings and investments. Previous studies have shown that associations between

psychosocial resources and IIN differ across age (Beatty et al. 2012). Further, there is evidence that self-esteem is positively associated with age (Vasile 2018). As a result, the age of an individual may influence his/her self-evaluations (Rosenberg 1979) and could directly influence IIN. Yurttadur and Ozcelik (2019) show that an overconfidence-tendency is observed in middle-age. Thus, I hypothesize that: Individuals' age, as a moderator, will have a positive impact on IIN towards SMP.

### **Enterprising Personality (ENP) as A Psychosocial Resource**

Enterprising, as a personality trait, is defined as good at thinking of and doing new and difficult things, especially things that will make money (Cambridge 2020). Using Holland's (1997) SOS enterprising (E) scale, Zulafah (2005) showed that ENP is significantly related to uncertainty tolerance. In this light, and because studies in behavioral finance have shown that personal resources have an effect on investment decisions (Durand et al. 2008), I contend that ENP is a broad construct of positive psychosocial feelings with various dimensions motivating individuals towards SMP.

Recently, Martinez-Loredo et al. (2018) have introduced a multifactor implicit-measure model to assess ENP dimensions enfolding eight traits (with associated stimuli words); achievement motivation (persistent), autonomy (initiative), innovativeness (creative), self-efficacy (competent), locus of control (responsible), optimism (positive), stress tolerance (stable, calm) and risk-taking (courageous, daring). In addition, Vasile (2018) reveals that persons who have an ENP make active decisions and were actively involved in taking control of their lives more than others. Thus, consistent with the behavioral financial models previously adopted, I hypothesize that, ENP positively influence IIN towards SMP.

In sum, I tested whether ENP plays a mediating role in relation to the association between three individual PSCCs (Intuition, Knowledge and education, and Sociocultural norms) and IIN, and with the Age factor directly influence IIN for SMP as a causal structural equation model (SEM). So I endeavored to analyse and estimate how individuals are motivated to invest in the SPX. As depicted in Figure 2, the specific hypotheses are as follows:



Hypothesis H1a, H1b and H1c: Individual PSCCs [Intuition (H1a), Knowledge and education (H1b), and Sociocultural norms (H1c)] influence ENP towards SMP.

Hypothesis H2: Age factor directly influences IIN in moderating the relationship between IIN and SMP.

Hypothesis H3: ENP mediates the relationship between individual PSCCs and IIN in influencing SMP.

Hypothesis H4: IIN positively influences SMP.

### **Methods**

The study sample included 162 participants with university education. The Structural Equation Model Sample Size Calculator recommended a minimum sample size of 137 (Analytics Calculator, 2019) for the testing of hypothesized models. Two research assistants were involved in collecting data, and 108 questionnaires were received via email and Google forms while the balance 54 were collected physically. The survey was carried out with employed university students majoring in Banking and Finance. I used the questionnaire to gather the knowledge, feelings, and behavior of these people in relation to the SPX in several aspects using 18 items. Five items involved demographic factors: Age, Assets, Level of education, Income level and Origin (Indigenous, Fiji-Indian, and Other) while 13 items had Likert-scale answers (from 5 = Strongly agree, to 1= Strongly disagree).

### **Measures**

Self-reporting is very common in social research for capturing psychosocial characteristics, despite the responses being influenced by social desirability and self-biases (Navarro-González et al. 2016). According to De Houwer et al. (2009), use of implicit measures could minimize this effect because such enquiries might automatically activate cognitive associations (Fazio and Olson 2003). Therefore, I strived to explore unbiased responses as much as possible by posing statements/enquiries which contain the characteristics to be captured in an implicit manner, sometimes with reverse coding.

### **Enterprising Personality**

Drawing from many studies, such as Loredó et al. (2018), I use five measures to capture five traits (out of the eight) of ENP; achievement motivation, risk-taking, self-efficacy, self-control, and optimism to assess ENP.

The achievement motivation (AM) trait is defined as the desire to achieve (Rauch and Frese 2007b) and captured by posing the enquiry: 'share market is for wealthy people'. The risk-taking (RT) trait is described as the tendency and will to assume risk which offers more benefits than negative consequences (Moore and Gullone 1996) and is captured with the response to the statement: 'I rather earn interest from my bank deposits'. In this case, since bank deposits are considered as low risk investments, the response 'strongly agree' would be assigned a score of 1 while 'strongly disagree' would get 5, a reverse code, for example.

Some studies have shown that self-efficacy (SE) is a clearer construct and depicts better correlation with willingness (enterprising) than perceived behavioral control (Armitage and Conner, 2010). Similarly, financial self-efficacy is defined as the belief in one's capability to achieve certain financial goals (Forbes and Kara 2010), and therefore plays a critical role in shaping up ENP dimension in our model in this study. Drawing from Bandura (1992), because self-efficacy refers to an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments (Bandura 1992), I attempted to capture self-efficacy from the item: 'I can do just about anything that I really set in my mind'.

The self-control (SC) trait is about the causal attribution of consequences of one's own behavior (Rauch and Frese 2007a) and is measured from the item: 'I have little control over the things that happen to me' (reverse coded). Finally, the optimism (OP) trait, which is defined as the beliefs a person has about good things happening more than bad things in their life (Sheppard et al., 2002), is measured from the response to the statement: 'I am happy with the way life goes'.

### **Intuition**

I capture this characteristic through two items: risk-appetite (RA) and overconfidence tendency or contention (Yurttadur and Ozcelik 2019). The risk-appetite or the intensity of risk involved with capital investment is measured from the item 'Investing in shares is a risky businesses. The characteristic of contention (CN) is measured through a statement in negative form: 'Becoming rich depends more on factors beyond my control'.

### **Knowledge and Education**

This dimension is measured by three items: awareness of the stock market (MA), operational skills (OP), and level of academic education (ED). The relevant enquiries are: 'There are 25 companies listed in the SPX' (for market awareness), 'I do not know how to trade securities in the SPX' (for operational skills), and the academic education is indicated under the demographic section of the questionnaire through choosing 'graduate', 'postgraduate', 'masters', and 'doctorate'.

### **Socio-Cultural Norms**

One measure I use to measure this dimension is the ethnicity of the participants, and I asked them to indicate their origin (OG), i.e., the ethnicity: Indigenous, Fiji Indian, or other. The other measure gathers their views on the importance of the SPX for Fijian people (perception of the stock market: PM), and they responded using the same Likert scale of 1 to 5 for 'strongly agree' to 'strongly disagree' respectively (reverse coded) for the enquiry: 'Stock market has very little impact on Fijians'.

### **Hypothesis and the Model**

Intuition, Education and knowledge, Sociocultural norms, and ENP were defined as latent factors using multiple indicators. Statistically, latent factors reflect the common variance of indicators, and the squared loading of indicators reflects the amounts of variance of the indicators explained by the latent factor. ENP is hypothesized to be directly influenced by PSCC dimensions such as Intuition, Education and knowledge, Socio-cultural norms. Therefore, as depicted in the theoretical model, I conducted a path analysis in SEM framework, estimating the influences of individual characteristics on ENP, and then the impact of ENP on SMP through IIN within the same model.

However, the model fit indices assess the overall model-fit of this model. In addition, I test the moderating influence of Age.

This analysis was performed with Mplus version 8.0 (Muthén and Muthén, 2017) with Maximum Likelihood Estimation. A range of fit indices were used to evaluate the model fit of the models including the chi-square statistic, Cumulative Fit Indices (CFI), and Root Mean Square Error of Approximation (RMSEA). For the chi-square fit statistic, the model is thought to fit the data well when the chi-square divided by the degrees of freedom is below 3.0 (Carmines and McIver 1981). The CFI and RMSEA were used to evaluate the models' fit due to the fact that they were not directly related to the sample size. I used the chi-square statistic, the CFI, and the RMSEA to evaluate the model fit. According to generally acceptable norms, a CFI value nearing .80 ensures the model is not mis-specified and a RMSEA nearing .06 indicates a reasonably good model fit (Hu and Bentler, 1999, MacCallum et al., 1996).

The association between manifest indicators  $Y$  and a latent construct  $\eta$  can be given by the following matrix regression equation (1), where  $\Lambda$  are regression coefficients connecting indicators and the latent construct and  $\varepsilon$  are errors of indicators (measurement errors).

$$Y = \Lambda \eta + \varepsilon \quad (1)$$

Then, the structural portion of the model defines the association among defined latent constructs  $\eta$ s. These associations can be represented by the following matrix regression equation (2), where  $\beta$  are regression coefficients among latent constructs and  $\zeta$  are residual errors. ( $\eta$  can also be single indicator constructs, e.g., investment inclination)

$$\eta = \beta \times \eta + \zeta \quad (2)$$

Thus, structural equation models allow to define latent constructs that capture study concepts with multiple indicators and account for measurement errors of indicators and. In addition, SEM produce regression parameters among latent constructs for all hypothesized associations within the same analytical framework along with overall model-fit indices.

Table 1 shows the constituent measurable items (manifest variables) for each dimension (latent factors).

**Table 1: Constituent items for each latent factors and the corresponding question/premises**

<b>Dimensions (Latent factors)</b>	<b>Constituent items with abbreviation</b>	<b>Survey question/premises</b>
<b>Enterprising personality</b>	AM: Achievement Motivation	Share market is for wealthy people
	RA: Risk-taking	I rather earn interest from my bank deposits
	SE: Self-Efficacy	I can do just about anything that I really set in my mind'
	SC: Self-control	I have little control over the things that happen to me
	OT: Optimism	I am happy with the way the life goes
<b>Intuition</b>	RA: Risk appetite	Investing in shares is a risky business
	CN: Contention	Becoming rich depends more on factors beyond my control
<b>Knowledge and education</b>	MA: Market awareness of <del>CDV</del>	There are 25 companies listed in the SPX
	OS: Operating skills	I do not know how to trade securities in the SPX
	ED: Knowledge and education	graduate, postgraduate, masters and doctorate.

<b>Dimensions (Latent factors)</b>	<b>Constituent items with abbreviation</b>	<b>Survey question/premises</b>
<b>Sociocultural norms</b>	OG: Origin	Indigenous, Fiji Indian, or other
	PM: Perception on SPX	Stock market has very little impact on Fijians
<b>Maturity</b>	AGE	Actual age

Source: Author's compilation

## Results

### Descriptive Statistics and By-Variate Correlations

Descriptive statistics and correlations among all study variables are shown in Table 2. The means of the variables were within 1.5 (Std. Dev. = 1.269) and 3.49 (Std. Dev. = 0.614). All the study variables were correlated in the expected direction. The skewness of the variables were within -0.533 and +0.865, except stock market participation which showed 2.476 of skewness, confirming clear normal distributions. As expected, there were significant positive correlations between age and the intuitional characteristic of risk-taking ( $r = .258, p < .01$ ), knowledge and educational characteristic of market awareness ( $r = .216, p < .01$ ), and the level of education ( $r = .668, p < .05$ ).

Origin factor (the ethnicity), a variable constituent of sociocultural norms showed a negative correlation with the ENP constituent variable of self-control ( $r = -0.222, p < .01$ ), suggesting people of Indian origin experience less self-control. The contention variable, which is a constituent construct of intuition dimension showed a significant positive correlation with the constituent variable for risk-taking ( $r = .316, p < .01$ ) and self-efficacy ( $r = .341, p < .01$ ) of ENP dimension, suggesting that more confident investors showed more willingness to take risk in relation to SMP.

### Latent Factors and Loadings of Manifest Variables

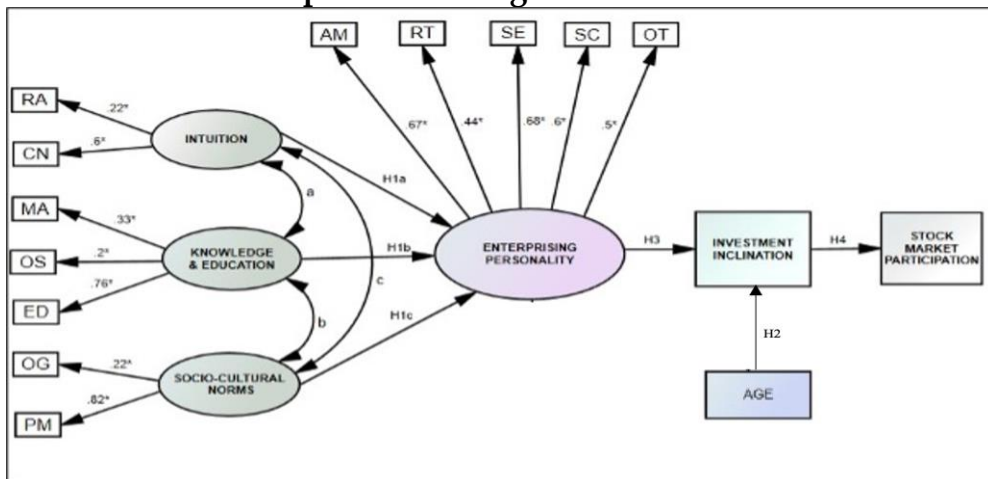
Figure 3 presents the results for the measurement part of the model; factor loading of ENP, Intuition, Education and knowledge and

Sociocultural norms. All 13 items showed significant substantial factor loadings to respective dimensions ( $p < .05$ ) showing acceptable reliabilities and validities of these items in relation to the defined constructs (Bollen 1989). There were no significant cross-factor loadings. Measurement errors of observed responses and significant error correlations which were freed to be correlated are not shown in the figure. Thus, the measurement part of the model (factor loading) showed that manifest variables significantly define and capture four latent factors: Intuition, Knowledge and education, Socio-cultural norms, and enterprising personality.

### Testing Hypothesized Associations

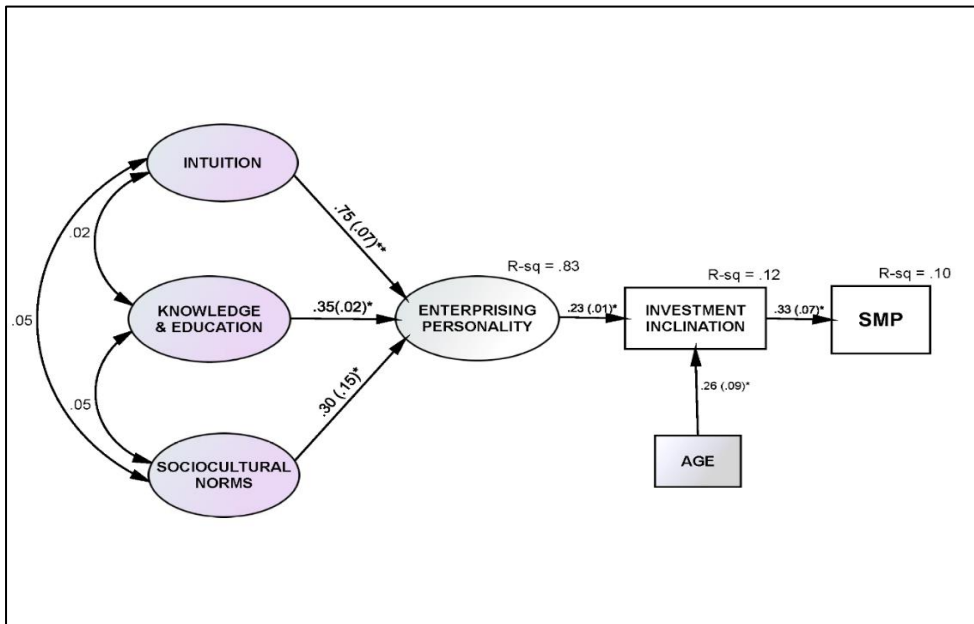
Standardized regression coefficients for hypothesized associations are presented in figure 4.

**Figure 3: Construction of enterprise personality and associated dimensions with respective loadings**



Source: Author's compilation

**Figure 4: Overall path analysis model**



Source: Author's compilation

The positive highly significant association between Intuition and Enterprise Personality ( $\beta = .75$ ,  $p < .01$ ) suggests that increase in Intuition by one unit would result in an increase of 0.75 units in enterprising personality. However, as shown in Table 2, it appears that the zero-order correlations between the constituent items of these dimensions showed weaker associations.

The findings also supported the existence of a pathway from Knowledge and education to the ENP. The participants with higher academic education showed significant influence towards enterprise personality ( $\beta = .35$ ,  $p < .05$ ), suggesting that one unit increase in knowledge and education would influence the ENP to increase by 0.35. The observed strong regression coefficients between Intuition and ENP, and Knowledge and education and ENP may be attributed to the fact that structural equation modeling with multiple indicators accounting for the measurement errors of manifest variables and correct for the attenuation of coefficients (Bollen 1989). Results also confirm that Socio-cultural norms significantly and positively influence ENP, i.e., one unit increase in sociocultural norms would result in an increase of .30 units in ENP.



Overall, enterprising personality showed a positive association with investment inclination ( $\beta = .23$ ,  $p < .05$ ) backed by the associated dimensions of Intuition, Knowledge and education, Sociocultural norms, and Maturity. The findings supported the existence of significant association between maturity and ENP ( $\beta = .26$ ,  $p < .05$ ), so that one-year increase in age would increase ENP by 0.26 units. Investment inclination, which was positively influenced by enterprising personality ( $\beta = .23$ ,  $p < .05$ ), showed a positive association with SMP ( $\beta = .33$ ,  $p < .05$ ). Therefore, one unit increase in enterprising personality could elevate the investment inclination of people by .23, and a one unit increase in investment inclination would motivate them to participate in the stock market by .33-unit investment inclinations more.

Overall, the path analysis model accounted for 83% of the variance in ENP, 12% of the variance in IIN, 10% of the variance in SMP, and the model shows an acceptable fit with the data (CFI. 81, RMSEA .075), Chi-sq. (df) = 196.16(93), Chi-sq/df = 2. 10, SRMR = .076).

**Table 2: Descriptive statistics and correlations among all study variables.**

	SMP	IIN	AM	RT	SE	SC	OT	RA	CN	MA	OS	ED	OG	PM	AGE
IIN	.330**														
AM: Ach. Motivation	0.144	0.123													
RA: Risk-taking	0.106	.213**	.406**												
SE: Self-Efficacy	0.106	.207**	.360**	0.109											
SC: Self-Control	0.1	0.019	.263**	.259**	.287**										
OT: Optimism	0.111	0.004	.468**	.259**	.331**	0.143									
RA: Risk Appetite	.193*	0.116	-0.250**	-0.181	-0.06	-0.098	-0.086								
CN: Contention	.333**	0.104	0.12	.316**	.341**	.201*	0.148	0.095							
MA: Mkt. Awareness	-0.091	.162*	.241**	.264**	0.141	0.029	.246**	0.045	0.038						
OS: Op. Skills	0.023	0.074	.255**	.270**	-0.076	0.045	.363**	-0.026	-0.025	.219**					
ED: Knowledge and Ed.	0.154	0.153	.194*	.292**	0.075	.178*	0.135	-0.195*	-0.175*	.216**	0.138				
OG: Origin	0.092	-0.031	-0.043	-0.07	0.105	-.222**	0.013	-0.055	-0.085	0.055	-0.063	0.09			
PM: Perception SPX	.198*	0.109	.209**	0.028	-0.012	.205**	0.147	0.103	-0.141	-0.097	.179*	0.096	-0.125		
AGE	0.147	.251**	0.054	.258**	0.073	.184*	0.123	-0.105	-0.039	.256**	0.089	.668**	0.062	-0.033	
Mean	1.23	3.16	3.49	2.99	3.09	3.13	3.16	3.25	3.29	2.83	2.7	1.51	1.87	3.2	1.79
Std. Deviation	0.634	1.99	1.269	1.16	1.2	1.137	1.263	1.182	1.261	1.061	1.233	0.614	0.486	1.243	0.788
Skewness	2.476	-0.16	-0.533	0.269	-0.082	-0.041	-0.197	-0.127	-0.368	0.42	0.55	0.777	-0.313	-0.108	0.865

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

## **Discussion and Conclusions**

In the present investigation, I captured cumulative psychosocial resources by generating a composite dimension of Enterprising personality summing the dichotomous indicators of achievement motivation, risk-taking, self-efficacy, self-control, and optimism. Similarly, I captured three more composite dimensions: Intuition, Education and knowledge, and Socio-cultural norms to capture further attributes and resources. These were: risk-appetite, contention (overconfidence), market awareness, operational skills, academic education, ethnicity (origin), and perception on the SPX. All these dimensions showed positive significant association with Investor inclination towards Stock market participation.

This study had three main objectives. First to confirm the hypothesized theoretical framework with different dimensions of the investment inclination (IIN), and then to test this model in the Fijian context using relevant exogenous variables. This study also revealed that four latent factors (Intuition, Education and knowledge, Sociocultural norms, and Enterprising personality (ENP)) are distinct dimensions of investment inclination together with the maturity factor (Age) towards stock market participation.

In general, the results of the study supported the hypothesized model which showed that enterprising personality mediates the influence of individual characteristics on investors' inclination to invest which, in turn, influences stock market participation. Overall, the study provided useful findings about the role of individual characteristics and personal resources influencing investment in stocks, which may have important implications for financial policy and programme planners in markets with similar contexts.

The present study has used quantitative techniques to analyse the data such as SEM which allowed us to account for the measurement errors of the responses. Also, I have used several fit indices to evaluate the hypothesized model. This has enhanced the quality of estimated parameters and provided statistically more convincing results (Bollen 1989). I believe that this methodical framework can also be used to discover the influential factors of investment inclination and then estimate the predictors of stock market investments in other

developing countries with similar socioeconomic contexts such as Sri Lanka.

This study emphasized the importance of individual characteristics affecting the propensity to participate in stock markets and documented the association between investment inclination and actual investments in stocks. Moreover, I explored the significance and estimated the impact of the role played by the enterprising personality, as a mediator between the investment inclination and individual characteristics such as intuition, knowledge and education, and sociocultural norms. Further, this study revealed that maturity represented by age plays a vital role in inclining investors towards stock market participation. Overall, this study not only incorporated many influential individual characteristics into the research model and showed their impact on investment inclination, but also revealed the impact of such investment inclinations on making actual investments in stocks.

The findings will be useful for financial service providers, mainly stockbrokers, who need to attract more clients by designing educational programs to match different levels of maturity and knowledge and education. For regulators, the findings are useful for creating awareness and promotional programs to enhance enterprising personality qualities amongst the general public. The findings also suggest that having a positive attitude towards the SPX is important if people are to participate in the stock market, and those attitudes, beliefs and perceptions might have to be inculcated from an early age through high school curriculums and mass awareness programs.

The present study has several limitations. First, the sample size is relatively small; it would need to be larger to yield more statistical power. Second, respondents with more diverse backgrounds and from diverse geographical areas would have increased the generalizability of the study findings. Third, greater numbers of questionnaire items would have produced higher reliability of factors reflecting different dimensions. Future studies should test this theoretical framework with a larger and more diverse sample, and with a more comprehensive instrument. This research can also be taken further by studying the

---

causal or mutually integrative relationship between stock market participation and stock market development for future research.

Despite these limitations, the current study enhanced our knowledge about the assessment of investment inclination and its underpinning influential factors in the Fijian context. The study findings indicated diverse influences of Intuition, Educations and knowledge, and Sociocultural norms on investment inclination through enterprising personality which directly influence investment inclination towards investment behavior (stock market participation) in the South Pacific Stock market. Further, there was also evidence that individuals' maturity (the Age factor) has a direct effect on triggering stock market participation.

There are currently no studies available about the motivating factors of individual investor participation in the South Pacific Stock Market to the best of our knowledge. This study investigates the motivating factors of existing and potential stock market investors in countries with similar socio-cultural backgrounds like Sri Lanka.

## References

- Analytics Calculator, Structural Equation Model Sample Size Calculator.  
<https://www.analyticscalculators.com/calculator.aspx?id=89>.  
Accessed on 25 October 2021.
- Hogarth, R.M. and Karelaia, N. (2007). Heuristic and linear models of judgment: Matching rules and environments. *Psychol. Rev.* 114(3), 733–758. <https://doi.org/10.1037/0033-295X.114.3.733>.
- Abreu, M. and Mendes, V.(2010). Financial literacy and portfolio diversification. *Quant. Fin.* 10(5): pp. 515–528. doi:10.1080/14697680902878105.
- Ajzen, I.(1991). The theory of planned behavior. *Organ. Behav. and Hum. Decis. Process.* 50(2): 179–211. doi:10.1016/0749-5978(91)90020-t.
- Akhtar, F. and Das, N. (2019). Predictors of investment intention in Indian stock markets. *Int. J. of Bank Mark.* 37(1), pp.97–113. doi:10.1108/IJBM-08-2017-0167.
- Antonovsky A. (1979). *Health, Stress and Coping*,: Jossey-Bass, San Francisco.

- Armitage, C. J. and Conner, M.(2010). Efficacy of the Theory of Planned Behaviour: A meta-analytic review. *Brit. J. of Soc. Psychol.* 40(4), pp.471–499. doi:10.1348/014466601164939.
- Bandura A. (1992). Exercise of personal agency through the self-efficacy mechanism. In: R. Schwarzer (eds.) *Self-Efficacy: Thought Control of Action*, pp. 3–38.: Hemisphere Publishing Corporation. Washington, DC.
- Barber, B. M. and Odean, T. (2011). *The Behavior of Individual Investors* (2011). SSRN: <https://ssrn.com/abstract=1872211> or <http://dx.doi.org/10.2139/ssrn.1872211> Accessed 25 October 2021.
- Beatty, D.L., Kamarck, T.W., Matthews, K.A. and Shiffman, S. (2012). Childhood socioeconomic status is associated with psychosocial resources in African Americans: The Pittsburgh Healthy Heart Project. *Health Psychol.* 30(4), pp.472–480. doi:10.1037/a0024304.
- Bollen, K.A. (1989). *Structural Equations with Latent Variables*. Wiley. New York, NY.
- Brown, J.R., Ivković, Z., Smith, P.A. and Weisbenner, S.J.(2008). Neighbours matter: Causal community effects and stock market participation. *J. of Fin.* 63, pp.1509–1531.
- Campbell, J. (2006). Household finance. *J. of Fin.* 61, pp.1553–1604.
- Carmines, E.G. and McIver, J.P. (1981). Analyzing models with unobserved variables: Analysis of covariance structures. In: G.W. Bohrnstedt and E.F. Borgatta (eds.) *Social measurement: Current issues*, pp. 65–115. Sage. Beverly Hills.
- Chen, J., Li, H. and Zheng, D. (2020). The impact of margin-trading and short-selling on stock price efficiency – Evidence from the fifth-round ban lift in the Chinese stock market. *The Chin. Econ.* 53(3): pp.265–284. doi:10.1080/10971475.2020.1721017.
- Chun, W. and Ming, L. (2009). Investor behaviour and decision-making style: A Malaysian perspective. *Bank. J. Malaysia.* [www.ibbm.org.my/v2/wpcontent/uploads/2011/06/BJM\\_Investor\\_133.pdf](http://www.ibbm.org.my/v2/wpcontent/uploads/2011/06/BJM_Investor_133.pdf).
- Cillo, P., Griffith, D.A. and Rubera, G. (2018). The new product portfolio innovativeness-stock market returns relationship: The role of large individual investors' culture. *J. of Mark.* 82(6), pp.49–70. doi:10.1177/0022242918805405

- 
- Clark-Murphy, M. and Soutar, G.N. (2004). What individual investors value: Some Australian evidence. *J. of Econ. Psychol.* 25(4), pp.539–555.
- Cuong, P.K. and Jian, Z. (2014). Factors influencing individual investors' behavior: An empirical study of the Vietnamese stock market. *Am. J. of Bus. and Mang.* 3(2), pp.77–94.
- De Houwer, J., Teige-Mocigemba, S., Spruyt, A. and Moors, A. (2009). Implicit measures: A normative analysis and review. *Psychol. Bull.* 135, 347–368. doi: 10.1037/a0014211.
- Durand, R.B., Newby, R. and Sanghani, J. (2008). An intimate portrait of the individual investor. *J. of Behav. Fin.* 9(4), pp. 193–208.
- Earlenbaugh, J. and Molyneux, B. (2009). Intuitions are inclinations to believe. *Philos. Stud.* 145, 89–109. doi:10.1007/s11098-009-9388-4.
- East, R. (1993). Investment decisions and the theory of planned behavior. *J. of Econ. Psychol.* 14, pp.337–375.
- Edmiston, K.D. and Gillett-Fisher, M. (2006). Financial education at the workplace: Evidence from a survey of Federal Reserve Bank employees, Community Affairs Research Working Paper 2006-02, Federal Reserve Bank of Kansas City.
- El-Wassal, K.A. (2005). Understanding the growth in emerging stock markets. *J. of Emerg. Mark. Fin.* 4(3), pp.227–261.
- Escobari, D. and Jafarinejad, M. (2018). Investors' uncertainty and stock market risk. *J. of Behav. Fin.* 20(3), pp.304–315. doi:10.1080/15427560.2018.1506787
- Fazio, R.H. and Olson, M.A. (2003). Implicit measures in social cognition research: Their meaning and use. *Annu. Rev. of Psychol.* 54, pp.297–327. doi:10.1146/54.101601.145225
- Forbes, J. and Kara, S.M. (2010). Confidence mediates how investment knowledge influences investing self-efficacy. *J. of Econ. Psychol.* 31(3), pp.435–443.
- Fufa, T. and Kim, J.: Stock markets, banks, and economic growth: Evidence from more homogeneous panels. *Res. in Int. Bus. and Fin.* 44, 504–517 (2018)pp.
- Glöckner, A. and Betsch, T. (2008). Modeling option and strategy choices with connectionist networks: Towards an integrative model of automatic and deliberate decision making. *Judg. and Decis. Mak.* 3(3), 215–228.

- Hassan Al-Tamimi. and Anood Bin Kalli. (2019). Financial literacy and investment decisions of UAE investors. *J. of Risk Fin.* 10(5), 500–516. DOI:10.1108/15265940911001402.
- Ho, S.-Y. and Iyke, B.N. (2017). Determinants of stock market development: a review of the literature. *Stud. in Econ. and Fin.* 34(1), pp.143-164.
- Ho, S.-Y. (2017). The macroeconomic determinants of stock market development in Malaysia: An empirical analysis. *Glob. Bus. and Econ. Rev.* 21(2), pp.174–193.
- Hofstede, G. (2001). *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations across Nations*, 2nd ed. Sage. Thousand Oaks.
- Hofstede, G. (1980). *Culture's Consequences: International Differences in Work-related Values*. Sage, Beverly Hills.
- Hogarth, R. M.(2001) *Educating intuition*. University of Chicago Press, Chicago.
- Holland, J.L. (1997). *Making vocational choices: A theory of vocational personalities and work environments*, 3rd ed, Psychological Assessment Resources, Odessa.
- Hong, H., Kubik, J.D. and Stein, J.C. (2004). Social interaction and stock-market participation. *J. of Fin.* 60(1), pp.-32.
- Hopp, C. and Stephan, U. (2012) The influence of socio-cultural environments on the performance of nascent entrepreneurs: Community culture, motivation, self-efficacy and start-up success. *Entrep. and Reg. Dev.* 24(9-10), pp.917–945. <https://doi.org/10.1080/08985626.2012.742326>.
- Hu, L.-t. and Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Struct. Equ. Model.* 6(1), pp.1–55. <https://doi.org/10.1080/10705519909540118>.
- Hunjra, A.I., Qureshi, S.A. and Riaz, L. (2016). Psychological factors and investment decision making: A confirmatory factor. *J. of Contemp. Manag. Sci.* 2(1), pp.66–81. <https://www.researchgate.net/publication/314284307>  
Accessed on 25 October 2021.
- Klapper, L., Lusardi, A. and Panos, G.A. (2015). Financial literacy and its consequences: Evidence from Russia during the financial crisis. *J. of Bank. and Fin.* 37(10), pp.3904–3923. DOI: 10.1016/j.jbankfin.2013.07.014



- Kobosa, S. (1979). Stressful life events, personality, and health: An inquiry into hardiness. *J. Pers. and Soc. Psychol.* 37, pp.1-11.
- Kocaarslan, B. (2020). Volatility spillover between uncertainty in financial and commodity markets and Turkish stock market. *Bus. and Econ. Res. J.* pp.119-129. doi:10.20409/berj.2020.239.
- Korniotis, G.M. and Kumar, A. (2011) Do older investors make better investment decisions? *Rev. Econ. and Stat.* 93(1), pp.244-265.
- Kumar, A. and Lim, S.S. (2008). How do decision frames influence the stock investment choices of individual investors? *Manag. Sci.* 54(6), pp.1052-1064
- MacCallum, R.C., Browne, M.W. and Sugawara, H.M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychol. Meth.* 1(2): pp.130-149.
- Martínez-Loredo, V., Cuesta, M., Lozano, L. M., Pedrosa, I. and Muñiz, J. (2008). Multifactor implicit measures to assess enterprising personality dimensions. *Psicothema* 30(4), pp.357-363. doi:10.7334/psicothema2018.204
- Matadeen, J. (2019). Stock market development: An assessment of its macroeconomic and institutional determinants in Mauritius. *Int. J. of Econ. and Fin. Iss.* 9(4), pp.197-201. <https://ideas.renpec.org/a/eco/journ1/2019-04-23.html>  
Accessed on 25 October 2021
- McEwen, B.S. and Gianaros, P.J. (2010). Stress- and allostasis-induced brain plasticity. *Annu. Rev. of Med.* 62, pp.431-445 <https://doi.org/10.1146/annurev-med-052209-100430>.
- Moore, S., and Gullone, E. (1996). Predicting adolescent risk behavior using a personalized cost benefit analysis. *J. of Youth Adolescent* 15, pp.343-359. doi: 10.1007/BF01537389.
- Muthén, L.K. and Muthén, B.O. (2017). *Mplus user's guide*, 7th ed. Muthén, and Muthén, Los Angeles.
- Navarro-González, D., Lorenzo-Seva, U. and Vigil-Colet, A. (2016). How response bias affects the factorial structure of personality self-reports. *Psicothema* 28, pp.465-470.
- Pan, L. and Mishra, V. (2018) Stock market development and economic growth: Empirical evidence from China. *Econ. Model.* 68, pp.661-673.
- Pearlin, L. I., Lieberman, M. A. and Menaghan, E.G. (1981) The stress process. *J. of Health and Soc. Behav.* 22, pp.-356.

- Prasad, B.C. (2014). Why Fiji is not the 'Mauritius' of the Pacific? Lessons for small island nations in the Pacific. *Int. J. of Soc. Econ.* 41(6), pp.467-481.
- Rauch, A. and Frese, M. (2007b) Born to be an entrepreneur? Revisiting the personality approach to entrepreneurship. In: J. R. Baum, M. Frese and R.J. Baron (eds.) *The Psychology of Entrepreneurship*, pp. 41-65. NJ: Erlbaum: Mahwah, New Jersey (2007b)
- Rauch, A. and Frese, M. (2007a) Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success. *Eur. J. of Work and Organ. Psychol.* 16, pp.353-385. doi: 10.1080/13594320701595438.
- Rosenberg, M. (1979). *Components of Rosenberg's Self-esteem Scale. Conceiving the Self.* Basic Books, New York.
- Rubaltelli, E., Pasini, G., Rumiati, R., Olsen, R.A. and Slovic, P. (2010). The influence of affective reactions on investment decisions. *J. of behav. Fin.* 11(3), pp.168-176.
- Saliya, C. A. (2010). Role of Bank Lending in Sustaining Income/Wealth Inequality.
- Saliya, C. A. (2020). Stock Market Development and Nexus of Market Liquidity, *International Journal of Finance and Economics.* <https://doi.org/10.1002/ijfe.2376>.
- Saliya, C. A. (2021) Driving Forces of Individual Investors in Stock Market Participation, *Review of Economics and Finance*, 19. 73-79. <https://refpress.org/ref-vol19-a8/>
- Saliya, C. A. (2020), Dynamics of credit decision-making: a taxonomy and a typological matrix, *Review of Behavioral Finance*, <https://doi.org/10.1108/RBF-07-2019-0092>
- Saliya, C. A. and Jayasinghe, K. (2016) Cultural Politics of Bank Lending for Development Financing in Sri Lanka, *Journal of Accounting in Emerging Economies*, 6(4), pp. 449 - 474. <http://doi/abs/10.1108/JAEE-10-2011-0040>
- Saliya, C. A. and Yahanpath, N (2016), Petty-Bourgeois Nationalism – A case study. *Qualitative Research in Financial Markets*, 8(4), pp. 359 - 368. <http://www.emeraldinsight.com/doi/full/10.1108/QRFM-04-2016-0013?mobileUi=0>

- Saliya, C. A. and Jayasinghe, K. (2016) Creating and Reinforcing Discrimination: The Controversial Role of Accounting in Bank Lending, *Accounting Forum*, 40(4), pp. 235-250. Issn:0155-9982, <https://www.sciencedirect.com/science/article/pii/S0155998216300497> or <http://repository.essex.ac.uk/18321/>
- Sarwar, A. and Afaf, G. (2016). A comparison between psychological and economic. *Cogent Bus. and Manag.* 3(1), 1–18. doi:10.1080/23311975.2016.1232907.
- Scatizzi, C. (2006). Graham’s long-term winning approach for enterprising and defensive investors. *AAIJ*. 28(3), pp.21–25.
- Seasholes, M.S. and Zhu, N. (2010). Individual investors and local bias. *J. of Fin.* 65(5): pp.1987–2010.
- SEM. (2019). The Stock Exchange of Mauritius Annual. <https://www.stockexchangeofmauritius.com/media/1496/sem-arENPort-single-page-2019.pdf>. Accessed on 29 September 2019
- Sheppard, J.A., Carroll, P., Grace, J. and Terry, M. (2002). Exploring the causes of comparative optimism. *Psychologica Belgica*, 42, pp.65–98.
- SPSE.: Annual Report. Suva, Fiji: SPSE. (2018). Available at <http://www.spse.com.fj/About-SPSE/SPSE-Annual-RENPorts.aspx> Accessed on 29 September 2019
- Stock Exchange of Mauritius. (2019). About Us; SEM at a glance. <https://www.stockexchangeofmauritius.com/about-us/sem-at-a-glance> Accessed on 29 September 2019
- Thornton, P.H., Ribeiro-Soriano, D. and Urbano, D. (2011). Socio-cultural factors and entrepreneurial activity: An overview. *Int. Small Bus. J.* 29(2), pp.105–118. doi:10.1177/0266242610391930.
- Vasile, C. (2018). An analysis of self-esteem variation related to social and enterprising personality type at the third age. *J. of Edu. Sci. and Psychol.* 8(1), pp.103–108. Available at <https://search.proquest.com/docview/2057179515?pq-origsite=gscholar> Accessed on 29 September 2019
- Wang, A. (2009). Interplay of investors’ financial knowledge and risk taking. *J. of Behav. Fin.* 10( 4), pp.204–213. doi: 10.1080/15427560903369292.
- Wilder, R.L. 1967). The role of intuition. *Sci.* 156(3775), pp.605–610. doi:10.1126/science.156.3775.605.

- Xia, T., Wang, Z. and Li, K. (2014). Awareness and stock market participation. *Rev. of Fin.* 9, pp.537-567.
- Yartey, C. A. (2010). The institutional and macroeconomic determinants of stock market development in emerging economies. *Appl. Fin. Econ.* Pp.1615-1625, DOI: 10.1080/09603107.2010.522519.
- Yurttadur, M. and Ozcelik, H. (2019). Evaluation of the financial investment preferences of individual investors from behavioral finance: The case of Istanbul. *Procedia Comp. Sci.* 158: pp.761-765. doi:10.1016/j.procs.2019.09.112 (2019)
- Zulaifah, E. (2005). Enterprising personality and uncertainty tolerance. *PSIKOLOGIKA* 19(10), pp.7-15. DOI: 10.13140/RG.2.2.32899.4048.