# THE INFLUENCE OF SAVING FOR INVESTMENT AS A MODERATOR VARIABLE BETWEEN CUSTOMER EQUITY AND BEHAVIORAL LOYALTY OF THAI INVESTORS

Puncharat Borirakcharoenkit<sup>1,\*</sup>, Sasiwemon Sukhabot<sup>2</sup>, Idsaratt Rinthaisong<sup>3</sup>, and Nimit Soonsan<sup>4</sup>

#### **Abstract**

This study aimed to explore how saving for investment affects the relationship between customer equity and behavioral loyalty among stock market investors in Thailand. The study used quantitative research. The sample used, was comprised of 1208 investors in Thailand. Data were collected via questionnaires distributed via mail. Data were analyzed using multi-group structural equation modeling. The findings indicated an adequate fit between the measurement and the equation model. Therefore, this result can be used in the test for the invariability of the structural model. Results showed that for the group of investors with an amount of savings for investment of more than 5 million Baht, the proposed model satisfactorily accounts for any variation in terms of explaining behavioral loyalty ( $R^2 = 0.028$ ). The findings for this group indicated that customer equity significantly and positively affected behavioral loyalty ( $\beta = 0.870$ ). For the group with an amount of savings for investment of less than 5 million Baht, the proposed model satisfactorily accounted for any variation in terms of explaining consumer loyalty ( $R^2 = 0.093$ ). The findings for this group also indicated that customer equity significantly and positively influenced behavioral loyalty ( $\beta = 0.795$ ).

Keywords: Equity, Loyalty, Investor, Moderator

<sup>&</sup>lt;sup>1,\*</sup>Dr. Puncharat Borirakcharoenkit (corresponding author) is currently working as a Hatyai branch manager, Yuanta securities (Thailand) Company Limited, Thailand. She obtained a Ph.D. in management from Prince of Songkla University, Thailand. Email: waykk.borirak@gmail.com

<sup>&</sup>lt;sup>2</sup> Assoc. Prof. Dr. Sasiwemon Sukahbot is currently working as a lecturer in the Faculty of Management Sciences, Prince of Songkla University. Thailand. She obtained a Ph.D. in Marketing, Universiti Utara Malaysia, Malaysia.

<sup>&</sup>lt;sup>3</sup> Dr. Idsaratt Rinthaisong is currently working as a lecturer in the Faculty of Management Sciences, Prince of Songkla University, Thailand. He obtained a Ph.D. in Applied Behavioral Science Research, Srinakharinwirot Prasarnmit University, Thailand.

<sup>&</sup>lt;sup>4</sup> Asst. Prof. Dr. Nimit Soonsan is currently working as a lecturer in the Department of Business Administration, Phuket Rajabhat University, Thailand. He obtained a Ph.D. in Management from Prince of Songkla University, Thailand.

## 1. INTRODUCTION

According to the important statistics of the Stock Exchange of Thailand (SET), there were 1.5 million investors opening trading accounts in 2019. The SET has had the highest liquidity among the ASEAN stock markets for seven consecutive years, with an average daily trading value up to 65,000 million Baht, and the trading value likely to increase in each consecutive year (The Securities and Exchange of Thailand, 2021). Due to changes in the behavior and values of people in the new era, investing is gradually becoming more popular in common stocks, mutual funds, and derivatives, among others. There are several groups of securities investors in the stock market: foreign, institutions, securities companies, and general/retail investors. The securities firms, consequently need to know their customers, and the differences they may have regarding their financial burdens and regular expenses. These firms must look at the proportion of their customers with a suitable amount of savings, in order to diversify the risks for their investors. For the SET market, the majority of securities investors are general investors with diverse customer equity and behavioral loyalty.

Due to its capacity to assess individual customers and customer segments from a value perspective, customer equity has become one of the most important marketing objectives for today's businesses (Rust et al., 2004). "The amount of

discounted lifetime value aggregated over all of the firm's current and potential customers" is how customer equity is calculated, with customer equity being determined by three factors: value equity, brand equity, and relationship equity (Rust et al., 2004). Marketing managers must pursue a more accountable marketing investment by continuously monitoring these three sources of customer equity, in order to maximize the company's long-term profitability. This allows managers to identify signs of deterioration in a single driver of customer equity and implement appropriate measures to boost it.

Customer loyalty has a strong impact on business-tobusiness profitability. By remaining with the same source and rejecting competitors, loyal customers provide a consistent stream of revenue for a business (Lam et al., 2004). While more than 80% of organizations use satisfaction scores to track customer loyalty due to the positive link between happiness and loyalty, there is very little association between satisfaction and loyalty in commercial marketplaces (Narayandas, 2007). The antecedents of customer equity are intensively discussed in the literature. Customer equity and have been extensively explored, and numerous conceptual models have been suggested and tested. As a result, it is unclear if current customer equity frameworks can accurately anticipate the success of marketing investments in earning the loyalty of business customers.

Previous research in saving for

investment has not been discussed in the context of the securities business. Most studies looking into saving have focused on issues connected savings, such as the idea that savings are essential to prevent financial hardship resulting from loss income caused by unemployment or retirement (Griffin & Tippins, 2016), reducing the risk through a wide range of investments (Ketenci, 2015), or improving the efficiency of money (Manikandan management Muthumeenakshi, 2017). In securities markets in Thailand, a focus on saving and investing, provides investors with accurate investment knowledge. According to information in the SET, investors with investment savings of more than 5 million are mostly business owners who have a larger income and no financial burden. allowing investment in various financial products and diversification of investment in large amounts (The Securities and Exchange of Thailand, 2021). Regarding investors with an investment capital of less than 5 million, most work as company employees; they have financial associated with regular burdens spending, such as loan or mortgage repayments for a house or car, and of family care, costs causing limitation to the amount of money available for investment compared with the former group. For this reason, securities companies have always been inquisitive regarding whether this difference in the value of savings, which is required to be reported in account opening documents, has influenced the causal relationship between customer equity and behavioral loyalty, to see if it can be used as a guideline for appropriate investment of customers in the securities market. In this study, a model of the expected relationships between customer equity and behavioral loyalty in savings for investment, was used to estimate the proposed moderating effects.

To the best of our knowledge, no empirical investigation on this topic has been undertaken thus far; hence the current study was prompted to address this important research gap. The study contributes to the existing customer equity literature. This is the first study of its kind to explore how saving for investment affects the relationship between customer equity and behavioral loyalty among stock market investors in Thailand. It is hoped that the findings can lead to more appropriate management of these savings for investment, as a regulatory variable. The findings will also be of great potential to help fill the theoretical gap and for further development and creation of new knowledge in promoting investment. At the same time, the results of this study will be very useful for businesses in investment services such as the stock market, securities companies, banks, and insurance companies, in promoting their transactions.

## 2. LITERATURE REVIEW

## 2.1 Customer Equity

Customer equity determines a

customer's value to the selling company and focuses on achieving a good customer lifetime Blattberg and Deighton (1996) first suggested the concept of customer equity, which was then modified and extended by a number of marketing researchers over the following decade (Blattberg et al., 2001; Reinartz & Kumar, 2000; Rust et al., 2004). Customer equity is a long-term asset of the company which can be measured by the value of relationship between the company and the customer. The customer equity model of Rust et al. (2000) proposes three determinants of loyalty intentions: value equity, brand equity, and relationship equity.

Customers' objective of utility assessments the goods/services are captured by value equity, which is based on views of "what is given up" for "what is received." Customers' comparisons between their own expectations and corporate performance are reflected in value equity (Forgas-Coll et al., 2014). Quality results from customer perceptions of the product from a comparison of the company's product with that of other companies. If the product can meet the customers' needs and they can see its cost effectiveness (Kumar & Kanchan, 2017; Sierra et al., 2017), this will create a good customer-business relationship, which prevents customers from turning to the services of competitors (Chokpitakkul et al., 2020; Naderian & Baharun, 2015), and attracts them to return to use the repeatedly service (Hossain

Dwivedi, 2015). The quality value that customers perceive important factor leading to the competitive advantage of a business, and reduction of operating costs (Lin et al., 2016); it also influences trust and loyalty (Yildiz, 2017). In this study, measures for quality include knowledge satisfaction, of provider, and service (Kumar & Kanchan, 2017; Rust et al., 2001). Moreover, price can regulate how goods and services are used, and by whom, as price can affect consumers' purchasing behavior and purchase decisions. Pricing can be said as being the only factor affecting a business' income (Ho & Chung, Sigurdsson et al., 2010). Pricing is also used as a means for creating customer purchase loyalty and intentions (Mahmood, 2014). There several research studies are supporting the importance of pricing. Pricing is one of the important factors for customers purchasing intent, causing repeated buying behavior, boosting sales, and helping customers become more loyal to organization. In this study, measures for pricing include fees, accumulating promotion points, and value (Kim et al., 2020; Mahmood, 2014; Rust et al., 2001). In addition, convenience is a physical feature that affects a customer's assessment of value. Convenience is an important factor for the service industry, which can create satisfaction, and lead to loyalty. The business or service environment, decoration, and facilities, are tangible elements of a customer's image of service organizations, while

organizations must elevate themselves from their competitors. Measures for convenience in the present research are convenience, mobility in transportation, adequate service units, and training and education (Dimitriadis & Koritos, 2014; Rust et al., 2001).

Brand equity plays an important role in marketing communication, and whether the company's products and services are at a satisfactory price for the customers. This research considers three dimensions of brand equity consisting of customer awareness. attitude, and ethics (Aaker, 1991). Customer awareness reflects whether the business is outstanding to customers (Chan et al., 2018) and can increase sales and effectively promote marketing (Datta et al., 2017), consequently affecting the sustainability and continued existence of the business. measures for Customer Awareness in this research are ease of recognition, familiarity, and reputation (Aaker 1991; Llicic & Webster 2015). Moreover, attitude is an important part in building trust for customers or service users (Norman, 2017). Attitude measures in this research include meeting customer needs, being a complete and suitable product, and having an outstanding and reliable image (Blair et al., 2012). In addition, ethics is an important factor convincing customers to choose to invest in a company with a high level of moral values (Rakoto, 2015), differentiating the business from its competitors (Quader & Sohel, 2018). Ethics becomes a key strategy in management of the organization in controlling risks and generating sustainable development (Adelstein & Clegg, 2016). The ethics measures used in this research are acceptance, instilling confidence in using the service, and having professional expertise (Aminu & Oladipo, 2015).

The term "relationship equity" refers to a person's overall evaluation of the firm's interaction quality. Customers who have positive feelings about a company are more likely to care about its well-being and to avoid making decisions that could impact the company (Cuong Pham et al., 2020). Relationship equity refers to assets which the organization gains from maintaining good relations with customers in the long run. This can be done by collecting information about exchanges or transactions currently performed with both current and prospective customers and paying attention to every activity carried out in order to retain customers. Building relationships with customers brings benefits for both the customer and the company itself (Atsan, 2017; Berry 2017).

## 2.2 Behavioral Loyalty

Behavioral loyalty refers to the level of a customer's relationship with a company, regardless of other competitors. Service recipients develop a habit of buying or using the service consistently with willingness and this develops into a positive relationship, leading to the clients' intention to use the service again in the future (Bourdeau, 2005). The

present research focuses on four dimensions of customer behavioral loyalty, namely word-of-mouth, retention, advocate, and partner (Kotler, 2011).

Word of mouth is generated by a positive attitude toward the business that leads to the positive behavior of telling others about the services or products (Parasuraman et al., 1985), as well as correcting bad news about the company, and sharing experiences about the business in a good way with friends (Zhang et al., 2016). Word of mouth is the most effective driver for a business (Tournois, 2015). In this research, the word of mouth measures include referring the service, saying good things about the business, and protecting the image of the business (Chahal & Dutta 2015; Parasuraman et al., 1985; Zhang et al., 2016). In addition, retention refers to repeated purchases which occur when customers' expectations are met, providing trust (Sung et al., 2010), and when there is a positive customer experience that affects satisfaction (Chahal & 2015). Dutta, consequently makes the customer more willing to spend more 2014). Retention (Dolarslan, measures in this study include service resumes, purchasing larger quantities, and constant trading in the long run (Bourdeau, 2005).

Advocate refers to customers who voluntarily continue to use and choose the service from the same provider regularly, despite of other competitors (Raimondo, 2008). Customers will consider the service first and consistently use it with the

understanding that it is best for themselves (Bourdeau, 2005). The company can guarantee its future income as these advocate customers will continue to provide sustainable support (Kandampully, 1998). The measures for advocate in this research are receiving fair services, having a experience, and participation in customer events of the business (Bourdeau 2005; Ou et al., 2017). Furthermore, partners refers to customers who are like business partners. These customers desire to protect the products or services of the business that they use, and they clearly identify themselves as a customer and are willing to protect the business as their own business (Bourdeau, 2005). They also have great confidence in the company (Jones, 2007; Ou et al., 2017) and this can lead to loyalty. Partners of the business develop through various including satisfaction, steps, confidence, support, co-creation, and co-ownership (Kotler, 2011). Measures of partnership used in this research are the decision to use the service as a priority, extended use of the service, and supporting the businesses affiliate products (Bourdeau 2005; Chahal & Dutta, 2015).

Customers are more likely to choose a brand with a good and favorable image. Customers who are connected with a particular brand have positive brand equity, according to Keller (1993), which means they respond more to the brand's marketing activity. Moreover, the basis of a customer's relation with a company is

value. If a company's products and/or services do not satisfy requirements and expectations of its customers, even the best brand or relationship marketing efforts will prove inadequate. Customers must carefully assess their decisions to cost-benefit establish trade-offs compared to accessible alternatives as value becomes more relevant and applicable. Customers' loyalty intentions are boosted by value equity, which influences their switching tendency (Rust et al., 2004). Great brand equity and value equity are not enough to maintain customers: instead, businesses must invest in relationship equity to keep them (Richards & Jones. 2008). Relationship equity is critical in today's competitive economy, where the shift from goods to services and from transactions to relationships is especially when significant, benefits associated with a company's loyalty program are significantly greater than the actual cash value of the benefits received. It provides businesses with the potential to develop long-term connections with customers by providing a strong incentive for them to return for future purchases.

# 2.3 Saving of Investments

Marketing scholars have become more interested in examining the effects of various moderators on consumer behavior in recent years. Prior research has identified various moderating variables, such as demographic characteristics (Homburg & Giering, 2001), psychological characteristics (Madrigal & Chen, 2008). relational characteristics (Raimondo et al., 2008). In the stock exchange literature, saving for investment refers to the portion of excess income or that which is not spent through consumer spending, with the aim of using it for investment. Saving for investment offers opportunities for receiving returns. Savings can be spread differently among different investors. and individuals may give priority to different types of investment e.g. in order to be more efficient in money management (Manikandan Muthumeenakshi, 2017), to prevent unwanted risks (Griffin & Tippins, 2016) or to balance the return and risk (Wen & Qian, 2013). Investors' investment decisions depend on the value of the savings and the expected return (Bishnoi, 2013). If there is a high savings rate, the investment return will be at a high growth rate (Eckaus, 2014), with both the saving and its investment returns playing an important role in the economic development of individuals and the country (Aduda et al., 2014).

The value of savings for investment is particularly crucial information in the securities business. In this research, there are no rules for regulating the amount of investment, except for the general regulations of the SET and SEC required for all securities companies, which state that retail investors must complete a suitability test before investing (as all other clients) in order for the true financial status to be known, such that

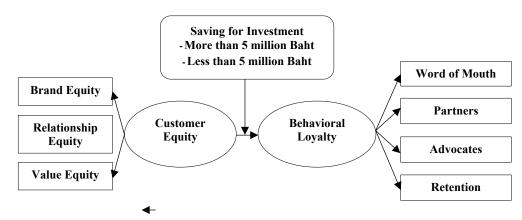
companies are able to recommend trading appropriately to individual investors. In this research the amount savings obtained from suitability test shows that saving for investment at less than 5 million Baht constitutes 70 % of total investors, while investment of more than 5 million Baht relates to 30% of investors. This research can further assist investment advisors in clearly understanding the amount of money available for investment, allowing select and them to allocate investments (asset allocation) to achieve the expected return for the customer (The Securities and Exchange Commission Thailand. 2021).

Information obtained from securities companies reveals that investors with investment savings of more than 5 million Baht are mostly business owners who have a large income and no financial burdens, making it possible for them to invest various designs in financial products and to diversify their in investment large amounts.

Meanwhile, most investors with less than 5 million Baht to invest, work as company employees; they still have regular financial burdens to spend on, such as mortgage repayments for housing, loan repayments for a car, or various family cares.

This research was conducted using a questionnaire based on the SET suitability test that can assist individuals in making well-informed investment decisions. A questionnaire was also derived from research. requirements, official and asset management organizations brokers in Thailand, as all investors are required to answer truthfully about a range of items such as personal information before creating a trading account, this can be used to conduct research. Investors should provide as financial information possible to their financial advisor in for the advisor to order give appropriate advice. To appropriately recommend investments in financial assets with all clients' savings which are intended for investment.

The present research, therefore,



**Figure1:** The conceptual framework

focuses on the value of savings used for investment as a moderating variable, divided into 2 groups including (1) savings for investment totals more than 5 million Baht and (2) savings for investment totals less than 5 million Baht, to see if this difference in the value of savings for investment intervenes the pattern of direct and positive causal relationships between customer equity and their loyalty to the business. The research assumption is set as following.

H1: Saving for investment moderates the relationship between customer equity and behavioral loyalty.

#### 3. METHODOLOGY

Following an extensive literature analysis, a quantitative research method was adopted as an academic approach to achieve the study's goal. This study employed a convenience sampling technique. As a result, respondents were chosen from among Thailand's Stock Exchange investors. Only those who had direct experience with Thailand's Stock Exchange were invited to complete the survey. The survey was conducted from March to September, 2019. Consequently, a total of 1600 questionnaires were distributed via mail, with a total of 1280 questionnaires being collected from the respondents, representing an approximate 80 percent return rate. Only 1208 of the 1280 returned questionnaires were subsequently deemed usable for data analysis, as 72 questionnaires had either incomplete or incorrect responses. Accordingly, the research utilized 1,208 completed questionnaires, which is a sufficient sample size for the structural equation analysis (Hair et al., 2010). Their response as mentioned in Table 1.

The questionnaire was employed both to collect and interpret data. The first part of the questionnaire included 16 items related to customer equity (i.e., brand equity, relationship equity, value equity). The second part included 11 items identified as relating to customer loyalty (i.e., word partners, mouth, advocates, retention). The respondents were asked to score their level of agreement on a 5-point Likert scale in both sections. The five points allowed the respondents to rate various statements from "strongly disagree" (1) to "strongly agree" (5). Thus, the measurement scales used in this investigation had a wide range of applications. To improve content and face validity, a pre-test was conducted with academics, professionals, and investors. The initial version of the questionnaire was slightly adjusted enhanced based on comments.

The data were analyzed using the statistical package for the social sciences (SPSS). A hypothesis test for metric invariance using a series of modeling comparisons undertaken to see whether saving for investment had a moderating effect. Both measurement and structural invariance models were evaluated based Steenkamp on Baumgartner's (1998) and Yoo's Accordingly, (2002)suggestions. examination of the measurement

 Table 1: Personal Data

Item	Frequency	Percentage	Item	Frequency	Percentage
Gender			Income (per year)		
Male	538	44.5	1 million Baht	534	44.2
Female	670	55.5	and below		
Age (years)			1-3 million Baht	330	27.3
30 and below	217	18	3-5 million Baht	152	12.6
31-40	306	25.3	5-10 million	104	8.6
41-50	302	25	Baht	88	7.3
51-60	258	21.4	10 million Baht and higher		
61and higher	125	10.3	Experience		
Education			Less than 1 year	208	17.2
Secondary level	84	7	1-3 years	222	18.4
and below			3-5 years	250	20.7
Diploma	105	8.7	5 years or more	528	43.7
Bachelor's degree	642	53.1	Trading behavior		
Master's degree	377	31.2	Every day	245	20.3
and higher			Once a week	227	18.8
Marital status			Once a month	433	35.8
Single	459	38	6 months/ time	170	14.1
Married	631	52.2	1 year and more	133	11
Widow/ Divorced	118	9.8			

model was conducted by separating the levels of saving for investment. Firstly, the measurement model was used to test the influence of the amount of savings for investment on the causal relationship between customer equity and the behavioral loyalty of investors. The amount of savings available for investment was divided into two groups of

investment: an amount less than 5 million Baht and an investment amount more than 5 million Baht. The measurement model procedures were performed in four steps: 1) an independent test of the measurement model for each group to whether the pattern of see measurement was the same; 2) hypothesis testing for invariability of the model, 3) hypothesis testing for invariability of the weight parameters (exterior and interior) of the observable variables, and 4) hypothesis testing of the regression intercept.

In testing the structural equation model, which was a test for the invariability of the path coefficient, the test procedures were as follows: (1) analyzing the multiple groups by allowing the parameters of both groups to be independent of each other; (2) analyzing the multiple groups with equal parameters for both groups; (3) comparing the differences of the Chi-squares  $(\triangle \chi^2)$  to test the variability of the path coefficient.

### 4. RESULTS AND DISCUSSION

measurement model was established prior to data analysis before estimating the structural model. The data was found to adequately fit the measurement model  $(\chi^2 = 12.225, df = 12, \chi^2//df = 1.018,$ RMSEA = 0.998, SRMR = 0.010),according to the results of the second confirmatory factor analysis. The indicator factor loadings for each variable were all highly significant (p Factor loadings 0.01). measurement errors for the indicators for each construct were used to calculate composite reliability. All values were acceptable, ranging from 0.81 to 0.88.and above the recommended cut-off of 0.600 (Bagozz i& Yi, 1988). Furthermore, Cronbach's alpha values for the research constructs were all greater than 0.70 (Hair et al., 2010), indicating that the measurement items were internally consistent. After that, AVE values were determined. The study variables' estimated variances ranged from 0.59 to 0.65, all of which were greater than 0.50. As a result, convergent validity was adequately demonstrated (Hair et al., 2010).

The findings of the structural equation model with maximum estimation likelihood approach showed a satisfactory model fit ( $\chi^2$  = 12.225, df= 12,  $\chi^2//df$ = RMSEA = 0.998, SRMR = 0.010). In terms of explaining consumer loyalty, the proposed model satisfactorily accounted for the observed variation  $(R^2 = 0.668).$ The relationship between equity customer customer loyalty was also tested. The indicated that customer findings equity significantly and positively affected behavioral loyalty ( $\beta$  = 0.817).

The hypothesis measurement model was evaluated. The tests were performed separately in two groups according to the amount of savings for investment as shown in Table 2. In step 1, the results of the analysis testing of the measurement models, were considered one by independently, in order to see the pattern of measurement. Results showed that both models were consistent with the empirical data. The measurement model for the group of investment totaling more than 5 million Baht yielded  $\chi^2 = 64.276$ , p = 0.000, df= 40, CFI = 0.972, TLI = 0.962, RMSEA = 0.069, SRMR =

0.035, while the group of investment totaling less than 5 million Baht yielded  $\chi^2 = 93.984$ , p = 0.000, df= 40, CFI = 0.979, TLI = 0.971, RMSEA = 0.063, SRMR = 0.024. From these data, both groups had a corresponding statistical value; therefore, it could be concluded that both models had the same measuring pattern.

In step 2 (Model 1 baseline model), the results of the hypothesis testing for invariability in the model was found consistent with the empirical data ( $\chi^2 = 164.572$ , p = 0.000, df= 85, CFI = 0.977, TLI = 0.970, RMSEA = 0.063, SRMR = 0.039). From these data, it was accepted that there was no variation in the correlation model of the two groups with different amounts of savings available for investment.

Step 3 (Model 2), of the model included the test of invariance of the weight value composition of the

observable variables of the two test groups using equal matrix parameters. The test results showed  $\chi^2 = 171.616$ , p = 0.000, df= 88, CFI = 0.976, TLI = 0.969, RMSEA = 0.064, SRMR = 0.046. From these data, differences between the Chi-square result  $(\Delta \chi^2)$  of step 3 (Model 2) and that of step 2 (Model 1) was 7.04, while the difference in the degrees of freedom ( $\triangle$ df) was equal to 3, which was not significant at the 0.05 level. This suggests that there was no variance in the weight parameters of the observable variables by the different values of savings available for investment.

Step 4 (Model 3) in this model included the test of the intercept values for each observable variable with equal matrix parameters in both groups. The test results showed  $\chi^2$  = 179.467, p = 0.000, df= 96, CFI = 0.976, TLI = 0.972, RMSEA = 0.061, SRMR = 0.064. From these data, the

**Table 2:** Invariance Tests for the Measurement Model

Hypothetical model	$\chi^2$	df	p- value	$\chi^2/df$	CFI	TLI	SRMR	RMSEA
Pooled sample model	166.241	40	0.0000	4.15	0.978	0.969	0.022	0.062
Configural invariance (Model 1 Baseline model)	164.572	85	0.0000	1.95	0.977	0.970	0.039	0.063
Metric invariance (Model 2)	171.616	88	0.0000	1.95	0.976	0.969	0.046	0.064
Scalar invariance (Model 3)	179.467	96	0.0000	1.86	0.976	0.972	0.064	0.061
-	$\triangle \chi^2_{2-1} = 7.04$ $\triangle \chi^2_{3-2} = 7.85$				$\triangle df_{2-1} = 3$ $\triangle df_{3-2} = 8$		$\chi^2_{0.05,3} = 7.81$ $\chi^2_{0.05,8} = 15.507$	

difference in the Chi-square result  $(\triangle \chi^2)$  between step 4 (Model 3) and step 3 (Model 2) was 7.85, with a difference in the degrees of freedom  $(\triangle df)$  of 8, which was not significant at the 0.05 level. This therefore proves that the correlational model of different amounts of savings available for investment has no variation in the intersection values regression equation. In other words, change there was no measurement model. Therefore, this result can be used in the test for invariability of the structural model.

The hypothesis structural model was evaluated. The results of the comparison of the Chi-square values of the model are as follows.

The were tests performed separately in two groups according to the amount of savings for investment as shown in Table 3. The path coefficients of the structural factors, for the value of savings available for investment, is not equal. difference in the Chi-square  $(\triangle \gamma^2)$ between the results of step 3 (Model 2) and step 2 (Model 1) was 0.477, indicating that the models did not have any differences in explaining the models for both groups of high and amounts of savings low investment. Hence, hypothesis 1 was not supported. The findings from the structural invariance tests were as follows.

For the group with an amount of more than 5 million Baht of savings for investment, the proposed model satisfactorily accounts for the observed variation in terms of

explaining behavioral loyalty ( $R^2 = 0.028$ ). The findings indicated that customer equity significantly and positively affected behavioral loyalty ( $\beta = 0.870$ ). For the group with an amount of less than 5 million Baht of savings for investment, the proposed model satisfactorily accounts for the variation in terms of explaining consumer loyalty ( $R^2 = 0.093$ ). The findings indicated that customer equity significantly and positively influenced behavioral loyalty ( $\beta = 0.795$ ).

Results of the analysis showed that the amount of savings available for investment (more than 5 million Baht or less than 5 million Baht) did not have a significant effect on the model, considering the positive and direct relationship between customer equity and the behavioral loyalty of Thai investors. The invariability of the structural equation model showed no differences in the structural equation model for the causal relationship between customer equity behavioral loyalty when comparing the high and low groups of savings available for investment (more than 5 million Baht and less than 5 million Baht). This means that differences in the value of saving for investment did not have any significant effects on the causal relationship between customer equity and behavioral loyalty at a statistical level.

Saving is an important part of the economy of any nation. With savings invested in various options available to the people, this money acts as a driver for the growth of the country.

Table 3.	Invariance	Tests for the	Structure1	Modal
Table 7.	invariance	regig for the	Sirucilirai	winger

Hypothetical Model	$\chi^2$	df	p- value	$\chi^2/df$	CFI	TLI	SRMR	RMSEA
Pooled sample	166.241	40	0.0000	4.15	0.978	0.969	0.022	0.062
model	64.276	40	0.0088	1.60	0.972	0.962	0.035	0.069
More than 5 million	93.984	40	0.0000	2.35	0.979	0.971	0.024	0.063
Baht, Less than 5 million Baht								
Model 1:	187.587	91	0.0000	2.06	0.972	0.966	0.092	0.067
Unconstrained path coefficient equal across groups								
Model 2:	188.064	94	0.0000	2.00	0.973	0.968	0.091	0.065
Constrained path coefficient equal across groups								*****
	$\Delta \chi^2_{2-1} = 0.477$				$\Delta df_{2-1} = 3$		$\chi^2_{0.05, 9} = 7.81$	

The major problem that every investor faces is a lack of understanding and patience. At the same time, very few knowledge people have about diversifying their portfolios. As a individuals result, frequently experience investment difficulties, causing emotional tension. It becomes essential to undertake a study to understand the pattern of investment and customers' attitudes towards investing in different investment avenues.

This section considers the research results, including discussion of the information about the amounts of savings for investment among the individuals of the research sample, while the descriptive statistics of the observable variables of customer equity and behavioral loyalty towards the company are also presented. The results of the tests of the measurement model and those of the structural model to test the research hypothesis, i.e. if there are any significant influences of the amount of savings for investment on the relationship between customer equity and behavioral loyalty are discussed.

Amongst our key results, it was found that savings and investment were co integrated for Thailand, investment caused saving and saving caused investment. This consistent with many other studies. For example, Doshi (1994) found that the overall outcomes were sensitive to the level of development and diversity in the regions, as financial systems in some regions do not support effective saving for investment and fail to provide consistent evidence to support the hypothesis of the investment decision elements, also being found to be insignificant in other elements. Another study also disclosed a general view of investor's perception over various investment avenues (Geetha & Ramesh, 2012). In addition, it was found that age and property insignificant components were regarding saving for investment (Issahaku, 2011). There was no

statistical difference between the effects of positive and negative interest rates on the change in hazardous asset allocation in investment portfolios, according to David-Pur et al.'s (2020) findings.

This study found that the amount of saving for investment (more than 5 million Baht or less than 5 million Baht) did not statistically effect customers' equity or their behavioral loyalty towards the company as the background of investors was not the same, including income, expenses, economic conditions, and financial assets. This finding supported the study of Geetha and Ramesh (2012). The study found that investment decisions needed focus to diversification rather than the amount invested in financial assets. Moreover, the financial system was not a powerful enough financial intermediary. The focus should be on diversification and means of saving, more than investment value (Nzotta & Emeka. 2009). In addition, allocation of risky assets in the investment port of each individual should match the amount of their investment (David-Pur et al., 2020).

## 5. RECOMMENDATION

It is hoped that the findings of this study contribute to both academic and business value, for investors, securities companies, and other related businesses. Firstly, the findings of the present research are expected to have some value in academic circles, for developing or creating new knowledge to fill the theoretical gap in securities markets and other kinds of investment. The findings prompt initiative may questions if certain characteristics and investment behavior have any effect on the causal relationship of customer equity and behavioral loyalty. The proposes present study intervention of the value of savings available for investment moderator of this causal relationship. Further research can be done in other investment characteristics or in other investment businesses. importantly, future research should be conducted to test other models that are more suitable for the specific amount of investment, products, customer profile, or in different circumstances such as the culture and country. The results of this study may be used for the investment business to adapt their management and advice to suit different customer groups and to meet the needs of their target customers. Finally, organizations in the service business are suggested to give priority attention to all customer groups apart from retail investors which are the sample group in this research. Regardless of the size of investment, customers bring in their own savings or assets to invest according to their individual financial position and with the same expectation, to increase Therefore, the company profits. should give appropriate and equitable investment advice to build trust, showing that every investor's saving is valued in order to meet the needs of the customers and to generate the highest satisfaction, which will in turn positively impact customer loyalty to

the company.

## 6. CONCLUSION

This research examined whether different amounts of saving for investment influences the relationship equity between customer and behavioral loyalty among general securities investors in the SET. Investors were divided into two groups (more than 5 million Baht and less than 5 million Baht) according to the results of the analysis of their investment behavior. Results show that there is no difference between the two groups of investors regarding customer equity and behavioral loyalty. Whether the amount is more or less, investors expect a return based on their current primary objectives and financial situation to make their investments as efficient as possible. Nevertheless, saving is considered essential for hedging risks (Griffin & Tippins, 2016). Investing can and should be done in different ways, such as investing in mutual funds, stocks, and real estate (Manikandan & Muthumeenakshi, 2017) in order to diversify investment risk (Ketenci, 2015). Efficient investments with eligible effort can not only enrich individual investors' finances, but also play an important role in the development of a country's economy (Aduda et al., 2014).

## REFERENCES

Aaker, J. (1991). The negative attraction effect? A study of the attraction effect under judgment

- and choice. Advances in Consumer Research, 18, 462-469
  Adelstein, J., & Clegg, S. (2016).
  Code of ethics: A stratified vehicle for compliance. Journal of Business Ethics, 138(1), 53-66.
- Aduda, J., Chogii, R., & Murayi, M. T. (2014). The effect of capital market deepening on economic growth in Kenya. *Journal of Applied Finance and Banking*, 4(1), 141-159.
- Aminu, A. A., & Oladipo, O. O. (2016). Application of Financial Ethics in Annual Financial Reporting of Banks. *Journal of Economic and Social Development*, 3(1), 66.
- Atsan, N. (2017). Relationship between service quality corporate image and customer satisfaction. *A Research on Banking Sector*, 8(29), 1244-1257.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94.
- Berry, L. L. (2017). How service companies can earn customer trust and keep it. *Harvard Business Review*, 19, 2-4.
- Bishnoi, S. (2013). An empirical study on investors' behaviour in national capital region (NCR). *International Journal on Global Business Management & Research, 1*(2),14-26.
- Blair, T. C., Wu, J. Y., Chiou, S. C., Kung, S-F., & Shieh. (2012). Brand image communication

- through multicultural. International Journal of Knowledge, Culture and Change Management, 11(3),85-98.
- Blattberg, R. C., & Deighton, J. (1996). Manage marketing by the customer equity test. *Harvard business review*, 74(4), 136.
- Bourdeau, B. L. (2005). A new examination of service loyalty: Identification of the antecedents and outcomes of an attitudinal loyalty framework. The Florida State University.
- Chahal, H., & Dutta, K. (2015). Measurement and impact of customer experience in banking sector. *Decision*, 42(1), 57-70.
- Chan, H.-Y., Boksem, M., & Smidts, A. (2018). Neural profiling of brands: Mapping brand image in consumers' brains with visual templates. *Journal of Marketing Research*, 55(4), 600-615.
- Chokpitakkul, N., Anantachart, S., & Hamilton, M. A. (2020). Toward a process model of consumer brand evaluation and promotion: Drivers of word of mouth for Thai small and medium enterprises. *ABAC Journal*, 40(4), 78-97.
- Cuong Pham, H., Nguyen OanhDinh, Y., Ngo Liem, V., & Nguyen Nguyen, P. (2020). Not all experiential consumers are created equals: the interplay of customer equity drivers on brand loyalty. *European Journal of Marketing*, 54(9), 2257-2286.
- Datta, H., Ailawadi, K. L., & van Heerde, H. J. (2017). How well does consumer-based brand

- equity align with sales-based brand equity and marketing-mix response? *Journal of Marketing*, 81(3), 1-20.
- David-Pur, L., Galil, K., & Rosenboim, M. (2020). To decrease or not to decrease: The impact of zero and negative interest rates on investment decisions. *Journal of Behavioral and Experimental Economics*, 87, 1-36.
- Dimitriadis, S., & Koritos, C. (2014). Core service versus relational benefits: what matters most? Service Industries Journal, 34(13), 1092-1112.
- Dolarslan, E. S. (2014). Assessing the effects of satisfaction and value on customer loyalty behaviors in service environments high-speed railway in Turkey as a case study. *Management Research Review*, 37(8), 706-727.
- Doshi, K. (1994). Determinants of the saving rate: An international comparison. *Contemporary Economic Policy*, 12(1), 37-45.
- Eckaus, R. S. (2014). Forced saving in China. *The China Quarterly*, 217, 180-194.
- Forgas-Coll, S., Palau-Saumell, R., Sánchez-García, J., & Caplliure-Giner, E. M., (2014). The role of trust in cruise passenger behavioral intentions. *Management Decision*, 52(8), 1346-1367.
- Geetha, N., & Ramesh, M. (2012). A study on relevance of demographic factors in investment decisions. *Perspectives of Innovation in*

- Economics and Business, 10(1), 14-27.
- Griffin, M., & Tippins, S. (2016). A case study exploration of blue-collar worker retirement plan investment decisions.

  International Journal of Applied Management and Technology, 15(1). 41–56
- Hair, J. F., Anderson, B. W., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis with reading* (Vol. 6th). New Jersey: Prentice-Hall.
- Ho, M. H.-W., & Chung, H. F. L. (2020). Customer engagement, customer equity and repurchase intention in mobile apps. *Journal of Business Research*, 121, 13-21.
- Homburg, C., & Giering, A. (2001). Personal characteristics as moderators of the relationship between customer satisfaction and loyalty—an empirical analysis. *Psychology Marketing*, 18(1), 43-66.
- Hossain, M. A., & Dwivedi, Y. K. (2015). Determining the consequents of bank's service quality with mediating and moderating effects: an empirical study. *Total Quality Management* & Business Excellence, 26(5/6), 661-674.
- Ilicic, J., & Webster, C. M. (2015). Consumer values of corporate and celebrity brand associations. *Qualitative Market Research: An International Journal*, 18(2), 164-187
- Issahaku, H. (2011). Determinants of saving and investment in

- deprived district capitals in GHANA -A case of Nadowli in the upper west region of GHANA. *Journal of Social Science*, *I*(4), 1-12.
- Jones, T. (2007). The conceptual domain of service loyalty: How many dimensions? *Journal of Services Marketing*, 21(1), 36-51.
- Kandampully, J. (1998). Service quality to service loyalty: A relationship which goes beyond customer services. *Total Quality Management*, *9*(6), 431-443.
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, *57*(1), 1-22.
- Ketenci, N. (2015). Capital mobility in the panel GMM framework: Evidence from EU members. *The European Journal of Comparative Economics*, 12(1), 3-19.
- Kim, W., Kim, H., & Hwang, J. (2020). Sustainable growth for the self-employed in the retail industry based on customer equity, customer satisfaction, and loyalty. *Journal of Retailing and Consumer Services*, 53, 101963.
- Kotler, P. (2011). Reinventing marketing to manage the environmental imperative. *Journal of Marketing*, 75, 132-135.
- Kumar, N., & Kanchan, U. (2017). Impact of service parameters and customers' demographic characteristics on satisfaction with e-tailors with special

- reference to Bareilly city. Journal of Marketing Management, 16(4), 33-53.
- Lam, S. Y., Shankar, V., Erramilli, M. K., & Murthy, B. (2004). Customer value, satisfaction, loyalty, and switching costs: An illustration from a business-to-business service context. *Journal of the Academy of Marketing Science*, 32(3), 293.
- Lin, S. P., Yang, C. L., Pi, H. C., & Ho, T. M. (2016). Tourism guide cloud service quality: What actually delights customers? *Springer Plus*, 5(1), 1-9.
- Madrigal, R., & Chen, J. (2008). Moderating and mediating effects of team identification in regard to causal attributions and summary judgments following a game outcome. *Journal of Sport Management*, 22(6), 717-733.
- Mahmood, A. (2014). How do customer characteristics impact behavior-based price discrimination? An experimental investigation. *Journal of Strategic Marketing*, 22(6), 530-547.
- Manikandan, A., & Muthumeenakshi. (2017). Perception of investors towards the investment pattern on different investment venues-A review. *Journal of Internet Banking and Commerce*, 22(7), 1-15.
- Naderian, A., & Baharun, R. (2015). Service quality and consumer satisfaction and loyalty association moderated by switching cost in hospitality

- industry. International Journal of Hospitality & Tourism Systems, 8(1), 10-22.
- Narayandas, (2007). Trends in executive education in business marketing, *Journal of Business-to-Business Marketing*, 14(1), 23-30.
- Norman, A. T. (2017). Validating the effects of brand quality on attitude and purchase intention in service–product alliances. *Services Marketing Quarterly*, 38(1), 23-30.
- Nzotta, S. M., & Emeka, a. O. (2009). Financial deepening and economic development of Nigeria: An empirical investigation. African Journal of Accounting, Economics, Finance and Banking Research, 5(5), 52-66.
- Ou, Y.-C., Verhoef, P., & Wiesel, T. (2017). The effects of customer equity drivers on loyalty across services industries and firms. *Journal of the Academy of Marketing Science*, 45(3), 336-356.
- Parasuraman, Zeithaml, & Berry. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41-50.
- Quader, M. S., & Sohel, S. M. (2018). Strategic brand experience to differentiate B2B service offering: A Case study analysis. European Journal of Management Studies, 23(1), 49-82.
- Raimondo, M. A., "Nino" Miceli, G., & Costabile, M. (2008). How

- relationship age moderates loyalty formation: the increasing effect of relational equity on customer loyalty. *Journal of Service Research*, 11(2), 142-160.
- Raimondo, M. A., Miceli, G. N., & Costabile, a. M. (2008). How relationship age moderates loyalty formation: The increasing effect of relational equity on customer loyalty. *Journal of Service Research*, 11(2), 142-160.
- Rakoto, P. (2015). Financial reporting quality, executive stock options and business ethics. *GSTF Journal on Business Review*, 4(2), 1-7.
- Richards, K. A., & Jones, E. (2008). Customer relationship management: Finding value drivers. *Industrial Marketing Management*, 37(2), 120-130.
- Rust, R. T., Lemon, K. N., & Zeithaml, V. A. (2004). Return on marketing: Using customer equity to focus marketing strategy. *Journal of Marketing*, 68(1), 109-127.
- Rust, R. T., Zeithaml, V. A., & Lemon, K. N. (2004). Customer-centered brand management. *Harvard Business Review*, 82(9), 110-118.
- Rust, Zeithaml, & Lemon, a. (2001). Driving customer equity: How customer lifetime value is reshaping corporate strategy. *Journal of Marketing*, 64, 107-109.
- Sierra, Iglesias, Markovic & Singh. (2017). Does ethical image build

- equity in corporate services brands? The influence of customer perceived ethicality on affect, perceived quality, and equity. *Journal of Business Ethics*, 144(3), 661-676.
- Sigurdsson, V., Foxall, G., & Saevarsson, H. (2010). In-store experimental approach to pricing and consumer behavior. *Journal of Organizational Behavior Management*, 30(3), 234-246.
- Steenkamp, J. B. E., & Baumgartner, H. (1998). Assessing measurement invariance in crossnational consumer research. *Journal of Consumer Research*, 25(1), 78-90.
- Sung, Y., Kim, Y., Kwon, O., & Moon, J. (2010). An explorative study of Korean consumer participation in virtual brand communities in social network sites. *Journal of Global Marketing*, 23(5), 430-445.
- The Securities and Exchange Commission Thailand (2021). Suitability test. Retrieved January 8, 2021. from https://www.sec.or.th/th/pages/media-for-IC.aspx#test
- The Securities and Exchange of Thailand (2021). *Market statistics*. Retrieved January 8, 2021.From https://www.set.or.th/th/market/market statistics.html
- Tournois, L. (2015). Does the value manufacturers (brands) create translate into enhanced reputation? A multi-sector examination of the value—satisfaction—loyalty—reputation

- chain. Journal of Retailing & Consumer Services, 26, 83-96.
- Wen, L., & Qian, H. (2013). Consumer investment preferences and the Chinese real estate market. *International Journal of Housing Markets and Analysis*, 6(2), 231-243.
- Yildiz, E. (2017). Effects of service quality on customer satisfaction, trust, customer loyalty and word of mouth. An Application on Cargo Companies, 6(12), 81-88.
- Yoo, B. (2002). Cross-group comparisons: A cautionary note. *Psychology & Marketing*, 19(4), 357-368.
- Zhang, R., Li, G., Wang, Z., & Wang, H. (2016). Relationship value based on customer equity influences on online group-buying customer loyalty. *Journal of Business Research*, 69(9), 3820-3826.