

Southern Retail Investors' behavior in the stock exchange of Thailand during the Covid-19 Pandemic

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Abstract

The objectives of this research are 1) to study the investment behavior of retail investors in the southern region during the Covid-19 outbreak and 2) to study personal factors and the perception factor of Covid-19. This research is quantitative research type. The sample group used in the research is 400 retail investors in the southern region who invested in Thai stocks. The research instrument is a questionnaire. Data analysis consists of Frequency, Percentage, Mean, Standard Deviation, and the Chi-Square statistic.

The research result of the investors' behaviors shows that the investment objective during the Covid-19 pandemic is to invest in the hope of profit from the price difference. Persons influencing decision-making include relatives, family members, and friends. Types of stock that decide to invest is the share of Glows (the company is in a period of growth). The amount used for investment is less than 500,000 baht, using approximately a month - 3 months of securities holding period. The security trading method is one-time buying and selling when required. Information used for decision-making is from the investment advisors and analysts the most. The hypothesis test result reveals that the personal factor and the perception factor of the Covid-19 pandemic situation relate to the investment behavior in the stock market of

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retail investors in the southern region during the Covid-19 pandemic with a statistically significant level of 0.05.

Keywords: Investment behavior; Stock market; Investor; COVID-19

Introduction

The Covid-19 outbreak causes anxiety among people about their health system and livelihood. This pandemic affects numerous changes. Several countries have to use lockdown measures to prohibit all airlines from traveling across the country, close shopping malls, not allow eating out or at a restaurant, etc. Such changes affect the economic and health system of people around the world. The latest, on 8 May 2022, more than 517 million people were infected by the coronavirus, which killed more than 6.25 infected patients (World Health Organization, 2022). In Thailand, on 8 May 2022, there were 4.3 million people infected, and 29,088 people were dead (Centre for the Administration of the Situation due to the Outbreak of the Communicable Disease Coronavirus (COVID-19), (Ministry of Interior, 2022). The coronavirus happened for the first time in Wuhan City, China. According to the report, the first infection found was on 1 December 2019. The symptoms included lung infection, a fever, cough, weary, dyspnea or shortness of breath, myodynia or pain in a muscle, sore throat, etc. The incubation period was about 1-14 days. The diseases from the infected can spread to people through the secretions when they cough, sneeze, or even from mutual things they touch each other and then bring to their faces (World Health Organization, 2022). For the last three years, the Covid-19 outbreak has affected the stock market index in various global countries. It has been weaker since March 2020 due to economic concerns. The stock market index of Dow Jones in America reduced to 18,591 points from 29,387 points (Bloomberg, 2020). In Thailand, the SET Index was weaker, from 1,500 points to 963 points. It caused the circuit breaker several times because the price of securities trading was severely volatile during operating

hours (The stock exchange of Thailand, 2020). Many countries had to release financial policies by reducing low-interest rates to support the economy. In March 2021, The Federal Reserve System determined the policy rate at 0.50% (Infoquest, 2021), while the Bank of Japan determined the policy rate at -0.10% (Infoquest, 2021). The Bank of Thailand has a policy rate of 0.50% (Mallikamas, 2021). Furthermore, it tends to remain the interest rate at a low level until passing through this crisis. The investment as a whole image has still been interesting for foreign investors, institutes, and retail enterprises because the trading values still have so many ten billion baht per day that generate various new investors. Especially in this uncertain situation, the share price falling in this crisis duration is considered a good opportunity for investors interested in buying shares for compensation. Compared to other assets, this long-time investment helps create attractive alternatives for investors that can beat inflation. Not only getting the return in a type of dividend but also the investors will get the differential gain from the market price.

Investment originates from the current slowing down of expenses. People save money through alternative financial products to expect potential returns. Investors have choices for investing, such as bank savings, government bonds, debt securities, funds, gold, or in common shares, etc., as acceptable risks. However, the compensation rate should be worth the inflation (Sangkaew, 2004). Numerous researchers define the investing behaviors and factors for investment in various views. For example, Riaz (2020) says that the investors who decide to invest need high compensation with low risks and expect profits and dividends as the main from the enterprise. They are usually influenced by the major shareholders' opinions and get consultancy from investment consultants, friends, and family. When they feel confident with the information they get, they can create advantages in their investment. It includes the managing process with emotions and risks expectation in appropriate ways that enhances good returns. Manish et al. (2021) studied the financial attitudes that caused investors to decide to do share trading. The research mentioned the gaps in the last contributions. The study was about the influences relating to financial attitudes in six dimensions: anxiety, positivity,

financial securities, consideration, interest, and saving to prevent risks. The securities trading of retail investors during the Covid-19 outbreak found that all six dimensions affect securities trading. Retail investors are interested in the issue of financial security the most.

For all reasons mentioned above and from the literature reviews, it enhances the researcher to study the investment in the Stock Exchange of Thailand during the Covid-19 pandemic of the southern investors. The study concerns whether the personal factors relate to the investment behaviors in the Stock Exchange of Thailand during the Covid-19 pandemic and whether the perception factors from the Covid-19 pandemic relate to the investment behaviors in the Stock Exchange of Thailand.

Purposes of Study

1. To study the investment behavior of retail investors in the southern region during the Covid-19 outbreak;
2. To study personal factors and the perception factors of the Covid-19 pandemic that relate to the investment behavior in the securities market of the southern retail investors during the Covid-19 pandemic.

Literature review

Several researchers have defined investment behaviors and investment factors from various views. For example, Riaz (2020) said that the investors who decide to invest always require high compensation, accept low risks, and expect profits and dividends as the main. Furthermore, they usually get influenced by the principal shareholders' opinions or get consultancy from investment consultants, friends, family, etc. Reliability of information enhances advantages in investment, having a management process on emotions, and expecting risks with appropriate methods make compensations to the investors much better. Manish et al. (2021) studied the financial attitudes, which generate the purchase and sale

decisions of the investors, referring to the gap of past contributions by studying the effects related to the six dimensions of the financial attitudes' relationship. They consist of anxiety, positivity, financial security, interest consideration, and saving to prevent risks from buying and selling securities of retail investors during the Covid-19 pandemic. The result indicated that all six dimensions affect buying and selling securities. Financial security is the dimension the retail investors are interested in the most. Secondly, it was the interest consideration and investing interest. Behavioral Finance is a science that originated from the extended theory of the Efficient Market Hypothesis. It is about security price reflecting primary data and news happened. In such a situation, the investors are unprofitable from the current price difference. The profitable compensation made by the investors over the market is statistically unexpected.

The literature reviews concerning investment behavior, including various researches, have not found one related to the investment behavior of retail investors during the Covid-19 pandemic. Hence, the researchers are interested in studying the retail investors' behaviors, focusing on the southern regions having investments through a securities company and determining the study scope in the dimension of investors' personal factors (gender, age, status, education, income, and resources used for investment), and the factors of investors' perception (Health aspect, Politics and Social aspect, Economy aspect, Capital market aspect, and Technology aspect) regarding the Covid-19 pandemic situation how it is and how it has a relationship with the investment behavior (Purposes of investment, Persons affecting the decision-making, Type of share decided to invest, Circulation used in the investment, Period of securities holding, Trading method, and Method of receiving Information for investment) during the Covid-19 pandemic situation (Riaz, 2020; Naseem, 2021). Two hypotheses determined are as follows:

H1: Personal factor has a relationship with the investment behaviors in the Stock Exchange of Thailand during the Covid-19 pandemic.

H2: The perception factors from the Covid-19 pandemic situation have a relationship with the investment behaviors in the Stock Exchange of Thailand.

Research methodology

Type of research

The type of research is quantitative, surveying the investment behaviors of 400 samples living in the southern areas of the Stock Exchange of Thailand during the Covid-19 outbreak. The instrument used is a questionnaire. The study resources are from academic journals and research contributions. Such information determines the study orientation, including the academic textbooks, as a base for creating a tool to find the information. The advice is from the group of populations, using the contributions from analysis articles, news, and groups of investors.

Population and sample

For the research, the researcher focuses on the information from the southern retail investors investing in Thai shares during the Covid-19 pandemic. It is because the number of retail investors is uncertain. Hence, the researcher calculated the size of the investors' group by not knowing the population numbers technique since the investors could invest or cancel every period according to personal factors. The reliability was 95%, the error was 5% (Roscoe, 1969) and the number was 400 samples.

Research instrument

The research uses a questionnaire as a tool to study and data collection, consisting of three parts as follows:

Part 1 : Personal data; it consists of gender, age, marital status, occupation, educational background, funds sources, and expenses burden. Each item of questions was multiple choices. The respondent could choose a single answer concordant with the truth the most.

Part 2: A questionnaire about perception factors from the situation of the Covid-19 pandemic, consisting of health aspects, political and social aspects, economic aspects, capital market aspects, and technological aspects. The question type used was Likert Scales, by selecting only a single choice in the box concordant with the respondent's perception levels the most. The answer dividing is in five stages; from 1 to 5, which is the least perceived to the most perceived, respectively.

Part 3: Investor's behaviors in the securities market during the Covid-19 pandemic have a question characteristic of a close-ended question. The respondent marked a single choice in the blank determined.

This research has investigated the validity of the questionnaire by three experts to give opinions and adjust the questionnaire. In addition, the researchers brought the created and improved questionnaire to try out, a total of 30 sets, with a group of populations which had similar qualifications with the sample group to test whether the questions could give the meaning as required or suitable, how much they are difficult or easy. Then, the researchers tested the reliability of the questionnaire by using the SPSS Software Program. The coefficient value of Cronbach's Alpha was equal to 0.712, considered acceptable for the reliable questionnaire (Jump, 1978).

Data collection

The data collection was from two resources as follows:

1. Primary Data; it is the survey of personal data, perceptions about the situation of the Covid-19 pandemic, and investment behaviors from the southern retail investors in the Stock Exchange of Thailand during the Covid-19 pandemic that happened between 2020 and 2022. The data were from 400 questionnaires;

2. Secondary Data; is from academic journals and research contributions. Such information determines the study guidelines, and the investment textbooks are the base used to create the tool for finding information. The advice is from the group of populations, and the contributions are from analysis articles, news, and groups of investors.

Data analysis

The data from questionnaires were collected and investigated, coded, and processed by using the statistical program and data analysis as follows:

1. Descriptive Statistics

1.1 found out the personal data of the southern retail investors and investment behaviors during the Covid-19 pandemic using Frequency and Percentage;

1.2 Analyzed the perception factors from the investment situation during the Covid -19 pandemic of the southern retail investors by finding out the Mean and Standard Deviation. The Mean can be interpreted according to the determined criteria as follows:

4.21-5.00	means	the most perceived
3.41-4.20	means	much perceived
2.61-3.40	means	moderate perceived
1.81-2.60	means	a little perceived
1.00-1.80	means	the least perceived

2. Inferential Statistics

The analysis to find out the personal factors data and perception factors from the Covid-19 pandemic had a relationship with the investment behaviors in the securities market during the time of emerging disease by using Chi-Square, which indicated the criteria used to measure such relationship, had the statistical significance at 0.05 level.

Result

1. Personal data, the respondents were male the most (62%), aged between 45 and 60 years old (39.30%), married marital status (58.70%), owned a business (31.50%), Bachelor's Degree educational background (69%), monthly income between 50,001 – 100,000 baht (27%), investment resources were from salary (36.30%), and monthly expenses burden was less than 25% of all incomes (31.40%);

2. Investment behaviors: the investment purposes were for getting profit from the price difference (49.30%), persons affecting the decision-making were relatives/family members/friends/colleagues (48.70%), type of share selected to invest during the Covid-19 pandemic was Glows Group (the enterprise was in a growth duration, involving innovation and technology business) (40.40%), the investment circulation during the Covid-19 pandemic was lower than 500,000.00 baht (32.50%), period of securities holding was about a month – 3 months (36.80%), the securities trading method was a single time when required (47.30%), and information used for decision-making was from the investment consultants and analyst the most (47.50%);

3. Perception factors: it was at much level overall, whereas each aspect considered in descending order included technology, capital market, and economy, which were at much level, while politics and society, and health were at a moderate level, respectively;

4. Hypothesis test (H1): it revealed that perception factors from the Covid-19 pandemic had a relationship with the investment behaviors in the securities market of the southern retail investors during the Covid-19 pandemic by a statistical significance at 0.05 level.

Table 1: A percentage of the respondents categorized by personal information

Personal data	Frequency	Percent	Personal data	Frequency	Percent
1. Gender			4. Occupation		
Male	248	62.00	Own business	126	31.50
Female	152	38.00	Company employee	103	25.60
2. Age			Civil servant	35	8.80
Less than 35 years old	76	19.00	Physician	18	4.50
35 – 45 years old	109	27.20	Nurse	21	5.30
45 – 60 years old	157	39.30	Lecturer/University	10	2.50
60 years old up	58	14.50	Student		
3. Marital Status			Agriculturalist	27	6.80
Single	146	36.50	Investor	34	8.50
Married	235	58.70	Housewife/Househusband	18	4.50
Devoiced/Separated	19	4.80	Other occupations	8	2.00

Personal data	Frequency	Percent	Personal data	Frequency	Percent
5. Educational Background			7. Investment Resource		
Under graduate	19	4.80	Salary	145	36.30
Bachelor's degree	276	69.00	Heritage	12	3.00
Master's degree	101	25.20	Saving	109	27.20
Doctoral's degree	4	1.00	Pension	25	6.30
6. Monthly Income			Business	109	27.20
Lower than – 30,000 baht	72	18.00	8. The proportion of		
30,001 – 50,000 baht	98	24.50	monthly expense burdens		
50,001 – 100,000 baht	108	27.00	More than 75% of all	43	10.80
100,001 - 500,000 baht	92	23.00	incomes.		
500,000 baht up	30	7.50	Between 50% and 75% of	107	26.80
			all incomes.		
			Between 25% and 50% of	124	31.00
			all incomes.		
			Less than 25% of all	126	31.40
			incomes.		

Table 2: Perception factors from the situation of the Covid-19 pandemic overall aspect and each aspect (n = 400)

Perception Factors	\bar{x}	S.D	Interpretation	Rank
Health aspect	3.23	0.94	Moderate	5
Politics and society aspect	3.38	0.70	Moderate	4
Economy aspect	3.62	0.73	Much	3
Capital market aspect	3.83	0.76	Much	2
Technology aspect	3.91	0.64	Much	1
Total	3.59	0.43	Much	

Regarding Table 2, the perception factors from the situation of the Covid-19 pandemic overall were at a much level (Mean= 3.59 and Standard Deviation= 0.43.) When considering the Mean of each aspect, it indicated that the highest Mean was the technology aspect

(Mean= 3.91 and the Standard Deviation= 0.64.), Secondly, the capital market aspect with a much level (Mean= 3.83 and the Standard Deviation= 0.76). However, the aspect with the lowest Mean was the health aspect (Moderate level with the Mean= 3.23 and the Standard Deviation= 0.94).

From Table 3, the study result about the personal factors that had a relationship with investment purposes during the Covid-19 pandemic revealed that age, occupation, educational background, monthly income, investment resources, and monthly expense burdens had a relationship with investment purpose. In contrast, gender and status did not have a relationship with the investment purpose during the Covid-19 pandemic by statistical significance at 0.05 levels.

Furthermore, the personal factors of all aspects had a relationship with the investment behaviors in terms of persons affecting the decision making, type of share decided to invest, circulation used in the investment, and period of securities holding during the Covid-19 pandemic by statistical significance at 0.05 levels.

The personal factors in almost all aspects had a relationship with the investment behaviors in terms of securities trading method except the status aspect. Moreover, most personal factors had a relationship with the using information for investment decisions during the Covid-19 pandemic by a statistical significance at 0.05 levels except the status and education factors. Therefore, overall, it can accept the research hypothesis of H2, the perception factors from the Covid-19 pandemic situation that had a relationship with the investment behaviors in the Stock Exchange of Thailand.

Table 3: Analysis of personal data and investment behaviors in the securities market during the Covid-19 pandemic

Personal factors	Purposes of investment		Persons affecting the decision-making		Type of share decided to invest		Circulation used in the investment		Period of securities holding		Trading method		Method of receiving Information for investment	
	χ^2	Sig.	χ^2	Sig.	χ^2	Sig.	χ^2	Sig.	χ^2	Sig.	χ^2	Sig.	χ^2	Sig.
1. Gender	2.817	0.421	17.437	0.001*	2.229	0.526	5.777	0.216	21.739	0.001*	0.658	0.883	0.016	0.992
2. Age	21.339	0.011*	26.114	0.002*	59.728	0.000*	105.99	0.000*	64.083	0.000*	36.708	0.000*	69.127	0.000*
3. Marital status	11.080	0.086	20.523	0.002*	22.160	0.001*	28.034	0.000*	34.998	0.000*	7.934	0.243	5.552	0.235
4. Occupation	107.95	0.000*	65.488	0.000*	110.73	0.000*	215.53	0.000*	139.08	0.000*	87.802	0.000*	103.27	0.000*
5. Educational background	46.385	0.000*	28.417	0.001*	21.888	0.009*	34.111	0.001*	59.404	0.000*	17.487	0.042*	11.136	0.084
6. Monthly income	44.608	0.000*	43.752	0.000*	52.306	0.000*	215.60	0.000*	105.23	0.000*	121.48	0.000*	24.160	0.002*
7. Investment resources	52.556	0.000*	43.190	0.000*	44.700	0.000*	65.950	0.000*	51.880	0.000*	43.206	0.000*	71.292	0.000*
8. The proportion of monthly expense burdens	35.728	0.000*	26.683	0.002*	27.725	0.001*	95.119	0.000*	75.432	0.000*	38.720	0.000*	34.952	0.000*

*Statistical significance is 0.05 level.

Discussions

Investment behaviors in the securities market of the southern retail investors during the Covid-19 pandemic

The study found that the situation of the Covid-19 pandemic had a relationship with the investment behaviors in the securities market. The researcher viewed that the increasing number of the infected had affected the investors toward anxiety and fear. It caused them to decide to invest decreasingly to avoid meeting the crowded. The investors would contact their investors' friends and other people through various channels, such as Line, and Facebook. Furthermore, they socialized like the old times, and reduced travel to the branch. The economic situation also changed from the economic growth, there was an adjustment in interest reduction and increased Quantitative Easing (QE), which affected the investment overweight, and decision-making in the capital market condition based on the effective company. During the later time, the securities price was better. Hence, the investors were back to invest continuously. Moreover, technology helps create social distancing and can do online transactions, such as increasing capital and enhancing safe and convenient reservation of Initial Public Offering (IPO) purchases is considered the adjustment of the investors who require investing under the situation of the Covid-19 pandemic. Similarly, Manish et al. (2021) said that considering interesting news influenced the share purchase decision of the investors.

The research contribution of Kaewpaitoon (2020) identified that the securities in the group of real estate development using the theory of securities pricing that gave the compensation rate more than the compensation rate of the securities market, or the Alpha value was more than 0 included MBK SPALI LH. The investors had an opinion that its investment tended to give the surplus compensation. Research by Khanthavit (2020) indicated that the abnormal trading quantity of foreign investors during the Covid-19 pandemic gave a negative result and had significance. The analysis of abnormal trading quantity by returning shares revealed that the foreign investors

were not the ones who gave positive compensation. Although their abnormality did not cause insecurity, it generated fluctuation from the share having sizes similar to ordinary trading. When considering separately internal and external risk disclosure and risk disclosure from investment, it indicated that only external risk disclosure had a relationship with the Initial Return or First-Day Initial Return of the IPO share. The contribution of Sutanyarak (2017) revealed that all securities of the tourism and recreation group studied were at risk higher than the market. The investors should invest included ASIA, CENTEL, DTC, ERW, and SHANG. These securities had a value lower than they should be, whereas the one whose value was higher than it should be was LRH. The research of Gurbaxani, 2021 indicated that the economic and social effects of the Covid-19 pandemic affected the decision-making to invest of the persons in small cities in India. Yuan (2022) found that retail investors encountered investment risks. The psychological bias of their perception would not facilitate most of the investors. And the result proved that more than 50 % of them got influenced by the limited perception of themselves. The work of Riaz (2020) found that most of the factors crucially determined and influenced the decision-making to invest in Pakistan shares involved: quick richness, disgusting and fear of loss, expecting organization, profit, and dividend, feeling through the economy, last contributions of the company's share, opinions of the major shareholders, and the advice of the brokers, family, and fellows. The research of Naseem (2021) revealed that psychology of the investors had a negative relationship with the three share markets selected under the psychological flexibility and pressure from the huge pandemic. Negative emotions and pessimistic stimulate investors to stop investing in their finance in the share market. It affected the returns in the share market to decrease. During the severe outbreak, people were worried about their lives and livelihood more than about wealth and relaxation. The recommendation was that the government should manage the budgets for public health to be able to pass through. And the research of Benny (2018) indicated that financial and economic factors increasingly affected investors' decisions.

Personal factors and perception factors from the situation of Covid-19 pandemic had a relationship with the investment behaviors in the securities market of the southern retail investors during the Covid-19 pandemic.

According to the study, personal factors related to the investment behaviors in the securities market during the Covid-19 outbreak. The researcher perceived that most investors were male, aged between 45 – 60 years old. They possessed their own business, had a bachelor's degree, and the monthly income was between 50,001 – 100,000 baht. The investment resource was salary, with the expense burdens monthly less than 25%. The investment was for getting the profits from the price difference, and the decision-making for investment was from the consultancy and advice of the influencers that included relatives, siblings, friends, colleagues, or the persons nearby. The share popular to invest in was the Glow share, which related to innovation and technology having a growth tendency. Hence, the Growth share was growing and had outstanding income, which could give the returns to the investors at a high level. However, it had high risk because the profit was sensitive to the economic conditions. Furthermore, the business trend was suitable for investors who accept the high risk, high return. Therefore, the Growth share was growing and had outstanding income, which could give the returns to the investors at a high level. However, it had high risk because the profit was sensitive to the economic conditions. Furthermore, the business trend was suitable for investors who accept the high risk, high return. The circulation they used was less than 500,000 baht, the securities holding was between a month – 3 months, with a single trading when the time appropriate, and the information relating to the investment was from investment consultants and analysts. Single trading had an advantage by helping the investors reach convenience and had the stock focus to trade as required. They might get high compensation if the time was right. However, it might be at risk in case expecting the wrong way. When comparing the single trade and multiple trades in a normal situation, the latter could prevent the risks better. The cost the investors gained from the purchase

was the average cost. Nevertheless, in the Covid-19 pandemic, when the needed price came in the single trade, it created good returns because the market conditions fluctuated up and down faster than the ordinary market situation.

It is concordant with the concept of Riaz (2020), who said that retail investors usually served online information to prevent them from being uncertain about the share investment. When any share had the extra quantity of retrieved information, its price would relatively affect the variance. The more the uncertain situation happened, the more retrieved information occurred to interest the investors increasingly because they dared to decide to purchase the shares they felt interested in. Likewise, the research of Jangaksorn (2021) revealed that the group of Generation Y who had different gender, occupation, marital status, and monthly incomes affected the behaviors of personal financial management during the Covid-19 pandemic differently. Gender, educational background, and revenues would influence the behaviors of personal financial management significantly, especially during the Covid-19 pandemic.

Besides, the factor of financial competency, income, expense, and saving affected the behaviors of personal financial management. However, the investment ability factor did not affect the behavior of personal financial management during the Covid-19 situation in Bangkok metropolitan. The contribution of Teerawankongsiri (2018) indicated that most of the sample group was Thai investors, male gender, aged between 26-35 years old, had investment experience from a year to 5 years, invested in the energy group, chemical petroleum, bank, and finance as the main, and had the average compensation at 5% per year. Furthermore, the investors holding the investment of Philip Fidher would get higher returns. The research of Benny (2018) revealed that the personal factor affected the investment decision of the investors more.

Conclusions

The researcher manages the research about the investment behaviors in the securities market of the southern retail investors during the Covid-19 pandemic, including synthesizing the results from this research. It indicates that the relationship between the personal factors and perception factors from the Covid-19 pandemic affects investment behaviors during the Covid-19 pandemic. Technological development is a rushing factor affecting investment behavior the most. Investors who quickly adjust to apply technologies can use them more rapidly for various transaction managements, reduce travel costs, save time, and obtain investment effectiveness. Moreover, the investors still focus on economic change and capital market conditions. Although they were worried about health, politics, and society, it is just a moderate level that can control and does not affect the investment. The different personal factors of gender and marital status do not affect investment behaviors during the Covid-19 pandemic. However, the age range, occupation, educational background, income, investment resources, and expenses burdens affect investment behavior differently in various aspects. During the time of variance in the capital market and economic uncertainty, the investors intend to generate profits from the price difference. They studied the information and analyzed the industry, including emphasizing the shares that reach growth in the future. The investors invest in a conservative form (safety first) during the earlier time of the pandemic, and they felt confident to invest more during the mitigation of the situation.

Recommendations

1. Health aspect; receiving the news that a beloved person, such as a movie star, infects with Covid-19, a person will get an effect on daily life. The investors should live their routine life more carefully and concordant with the advice or measure of the Ministry of Public Health;

2. Politics and social aspect; it identifies that the government has stability and ability toward various policies. The investor should follow the changes of policies from the government, including cooperating with the public sector for investment;

3. Economic aspect; it discovers that despite encountering the crisis condition, there is confidence that the economy will recover like before the Covid-19 situation. The investors should prepare for the self-readiness, such as capital, knowledge, and news follow about the economy, politics, society, and technology to support the rising economy for investing;

4. The capital condition situation; it reveals that the major shareholders are crucial in the investment decision. Hence, the investors should follow the movement of such investors to adjust their investment decision-making;

5. Technological aspect; it indicates that the Covid-19 outbreak affects the person to use the technology involved with the investment, such as online transactions or account opening. Hence, investors should study how to use the new technology more, such as applications giving knowledge about investment and listening to or reading the analysts' comments through an online system.

Further research

It should study relating to PEST affecting the investment behaviors in the securities market of southern retail investors during the Covid-19 pandemic, such as politics, economy, society, and technology, the PESTEL factor affecting the investment behaviors in the securities market of the southern retail investors during the Covid-19 pandemic, such as politics, economy, society,

technology, environment, and laws. Furthermore, it should study the factors impacting the investment decision-making in the securities market of the southern retail investors during the Covid-19 pandemic, such as security price, exchange rate, the difference in profits, risks, etc.

Because the research regarding the southern retail investors' behavior used the database of the investors from a security market, it might be a limitation on the scope and samples of the investors used for the study. It made the research result and result discussion about the investor's behaviors might not apply to describe the behaviors of the investor overall. If the study extension is needed, it should expand the scope of the population and random sampling of the investors to be covered more. It would enhance the research result to be beneficial and could apply to develop the capital market better.

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