THE BUDDHIST INTEGRATION FOR RISK MANAGEMENT AND DECISION-MAKING FOR THE INVESTMENT IN THE ONLINE FINANCIAL MARKETS

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Abstract

This article is part of the dissertation entitled "The Buddhist Integration for Risk Management and Decision-Making for the Investment in the Online Financial Markets." This is a qualitative research consisting of 3 objectives: 1) to study the risk management and decision-making in the online financial markets, 2) to study the Buddhist teachings that promote risk management and decision-making in the online financial markets, and 3) to integrate the Buddhist teachings with the risk management and decision-making for the investment in the online financial markets.

From the study, the research has proposed the model of the Triangles of Success comprising Mindfulness (Sati), Concentration (Samādhi), and Wisdom (Paññā) for integrating with the risk management and decision-making. The application of Mindfulness together with Concentration could help to identify the risks while the application of Wisdom together with the Buddhist teachings could help to reduce the risks of decision-making on the price prediction of commodity from using the indicator or mathematical calculations; this is because the investment in the online financial markets has a high risk and fluctuates throughout 24 hours. To make profits from Foreign Exchange markets, it is neither difficult nor easy. It depends on a person's mindfulness and the control of mind in making investment decisions. The risks are present at every moment of investment starting from the pre-investment, during the investment and post-investment. Therefore, mindfulness is the only way to avoid negligence. Only one mistake could lead to loss and damage to the investment.

Keywords: Investment in Online Financial Markets, Forex Market, Commodity, Risk Management, and Decision-Making

1. INTRODUCTION

At present, the situation of the world has changed rapidly in terms of politics, economy, society, and technological advances, resulting in investment patterns being adapted to the form of foreign exchange (forex) investment and online communities. The growing problems of fraud in the market are often caused by the greed of investors towards profit and want the reward without any hard work. Therefore, they usually become victims of fraud. Another reason is that the investors have problems in the way of thinking on working, such as the ignorance in forex trading and the problem in dealing with emotions which considers as a huge problem. Online investment is still new and unclear; therefore, in society, there usually happen a distortion of the reality and lack of skills for working in this area.

During the Buddha's time, the teaching on Right Livelihood ($Samm\bar{a}-\bar{a}j\bar{v}va$)¹, one of the constituents of the Noble Eightfold Path, was classified in the division of moral discipline ($S\bar{\imath}la$). To follow the teaching of Right Livelihood, it means to do business without causing any harm or violence to others. Those who have a way of life that is related to income generation, they must not create problems for the society from their business operations, and they must follow the teaching of Right Livelihood until they could develop themselves to achieve the ultimate goal in Dhamma. The economic activity is not an alienation to life; in fact, one could get on with it well. The combination of Contemplative Practice and work is not something new. Only there has not been anyone who studies it seriously and applies as one of the paradigms of economic activity in today's borderless world.

2. OBJECTIVES OF THE RESEARCH

This article is part of the dissertation entitled "The Buddhist Integration for Risk Management and Decision-Making for the Investment in the Online Financial Markets" consisting of three objectives:

- 1) to study the risk management and decision-making in the online financial markets,
- 2) to study the Buddhist teachings that promote the risk management and decision-making in the online financial markets, and
- 3) to integrate the Buddhist teachings with the risk management and decision-making for the investment in the online financial markets.

3. RESEARCH METHODOLOGY/RESEARCH DESIGN

There are 10 steps for the Research Methodology as follows:

- 1) Study the investment process in online financial markets
- 2) Study and identify risk factors that are the key elements of investing in the market on the MetaTrader 4 system
- 3) Study the modern sciences that use the risk management and decision-making
- 4) An in-depth interview with the investors and experts in risks and decision-making for investing in today's online financial markets
- 5) Apply knowledge or suggestions from experts in risks and decision-making to identify risk factors

¹ Vin.I.10

- 6) Explore the Buddhist teachings that help to promote risk management and decision-making
- 7) Interview with experts in Buddhism about the Buddhist teachings and its integration
- 8) Apply knowledge or suggestions from experts about the Buddhist teachings on risk management and decision-making
- 9) Apply the variables on risk and decision-making for investing in the market on the MetaTrader 4 system to test for the results
- 10) Summarize the integration of risk management and decision-making

This study is a qualitative research by using an in-depth interview for the data collection. The in-depth interview is defined into 2 dimensions: 1) Risk and decision- making for the investment in the online financial markets and the application methods, and 2) The use of Mindfulness and Wisdom in risk management and decision-making for the investment in the online financial markets and the application methods. The population used in the study is divided into 2 groups, as follows:

 1^{st} Group: Risk and decision-making for the investment in the online financial markets and the application methods; the key informants could be categorized as follows: 1) 5 successful investors who have at least 5 - 15 years of experiences on the investment in the online financial markets and high-level executives of overseas agents, 2) investors with fewer experiences who have been damaged from the investment in the online financial markets, 3) foreign investors who have experiences in the online financial markets for at least 5 – 15 years, and 4) local investors who have experiences between 3 – 8 years.

2nd Group: The use of Mindfulness and Wisdom in risk management and decision-making for the investment in the online financial markets and the application methods; the key informants included Buddhist monks with knowledge and experiences in the use of Mindfulness, Concentration, and Wisdom.

The questions for the research instruments are divided into 2 dimensions: 1) questions for investors in the risk management theory and decision-making for the investment in the online financial markets, and 2) questions for Buddhist monks in the use of Mindfulness and Wisdom in the risk management and decision-making for the investment in the online financial markets.

The research instrument inspectors consist of experts to validate the research instruments for interview.

4. RESEARCH RESULTS

The findings of the study reveal as follows:

- 1. From the results of the study on modern sciences that investors use to manage risk and make the decision for the investment in the online financial markets, the researcher would like to propose the risk assessment and decision-making for retail investors in the online financial markets according to the Risk-Based Approach (RBA) theory in order to improve the investment process in the online market of retail investors at present, as follows:
 - 1) The investment needs of investors
 - 2) A consideration whether the investment is immoral or illegal
 - 3) The reliability of the brokers

- 4) Laws that support the trading orders between brokers, agents, and investors
- 5) Online operating system and internet communication
- 6) A decision to open an online investment account
- 7) A consideration of the amount of money that is suitable for investment
- 8) The study of information and impacts before the trading in each of the following variables:
 - 1. Amount of Investment
 - 2. Margin and Leverage
 - 3. Margin Level
 - 4. Lot Size of Investment
 - 5. Change of Commodity Price
 - 6. The Overnight Rate (Swap Fee)
 - 7. Foreign Currency Rates used for Gold Exchange
- 9) Decision management under pressure

In testing the risk control of investment variables in the online financial markets on the MetaTrader 4 trading system, from the results of the investment policy tests defined in the risk control tests of the variable according to the small fish strategy testing the depth of water which could make profit of 53.92% within 48 hours on Crypto commodity selected according to the appropriateness of the capital used for testing and the commodity price volatility, it is found that the factors in choosing commodity for investment depend on the suitability of the expectations of each investor. In addition, the commodity price that has strong and rapid volatility will find that the overturn in the direction of the commodity price occurs in a short and frequent time, which causes the investor to reserve the initial capital in the high amount in order to insure the risk in the market. The rewards often have a direct variation with the greed and fear of the market of investors. Therefore, in online investment, the psychology of investing is very important.

The researcher reflects on the online investment through risk control of variables by using the policy to determine the investment size, the right time for investment and the impact on the capital from the price volatility of commodity selected for investment in each period, it is found that when the size of the investment is suitable with the cost and the commodity price volatility, the management for the survival of the company or the investors will be possible and will not cause any damage to the investment. Commodity price volatility is typical in the online financial markets which require the decision of the investor according to the Buy Low, Sell High strategy; therefore, investors should be aware that price volatility could occur at any time. If investors could control their mind, the investment decisions will not cause damage at all. Investors' decisions that are stress-free at the time of the market panic will result in a safe reward. To make profits from Foreign Exchange markets, it is neither difficult nor easy. It depends on a person's mindfulness and the control of mind in making investment decisions. The risks are present at every moment of investment starting from the pre-investment, during the investment and post-investment. Therefore, mindfulness is the only way to avoid negligence. Only one mistake could lead to loss and damage to the investment. In order to know the period in which the market is panic, it could be observed from the extreme volatility in the price of the commodity. Investors need to study the history of the commodity price volatility and see the price of the trading volume in order to assess the market status. Equanimity ($Upekkh\bar{a}$) could be used to support the wait for the right time for investment; investors should be aware that waiting with mindfulness is also one kind of investment as it helps to reduce mistakes in decision-making.

3.67 USD -19.15 USD 111.73 Datases 107.02 Balance **Equity Ribergins** 200,003 Margins 20.73 Free manging 82.45 Free margin 71.85 Margin level (%): 464.29 Margin level (%): 446.50 DTDLESO, patt 0.01 BTCUSD, sell 0.21 -9.44-10.085.77 STCUSB, sell 6.19 9500.55 → 9591.31 STOURD, self-0.10 -9.07 $0685.04 \rightarrow 8627.29$ -3.75 USD Battener: 185,85 Drusty: 16-1,90 1.72 BTCUSD, sell 0.10 Narake 2018-03-11 23:11:10 Free margin: 180,18 Margin level (%) 9 415.09 STOUSD, sell 0.10 2018-03-12-86-47-31 9535.65 → 9068.00 46.77 RETURNED, AND DUCK Profit: 53.92 -3.75Credit: 0.00 Deposit: 0.00 Withdrawal: 0.00 808 0

Figure 1 Example of Gain/Loss from Trading

Investors need to study the risk factors that arise from all 10 variables in the MetaTrader 4 trading system so that they could fully specify risk control strategy in investment and make the right decisions that are suitable for investment. Applied strategies do not have a fixed format. They vary according to the situation, depending on the experience and the temperament in the decision of the investor. After determining the strategies for eliminating or managing risks, investors must perform according to the plan with discipline, thus making the investment without any damage. Adjusting the investment image by offering risk management and decision-making based on the Risk-Based Approach theory could reduce the damage of risk as

much as possible by performing with the mathematical theory of investment in the assessment of volatility or a Theory of Commodity Price Fluctuations such as the theory by Elliott Wave, etc.

These theories could reduce some investment risks, but there is no theory that could be the answer to all investment decisions and the price direction that determines the reward of investors, causing investors to be able to profit from the market from time to time but sometimes they lose all investment that they have to quit from the market. The researcher reckons that these Western theories are still unable to meet the investment without any risk or able to eliminate the damage from investing in online financial markets. Therefore, the researcher would like to propose the Buddhist teachings to be used in risk management and decision-making,

2. From the results of the study on the Buddhist teachings that promote risk management and decision-making for the investment in the online financial markets, it is found that investors must manage wealth according to the Virtues Conducive to Benefits in the Present (*Ditthadhammikattha-samvattanika-dhamma*) in order to achieve benefits. Investors must also be diligent, perseverant in working, saving up and spending money wisely, and making friend with good people according to the Buddhist teachings on the Path of Accomplishment (*Iddhipāda*), Virtues for a Good Household life (*Gharāvāsa-dhamma*), and Bases of Social Solidarity (*Sangahavatthu*). For a trading investment that investors have to always confront with risk, they need to have a good decision by using the Analytical Reflection (*Yonisomanasikāra*), stay in strict discipline according to the *Mangala Sutta*, and able to solve problems by using the Four Noble Truth (*Ariyasacca*) – all of these will result the investors in better decision-making, able to reduce risks and the causes of ruin².

For the investors to be able to follow the abovementioned Buddhist teachings for achieving good results; they have to have stable mindfulness and concentration in order to reduce the 6 States of Temperament (*Carita*) that could disturb the investors' mind causing them unable to make a good decision. Therefore, investors should practice mindfulness by meditating and practicing Buddhist teachings consistently.

The benefit of using Mindfulness, Concentration, and Wisdom is to consider risks of the change in commodity price happening at that moment in order to understand the reality of the change which consists of causes and factors so that investors could make a decision from reality happening at that moment without the influence from the past variables. This is because situations from the past could arise from different causes and factors resulting in wrong prediction and decision. Investors could use this practice to assess risks. Therefore, the researcher would like to propose new knowledge from this study as in the model of the Triangles of Success comprising Mindfulness, Concentration, and Wisdom for integrating with the risk management and decision-making. The application of Concentration and Wisdom could help to reduce the risks from the wrong prediction of the commodity price from using the indicator or mathematical calculations. The assessment of commodity price volatility directly affects the sufficiency of investments.

² Pavutto P.A., (1993). Dictionary of Buddhism. SEVEN edition. Bangkok. Mahachulalongkornrajavidyalaya University, Page 377.

3. From the study, the researcher would like to propose a model on the Buddhist integration for risk management and decision-making for the investment in the online financial markets, the model of the Triangles of Success consists of Mindfulness, Concentration, and Wisdom. Mindfulness and Concentration could be used to consider risks in the investment process. Factors that are the key elements of investing in the MetaTrader 4 trading system are as follows: 1) Amount of Investment, 2) Margin and Leverage, 3) Margin Level, 4) Lot Size of Investment, 5) Change of Commodity Price, 6) The Overnight Rate (Swap Fee), 7) the Used Foreign Currency Rates, 8) Reliability of Broker, 9) Law that supports the trading orders, and 10) Online Operating System and Internet Communication.

Mistakes from having insufficient information and knowledge could also cause more risks in the investment. Therefore, investors should apply the following Three Qualities of a Successful Shopkeeper or Businessman (*Pāpanika-dhamma*): 1) Vision factors (*Cakkhumā*); divided into 2 types, namely, Physical-Eye is the way that people see beautiful objects while the other type is Dhamma-Eye. Dhamma-Eye is to have a shrewd vision that it could help the physical-eye to choose the right thing. Dhamma-eye must consist of faith and wisdom. Physical-Eye is for seeing and looking at objects. Dhamma-Eye is for making a decision by using wisdom, 2) Skillfulness factors (*Vidhuro*); to be skillful in the management with experiences in assessing risks for decision-making, and 3) Relationship factors (*Nissayasampanno*); to have a good network in online work which considered as a worldwide market. To have news from foreign sources or a group of people who support each other with information will help investors up-to-date with information which could reduce risks in the market and bring success to work.

Moreover, the Buddha mentioned that a person must contemplate first before doing. The Buddhist teaching that the researcher would like to mention now is the Right View (Sammāditthi). Right view can be developed through two factors: Paratoghosa; external factors like good friends or good social environments, and Yonisomanasikāra; internal factor like analytical thinking. Paratoghosa, in this case, is to learn information from others by using Yonisomanasikāra to contemplate whether the trading is worth the money or not and what is the true value and artificial value to it. If the investors have both Paratokosa and Yonisomanasikāra, the risks control would be possible.

Whenever a person has mindfulness, he/she will also have equanimity (*Upekkhā*) and the 4 Sublime States of Mind (*Brahmavihāra*). Whenever a person has no mindfulness, it will cause the work to fail. For anyone whose work is related to risk, they must have 10 times of mindfulness in order to not let the work go wrong. Whenever a person has concentration, he/she will be able to contemplate on the risks and have the wisdom to apply the Dhamma to resolve problems on risks and decision-making.

There are 6 types of Wisdom to be used for risk management and decision-making for the investment in the online financial markets which are: 1) *Sutamaya-paññā;* wisdom resulting from the study, 2) *Cintāmaya-paññā;* wisdom resulting from reflection and using trial and error, 3) *Bhāvanāmaya-paññā;* wisdom resulting from development or practice, 4) Inborn Insight; able to see wisdom since birth, 5) Operative Insight; wisdom that is full of knowledge and experiences, and 6) Realizing Insight; wisdom resulting from the realization in the present moment, truth and reality. The use of mindfulness and concentration to consider risks through these 6 types of wisdom will help to resolve all problems about risks and decision-making without any mistake.

5. CONCLUSION

The Buddhist integration for risk management and decision-making for the investment in the online financial markets is based on the use of mindfulness to consider problems or variables that cause risks and use wisdom for decision-making. Investors, therefore, must practice developing their mindfulness, training their mind to be in a calm state without any distraction, being mindful of the current state and situation, and training the mind to reduce the 5 defilements which are: 1) Greed (*Lobha*), 2) Hatred (*Dosa*), 3) Delusion (*Moha*), 4) Lust (*Rāga*), 5) Thought-Conception (*Vitakka*). Whenever a person has mindfulness, he/she will also have clearer wisdom resulting in better decision-making. Investors should practice meditation according to the 4 Foundations of Mindfulness (*Satipaṭṭḥāṇa*) and practice the body, speech, and mind to be mindful and stable. Investors should also practice the Buddhist teachings on *Ditthadhammikattha-samvattanika-dhamma*, *Iddhipāda*, *Gharāvāsa-dhamma*, and *Sangahavatthu*, together with *Ariyasacca* consistently so that they will be skillful in *Yonisomanasikāra*. When investors could do this, it will not be hard for them to be mindful, and they will be full of wisdom resulting in better and quick decision-making.

When entering the online trading process, which would require a thorough consideration of the current situation and moment, a trained mind would be able to consider risks and make fewer mistakes on decision-making. There will also be more secure for the investment. From the study on the overview of risk control tests, this market could give rewards tremendously, but also it can turn out to be a loss in the blink of an eye if the risks cannot be controlled and managed. Therefore, risk control and decision-making depend on the experiences and expectation of each investor. There is no fixed formula for success but rather depends on the individual's planning. There is, however, a similar framework for risk management that could be adopted, and if the investors could pull it off, it is beyond the expectation of the investment.

From the study, it is found that Mindfulness helps in observing risks in the investment. Investors should understand the meaning of property, know themselves, know which one is bad or dangerous, what are the factors of the problem or situation in order to reduce damage from their own greed. After that, investors should prevent bad things and cut off the ways leading to loss and damage. All of these would lead to gaining wisdom for risk management and decision-making for the investment in the online financial markets.

Wisdom gaining from the knowledge of modern sciences on the investment in the online financial markets and the psychology of investing could be used to manage risk and make a decision. The knowledge on the 6 States of Temperament (*Carita*) together with the types of meditation could be analyzed to find the suitable type of meditation according to each investor's temperament.

Wisdom could help investors to achieve prosperity and right view in Buddhism. Therefore, wisdom would result in a noble life. The most important thing in Buddhism in the investment is not the earned profits but rather the ability to keep the invested money so that it can continue to make profits in the future.

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