Casino Royale: A Comparative Analysis of Financial Literacy and Locus of Control on SMEs' Financial Behavior

Andi Meriam [a], Andi Dewi Angreyani [a], Agung Widhi Kurniawan [b], Muh. Ichwan Musa [b] and Muh. Yushar Mustafa [c*]

[a] *Department of Management, Universitas Andi Djemma, Palopo, Indonesia.*
[b] *Department of Management, Universitas Negeri Makassar, Indonesia.*
[c] *Department of Management, Sekolah Tinggi Ilmu Ekonomi Makassar, Bongaya, Indonesia.*

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Original Research Article

ABSTRACT

Knowledge is considered as the vital factor for firms in improving their capability and stability of SMEs, especially a financial literacy knowledge. Based on the literature, this study finds that due to lack of finance literacy knowledge, most of firms in Indonesia are not able to survive inside the business world that is full of competition and the dynamics of changing within particular periods. Unfortunately, lack of financial literacy knowledge also ultimately affects firms in Indonesia, particularly their financial behavior at both the organizational and individual levels, as well a locus of control of SME owners in controlling their business's financial management. However, effective and efficient financial management behavior based on financial literacy knowledge and locus of control skills that are proportional to the context of firms tends to be something that is often overlooked by

_____

Corresponding author: Email: yushar.mustafa@stiem-bongaya.ac.id;

business people. Thus, a lot of literature indicates that almost all SMEs in Indonesia do not have adequate business financial performance reports as a condition for obtaining business loans from financial institutions. Therefore, with the support of the above issues, this study then aims to conduct a comparative study, through the approach of quantitative research method, from two major cities in Indonesia to explore and identify how much financial literacy and locus of control influence financial management behavior in 130 firms, which are small and medium-sized enterprises as sample size of this study. The findings of this study theoretically discover that financial literacy affects firm's financial management behavior in both major cities of Indonesia, which are Makassar and Surabaya. The findings of this study are also expected to contribute positively to the managerial aspects, especially in providing detailed explanations and guidelines related to financial literacy, locus of control, and financial management behavior for policy makers as well as business owners. A detail recommendation for future research is also explained in the particular section of this paper.

1. INTRODUCTION

Literature indicates that research on small and medium-sized enterprises (SMEs) has increased and discussed globally, given the fact that the strategic role of this business unit is very significant, especially as one of the driving forces of the nation's economy such as job creation as well as one of important contributors to the gross domestic product [1,2]. In Indonesia, the popularity of SMEs is increasing [3], especially its strategic position in the national economy since 1998. This is due to the existence of SMEs that are quite dominant in the national economy e.g. national innovation improvement, etc. The Indonesian Ministry of Cooperatives and Small and Medium Enterprises reported that in terms of the number of units, SMEs had a share of around 99.99% (62.9 million units) of the total business actors in Indonesia in 2017 and had at least helped absorb around 97% of the national workforce [4,5].

2. MATERIALS AND METHODS

2.1 Financial Management and Literacy

Financial management refers to the strategic planning, organizing, directing, and controlling of a company's financial resources. It involves making informed decisions about how to allocate funds to maximize profitability and ensure the long-term financial stability of the organization [6]. Financial management encompasses various activities such as budgeting, forecasting, investment analysis, risk assessment, and financial reporting. It plays a crucial role in monitoring and managing the financial health of a company and making sure that resources are utilized effectively and efficiently to achieve the organization's goals and objectives [6,7].

Financial literacy refers to the ability to understand and apply various financial skills and concepts to make informed decisions regarding personal and household finances [7]. It encompasses the knowledge and understanding of financial concepts such as budgeting, saving, investing, borrowing, and managing debt. Financial literacy also involves the ability to analyze and assess financial risks, evaluate financial products and services, and make informed decisions to achieve long-term financial goals [8]. Being financially literate is crucial in today's complex financial landscape to make sound financial decisions and achieve financial security [6-8].

Moreover, based on the results of the 2019 National Financial Literacy and Financial Inclusion Survey (SNLIK) conducted by the Financial Services Authority (OJK) stated that the financial literacy index of people in Indonesia increased to 38.03% from the previous 29.66% in 2016 [5]. However, specifically in the SMEs sector, in 2016, the level of financial literacy was only 15.68%, so the results of this survey indicate that there is still low knowledge about financial literacy among SME actors and/or owners. With sufficient mastery of financial literacy, SME actors and/or owners are expected to be able to better manage business finances so as to have a positive impact on increasing income, especially income management for more productive long-term investment, so that this will also have a positive effect on the wheels of the national economy [6,9].

2.2 Locus of Control

One of the personality variables of the individual is belief i.e. locus of control (LOC) which consists of two types, namely: (a) internal LOC; and (b) external LOC. According to Kristanto [10], a person is said to have an internal LOC, if, he has confidence that the fate in his life is under his control; he considers that the results he achieves come from his own activity; He has the perception that the environment can be controlled by him so that he is able to make changes according to his wishes. Conversely, a person is said to have an external LOC if: he has the belief that it is the environment that has control over his fate or events; He assumed that the success achieved was controlled by the circumstances around him; He tends to be resigned to what happens to him without trying to make changes, so he tends to like the behavior of adjustment to the environment in order to stay afloat in the existing situation [9,10].

Subsequently, professionalism in financial management has always been considered as the most important concept in the discipline of financial science [1,2]. This is because financial management behavior is a determinant in terms of acquisition, allocation, and utilization of financial resources [11-13]. Based on this phenomenon, this study then indicates that there is a serious problem in the context of SMEs, namely the lack of knowledge level of SME actors and/or owners on financial literacy and LOC.

Based on the discussion earlier, especially the related issues as well as gap in the literature that have been described in the prior section, this study then wants to answer how do the financial literacy and LOC affect the financial management behavior of SME actors and/or owners who actively run their business in two major cities in Indonesia, namely Surabaya and Makassar.

Furthermore, this study, through an in-depth analysis of literature, finds that there are many studies that discuss the effect of financial literacy and LOC in one particular city, however few literatures are found that explore the effect of financial literacy and LOC on financial management behavior by comparing SMEs from two different cities. The most important thing is that, there is a research gap found which later becomes the novelty of this research, which is a special finding in the scientific literature related to the scarcity of research conducted in the developing countries, especially in Indonesia. Therefore, with the support of the background of the above problems, this study then formulated the research objectives, namely a comparative study of the effect of financial literacy and LOC on the financial management behavior of SMEs in Surabaya and Makassar.

Moreover, following the above explanation, this research is then expected to present research outputs that can make a positive contribution both theoretically and managerially, especially providing theoretical explanations related to the influence of financial literacy and LOC on financial management behavior. So that from this theoretical explanation, this study is able to provide newer treasures to the existing literature both by supporting and / or rejecting the results of previous research and providing additional scientific descriptions to the results of previous research. From the managerial side, the output of this research is expected to be a useful guideline for SMEs in managing their business units, especially better financial management in the business world and industries that are full of competition and rapid change. In addition, the results of this study are expected to provide recommendations for future research. This study also compares how financial literacy and locus of control affect the financial management of SMEs so that a comparison of the capabilities of the two big cities is obtained and can play an important role in management science both contributions in theoretical contexts, especially in innovation and business management and managerial contexts, namely guidelines for business actors and policy and/or regulatory determinants, and also as an effort to: (a) increase joint-research both at national and international levels; (b) institutional strengthening through increased research cooperation; (c) internationalization of research quality; and (d) optimization of the benefits of research results.

2.3 Research Framework and Hypothesis

Based on the previous discussion, this study builds the framework of concepts described in Fig. 1. The illustration in Fig. 1 shows that the first independent variable or X1, is financial literacy. Then, for the second independent variable or X2, namely the locus of control, and for the dependent variable, namely, the financial management behavior of SMEs. Then, from Fig. 1, this study builds a conceptual framework,

focusing on the analysis of the influence of the two independent variables, namely financial literacy and locus of control, on the dependent variable, namely SME financial management behavior. From this analysis, this study is expected to provide findings on whether independent variables have a role, including: (1) positive; and (2) significant to the financial management behavior of SMEs.

2.4 Research Design

This study is a survey which adopted a comparative design, and in this study, the object of research compared is the influence of literacy and locus of control on the financial management behavior of SMEs from two cities in Indonesia, namely Makassar and Surabaya. Subsequently, in quantitative methods, this study uses survey methods where the goal is to obtain data from certain places that are natural (not artificial) through survey tools, for example questionnaires and structured interviews [17,18].

2.5 Research Location and Period

The study was conducted in August-November 2023. The location selection is in Surabaya, East Java and Makassar, South Sulawesi. For sample selection, this study sorts out SMEs that meet the requirements specified in this study to then be used as a unit of research analysis.

2.6 Research Population, Sample, and Sampling Technique

The population of this study came from SMEs that met the requirements to be used as a unit of analysis of the research population unit. For sampling techniques, this study uses non-probability sampling technique, which is a technique that is not based on the laws of probability so that it does not provide equal opportunities for every element or member of the population to be selected into a sample

[15,16,19]. The number of samples in this study was 130 SMEs over 1,239 SMEs as the research population [4], that were active and officially registered with the Indonesian Ministry of Cooperatives and SME.

2.7 Data Source and Data Analysis Technique

The data sources used in the study are the first, namely primary data which includes: (a) data in the form of interview results obtained from tourism SMEs in Surabaya and Makassar, plus interviews with key informants who carry out SME activities; and (b) field observations. Then, the second or secondary source of data is data from reports or documents related to SMEs in Surabaya and Makassar. This study used data collection techniques through: (a) observation; (b) structured and in-depth interviews; and (c) documentation including questionnaires. Then, this research data analysis technique uses quantitative test tools, namely: (1) validity and reliability test; (2) R-Square test; (3) the hypothesis test through path coefficients measurement.

Moreover, this study applies (1) the validity; and (2) reliability test, the first examines accurately the actual content of the research, particularly the validation of all the variables of this study, whereas the latter is considered more stable in measuring the instrument consistently over time. This test is also performed in order to detect the degree of reliability values of all the variables in the research [20,21]. 11). Additionally, Bougie and Sekaran [21] also suggest that the construct validity is the mostly accepted approach among scholars due to that the values of average explained variance or AVE must be smaller than the composite reliability or CR, and each AVE value must be greater than 0.5. As such, this study is then supported to apply the construct validity approach.
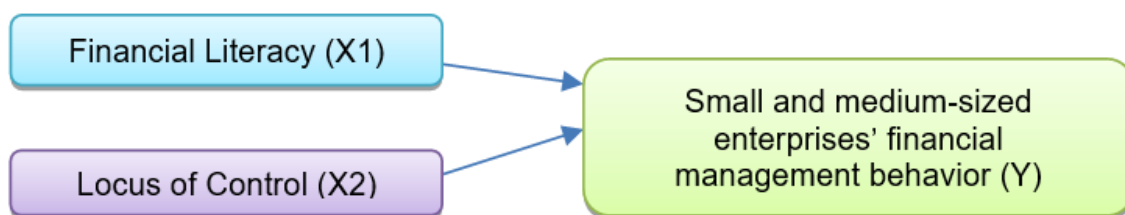

Fig. 1. Research framework

Table 1. Research hypotheses

No	Research Hypotheses
H1	Financial literacy has a positive influence on SME's financial management behavior in Makassar
H1	Financial literacy has a significant influence on SME's financial management behavior in Makassar
H3	Financial literacy has a positive influence on SME's financial management behavior in Surabaya
H4	Financial literacy has a significant influence on SME's financial management behavior in Surabaya
H5	Locus of control has a positive influence on SME's financial management behavior in Makassar
H6	The locus of control has a significant influence on financial management behavior in Makassar
H7	Locus of control has a positive influence on SME's financial management behavior in Surabaya
H8	The locus of control has a significant influence on financial management behavior in Surabaya

3. RESULTS AND DISCUSSION

3.1 The Results of Validity, Reliability, and R-Square Test

Based on Table 2, this study discloses that all variables in this research are valid for both Makassar and Surabaya research location. The reason is because r-count scores of all variables are higher than r-table scores [20,21]. Accordingly, this study implies that the variables and indicators of financial literacy, locus of control, as well as, financial management behavior of SMEs are valid, and can be used for the further statistical analysis. For the reliability test results, as suggested by Yushar et al. [17], if Cronbach Alpha scores of variables are higher than 0.80, then the indicators as well as variables are reliable. This study variables' Cronbach Alpha scores are higher than 0.80, as such, this study implies that all variables in this study are reliable and can be used for further statistical measurements. Moreover, r-squared is the proportion of the variance in the dependent variable that is explained by the independent variables in a regression model. The coefficient of determination shows how correlated one dependent and one independent variable are [18,22,23]. Also called r^2 (r-squared), the value should be between 0.0 and 1.0. The closer to 0.0, the less correlated the dependent value is. The closer to 1.0, the more correlated the value is.

Based on Table 2, it is shown that the result of R-Square test in Makassar is 0.735, and Surabaya is 0.668, and therefore, such scores are closer to 1.0, in other words, the dependent value is more correlated and it is supported to be user for further statistical analysis.

Table 2. Validity, reliability, and r-square test results

Makassar						
	C.Alpha	rho_A	Realiab.	r-table	AVE	R-Square
FB	0.817	0.819	0.891	0.159	0.732	0.735
FL	0.804	0.808	0.873	0.159	0.632	
LOC	0.830	0.833	0.887	0.159	0.663	
Surabaya						
	C.Alpha	rho_A	Realiab.	r-table	AVE	R-Square
FB	0.861	0.866	0.916	0.159	0.691	0.668
FL	0.817	0.818	0.879	0.159	0.691	
LOC	0.850	0.856	0.899	0.159	0.691	

3.2 The Results of Path Coefficient Test

Table 3. Path coefficient (hypothesis) test results

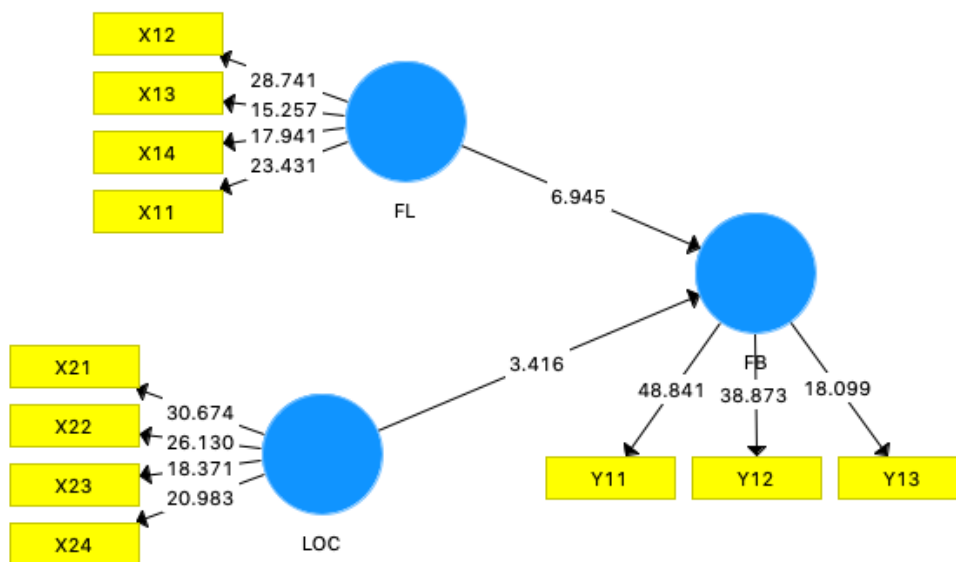| Makassar					
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
FL -> FB	0.592	0.592	0.079	7.458	0.000
LOC -> FB	0.301	0.306	0.083	3.650	0.000
Surabaya					
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
FL -> FB	0.509	0.512	0.085	5.976	0.000
LOC -> FB	0.341	0.343	0.082	4.189	0.000

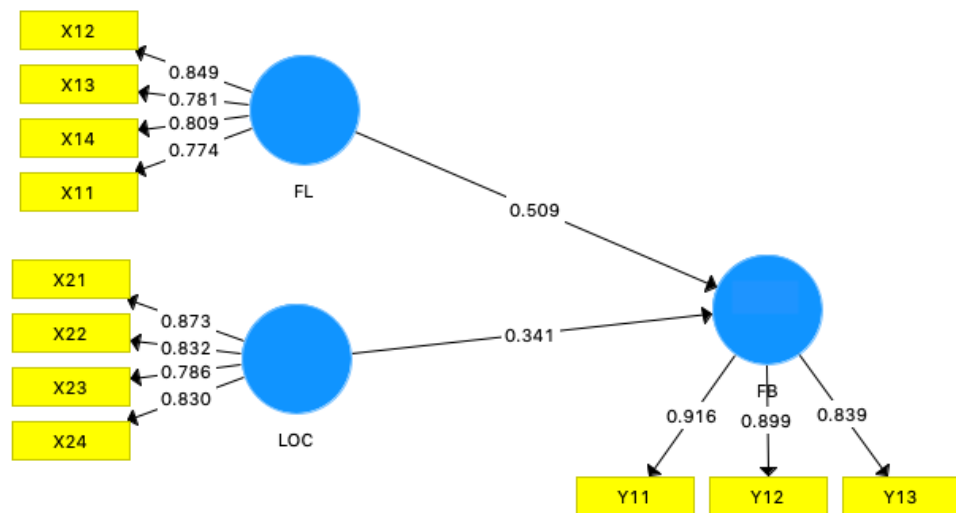**Fig. 2. Path coefficients test results (Makassar)**

Fig. 3. Path coefficients test results (Surabaya)

200

3.2.1 The effect of FL on FB (Makassar)

Based on Table 3, Fig. 2, and Fig. 3, this study finds that there is a positive effect of FL on FB at the research location in Makassar, with the path coefficient score is 0.592. Additionally, based on the score of P-Value, which is 0.000 or the p-value of 0.000 is an indication that CE affects PD significantly in a positive manner.

3.2.2 The effect of LOC on FB (Makassar)

Based on Table 3, Fig. 2, and Fig. 3, this study finds that there is a positive effect of PP on PD with the path coefficient score is 0.301. Additionally, this study implies that based on the score of P-Value, which is 0.000 or lower than 0.05 (significant), this study accordingly confirms that LOC has a positive significant effect on FB.

3.2.3 The effect of FL on FB (Surabaya)

Based on Table 3, Fig. 2, and Fig. 3, this study finds that there is a positive effect of FL on FB at the research location in Makassar, with the path coefficient score is 0.509. Additionally, based on the score of P-Value, which is 0.000 or smaller than 0.05 (significant), this study accordingly confirms that FL affects FB significantly in positive way.

3.2.4 The effect of LOC on FB (Makassar)

Based on Table 3, Fig. 2, and Fig. 3, this study finds that there is a positive effect of PP on PD with the path coefficient score is 0.341. Additionally, this study implies that based on the score of P-Value, which is 0.000 or lower than 0.05 (significant), this study accordingly confirms that LOC has a positive significant effect on FB.

Moreover, in line with the results of this study, it is important to conclude that both financial literacy and locus of control significantly influence SME's financial management behavior. The results, which are in earlier section, are also supported by the existing study from Rohmah [14], recently, as well as Angreyani [18] that confirm financial literacy affects firm's financial management behavior.

4. CONCLUSIONS AND RECOMMENDA-TIONS

It is important to conclude in this study that through the comparative analysis in two of many major cities in Indonesia, it is vital to help SMEs' owners to stimulate them to improve their knowledge in financial literacy. The main reason is due to there will be a financial issue exists inside SMEs, given the fact that SMEs are tend to be associated with the resource-limited firms, especially financial limitation. With the sufficient and training of financial literacy knowledge, the owners of SMEs tend to improve their locus of control indirectly that consequently also increase their financial management behavior. Although the findings of this study can be used as a guideline for SMEs owners in improving their whole firms' performance, nevertheless, due to some research limitations of this study, namely: research time and sample size, it is important to recommend accordingly that further study should be conducted in more than two major cities in Indonesia with more sufficient research time in exploring the role of financial literacy and locus of control on SMEs, or more bigger firms, e.g. large companies' financial management behavior. This study also recommends that increasing financial literacy knowledge and effective LOC control can be one of the most important factors in improving the financial performance of SMEs in Indonesia so that SME actors and/or owners are expected to be able to survive in a business world full of competition.

ACKNOWLEDGEMENTS

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Anggraini BD. The Influence of business owners' financial literacy level on financial management. J. Indonesian Vocational. 2018;4(1).
2. Billah ZIt. The role and obstacles of sharia fintech in MSMEs. Ar-Ribhu: Journal of Sharia Management and Finance. 2021; 2(2):256-66.
3. Dr. Subagyo MM, Hery Purnomo, M.M. MSME Management: Media Sains Indonesia; 2022.
4. BPK I. Indonesian MSME Law; 2023
5. OJK I. Data on Financial Literacy and Inclusion; 2022.
Available:[https://www.ojk.go.id/id/default.aspx]

6. Goyal K, Kumar S, Xiao JJ. Antecedents and consequences of Personal Financial Management Behavior: a systematic literature review and future research agenda. International Journal of Bank Marketing. 2021 Oct 28;39(7):1166-207.

7. Ouachani S, Belhassine O, Kammoun A. Measuring financial literacy: A literature review. Managerial Finance. 2021 Jan 28;47(2):266-81.

8. Anshika A, Singla A. Financial literacy of entrepreneurs: A systematic review. Managerial Finance. 2022 Feb 4;48 (9/10):1352-71.

9. Rumbianingrum W, Wijayangka C. The influence of financial literacy on firms' financial management behavior. Almana: Journal of Management and Business. 2018;2(3):156-64.

10. Sudati Nur S, Hanung Eka A, Dian Marlina V. MSMEs as Pillars of Building the Nation's Economy. Development Economics Research. 2019;4(2):137-46.

11. Kristanto RS, Suparwati YK, Atiningsih S, Wahyuni AN. The influence of HR competency, quality of financial information and locus of control on MSME performance with decision making as an intervening variable. JIEF: Journal of Islamic Economics and Finance. 2021; 1(1):46-67.

12. Mustafa, Muh Yushar, et al. Japanese enterprises role on SMEs development in Indonesia: inside Tobiko export and import. Hasanuddin Economics and Business Review. 2018;2(2):83-95.
    Available:
    http://dx.doi.org/10.26487/hebr.v2i2.1352

13. Lusardi A, Mitchell OS. Financial literacy and retirement planning in the United States. Journal of Pension Economics & Finance. 2011;10(4):509-25.

14. Rohmah N, Susbiyani A, Aspirandy RM, Cahyono D. The influence of financial knowledge, financial attitude and internal locus of control on financial management behavior. Ecobis.

15. Fitriana A, Hasibuan RR, Tyas KZ, Supriatin D. Assistance with Simple Financial Recording for MSME Actors in the Tourism Sector in Petahunan Village, Kab. Banyumas. PaKMas: Journal of Community Service. 2022;2(1):17-22.

16. Nurjannah N, Angreyani AD, Supri B, Musakirawati M, Marwan M. We are the champions: towards athlete achievement, sports promotion, and sports stress management. 2022.

17. Yushar, MM., Abdi A., Nurlaely R, Dewi AD, Riwayat A, Nurjannah N. The Rise of Skywalker: The Critical Vehemence of Customer Loyalty within the E-commerce Platform. Asian Journal of Education and Social Studies. 2023; 41(2): 57-67.
    Available:https://doi.org/10.9734/ajess/2023/v41i2893

18. Angreyani AD. Comparative Analysis of Financial Statements with a Financial Ratio Approach: Study Case PT. Indofood Sukses Makmur Tbk. and PT. Siantar Top Tbk. Period 2022. Economics and Business Journal (ECBIS). 2023;1(4):483-94.
    Available:http://ecbis.net/index.php/go/article/view/61

19. Anggarini DR. Contribution of MSMEs in the tourism sector to the economic growth of Lampung Province 2020. EKOMBIS Review: Scientific Journal of Economics and Business. 2021;9(2):345-55.

20. Sugiyono D. Quantitative research methods and R&D. Bandung: Alphabet. 2010;26-33.

21. Bougie, R. and U. Sekaran, Research methods for business: A skill building approach John Wiley & Sons; 2019.

22. Widodo ZD, Bangun R, Santosa S, Putra VD, Yudawisastra HG, Angreyani AD, et al. Introduction to Management. Widiana; 2023.

23. Angreyani AD. Financial performance and effectiveness on debt management in state-owned enterprise pharmaceutical sector period 2004-2016. JBMI (Journal of Business, Management and Informatics. 2018;14(3):193-204.
    Available:https://doi.org/10.26487/jbmi.v14i3.2863