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THE NEGATIVE EFFECTS OF MENTAL ACCOUNTING ON THE DECISION-MAKING PROCESS

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Abstract:

The term mental accounting is one of the most used modern accounting terms in the financial decision-making process for consumers, and despite the widespread use of mental accounting among different consumers, there is still a gap in the understanding of mental accounting; That is why this study provides a framework for understanding some of the foundations upon which mental accounting is based. This study also provides a general description of the concept of mental accounting; In addition, this study discusses the various negative effects directly related to the use of mental accounting, which the decision maker is exposed to when making the outsourcing decision; Therefore, this research focused on studying the relationship between rationalizing the negative effects of mental accounting in the process of making the outsourcing decision and increasing its effectiveness. This study presented a suggested approach to rationalize these negative effects in order to increase the effectiveness of the outsourcing decision. The study suggested that rationalizing the negative effects of mental accounting in the process of making the outsourcing decision is expected to affect the increase in the effectiveness of this decision.

Keywords: Mental Accounting, Decision-Making, Process

INTRODUCTION

Richard Thaler is considered the first to use the term "Mental Accounting", as he mentioned this term in the article "Using Mental Accounting in Consumer Behavior Theory". Through the article, he analyzed consumer behavior using mental accounting (145: Mascarenas & Yan, 2017). Mental accounting is used in financial decision-making (34: Musura & Petrovecki, 2015). The consumer divides his personal financial activities into a set of mental accounts related to income and expenditure (198: Sheng et al., 2017). In this division, a set of implicit criteria is used to track its personal resources, which is similar to the way companies use traditional accounting systems to track their own resources. The way to monitor consumer financial behavior; (Ramesh et al., 2014) where mental accounting is closely related to consumer financial behavior, Bi & Liu, 2014: 2) It refers to a set of defined processes It is used by the consumer to organize and keep track of his personal financial activities. (Xiao & O'Neill, 2018:448) and since consumer decisions must be fairly consistent and logical, the consumer is often irrational in making his financial decisions; (Hariyadi & Mardjono, 2016). The mentality in explaining the different motives of the consumer in making illogical financial decisions; Hu et al., 2015: (1) It is also used in predicting consumer financial decisions in different situations.) 162: Liaw & Le, 2017. The study of mental accounting allows understanding the negative effects of mental accounting on the financial decision-making process, and then it can be reached To explain the reasons for the financial decisions of consumers, and thus populations and markets, as well as organizations and businesses. (Anolam et al., 2015: 100) It has been proven that when the consumer makes financial decisions on behalf of organizations and companies, he is exposed to the same negative effects of mental accounting that he is exposed to when making his personal decisions, as the consumer uses similar mental accounting rules when making financial decisions for his person Or to others. (142: Osseiran, 2017) The decision-making process includes the outsourcing decision, as outsourcing has become a strategic necessity for companies that seek to reduce costs in light of the developments of globalization, and the increasing aspirations of consumers. (505: Gerbl et al., 2015) and indicates « Outsourcing refers to acquiring products or services from external parties rather than performing them internally, in order to focus on core activities, increase production efficiency, and thus maximize profitability. (60: Atkinson et al., 2015) The decision is to make the outsourcing decision under the conditions of maximizing the functional interest; (Meixell et al., 2014): However, the decision-maker is not completely logical; (Momen et al., 2016: 1048) he is like other consumers subject to the various negative effects of mental accounting, Walt It may lead him to

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make irrational decisions that have negative consequences. (14): Konstantinidis & Katarachia, 2015.

The study Problem

The basis of the problem for this study is the following question: Is it possible to rationalize the negative effects caused by the mental accountability of the decision maker in the process of making the outsourcing decision, and to allow for an increase in the effectiveness of this decision, or is it not possible to rationalize these negative effects, and they must occur? The aim of the study is that the main objective of this study is to explore the different forms of negative influences of mental accounting in the process of making the outsourcing decision, in order to rationalize these negative influences, and then the effectiveness of the outsourcing decision can be increased.

The importance of study

This study has a theoretical and practical significance. In theory, it incorporates the concept of mental accounting into a new field of outsourcing decision making. As for the practical aspect, it works to rationalize the negative effects of mental accounting in the field of outsourcing decision-making, where the outsourcing decision is one of the important strategic decisions, due to the presence of several alternatives that require choosing the appropriate alternative, as the wrong choice of one of the alternatives may have negative results, and may carry The company losses.

Previous studies

Dr. Richard presented a paper entitled Questions of Mental Issues, which was published in the Journal of Behavioral Decision Making, and includes how mental accounting leads to irrational behavior in investment and spending, and it is worth noting that Dr. Richard is a professor of economics at the University of Chicago Booth College of Business

The essence of this theory is the exchangeability of money; What is the unity of the state of money Regardless of its origins or intended use, individuals should treat money as permanently fungible when distributed between different accounts either in a budget account (daily living expenses), discretionary spending account or wealth account (savings and investments) in order to avoid Bias in mental accounting.

They must also give the same value in dollars whether earned from labor or given to them, but Thaler notes that this principle is frequently violated especially when winding profits are made. For example, individuals consider a tax refund from the IRS as given money; They often feel free to spend on things that were left to discretionary spending, but in fact the recovery of this money does not change the fact that it was the property of the individual in the first place and the return of it is not a gift, it is more taxed and therefore should be treated as ordinary income.

Mental accounting is a theory that describes people's thinking about money, or the way people think about the ways of spending and investing, and this theory indicates that people coordinate their financial activities by taking financial decisions from a soft division of their money through mental accounts, these money is spent either entertainment Or educational or other, and this concept in psychology is considered a shift from the theory of traditional economic to the theory of psychological economy, and therefore the spending decisions are based on the benefit and the benefit of it.

The concept of mental accounting first appeared in psychology with studies of human spending behavior associated with sunk costs, i.e. money spent on a future event that cannot be recovered, and from which studies of psychological research in mental accounting have since expanded to include more in-depth analyzes of spending behavior as well as how Opening and closing mental accounts and how to divide income into accounts.

The most important evidence for the concept of mental accounting in psychology is represented by the following:

Evidence for Fixed Costs: An early mental accounting study examined whether people would attend a basketball game in the middle of a snowstorm. Those who bought a ticket in advance chose to go to see the game, since, despite their unwillingness to drive in bad weather, in turn decide People who plan to buy a ticket in the game stay at home to avoid driving in bad conditions. From which this difference can be attributed to the observation that for advanced ticket holders, the mental arithmetic of watching a basketball game remains open until the match is attended, and if the game is not attended, the mental arithmetic may remain open indefinitely which may be a mental nuisance affecting the Mental.

Manual of Assigning Activities to Accounts: Psychological research that investigates the assignment of activities to mental computations presents several scenarios as follows: 1- Imagine that a person has spent an amount of money on a ticket to go to a concert, and when he arrives at the concert, he realizes that he has lost the ticket he bought, Here we can look at the individual really wants to see the concert, he should buy another ticket of the same value, and wonder if he really will buy it or not. 2- Imagine that a thousand went to the concert without a ticket from the original and plans to buy one there, and when he looks at the wallet, he finds that he cannot buy the ticket because it is a high

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amount, so will he make the purchase or not. People are less likely to buy a ticket after losing a ticket, compared to losing money when buying it for the first time, and this goes against traditional psychoeconomic theory; Because the scenarios are economically equivalent in both versions, choosing to skip the party means we have less money and the option to watch the party means we have a lot more money.

Evidence of transaction utility: Psychological research reveals the utility of transactions, i.e. the perception and experience of results, as changing the buying context makes people willing to pay different and different prices for the same specific product, as economic theory predicts that willingness to pay should not be influenced by factors such as the source of the product, and research reveals Mental accounting that this is not actually the case and that people perceive and experience results differently depending on the context, and the same beer is charged to different mental accounts based on the particular circumstances of the purchase.

Mental accounting guide in real life: I studied mental accounting with virtual scenarios such as previously described and in the field of a varied population group. In this context, one of the studies investigated mental accountability by conducting a field study on taxi drivers, where the study found that drivers are bored to work for longer periods during the days when they do not earn money. As for the days when they earn, they end their work earlier. This is the mental account they have in their possession of a good amount of money that they will leave early, and this is the opposite of the economic theory, which states that they will work more at the most earning

The importance of mental accounting in psychology: Mental accounting shows that psychological economic theory cannot always explain human behavior in spending, mental accounting shows that money is not always treated as a condition for wealth, psychological factors must be taken into account when it comes to earning or spending money

Mental accounting in investment

People tend to have a mental accounting bias in investing as well. Many investors split their money between safe and speculative investment portfolios on the assumption that they can prevent negative returns from speculative investments from affecting the total investment portfolio, in this case the difference in net wealth None regardless of whether the investor has several investment portfolios or one large portfolio, and the only difference between these two cases is the amount of time and effort it takes for the investor to separate the portfolios from each other.

Mental accounting often leads investors to make irrational decisions. Thaler provides an example of loss aversion using the industry-leading theory of Daniel Kahneman and Amos Terfxi. Here is the example: An investor owns two stocks, one of which is a winner and one is a loser. The investor must sell one of the shares to make money.

An example of mental accounting

People don't realize that rational accounting thinking seems logical but in fact it is very illogical, for example, some people set aside a fund for holidays or buy a new home and at the same time they hold credit cards with large debts, they are more likely to treat money This private fund is different from debt-repayment funds although transferring funds from the debt-repayment process increases the interest payments, reducing their overall net worth.

It is considered illogical to save money in a fund to earn little through it or not actually benefit from it, and at the same time keep credit cards whose debts double annually, which leads to the loss of the value of any interest earned from saving, and for this it is preferable for individuals to pay off their exorbitant debts before they accumulate from these funds the savings.

The solution to this problem seems straightforward, however, many people do not act this way and the reason is that the value of money differs for people, for example, many people feel it is difficult to give up money saved to buy a new home or to educate their children in college, even if it is The move is the most sensible, so it remains popular to save money in an interest-free or savings account while taking on outstanding debt.

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Previous studies related to the subject of the study were analyzed through the following points:

Study (Bonner et al., 2014) This study aimed to examine the impact of mental accounting on the breakdown of the income statement items; The study concluded that the evaluation of the users of the financial statements for the performance of companies varies according to the way the information is presented, and this is affected by mental accounting; The users of the financial statements view the multiple elements of profits as multiple positives, and they reject losses; Therefore, profits are detailed, and losses are aggregated in the income statement, with the aim of influencing the decisions of users of the financial statements; The study recommended conducting more studies on the impact of mental accounting in the field of detailing the elements of financial statements.

A study (Liu & Chiu, 2015) This study focused on examining the status of sales within the framework of mental accounting, and the effect of price discounts on sales volume; It was found that the consumer evaluates the event of purchasing the product according to the difference in the time of purchase, as he considers his early purchases as savings rather than expenses; I also found that the consumer is aware of false values when describing discounts in percentages, as he prefers to buy one unit of a product, and get the second for free (100% discount on the second unit) than buying two units and getting a 50% discount; I also found that the consumer does not realize The return on cost in the case of acquiring a group of products at an inclusive price; the study recommended companies to take advantage of the negative effects of mental accounting on the consumer in increasing the volume of sales

Study (Anolam et al., 2015) This study aimed to examine mental accounting practices (classification - allocation - time range of allocation) on the profitability of companies in the city of Owerri. Its expenditure, just as the separation of income into independent mental accounts, leads to the inability of funds to transfer easily between different accounts, as well as the time range of allocation affects the method of spending, so the study recommended the necessity of categorizing income in the books of accounts without looking at its source or the purpose of its use.

A study (Loureiro & Haws, 2015) This study examined the positive impact of mental accounting on the flexibility of expenditure classification; She explained that mental accounting provides a mechanism for planning and monitoring spending, by creating a set of mental accounts, with restrictions on spending from these accounts; I have found that mental accounting has a positive effect on spending control; The study recommended conducting more research in the field of the relationship between consumer income classification and the probability of spending more money according to this classification.

A study (Hariyadi & Mardjono, 2016) The study aimed to examine the role of mental accounting in influencing the purchase decision of the consumer; I have concluded that a product that is similar to the original product in quality, and is sold at a price lower than the price of the original product, has a positive impact on the consumer's purchase decision, because it is affected by one of the effects of mental accounting, which is the reference mental price, where the consumer uses the price of the original product as a criterion for comparison; The study recommended the need for companies to study the mental accounting of the consumer because it has the most influence on his purchase decision.

Study (Osseiran, 2017) This study sought to examine the role of mental accounting in the financial decision-making process at the societal level; The results of the study revealed that the negative effects of mental accounting are not limited to the personal decision-making process, but extend to the societal decision-making process, and it was found that the consumer uses identical accounting rules when making a financial decision for himself or for others; The study recommended conducting future research on the role of mental accounting in aligning costs with returns for creditors and debtors.

A study (Mascarenas & Yan, 2017) This study focused on analyzing the relationship between the mental accounting of the investor and the design of investment portfolios; It has concluded that the investor's previous experiences affect his decision-making process in light of the fear of exposure to risks, which leads to decisions that reduce financial returns in order to avoid risks; The study recommended conducting more studies related to the role of mental accounting in investment markets.

Study (Fritzell & Strand, 2018) This study aimed to clarify the role of mental accounting in the negative impact of neglecting the opportunity cost of money and time; It found that the consumer ignores thinking about alternative ways of spending money when making a purchase decision, and the study recommended that the opportunity cost should be taken into account when making a monetary or time decision.

Study (Promsivapallop et al., 2015) This study sought to reveal the factors affecting the decision-making of outsourcing in hotels in Thailand through the perspective of the transaction cost economy approach; I concluded that the input to the cost economy of parameters was not an influential factor in making the outsourcing decision in hotels in Thailand; As the performance of hotel services internally achieves cost savings compared to outsourcing its performance externally, due to the large economies of scale for major hotels; The study recommended smaller hotels to outsource the performance of hotel services to take advantage of the economies of scale for the external contractor.

A study (Bals et al., 2016) The study aimed to explore the motives of the outsourcing decision-making process and internal performance; She indicated that the motives for making the outsourcing decision are reducing costs and transferring risks. I have found that the decision maker tends to cancel some of the previous outsourcing decisions, and reconfigure supply chains with the aim of transferring external services to closer locations, or reintegrating outsourcing activities back into the company; The study recommended further research on the outsourcing decision-making process and internal performance.

Study (Mburu & Rotich, 2017) This study focused on identifying the determinants of the outsourcing decision for customer service activity in Kenya; The study concluded that the determinants of the outsourcing decision are: cost reduction, risk sharing, and customer satisfaction; The study recommended companies in Kenya to apply outsourcing in order to reduce costs and achieve customer satisfaction, with the need to verify the ability of the external contractor to perform the tasks assigned to it.

A study (Altin et al., 2018) This study attempted to explore the determinants of the outsourcing decision in the field of hotel revenue management; I have found that hotels take the decision to outsource a specific activity when this activity is related to a high level of uncertainty, or because of the hotels' low ability to perform this activity, or because of the specificity of the assets associated with the performance of this activity; The study recommended hotels to accurately assess the level of these three determinants (degree of certainty - ability to perform - specificity of assets) before making the outsourcing decision.

A study (Montaseb et al., 2018) focused on examining the factors affecting outsourcing decision-making in small and medium-sized companies; It has concluded that the factors affecting the decision to outsource are positive, such as: reducing costs, converting fixed costs to variable ones, improving service quality, and increasing focus on core competencies; negative factors such as: hidden costs, loss of knowledge, supplier problems, and low employee morale; has The study suggested a practical framework that contributes to the outsourcing decision-making process. The study recommended using the proposed framework because of its effective role in the outsourcing decision-making process.

Analysis of previous studies

Analyzing previous studies, the researcher notes the following:

Some studies, such as: (Liu & Chiu, 2015), and (Hariyadi & Mardjono, A.16 6) have been concerned with examining the role of the negative effects of mental accounting in the purchasing decision process, such as: (Considering early purchases as savings - not realizing the return on cost – Discounting the largest percentages (the reference mental price) in order to reach the way in which the consumer's mind works when making a purchase decision, and then maximizing the companies' benefit in increasing sales.

The study (Anolam et al., 2015) also focused on addressing some of the other negative effects of mental accounting when making financial decisions on the profitability of companies, such as: (classification - allocation - time range of allocation) of financial resources; Optimum use of available financial resources.

The study (Bonner et al., 2014) focused on examining the role of one of the negative effects of mental accounting on the investment decisions of users of financial statements, which is (the way of presenting information), and how to employ this negative impact in the interest of companies.

The study (Mascarenas & Yan, 2017) also focused on examining the role of one of the negative effects of mental accounting, which is (fear of exposure to risks) on the decision-making process. Financial returns to avoid risks.

While the study (Fritzell & Strand, 2018) aimed to clarify the role of mental accounting in the negative impact of consumer neglect of the opportunity cost of money and time; Which leads to inefficiency in spending money.

As for the study (Osseiran, 2017), it sought to examine the role of mental accounting in the financial decision-making process at the societal level; It found that the consumer uses the same accounting rules when making the financial decision for himself or for others. While the study (Loureiro & Haws, 2015) differed with previous studies; This study dealt with the positive impact of mental accounting on the flexibility of expenditure classification, and the study saw that mental accounting has a positive impact on spending control. While the study (Promsivapallop et al., 2015), the study (Bals et al., 2016), and the study of , (Mburu & Rotich, 2017), the study of (Altin et al., 2018), and the study of (Montaseb et al., 2018) the determinants, motives, or

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factors affecting making the outsourcing decision, which are cost reduction, risk sharing, degree of certainty, and ability to perform Asset privacy, focusing on core competencies, improving service quality, and achieving customer satisfaction. After reviewing and analyzing previous studies, the researcher was able to reach the following:

- Most of the studies that dealt with mental accounting agreed that there are negative effects of mental accounting in the financial decision-making process, whether the consumer's decision is for himself, or for others; As the consumer uses the same accounting rules when making the financial decision for himself or others.

These negative effects are represented in: the classification of funds on the basis of the effort expended, and the inability to Money for exchange, early purchases as savings, reference mental price, not realizing return on cost, discounting larger percentages, neglecting opportunity cost, underestimating time, fear of exposure, way of presenting information.

Steps for applying outsourcing in the company under study

The process of applying outsourcing in the company under study goes through several steps, namely:

Examination of the internal activities of the company by the accountants of the cost department, in order to determine whether each activity adds value or not, and then determine the basic activities that will be performed within the company, which are activities that may become a source of danger to the competitive position of the company if they are performed externally; Transferring the performance of non-value adding activities, which are not related to the company's core business, to a more specialized external contractor, to perform them at a lower cost.

- Develop a detailed performance model for the application, which is prepared by the accountants of the cost department, and it includes data on application costs, implementation time, data of workers who will be laid off after application, implementation risks, and how to reduce these risks.

Preparing the final report, which includes notes on the activities appropriate for outsourcing, and these notes are submitted to the decision maker, as the role of the cost department accountants is limited to providing reports and recommendations only, and not making the decision to outsource.

- Selection of the external contractor, the external contractor is selected based on several objective criteria such as cooperation, high quality, speed of delivery, and low cost.

- Writing the contract, the responsibilities of the company and the external contractor are specified in the contract, as well as technical specifications, quality level, inspection system, receipt dates, financial compensation, penal conditions in case of non-implementation of the contract terms, contract termination system, how to settle disputes, and submission legal.

The accountants of the cost department are keen to follow up the performance in every step of the application of the outsourcing in order to ensure the safety of the application, and to achieve the desired goals.

Study results, recommendations, and future studies

First, the results of the study

Through the theoretical and applied study, the most prominent results that have been reached are:

- The study of mental accounting allows understanding its negative effects on the financial decision-making process, and then it is possible to reach an explanation of the reasons for financial decisions of the consumer, and thus the population and markets, as well as organizations and companies.

When the consumer makes financial decisions on behalf of companies, he is exposed to the same negative effects of mental accountability that he is exposed to when making his personal decisions. The consumer uses similar mental accounting rules when making financial decisions for himself or others.

- The corporate financial decision-making process includes the outsourcing decision, as outsourcing has become a strategy for companies seeking to reduce costs in light of globalization.

- It is logical to assume that the decision maker makes the outsourcing decision under the conditions of maximizing the functional interest; However, the decision maker, like all consumers, is subject to the negative effects of mental accountability, which may lead him to make irrational decisions that have negative consequences.

- Awareness of the negative effects of mental accountability that the decision maker may be exposed to when making the outsourcing decision was able to rationalize these negative effects, and thus increase the effectiveness of the outsourcing decision.

- The case study proved that the negative effects caused by mental accountability for the outsourcing decision-maker can be rationalized, allowing for an increase in the effectiveness of the outsourcing decision. The case study also demonstrated the effectiveness of the proposed approach.

Secondly, the recommendations of the study

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Based on the findings, the researcher recommends the following:
- The tendency to teach mental accounting in colleges and higher commercial institutes because of its role in explaining the different motives of the consumer in making illogical financial decisions.
- Encouraging decision-makers in companies to study mental accounting, as its study helps to understand the negative effects of mental accounting, and its impact on financial decision-making, and then be able to avoid the shortcomings that their decisions show.
- Submitting proposals to Egyptian professional bodies and institutions specialized in issuing standards and guidelines, with the aim of assisting them in issuing standards and guidelines that contribute to limiting the negative effects of mental accounting in the outsourcing decision-making process.
- Re-evaluate the companies' previous outsourcing decisions annually, using the proposed approach contained in this study, which has proven effective by application in the company under study, with the aim of rationalizing the negative effects of mental accounting that the decision maker may have been exposed to when making the outsourcing decision, and then increasing the effectiveness of the outsourcing decision.

REFERENCES

1. Altin, M., Uysal, M., & Schwartz, Z. (2018). Revenue management outsourcing: A hybrid model of transaction cost economics and organizational capability. Cornell Hospitality Quarterly, 59(2), 112-124.
2. Anolam, O. M., Okoroafor, S. N., & Ajaero, O. O. (2015). Effect of mental accounting on corporate profitability. West African Journal of Industrial and Academic Research, 14(1), 100-114.
3. Atkinson, M. A., Bayazit, O., & Karpak, B. (2015). A case study using the analytic hierarchy process for IT outsourcing decision making. *International Journal of Information Systems and Supply Chain Management (IJISSCM)*, *8*(1), 60-84.
4. Bals, L., Kirchoff, J. F., & Foerstl, K. (2016). Exploring the reshoring and insourcing decision making process: toward an agenda for future research. *Operations Management Research*, *9*(3), 102-116.
5. Bi, W., & Liu, M. (2014). Product demand forecasting and dynamic pricing considering consumers' mental accounting and peak-end reference effects. *Journal of Applied Mathematics*, *2014*.
6. Bonner, S. E., Clor-Proell, S. M., & Koonce, L. (2014). Mental accounting and disaggregation based on the sign and relative magnitude of income statement items. *The Accounting Review*, *89*(6), 2087-2114.
7. Fritzell, G., & Strand, L. (2018). The Opportunity Cost Neglect of Money and Time: The Role of Mental Budgeting.
8. Gerbl, M., McIvor, R., Loane, S., & Humphreys, P. (2015). A multi-theory approach to understanding the business process outsourcing decision. *Journal of World Business*, *50*(3), 505-518.
9. Hu, Y., Li, J., & Ran, L. (2015). Dynamic pricing for airline revenue management under passenger mental accounting. *Mathematical Problems in Engineering*, *2015*.
10. Liaw, S. Y., & Le, T. M. (2017). Under interruptive effects of rarity and mental accounting, whether the online purchase intention can still be enhanced even with higher search costs and perceived risk. *International Journal of Business and Management*, *12*(8), 160-174.
11. Liu, H. H., & Chiu, Y. Y. (2015). Sales framing, mental accounting, and discount assignments. *Asia Pacific Management Review*, *20*(4), 201-209.
12. Loureiro, Y. K., & Haws, K. L. (2015). Positive affect and malleable mental accounting: an investigation of the role of positive affect in flexible expense categorization and spending. *Psychology & Marketing*, *32*(6), 670-677.
13. Mascareñas, J., & Yan, F. (2017). How People Apply Mental Accounting Philosophy to Investment Risk?. *International Journal of Economics and Financial Issues*, *7*(3), 145-151.
14. Mburu, E. W., & Rotich, G. (2017). Determinants of customer service outsourcing decision among organizations in Kenya: A case of Orange Telkom Kenya Ltd. *International Academic Journal of Human Resource and Business Administration*, *2*(3), 632-652.
15. Meixell, M. J., Kenyon, G. N., & Westfall, P. (2014). The effects of production outsourcing on factory cost performance: an empirical study. *Journal of Manufacturing Technology Management*.
16. Momen, O., Esfahanipour, A., & Seifi, A. (2016). Revised mental accounting: a behavioral portfolio selection. In *12th international*

conference on industrial engineering (ICIE 2016). January (pp. 25-26).

17. Montaseb, M. M., Ragheb, M. A., Ragab, A. A., & Elsamadicy, A. M. (2018). The Affect factors of SMEs' outsourcing decision making. *The Business & Management Review*, *9*(3), 271-278.
18. Musura, A., & Petrovecki, K. (2015). MENTAL ACCOUNTING AND RELATED CATEGORIZATIONS IN THE CONTEXT OF SELF-REGULATION. *Journal of Business Management*, (9).
19. Osseiran, A. (2017). *Mental accounting and public choice* (Doctoral dissertation, University of Warwick).
20. Promsivapallop, Pornpisanu et al. (2015). "Factors Influencing Hotel Outsourcing Decisions in Thailand: Modifications to the Transaction Cost Economics Approach", Journal of Hospitality & Tourism Research, Vol. 39, No. 1, February .
21. Ramesh, A., Dew, N., Read, S., & Sarasvathy, S. D. (2014, January). The mental accounting of resource tradeoffs during the entrepreneurial plunge decision. In *Academy of Management Proceedings* (Vol. 2014, No. 1, p. 12141). Briarcliff Manor, NY 10510: Academy of Management.