

An Analytical Study of Ship Hull Insurance in the Liquidity and Profitability of the National Insurance Company

Warqaa Ahmed Irzooqi Al-Shaikhli^{1*}; Dr. Tahani Mahdi AL-Yasiri²; Dr. Hanan Abdullah Hassan³

^{1*}Republic of Iraq, Ministry of Higher Education and Scientific Research, University of Baghdad, Higher Institute of Accounting and Financial Studies, Finance Department, Insurance Major.

^{1*}warkaa2019@gmail.com

²Assistant Professor, Republic of Iraq, Ministry of Higher Education and Scientific Research, University of Baghdad, Higher Institute of Accounting and Financial Studies, Finance Department, Insurance Major.

²drtahani_mhd@yahoo.com

³Assistant Professor, Republic of Iraq, Ministry of Higher Education and Scientific Research, University of Baghdad, Higher Institute of Accounting and Financial Studies, Finance Department, Insurance Major.

³Wedmgd@gmail.com

Abstract

The sea is of paramount importance in the life of man and peoples. Since ancient times, it has represented a tool for communication between nations, a link for civilizational meeting between them, and a source of sustenance. Man's need and interest in exploiting this wealth moves his curiosity and ambitions to think and search for means that contribute and help in expanding the scope of maritime exploitation and consolidating relations between countries more and more. The maritime field was among the important areas touched by industrial and technological development, especially in the field of maritime transport, which led to the emergence of giant ships capable of embarking on sea voyages and thus moving foreign trade in a positive way.

The aim of the research is to know the extent to which ship hull insurance is related to the liquidity and profitability of the National Insurance Company, and where the main research problem is manifested in the extent to which ship hull insurance is linked to the liquidity and profitability of the National Insurance Company.

Only the research relied on the questionnaire as a tool for all data and information from the sample of 64 and those who have responsibility are (General Director, Department Director, Division Officer, Unit Officer) and the statistical program was used spss 21 in the calculation standard deviation, simple linear regression, testF (R^2).

The conclusions reached by the research are the evaluation of the degree of risk surrounding the ship and the evaluation of the degree of classification in the classification record is based on which the insurance price for the structures of marine vessels is determined, which shows that the degree of risk varies up and down according to the type of ship, origin, shipping lines, and the experience of the crew and the master. The results of the study also showed the existence of a strong correlation between the

liquidity variable and profitability in the respondents' response to the research sample in the National Insurance Company, as there is no profitability without the presence of liquidity and good liquidity expresses the company's ability to meet the payment of its obligations.

() An extracted thesis, which is part of the requirements for obtaining a higher diploma equivalent to a master's degree.*

There are also a number of recommendations, including; Adoption of a unified plan for all insurance branches. To measure the liquidity risk in order to ensure that the company is protected from bankruptcy or its exit from the insurance market in the event of a financial crisis again.

Keywords: Ship Hull Insurance, Degree of Risk, Market Risk, Liquidity, Profitability.

1. Introduction

There is no doubt that the insurance sector plays a general role in the economic sectors, and this role is embodied by activating the commercial movement. The role of the insurance industry as an activity is not limited to one economic sector without the other as long as it provides the necessary guarantee and protection against potential risks and for various sectors.

Insuring the hulls of ships has a very dangerous impact, stemming from the value of its high amounts, as well as the value of potential losses and the size of large compensation, so care and great care must be taken when dealing with this type of insurance, where the value of the ship is the origin of the guarantee.

The researchers used financial analysis methods to identify the extent of the resulting policy applications and decisions implementation in these companies, and the ability of the National Insurance Company to fulfill its obligations towards policyholders, as well as assisting the relevant supervisory and supervisory authorities to follow up on the implementation of these policies.

The research consists of the first topic, which is the methodology of research and previous studies, and the second topic, which contains the independent research variable, which is securing the hulls of ships and the two dependent variables, which are liquidity and profitability. in particular, and other insurance companies in general.

2. Research Methodology

The Research Problem

The insurance industry and its markets have witnessed challenges as a result of the openness witnessed by the insurance market in Iraq and the need for insurance covers in terms of quantity and type by various economic sectors. Sub-questions branch from it, the content of which is as follows:-

How can the role of ship hulls affect the company's liquidity and profitability ?Can the indicators of liquidity and profitability affect the financial evaluation of the ship hulls insurance branch ?Is the research company continuing to achieve profits related to ship hulls, an ability to raise the level of the company's financial performance completely?

The Importance of Research

Marine insurance is one of the most important branches of the company under study, and it has gained this importance from its international character that distinguishes it from other branches of insurance.

1. A statement on the extent to which the research company is able to raise the profit margin level for the ship hulls insurance portfolio to fully serve the company.
2. This research contributes to enriching our Iraqi and Arab libraries in the fields of administration and insurance, which achieves a modest contribution to students and other researchers.

Objective of the Research

This study achieves a set of objectives, represented by the main objective, which is to know the extent of the role of ship hull insurance in the company's liquidity and profitability. Ship hulls insurance branch, a statement of the company's role in achieving profits for ship hulls, the ability to raise the level of the company's financial performance completely.

Research Hypotheses

1. There is a statistically significant correlation between ship hull insurance and the liquidity of the National Insurance Company.
2. There is a statistically significant correlation between ship hull insurance and the profitability of the National Insurance Company.

Research Methodology

The research focuses on the descriptive analytical method ;This is for the purpose of understanding all the essential aspects, and by relying on the writings related to the literature of the study.

The Location of the Research

The research was applied in the National Insurance Company, which is considered the mother company, especially in the work of ship hull insurance, as it is considered a pioneer in this field, as its capital is considered to be 15,000,000 thousand dinars (fifteen billion) and according to the certificate of incorporation numbered 54 on 12/24/1997. Issued by the Ministry of Commerce - Companies Registrar. The organizational structure at the company's center consists of (11 departments) and (13 specialized branches), including (8 in Baghdad) and (5 in the governorates), and these branches are linked to (40 offices), (29 offices distributed geographically), (8 border offices) and (3 specialized offices).

Research Community and Sample

The research community is represented by the National Insurance Company, and the research sample consisted of 64 senior management level employees, where a questionnaire was distributed to all these groups and 61 respondents were obtained with a response rate of 95%.

Statistical Methods and Financial and Sports Indicators

The research was based on the results of the statistical program (SPSS 21) as well as the use of mathematical equations in it, which are the standard deviation, the arithmetic mean, the simple linear regression, and the test F, and selection lab R^2 Change rate, realization ratio, debtors turnover rate, collection period rate, retention rate, return on equity, loss rate, and net profit realization rate.

The Search Tool

The questionnaire was adopted as a main tool for collecting data and information from the field side of the research, if it included (19 paragraphs related to the independent axis, securing the structures of ships and its dimensions) and (21 paragraphs related to the two dependent axes, which are liquidity and profitability. Likert quintuple was used (strongly agree, agree, neutral, disagree), strongly disagree) and with weights 1,2,3,4,5 respectively.

Testing the Validity and Stability of the Questionnaire

The validity of the scale was tested by making sure of the reliability by the Facronbach method to determine the reliability level of the questionnaire, meaning that the scale gives the same results if it is re-applied. In the table below:

Table 1 - Shows the Values of the Reliability and Validity Coefficients of the Questionnaire

Self-honesty	Alfakronbach	Number of paragraphs	The hub
0.93	0.86	19	Ship hull insurance
0.87	0.76	8	Liquidity
0.92	0.84	12	Profitability
0.95	0.91	39	Total resolution (scale)
Source: Prepared by the researcher based on program outputs Spss (v25)			

3. Theoretical Framing of the Research

Insurance

Insurance in language: means ability and guarantee to ward off dangers (Nasser, 1998). This is because insurance in the language gives safety and calmness of the heart and the removal of fear, as well as in the Almighty's saying, "In the name of God, the Most Merciful, the Most Merciful," "He made them safe from fear." Quraish, verse number: 4, and in his saying, "And when We made the House a place of refuge for people and a place of safety." Al-Baqarah verse number: 125. (Muhammad, et al., 2017).

Insurance idiomatically: means the agreement in which the insurance company bears the responsibility to cover the risks agreed upon under the contract, in return for payments made by the contractors with these companies. (Nasser, 1998). Insurance has been defined with different definitions as it is important for the parties concerned with the insurance contract, including:

A - It is a system that ensures the distribution of damage to a group of individuals.

B - It is the participation of a group of individuals exposed to a unified risk in the formation of a commission to compensate for the harm to one of them, by means of the premiums received from its members.

c - It is a means of compensating the financial loss that it suffers; As a result of the occurrence of a certain risk by distributing these losses to a large group of individuals, all of whom are exposed to the same risk under a previous agreement. (Al-Khafaji et al., 1993).

D - It is a system of European origin. Its first contract appeared in a regular manner, including its real pillars, in Germany on May 1910-12 and is based on loss prevention and compensation. (Nasser, 1998).

The Concept of Marine Insurance

The concept of marine insurance the concept of marine insurance. It can be described as an effective means to secure the dangers that may encounter the ship or the transported goods while carrying out the sea carriage process without including the dangers related to the persons on board the ship. (Al-Sayegh, Al-Khafaji, 2021). Since the researchers agreed that marine insurance is the oldest and most common type of insurance in terms of its connection to maritime transport and trade operations, this is why the role was clear and important in global trade and in the national economy. (Alwan et al., 2018).

Marine insurance can also be defined :Definition of marine insurance It is “a contract whereby the insurer undertakes to compensate the insured in the manner and to the agreed extent for losses resulting from the realization of marine risks that occur during the transportation process.” (Marza, 2006).

The Importance of Marine Insurance: The Importance of Marine Insurance

1. Marine insurance works to ensure monetary protection for ship owners if the ships suffer total or partial loss or damage, which leads to the prosperity of maritime navigation.
2. Encouraging capital owners to build large ships and tankers, such as cargo ships for passengers and modern oil tankers, despite the risks of manufacturing.
3. The monetary compensation for the expected material loss has a clear effect in reducing the sensitivity of the owners of funds towards their entry into the immersion of foreign trade, which led to the expansion and development of the scope of foreign trade. (Hakim, 2003).

The Concept of Ship Hull Insurance

The ship in the Arabic dictionary collection : Ships, and Svain, and Sven and the ship in English Ship. It is a vehicle that floats in water. <https://www.almaany.com>) (A ship is a vessel for transporting people or goods in the sea, river, or outer space .Ships have arisen In general from the development of boats, ships may be found in lakes ,seas ,and rivers ,and there are many tasks that ships can perform

and according to those tasks, the sizes and equipment of the ship are determined to suit the task for which it was established, and an example of those tasks, ferries and freight ships and fishing vessels cruise ships, coast guard ships, and warships. (<https://www.maref.org/>A ship is a sailing instrument through which sailors perform the various activities assigned to them on board. (Al-Saeed, 2014).

As for the Algerian Maritime Law of Article 13, it did not define it, but the judiciary only settled that the ship is every floating facility that operates or is prepared to work in maritime navigation, whether it aims for profit or otherwise, and also defined it as every floating vehicle or building that carries out marine navigation either by its means. private or by towed by another vessel. (Moses, 2007).

The Brussels Convention

Article 3 of the 1924 Brussels Convention states that the carrier, before and at the beginning of the voyage, must exercise reasonable care in:

1. Placing the ship in a navigable condition.
2. Fully equipped and supplied.
3. Equipping the wards and making them in good condition, as well as the refrigerated and cold rooms and the other parts in which the goods will be placed for transportation. (Al-Ta'i, 2001).

Accordingly, ship hull insurance is defined: It is a type of insurance that provides cover and protection for the ship's body from dangers during its voyage or cruises between ports or during its work inside ports or when it stops in the port or during the construction process or building in one of the arsenals.

Marine Vessels Validity

Sea worthiness Ship Here, the ship's validity is divided into:

1. Any technical authority that the structure of the vessel and its machinery a solid be able to face the dangers sea and be equipped with a number d enough sailors and also captain of a high enough.

2. The commercial validity means that it is suitable for receiving that type of goods subject of transport so that it is equipped with suitable hatches in terms of cooling and ventilation. (Komani, 2001).
3. The ship must carry all its legal papers such as permission to sail from the competent authority and survey certificate. Here, the carrier must report the ship's seaworthiness when the ship is ready for the shipping process. (Al-Ta'i, 2001).

The Proportions Financial

Prepare financial ratios Financial ratios. It is one of the most important tools of financial analysis among financial analysts, as it appeared in the middle of the nineteenth century when users used it previously and stakeholders to make their economic decisions. One of the advantages of financial ratios is that they are easy to understand and extract, and the possibility of reliance on them in evaluating the performance of the company and various aspects of activity and in control as well. (Khanfar, Al-Mutarna, 2009), the use of information from financial statements whose primary objective is to take the best decisions after identifying emerging problems and starting corrective actions in a timely manner, as well as identifying potential opportunities to increase profits, and this through financial analysis. Laurence, (2011). Therefore, it is the duty of the financial manager to balance between liquidity and profitability and to maintain this balance constantly, and this duty entails great difficulty because the availability of liquidity may contradict the goal of profitability, so the financial manager finds a difficult equation to solve sometimes. (Radi, 2018).

Liquidity

Liquidity is one of the important factors affecting profitability, as liquidity must remain in a state of equilibrium to the extent that risks remain at a reasonable level in financial institutions, where liquidity and profitability are two inseparable goals, but at the same time they are opposite in the sense that taking into account the improvement of one of them will be At the expense of the other, the administration's interest in employing its efforts to achieve high profitability indicators, as a result, will be reflected on its liquidity indicators. (Al-Hussein, 2016), the possession of assets in the form of high liquidity tends to reduce income as liquid assets are related to low rates of return. For example, cash, which is the most liquid of all current assets, is a non-income-generating asset and therefore high liquidity negatively to profitability, so the financial institutions must create an effective asset and

liability management system to raise the index of balance between them and to increase the return as well, (Li, 2007). As the liquidity ratios provide us with important information about the insurance company, and this ratio can be measured by dividing the technical precautions, which are the amounts that the insurer or reinsurer must deduct and keep to meet the company's obligations arising from it to policyholders and beneficiaries on current assets, provided that it does not exceed 100% according to Resolution 210 issued by Insurance Supervisory Authority for the year 2005. (Karimah and Mukhtar, 2018) and liquidity is determined in:

1. The ratio of the many cash liabilities to the total long-term resources.
2. The proportion of liabilities that consist of short-term liabilities. (Rose: 2013).

The main purpose of measuring the facility's liquidity is to assess the company's ability to meet its financial obligations on time, as the liquidity ratios are the capital ratio, the cash ratio (Al-Ali, 2012), the liquidity ratio, the quick ratio and the trading ratio. (Al-Amri, 2013).

Liquidity Ratios

They mean those ratios that measure the facility's ability to meet short-term obligations that contain cash and other assets that can be converted into cash in a relatively short period of time. The analysis of the company's liquidity is an important indicator for evaluating its financial performance and its ability to face urgent obligations. (Sheikh, 2008) What is related to the liquidity ratios of insurance companies aims to measure the extent to which the company retains the appropriate liquidity to meet its obligations. (Indicators of Insurance Performance Evaluation - Federal Oversight Bureau).

For the purpose of avoiding the defects of the current ratio, as it contains elements that are slow to turn into cash, and the measurement of the percentage of liquidity in paying its obligations in terms of current assets, and accordingly, the elements of current assets can be divided into two types:

a) Quickly circulating assets or their speed into cash, including (cash, temporary investments, and notes receivable).

(NS) Less liquid assets include inventory and therefore take time to turn into cash.

From the current assets, the company can measure its ability to pay its short-term obligations, where the acceptable value of the current ratio is the coverage of current assets for current liabilities equivalent to twice (1:2) (Al-Amri, 2013). (The company's short-term liquidity is measured after deducting the stock, which is the least liquid asset, where the acceptable value is the coverage of current

assets to current liabilities equivalent to one time (1:1), (Al-Amri, 2013) and the quick ratio is a measure of assets that are easy Can be calculated according to this ratio, and the Quick Ratio is the ratio of liquidity measure that can be converted into cash of total cash and securities negotiable and receivables divided by liabilities in circulation, liquidity is one of one important determinant of financial insurance companies and the existence of more liquid assets and non - candidate that fail; Because it can achieve, liquidity even if the company is in difficult situations (NGWIL, 2014).

The purpose of liquidity ratios is a basic financial goal that the company seeks to achieve. Its importance is to enhance confidence in the institution from its dealers ,fulfill obligations when their due dates come, or to avoid the risk of bankruptcy. (Bin Hilal, 2018).

Profitability

Says, bedford " bedford" Profit incentive j pays human to engage in the activity of economic, can be said that. Profit amount calculated is used to guide community operations and control, and profit in the economy is returning to the regulator at the bear risk, so that the life of economic characterized by this sure may be due : to reasons related to some aspects of economic m such as the volume of demand, the amount of demand or the price of a sale, so was the establishment of new projects or, and the application of innovations involve : the risk can not be calculated for the uncertainty of the success of the project or a new product. (bright 2020), profitability and know: is self-efficiency in the institution's financial re - production is defined as a measure of profitability of this enterprise efficiency int conduct their financial resources. (Bashir 2006).

Profitability ratios are defined as ratios that measure the company's profitability and earning capacity. The ratio of net profit to net sales, as well as the ratio of operating profit to net sales, or the ratio of gross profit to net sales. (Khanfar, Al-Mutarna, 2009).

Also known as profitability ratios: the company's ability to generate profits as they reflect the overall performance of the company, and the fact that profit is a measure of the efficiency of the policy management company 's financing and investment and operational decisions related to this policy (Field 2004).

Standards for Measuring Profitability

There are three types of criteria for measuring profitability, which are:- (Karima and Mokhtar, 2018).

1. Voluntary strength: It is the company's ability to generate operating profits and is based on the net profit income resulting from operating profits.
2. Return on investment: It is based on the comprehensive net profit entry.
3. Return on equity: is based on the comprehensive net profit entry.

4. Analysis of Research Results and Testing of Hypotheses

First: To test the first hypothesis that states (there is a statistically significant correlation between ship hull insurance and the liquidity of the National Insurance Company), and the results were as shown in the table below:

Table 2 - Ordinal Correlation Coefficient (Spearman) between the Insurance of Ship Hulls and Liquidity

(X) To secure the hulls of ships				
The test	Direction (deciphering/reverse)	P_value	Rank Correlation Coefficient (Spearman)	(y1 Liquidity)
Moral	expulsion	0	0,44	

Source: Prepared by the researcher based on program outputs spss (v25)

The analysis of the results of evaluating the correlation relationship shows that there is a direct, medium, and statistically significant correlation between the ship hull insurance variable and the liquidity variable, where the value of the correlation coefficient was (0.44), which is a direct correlation coefficient, and the value of (p_value (accompanying the test) t) of the test of morale, the correlation coefficient is less than (0.01), which indicates that the relationship is significant (statistically significant), which means accepting the first main hypothesis which states (there is a statistically significant correlation between ship hull insurance and the liquidity of the National Insurance Company).

Second: To test the second hypothesis which states (there is a statistically significant correlation between ship hull insurance and the profitability of the National Insurance Company), and the results were as shown in the table below.

Table 3 - The Rank Correlation Coefficient (Spearman) between Ship Hull Insurance and Profitability

X (To secure the hulls of ships)				
The test	Direction (deciphering/reverse)	P_value	Rank Correlation Coefficient (Spearman)	2y profitability
Moral	expulsion	0	0,43	
Source: (Prepared by the researcher based on program outputs spss v25)				

The analysis of the results of evaluating the correlation relationship shows that there is a direct, medium, and statistically significant correlation between the ship hull insurance variable and the profitability variable, where the value of the correlation coefficient was (0.43), which is a direct correlation coefficient, and the value of) p_value) accompanying the test(t (for testing the significance of the correlation coefficient is less than (0.01), which indicates that the relationship is significant (statistically significant), which means that the second main hypothesis is accepted, which states (there is a statistically significant correlation between ship hull insurance and the profitability of the national insurance company).

5. Conclusions and Recommendations

The Conclusions

1. The evaluation of the degree of risk surrounding the ship and the evaluation of the degree of classification in the classification record is based on which the insurance price for the structures of marine vessels is determined, which shows that the degree of risk varies up and down according to the type of ship, origin, shipping lines, and the experience of the crew and the master.
2. The results of the analytical study showed that there is a moderate direct correlation between the ship hull insurance variable and the liquidity variable, as well as between the ship hull variable and profitability.
3. Although the inclusion of war risk coverage increases the insurance price of the policy, it increases the confidence of the insured public in the ship hulls policy, especially since Iraq is one of the countries that are constantly exposed to risks.
4. The company in question works to hold the insured with a part of the responsibility when we realize some risks, especially the partial ones, by agreeing with the method of wasted loss from

underwriting, which it considers as a means of protection to secure ship hull documents in getting rid of small and frequent losses.

Recommendations

1. The use of external insurance men who have high experience and competence in the insurance industry, especially in ship hull documents, which affect the development of their skills and the completion of their work with high efficiency, especially in the settlement of losses and compensation, which leads to not losing time or prolonging the time period for compensation.
2. Adoption of a unified plan for all insurance branches; To measure liquidity risk in order to ensure that the company is protected from bankruptcy or its exit from the insurance market in the event of a financial crisis again.

Suggestions

1. Establishing a special division for actuaries and activating their work in a large way because they are of great importance in analyzing the risks facing insurance companies ;To avoid a financial deficit, as their work is deeper in terms of analyzing the amounts and highlighting both the strengths and weaknesses in the company's financial liquidity.
2. Keeping accounting records for each branch of insurance that include all their financial operations, accurately and prepared in accordance with a policy that enables the higher management and the competent authorities to form a true opinion about its financial situation and thus to form a solid base that excludes any negative effects or obstacles that hinder the course of the insurance work.

References

Bashir, Dreddy. (2006). *Marketing mix policies and their impact on the profitability of the economic institution: a case study*. Kasdi Merbah University. Faculty of Law and Economic Sciences - Ouargla, Algeria.

Al-Khanaq, Nabil Muhammad, Al-Khafaji, Alaa Al-Din Mahmoud, and Alwan, Talal Nazim Alon. (1993). *General theory of insurance*. Baghdad: Ministry of Higher Education and Scientific Research. Technical Institutes Authority.

Radi, Hassan Hadi Kaho. (2018). *The role of capital management in achieving harmonization between liquidity and profitability: An applied research*. A higher diploma equivalent to a master's. Higher Institute of Accounting and Financial Studies. Baghdad University. Iraq.

- Bright, for fortune teller. (2020). *Evaluating the performance of Algerian commercial banks in light of the constraints of liquidity and profitability*. Case study, Ph.D. Abu Diyaf University of M'sila. Faculty of Economic, Commercial and Management Sciences. Department of Commercial Sciences. Algeria.
- Al-Sayegh, Nagham Ali, and Al-Khafaji, Ibtisam Abbas (2021). *Insurance Administration*. Baghdad: Dar Al-Doctor for Administrative and Economic Sciences.
- Al-Tai, Raghad Fawzi Abd. (2001). *The fine for delaying the loading and unloading of the vessel: a comparative study*. Master's thesis in private law. University of Babylon. Iraq.
- Al-Amiri, Muhammad Ali Ibrahim. (2013). *Modern Financial Management (I.1)*. Amman: Dar Wael for publishing and distribution.
- Alwan, Talal Nazim, Abboud, Salem Abboud, and Muhammad, Faiza Abdel Karim. (2017). *Risk management and insurance*. Baghdad: The Doctor's House for Administrative and Economic Sciences.
- Karima, Ezz El-Din, and Mokhtar, Diqish (2018). *The effect of liquidity on the profitability of insurance companies: a case study of the National Insurance Company SAA*. Abdelhamid Ben Badis University - Mostaganem. Faculty of Economics, Commercial Sciences and Management Sciences. Department of Economic Sciences. Algeria.
- Komani, Latif Jabr. (2001). *Responsibility of the shipping carrier*. Jordan: International Scientific House for Publishing and Distribution, Culture House for Publishing and Distribution, Amman.
- Merza, Saeed Abbas. (2006). *Insurance theory and practice*. Baghdad: done in the Iraqi Reinsurance Company.
- Musa, Talib Hassan. (2007). *Maritime Law*. Amman: House of Culture for Publishing and Distribution.
- Field, Muhammad Amin Ezzat. (2004). *Corporate finance management*. Algeria: Obeikan Library, first edition.
- Nasser, Mohamed Jawdat. (1998). *Insurance business management between theory and practice (i.1)*. Amman: Al-Majdalawi Publishing House.
- Encyclopedia - Knowledge. (2017). Retrieved on 6-18-2021 <https://www.maref.org/>.
- Meanings - I'm back. (2018). On May 17, 2021 <https://www.almaany.com>
- Hussein, Bassam. (2016). Factors affecting the profitability of banks in Syria - an applied study. *Al-Baath University Journal*. Volume 38. Issue 33.
- Li, Yuqi. (2007). *Determinants of Banks Profitability and its Implication on Risk Management Practices: Panel Evidence from the UK in the Period 1999-2006*. A Dissertation presented in part consideration for the degree of MA in Risk management, University of Nottingham. Britain.
- Ngwili, Kiio Peter. (2014). *A research project submitted in partial fulfillment of the requirements for the award of the degree of masters of business administration*. University of Nairobi.
- Laurence, M., (2011). *Measuring Financial Performance: A Critical Key to Managing Risk*. National Crop Insurance Services. Inc. <https://docplayer.net/11916431-Measuring-financial-performance-a-critical-key-to-managing-risk.html> Retrieved on 07/17-2021