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Structural Model for Internal determinants Affecting Profitability According to CAMELS Model

An Applied Study in Gulf Countries

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البناء التركيبي للعوامل الداخلية المؤثرة في الربحية وفق نموذج CAMELS

دراسة تطبيقية في دول الخليج العربي

المستخلص

إن دراسة محددات الربحية في مختلف المؤسسات لاتزال محل اهتمام وبحث ودراسة من قبل المهتمين الأكاديميين والممارسين وذلك نظرا للحاجة الملحة والمستمرة لمعرفة أهم المحددات التي تؤثر علي ربحية تلك المؤسسات ومحاولة التنبؤ بما ستكون عليه مستقبلا بهدف تحسين مستوي أدائها؛ ولقد قدمت العديد من العوامل المؤثرة في الربحية من وجهات نظر مختلفة، والتي درست وفقا للعديد من الرؤى منها نموذج CAMELS، وتهدف هذه الدراسة إلي: دراسة الصدق البنائي لنموذج العوامل الداخلية المؤثرة في الربحية، وذلك من خلال إعادة بناء وتطوير نموذج CAMELS لتحليل لربحية، ودراسة صدق بناء النموذج. ومن أجل تحقيق هدف الدراسة اعتمد الباحث المنهج الاستقرائي التحليلي من خلال استقراء ما عرض في الأدب المحاسبي المنضبط بالشريعة الإسلامية، مدعما ذلك بالتحليل الإحصائي لبيانات عينة الدراسة خلال الفترة 2009–2018 وذلك في دول الخليج العربي باستخدام برنامج Smart PLS، ولقد توصلت الدراسة إلي: إن العوامل الأساسية المكونة للعوامل الداخلية المؤثرة في الربحية تتكون من العوامل الرأسمالية والعوامل التشغيلية وأن هذا النموذج يتميز بأدلة الصدق البنائي.

الكلمات الدالة: البناء التركيبي _العوامل الداخلية – تحليل الربحية – نموذج CAMELS – المصارف الإسلامية.

Structural Model for Internal determinants Affecting Profitability According to CAMELS Model

An Applied Study in Gulf Countries

Abstract

Studying the determinants of profitability in different organizations is still a matter of interest and research by the academics and practitioners due to the constant and continuous need to identify the most important determinants that affect the profitability of those organizations, and to try to predict what their position will be in the future in order to improve their performance. Many determinants had been proposed in different viewpoints, which have been studied according to several perspectives such as the CAMELS model. This study aims to study the structural validity of the internal determinants that affect profitability through restructuring and improving the CAMELS model for profitability analysis, and to verify the validity of the structural model. To achieve the objective of the study, the researcher adopted the analytical inductive approach by extrapolation of the previous accounting literature in Islamic Sharia, supported by statistical analysis of the sample data for the period of 2009-2018 in the Arab Gulf countries using the Smart PLS software. The study concluded that the determinants of the internal factors affecting profitability consist of capitalist and operational factors, and the structural model proved consistently valid.

Keywords: Internal factors, structural model, profitability, CAMELS model, Arab Gulf countries.

1- Introduction

The CAMELS method is a set of indicators that can be used to analyze bank's financial position and its rating, where the financial statements form the essential base for quantitative analysis. This model has 44 indicators, of which 10 are numeric financial ratios and the rest are qualitative indicators (Bourqaba, 2011). This method is one of the direct monitoring controls carried out by the field inspection, where the regulatory authorities in America have approved the results of this method in decision-making process throughout the indicators that mainly affect the performance factors (N'guessan, 2004) as follows:

Capital Adequacy, Asset Quality, Management Quality, Earning Management, Liquidity Position, and Sensitivity to Market Risk.

The letter C represents the Capital Adequacy to protect depositors and cover risks, and the letter A represents the Assets Quality with the expected net value within and outside the budget, and the extent of the appropriations availability to cover earnings that could be difficult to earn, while the M refers to Management and its level of efficiency, depth and commitment to the laws governing banking and the efficiency of internal and institutional controls and the existence of future policies and planning. The letter E refers to the level of profitability and the extent of its contribution to the growth of the bank and capital increment. The letter L refers to the measurement of liquidity safety and the ability of the bank to meet its current and future obligations. Lastly, the letter S represents the bank's sensitivity to the risk (N'guessan, 2004) (Alghussein and Nashawati, 2014).

The objective of the study is to verify the validity of the structural model of the internal determinants influencing profitability. This is done by rebuilding and developing the CAMEL model to analyze profitability.

Hence, according to the study objective, the hypothesis of the study can be formulated as follows:

The essential internal factors that influence profitability are capitalist and operational factors, where this structural model proved consistently valid.

The study community is composed of Islamic banks in all the Arab Gulf countries, except the Sultanate of Oman, due to its lack in the area of Islamic banking (Bankscope website). The total number of Islamic banks in these countries was 41, according to the Bankscope website. The study sample consists of twenty nine Islamic banks distributed over Qatar, Kuwait, Bahrain, Saudi Arabia and the UAE, for the period of 2009-2018, The researcher used the analytical inductive approach through statistical analysis of the study sample for the data collected from the Bankscope website as well as from the annual reports published by the participants. The data collected is analysed using the Smart PLS statistical software.

2- Literature Review

Several financial ratios have been used to express the determinants of profitability, which researchers and practitioners believe affect the profitability of the financial institutions. Logan (2016) concluded that the ability of financial institutions to achieve greater profitability depends primarily on the determinants under their control and are not heavily constrained by external determinants. The most important internal

determinants used by most of the previous studies will be presented below and will be used in this study with respect to the CAMELS model.

The internal determinants such as administrative decisions on (balance sheets, income statements), bank size, capital, management and expenses, and risk management affect the profitability of banks directly, because most of these determinants are totally internal, which are closely linked to bank management, especially risk management as it is considered to be principle banking business. Although other internal determinants, such as credit or bank liquidity, are secondary determinants, the low quality of assets and poor liquidity are, in turn, the main causes of failure by banks (Almazari, 2014). Logan (2016) emphasized that the capacity of financial institutions to achieve more profitability depends primarily on the factors that fall under its control. According to the theory of performance behaviour structure (Structure Conduct Performance), banks are better managed, more efficient and profitable, so there is a positive relationship between the internal profitability and profitability determinants (Berger and Humphrey, 1997). Alharbi (2013) confirmed that internal variables have a positive impact on profitability more than External variables, Siddique (2016) supported the same view that internal determinants are important relatively. Almazari (2014) concluded that internal determinants have an impact on profitability positively and negatively. Aldamir (2014) and Madei (2016) proved that internal determinants are linked and they affect profitability. The majority of the studies did not assess the internal determinants when analysing their impact on profitability into groups, except a study done by Amba, (2013) which divided it into three groups, capital structure, liquidity and debt.

Previous studies have used many indicators to measure the internal determinants of profitability, which are not very different from the indicators of the CAMELS model, and they will be used in this study as two groups: The capital and the operational determinants according to statistical observation.

3- Research Factor

There are internal determinants that are closely linked to the bank and have impacts on all of its activities. In contrast, there are other internal determinants with a small impact. We will be presenting the most important determinants according to the CAMELS model.

3-1 Capital Adequacy (CA)

The term capital refers to a quantity of funds owned and available to support the bank's business activities. Capital adequacy is considered the most important ratio for determining capital strength, and the capital adequacy is measured by dividing the capital by the total assets weighted by risk (credit risk + market risk + operational risk), (Figuet, 2005) and (Bourqaba, 2011) as a proportion of shareholders' rights to total of assets, which reflect the ability of banks to use or invest its own funds to support commercial businesses, and also serve as a safety net from risk. Hence, it is assumed that the increase of this index will capitalize banks well so they are less exposed to bankruptcy and thus enhance their profitability (Berger, 1995) and (Athanasoglou et. al, 2006). The higher rate refers to the institution's reliance on internal funding. The studies have shown that the normal situation is a positive relationship between capital adequacy and profitability as it expands capital investment and improves cash flow and the ability to generate profits (Goddard, 2004) (Bashir, 2003) (Berger, 1995) (Abreu and Mendes, 2001), and this was appointed out by Fung and Chan (2009) that the ratio of capital is a

valuable tool for assessing the safety and strength of banks. When the ratio of capital is high, the bank seems more cohesive and safe, which is a feature to gain higher profitability. On the other hand, according to the theory of agency cost, Pratomo and Ismail (2006); Wasiuzzaman and Tarmizi (2010) proposed that the ratio of low capital reduces the agency's problem and increases the value and profitability of the organization, as it can restrict managers manipulation from maximizing their interest (reward), which may increase the shareholders' return. Berger (1995) agreed that when the ratio of capital is low, it will result in lower agency cost and better profitability.

3-2 Assets Size: Log A

The assets size is one of the internal determinants of profitability because the enterprise expansion is management's responsibility, and the bank's total assets is used to indicate the bank size. It can be expressed by calculating Log A of natural logarithm of total assets. The assets size variable has been used in most of the previous literature, and it is thought that the assets size positively affects profitability (Dawood, 2014) (Widyaningrum and Siswantoro, 2015) (Dermiguc and Huizinga, 2000) (Berger, 1995); and usually the size of the bank is associated with the concept of economies or scalar economies. The economic theory has shown that in the case of industry, the scaled economies will make the enterprise be more efficient at lower cost, and when comparing large banks with small banks, we find that large banks usually offer more services at lower prices and high efficiency, and thus large banks are able to generate a higher rate of return than small banks (Boyd and Runkle, 1993). However, Idris et. al, (2011) believe that large size banks will have an advantage in negotiating the input price, which reduces the average cost, and is therefore able to enjoy the scale savings and improve its profitability.

3-3 Liquidity (LQ)

The liquidity ratio is an internal determinants for measuring profitability, which is measured by the ratio of liquid assets to total assets or by the ratio of loans to total assets or both (Molyneux and Thornto, 1992), and it can be measured by the ratio of liquid assets to deposits (Bourqaba, 2011). The liquidity is used to measure the ratio of liquid assets that constitute support for the loan portfolio, where inadequate liquidity is a major cause of banks failure. On the other hand, the high volume of liquidity entails a higher alternative opportunity cost. As proposed by Francis (2013), there is a negative correlation between liquidity and profitability, i.e., low liquidity can enhance the profitability of banks, which is in accordance to a study by Rasia, (2010) and Pratomo and Ismail, (2006), i.e. the growth in business and commercial investments, and that was mentioned by (Kosmidou, 2008). In contrast, Bourke (1989) suggests that high liquidity leads to higher profitability, where Eichengreen and Gibson (2001) assumes that the effect becomes positive and strong when macroeconomic variables are used.

3-4 Quality of assets

Several ratios have been used to measure assets quality, such as: Loans to total number of assets, this rate measures the ratio of assets that have been invested in loans, and their increment indicate lower liquidity (Elsiefy, 2013) (Masood and Ashraf, 2012), of which non-performing loans\total assets (Masood and Ashraf, 2012), including the ratio of non-performing loans\total equity (Al-barq, 2013). This rate measures the impact of potentially stalled loans on ownership rights in particular, so that the amount of basic capital which can be reduced in the event that all stalled loans must be fully settled,

whereas asset quality rate decreased according to the last indicator, the bank becomes more capable of absorbing potential losses and able to pay from its money (Dang, 2011). The increment of this rate may be one of the biggest credit losses affecting the capital and less protection of creditors from potential future losses (Elsiefy, 2013). The non-performing loans\total loans was used by Awan (2009), while Bashir and Hassan (2003) have used the ratio of non-performing loans\loans, but the most used ratios to measure the quality of assets are:

First: Loans\total assets, where it is expected to affect the profitability of the banks positively. As Kosmidou et. al. (2005) suggested the risk and return hypothesis assuming high risk provides high return with asset quality through loans. Also Gul. et. al. (2014) have proven this hypothesis and found a positive relationship.

Second: ratio of non-performing loans\total assets, sometimes to the total ownership rights. Some studies expect the relationship according to this ratio is negative because stalled loans reduce the profitability of banks (Widyaningrum and Siswantoro, 2015) (Awan, 2009) (Masood and Ashraf, 2012) and that according to the theory that increased exposure to lending credit risks leads to a reduction in the profitability of the bank (Athanasoglou et. al. 2006).

3-5 Operational Efficiency (OPEA)

Operational efficiency is referred to as expenditure management, which is an indicator to measure the bank's ability to generate revenues from spending management of business investments. The expenditure management is an indicator of great importance when calculating the profitability of enterprises, and is a major cause of poor profitability, and therefore efficiency in managing expenditures will affect the profit (Kosmidou, 2008), as Islam and Salim (2011) mentioned it is indicative of how efficient the bank is in controlling operational expenses, and it is calculated as the total operating expense over total assets.

The expenditure management index is expected to negatively affect profitability, as with respect to the economic theory, the lower operational costs will help increase enterprise profits (Sufian and Parman, 2009).

3-6 Asset Management (OPIA)

Asset Management is one of the most important internal determinants that affect enterprises profitability and is expressed as efficiency of productivity, where it reflects the efficiency and effectiveness of the bank in managing its assets to generate the highest possible income. It is by the ratio of operating income to the total assets. The Asset Management index is believed to positively affect profitability (Akhtar, 2011). Moreover, the efficiency refers to the collection of assets to generate income. The bank can reach the optimum efficiency of its asset management if it is able to employ the total assets available, which will lead to high return on assets without incurring risks that may threaten the viability and stability of the bank. The low rate of return on the bank's assets compared to competitors means inefficiency in assets management, hence, need a review of the current bank's policies to maximize its efficiency in asset management (Elsiefy, 2013).

3-7 Gearing Ratio (TDE)

The gearing ratio is one of the determinants that the organization can control, which is an index calculated by dividing total debt by total equity (Milhem and Istaiteyeh, 2015),

the total debt means all funds received by the enterprise from others, namely short and long-term loans, and the balance of this ratio is between the funding provided by the creditors with the funding provided by the shareholders, which refers to the ratio of debt in the capital used to fund the assets. However, in the event of committing a profit and the rate of return on assets was higher than the prevailing rate of interest, the increase in the rate of financial increment would increase the return on shareholders' equity. Conversely, the increased financial lifting would double the losses of investors, if the return on assets was less than the interest rate on loans, and in this situation, the management is responsible for determining the optimal mix of the financial structure to avoid potential risks, while taking consideration of the sector in which the organization operates. Moreover, Studies assume a statistically significant relationship between gearing ratio and profitability.

3-8 Financial risk (TLA)

Funding risks considered to be an important indicator of profitability and is measured as the ratio between total liabilities and total assets or debt to shareholders equity. This index presents an indication of the ability of banks to generate cash flow and to pay their long-term financial obligations (Masud, 2016). Risk management is an important component in the banking sector to determine the level of profitability of banking. Based on the theory that states an increased exposure to risk leads to low profitability, it is expected to have a negative correlation between profitability and funding risks, where profitability can be improved through an improved inspection and control over credit risks, and these policies must include forecasting future levels of risk (Berger, 1995).

3-9 Deposits (DPA)

Meaning DTA affect deposits on total assets, deposits are a source of finance for major banks, on which the bank can control their value by to increase or decrease in accordance with its policy, as internal determinants that have a bearing on profitability (Alkassim, 2005). According to the agency's theory, the Islamic Bank acts as an agent in the investment of depositors ' funds, and is considered high-deposit, where low-profitability index will have a negative impact on profitability (Bashir,1999), that is, it has to do with profitability, and this depends on the bank's responsibility for how to transfer deposits to the earning assets (Bilal. et. al, 2013), and they may be in the form of temporary deposits and some them A long-term calculated by dividing deposits\total assets (Amba and Almukharreq , 2013) (Dawood, 2014) .

The researcher has divided these determinants into two sections according to the vertical financial analysis of financial statements, operational determinants and capital factors. This is because the statistical theories used in the analysis produce better results when the number of variables is less than nine variables (Hair et al. 2010). Hence, the researcher divided the determinants of profitability into two parts according to the sources of funds and used them as applied in the fundamentals of financial analysis, on which the researcher expects this total will affect profitability through fair value accounting measurement.

4- Statistical analysis and empirical results

Second order analysis of internal determinants:

This section focuses on testing the hypothesis based on the question, which says: what are the underlying factors that form the internal determinants which affect profitability?

This question comes out from the hypothesis that says "the underlying factors of internal determinants affecting profitability consist of capital and operational determinants and that this model is characterized by evidence of structural validity. To answer this question and verify the hypothesis and examine the evidence of the structural validity, the second degree analysis can be used by the (Smart PLS) software.

4-1 Main model of internal factors of profitability

Figure (1) second order factor analysis of the internal factors model of the profitability shows the results of the second order analysis (second order constructs) of the internal factors of profitability model, as it contains two theoretical factors, capital and operational, and both of these sub factors contain several measurable factors, where capitalism consists of five factors: capital adequacy, deposits, asset size, debt, financing risk. On the other hand, the operational factors consists of operating efficiency, liquidity ratio, assets management, quality of assets, loans and equity.

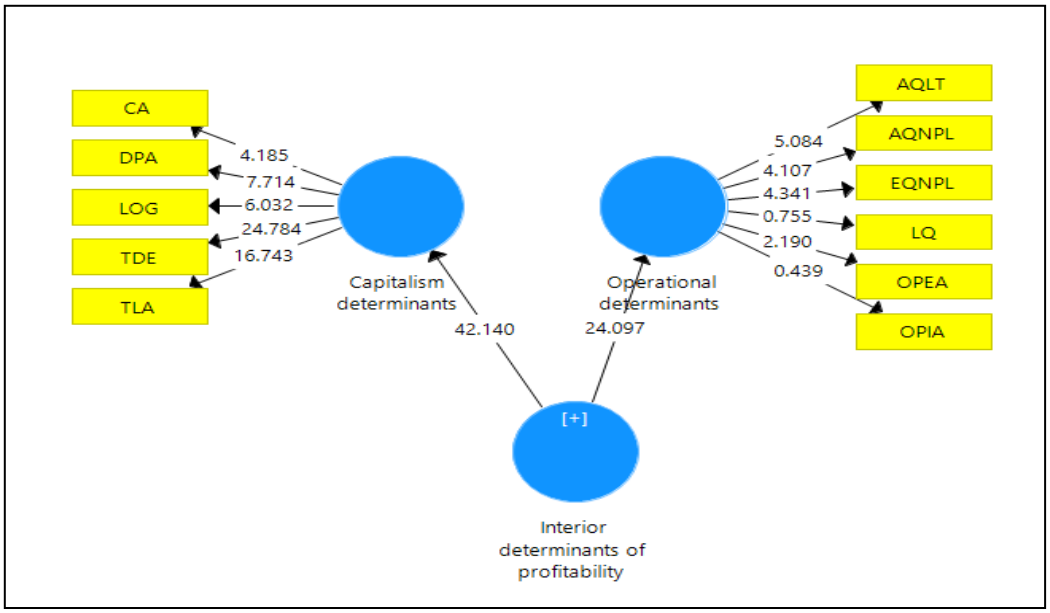

Figure (1) second order factor analysis, Main model (T-statistics)

To examine the relationship between the factors mentioned in the model, the focus will be on:

1. Statistical significance:

The relationship between the theoretical variables and the measured factors can be judged by the value of (T-statistics) which must be at least greater than or equal to (1.964), that is in the form of an indication level equal to or less than (.05) (Hair. et al, 2013), as shown in figure (1), that the relationship between the default factor: capital factors (Capitalism) and the measured factors represented by: capital adequacy (CA) deposits (DPA), asset size (LOG), debt (TDE), Financing Risk (TLA), where all are statistically significant because T statistical values are higher than the specified standard of (1.964), and are distributed between (4.185) for capital adequacy factor, and (24.784) for the debt factor as the highest ratio. Moreover, it is clear that the relationship between the default factor, operational factors and the measured factors represented by operational efficiency (OPEA), asset management (OPIA), liquidity

(LQ), asset quality (AQNPL), loans (AQLT), shareholders equity (EQNPL) was statistically significant as T-statistics value is higher than the specified standard of (1.964), and it ranged from (2.190) for the operational efficiency factor, and between (5.084) for the loan factor as the highest ratio and therefore statistically significant at a moral level less than (.05). It is observed that all the factors were statistically significant except for asset management and liquidity where T- statistics value was less than the specified standard and reached (.439), and (0.755), therefore this factor can be eliminated from the operational factors in the modified model.

Finally, the relationship between the top default factor (internal factors affecting profitability and its default sub factors (capitalism and operational) was statistically significant, as the T-statistics value was higher than the specified standard of (1.964), where it was (24.097) for operational factors and (42.140) for capital factors.

Analysis conclusion: From Figure (1), It is clear that all factors are statistically significant, as the T-statistic value is greater than the tabular value (1.964) except for the asset management factor and the liquidity factor, which must be excluded from the analysis in the modified form.

2. Loading :

The concept Loading refers to link between the default factor and the observed factors, and it is represented by an arrow coming out from the default factor to those measurable factors, As previously mentioned that the saturation rate should be at least of (.50), and of (.60) to be considered to be good, while the ratio of (.70) is excellent and optimal (Hair et. al, 2013). As shown in Figure (2) the second order factor analysis of the internal factors model of profitability; where the saturation ratio of the capital factor is exemplary excellent, also the saturation ratio for the operational factor was high. It is also clear that the saturation rate of operational factors was less than the acceptable ratio of the asset management factor and liquidity, hence it is mandatory to eliminate these factors. Otherwise, it turns out that the saturation ratios of the rest of those factors specified in the model were good and optimal. Finally, the saturation ratio of internal capital and operational factors was ideal (0.944& 0.856), respectively.

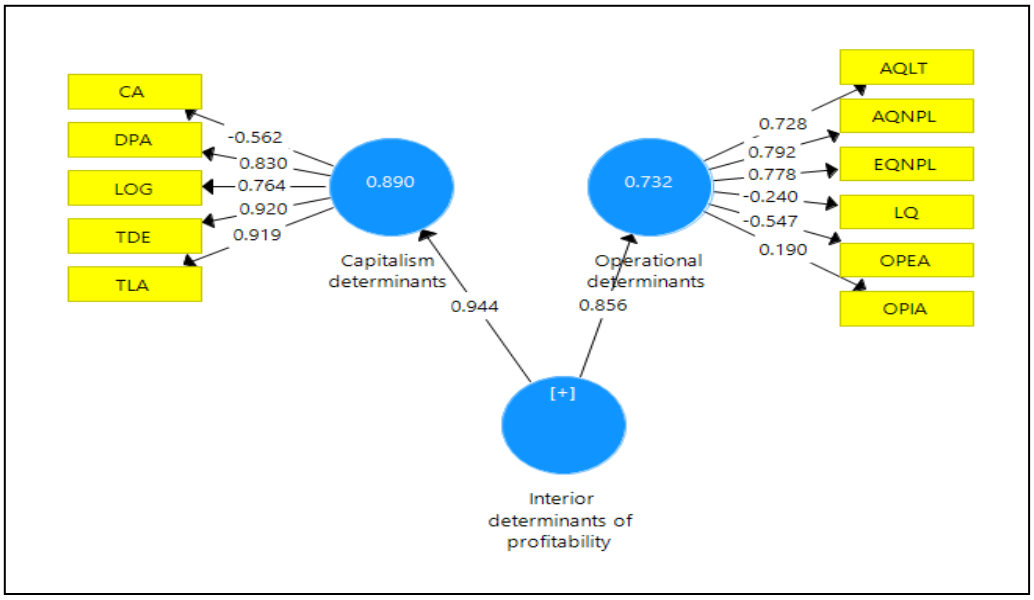

Figure (2) the second order factor analysis, Main model - Loading

We conclude that Loading has been high except for liquidity and asset management factors in the operational and capital adequacy of capital factors, and therefore should be eliminated on the modified model.

4-2 Internal factors of profitability (modified model)

The following is the proposed modifications by statistical analysis and staff elimination, the criteria for validity convergence are as follows:

1. Statistical significance:

As in Figure (3) factor analysis of the internal determinants: of profitability model, T-statistics, it is clear that the relationship between the capitalist factors (Capitalism) and the factors they represent: such as deposits (DPA), asset size (LOG), debt (T), Financing Risk (TLA) and capital adequacy (CA), was statistically significant because the value of (T-statistics) was more than the standard of (1.964) at the significance level below (.05). Accordingly, we find that the relationship between the operational and the factors that measure it such as operating efficiency (OPEA). Asset Quality (AQNPL), loans (AQLT), shareholders' equity (EQNPLE) were statistically significant, as the value of T-statistics was higher than the standard of (1.964) at the significance level less than (.05). Finally, the relationship between the top default

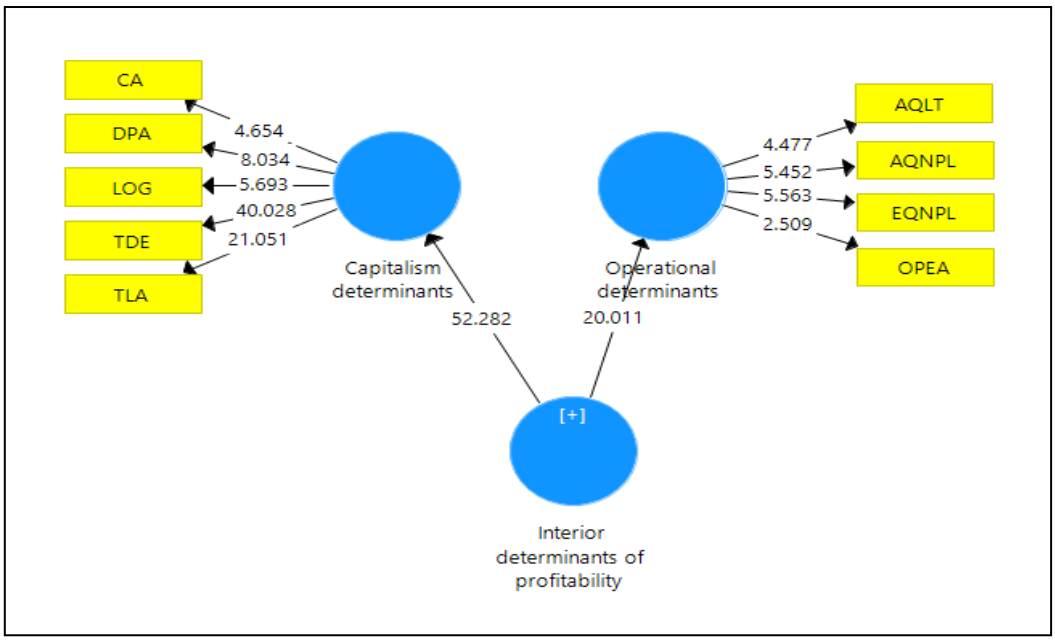

Figure (3) the second order factor analysis, modified model (T-statistics)

factor (the internal factors affecting profitability and its default sub factors (capital and operational), was statistically significant, as the T-statistics value was more than the standard of (1.964), where it was (20.011) for operational factors and (52.282) for capital factors.

2. Loading :

As previously stated, the concept of saturation refers to link between the default factor and the observed factors, and it is represented by an arrow coming out from the default factor to those measurable factors. As previously mentioned that the saturation rate should be at least of (.50), and of (.60) to be considered to be good, while the ratio of (.70) is excellent and optimal.

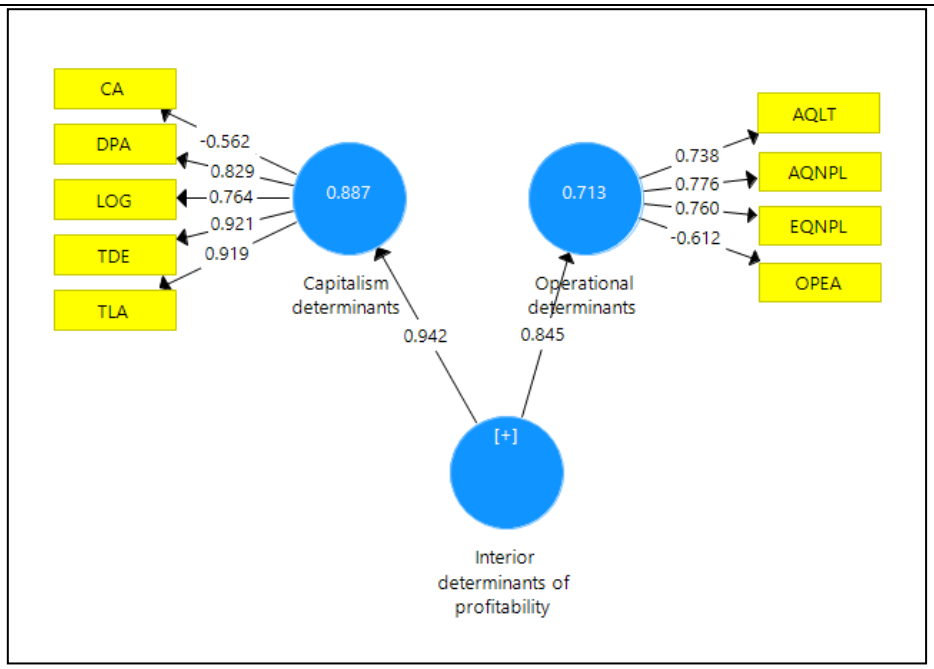

Figure (4) the second order factor analysis, modified model (T-statistics)

As shown in Figure (4) the second order factor analysis of the internal factors model of profitability; where the saturation ratio of the capital factor is exemplary excellent. Finally, the saturation ratio of internal capital and operational factors was optimal at (.942) (.845), respectively.

We conclude that the saturation ratio were high at (.60) and optimal at (more than .70), and this supports the convergence validity of the model.

3. Average Variance Extracted

The average variance extracted-AVE is a basic criterion for the validity convergence of the internal factors of profitability model which indicates the extent of the representation of those factors for the default concept, obtained by squaring the factor saturation ratio of the default concept and calculating the arithmetic mean. The average percentage of the extracted variation must be at least (.50) as a validity of convergence (Hair et. al, 2013).

Table (1) is the average Variance Extracted of the internal factors of profitability, shows the results of the average variation derived from the internal factors of profitability, and from those results it is clear that the average variation of the internal factors of profitability was (.52), and the average variation of the capitalism factors was (.65), and the average variation extracted for operational factors was (.52). These ratios were higher than the standard value for variation (above .50). It can be concluded that this standard supports the validity convergence of the internal factors of profitability model.

Table (1) average Variance Extracted

Construct Reliability and Validity

Matrix	Cronbach's Alpha	rho_A	Composite Reliability	Average Va

	rho_A	Average Variance Extracted (AVE)
Capitalism determinants	0.90	0.65
Interior determinants of profitability	0.88	0.52
Operational determinants	0.72	0.52

4. Composite Persistence

Composite persistence indicates the consistency of the measured factors in the representation of the default factor. The proposed value of the persistence must be at least (.70) (Hair et. al, 2013). Table 1 shows the results of the persistence of internal factors of profitability. Among those results, it is clear that the persistence rate of internal factors of profitability was (.88), the persistence ratio of capitalism (.90), and the persistence ratio of the operational was (.72). These ratios were more than the standard (0.70), it can be concluded that this standard supports the validity convergence of the internal factors of profitability model.

5- Conclusion

Analysis conclusion: The results of the level of significance of the internal factors of profitability model, Loading , Average Variance Extracted and Composite Persistence all have proved that approximation of the internal factors of profitability model, and the capitalist and operational factors and their sub-factors they represent. The results show that deposits, asset size, debt, and financing risks highly represent capitalist factors. And the sub factors of operating efficiency, asset quality, loans to assets, and lastly stalled loans to shareholders equity are highly operational factors, and thus it can be concluded that the validity convergence is the evidence of the structural validity of the model.

It can be concluded from previous discussion that the pillar question underlying factors that make up the internal factors affecting profitability and the hypothesis that derives from it is that "the underlying factors of internal factors affecting profitability include capital factors and operational factors and that this model has the structural validity convergence", and it has been verified and answered with high efficiency through analysis. Hence, the alternative hypothesis is therefore accepted.

References:

Akhtar. M. F (2011), Factors influencing the profitability of Islamic banks of Pakistan, International Research Journal of Finance and Economics, No: 66, pp125-132.

Al-barq.S. M(2013) , Factors affecting the profitability of Islamic banks in GCC countries , master degree in islamic finance and banking .Insaniah University College.

Aldamir, N. A. (2014). Factors affecting the Profitability of Islamic banks In GCC Countries. UNIVERSITI UTARA MALAYSIA,MASTER OF SCIENCE (FINANCE).

Alghussein. R, and Nashawati. M (2014) , Evaluating the Financial Performance of Jordanian Islamic And Conventional Banks, Using the Indicators of the "CAMEL "Method: A Comparative Analysis .Tishreen University Journal for Research and Scientific Studies -Economic and Legal Sciences Series, Vol 36, No (1), pp341-364.

Alharbi, A. (2013). Development of the Islamic banking system, determinants of profitability, and the performance of Islamic banks.

Alkassim. F. A (2005) ,The profitability of Islamic and conventional banking in the GCC countries: A comparative study, Journal of Review of Islamic Economics, Vol 13, No (1), pp5-30.

Almazari, A. (2014). The impact of internal factors on the profitability of banks: Comparison study between Saudi Arabia and Jordan. Journal of Applied Finance and Banking, Vol 4, No(1), pp125 -140.

Amba. M and Almukharreq. F(2013) , Impact of the financial crisis on profitability of the Islamic banks vs conventional banks-evidence from GCC ,International Journal of Financial Research,Vol 4, No(3), pp83-93.

Athanasoglou. P (2008), Bank-specific, industry-specific and macroeconomic determinants of bank profitability, Journal of international financial Markets, Institutions and Money, Vol 18, No(2), pp121-136.

Athanasoglou. P , Delis. M , and Staikouras. C (2006) , Determinants of bank profitability in the South Eastern European region.

Awan. A. G (2009), Comparison of Islamic and conventional banking in Pakistan, Proceedings 2nd CBRC .Lahore, Pakistan, pp1-36.

Bashir. A.M and Hassan. M. K (2003) , Determinants of Islamic banking profitability . . In 10th ERF annual conference, Morocco (, (December),pp16-18.

Bashir. H.M (2003) , Profitability of Islamic banks determinants: Some evidence from the Middle East, Islamic economic studies, Vol 11, No (1) ,pp 31-54.

Bashir, H. M (1999) , Risk and profitability measures in Islamic banks: The case of two Sudanese banks , Islamic Economic journal Studies, No: 6(2), pp1-24.

Berger. A. N. (1995) , The Relationship between Capita land Earnings in Banking . Journal of Money, Credit and Banking, Vol 27, No (2) ,pp432-456.

Berger. A. N & Humphrey D. B (1997) , Efficiency of financial institutions: International survey and directions for future research, European journal of operational research Vol 98 , No (2) , pp175-212.

Bilal .M , Ammar .N, Saeed. A and Toquer. A(2013) , Bank of the impact of specific factors and macroeconomics on the profitability of commercial banks: A Case Study, Journal of Financial Research and Accounting ISSN , Vol 4, No(2).

Borqaba. S (2011) ,Operational Efficiency of Non Islamic Banks - Islamic Banks - Comparative Applied Study, PHD Thesis, University of Farhat Abbas, Algeria.

Bourke. P(1989) , Concentration and other determinants of bank profitability in Europe, North America and Australia, Journal of Banking and Finance,No(13) pp65-79.

Boyd. J.H. and Runkle.D. E (1993) , Size and Performance of Banking Firms: Testing the Predictions Theory, Journal Monetary Economics, Vol 31, No(1),pp 47-67.

Dang.U (2011) , The CAMEL Rating System In Banking Supervision, Arcada University of Applied Sciences International Business.

Dawood. O (2014) , Factors impacting profitability of commercial banks in Pakistan for the period of (2009-2012) , International Journal of Scientific and Research Publications,Vol 4, No (3) , pp1-7.

Dermiguc. K. A. and Huizinga . H (2000), Financial Structure and Bank Profitability, Policy Research Working Paper Series 2430, The World Bank.

Eichengreen. B and Gibson. H (2001) , Greek Bankingat the Dawn of the New Millennium, London: Centre for Economic Policy Research. CEPRD iscussion Paper 2791.

Elsiefy. E (2013) ,Comparative Analysis of Qatari Islamic Banks Performance versus Conventional Banks Before, During and After the Financial Crisis International journal of business and commerce,Vol 3, No(3) , pp11 - 41.

Figuet. J. M (2005), Quelques implications strategiques des accords de Bâle-2 .,article publie dans : Management de la banque, risques, relation, organisation, coordination par Éric Lamarque, Pearson education, France.

Francis. M. E(2013) , Determinants of commercial banks' profitability in Sub-Saharan Africa. Retrieved 23 (July).

Fung. P.I and Chan. H.S (2009), Determinants of bank profitability in Macau, Journal of Banking and Financial Studies, Beijing .

Goddard. J , Molyneux. J and Wilson. S (2004), Dynamic of Growth and Profitability in Banking .Journal of Money, Credit and Banking ,Vol 36, No(6), pp1069-1090.

Gul. S, Guidance . F and Zaman. K(2014) , Factors affecting the profitability of the West in Pakistan .Romanian Economic Journal, Vol 14, No(39), pp61-87.

Hair. J. F, Tomas. G and Hult. M (2013), A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), USA.

Hair. J. F, Black, W. C, Babin, B. J and Anderson, R. E (2010) , Multivariate data analysis (7th), Englewood Cliffs: Prentice Hall .

Http:\\www.bankscope.bvdep.com (Bankscope website).

Idris. A, Abu Hassan.F, Taufik. N, Salim. N , Mustaffa. R and Jusoff. K (2011) , Determinant of Islamic Banking Institutions 'Profitability in Malaysia, World Applied Sciences Journal 12 (Special Issue on Bolstering Economic Sustainability) .

Kosmidou. K(2008) , The Determinants of Banks'Profits in Greece during the Period of EU Financial Integration , Journal Managerial Finance, VoL 34, No(3), pp146-159.

Kosmidou. K (2005), Determinants of profitability of domestic UK commercial banks: panel evidence from the period 1995-2002.. In Money Macro and Finance (MMF) Research Group Conference ,(June)Vol 45, pp 1- 27.

Logan, T (2016) , Determinants of profitability of financial institutions in Latin America and the Caribbean. The Journal of Developing Areas, pp 345-362.

Madei. S. H (2016) , Accounting measurement according to Islamic law and its impact on the profitability of assets, Islamic banks in Sudan model, The First International Conference on Islam and Contemporary Issues in the Islamic World: Prospects and Challenges of the Future, (pp. 1546 - 1559), kuala lumpur, University of Malaya.

Masood. O and Ashraf. M (2012), Bank-specific and macroeconomic profitability determinants of Islamic banks: The case of different countries , Qualitative Research in Financial Markets, Vol 4, No(2,3) , pp255-268.

Masud, R. M (2016), Profitability and liquidity of conventional banking and Islamic banking in Bangladesh: A comparative study. International Journal of Applied Research, pp318-327.

Mendes. V and Abreu. M(2001) , Commercial bank interest margins and profitability: evidence for some EU countries .In Pan-European Conference Jointly Organised by the IEFS-UK & University of Macedonia Economic & Social Sciences, pp17-20

Milhem. M and Istaiteyeh, R(2015), Financial Performance of Islamic and Conventional Banks: Evidence from Jordan, Global Journal of Business Research, Vol l9 No (3) , pp27-41.

Molyneux. P and Thornton, J(1992) , Determinants of European bank profitability:A Note .Journal of Banking and Finance, Vol 16, No(6) ,pp1173-1178.

N'guessan. K (2004) , Mission Report on Financial Risk Analysis of Banks and countries in emerging markets .New York.

Pratomo. W.R and Ismail. A.G (2006) , Islamic bank's performance and capital structure .MPRA Paper No. 6012.

Rasia. D (2010) , The theoretical framework for profitability as applied in commercial banks in Malaysia, European Journal of Economics, Finance and Management Science, No 19.

Salim, M. and Islam.S(2011) ,Analysis of the Operational Efficiency of Commercial Banks: A Study of the Islamic Banks in Bangladesh, Department of Banking Faculty of Business Studies University of Dhaka.

Siswantoro. L and Widyaningrum. D(2015) , Analysis the Effect of Macroeconomic Indicators and Specific-Firm Characteristic as Determinant Profitability of Islamic Banks in Asia, Global Review of Islamic Economics and Business.

Siddique. M. A (2016), Determinants of Islamic Banking Industry's Profitability In Pakistan for the Period 2004-2012. Journal of Islamic Business and Management, Vol 6 , No(1. 2016), pp 41-61.

Sufian. F. and Parman. S (2009), Specialization and Other Determinants of Non-Commercial Bank Financial Institutions 'Profitability .Journal Studies in Economics and Finance, Vol 26, No(2) , pp 113-128.

Wasiuzzaman.A. S and Tarmizi. H.A(2010) , Profitability of Islamic banks in Malaysia: an empirical analysis, Journal of Islamic Economics, Banking and Finance, Vol 6, No(4) , pp53-68.