Analysis of Firm-Specific and Macroeconomic Factors Affecting the Performance of Hotel Sector in United Kingdom: Profitability and its Determinants

Tan, Mei Syen

Universiti Utara Malaysia

18 November 2019

Analysis of Firm-Specific and Macroeconomic Factors Affecting the Performance of Hotel Sector in United Kingdom: Profitability and its Determinants

Tan Mei Syen

University Utara Malaysia

ABSTRACT

This study looking for the determinants that may affect the profitability in the hotel sector in United Kingdom. The goals is to identify the firm-specific factors, macroeconomic factors and the firm-specific and macroeconomic factors that may affect the profitability. The approach used in this research is the statistical and regression techniques which test for the association of these variables the level of significance. Upon these considerations are discussed, the liquidity risk and credit risk have greatest impact on productivity. This will allow greater consideration of competitiveness for other business field and may lead to the future work on the profitability determinant.

Keywords: Profitability, Liquidity risk, Credit risk

1.0 Introduction

1.1 Introduction

This chapter will describe the overview of the hospitality field in United Kingdom and the focused company is known as the Whitbread PLC. Then, it will follow by the discussion of the problem statement, research objectives, research questions, scope of study and the organisation of the study.

1.2 Overview of United Kingdom Hotel Sector

The hospitality and tourism in general is the one of the world's main active field worth trillions of ponds globally. United Kingdom is a highly developed economic country and ranks on the top ten international tourist destinations. Moreover, the World Tourism Organization 2018 reports that United Kingdom also is the fourth largest country for the international tourism expenditures, behind the China, United State and Germany. Whitbread PLC is the United Kingdom's market-leading company, which it's headquarter located in Houghton Regis, Bedfordshire, United Kingdom. Whitbread PLC was the leading companies in British that operate over 785 hotels and over than 35,000 employees in company, it also is the owner of the Premier Inn, Costa, Beefeater, Brewers Fayre, Table Table and Taybarns. In the global hotel industry, Whitbread PLC is the hotel operate boasting one of the highest revenues compared with the other companies. In addition, the Whitbread PLC had listed on the London Stock Exchange and is a constituent of the FTSE 100. It is also a member of the FTSE4Good Index. Thus, in this study, the Whitbread PLC is used as a sample to determine the factors of the financial performance.

1.3 Problem Statement

Insolvency is a financial crisis if an individual or organization can not meet its financial obligations to its creditors once their debt are due, and their liabilities exceed their assets. Besides that, the company might involve in the trouble of profitability. Insolvency is a major problem for every corporation faces in order to be avoid for bankruptcy happens. A company have enough money to run their day-to- day service. Nonetheless, it is reliable that the profitability may influenced by the other risk, such as corporate governance, credit risk and operational risk. Corporate governance may influence the profitability when a company

running business. Profit is the driving force of the firm, as well as the survival indicator of a company the accomplishment of its goal is entirely dependent on its profitability. For example, the performance of a company can be divided into two elements, which are profitability and efficiency that interrelated in one way or another (Tahir,1999). Thus, the studies of profitability and efficiency of the hotel performance are important tools which contributes to the improvement of the hotel performance and its sustainable. Since these internal and external factors may exist a relationship with the profitability, therefore, in this report, the determinants of profitability in the Whitbread PLC to be determined.

1.4 Research Objective

This report purpose to examine the profitability and its determinants of hospitality industry in the Whitbread PLC, United Kingdom. The objectives of this study are:

1. To determine the firm-specific factors towards the profitability.
2. To determine the macro-economic factors towards the profitability.
3. To analyse the firm-specific factors and macro-economic factors that may influence the profitability.

1.5 Research Question

1. Is there any relationship among firm-specific factors towards profitability?
2. Is there any relationship among macro-economic factors towards profitability?
3. Is there any relationship among firm-specific factors and macro-economic factors that may influence the profitability?

1.6 Scope of the Study

This study involved only the Whitbread PLC, United Kingdom. The accounting and the financial ratio that indicated the performance, profitability and solvency of the company was based on the Whitbread PLC's annual report for 5 years starting from 2014 to 2018.

1.7 Organisation of the Study

This study is made up of five main chapters. Chapter 1, it outlines the introduction that provides a summary of the studied company, research objectives, research questions, scope of study as well as the organisation of report. Chapter 2 discusses the risk related literature review

and its determinants while research methodology will pe presented in Chapter 3. Next, Chapter 4 presents the research results and ourtcomes that include linear regression analysis. Lastly, Chapter 5 explain a summary and conclusion of the analysis with further reccomadation and also the limitations of the study.

2.0Literature Review

2.1 Introduction

This chapter represented the literature review of our study outlining the meaning and concept of financial risk, corporate governance and performance of the organization.

2.2 Financial Risk

Financial risk is a possible of business loss and it means the financial situation that minimum the possibility of financial status of disintegration. The most obvious way to perceive the financial risk will extend to the risk exposure of operating lender in future transaction, which is contingent exposures. Financial risk can be categories in the internal financial risk, where the organisation itself is the source of the risk and also the external financial risks that depending on the changes on financial market, such interest and exchange rate that will affect the credit risk of the organisation (Eichorn, 2004). There are financial risk manager(FRM) exams in every country that get the qualification to consult and make improvement in the performance of organisation (Eshna, 2017). Financial risk managers must able to identify and allocate all the potential business risk, and provide recommendations for better decision in making the risk management plan. FRM more focus in managing the risk exposure to business risk and analyse and control it. Besides that, FRM should ensure that all the decisions taken are possible to avoid from the organisation financial losses and performance decline. (Wenqin Fan, Weixian Dong and Jie Lu, 2018).

2.2.1 Profitability

Profitability is the ability of a business to earn a profit, can be an efficient measurement of financial performance (Omondi and Muturi,2013). J.B Maverick (2015) stated that the success of all businesses depends upon both delivering sustainable profitability and growth to survive and remain attractive to investors and analysts. The net profit of a company refers to the money left over after paying all expenses of an endeavour, such as manufacture, production and selling products. Profitability is fundamental goal of the organisation as capital especially for those without investors or financing, and it goes directly on the owners and investors. The organization will not able to continue their operation without productivity, so that, it is very

important to analyse the current and past production and forecast for the future. Therefore, the record of organization's performance data, enable to establish the managerial decision to predict the potential changes in the economic resources (Camelia Burja,2011).

2.2.2 Corporate Governance

According to OECD (1999), corporate governance describes the business structure that are directed and controlled. The corporate governance system defines the allocation of rights and responsibilities among all the members of organization and listed out the procedures and regulation for making right decision on corporate affairs. By doing this, it ensure that for attaining the objective that set and monitoring performance. A good governance in a corporation can protect the benefit of shareholders and other stakeholders from the managerial discretion. (Cuervo,2002). The effective mechanism can help to improve the agency cost and make the better solution for business risk problems, thus can cut down the agency problem. (Patrick McColgan,2001). Otherwise, John and Senbert (1998) stated that the effectiveness of corporate governance structure in a company can be traced. They suggested that the firm-specific factors and macroeconomics factors should be included in the monitoring commitees, to achieve the level of good corporate governance index.

2.2.3 Credit Risk

Olivia Labarre point out that credit risk is refer to the probability of failure for a borrower or counter to settle up a loan or fulfil the contractual obligations with the agreed term. When the borrower has not effectively cash flow and unable to repay creditors, then the credit risk will occur. However, the longer the period of debt extend, the borrower have to carry on higher the interest rate. This will cause the organization facing will the financial problem with insolvency (Steven Bragg,2018). According to Edward I. Altman (2003), the financial economists, bank supervisors and regulators, and from financial market practitioners have to take more attention in the measurement, pricing and management of credit risk that may bring to effect for organization's financial contract. Credit risk frameworks is important to all business to achieve the good corporate governance index and controllable level of risk. These frameworks help the customers to maintain a robust and reliable credit, and their credit limits can be fixed (D.Nelson, 2018). Merton (1974) is the developer of first generation structural-

form models that based on the original framework by using the principles of option pricing. While the Merton model only can be assumed that the default at the mature status, the structual models of their second generation assume that the default may occur at any time between the issuance of the debt and the maturity of the companies' assets. This approach simplifies the organization is facing the risk in the happen of bankruptcy.

2.2.4 Operational risk

Operational risk is applies to all banking products, operations, processes and systems, and it is a reflection of the effectiveness of the board and senior management in administering its portfolio of the goods products, activities, process and systems. Operational risk management relies more on the non-project patterns, which low severity or high impact event other than tendencies of project. In this generation of technology, a large number of pioneers using the lastest currency- related programming advances have built and produces multi-organized, multi-layered items and administration. This makes the extremely complex and difficult tasks in these organizations become easier to handle. As the result, tbe modelling of operating hazard will reflect these more difficult mode tail events (Jobst,2007). Based on Cruz (2002), the operating risk modelling is important to help the risk managers easily analyse the business risk and it supports more efficient risk management. There are several methods and analytical tools including the Extreme Value Theory (EVT), that will built and match the frequency and severity models.

2.2.5 Liquidity risk

Liquidity risk is the business risk of an organisation facing problem with inability to afford their short term financial demands with their immediate cash requirements , holds a valuable assets that it be purchased or sold at market value due to lack of demand or an inefficient market (John Spacey, 2017). The company needs avoid the problem of bankruptcy by controlling their liquidity risk of organization. An understanding of the liquidity of an organisation's stock within the market helps investors judge and avoid the valuable shares. Liquidity and trading activities are important features of financial market, especially debated by market microstructure researchers that its variable are relevant in almost all financial domains (Avanidhar Subrahmayam, 2009). Next, Jamal and Ali (2014) stated that liquidity can

be categories as funding liquidity risk and market liquidity risk. Funding liquidity risk happens when the borrower is failed to repay the debt, while market liquidity risk occurs when market participants cannot liquidate positions at low cost.

2.2.6 Market Risk

Market risk is the possibility of individual to suffer losses due to thw factors impacting the financial markets(DexLab, 2017). In result, these factors will bring impact to the financial status of the organisation (Hendricks and Hirtle, 1997). J.B. Marverick (2018) stated that market risk entails the possibility of the changes in the business conditions, such as tendency of online buyers. Organizations can measure and adjust their marketing strategy to set up the online shopping services and profit the revenue. While, when the risk manager of the company decided the bad decision on market risk management techniques, this will bring the company to the problem of insolvency. However, some researchers pointed out that higher interest rates have a positive impact on business. (Hanweck and Ryu, 2004) Thus, market risk arises from potential changes in earning attributable to fluctuations exchange rate fluctuation, adverse exchange positioning, or changing in the market prices.

2.2.7 Summary

In summary, the main goal for an organisation is to maximize the shareholder value, while financial risk management is the identification, assessment and decisions made regarding the treatment by an individual or organisation to monitor their business risks. If an organisation is responsive to a particular of risk because of its operations it carries out, then adjustment in the risk factors will affect the organization's cash flows of the organisation. The key of financial risk management is to analyse the risk reduction with the cost-benefit analysis. Typically, the organisation managed the risks change in the macroeconomics do not affect its objective. As the next section indicates, the company is likely to have a diverse set of goals to be achieved in managing its different exposures. In reality, organisations prefer to use a variety of approaches to reduce the risk of productivity, depending on the quality and timeliness of the available information.

3.0 Design & Methodology

3.1 Introduction

Research methodology explains the techniques of performing a study. Sampling and statistical techniques, data analysis, as well as Statistical Package for Social Science (SPSS)are used in this section.

3.2 Sampling Technique

The population multiplied through the use of inferential statistics is the hotel sector in United Kingdom. However, the sample used in this study is Whitbread PLC, representing the entire hotel sector in United Kingdom. The financial data that we sampled from year 2014-2018 annual reports are used to measure its dependent variable that we suggested is liquidity risk and the independent variables (firm- specific factors and macro-economic factors).

3.3 Statistical Technique

In this study, the 5 years annual reports of Whitbread PLC from year 2014 to 2018 as the sample data. Next, we also calculate each year of corporate governance index score for Whitbread PLC in five principles, which are accountability, transparency, independence, fairness and sustainability. The main procedure that has been used is the ordinary least-squares (OLS) regression to analyses data and form the basis of other technologies. The OLS method corresponds to minimizing the sum of square difference between the observed dependent variable and the sample regression function (SRF) in the given dataset and those predicted by the linear function. OLS technique is often use to predict outputs' value for new samples and enable to characterize the quality of the model for prediction.

3.4 Data Analysis

The framework of our methodology is shown below:

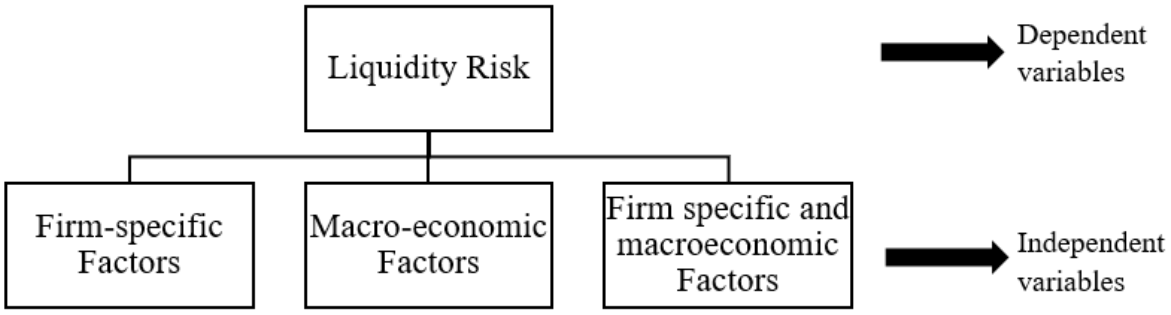

Figure 1: Research Framework

Independent variables are constrasted with the dependent variable and the output represent the relationship between the variables in SPSS. Since the independent variable is more than one, multiple linear regression analysis has been used to assess its effect on dependent variables by the equation below:

$$y_i = \beta_1 x_{i1} + \beta_2 x_{i2} + \cdots + \beta_p x_{ip} + \varepsilon_i$$

where y_i represent to the dependent variable) x_{ij} for j = 1, 2, 3, ..., p refers to the independent variables and β is the interception of the linear regression line with ε_i is the error.

3.5 Statistical Package for Social Sciences (SPSS)

In this study, we are using the IBM SPSS Statistics 25 in the data computation. It is acknowledged that this program is strong tool that helps researchers perform statistical data analysis. SPSS is widely used in data mining and researches on business studies because it is capable of carrying out descriptive statistics, predicting numeral results and predicting group identification as well.

4.0 Finding & Analysis

4.1 Introduction

This chapter discusses the findings and analysis the trend of the industry by comparing the ratios across the period of five years using multiple regression analysis of SPS. Tables of descriptive statistics, correlations, coefficients, ANOV, model summary of the model and other statistical functions as well as graphs plots are displayed based on the SPSS output.

4.2 Model Summary

4.2.1 Firm-specific Factors

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.953[a]	.908	.878	.001686316833741	
2	1.000[b]	1.000	1.000	.000018149399526	2.853

a. Predictors: (Constant), ROE

b. Predictors: (Constant), ROE, DEBT TO INCOME

c. Dependent Variable: ROA

Table 1: Model Summary for firm-specific factors

Since the method selected is Stepwise, SPSS only choose the most significant correlated variable to present the model. R^2 is the coefficient of determination, which is a ratio of the explained to total variation, in the first model, the return on equity(ROE) as the independent variable, where the R^2 value that shows 95.3% variation can be explained by the independent variables return on equity and debt to income, which means the linear regression is fit in the model. The next model shows that the R^2 value is equal to 1 which means the linear regression line is perfectly fit into the model. As R^2 value increases means that better fit model will has the less estimation error. In both of the cases, the standard error of the estimate is very small, which means the regression line can use as a trend line to predict the missing value perfectly. Next, the Durbin-Watson statistics shows the value which is 2.853. Values which is less than 2 in Durbin-Watson statistics indicate positive autocorrelation based on Investopedia. Overall, only the return on equity and debt to income are the best variables to be included, compared to the other firm-specific independent variables.

4.2.2 Macro-economic Factors

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.922[a]	.850	.800	.00215773548 8960	3.486
a. Predictors: (Constant), Exchange Rate					
b. Dependent Variable: ROA					

Table 2: Model Summary for macro-economic factors

Since the method selected is Stepwise, SPSS only choose the most significant correlated variable to present the model. R^2 is the coefficient of determination, which is a ratio of the explained to total variation. The model choosing the return on assets as the independent variable, where the R^2 value that shows 92.2% of the variance of return on assets can be predicted from the exchange rate, that means it is fitly in the model. In this case, the standard error of the estimate is about 0.2158 x 10^{-2}. However, the Durbin-Watson statistics shows the value which is 3.486. Values which is more than 2 in Durbin-Watson statistics indicate negative autocorrelation based on Investopedia. Overall, only the exchange rate is the best variables to be included, compared to the other macro-economic independent variables.

4.2.3 Firm-specific & Macro-economic Factors

Model Summary[c]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.953[a]	.908	.878	.00168631683 3741	
2	1.000[b]	1.000	1.000	.00001814939 9526	2.853
a. Predictors: (Constant), ROE					
b. Predictors: (Constant), ROE, DEBT TO INCOME					
c. Dependent Variable: ROA					

Table 3: Model Summary for firm-specific and macro-economic factors

Since the method selected is Stepwise, SPSS only choose the most significant correlated variable to present the model. R^2 is the coefficient of determination, which is a ratio of the explained to total variation, in the first model, the R^2 value that shows 95.3% of the variance

of return on assets can be predicted from the variables return on equity and debt to income, which means the linear regression is fit in the model. In both of the cases, the standard error of the estimate is very small, which means the regression line can use as a trend line to predict the missing value significantly. However, the Durbin-Watson statistics shows the value which is 2.853. Values which is less than 2 in Durbin-Watson statistics indicate positive autocorrelation based on Investopedia. Overall, only the return on equity and debt to income are the best variables to be included, compared to the other firm-specific and macro-economic independent variables.

4.3 ANOVA

The output of the ANOVA analysis shows whether there is a statistically significant different between the profitability of Whitbread PLC and it firm-specific factors. An independent variable with significant level which is less than $p= 0.05$ indicating it is significant linear relationship between the variables

4.3.4 Firm-specific Factors

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.000	1	.000	29.777	.012[b]
	Residual	.000	3	.000		
	Total	.000	4			
2	Regression	.000	2	.000	141477.874	.000[c]
	Residual	.000	2	.000		
	Total	.000	4			

a. Dependent Variable: ROA

b. Predictors: (Constant), ROE

c. Predictors: (Constant), ROE, DEBT TO INCOME

Table 4: ANOVA table for firm-specific factors

Based on the Table 4, the first model which only calculate return on equity as the firm-specific independent variable, the significant level or p-value of the ANOVA is 0.012, means that the regression model does not has a consistent variance, which is the regression model is not a significantly predicts the outcome variables. However, the second model, which use the

return on equity and debt to income as the firm-specific variables, has a very consistent variance with p-value = 0, that is the perfectly significant between the variables.

4.3.5 Macro-economic Factors

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	17.019	.026[b]
	Residual	.000	3	.000		
	Total	.000	4			

a. Dependent Variable: ROA

b. Predictors: (Constant), Exchange Rate

Table 5: ANOVA table for macro-economic factors

Based on the Table 5, the model which only calculate exchange rate as the macroeconomic independent variable, the significant level or p-value of the ANOVA is 0.026, means that the regression model has a consistent variance, that are significant with the other variables.

4.3.6 Firm-specific & Macro-economic Factors

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.000	1	.000	29.777	.012[b]
	Residual	.000	3	.000		
	Total	.000	4			
2	Regression	.000	2	.000	141477.874	.000[c]
	Residual	.000	2	.000		
	Total	.000	4			

a. Dependent Variable: ROA

b. Predictors: (Constant), ROE

c. Predictors: (Constant), ROE, DEBT TO INCOME

Table 6: ANOVA table for firm-specific and macro-economic factors

Based on Table 6, the first model which only calculate return on equity as the firm-specific independent variable, the significant level or p-value of the ANOVA is 0.012. This means that the regression model does not has a consistent variance, which is the regression model is not a significantly predicts the outcome variables. However, the second model, is the perfectly significant level of 0 thst has a very consistent variance between the variables.

4.4 Descriptive Statistics

The data that we used to analyse has 5 samples, which the financial ratios is collected from the annual reports from 2014 to 2018. However, the descriptive statistics is calculated and shown in the tables below. The mean is the average of each dependent and independent variables, while the standard deviation is the measure of dispersion of the dependent and independent variables.

4.4.7 Firm-specific Factors

Descriptive Statistics

	Mean	Std. Deviation	N
ROA	.092095357939765	.004827175193266	5
ROE	.169595723917603	.012925437474463	5
CURRENT RATIO	.358600002167710	.052674131579126	5
QUICK RATIO	.297165296299073	.053491023480960	5
AVERAGE-COLLECTION PERIOD	18.735814247757173	1.582694098874543	5
DEBT TO INCOME	4.958305315873406	.207602187106758	5
OPERATIONAL RATIO	.821067755941316	.007635639614937	5
OPERATING MARGIN	.165672706729510	.009462955376340	5
Index	1.00	.000	5

Table 7: Descriptive statistics table for firm-specific factors

Based on the descriptive statistics in Table 7, it shows us the mean and standard deviation of Whitbread PLC from the year 2014 to 2018. As we can see in the table, the dependent variable is return on assets (ROA), and other factors are as the independent variables. For profitability, the hotel shown that around 0.0921 of them having a good return on assets, means they have high values of effectiveness in deploying their assets to generate sales and eventually profits. Next, the mean of current ratio is 0.3586 and for quick ratio is about 0.2972, it can be assumed that Whitbread PLC is able to pay short-term obligations, and meet their creditor's

demands. In table 7, we also know that Whitbread PLC need to take the average 18.74 days for their average-collection period and 4.9583 average for debt to income to repay their loan. Next, for the operational risk, this hotel has the means around 0.8211 for operating ratio and 0.1657 for the operating margin to maintain their operations. This indicate the hotel have a well manage with operational risk faces by company in the course of conducting its daily business activities, procedures, and systems. Lastly, 100% of the hotels in United Kingdom achieve the good corporate governance index, which including the principles of accountability, transparency, independence, fairness and sustainable.

4.4.8 Macro-economic Factors

Descriptive Statistics

	Mean	Std. Deviation	N
ROA	.092095357939765	.004827175193266	5
GDP	2.051760000000000	.582486508856643	5
Unemployment	4.901999999999999	.843842402347737	5
Inflation	1.5360	.90287	5
Interest Rate	.4500	.11180	5
Exchange Rate	.7060	.07232	5
Beta	.8400	.00000	5

Table 8: Descriptive statistics table for macro-economic factors

The output of descriptive statistics in Table 8 shows the mean and standard deviation of ROA (dependent variable) and other macro-economic factors (independent variables) for the Whitbread PLC in United Kingdom. From the table, the mean for gross domestic product (GDP) is 2.0518 while its standard deviation is 0.0048 and the mean for unemployment is 4.9020 with standard deviation 0.8438 have the two slightly biggest differences gap between the mean and volatility among the macro-economic factors. Besides that, the mean for inflation in United Kingdom is 1.5360, the mean of interest rate is about 0.45 and the mean for exchange rate is 0.7060. Lastly, the mean of beta for Whitbread PLC is around 0.84.

4.4.9 Firm-specific & Macro-economic Factors

Descriptive Statistics			
	Mean	Std. Deviation	N
ROA	.092095357939765	.004827175193266	5
ROE	.169595723917603	.012925437474463	5
CURRENT RATIO	.358600002167710	.052674131579126	5
QUICK RATIO	.297165296299073	.053491023480960	5
DEBT TO INCOME	4.958305315873406	.207602187106758	5
AVERAGE-COLLECTION PERIOD	18.735814247757173	1.582694098874543	5
OPERATIONAL RATIO	.821067755941316	.007635639614937	5
OPERATING MARGIN	.165672706729510	.009462955376340	5
Index	10.00	.000	5
GDP	2.051760000000000	.582486508856643	5
Unemployment	4.901999999999999	.843842402347737	5
Inflation	1.5360	.90287	5
Interest Rate	.4500	.11180	5
Exchange Rate	.7060	.07232	5
Beta	.8400	.00000	5

Table 9: Descriptive statistics table for firm-specific and macro-economic factors

Based on the descriptive statistics in Table 9, it shows us the mean and standard deviation of firm-specific and macro-economic factors for Whitbread PLC in United Kingdom from the year 2014 to 2018. As we can see in the table, the dependent variable is return on assets (ROA), and other factors are as the independent variables. For profitability, the hotel shown that around 0.0921 of them having a good return on assets, means they have high values of effectiveness in deploying their assets to generate sales and eventually profits. Next, the mean of current ratio is 0.3586 and for quick ratio is about 0.2972, it can be assumed that Whitbread PLC is able to pay short-term obligations, and meet their creditor's demands. In table 9, we also know that Whitbread PLC need to take the average 18.74 days for their average-collection period and 4.9583 average for debt to income to repay their loan. Next, for the operational risk, this hotel has the means around 0.8211 for operating ratio and 0.1657 for the operating margin to maintain their operations. This indicate the hotel have a well manage with operational risk faces by company in the course of conducting its daily business activities, procedures, and systems. Lastly, 100% of the hotels in United Kingdom achieve the good corporate governance index, which including the principles of accountability, transparency, independence, fairness and

sustainable. Furthermore, from the Table 9, we also can observe that the mean and standard deviation of ROA (dependent variable) and other macro-economic factors (independent variables) for the Whitbread PLC in United Kingdom. From the table, the mean for gross domestic product (GDP) is 2.0518 while its standard deviation is 0.0048 and the mean for unemployment is 4.9020 with standard deviation 0.8438 have the two slightly biggest differences gap between the mean and volatility among the macro-economic factors. Besides that, the mean for inflation in United Kingdom is 1.5360, the mean of interest rate is about 0.45 and the mean for exchange rate is 0.7060. Lastly, the mean of beta for Whitbread PLC is around 0.84.

4.5 Correlations

Pearson correlation is used to analyse the relationship between dependent variable (profitability) of Whitbread PLC and the independent variables (firm-specific factors and macroeconomic factors). The table below is used as benchmark to determine the relationship between variables.

Size of Correlation	Interpretation
± 0.70 to ± 1.00	High positive (negative) correlation
±0.50 to ± 0.70	Moderate positive (negative) correlation
±0.30 to ± 0.50	Low positive (negative) correlation
0.00 to ± 0.30	Negligible correlation

Table 10: Benchmark for size and interpretation of correlation

Besides, the positive value of correlation means the relationship between the dependent variable and the independent variables is positive, which means whenever the independent variable increase, the dependent variable will expect to be increase. Moreover, the negative value of correlation means the relationship between the dependent variable and the independent variables is negative, which means whenever the independent variable increase, the dependent variable will tend to be decrease. However, since the corporate governance index score is constant throughout the 5 years, therefore the correlation for the corporate governance index score and the ROA is 0. Thus, this means the corporate governance has no relationship at all with the profitability in the Whitbread PLC.

Next, if the value of Sig(1-Tailed) is greater than 0.05, we can conclude that there is no statistically significant correlation between two variables. This means that the increases or decreases of independent variable do not significantly relate to increases or decreases of dependent variables. On other hand, if the Sig(1-Tailed) value is less than 0.05, we can conclude that there is a statistically significant correlation between two variables. This means that the increases or decreases of independent variable do significantly relate to increases or decreases of dependent variables.

4.5.10 Firm-specific Factors

Correlations										
		ROA	ROE	CURRENT RATIO	QUICK RATIO	AVERAGE-COLLECTION PERIOD	DEBT TO INCOME	OPERATIONAL RATIO	OPERATING MARGIN	Index
Pearson Correlations	ROA	1.000	0.953	-0.266	-0.297	-0.232	-0.678	-0.242	-0.006	
	ROE	0.953	1.000	-0.389	-0.424	-0.423	-0.423	-0.224	-0.008	
	CURRENT RATIO	-0.266	-0.389	1.000	0.998	0.788	-0.148	0.874	-0.848	
	QUICK RATIO	-0.297	-0.424	0.998	1.000	0.823	-0.139	0.868	-0.828	
	AVERAGE-COLLECTION PERIOD	-0.232	-0.423	0.788	0.823	1.000	-0.336	0.586	-0.509	
	DEBT TO INCOME	-0.678	-0.423	-0.148	-0.139	-0.336	1.000	0.183	-0.005	
	OPERATIONAL RATIO	-0.242	-0.224	0.874	0.868	0.586	0.183	1.000	-0.964	
	OPERATING MARGIN	-0.006	-0.008	-0.848	-0.828	-0.509	-0.005	-0.964	1.000	
	Index									1.000
Sig. (1-tailed)	ROA		0.006	0.333	0.314	0.354	0.104	0.347	0.496	0.000
	ROE	0.006		0.259	0.239	0.239	0.239	0.359	0.495	0.000
	CURRENT RATIO	0.333	0.259		0.000	0.057	0.406	0.026	0.035	0.000
	QUICK RATIO	0.314	0.239	0.000		0.043	0.412	0.028	0.042	0.000
	AVERAGE-COLLECTION PERIOD	0.354	0.239	0.057	0.043		0.290	0.149	0.191	0.000
	DEBT TO INCOME	0.104	0.239	0.406	0.412	0.290		0.384	0.497	0.000
	OPERATIONAL RATIO	0.347	0.359	0.026	0.028	0.149	0.384		0.004	0.000
	OPERATING MARGIN	0.496	0.495	0.035	0.042	0.191	0.497	0.004		0.000
	Index	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
N	ROA	5	5	5	5	5	5	5	5	5
	ROE	5	5	5	5	5	5	5	5	5
	CURRENT RATIO	5	5	5	5	5	5	5	5	5
	QUICK RATIO	5	5	5	5	5	5	5	5	5
	AVERAGE-COLLECTION PERIOD	5	5	5	5	5	5	5	5	5
	DEBT TO INCOME	5	5	5	5	5	5	5	5	5
	OPERATIONAL RATIO	5	5	5	5	5	5	5	5	5
	OPERATING MARGIN	5	5	5	5	5	5	5	5	5
	Index	5	5	5	5	5	5	5	5	5

Table 11: Correlation analysis table for firm-specific factors

Positively correlated to the ROA:

1. ROE

Only one of the firm-specific factors which is return on equity is positively relationship to the return on assets. However, the significant level of this firm-specific independent variable,

have very high positive significance levels, which the p-values is 0.953. This means that the ROE has a strong positive relationship that will positively increase and affect the profitability of company, which the ROA and ROE are the results for the organization performance.

Negatively correlated to the ROA:

1. Current ratio
2. Average collection period
3. Debt to income
4. Operational ratio
5. Operational margin

The firm-specific factors that listed above is negatively correlated to the return on assets. Among these independent variables, debt to income show there are highest negative correlation with profitability. This means that debt to income will moderate negatively affect the profitability, meaning that, whenever the increasing of credit risk, the profitability of the company will also decrease. Moreover, the significant level of these firm-specific independent variables, the current ratio, average collection period, operational ratio and operational margin have a very low significance level, which the p-values are less than 0.05. This means the current ratio, average collection period, operational ratio and operational margin having weak negative relationship with the return on assets and the correlation is not very clear. Therefore, we cannot conclude that the liquidity risk and operational risk will give direct impacts on the profitability. Next, only the return on equity having the Sig(1-Tailed) value that is less than 0.05, we can conclude that there is a statistically significant correlation between ROE and ROA. This means that the increases or decreases of ROE do significantly relate to increases or decreases of ROA. Then, the Sig(1-Tailed) values of other independent variables is more than 0.05, this means they have the not significantly relationship with profitability.

4.5.11 Macro-economic Factors

Correlations								
		ROA	GDP	Unemployment	Inflation	InterestRate	Exchange Rate	Beta
Pearson Correlation	ROA	1.000	0.833	0.790	-0.619	0.484	-0.922	
	GDP	0.833	1.000	0.976	-0.480	0.252	-0.906	
	Unemployment	0.790	0.976	1.000	-0.595	0.061	-0.921	
	Inflation	-0.619	-0.480	-0.595	1.000	0.326	0.630	
	InterestRate	0.484	0.252	0.061	0.326	1.000	-0.263	
	Exchange Rate	-0.922	-0.906	-0.921	0.630	-0.263	1.000	
	Beta							1.000
Sig. (1-tailed)	ROA		0.040	0.056	0.133	0.204	0.013	0.000
	GDP	0.040		0.002	0.207	0.341	0.017	0.000
	Unemployment	0.056	0.002		0.145	0.461	0.013	0.000
	Inflation	0.133	0.207	0.145		0.296	0.127	0.000
	InterestRate	0.204	0.341	0.461	0.296		0.335	0.000
	Exchange Rate	0.013	0.017	0.013	0.127	0.335		0.000
	Beta	0.000	0.000	0.000	0.000	0.000	0.000	
N	ROA	5	5	5	5	5	5	5
	GDP	5	5	5	5	5	5	5
	Unemployment	5	5	5	5	5	5	5
	Inflation	5	5	5	5	5	5	5
	InterestRate	5	5	5	5	5	5	5
	Exchange Rate	5	5	5	5	5	5	5
	Beta	5	5	5	5	5	5	5

Table 12: Correlation analysis table for macro-economic factors

Positively correlated to the ROA:

1. GDP
2. Unemployment rate
3. Interest rate

The macroeconomic factors that listed above is positively correlated to the return on assets. However, by looking at the Pearson's r value of these macro-economic independent variables, GDP and unemployment have high positive correlation, that 0.70 and above. This means the GDP and unemployment has a strong positive relationship with the ROA. However, the interest rate has a weak positive relationship with profitability of Whitbread PLC. This

implies whenever the GDP, unemployment rate and interest rate of United Kingdom increases, the liquidity risk will be increases.

Negatively correlated the ROA:

1. Inflation rate
2. Exchange rate

The macroeconomic factors that listed above is negatively correlated to the ROA. However, by looking at the significant level of these macro-economic independent variables, the exchange rate has high negative correlation, while the inflation rate having moderate negative correlation with ROA of Whitbread PLC. This means the decreasing of exchange rate for British will strongly affects the profitability of company. And, we cannot conclude that the inflation will give direct impacts on the liquidity risk since the correlation is not very clear.

Furthermore, the value of the Sig(1-Tailed) for GDP and exchange rate is less than 0.05. This means that the increases or decreases of GDP and exchange rate do significantly relate to increases or decreases of ROA.

4.5.12 Firm-specific & Macro-economic Factors

Correlations

		ROA	ROE	CURRENT RATIO	QUICK RATIO	DEBT TO INCOME	AVERAGE-COLLECTION PERIOD	OPERATIONAL RATIO	OPERATING MARGIN	Index	GDP	Unemployment	Inflation	InterestRate	Exchange Rate	Beta
Pearson Correlation	ROA	1.000	0.953	-0.266	-0.297	-0.678	-0.232	-0.242	-0.006		0.833	0.790	-0.619	0.484	-0.922	
	ROE	0.953	1.000	-0.389	-0.424	-0.423	-0.423	-0.224	-0.008		0.898	0.851	-0.644	0.369	-0.872	
	CURRENT RATIO	-0.266	-0.389	1.000	0.998	-0.148	0.788	0.874	-0.848		-0.011	0.009	0.549	0.050	-0.017	
	QUICK RATIO	-0.297	-0.424	0.998	1.000	-0.139	0.823	0.868	-0.828		-0.057	-0.046	0.601	0.083	0.031	
	DEBT TO INCOME	-0.678	-0.423	-0.148	-0.139	1.000	-0.336	0.183	-0.005		-0.310	-0.294	0.285	-0.558	0.639	
	AVERAGE-COLLECTION PERIOD	-0.232	-0.423	0.788	0.823	-0.336	1.000	0.586	-0.509		-0.250	-0.334	0.779	0.525	0.176	
	OPERATIONAL RATIO	-0.242	-0.224	0.874	0.868	0.183	0.586	1.000	-0.964		0.205	0.189	0.577	0.027	-0.027	
	OPERATING MARGIN	-0.006	-0.008	-0.848	-0.828	-0.005	-0.509	-0.964	1.000		-0.431	-0.425	-0.373	-0.074	0.292	
	Index									1.000						
	GDP	0.833	0.898	-0.011	-0.057	-0.310	-0.250	0.205	-0.431		1.000	0.976	-0.480	0.252	-0.906	
	Unemployment	0.790	0.851	0.009	-0.046	-0.294	-0.334	0.189	-0.425		0.976	1.000	-0.595	0.061	-0.921	
	Inflation	-0.619	-0.644	0.549	0.601	0.285	0.779	0.577	-0.373		-0.480	-0.595	1.000	0.326	0.630	
	InterestRate	0.484	0.369	0.050	0.083	-0.558	0.525	0.027	-0.074		0.252	0.061	0.326	1.000	-0.263	
	Exchange Rate	-0.922	-0.872	-0.017	0.031	0.639	0.176	-0.027	0.292		-0.906	-0.921	0.630	-0.263	1.000	
	Beta															1.000
Sig. (1-tailed)	ROA		0.006	0.333	0.314	0.104	0.354	0.347	0.496	0.000	0.040	0.056	0.133	0.204	0.013	0.000
	ROE	0.006		0.259	0.239	0.239	0.239	0.359	0.495	0.000	0.019	0.034	0.121	0.270	0.027	0.000
	CURRENT RATIO	0.333	0.259		0.000	0.406	0.057	0.026	0.035	0.000	0.493	0.494	0.169	0.468	0.489	0.000
	QUICK RATIO	0.314	0.239	0.000		0.412	0.043	0.028	0.042	0.000	0.464	0.471	0.142	0.447	0.480	0.000
	DEBT TO INCOME	0.104	0.239	0.406	0.412		0.290	0.384	0.497	0.000	0.306	0.316	0.321	0.164	0.123	0.000
	AVERAGE-COLLECTION PERIOD	0.354	0.239	0.057	0.043	0.290		0.149	0.191	0.000	0.343	0.291	0.060	0.182	0.389	0.000
	OPERATIONAL RATIO	0.347	0.359	0.026	0.028	0.384	0.149		0.004	0.000	0.370	0.381	0.154	0.483	0.483	0.000
	OPERATING MARGIN	0.496	0.495	0.035	0.042	0.497	0.191	0.004		0.000	0.234	0.238	0.268	0.453	0.317	0.000
	Index	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000
	GDP	0.040	0.019	0.493	0.464	0.306	0.343	0.370	0.234	0.000		0.002	0.207	0.341	0.017	0.000
	Unemployment	0.056	0.034	0.494	0.471	0.316	0.291	0.381	0.238	0.000	0.002		0.145	0.461	0.013	0.000
	Inflation	0.133	0.121	0.169	0.142	0.321	0.060	0.154	0.268	0.000	0.207	0.145		0.296	0.127	0.000
	InterestRate	0.204	0.270	0.468	0.447	0.164	0.182	0.483	0.453	0.000	0.341	0.461	0.296		0.335	0.000
	Exchange Rate	0.013	0.027	0.489	0.480	0.123	0.389	0.483	0.317	0.000	0.017	0.013	0.127	0.335		0.000
	Beta	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
N	ROA	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	ROE	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	CURRENT RATIO	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	QUICK RATIO	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	DEBT TO INCOME	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	AVERAGE-COLLECTION PERIOD	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	OPERATIONAL RATIO	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	OPERATING MARGIN	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Index	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	GDP	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Unemployment	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Inflation	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	InterestRate	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Exchange Rate	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Beta	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

Table 13: Correlation analysis table for firm-specific and macro-economic factors

Positively correlated to the ROA:

1. ROE
2. GDP
3. Unemployment rate
4. Interest rate

The firm-specific factors and macro-economic factors that listed above is positively correlated to the ROA of Whitbread PLC. However, by looking at the significant level of these internal and external independent variables, the ROE, GDP and unemployment rate have very high positive Pearson's r values than more than 0.07. This means that the ROE, GDP and unemployment have a strong positive relationship with the ROA. However, the interest rate of British having that Pearson's r-values about 0.484. This implies that the increasing of ROE, GDP, unemployment rate and interest rate, will cause the profitability of company to increase.
Negatively correlated to the current ratio:

1. Current ratio
2. Quick ratio
3. Debt to income
4. Average collection period
5. Operational ratio
6. Operational margin
7. Inflation rate
8. Exchange rate

The firm-specific factors and macro-economic factors that listed above is negatively correlated to the ROA. However, by looking at the Pearson's r-values of these firm-specific and macro-economic independent variables, only the exchange has a very high negative relationship with the profitability of Whitbread PLC. While the debt to income and inflation rate of the company have a moderate negative correlation with the ROA. However, the current ratio, quick ratio and average collection period, operational ratio and operational margin have weak negative relationship with profitability of the company. This implies these independent variables will negatively affect the profitability, meaning that, whenever these negative correlation factors increase, the profitability will also decrease.
However, these are some independent factors (ROE, GDP, and exchange rate) that are significantly relate to the profitability of the company, which their Pearson's r-values are less

than 0.05. This indicate that the increases or decreases of GDP and exchange rate do significantly relate to increases or decreases of profitability.

4.6 Coefficients

4.6.13 Firm-specific Factors

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.032	.011		2.861	.065	-.004	.067
	ROE	.356	.065	.953	5.457	.012	.148	.564
2	(Constant)	.079	.000		248.897	.000	.078	.081
	ROE	.303	.001	.812	391.180	.000	.300	.306
	DEBT TO INCOME	-.008	.000	-.334	-160.924	.000	-.008	-.008

a. Dependent Variable: ROA

Table 14: Coefficients analysis table for firm-specific factors

In the first model that shown in Table 14, the ROE is the firm-specific independent variable that influence the ROA, which the significance level of the size of the company is 0.012. This indicate that the ROE will give a large impact to the profitability. Besides, the second model is using the ROE and debt to income as the firm-specific independent variable that influence the ROA. Since the p-value is less than 0.05, with perfectly significance level of 0.000, the ROE and debt to income will affect the liquidity risk significantly.

Moreover. In the first model, the regression line for the dependence variable is $y = 0.032 + 0.356\ x_1$ where y is the profitability (dependent variable) and x_1 is the ROE (independent variable) for the prediction after year 2018. Furthermore, the second model tells us, the regression line for the dependence variable is $y = 0.079 + 0.303\ x_1 - 0.008\ x_2$ where y is the profitability (dependent variable) and x_1 is the ROE whilst x_2 is the debt to income (independent variables).

4.6.14 Macro-economic Factors

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.136	.011		12.816	.001	.102	.169
	Exchange Rate	-.062	.015	-.922	-4.125	.026	-.109	-.014
a. Dependent Variable: ROA								

Table 15: Coefficients analysis table for macro-economic factors

In this model, the exchange rate of United Kingdom influenced the return on assets (ROA) of Whitbread PLC. This is because the significance level of the size of the company is 0.026 which is lower than 0.05. This indicate that the exchange rate of United Kingdom will give an impact to the profitability. In this model, the regression line for the dependence variable is $y = 0.136 - 0.062x_1$ where y is the profitability (dependent variable) and x_1 is the exchange rate of United Kingdom (independent variable) for the prediction after year 2018..

4.6.15 Firm-specific & Macro-economic Factors

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.032	.011		2.861	.065	-.004	.067
	ROE	.356	.065	.953	5.457	.012	.148	.564
2	(Constant)	.079	.000		248.897	.000	.078	.081
	ROE	.303	.001	.812	391.180	.000	.300	.306
	DEBT TO INCOME	-.008	.000	-.334	-160.924	.000	-.008	-.008
a. Dependent Variable: ROA								

Table 16: Coefficients analysis table for firm-specific and macro-economic factors

In the first model, the ROE is the firm-specific independent variable that influence the ROA. This is because the significance level of the ROE is 0.012 which is lower than 0.05. This indicate that the ROE of the company will give a huge impact to the profitability.

Besides, the second model is using the size of the ROE and debt to income as the firm-specific independent variable that influence the current ratio. Since the both of p-value is less than 0.05, with perfectly significance level of 0.000, the ROE and debt to income will affect the profitability significantly.

In the first model, the regression line for the dependence variable is $y = 0.032 + 0.3256x_1$ where y is the profitability (dependent variable) and x_1 is the ROE of the company (independent variable). Furthermore, the second model tells us, the regression line for the dependence variable is $y = 0.079 + 0.303\ x_1 - 0.008x_2$ where y is the profitability (dependent variable) and x_1 is the ROE whilst x_2 is the debt to income (independent variables) for the prediction after year 2018.

4.7 Excluded Variables

One of the speciality in the linear regression analysis by using **Stepwise** is that the SPSS will choose the most significant independent variables to include in the regression model. Therefore, the statistics of the excluded variables for Whitbread PLC are shown in the table below.

4.7.16 Firm-Specific Factors

Excluded Variables[a]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	CURRENT RATIO	.123[b]	.573	.624	.376	.849
	QUICK RATIO	.130[b]	.598	.611	.389	.821
	AVERAGE-COLLECTION PERIOD	.208[b]	1.128	.376	.624	.821
	DEBT TO INCOME	-.334[b]	-160.924	.000	-1.000	.821
	OPERATIONAL RATIO	-.031[b]	-.141	.901	-.099	.950
	OPERATING MARGIN	.002[b]	.010	.993	.007	1.000
2	CURRENT RATIO	.001[c]	.211	.867	.207	.730
	QUICK RATIO	.000[c]	.145	.909	.143	.697
	AVERAGE-COLLECTION PERIOD	-.002[c]	-.645	.635	-.542	.498
	OPERATIONAL RATIO	.000[c]	.072	.955	.071	.941
	OPERATING MARGIN	.000[c]	-.176	.889	-.174	1.000

a. Dependent Variable: ROA

b. Predictors in the Model: (Constant), ROE

c. Predictors in the Model: (Constant), ROE, DEBT TO INCOME

Table 17: Excluded variables table for firm-specific factor

4.7.17 Macroeconomic Factors

Excluded Variables[a]						
Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	GDP	-.016[b]	-.024	.983	-.017	.178
	Unemployment	-.392[b]	-.606	.606	-.394	.151
	Inflation	-.063[b]	-.180	.874	-.126	.603
	InterestRate	.259[b]	1.199	.353	.647	.931
a. Dependent Variable: ROA						
b. Predictors in the Model: (Constant), ExchangeRate						

Table 18: Excluded variables table for macro-economic factors

4.7.18 Firm-specific & Macroeconomic Factors

Excluded Variables[a]						
Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	CURRENT RATIO	.123[b]	.573	.624	.376	.849
	QUICK RATIO	.130[b]	.598	.611	.389	.821
	DEBT TO INCOME	-.334[b]	-160.924	.000	-1.000	.821
	AVERAGE-COLLECTION PERIOD	.208[b]	1.128	.376	.624	.821
	OPERATIONAL RATIO	-.031[b]	-.141	.901	-.099	.950
	OPERATING MARGIN	.002[b]	.010	.993	.007	1.000
	GDP	-.118[b]	-.246	.829	-.171	.194
	Unemployment	-.077[b]	-.192	.866	-.134	.275
	Inflation	-.010[b]	-.034	.976	-.024	.586
	InterestRate	.153[b]	.752	.530	.470	.864
	ExchangeRate	-.379[b]	-1.099	.386	-.614	.240
2	CURRENT RATIO	.001[c]	.211	.867	.207	.730
	QUICK RATIO	.000[c]	.145	.909	.143	.697
	AVERAGE-COLLECTION PERIOD	-.002[c]	-.645	.635	-.542	.498
	OPERATIONAL RATIO	.000[c]	.072	.955	.071	.941
	OPERATING MARGIN	.000[c]	-.176	.889	-.174	1.000
	GDP	.002[c]	.416	.749	.384	.188
	Unemployment	.004[c]	1.056	.483	.726	.270
	Inflation	-.003[c]	-1.208	.440	-.770	.586
	InterestRate	-.003[c]	-3.671	.169	-.965	.667

Table 19: Excluded variables table for firm-specific and macro-economic factors

4.8 Charts

The charts below shown the histograms, normal P-P plots, and the scatterplot for the dependent variable: profitability. We can observe and estimate the trend of financial status and relationship between the variables by using this three type of graphs.

4.8.19 Firm Specific Factors

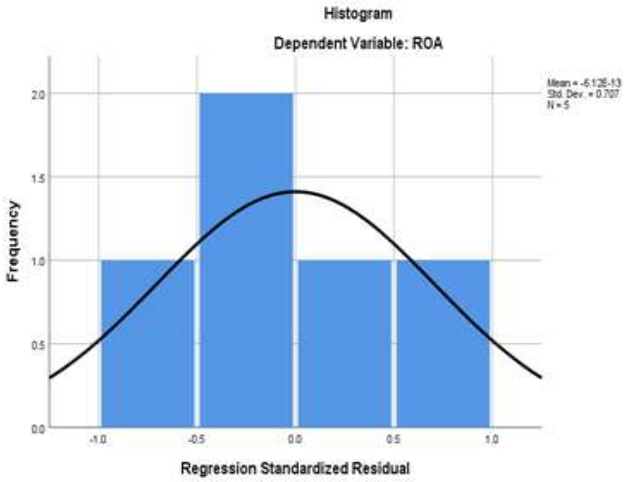

Figure 1: Histogram of firm specific factors

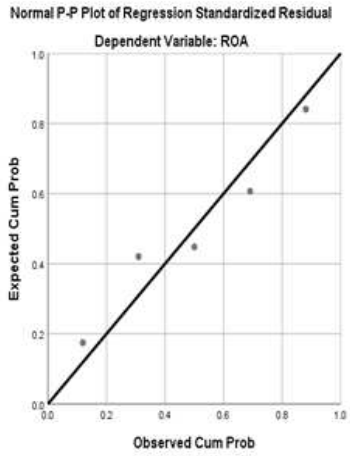

Figure 2: Normal P-P plot of firm specific factors

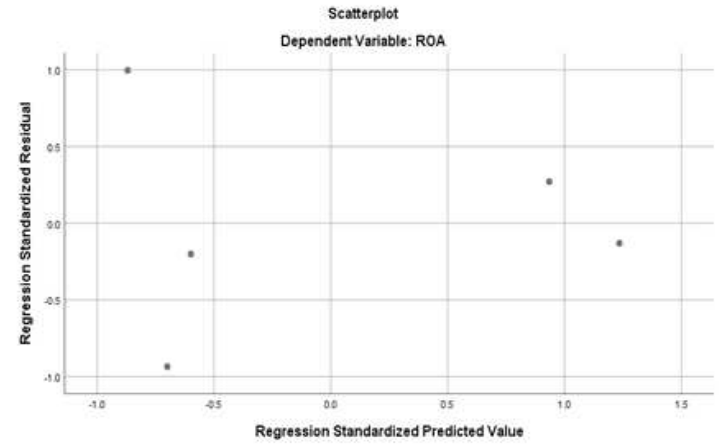

Figure 3: Scatterplot of firm specific factors

4.8.20 Macro-economic Factors

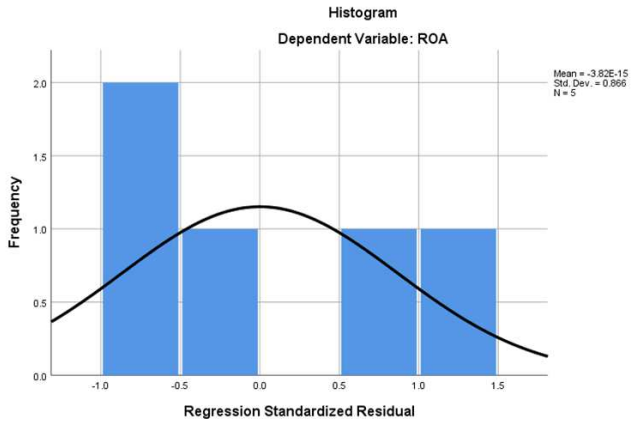

Figure 4: Histogram of macro-economic factors

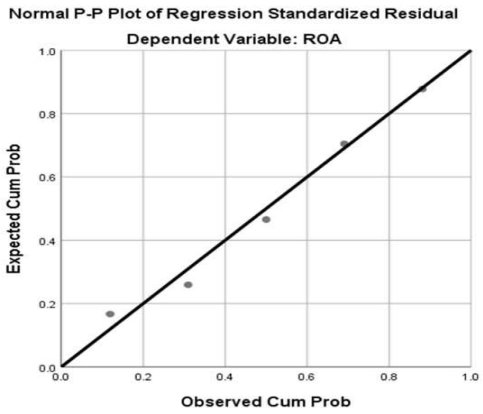

Figure 5: Normal P-P plot of macro-economic factors

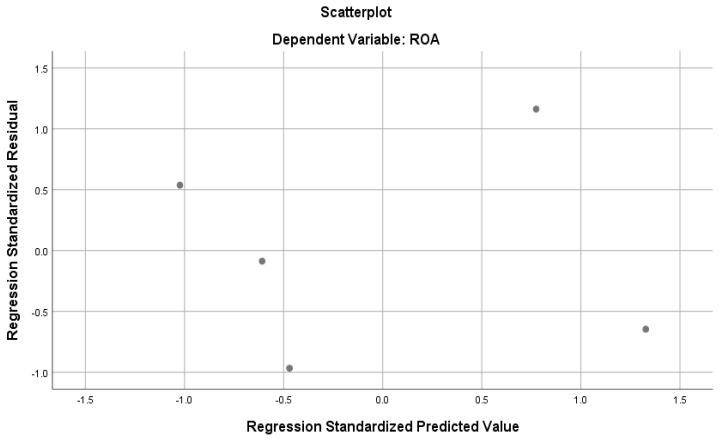

Figure 6: Scatterplot of macro-economic factors

4.8.21 Firm-specific & Macro-economic Factors

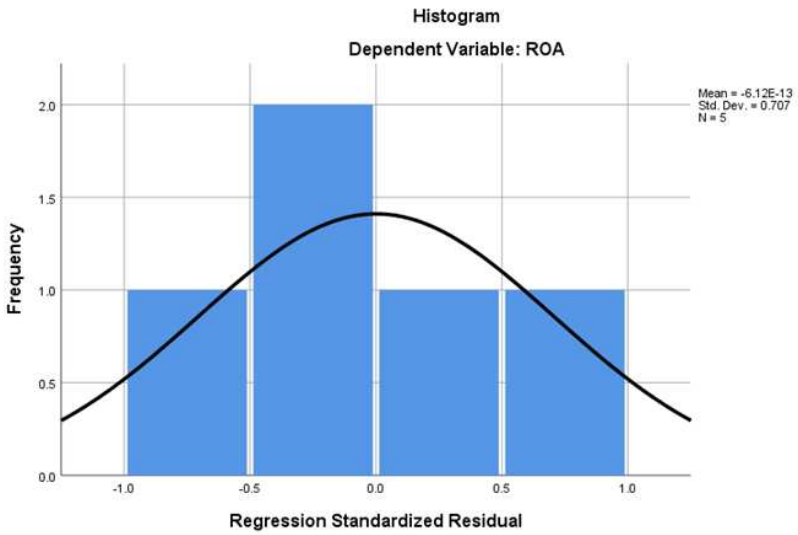

Figure 7: Histogram of firm-specific and macro-economic factors

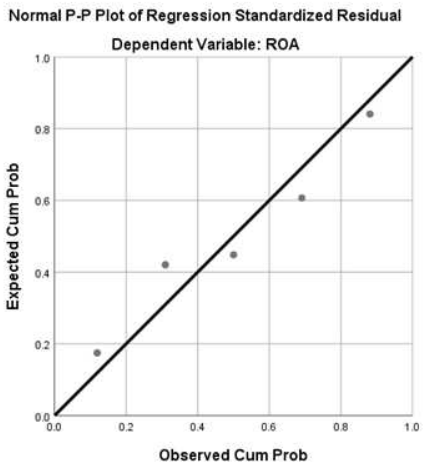

Figure 8: Normal P-P plot of firm-specific and macro-economic factors

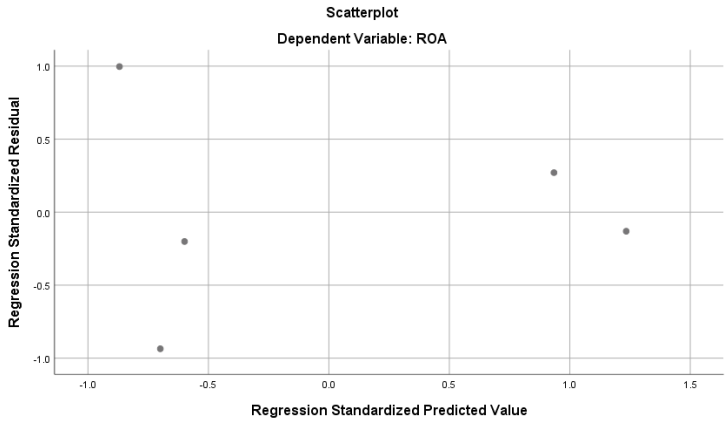

Figure 7: Scatterplot of firm-specific and macro-economic factors

5.0 Discussion & Conclusion

5.1 Introduction

This chapter, with shows the result and findings that summarized along with some recommendations and the limitation of study is discussed.

5.2 Discussion of Result

This study have to determine the profitability and its determinants in the Whitbread PLC, United Kingdom. This study is done to achieve the research objectives as follows:

1. To determine the firm-specific factors towards the profitability.

2. To determine the macro-economic factors towards the profitability.

3. To analyse the firm-specific factors and macro-economic factors that may influence the profitability.

There are 3 models included in the regression model according to the findings on Chapter 4, which is firm-specific factors, macro-economic factors, and firm-specific and macro-economic factors. As a result, the regression model that uses firm-specific factors (model 1) is same as the regression model that uses firm-specific and macro-economic factors (model 3). Therefore, there are enough evidence to say that the firm-specific factor has influence the profitability (dependent variable) the most.

Among the firm-specific factors, based on the coefficient of correlation, the credit risk has positively influenced the profitability the most. This means whenever the credit risk increase, the profitability will increase as well. This is because the effective of credit cycle faced by Whitbread PLC to pay off their long-term liability. So, they might have to face problems in paying their short-term obligation. However, the liquidity risk and operational risk has the negative relationship with the profitability of the Whitbread PLC. Even though they are not in the statistic significant level, but it means that the increasing of liquidity risk and operational will bring the negative impact to the organization's performance, and cause the financial stability and performance of the organization more volatile. (Kargi, 2011).

Moreover, based on the correlation & coefficient tables that described in Chapter 4, there are enough evidences to say that the profitability has no relationship with the corporate governance. This is because within these 5 years, the corporate governance index score remain at the same level. This means the corporate governance element will not give any impact to the profitability. However, among the macro-economic factors, based on the coefficient of

correlation, the market risk has positively influenced the profitability the most. From the result, we can see that gross domestic product (GDP) of United Kingdom having a significantly positive relationship with the profitability of Whitbread PLC. The increasing of GDP will bring the profit for the organization. In addition, the market risk of United Kingdom increase, will causes the profitability of organization decreases as well. For example, when the increases of interest rates or exchange rates of United Kingdom, it will negatively affect the Whitbread PLC's profitability status. And, there is not enough evidence to say that the inflation rate and the unemployment rate is negatively related to the profitability.

5.3 Limitations

The research is confined to United Kingdom's hotel industry. The selected hotel company from industry also the sample that only listed in London Stock Exchange (LSE). Next, this study also includes only five year of financial statements from 2014 to 2018. Thus, this study only limited for referring to the hotel industry in the United Kingdom.

5.4 Recommendations

In order to control the profitability, the credit risk is needed to be decrease as well. Thus, the organization should manage their creditors effectively, one of the solution is to build up a crystal clear credit management. A transparent credit management help the company keep track on their creditors' record. The credit should only be available to their customer who adopt the company's credit management policies. Besides that, the organization can set up more discounts and shorter the debt period for account receivable, to ensure the effectiveness of credit cycle of organization.

Furthermore, the operational ratio and operational margin. of company is significantly negative correlated to the profitability. Therefore, in order to reduce the profitability, the operational risk should be decrease. The employees should having the principle of accountability for identifying things that go wrong, always prepare and challenge he pre-existing assumptions made. In order to reduce the credit risk and market risk, the company should set up more discounts and shorter the debt period for account receivable, to ensure the sustainable of the company is protected.

On the other hand, the corporate governance is not related to the profitability, but the corporate governance could help the company to maintain the stability of the company.

Therefore, the company is recommended also to implement the corporate governance in their daily operations, especially the four principles of the corporate governance: transparency, fairness, independence and accountability. The main objective of the implementation of good corporate governance is to optimize value for shareholders and stakeholders in the long run (P.A Gompers, L.Ishii, and A. Metrick, 1990). It ensure organization in managed in a manner that fits the best interests of all and helps in brand formation and development.

REFERENCES

Safdat Hussain Tahir, Hazoor Muhammad Sabir, Adnan Arsshed, Muhammad Anwar ul Haq (1999). *Two-tier Corporate Governance Model for Parkistan.*

Bikker, J.A and H.Hu(2001). *Cyclical Patterns in Profits, Provisioning and Lending of Banks and Procyclicality of the New Basle Capital Requirements.* Retrieved December 2001, from https://www.dnb.nl/binaries/ot039_tcm46-146052.pdf

Ministry of Trade and Industry Singapore (2012). *Economic survey of Singapore*. Retrieved 17 September 2017, from

https://www.mti.gov.sg/-/media/MTI/Resources/Economic-Survey-of-Singapore/2017/Economic-Survey-of-Singapore-2017/fullreport_aes2017.pdf

Barajas, A., Steiner, R., Salazar, N., 1999. *Interest Spreads in Banking in Colombia 1974-96. IMF Staff Papers.* Retrieved June 1999, from

http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.203.5229&rep=rep1&type=pdf

Wenqin Fan, & Weixian Dong Jie Luo (2018). *The Causes of Financial Risk in Enterprises and its precaution*. Retrieved 2018, from

https://pdfs.semanticscholar.org/9a97/68449124a81e16db7036aa9511760af67173.pdf

Maleya M. Omondi, & Willy Mwangi Muturi (2013). *Factors Affecting the Financial Performance of Listed Companies at the Nairobi Securities Excjhange in Kenya.* Retrived 2013, from

https://pdfs.semanticscholar.org/2ede/f54c2db329d2a4412aa8c1b00da53c338d4a.pdf?_ga=2.110469957.1764916618.1573463458-1656573979.1569777425

J.B Maverick (June 23, 2015). What are the key differences between financial risk and business risk to a company. Retrieved 2015, from

https://www.academia.edu/30238728/What_are_the_key_differences_between_financial_risk_and_business_risk_to_a_company_Investopedia

Camelia Burja (2011). Factors Influencing the Companies' Profitability. Retrieved 2011, from
https://ideas.repec.org/a/alu/journl/v2y2011i13p3.html

Patrick McColgan (May 22, 2001). *Agency theory and corporate governance a review of the literature from a UK perspective*. Retrieved 2001, from https://pdfs.semanticscholar.org/79c5/2954af851c95a27cb1fb702c23feaae86ca1.pdf

Edward I. Altman, Alessandro Danovi and Alberto Falini (2013*). Z-score Models' Application Companies Subject to Extraordinary Asministration.* Retrieved 2013, from http://people.stern.nyu.edu/ealtman/BOZZA%20ARTICOLO%2017.pdf

Robert C.Merton (May 1974). *On the Pricing of Corporate Debt: The Risk Structure of Interest Rate*. Retrieved from https://onlinelibrary.wiley.com/doi/10.1111/j.1540-6261.1974.tb03058.x

Andreas(Andy) Jobst(May 16, 2007). *The Economics of Islamic Finance and Securitization.* Retrieved May 2007, from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=986814

Jamal Ali Mohamed Noor(2014). *Effects of Market Risk on Performance of Transport Firms in Kenya.* Retrieved from file:///C:/Users/ASUS/Downloads/1493-Article%20Text-2755-1-10-20180104.pdf

Hendricks and Hirtle (December 1997). Bank Capital Requirements for Market Risk: The Internal Models Approach. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1016133

M. Hull, R. & Dawar, V. (2014). Agency theory, capital structure and firm performance: some Indian evidence. *Managerial Finance, Vol. 40 No. 12, pp. 1190-1206.* https://doi.org/10.1108/MF-10-2013-0275

Eitokpa, O.H., 2015. *Determinants of financial performance of listed foods and beverages companies in Nigeria* (Doctoral Dissertation).

Steven M.Bragg, CPA. IFRS Guidebook 2018 Edition (November 21, 2017). Accounting Tools, Inc.

OCED Principles of Corporate Governance (1999).

Leedy, D. P., Ormrod, J. E. (2001). *Practical Research: Planning and Design* (7th ed). New Jersey: Merrill Prentice Hall

Landau, S & Everitt, S, B, 2004, *A handbook of statistical analyses using SPSS*, CRC Press LLC, Florida.

Albertazzai, U., & Gambacorta, L.(2009). Bank profitability and the business cycle. *Journal of Financial Stability, 5(4), 393-409*

Noor Hashim Mohammed (2016). *The impact of liquidity risk, credit risk and operational risk on the performance of Iraqi private banks.*

Curak, M., Poposki, K., & Pepur, S. (2012). Profitability determinants of the Macedonian banking sector in changing environment. *Procedia-Social and Behavioral Sciences, 44, 406-416.*

Guru, B. K., Staunton, J., & Balashanmugam, B. (2002). Determinants of commercial bank profitability in Malaysia. *Journal of Money, Credit, and Banking, 17, 69-82.*

Samuel, O.T. and Abdulateef, Y., 2016. *Liquidity management and profitability of listed food and beverage companies in Nigeria*. IOSR Journal of Business and Management, 18(2), pp.167-176.

APPENDIX

	2014	2015	2016	2017	2018
Mean	441.7960	459.2618	283.1495	199.7083	127.5978
Variance	2382.0735	4881.2459	5377.3066	2990.7653	2586.4048
Standard deviation	48.8065	69.8659	73.3301	54.6879	50.8567
Maximum	587.2478	804.4019	574.4517	444.1787	321.2659
Minimum	323.7566	245.7827	29.0032	49.9426	3.6423
Coefficient of variance	9.0520	6.5735	3.8613	3.6518	2.5090

Table 20: The price change table of Whitbread PLC for each year 2014 to 2018

Average (2014-2018)	
Mean	286.2969
Variance	19556.8445
Standard deviation	139.8458
Maximum	804.4019
Minimum	3.6423
Coefficient of variance	2.0472

Table 21: The average price change table of Whitbread PLC for year 2014 to 2018

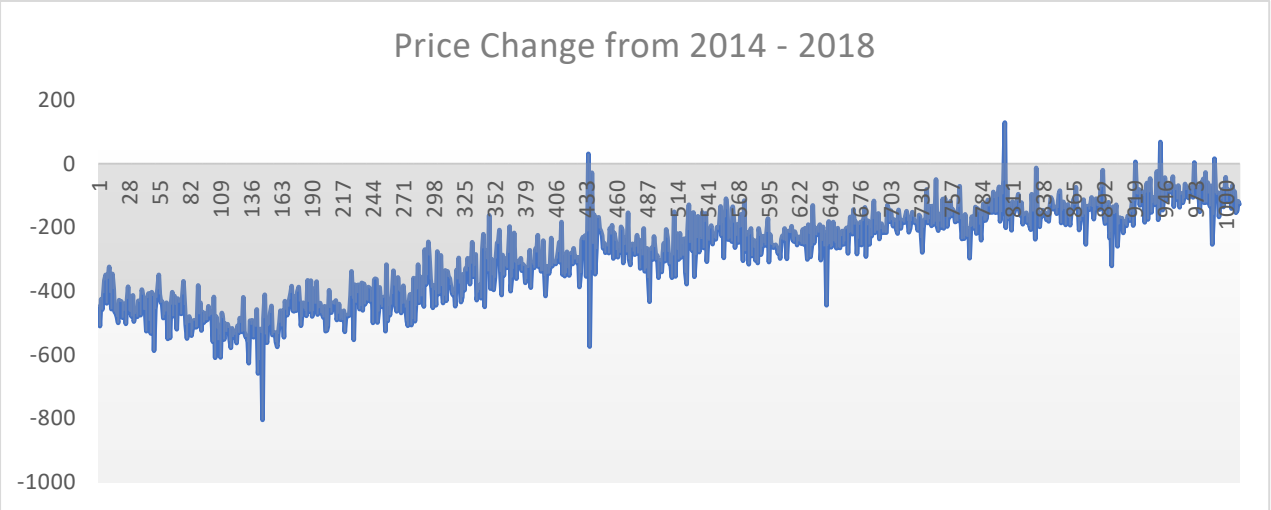

Figure 8: The graph plot for price change of Whitbread PLC from year 2014 to 2018.

YEAR	PERFORMANCE				
	Net Income	Total Assets	ROA	Common Equity	ROE
2014	323400000	3347500000	**0.0966**	1783000000	**0.1814**
2015	366100000	3733800000	**0.0981**	1977900000	**0.1851**
2016	387300000	4405300000	**0.0879**	2404700000	**0.1611**
2017	415900000	4688800000	**0.0887**	2524800000	**0.1647**
2018	436400000	4892400000	**0.0892**	2802500000	**0.1557**

Table 22: The performance calculation of Whitbread PLC(2014-2018) by Microsoft Excel

YEAR	LIQUIDITY RISK					
	Current Asset	Current Liability	CURRENT RATIO	Inventory	Prepaid Expenses	QUICK RATIO
2014	196000000	475300000	**0.4124**	30500000	0	**0.3482**
2015	164400000	584100000	**0.2815**	37100000	0	**0.2179**
2016	245100000	692500000	**0.3539**	44800000	0	**0.2892**
2017	287100000	838800000	**0.3423**	48200000	0	**0.2848**
2018	343000000	851200000	**0.4030**	48800000	0	**0.3456**

Table 23: The liquidity risk calculation of Whitbread PLC (2014-2018) by Microsoft Excel

YEAR	CREDIT RISK					
	Account Receivable	Revenue/360 Days	AVERAGE-COLLECTION PERIOD	Total Liability	Total Income	DEBT TO INCOME
2014	124100000	6373056	**19.4726**	1564500000	323400000	**4.8377**
2015	124000000	7244722	**17.1159**	1755900000	366100000	**4.7962**
2016	140000000	8116111	**17.2496**	2000600000	387300000	**5.1655**
2017	163600000	8627778	**18.9620**	2164000000	415900000	**5.2032**
2018	191100000	9152778	**20.8789**	2089900000	436400000	**4.7890**

Table 24: The credit risk calculation of Whitbread PLC (2014-2018) by Microsoft Excel

YEAR	OPERATIONAL RISK					
	Operating Expenses	Net Sale	OPERATIONAL RATIO	EBIT	Revenue	OPERATING MARGIN
2014	1905300000	2294300000	**0.8304**	347000000	2294300000	**0.1512**
2015	2110600000	2608100000	**0.8092**	463800000	2608100000	**0.1778**
2016	2397900000	2921800000	**0.8207**	487700000	2921800000	**0.1669**
2017	2557200000	3106000000	**0.8233**	515400000	3106000000	**0.1659**
2018	2707300000	3295000000	**0.8216**	548400000	3295000000	**0.1664**

Table 25: The operational risk calculation of Whitbread PLC (2014-2018) by Microsoft Excel

	Microeconomic factors								
YEAR	ROA	ROE	CURRENT RATIO	QUICK RATIO	AVERAGE-COLLECTION PERIOD	DEBT TO INCOME	OPERATIONAL RATIO	OPERATING MARGIN	Index
2014	0.0966	0.1814	0.4124	0.3482	19.4726	4.8377	0.8304	0.1512	1
2015	0.0981	0.1851	0.2815	0.2179	17.1159	4.7962	0.8092	0.1778	1
2016	0.0879	0.1611	0.3539	0.2892	17.2496	5.1655	0.8207	0.1669	1
2017	0.0887	0.1647	0.3423	0.2848	18.9620	5.2032	0.8233	0.1659	1
2018	0.0892	0.1557	0.4030	0.3456	20.8789	4.7890	0.8216	0.1664	1

Table 26: The firm-specific factors of Whitbread PLC (2014-2018) by Microsoft Excel

	Macroeconomic factors					
YEAR	GDP	Unemployment	Inflation	InterestRate	ExchangeRate	Beta
2014	2.90	6.11	1.45	0.50	0.61	0.84
2015	2.35	5.30	0.37	0.50	0.65	0.84
2016	1.79	4.81	1.01	0.25	0.74	0.84
2017	1.82	4.34	2.56	0.50	0.78	0.84
2018	1.40	3.95	2.29	0.50	0.75	0.84

Table 27: The macroeconomic factors of Whitbread PLC (2014-2018) by Microsoft Excel

Corporate governance index of Whirbread PLC

Keys:		
	1 =	YES
	0 =	NO

Year / Principles	2014	2015	2016	2017	2018
Accountability	1	1	1	1	1
Transparency	1	1	1	1	1
Independence	1	1	1	1	1
Fairness	1	1	1	1	1
Sustainable	1	1	1	1	1
Total (%)	100	100	100	100	100
In Decimal	1.00	1.00	1.00	1.00	1.00

Table 27: The corporate governance index of Whitbread PLC (2014-2018)