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ABSTRACT

This study's aim is to determine the internal and external factors which affect performance risk in the years 2014-2018. We use SPSS to run the internal and external data and found the factors which significant and affected Dunkin's brand. Inflation, debt to income ratio and operating margin is the factors affected Dunkin's brand in 2014-2018 at United State.

Keywords: corporate governance, inflation, return on asset, debt to income ratio, and operating margin

1.1 Company Background

Dunkin' Brands Group is quick-service restaurants ("QSRs") serving hot and cold coffee, baked goods, as well as ice cream. The Company operates primarily in the breakfast part of the day within the QSR segment of the restaurant industry. Dunkin' Brands Group operates worldwide. Dunkin' Brands Group is a leading quick-service restaurant franchisor, operating both the Dunkin' and Baskin-Robbins chains with more than 20,900 locations in about 60 countries. Dunkin' is the world's leading donut chain, boasting nearly 13,000 units in about 45 countries (including approximately 3,500 in the US).

In 1950, Bill Rosenberg opened the first Dunkin' Donuts restaurant in Quincy, Massachusetts, intending to "make and serve the freshest, most delicious coffee and donuts quickly and courteously in modern, well-merchandised stores." In 1955, the first Dunkin' Donuts franchise opened. Since then, the brand has grown to more than 12,400 restaurants in 46 countries.

Today, Dunkin' is America's favorite all-day, everyday stop for coffee and baked goods. The brand still uses the original proprietary coffee blend recipe established by its founder and serves approximately 2 billion cups of hot and iced coffee every year around the world, with standards for coffee excellence that are among the best in the industry. In addition, Dunkin' offers a full lineup of espresso beverages, including Lattes, Macchiatos and Cappuccinos, a range of frozen beverages, premium hot teas and iced tea, sandwiches and delicious baked goods. The brand is constantly innovating to offer guests new, delicious flavors and menu options to keep them running throughout the day.

1.2 Corporate Governance Issue

To achieve good sound corporate governance, Dunkin' Brands should have seven concepts of sound corporate governance. The seven concepts are transparency, independence, accountability, responsibility, fairness, social responsibility and reputation. Dunkin' Brands has concepts of transparency. They are willing to provide information about the company to an individual or group. For instance, they do announce the annual reports every year, investors can get information and analysis the company's statement.

Dunkin's brands also have independence as one of their sound of corporate governance. They have an independence director, audit committee, compensation committee and advisers. The Audit Committee ensures Dunkin' Brands' compliance with legal and regulatory requirements and assists with internal and independent audits. The Audit Committee also receives periodic summary reports of all ethics complaints and violations and liaises with Dunkin' Brands' Enterprise Risk Management team on their resolution. The Compensation Committee annually reviews, determines and approves compensation for the CEO and other executives using a sensible pay-for-performance program. They support the right of their shareholders to cast an annual advisory vote on executive compensation. Management and board consider the results of such a vote in making executive compensation recommendations and decisions. Lastly, Nigel Travis (Chairman of Dunkin' Brands) which is an independence and non-executive board.

Furthermore, accountability also practiced by the company. The management is accountable to the Board and the Board is accountable to shareholders. The decision made by the company will be informed to shareholders via annual reports. In the 2018 annual report, the decision made by company is they decided to open 392 new restaurants worldwide, invested back to their business, returned approximate 800 million US dollars to their shareholders and so on.

Besides that, Dunkin's brands put efforts to increase their reputation. They do Corporate Social Responsibility (CSR), fair treatment of staff and good attitude to customers. For example, in 2016, they did launch a foundation- the Joy in Childhood Foundation. They proving simple moments of joy to sick and hungry kids. They donated 2.3 million dollars in this fund and this can help more than 800000 meals packed for hungry kids during the volunteer week of joy.

Main risk associated

The main risk associated with this company is credit risk. Credit risk is the possibility of a loss resulting from a borrower's failure to repay a loan or meet contractual obligations. In Dunkin's Brands, They have total debt \$3.1 billion under their securitized debt facility, excluding 32.4 million of undrawn letters of credit and \$117.6 million of unused commitments in 2018. Not only that, they largely depend on franchisees. They received a substantial majority of their revenue in the form of royalties. If franchisees fail to renew their franchise agreement, will affect their business and operating result.

1.3 Research Objective

1. To investigate influence of the internal factors towards a performance risk.
2. To investigate the external factors towards a performance risk.
3. To investigate both internal and external factors towards performance risk.

1.4 Research Questions

1. Does any relationship between the internal factor towards performance risk?
2. Does any relationship between the external factor towards performance risk?
3. Does any relationship between both factor towards performance risk?

1.5 Scope of study

The scope of this study is food and beverage in the United states. We analysis five years' annual report of Dunkin's brand from 2014 until 2018.

1.6 Organization of the study

This study consists of 5 chapters. The first chapter is introduction consists of company background, corporate governance issue, main risk faced, research objective and questions, scope and organization of this study. Chapter two will talk about literature review about internal and external variables base on the past studies. Chapter three include research methodology and chapter will discuss the finding and result in this study. In final chapter will discuss about conclusion and summary of this study.

2.1 Introduction

This chapter will include some of the opinions from past researchers, calculation and theory about of element of study. There is corporate government, performance risk, credit risk, market risk, operation risk and liquidity risk.

2.2 Corporate Governance

There are several definitions of corporate governance (CG). CG defined as the action of companies which increase the investor confidence in honesty and accountability. (Cadbury report, 1992). The history lesson of Cadbury is division of top responsibilities, that is no one individual has powers of decision, majority of independent non-executive directors and at least three non-executives on the audit committee. At Dunkin's brands (2015), the Board is chaired by Dunkin' Brands CEO Nigel Travis and its composed of nine members, including seven men and two women. Eight of the Board's nine members are independent. The board of Directors assesses the independence of its non-management members at least annually in accordance with the listing standard of the NASDAQ Global Select Market.

CG is known as a process to manage and monitor a company so that they run properly. An investor will only invest in firms whose financial performance is creditable. CG important to ensure that the management team is ability to maximize the profit of company and bring interest to investors. At Dunkin' Brand, Board of Directors sets high standards for their employees and officers. The committee will report to the full Board on the results of its assessment each year to develop criteria and evaluation.

CG is also known as controlling for standard economic determinants to pay to boards so that the governance structures are more effective (John E, 1999). Jensen argues that CEO who received fixed salary will lower the company performance. At Dunkin' Brands, the compensation committee will determine and approves compensation for the CEO and other executives using a sensible pay-for-performance program. The compensation committee also reviews and recommends compensation for non-employee Board members. Governance and Ethics Dunkin' Brands has a robust insider trading policy that prohibits insiders from hedging their ownership of pledging shares of common stock.

2.3 Performance Risk

Company performance is an essential part of a company. Company's performance is an integral part for management decision on performance results as well as decision that need to improve them (Aurelija, 2017). At Dunkin' Brands, Net income in 2018 dropped to \$229.9 million versus \$271.2 million in 2017. It also reported an increase in net interest expense due to borrowings incurred. The company carries over \$3 billion debt and pay \$124 million a year in interest. After discussion, they spending \$650 million to clear some debt.

Company performance is measured by ROE, ROI, ROA, EPS and others (Faudziah Hanim, 2014). Return on assets (ROA) shows how profitable a company's assets are at generating revenue. It shows what percentage of every dollar invested in the business was returned as profit. The ROA of Dunkin' Brands in 2018 was 6.65% which declined from 6.89% in 2017 due to decrease of net income.

Company performance refers to a dashboard which providing an early warning of potential problems and allowing managers to know so that they can make adjustment to keep a business on track and achieve the goal of company (Henry Ford, 2016). It is important to one company because they could make a planning to allocate their money according to the financial ratio.

2.4 Operation Risk

Operation risk is known as the day-to-day hazards of running a business beyond those from its money-making activities (Rodney Coleman, 2011). operation risk also known as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events (Basel, 2013).

Operation risk needs to manage well because it will affect client satisfaction, reputation and shareholders value (Tom Ivell, 2015). Most organizations accept that their people and processes will inherently incur errors and contribute to ineffective operation. In evaluating operation risk, practical remedial steps should be emphasized in order to eliminate exposures and ensure successful responses (Margaet, 2014).

The risk formula attempts to capture the various components which influence the amount of risk which a hazard may produce for a company or population (Ernst, 2008). Operating expenses are those expenditures that a business incurs to engage in activities not directly with the production and administrative expenses (Steven,2019). Examples of operating expenses is sales commissions, pension plan, insurance and depreciation of assets. To get the operation risk ratio, we use operation expenses divided the net sales. For Dunkin's Brands, operation ratio in 2017 is 0.7058 reduced to 0.6984 in 2018. This is a sign of good performance due to decline of operation expenses and increase of net sales.

2.5 Liquidity Risk

Liquidity risk defined as the ability of a financial firm to meet its debt obligation without incurring unacceptably large losses (John C William, 2006). An example is a firm preferring to repay its outstanding one month commercial paper instead of selling assets. Financial firms are especially sensitive to funding liquidity risk since debt maturity transformation (for example, funding longer term loans or asset purchases with shorter-term deposits or debt obligation) is one of their key business areas. Liquidity risk needs to be managed in addition to credit, market and operational risks. Because of its tendency to compound other risks, it is all the most important to manage liquidity risk effectively. Many banks did not have an adequate framework that satisfactorily accounted for the liquidity risks posed by

individual products and business lines, and therefore incentives at the business level were misaligned with the overall risk tolerance of the bank (Hyun Song Shin, 2005).

Ratio of financing gap to total assets (FGAPR) is calculated to measure company's liquidity risk. If FGAPR is higher, then the company has to use more cash, sell more liquid assets and external funding to fund the gap which makes the liquidity risk larger (Yi-Kai Chen, 2009). In Dunkin's Brands, we use current assets divided current liability to achieve current ratio. Current ratio is used to measure a company's liquidity or ability to pay off short-term debts

2.6 Market Risk

Market risk is the possibility of an investor experiencing systematic losses which cannot be eliminated through diversification due to factors that affect the overall performance of the financial markets like recessions, change in interest rates and inflation which tends to influence the entire market at the same time (A Ekinici, 2016).

It is important to identify market risk but it is difficult to hedge as diversification will not help. Banks can set market risk limits that are commensurate with their complexity and reflect all market risks (Central Bank of Cyprus, 2008). Bank must perform scenario analysis, stress testing and contingency planning as appropriate of the system to measure system risk.

To measure market risk, investors use the value-at-risk (VaR) method. VaR modeling is a statistical risk management method that quantifies a stock or portfolio's potential loss occurring (Trencaa, 2015). For example, it assumes that makeup and content of the portfolio being measured are unchanged over a specified period.

2.7 Credit Risk

Credit risk is the possibility of a loss resulting from a borrower's failure to repay a loan or meet contractual obligations (Oliva, 1980). The other meaning, it refers to the risk that a lender may not

receive the owed principal and interest which results in an interruption of cash flow and increased costs for collection. We can manage and assess credit risk on a customer loan by look at five elements: credit history, capacity to repay, capital, the loan's conditions and associated collateral.

Credit risk management is important to company because it can reduce revenue losses and improve overall performance and secure a competitive advantage (Bart Baeses, 2009). Monitoring credit risk allows executive management team to understand which potential clients may come at too high risk and above the pre-identified tolerance. If company manages credit risk well, it will be lesser effect if some crisis occurred and can secure a competitive advantage.

According to Edgar R Fiedler,1971, credit risk can be determined by average collection period and debt to income ratio. Average collection period is the days receive money from account receivable. Debt to income ratio is the percentage of monthly income that used to debt payment. Dunkin's Brands had a debt to income ratio 3.15 (2018) which is quite high and company already paid around 600 million debt at the end of the year to reduce the debt interest. They also got a good result of average collection period which is 20 days (2018).

3.1 Introduction

This chapter will explain what technique we used to carry out this project. Besides, it also includes the application we used to analyse or sampling data.

3.2 Population and sampling technique

The food and beverage industry in United stated is huge and we choose one of the companies namely Dunkin's brand to conduct this study. To achieve data of the company, we found five years of annual reports of Dunkin's brand from Dunkin's official website.

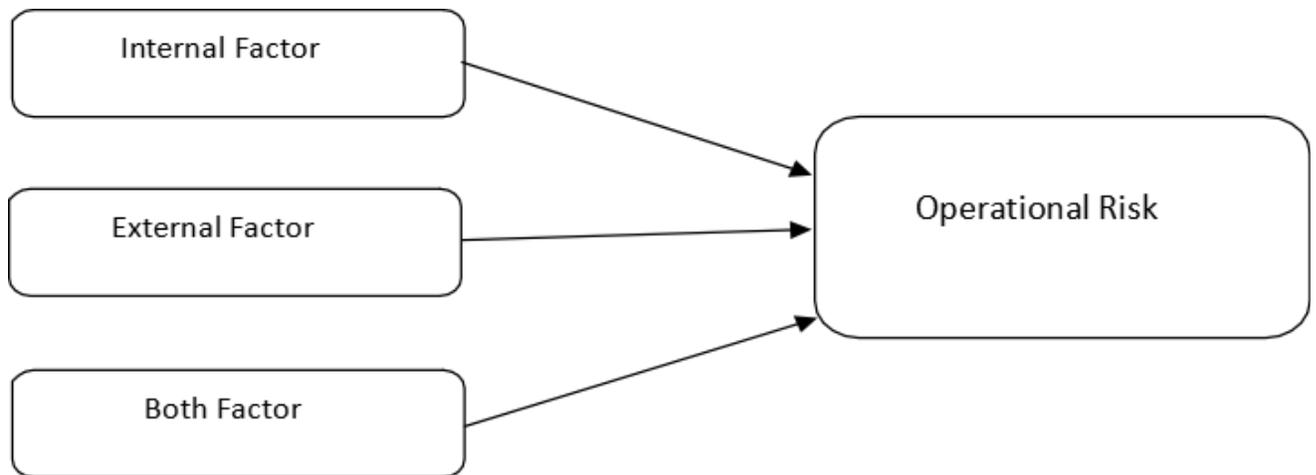
3.3 Statistical Technique

We determine our internal variable by using ratio formula and have data from annual reports. The internal variables is company performance, profitability, operational and credit. We also have information about external variables such as GDP, inflation rate interest rate and exchange rate from macroeconomic websites. Not only that, we also measure corporate governance index (CGI) of Dunkin’s brand by the information of board of directors.

3.4 Data analysis

This study will analysis the data as follow:

Figure 1: Research Framework



3.5 Statistical Package for Social Science (SPSS)

We use SPSS to determine what internal and external variables will affect company performance. There is three models in our study: model 1, model 2, and model 3.

$$\text{Model 1: ROA} = \beta_0 + \beta_1\text{CR} + \beta_2\text{QR} + \beta_3\text{ACP} + \beta_4\text{DTI} + \beta_5\text{OR} + \beta_6\text{OM} + e$$

$$\text{Model 2: ROA} = \beta_0 + \beta_1\text{GDP} + \beta_2\text{INFLA} + \beta_3i + \beta_4\text{EXCGR} + \beta_5\text{STDV} + \beta_6\text{CGI} + e$$

$$\text{Model 3: ROA} = \beta_0 + \beta_1\text{CR} + \beta_2\text{QR} + \beta_3\text{ACP} + \beta_4\text{DTI} + \beta_5\text{OR} + \beta_6\text{OM} + \beta_7\text{CGIDXS} + \beta_8\text{GDP} + \beta_9\text{INFLA} + \beta_{10}i + \beta_{11}\text{EXCGR} + \beta_{12}\text{STDV} + e$$

Introduction

We identify the data from annual report from 2014 to 2018 in order to calculate financial ratio of Dunkin's brand. In this study, we get information from income statements and balance sheets to evaluate financial performance.

4.1 Descriptive Analysis

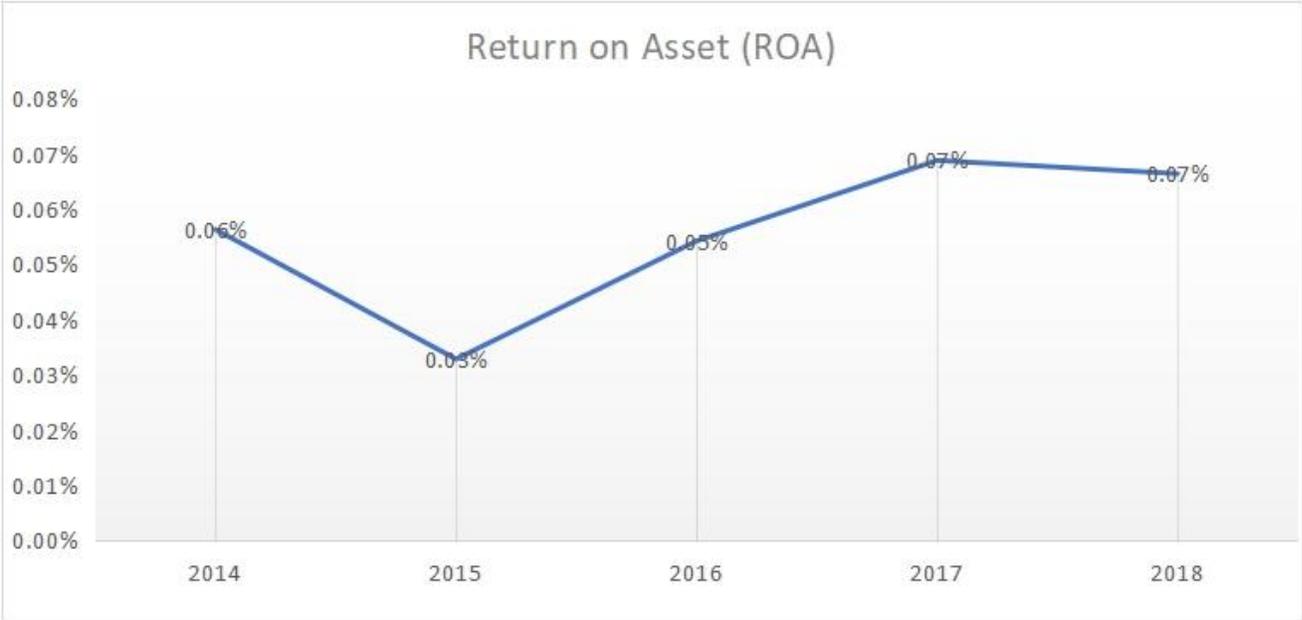
Table1: Descriptive statistics of specific variables

Descriptive Statistics			
Variables (constant)	Mean	Standard deviation	N
Return on Asset (ROA)	0.058800	0.142576	5
Current Ratio (CR)	1.612440	0.6190387	5
Quick Ratio (QR)	1.464600	0.6317662	5
Average Collection Period (ACP)	22.024780	3.1953539	5
Debt to Income (DTI)	3.683760	0.4704362	5
Operational Ratio (OR)	0.722780	0.2087480	5
Operating Margin (OM)	0.395900	0.793343	5
Growth Domestic Product (GDP)	2.48000	0.531040	5
Inflation (INF)	1.50000	0.891600	5
Interest rate (I)	2.02000	0.415930	5
Exchange rate (AOP)	95.0000	7.24600	5
Market risk (STDV)	7.938572	0.987695	5
CG Index (CGI)	5.0000	0.0000	5

Descriptive statistics is used to analysis the variable as shown in table 1. This indicates the average of a specific variable likely to occur and the standard deviation shows the dispersion of the actual amount from the mean. N indicate the number of observation. As the number of years in this study only five years (2014-2018), so the N remains in 5.

COMPANY PERFORMANCE

Graph 1: Return on assets ratio of Dunkin’s brands from 2014-2018



Return on assets ratio (ROA) is used to measure the performance of a company. If ROA ratio is high means a company can use their available assets to generate more income. Dunkin’ Brands has an average ROA 0.0588 in the years 2014 until 2018. The standard deviation of ROA is 0.1426 which is low and indicate that ROA is not fluctuated too much in these five years.

Liquidity Risk

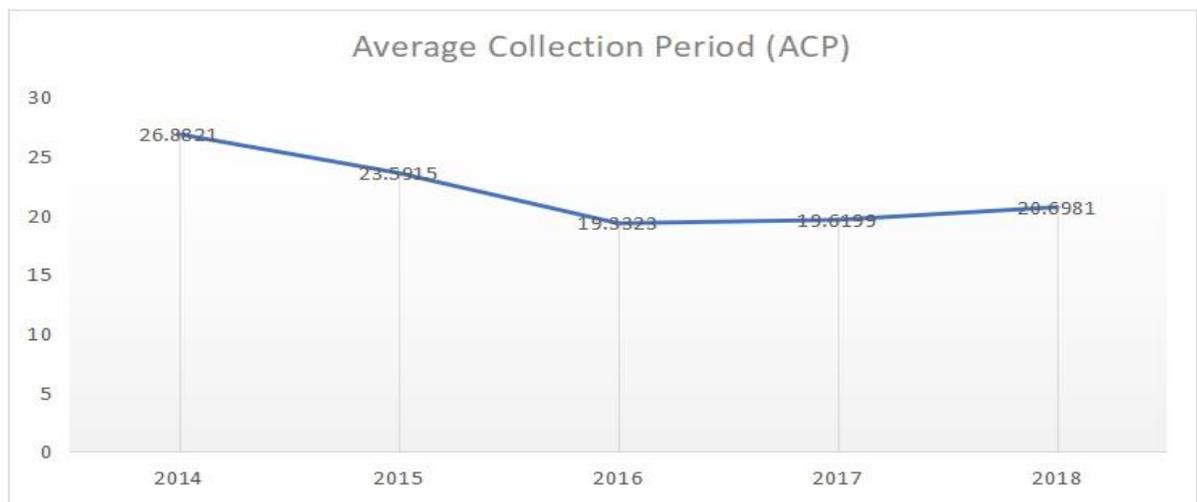
Graph 2: Quick ratio of Dunkin's brand from 2014-2018



Quick ratio is one of the liquidity ratios used to measure the ability of a company to pay back their short-term debt. In figure 4.2 shows in the years 2014 until 2018, Dunkin' brands has increase the quick ratio from 0.9173 (2014) to 1.3811 (2018). It indicated every one dollar company debt, they have 1.3811dollar asset ready to payback.

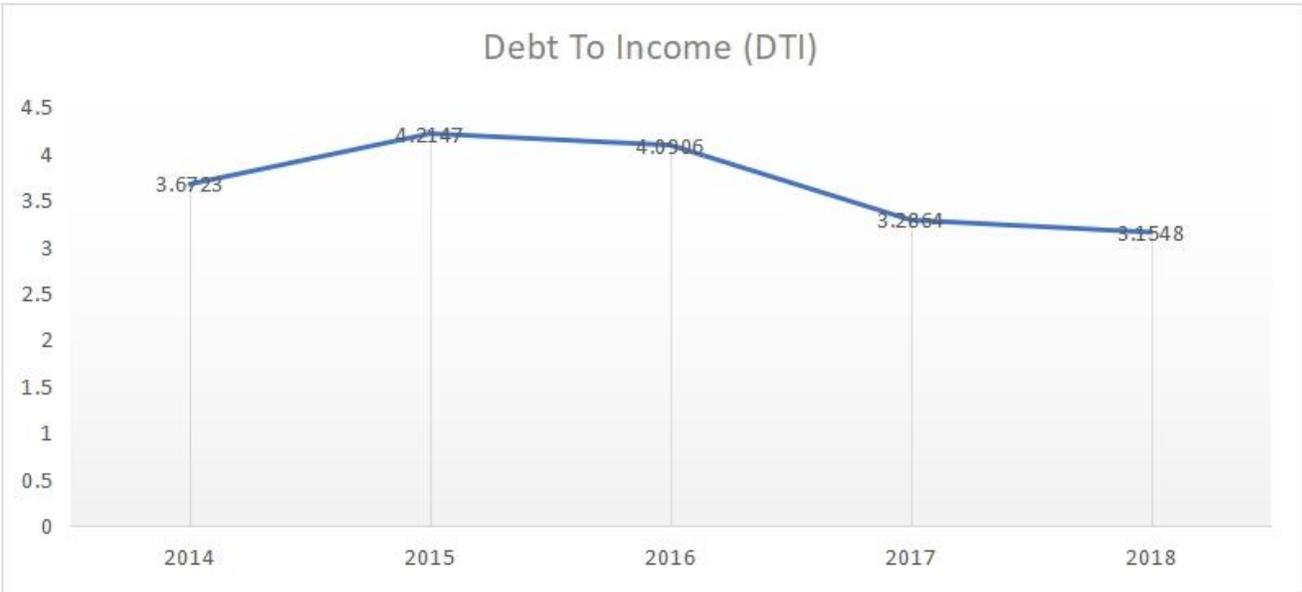
Credit Risk

Graph 3: Average collection period of Dunkin's brand from 2014-2018



Average collection period is the time taken for a company to collect their debt back from account receivable. The shorter the time means that company can operate their company more wisely because they can reinvest by using the collection. The average of Dunkin' Brand receive money from sales is about 22.0248 days (3weeks) with standard deviation 3.1953 days. This means that company needs to prepare for the time waiting for account receivable to payback.

Graph 4: Debt to income ratio of Dunkin's brand from 2014-2018



Debt to income ratio is total debt divided with total income. This ratio can show that how company manage their debt when generating the revenue. In 2014, Dunkin's brands had 3.6723 DTI and increase to 4.0906 in 2016. This is because they borrow more money to operate better their business.

Operational Risk

Graph 5: Operational ratio of Dunkin’s brand from 2014-2018



Operating ratio is operating expenses over net sale which mean that if a company has a high value of operating expenses will obtain a high operating ratio. This indicates bad management of a company to manage their operating risk. In 2016, Dunkin’s brand achieves the highest operational ratio which is 1.0758. This means that every 1 dollar company made need to pay 1.0758 dollars for operating costs.

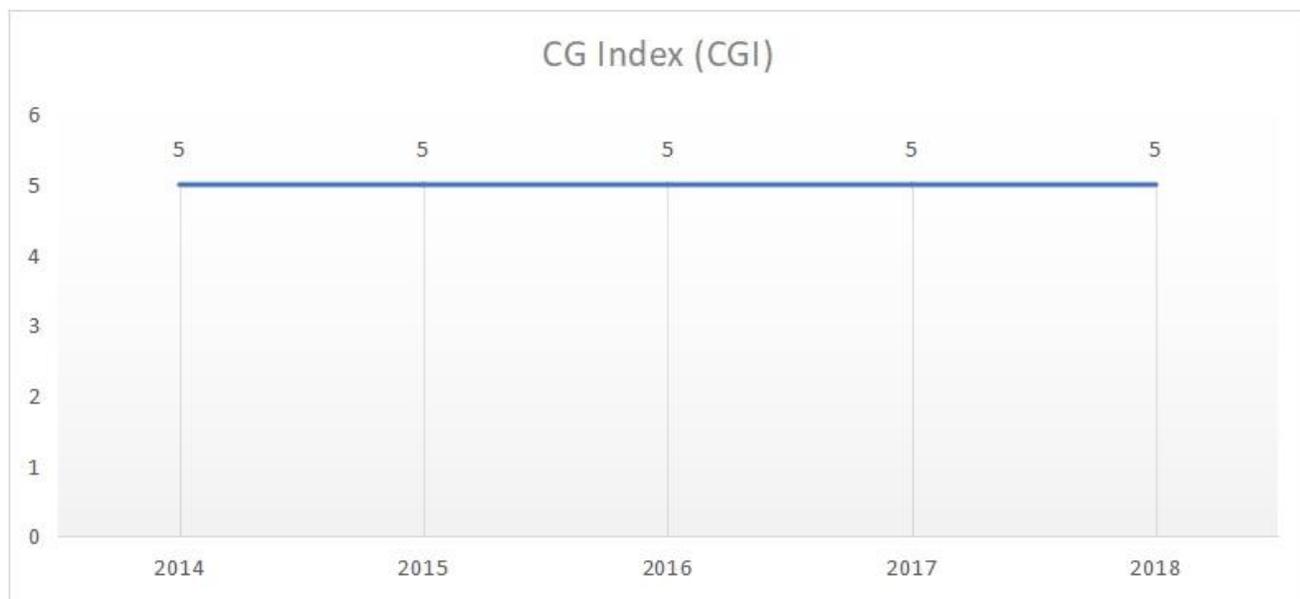
Graph 6: Operating margin of Dunkin’s brand from 2014-2018



The operating margin can obtain by earnings before interest and tax divided with total revenue. After paying for the salary of employees, raw material and other expenses, Dunkin's brand average had 0.3959 operating margin ratio with standard deviation 0.7933 which is not stable to predict the future operating margin ratio.

Corporate Governance Index (CGI)

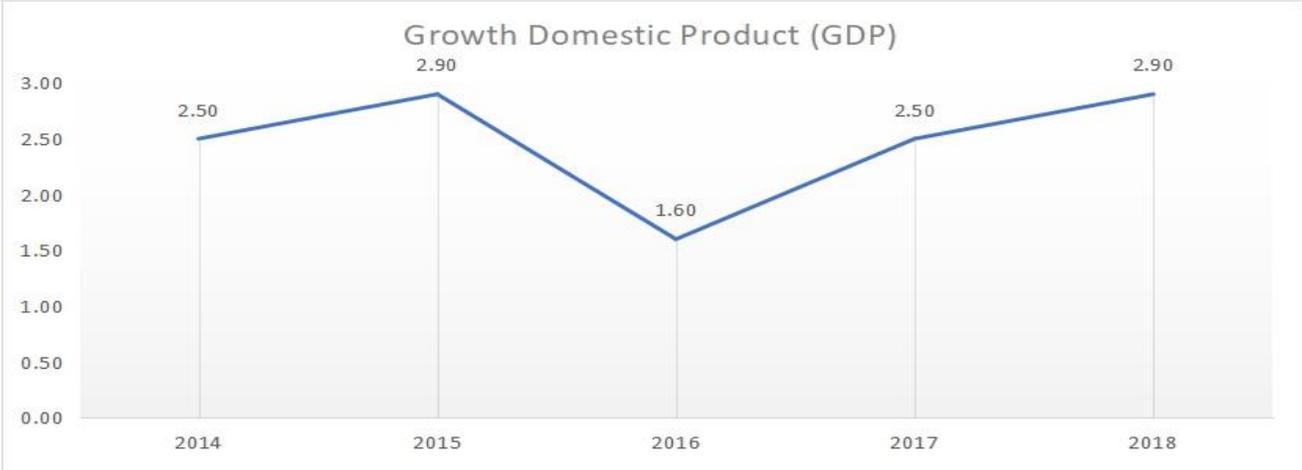
Graph 7: Index of Dunkin's brand from 2014-2018



Corporate governance index is calculated based on transparency, independence, fairness, accountability and sustainability. We notice that Dunkin's brand gets 5/5 of corporate governance index in 2014-2018 because they have 50% of non-executive committee, present of audit committee, have annual general meeting, female involve in board of directors and involve in social responsibility programme.

Growth Domestic Product (GDP)

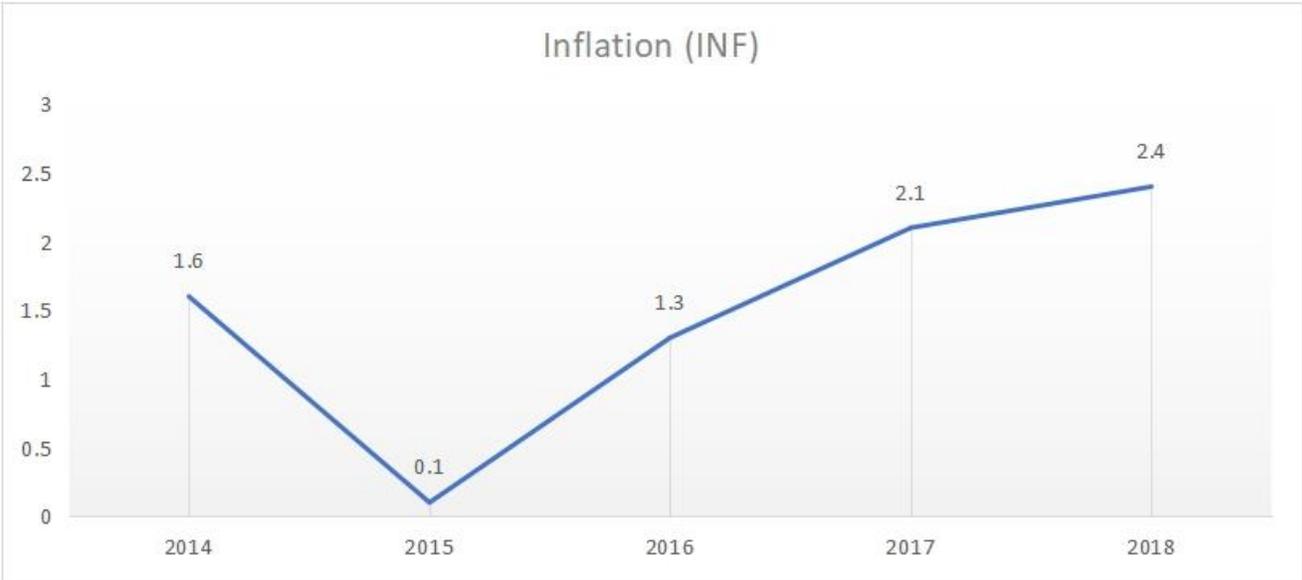
Graph 8: Growth Domestic Products of United States from 2014-2018



GDP is the market value of total final goods and services produce in a country with a specific period. Table 8 shows the GDP of United State in 2014-2018. From the table, we observe that the GDP has an average 2.48 in these 5 years.

Inflation Rate

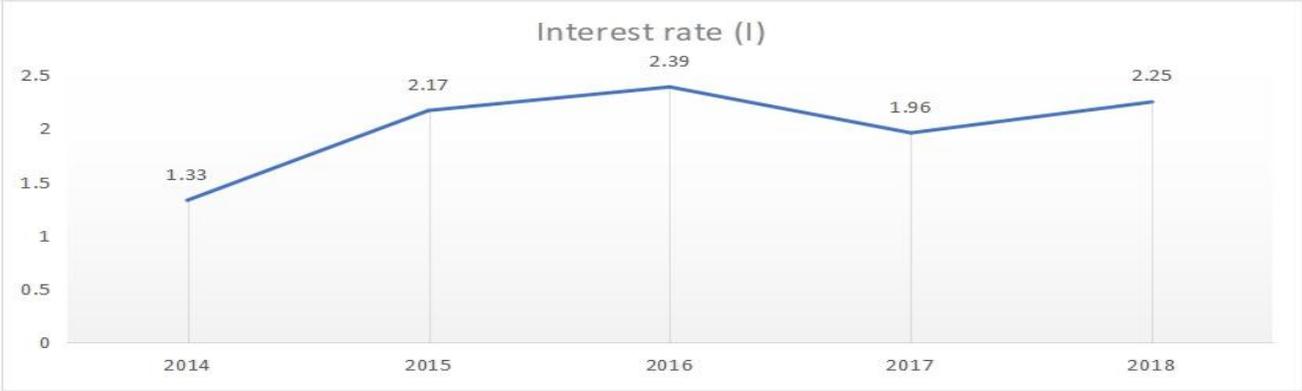
Graph 9: Inflation rate of United States from 2014-2018



Inflation is increase of all prices of goods and services in a country within a specific period. The inflation rate of US fluctuates from 2014-2018. The inflation rate mean shown at table 9 is 1.50.

Interest rate

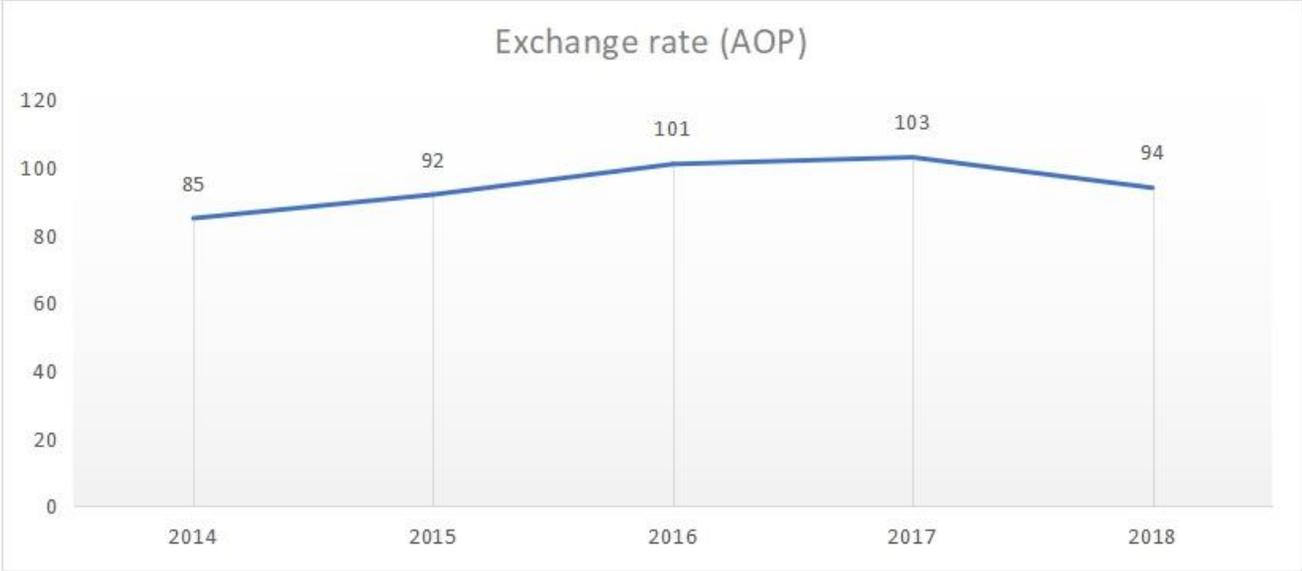
Graph 10: Interest rate of United states from 2014-2018



Interest rate increased from 1.33% (2014) to 2.39% (2016) and dropped to 1.96% (2017). In 2018, it bounced back to 2.25%. The interest rate mean is 2.02%

Exchange rate

Graph 11: Exchange rate of United States from 2014-2018



Exchange rate is rate of currency exchange to another country. From table 11, we know that there is increasing exchange rate from 2014 until 2018 which is increase from 85 to 94 respectively.

Market risk (STDV)

Graph 11: Market risk of Dunkin’s brand from 2014-2018



Market risk is the risk that may face by company if there are any losses from the share price. From table 11, we notice that market risk of Dunkin’s brand fluctuated in the years 2014-2018. The market risk drop from 0.8074 (2014) to 0.6624 (2016) and increase to 0.9328 (2018).

4.2 SPSS Analysis

The SPSS analysis of performance risk with correlation, model summary, anova and coefficient.

Correlation

Table 2: correlation between dependent variable and internal and external factors of Dunkin’s brand

		CORRELATIONS													
		ROA	CR	QR	ACP	DTI	OR	OM	GDP	INF	I	AOP	STDV	CGI	
Pearson correlation	ROA	1	0.548	0.543	-0.409	-0.881	0.228	-0.743	-0.117	0.982	-0.115	0.358	0.114	.	
	CR	0.548	1	0.999	-0.613	-0.506	0.077	-0.725	0.008	0.421	0.146	0.752	-0.2	.	
	QR	0.543	0.999	1	-0.631	-0.506	0.083	-0.735	0.016	0.418	0.176	0.763	-0.188	.	
	ACP	-0.409	-0.613	-0.631	1	0.223	-0.691	0.508	0.371	-0.334	-0.804	-0.943	0.294	.	
	DTI	-0.881	-0.506	-0.506	0.223	1	0.195	0.895	-0.366	-0.918	0.179	-0.124	-0.532	.	
	OR	0.228	0.077	0.083	-0.691	0.195	1	0.132	-0.889	0.156	0.579	0.654	-0.662	.	
	OM	-0.743	-0.725	-0.735	0.508	0.895	0.132	1	-0.411	-0.747	-0.164	-0.425	-0.457	.	
	GDP	-0.117	0.008	0.016	0.371	-0.366	-0.889	-0.411	1	-0.011	-0.205	-0.455	0.87	.	
	INF	0.982	0.421	0.418	-0.334	-0.918	0.156	-0.747	-0.011	1	-0.123	0.228	0.276	.	
	I	-0.115	0.146	0.176	-0.804	0.179	0.579	-0.164	-0.205	-0.123	1	0.66	-0.123	.	
	AOP	0.358	0.752	0.763	-0.943	-0.124	0.654	-0.425	-0.455	0.228	0.66	1	-0.513	.	
	STDV	0.114	-0.2	-0.188	0.294	-0.532	-0.662	-0.457	0.87	0.276	-0.123	-0.513	1	.	
	CGI	.	.	.	.	.	.	.	.	.	.	.	.	1
	Sig (1 tailed)	ROA	.	0.17	0.172	0.247	0.024	0.356	0.075	0.426	0.002	0.427	0.277	0.427	0
CR		0.17	.	0	0.136	0.192	0.451	0.083	0.495	0.24	0.407	0.071	0.373	0	
QR		0.172	0	.	0.127	0.192	0.447	0.079	0.49	0.242	0.389	0.067	0.381	0	
ACP		0.247	0.136	0.127	.	0.36	0.098	0.191	0.269	0.291	0.051	0.008	0.316	0	
DTI		0.024	0.192	0.192	0.36	.	0.377	0.02	0.273	0.014	0.387	0.421	0.178	0	
OR		0.356	0.451	0.447	0.098	0.377	.	0.416	0.022	0.401	0.153	0.116	0.112	0	
OM		0.075	0.083	0.079	0.191	0.02	0.416	.	0.246	0.073	0.396	0.238	0.22	0	
GDP		0.426	0.495	0.49	0.269	0.273	0.022	0.246	.	0.493	0.37	0.221	0.028	0	
INF		0.002	0.24	0.242	0.291	0.014	0.401	0.073	0.493	.	0.422	0.356	0.327	0	
I		0.427	0.407	0.389	0.051	0.387	0.153	0.396	0.37	0.422	.	0.113	0.422	0	
AOP		0.277	0.071	0.067	0.008	0.421	0.116	0.238	0.221	0.356	0.113	.	0.189	0	
STDV		0.427	0.373	0.381	0.316	0.178	0.112	0.22	0.028	0.327	0.422	0.189	.	0	

	CGI	0	0	0	0	0	0	0	0	0	0	0	0	0	.
N	ROA	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	CR	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	QR	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	ACP	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	DTI	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	OR	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	OM	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
	INF	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	I	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	AOP	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	STDV	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	CGI	5	5	5	5	5	5	5	5	5	5	5	5	5	5

Table 2 shows the correlation between return on asset ratio (dependent variable) of Dunkin's brand and its internal and external factors. Pearson correlation shows the relationship ROA with other variable and p-value shows the significant level of data toward our study. Current and quick ratio, operational ratio, inflation, exchange rate and market risk shown positive relationship with ROA. It means that if ROA increase will also increase the variable as above. Besides that, average collection period, debt to income, operating margin, GDP, and interest rate shown negative relationship with our dependent variable.

Debt to income, operating margin and inflation shows p-value less than 0.01 indicated this data is significant to our study. While, GDP and market risk (STDV) have p-value greater than 0.40 means that it no give a high impact to our study. This study show that ROA is positive correlated to inflation with p-value less than 0.01. Waseem Ahmad Khan (2014) state that the increase of inflation will increase the ROA.

Model 1: Performance Risk on Internal Factors

Table3: Model summary of Dunkin’s brand performance risk on internal factors

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.881 ^a	0.776	0.702	0.0077840	2.699
a. Predictors: (Constant), Debt to Income (DTI)					
b. Dependent Variable: Return on Asset (ROA)					

From table 3, we know that Debt to income ratio has great impact to dependent variable (ROA). From pass study, Mathuva (2009) states that debt to income ratio will affect ROA because increasing of debt in a company will reduce the total income due to interest paid.

Table 4: Anova of Dunkin’s brand performance risk on internal factors

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.001	1	0.001	10.420	.048 ^b
	Residual	0.000	3	0.000		
	Total	0.001	4			
a. Dependent Variable: Return on Asset (ROA)						
b. Predictors: (Constant), Debt to Income (DTI)						

From table 4, we know that debt to income ratio is significant to dependent variable (ROA) since p-value less than 0.05.

Table 5: Coefficients of Dunkin’s brand performance risk on internal factors

Coefficients ^a										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	0.154	0.031		5.026	0.015	0.057	0.252		
	Debt To Income (DTI)	-0.027	0.008	-0.881	-3.228	0.048	-0.053	0.000	1.000	1.000

a. Dependent Variable: Return on Asset (ROA)

From table 5, we know that debt to income ratio is the factors will affect the company performance because the p-value is less than 0.05. However, there are another variable is more significant to performance risk (ROA). Its p-value is 0.015.

Model 2: Performance Risk on External Factors

Table 6: Model summary of Dunkin’s brand performance risk on external factors

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.982 ^a	0.963	0.951	0.0031509	2.058

a. Predictors: (Constant), Inflation (INF)

b. Dependent Variable: Return on Asset (ROA)

From the table 6, it is the model summary of dependent variable (ROA) with external factors. We know that there are 95.1% affect ROA is come from inflation. It means that if the price

increase will affect the company performance. From the correlation table, we know that they have positive relationship between each other. This indicate that if Dunkin’s brand increase the price of its goods due to increase cost of raw material, cost of worker and expenses, it will increase the company performance. Zuhaib (2015) state that ROA will be affected by inflation, GDP and interest rate because of the return of assets.

Table 7: Anova of Dunkin’s brand performance risk on external factors

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.001	1	0.001	78.901	.003 ^b
	Residual	0.000	3	0.000		
	Total	0.001	4			
a. Dependent Variable: Return on Asset (ROA)						
b. Predictors: (Constant), Inflation (INF)						

From table 7, we know that inflation will affect company performance. Amany A (2014) state that increase of inflation will increase the ROA of a company. In 2017, inflation in United State increase from 1.3 to 2.1, the return of total assets (ROA) of Dunkin’s brand also increase from 0.0543 to 0.0689. this show that inflation and ROA has a positive relationship.

Table 8: Coefficients of Dunkin’s brand performance risk on external factors.

Coefficients ^a										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	0.032	0.003		10.746	0.002	0.023	0.042		
	Inflation (INF)	0.016	0.002	0.982	8.883	0.003	0.010	0.021	1.000	1.000
a. Dependent Variable: Return on Asset (ROA)										

From the coefficient table, we know that inflation is the main factor that affect return on assets ratio (ROA). Dunkin’s brands should be always aware on their products price so that minimize the performance risk and maximum total revenue company.

Model 3: Performance Risk on Internal and External Factors

Table 9: Model summary of Dunkin’s brand performance risk on both external and internal factors

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.982 ^a	0.963	0.951	0.0031509	2.058
a. Predictors: (Constant), Inflation (INF)					
b. Dependent Variable: Return on Asset (ROA)					

From table 9, we know that 95.1% affect the return on assets ratio is inflation. This is same result with the pass study made by Amany A (2014). This is because increase of price will reduce the total asset and increase ROA. Cost increase made company bear the more loss than consumers and therefore total assets such as cash and inventory of company will reduce.

Table 10: Anova of Dunkin’s brand performance risk on both external and internal factors

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.001	1	0.001	78.901	.003 ^b
	Residual	0.000	3	0.000		
	Total	0.001	4			
a. Dependent Variable: Return on Asset (ROA)						
b. Predictors: (Constant), Inflation (INF)						

Table 10 shows that inflation is the main factors the effect ROA. There shows a very significant value which is p-value lower than 0.001. It means that Inflation will effect the company performance.

Table 11: Coefficients of Dunkin’s brand performance risk on both external and internal factors

Coefficients ^a										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	0.032	0.003		10.746	0.002	0.023	0.042		
	Inflation (INF)	0.016	0.002	0.982	8.883	0.003	0.010	0.021	1.000	1.000

a. Dependent Variable: Return on Asset (ROA)

From table 11, we found that inflation has the most significant to return on assets ratio. Inflation give a bad impact o the company even though can increase net income of a company for short term. Tim McMahon (2013) state that inflation will reduce company revenue in the long term due to replacement inventory costs and carrying cost increases.

Introduction

The purpose of this study is to determine the internal and external factors which affect performance risk. In this chapter, we will conclude our finding with discussion and recommendation.

5.1 Limitations

This study only limit on food and beverage industry (Dunkin's brands) and not include all the franchise company outside United State. Annual report data only take from the years 2014-2018.

5.2 Conclusion

In conclusion, performance risk of Dunkin's brands affected by inflation, debt to income ratio and operating margin. Debt to income ratio and operating margin has a negative relationship with ROA and inflation has a positive relationship with ROA.

The main factors affect ROA is inflation. Inflation is external factors and it is difficult to control by company. Dunkin's brand should be always aware of the price change such as price of raw material, salary of employee and other expenses so that can face with performance risk.

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