

The Analysis of Effectiveness of Cost Control Strategy on the Profitability of Coca-Cola Company From Year 2015 to 2017

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This paper is aiming to evaluate the effect of cost control strategy on the profitability of Coca-Cola Company from year 2015 to 2017 by using the ratio analysis and offer essential recommendations for the company. This paper is divided into three parts. First part is to introduce the current business operation activities and basic background information. This paper adopts desk research as data collection method. The major sources of information are the annual report of Coca-Cola Company, the database of World Health Organisation and other scholastic websites such as Wan Fang Database. Second, financial statements analysis and profitability analysis. This part contains three data analysis methods that are horizontal analysis and ratio analysis. Third part is the conclusion which is from year 2015 to 2017, that Coca-Cola Company has strengthened its profitability through cost control strategy but there are fatal hazards in the profitability of Coca-Cola Company that is the worse utilization of its assets to generate profit and dispute with IRS. The recommendations are also provided based on the conclusion which could be referenced by other companies to some extent.

Keywords: horizontal analysis, ratio analysis, profitability ratio, financial statement analysis, Coca-Cola Company

Introduction

Although Coca-Cola Company is the world's largest beverage company who owns and markets four of the world's top five non-alcoholic sparkling soft drink brands and was recognized as the number one global brand in 2010, however, as the awoken of people's awareness toward healthy diet, the soft-drink industry is facing a great recession, which has caused the revenue of Coca-Cola Company to decrease consecutively since 2015. According to the annual reports of Coca-Cola Company, the net operating revenue for Coca-Cola Company in 2015 amounted to about \$44,294 million; however, in 2017, the Coca-Cola Company's net operating revenues worldwide amounted to about \$35,410 million. The continuous decrease in revenue, as well as the market share and profits, took a hit on the financial position of Coca-Cola Company. Therefore, it is crucial to analyse the financial report of Coca-Cola Company to detect the reasons for the recessions, moreover, to propose appropriate remedies or recommendations for its financial risks, in order to regain its financial stronghold and business success.

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In 20th century, as the development of Second Industrial Revolution, the owners' right and the management right has been separated, which leads the stakeholders to concern the profitability of their companies. The growing concern of the profitability has led the study of profitability analysis to begin and develop rapidly. Charumathi (2012) has proved that the main factors of the profitability are the asset scale, management effectiveness, and the loss ratio. Bisbe and Malagueno (2012) has also detected that the effectiveness of the cost management is the most important factor to influence the change in profitability of a company.

Through studying the dissertation of the foreign and domestic scholars, the system of profitability analysis is fully fledged. Wang (2006) has created a comprehensive profitability analysis system by dividing the measurement standard into the gross profit analysis and the quality analysis of profitability analysis; Zhang (2007) has combined the gross profit analysis and the cash flow analysis with the profitability analysis as the standard to measure the profitability. Meanwhile, Huang (2013) has proved that the gross profit ratio and loss ratio could also be the standard to measure the profitability of a company.

Financial Statement Analysis

Method Data Collection and Analysis

This paper has adopted desk research to obtain secondary sources of data. In order to obtain reliable and verifiable financial data, the most frequent used secondary source of data is annual reports on the official website of Coca-Cola Company. Scholastic databases including China National Knowledge Infrastructure, Wan Fang Database, and Google Scholar are used to attain data that might contribute to gaining a better understanding of the financial position and business operation of Coca-Cola Company. Papers published by professional analysts that related to the financial aspect are used as secondary sources of data as well. The data gained from secondary resource provide annual financial reports of Coca-Cola Company in last three years and the recent finance and investment activities it engaged in. It demonstrates the financial position and business operation strategy of Coca-Cola Company from year 2015 to 2017.

The main financial data analysis tools adopted in this paper are horizontal analysis and ratio analysis. Horizontal analysis is used to compare the historical data over a number of accounting periods that present the changes in the amounts of corresponding financial statement account over a period of time, which is useful to determine trends of change for Coca-Cola Company from year 2015 to 2017 and future trends of change in financial position for Coca-Cola Company. Ratio analysis is a quantitative analysis used to obtain indications of a firm's financial performance in critical accounting areas (Goel, 2015). Profitability ratios are essential tools to evaluate the profitability of Coca-Cola Company through year 2015 to 2017. Profitability ratio involves gross profit ratio and operating profit ratio that measures and evaluates the ability of Coca-Cola Company to generate profit relative to revenue, which is more meaningful than just comparing the revenue or profit generated by Coca-Cola Company, since it presents how well Coca-Cola Company utilizes its assets to generate profit with concerns of cost of sales and other costs.

Horizontal Analysis

In the Income Statement, there are some changes in the accounts from 2015 to 2017 that should be noticed. As shown in Table 1, from 2015 to 2017, both Net Operating Revenue, Cost of Goods Sold, Gross Profit, Operating Expenses, and Operating Income have decreased continuously; moreover, both of these accounts have worsen more seriously in 2017 than 2016. Net Operating Revenue has decreased by 5% and 15%. Cost of Goods

Sold has decreased by 6% and 19%. As a result of decrease in the Net Operating Revenue, Gross Profit has decreased by 5% and 13% respectively. The Operating Expenses has decreased by 9.27% and 8.74%. As a result of decrease in Gross Profit and Operating Expenses, Operating Income has decreased by 1% and 13% respectively. The Interest Cost for Coca-Cola Company has decreased by 14% from 2015 to 2016; however, it has increased by 15% in 2017. The consecutive decreases of Gross Profit and the Operating Income are due to the large decrease in Net Operating Revenue by 5% and 15% respectively. The reasons given for the consecutively decreases in 2017 Coca-Cola Company Annual Report are “currency fluctuation and acquisitions and divestitures”. It specifies that the currency fluctuation is responsible for 1% decrease in Net Operating Revenue in 2017 and 3% decrease in 2016. This means that the 2% decrease in 2016 and 14% decrease in 2017 are due to the acquisition and divestitures. The reason for the decrease in the acquisition and divestitures in 2017 is due to the deconsolidated of German bottling operations in December 31, 2016. The end of partnership with German bottling operations greatly decreases the revenue of acquisition and divestitures for Coca-Cola Company. Another reason for the decrease in the Net Operating Revenue in 2017 is an article of World Health Organisations (WHO) named “Effect of Nutrition in Coke to Diabetes in Ecuador” that disclosed the unhealthiness of Coca-Cola Company which raised widely concern toward sparkling soft-drinks.

Table 1

Main Financial Data in Consolidated Statements for Coca-Cola Company

Amounts in millions, except per share data	Fiscal years ended January 31		
	2017 (\$)	2016 (\$)	2015 (\$)
Net operating revenue	35,410	41,863	44,294
Cost of goods sold	13,256	16,465	17,482
Operating expenses	14,653	16,772	18,084
Gross profit	22,154	25,398	26,812
Operating income	7,501	8,626	8,728
Cash and cash equivalents	6,006	8,555	7,309
Trade account receivables	3,667	3,856	3,941
Short-term investments	9,352	9,595	8,322
Asset held for sale-discontinued operations	7,329	-	-
Total asset	87,896	87,270	89,996
Total current liabilities	27,194	26,532	26,929

Source: Data come from Consolidated Financial Statements for Coca-Cola Company, from 2015 to 2017.

There are some alternations in the Statement of Financial Position that has lead to changes in the financial position of Coca-Cola Company. Referring to the Table 1, Cash and Cash Equivalents in 2017 is 30% less than 2016, but 13% more than 2015. From 2015 to 2017, the Short-Term Investments increased by 15% in 2016; however, it decreased by 3% in 2017. The Trade Account Receivables from 2015 to 2017 has decreased consecutively by 2%, and 5% respectively. The Marketable Securities decreased by 5% in 2016; however, it increased by 31% in 2017. As a result, the Total Assets decreased by 3.12% in 2016, but increased by 0.71% in 2017. Total Current Liabilities decreased by 1.50% in 2016 and increased by 2.43% in 2017.

Implications for Profitability Ratio Analysis

Profitability Ratios

Profitability ratios are a class of financial metrics to assess a business’s ability to generate earnings relative to its associated expenses by means of a series of ratios (Williams & Carcello, 2008). The data and calculation of profitability ratios are presented numerically in Table 2 and graphically in Figure 1.

Table 2

Profitability Ratio for Coca-Cola Company

Amounts in millions, except per share data	Fiscal years ended January 31		
	2017	2016	2015
Gross profit (\$)	22,154	25,398	26,812
Net operating revenue (\$)	35,410	41,863	44,294
Gross profit ratio	62.56%	60.67%	60.53%
Operating profit (\$)	7,501	8,626	8,728
Net operating revenue (\$)	35,410	41,863	44,294
Operating profit ratio	21.18%	20.61%	19.70%
Operating profit (\$)	7,501	8,626	8,728
Employed capital (\$)	60,702	60,738	63,067
Return on capital employed	12.36%	14.20%	13.84%
Net Income attributable to shareowners (\$)	1,248	6,527	7,351
Number of ordinary share (\$)	4,303	4,322	4,350
Earnings per Share (\$)	0.29	1.51	1.69

Source: Data come from Consolidated Financial Statements for Coca-Cola Company, from 2015 to 2017.

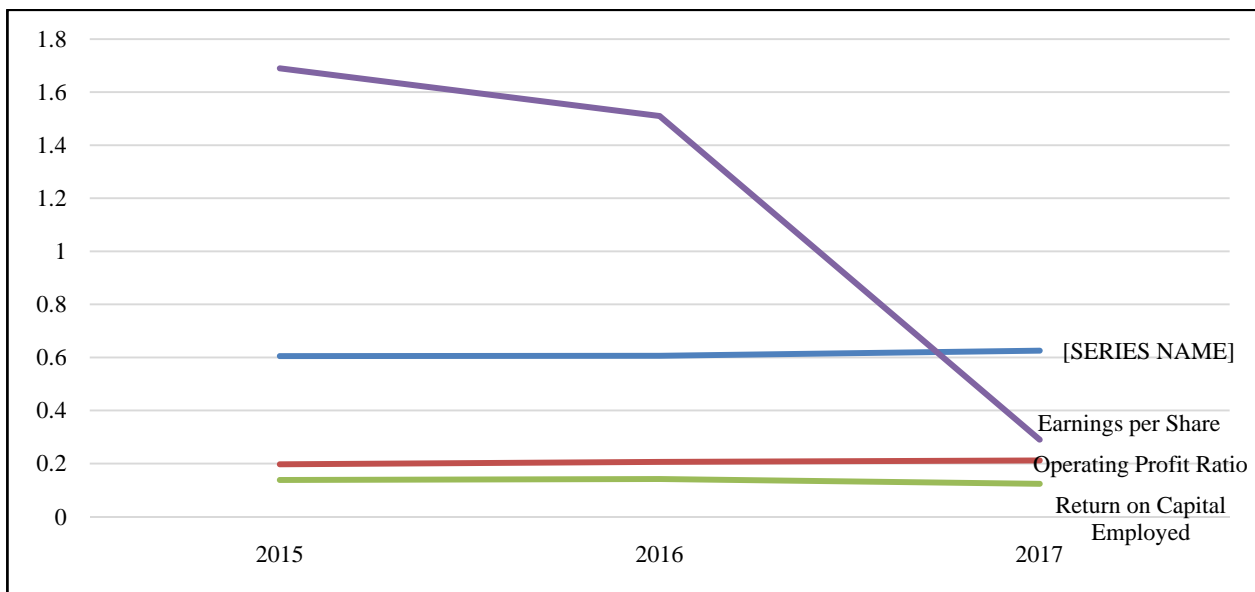


Figure 1. Graph for profitability ratio from 2015 to 2017. Note. The blue line in Figure 1 represents the development of Gross Profit Ratio of Coca-Cola Company from 2015 to 2017, which shows the stableness of Gross Profit Ratio that indicates the ineffectiveness of cost control strategy of Coca-Cola Company.

Gross Profit Ratio

Gross profit ratio is a profitability ratio that shows the relationship between gross profit and total net revenue. It is used to evaluate the operational performance of the business. The ratio is computed by dividing the gross

profit figure by net revenue (Groppelli, 2006). The Gross Profit Ratios of Coca-Cola Company in 2015, 2016, and 2017 are shown in Table 2 and their trend is shown in Figure 1.

From 2015 to 2017, the trend for the Gross Profit Ratio has been steady with a slight increase. In 2016, the Gross Profit Ratio has increased by 0.14%, which is due to the decrease in both cost of sales and net revenue. As a result of the deduction of \$1,017 million in cost of sales and deduction of \$2,431 million in revenue, the decrease in gross profit of \$1,414 million has been outweighed. In 2017, the increase of 1.89% in the Gross Profit Ratio is due to the same reason. Although the gross profit in 2017 is \$3,244 million less than it is in 2016, the reduction of \$3,209 million in cost of sales and reduction of \$6,453 million in revenue ensures the elevation in Gross Profit Ratio.

Based on the 2016 annual report and 2017 annual report of the Coca-Cola Company, the result of the decrease in net revenue is due to the global arising of concerns on the health issues and the deconsolidated of German bottling operations in December 31, 2016. In 2016, the partnership between Coca-Cola Company and its German bottling operations has been terminated, which caused the revenue that generated from bottling business to decrease and the consolidated revenue to decline by \$2,431 million. Moreover, in 2017, the World Health Organisations (WHO) has published an article written by nutrition specialists that indicates the ingredient of Coke produced by Coca-Cola Company could largely increase the possibility of diabetes (Carpio, Peñaherrera, Sandoval, & Sánchez, 2017). Although Coca-Cola Company has responded to adapt the recommendations by WHO, it still suffered a decrease of \$6,453 million in revenue and a decrease of \$3,244 million in profit. However, Coca-Cola is able to reduce its manufacturing cost and material cost in both 2016 and 2017. There are main reasons for the decrease in cost of goods sold that are currency fluctuation and backward integration. In 2016, the currency fluctuation has led a 2% decrease in the cost of goods sold for Coca-Cola Company and 1% decrease in 2017. Another important factor is the backward integration strategy adopted by Coca-Cola Company. The divestitures of Coca-Cola Company such as bottling company saved the distribution and production cost greatly that allows it to reduce cost of sales by \$1,017 million in 2016 and \$3,209 million in 2017, which elevate the Gross Profit Ratio consecutively.

Operating Profit Ratio

Operating profit ratio calculates the percentage of profit a company produces from its operations, prior to subtracting taxes and interest charges. It is calculated by dividing the operating profit by total revenue and expressed as a percentage (Pizzey, 2001). The Operating Profit Ratios for Coca-Cola Company from year 2015 to 2017 are shown in Table 2 and the graph of the trend is shown in Figure 1.

From 2015 to 2017, the trend for operating profit ratio is increasing steadily and slowly. The Operating Profit Ratio has increased by 0.91% due to the decrease in the operating cost of \$1,312 million and the decrease in revenue of \$2,431 million which outweighed the decrease in operating profit of \$102 million. Although the operating profit in 2017 is \$1,125 million less than it is in 2016, the reduction of \$2,119 million in operating costs and reduction of \$6,453 million in revenue ensures the elevation in Operating Profit Ratio. The increase of 0.57% in the Operating Profit Ratio is due to the decrease in operating costs.

According to the 2016 annual report and 2017 annual report of Coca-Cola Company, operating costs include the selling costs, general costs, administrative costs, and other operating costs. The decrease in the operating cost is due to the large reduction in advertising costs and shipping and handling costs. In 2016, the divestitures of Coca-Cola Company have saved \$1,312 million for Coca-Cola Company which is benefited from the back-ward

integration strategy. In 2017, Coca-Cola Company adopts strategy that allocates estimated full year marketing expenditures that benefit multiple interim periods to each of our interim reporting periods, and then uses the proportion of each interim period's actual unit case volume to the estimated full year unit case volume as the basis for the allocation. This methodology results in its marketing expenditures being recognized at a standard rate per unit case. As a result, the marketing costs reduced by \$627 million. The backward integration strategy also benefits the reduction of shipping and handling Costs for Coca-Cola Company. The holding distribution companies and distribution partners reduced the distribution costs by \$0.9 billion in 2017, which elevates the Operating Profit Ratio by 0.57%.

Return on Capital Employed (ROCE)

Return on capital employed (ROCE) is a profitability ratio which detects the efficiency of a company generating profit from utilization of its capital (Lee, 2009). ROCE is an indication of how much profit that one dollar of capital employed could generate. The ROCEs for Coca-Cola Company from 2015 to 2017 are shown numerically in Table 2 and graphically in Figure 1.

From 2015 to 2017, the trend for ROCE for Coca-Cola Company increases first, but decreases rapidly to the lowest rate among the three years. The increase from 2015 to 2016 is due to the decrease of \$2,329 million in employed capital. Since there is less capital employed, the profit generated from each dollar employed increases, which means that Coca-Cola Company is more efficient in utilization of its assets. However, from 2016 to 2017, the operating profit decreases by 15%, which exceeds the decrease in the capital employed of less than 0.01%.

On the basis of the 2016 annual report and 2017 annual report of Coca-Cola Company, the capital employed is composed by total assets and total current liabilities. The main reason for the decrease in the capital employed in 2016 is the decrease of \$2,324 million in the "Bottler's Franchise Rights With Indefinite Lives", which is caused by the decomposition of the German bottling partner in 2016. Another main factor for the decrease in capital employed is the decrease of \$2,481 million in the "Other Investments". Available-for-sale securities is the major factor for decrease in the "Other Investments"; this is due to the periodic recession in economy, which reduced the estimated fair value for the securities investment of Coca-Cola Company. From 2016 to 2017, the capital employed is stable; however, the operating profit decreases dramatically. The decrease in operating profit of 15% is due to the decrease in the revenue as analysed in the operating profit ratio, which leads the ROCE to recess by 1.84%.

Earnings per Share (EPS)

Earnings per share (EPS) identifies how much money that each ordinary share could receive from the attribution of company's profit (Lee, 2009). The EPS for Coca-Cola Company from 2015 to 2017 is shown numerically in Table 2 and graphically in Figure 1.

From 2015 to 2017, the EPS for Coca-Cola Company decreases steadily and rapidly from \$1.69 to \$0.29. On the basis of financial statements of Coca-Cola Company, the number of ordinary share is steady with a little decrease that is too meager to make an impact. The major factor for the decrease in EPS is the decrease of \$6,103 million in "Net Income Attributable to Shareowners" in 2017. As per the 2017 annual report of Coca-Cola Company, the major reason for the decrease in the "Net Income Attributable to Shareowners" is due to the increase in the "Income Taxes". In 2015, Internal Revenue Service (IRS) has sent a Statutory Notice of Deficiency to Coca-Cola Company claiming that the Company's US taxable income should be increased. In 2017,

IRS created a potential federal income tax liability of approximately \$3,300 million for the period plus interest. Moreover, IRS also filed an amended answer to the company's petition in U.S. Tax Court in which it is increased its penalties by \$523 million. As a result, the "Net Income Attributable to Shareowners" decreases rapidly in 2017, which leads to a dramatic decline in EPS.

Conclusions

This paper aims to evaluate the effect of cost control strategy on the profitability of Coca-Cola Company from year 2015 to 2017 and offer essential financial recommendations. The profitability of Coca-Cola Company has been strengthened from 2015 to 2017, which is done by reducing cost of sales and operating costs. The gross profit ratio indicates that Coca-Cola Company has a 2.03% increase and the operating profit ratio indicates that it has a 1.48% increase. However, all the revenue, the gross profit, and the operating profit have decreased, which leads to the decrease of 1.84% in the Return on Capital Employed and \$1.4 in the Earnings per Share. In order to remain the advantage in profitability when the market is recessing and avoid any future financial crisis, there are some possible ways that Coca-Cola Company could consider. First, Coca-Cola Company should remain its cost reduction strategy by executing its backward integration strategy to reduce the material cost and the marketing costs calculation methodology to reduce its marketing costs. Second, Coca-Cola Company should insist its foreign currency fluctuation control strategy to ensure that company would be beneficial in currency fluctuations. Moreover, Coca-Cola Company should adopt the recommendations by World Health Organisation to adapt its syrup ingredients in accordance with the health to restore the confidence of the customer and boost the revenue. Besides, Coca-Cola Company should reconstruct relationship with IRS in order to avoid filing more lawsuit and penalties.

From this paper, the influence of various costs on the profitability and the relationship between the effectiveness of cost control strategy and the profitability have been revealed. The theory that cost control strategy is the most efficient way to ensure the stability of profitability for a company when the market recesses and revenue declines is drawn based on the horizontal analysis and ratio analysis. This paper could be valuable for scholars to review and develop future study on the profitability analysis. Companies and organisations who seek to improve their profitability could also reference to this dissertation to find solution that is to advance its cost control strategy.

References

- Bisbe, J., & Malagueno, R. (2012). Using strategic performance measurement systems for strategy formulation: Does it work in dynamic environments? *Management Accounting Research*, 23(4), 296-231.
- Carpio, C., Peñaherrera, V., Sandoval, L., & Sánchez, M. (2017). Effect of nutrition in coke to diabetes in Ecuador. *Pan American Journal of Public Health*, 42, 177-182. (in Spanish)
- Charumathi, B. (2012). On the determinants of profitability of Indian life insurers—An empirical study. *Proceedings of the World Congress on Engineering*, 1. Retrieved from http://www.iaeng.org/publication/WCE2012/WCE2012_pp505-510.pdf
- Goel, S. (2015). *Financial ratios*. New York: Business Expert Press.
- Groppelli, A. (2006). *Management accounting: An introduction*. Hauppauge: Barron's Educational Series, Inc.
- Huang, Y. (2013). To view the profitability from the cost angle—Based on the comparison of Wangfujing department store and the Macy's department store (Master thesis, Southwestern University of Finance and Economics, Chengdu, China). (in Chinese)
- Lee, C. A. (2009). *Financial analysis, planning & forecasting: Theory and application*. New York: World Scientific.
- Pizzey, A. (2001). *Accounting and finance: A firm foundation*. Andover: Cengage Learning EMEA.
- Williams, J. R., & Carcello, J. V. (2008). *Financial & managerial accounting*. Irwin: McGraw-Hill Irwin.

- Wang, Y. (2006). Enterprise earnings ability evaluation (Master thesis, Xi'an University of Architecture and Technology, Xi'an, China). (in Chinese)
- Zhang, Y. (2007). Brief analysis of the standard of earnings ability for listed company. *Business Economy*, (1), 63-64. (in Chinese)