ANALYSIS OF THE IMPACT OF PRODUCT SELLING PRICE, PROMOTION COST, AND ADVERTISING COST TO THE COMPANY PROFITABILITY 
(A CASE STUDY OF PT. WRIGLEY INDONESIA)

By: 
Olivia Wilanda 
014200900122

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PANEL OF EXAMINERS
APPROVAL SHEET

The panel of Examiners declare that the thesis entitled “ANALYSIS OF THE IMPACT OF PRODUCT SELLING PRICE, PROMOTION COST, AND ADVERTISING COST TO THE COMPANY PROFITABILITY (A CASE STUDY OF PT. WRIGLEY INDONESIA)” that was submitted by Olivia Wilanda majoring in Management from the Faculty of Economic was assessed and approved to have passed the Oral Examinations on February 25th, 2013.

I. Ir. Iman Heru Wijayanto, MBA
   Chair-Panel of Examiner

II. Sonny Vinn Sutedjo, SE. MM
   Examiner I

III. Irfan Habsjah, MBA, CMA
    Examiner II
This Thesis is entitled “ANALYSIS OF THE IMPACT OF PRODUCT SELLING PRICE, PROMOTION COST, AND ADVERTISING COST TO THE COMPANY PROFITABILITY (A CASE STUDY OF PT. WRIGLEY INDONESIA)” prepared and submitted by Olivia Wilanda in partial fulfillment of the requirements for the degree of Bachelor in the Faculty of Economics has been reviewed and found to have satisfied the requirements for a thesis fit to be examined. I therefore recommend this thesis for Oral Defense.

Cikarang, Indonesia, January 30th, 2012

Acknowledged by,  

Irfan Habsjah , MBA, CMA

Recommended by,  

Purwanto, ST, MM

Head of Management Study Program

Thesis Adviser
DECLARATION OF ORIGINALITY

I declare that this thesis, entitled “ANALYSIS OF THE IMPACT OF PRODUCT SELLING PRICE, PROMOTION COST, AND ADVERTISING COST TO THE COMPANY PROFITABILITY (A CASE STUDY OF PT. WRIGLEY INDONESIA)” is, to the best of my knowledge and belief, an original piece of work that has not been submitted, either in whole or in part, to another university to obtain a degree.

Cikarang, Indonesia, 30th January, 2013

Researcher,

Olivia Wilanda
Company profitability is a comparison or ratio of profit with the assets that used in order to gain the profit, it measured in a percentage. Return on investment shows the capability of the company in generating profit from the investments made or assets used. One of many ways in increasing the profitability is by increasing the sales volume. The company’s sales volume mostly affected by the selling price determined by the company, and the selling price itself affected by the other costs occurred in for the sales process, includes the promotion cost and advertising cost.

In this research, the researcher collected the secondary data from the company and interviewed the employee in PT. Wrigley Indonesia. The secondary data used was the balance sheet, income statement, selling price, and company profile of PT. Wrigley Indonesia in 2008 until 2011. The selling price, promotion cost, and advertising cost used were the prices of Doublemint stick, which has the biggest sales volume among the products.

In analyzing the data, the researcher had done the normality test, autocorrelation test, multicollinearity test, heteroscedasticity test, F-test, and T-test in satisfying the multiple regression analysis. The result of the research showed that product selling price, promotion cost, and advertising cost have the significant impact to the company profitability in PT. Wrigley Indonesia. The most significant variable in impacting the company profitability is promotion cost.

**Keywords:** Profitability (Return on Investment), Selling Price, Promotion Cost, Advertising Cost.
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Olivia Wilanda
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<th>Definition</th>
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<tr>
<td>ANOVA</td>
<td>Analysis of Variance</td>
</tr>
<tr>
<td>ROA</td>
<td>Return on Assets</td>
</tr>
<tr>
<td>ROI</td>
<td>Return on Investment</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Products and Solution Services</td>
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<tr>
<td>VIF</td>
<td>Variance Inflation Factor</td>
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CHAPTER I

INTRODUCTION

1.1. Background of Study

Company profitability is a comparison or ratio of profit with the assets that used in order to gain the profit, it measured in a percentage. Profitability ratio is a ratio used in measuring the whole company affectivity. Profitability ratio is believed as the most valid tools in the implementation of company’s operations (Weygandt, 1996 cited in Meythi, 2007, p.52). Meythi (2007) also explained that return on investment (ROI) is one of the ways in measuring company profitability. Return on investment shows the capability of the company in generating profit from the investments made or assets used, that are why return on investments sometimes called as return on assets.

The company’s performances could be considered as efficient when the company gain profit with the used of its own wealth or capitals, either by the owner’s equity or by the foreign capital. Therefore, the company should consider about how to gain the high profit and increase its profitability. There is one general method that used by some companies in increasing their profitability, it is by increasing their sales. Increasing the sales of the company could be done by two things, whether the company increases its selling price or its sales volume (Ekatherina O.K., 2008).

The amount of sales volume is the basic consideration of the determination of selling price, which constitute as the principle of the company. The determination of the selling price that made by the producers or the company usually would be based on some objectives and the factors of some costs in producing or selling the products.
The objectives of price determination could be getting the maximum profits, gaining or leading the market share, or gaining the profitability or return on their investment (Lopiyoadi, 2008 cited in Utami, 2011, p.22). In order to know about the profit gained by the company, the company has to calculate it by considering the costs made in the sales. The costs could be the production cost, promotion cost, advertising cost, taxes, and so on.

PT. Wrigley Indonesia is a multinational company which involved in a fast moving consumer goods industry that located in Jakarta, Indonesia. PT. Wrigley Indonesia is concerned in confectionary industry, including the gum (chewing gum and bubble gum) and candy (soft-chew candy and gummy). This company is importing its products from foreign country since it has no factory in Indonesia.

One of many ways in increasing the profitability is by increasing the sales volume. The company’s sales volume mostly affected by the selling price determined by the company, and the selling price itself affected by the other costs occurred in the sales process (Ekatherina O. K., 2008). The other way of increasing the sales volume is by doing some promotions of the product, whether by advertise the products or by other ways of promotions. Hence, this research will be focused on product’s selling price, promotion cost, and advertising cost which affect the company profitability.

However, the determination of the selling price is important in targeting the profit that desirable by the company related to the company profitability. By understanding that, the researcher wants to know about the relationship of the variables. Thus, the researcher would analyze about the impact of product selling price, promotion cost, and advertising cost toward the company profitability in PT. Wrigley Indonesia.
1.2. Company Profile

The Wrigley Company is a multinational company which involved in fast moving consumer goods industry. This company has been operating in 102 sites worldwide. The Wrigley Company has more than 17,000 employees (or usually called associates in the Wrigley Company) in 40 nations who together are committed to bringing the simple pleasures to the consumers around the world (Mars.com, Wrigley).

A website named FundingUniverse.com posted that the headquarter company whose name is Wm. Wrigley Jr. Company has more than 120 years of success. Wm. Wrigley Jr. Company operates as the largest chewing gum manufacturer in the world. This company is supplying nearly half of all chewing gum that sold in the United States. The Wm. Wrigley Jr. Company is a market leader in Europe as well, securing almost 50 percent of the continent's gum profits.

Va McLean (2008) also informed that the Wm. Wrigley Jr. Company is recognized as a leader company in confections with a wide range of product offerings. The product scope of the Wrigley Company is including gum, mints, hard candies, chewy candies, lollipops, and also chocolates. On April 2008, Mars Inc. has successfully completed its acquisition of the Wm. Wrigley Jr. Co., making the chewing gum giant became a subsidiary of family-owned Mars. The Wrigley Company itself will remain headquartered in Chicago (CSnews.com, 2008).

Mars Incorporated is based in McLean, Virginia, it has net sales of more than $30 billion, six business segments including pet care, chocolate, Wrigley, food, drinks, symbioscience, and more than 70,000 associates (or usually called employees) worldwide that are putting the Mars Principles into action to make a difference for people and the planet through the performance (Wrigley.com, About Us). Based on the agreement between Mars Incorporated and the Wrigley
Company, the Wrigley Company will become a separate, stand-alone subsidiary of Mars (Sorkin, 2008).

The Wrigley Company is headquartered in Chicago, Illinois, U.S. which established in 1891. The name of the company was Wm. Wrigley Jr. Company (FundingUniverse.com). Few years after, the Wrigley Company started to expand its business to other countries, including the factories. When it comes to Indonesia, in 2006, it named PT. Wrigley Indonesia. The location of this company in Indonesia is at Wisma Surya Kemang, Jl. Kemang Raya 33, South Jakarta.

PT. Wrigley Indonesia started its first business with only four employees. The Wrigley Company has no factory in Indonesia, in consequence, PT. Wrigley Indonesia needs to import the other products from foreign factories. However, PT. Wrigley Indonesia proposed the Application of Importation to the government in order to get the license to import their products to Indonesia. Because this company has no license yet, this company only selling one brand, Sugus®, which was manufactured in Indonesia.

On January 2009, the government approved the Application of Importation that applied by Wrigley Indonesia. By then, PT. Wrigley Indonesia started to import their other products to Indonesia. Currently, PT. Wrigley Indonesia is importing nine brands which are Doublemint®, Wrigley's Spearmint®, Juicy Fruit®, Extra®, Boomer®, Sugus®, Skittles®, Airwaves®, and 5™. Some brands have their own sub-brands like Doublemint® which has Doublemint Cool and Doublemint Sugar Free Mints; and also Extra® which has Extra Xylitol, Extra Professional gum, and Extra Professional Mints.

PT. Wrigley Indonesia currently has 13 employees since this company only importing the products from foreign factories. The organization chart is shown in Figure 1–1. Organization Chart of PT. Wrigley Indonesia, below:
The belief of the Wrigley Company is Diversity and Inclusion is not a program, but it is who they are and how they live. It is valued in the decisions they make, on behalf of the company and inherent in their core values. By appreciating that each associate is unique, and assuring that each associate feels connected to others in the organization, they are positioning the company for exceptional performance (Wrigley.com, Diversity & Inclusion).

It stated on the web site of Wm. Wrigley Jr. Company which named Wrigley.com, the vision of the Wrigley Company is:

“To create a culture where Wrigley’s associates' unique talents are maximized, and they feel valued and connected to each other and to Wrigley through living the values.”
Besides, the Wrigley Company also has its mission to be done by the employees in order to achieve its vision, it also explained in its web site as follows:

“Wrigley’s belief is that as senior leaders align and own the strategy, lasting change will occur. The strategy consists of a four-pronged approach. It is focusing on the Workforce, Workplace, Marketplace, and in the Community.”

Wrigley.com has informed us that the employees in the Wrigley Company are interpreted their vision and mission by living their own values, by connecting with each other in meaningful ways, and also by doing the seeking-and-retaining the different perspectives among the employees. The employees are leveraging both their internal and external dimensions of diversity. The Wrigley Company believes that Diversity and Inclusion are the same as Abundance and Possibilities.

By that belief, they activate the power of Diversity and Inclusion through sharing, learning, connecting and having fun. They are also appreciating and leveraging the differences by understanding what is important to each other and ourselves, so that they can leverage the best of who they are and achieve more together, than on their own (Wrigley.com, Diversity & Inclusion).

The Wrigley Company has a new foundation of its culture and approach to the business that adopted from Mars Incorporated, which is called “The Five Principles”. The Five Principles are uniting them in across generations, geographies, languages and cultures. The Five Principles are Quality, Responsibility, Mutuality, Efficiency and Freedom (Mars.com, The Five Principles).

a) Quality

“The consumer is our boss, quality is our work and value for money is our goal.”
b) Responsibility

“As individuals, we demand total responsibility from ourselves; as Associates, we support the responsibilities of others.”

c) Mutuality

“A mutual benefit is a shared benefit, a shared benefit will endure.”

d) Efficiency

“We use resources to the full, waste nothing and do only what we can do best.”

e) Freedom

“We need freedom to shape our future; we need profit to remain free.”

(Mars.com, The Five Principles)

Wrigley Oral Healthcare Program explained that as the company continued to grow, the company consistently applied its basic principle, which is “Even from a little thing like a stick of gum, quality is important.” Andrew Ross Sorkin (2008) published that the transaction between the Wrigley Company and Mars Incorporated would create a confectionery behemoth, and it could pressure the rivals into a cascade of other mergers.

1.3. Problem Identified

According to the background of study above, the researcher wants to find out about the impacts of Doublemint stick’s selling price, promotion cost, and advertising cost to the company profitability in PT. Wrigley Indonesia. Promotion cost and advertising cost are separated, because the company records these two elements separately. The promotion costs consist of the merchandising, sales promotion, direct marketing, and so on. Advertising costs consist of advertising itself and the public relation.
1.4. **Statement of Problem**

According to the problem identified above, the statements of problems of this research are:

1. Do product selling price, promotion cost, and advertising cost of Doublemint stick have significant impacts toward the company profitability of PT. Wrigley Indonesia?

2. Which factor has the most significant impact toward the company profitability of PT. Wrigley Indonesia?

1.5. **Research Objective**

The statement of problem in this research shows the problems that needed to be solved, therefore, the objectives of this research are:

1. To analyze the impacts of the selling price, promotion cost, and advertising cost of Doublemint stick toward the company profitability of PT. Wrigley Indonesia.

2. To find out which factor that has the most significant impact toward the company profitability of PT. Wrigley Indonesia.

1.6. **Significance of Study**

The results and findings derived from this research would be significance for the researcher, company, and the next batch in the university.
To the researcher, this research is useful in gaining a deeper knowledge about the importance of determining the selling price of the products, planning the advertising of the products and also planning the promotional activities for the products, and about its relevance to the company profitability.

To the company, this research is expected to be useful as the input or consideration in managing the company’s performances in increasing the profitability of the company by determining the selling price of its product, and controlling the expenses occurred, especially the advertising cost and promotion cost.

To the next batch in the university, this research could be used as the guideline to do the next research about the related topic. The topics that related to this research are about product selling price, promotion cost, advertising cost, or the company profitability.

1.7. **Theoretical Framework**

The theoretical framework in this research is where the company profitability or return on investment (ROI) as the dependent variable that influenced by the independent variables which are product selling price, promotion cost, and advertising cost of Doublemint stick. The figure of this theoretical framework is shown in Figure 1 – 2. Theoretical Framework.
Figure 1 – 2. Theoretical Framework
Source: Constructed by the researcher

This theoretical framework was constructed by the researcher in consideration of the DuPont analysis (Figure 2-1.) in calculating the return on investment (profitability). The calculation of return on investment is affected by profit margin and total assets turnover. These two elements are affected by the net sales which calculated by selling price and quantity, whereas the calculation of net income is including the promotion cost and advertising cost as the parts of operating expenses.

1.8. Scope and Limitation of Study

The company that examined is a fast moving consumer goods multinational company: PT. Wrigley Indonesia – which focused on the confectionery industry include the gum (chewing gum and bubble gum) and candy (soft-chew candy and gummy).

The factor which impacts the profitability of the company is focused on four factors which are product selling price, promotion cost, and advertising cost. The product selling price, promotion cost, and advertising cost that used in this study are focused on one product which is Doublemint stick chewing gum.
The data used in this study is limited into product selling price, promotion cost, advertising cost, income statement, and balance sheet from 2008 until 2011. The variables used for this research are limited into selling price, promotion cost, advertising cost, and company profitability.

1.9. Research Hypothesis

Based on the problem identified, the researcher described the hypothesis made is product selling price, promotion cost, and advertising cost that impact the company profitability in PT. Wrigley Indonesia.

1.10. Definition of Terms

1. Product’s Selling Price means the market value or agreed exchange value, which will purchase a definite quantity, weight, or other measure of a good or service. It is the actual final price of a product or service that company charged a purchaser to buy the item. Selling price is the cash price that a buyer must pay for purchased goods or services (McCracken, 2005).

2. Promotion Cost means the cost that business spends in order to keeps the product in the minds of the customer and helps stimulate demand for the product. The ongoing activities of advertising, sales and public relations are often considered aspects of promotions (Carter McNamara). Machfoedz (2005 cited in Utami, 2011, p.28) said promotion is one of the elements of marketing which can be done by the marketer; the other elements are personal selling, direct marketing, advertising, and public relation.
3. Advertising Cost means the cost that businesses spend in bringing a product (or service) to the attention of potential and current customers. Advertising is typically done with signs, brochures, commercials, direct mailings or e-mail messages, personal contact, etc (Carter McNamara). Advertising is primary tools that firms use to affect the performance of their products. Therefore, advertising becomes crucial in making consumers aware of the existence and characteristics of the products (Barroso & Llobet, 2012)

4. Company profitability means the efficiency of a company or industry at generating the earnings. It is a state or condition of yielding a financial profit or gain (MoneyChimp.com, Profitability - Definition). Company profitability is a comparison or ratio of profit with the assets that used in order to gain the profit, it measured in a percentage. Profitability ratio is a ratio used in measuring the whole company affectivity.
CHAPTER II

LITERATURE REVIEW

2.1. Past Related Research

There is a similar research that used by the researcher as the guidance for this research. The research was “Analisis Pengaruh Harga Jual Produk terhadap Profitabilitas Perusahaan pada PT. Mega Eltra (Persero) Cabang Medan” which was conducted by Ekatherina O.K. during 2008 time. The research analyzed the impacts of product selling price to the company profitability in PT. Mega Eltra (Persero) Cabang Medan.

The research done by Ekatherina O.K. was utilized by collected the secondary data and interviewed the employee in PT. Mega Eltra (Persero) Cabang Medan during 2008. The secondary data used was the balance sheet and income statement of PT. Mega Eltra (Persero) Cabang Medan, in 2003 until 2005. The selling price used was the prices of cements, which was the main product of the company.

In analyzing the data, the first step was testing the normality of the data, and the next step was doing the simple regression analysis. The result of that research showed the R square or R determination was 0.207, it showed that there is only 20.7% variance of Return on Investment (ROI) changed that connected to the changes of product selling price that there is no significant influence of the cement’s selling price to the company profitability.
2.2. **Financial Statements as the Company’s Delineation**

2.2.1. **Definition of Financial Statements**

Financial Statements are the primary sources of information about the financial performance of the company (Keown et al., 2005). It is the accounting reports that provide the information about the transactions recorded and summarized. Financial statements also called as the outcome from accounting as the summary of financing transactions which happened in a period of time before the closing. The reports served the important information about the company periodically, could be monthly, quarterly (every three months), or yearly (Reeve et al., 2007).

There are some characteristic and limitations of financial statements according to Ikatan Akuntan Indonesia as follows:

1. Financial statements are historical, which means the reports only record the transactions happened before. In that case, financial statements are not used as the only resource of information in economic decision making.

2. Financial statements are general, and not be intended to fulfill the specific needs.

3. The structures of financial statements are based on the interpretations and considerations.

4. Accounting only reports about the material things. Likewise the application of the principles of accounting in a fact or entry that might not committed if the things are not affecting the material things to the proper financial statements.

5. Financial statements are conservative in facing the in-definitive, and if there are few possibility of indefinite conclusion to an entry,
so that the alternative which produces the net margin or the smallest amount in the asset as ruled.

6. Financial statements are more on economic value in an event or the transaction than its form.

7. Financial statements use technical terms, and the users are expected to understand the terms of accounting and the characteristic of the reported information.

8. The existences of multiple alternatives of accounting method make multiple variations of measuring economical resources and success level intercompany.

9. The qualitative information and facts that cannot be quantified are commonly neglected (Ikatan Akuntan Indonesia, 1974 cited in Ekatherina O.K., 2008, p.33)

The nine points above shows that financial statements are historical and general because financial statements are only records all of the transactions happened in the past, and make conclusion or summary of the transactions. The transactions recorded in financial statements are only the materials things by using its technical terms (Suharmadi, 2009).

2.2.2. Objectives of Financial Statements

By understanding the definition of financial statement above, we can conclude that financial statements’ objective is to report the business’ financial performance and the business’ position to both internal and external users of accounting information, because it reflects the transactions of the business. Financial statements are used to evaluate the current financial condition of a business. It also could be used in predicting the future operating results and cash flows (Reeve et al., 2007).
Jennifer Ireland (2005) explained that financial statements are the important things for both internal and external (investors) of the company to make economic decisions about the business. For the internal of the company, financial statements are expected be used in communicating the financial performances of the company to the investors, whereas for the external (investors) of the company, the information given from financial statements are expected to be useful in making the decisions.

Financial statements are useful to determine the ability of a business to generate cash, and the sources and uses of that cash, determine whether a business has the capability to pay back its debts, track financial results on a trend line to spot any looming profitability issues, derive financial ratios from the statements that can indicate the condition of the business, and also to investigate the details of certain business transactions (Accountingtools.com).

The objective of financial statements are providing the information regarding the financial position, performance and changes in financial position of an enterprise that benefits a large number of users in decision making (Ikatan Akuntan Indonesia, 2012)

There are some specific objectives of financial statements for some users. Financial statements give some benefits to many parties. The parties might divide into two groups, which are internals and externals. Internals are the managers and employees, whereas the externals are investors, suppliers, creditors, customers, and government (Ilham, 2012). This idea was also supported by Swastha and Sukotjo (1998)

Internal

1. Managers (Directors & Management)

   The financial statements provide information used in decision-making, evaluation of ongoing business, doing budgeting and internal controls. If the financial information provided is accurate,
then the manager can make clear decisions based on the data owned.

2. Employees
The employees will be interested in the financial information related to the stability and profitability of the company. It could give an idea if the company is able to provide remuneration, and also provide employment opportunities and career for a long time.

External

1. Investors
Investors or owners concern with the information related to the risks associated with equity investments. That information will help to make a decision whether to increase capital reduce capital, or sell the shares. In addition, investors also need to assess the ability of the company to pay the dividend/profit sharing.

2. Creditors
Creditors concern with the information that indicates the company's ability to pay debts and interest on time. The financial statements can help creditors to determine the ceiling, interest and also the period which they will give to the company to pay the debts.

3. Suppliers
Suppliers and other short-term creditor concerned with the information that indicates the company's ability to pay its short-term debts. Such information will help the supplier to determine the amount of the debt and the period of time that the suppliers willing to give to the company.
4. Customers

Customers need information that related to the continuity of the company, especially customers who conduct long-term cooperation.

5. Government

For the government, they can assess the company's ability to pay the taxes (Ilham, 2012).

2.2.3. Types of Financial Statement

There are four common types of financial statements which are balance sheet, income statement, statement of cash flows, and statement of owner’s equity (Reeve et al., 2007). In this research, the financial statements used are only balance sheet and income statement because these two reports give the information needed in doing this research. Balance sheet gives the information about the financial position of the business in a specific date. On the other hand, income statement gives the information about the revenue and expenses of the business in a specific period of time (Weygandt et al., 2010).

Balance Sheet

Reeve et al. (2007) explained that balance sheet is a list of assets, liabilities, and owner’s equity as of a specific date, usually at the close of the last day of the month or the year. There are two types of form in balance sheet, they are account form and report form. Account form of balance sheet resembles the basic format of the accounting equation, with assets on the left side and the liabilities and owner’s equity are on the right side. The report form of balance sheet presents the assets on the top of the form and followed by liabilities and owner’s equity below the section.
The formula of balance sheet is total assets is equal to the sum of outstanding debt (liabilities) and owners’ equity (Keown et al., 2004).

\[ \text{Assets} = \text{Liabilities} + \text{Owner’s Equity} \]

Keown et al. (2004) mentioned that assets represent the resources owned by the company, whereas, the liabilities and the shareholder’s equity indicate how those resources are financed.

a. Assets

Jennifer Ireland (2005) described assets as something owned or controlled by the business and which will provide cash or other benefits in the future. Assets are commonly divided into three categories for presentation on the balance sheet based on the order of the length of time necessary to convert them into cash in the ordinary course of business.

The first category is current assets which defined as the assets that are expected to be converted into cash or sold or used up within one year or less, through the normal operations of the business (Keown et al., 2004). The current assets are consisting primarily of cash, and other assets that include in current assets are marketable securities, accounts receivable, notes receivable, supplies or inventories, and other prepaid expenses (Swastha & Sukotjo, 1998).

Cash is the most important thing needed by the company, it used for the current business operations. Accounts receivable and notes receivable are the amounts that customers owe from the company, in a simple understanding, the customer buy the products in credit to the company (Reeve et al., 2007).

The notes receivable are written promises from the customer to pay the amount of the note and possibly interest at an agreed rate. Accounts receivable are less formal and do not provide the interest,
normally resulted from providing services or selling goods on account (Reeve et al., 2007). Keown et al. (2004) mentioned that inventories consist of the raw materials, work-in-progress, and the final products held by the company for eventual sale. Prepaid expenses are cash payments in advance before the outcome. Prepaid expenses are include the insurance premium (which may be due before the coverage begins), or rent (which due before the use of the rent).

The second category is fixed asset which means the assets that expected to be held in more than one year (Ireland, 2005). The assets that depreciate over time (long-term) or relatively permanent tangible assets that are used in the normal business operations are involved in fixed assets. The examples of fixed assets are equipment, machineries, buildings, and land (Keown et al., 2004).

The last category of assets is called other assets. Other assets are all assets that are not current or fixed assets, and including the intangible assets. Intangible assets are the assets that could not be seen or touch but it actually has the real value for the business, such as patents, copyrights, and goodwill (Weygandt et al., 2010). A patent for an invention is the grant of a property right to the inventor. Generally, the term of a new patent is 20 years from the date on which the application for the patent was filed. Under certain circumstances, patent term extensions or adjustments may be available (Alexandria, 2011).

Copyright refers to laws that regulate the use of the work of a creator, such as an artist or author (Miller). Copyright is a legal means of protecting an author's work. It is a type of intellectual property that provides exclusive publication, distribution, and usage rights for the author. This means whatever content the author created cannot be used or published by anyone else without the consent of the author (techterms.com, 2009). Copyright protects an original artistic or literary work, whether a patent protects an invention (Uspto.gov, 2010).
Goodwill is an intangible asset of a company which includes factors such as reputation, contacts, and expertise, for which a buyer of the company may have to pay a premium (Qfinance.com). In his 2012 article, C. Wilson described goodwill as the benefit and advantage of the good name, reputation and connection of a business (Duhaime.org). Goodwill is the intangible possession which enables a business to continue to earn a profit that is in excess of the normal or basic rate of profit earned by other businesses of similar type (Ventureline.com, Goodwill Definition).

b. Liabilities

Liabilities are the amounts the business owes to the creditors, it usually called debt. Debt is money that has been borrowed and must be repaid at some predetermined date. Debts consist of such sources as credit extended by suppliers or a loan from the bank (Keown et al., 2004).

However, liabilities or debts have two categories: current liabilities (current debts), and long-term liabilities (long-term debt). Like the current assets, current liabilities are the liabilities that will be due within a short time, usually one year or less than one year (Ireland, 2005). Reeve et al. (2007) showed that current liabilities include accounts payable, notes payable, accrued expenses, and other payables (wages payable, interest payable, taxes payable and unearned fees).

c. Owner’s Equity

According to Ikatan Akuntan Indonesia (2009) which cited in Kusuma & Bangun (2011), Owner’s equity is the stockholders’ investment in the company and the cumulative profits retained in the business up to the date of the balance sheet (Keown et al., 2004). It often called the owner’s right to the assets of the business. Owner’s equity represents the total amount invested by the stockholders plus the accumulated profit of the business (Reeve et al., 2007).
The components of owner’s equity include common stock, paid-in-capital (amounts invested not involving a stock purchase) and retained earnings (cumulative earnings since inception of the business fewer dividends paid to stockholders) (Entrepreneur.com).

Income Statement

Income statement is a financial statement that presents information on all operating results (income) and expenses incurred (operating expenses) for a particular period (Swastha & Sukotjo, 1998). As explained in the Businesstown.com, an income statement, otherwise known as a profit and loss statement, is a summary of a company’s profit or loss during any one given period of time, such as a month, three months, or one year. The income statement records all revenues for a business during this given period, as well as the operating expenses for the business.

Weygandt et al. (2010) informed that incomes or revenues are placed on the top of income statement, and then followed by the expenses below, after that it followed by the profit or loss of the operational. Income statement is a summary of the profitability of the firm over period of time (Bodie et al., 2008). The income statement is important because it shows the profitability of a company during the time interval specified in its heading. The period of time that the statement covers is chosen by the business and will vary (Accountingcoach.com).

The income statement (or profit and loss statement) is part of a company's financial statements resulting in an accounting period that describes the elements of income (revenue) and corporate expenses resulting in a gain (or loss). The income statement is a statement that shows the revenues and expenses of a business unit for a given period. The role of the income statement is as a tool to determine the progress of the company and find out what the net proceeds or profits earned during the period (ekonomi.kabo.biz).
Moreover, there is a basic equation to understand more about income statement that constructed by Swastha and Sukotjo (1998) as follows:

\[ \text{Net Income (Loss)} = \text{Revenue} - \text{Expense} \]

This equation described about revenues and expenses that showed in income statement. Some elements of income statement are described as follows (Glautier & Underdown, 2001 cited in Ireland, 2005, p.24):

a. Gross profit is the profit that the business earns by trading. It is the difference between sales revenue (sometimes called turnover) and cost of sales. Cost of sales is calculated as opening stock (at the beginning of the accounting period) plus purchases of goods for resale (or production costs if the business is a manufacturer), minus closing stock (at the end of the accounting period).

b. Net profit is the profit that the business earns after adding any additional income (such as interest receivable) and after deducting further business expenses (such as rent, wages and salaries, or heating and lighting costs).

c. Retained profit for the year is the final profit figure, after deducting distributions to owners. Distributions to owners are called either drawings if the business is a sole trader or partnership, or dividends if the business is a company. If there are no distributions to owners, then retained profit is equal to net profit (Glautier & Underdown, 2001 cited in Ireland, 2005, p.24).
2.3. Financial Statement Analysis

2.3.1. Definition of Financial Statement Analysis

Financial statement analysis is the analysis of a company’s financial statement, usually by accountants or financial analysts. Usually includes in-depth financial ratio analysis comparisons over time periods. Financial statement analysis is an evaluative method of determining the past, current and projected performance of a company (Ventureline.com, Financial Statement Analysis Definition).

Several techniques are commonly used as part of financial statement analysis including horizontal analysis, which compares two or more years of financial data in both dollar and percentage form; vertical analysis, where each category of accounts on the balance sheet is shown as a percentage of the total account and ratio analysis, which calculates statistical relationships between data (Investopedia.com).

Financial statement analysis is a process of analyzing the financial statements of the company along with the elements whose purposes are to evaluate and predict company’s financial condition, and evaluate the results achieved by the company in the past and present (Majalahpendidikan.com, 2011).

Majalahpendidikan.com (2011) also adopted an idea from S. Munawir, (1995) that quoted the definition of financial statement analysis which defined by Soemarso S. R. (1996) as the relationships among the amounts in financial statements which explain the trends of a phenomenon. By conducting the interpretation and analysis of financial statements, the users will obtain the detailed financial data and will get all the answers relating to issues of financial position and results achieved by the company or business entity concerned.
2.3.2. Objectives of Financial Statement Analysis

The objectives of financial statement analysis according to Bernstein (1983) which posted by Pustakasekolah.com (2012) are:

a. Screening: The analysis was performed with an analytical look at the financial statements for the purpose of selecting possible investment or merger.

b. Forecasting: The analysis is used to forecast the company's financial condition in the future.

c. Diagnosing: The analysis is intended to look at the possibility of the problems that occur in operations management, financial or other problems.

d. Evaluating: The analysis was conducted to assess management performance, operational efficiency and others.

e. Understanding: By doing financial statement analysis, the raw information is read from the financial statements will become wider and deeper.

In other words, financial statements analysis will give the benefits to the users in screening the possible business investment or merger, forecasting the business’s financial condition in the future, diagnosing the possibility of problems occurrence in the business, evaluating the performances of the business, and understanding the business’s financial statements.

According to Djarwanto (2001) in Satria’s (2011) study, the financial statement analysis aimed to determine whether the financial condition, results of operations of the company's financial progress satisfactory or unsatisfactory. The analysis was done by measuring the relationship between the elements of financial statements and how to
change elements of it from year to year and to know the direction of development.

The role of financial statement analysis is to take financial reports prepared by the companies, combined with other information to evaluate the past, current and prospective performance and financial position of a company for the purpose of making investment, credit, and other economic decisions (College Accounting Coach, 2011).

Ken Faulkenberry explained that the purpose of financial statements are to provide pertinent information on the financial position (Balance Sheet), profitability (Income Statement) and operating, investing, and financing activities (Cash Flow Statement) of a company. He also said that financial statements are used by shareholders, executives, employees, investors, potential lenders such as banks or vendors, and any other person or institution that needs to analyze a company.

2.3.3. Methods of Financial Statement Analysis

Financial statement analysts use a variety of techniques to evaluate a company's short-term and long-term profitability, business trends and performance indicators. Horizontal and vertical analyses show financial statement items in percentage and dollar forms. Liquidity ratios reflect cash availability. Profitability ratios analyze sales and expense trends. Solvency ratios indicate a firm's long-term ability to repay debt (Codjia). This research is the research about company profitability, therefore, this research only explains deeper about profitability ratio.

A financial statement analyst uses horizontal analysis to compare two or more years' financial data and shows changes in percentage or in dollars in order to detect trends or operating indicators. Whereas, the vertical analysis helps a firm to understands business performance and
segment productivity by evaluating common size statements to indicate operating items in percentage and dollar forms (Reeve et al., 2007).

Liquidity ratios evaluate a company's ability to pay current liabilities with current assets. Current financial items are also referred to as short-term items. Activity ratios indicate how quickly a company transforms its resources into sales. Long term solvency or leverage ratios indicate a company's ability to pay long-term obligations on time. Leverage ratios also analyze whether a firm will have sufficient funds to pay interests. The profitability ratios reflect a business entity's success in increasing net income by raising sales. These ratios could be net profit, gross profit, operating or expense ratios (Codjia).

Reeve et al. (2007) described that the profitability analysis focuses primarily on the relationship between operating results as reported in the income statement and resources available to the business as reported in the balance sheet. The ability of a business to earn profits is depends on the business effectiveness and efficiency in terms of its operations as well as the resources available to it.

2.4. Marketing Mix as the part of Marketing

Marketing is the activity, set of institutions, and processes for creating, communicating, delivering and exchanging offerings that have value for customers, clients, partners, and society at large (Kotler and Keller, 2012 cited in Londre, 2012, p.1). Marketing is the process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and services to create exchanges that satisfy the perceived needs, wants, and objectives of individuals and organizations (Arens et al., 2011 cited in Londre, 2012, p.1).

Marketing is the performance of activities that seek to accomplish an organization’s objectives by anticipating customer or client needs and directing a
flow of need-satisfying goods and services from producer to customer or client (Perreault et al., 2011 cited in Londre, 2012, p.2).

Marketing is the process of planning and executing the conception, pricing, promotion and distribution of goods and services to facilitate exchanges that satisfy individual and organizational objectives (McHugh, 2008 cited in Londre, 2012, p.2). Marketing is the overall system of business activity that addressed to plan, determine the price, promote, and distribute goods and services that able to fulfill the needs of customers existed, include the potential customer (Swastha & Sukotjo, 1998).

Kasmir and Jakfar (2003) in Utami (2011), described marketing as social and managerial process where the individual and group obtain the things they wants and needs by creating and exchanging the product and value with another parties. Tjiptono (2005 cited in Utami, 2011, p.7) explained about marketing definition as the process when the demand structure of goods and services anticipated or enlarged and satisfied by conception, promotion, distribution, and exchange.

Machfoedz (2010 cited in Utami, 2011, p.8) described marketing as a process applied by the company to fulfilled consumer needs and wants by providing the products (goods and services). By some definitions explained by the experts above, marketing could be described as the processes or activities of the businesses in planning, communicating, and delivering or fulfilling the needs and wants of consumers, both goods and services.
2.4.1. Marketing Mix Definition and Variables

Kotler and Armstrong (2008) described marketing mix as the set of controllable tactical marketing tools which blended by the company in order to produce the response that company wants in the target market. Marketing Mix is the combination of four elements, called the Four P’s (Product, Price, Promotion and Place). Philip Kotler cited in Londre (2012) stated that every company has the option of adding, subtracting, or modifying the marketing mix (four P’s) in order to create a desired marketing strategy.

Marketing mix also defined as the combination of its variables or activities which considered as the core of company’s marketing system by Swastha and Sukotjo (1998). Marketing mix consists of four variables which usually called as “four Ps”. The variables are product, price, place of distribution, and promotion. It described by Swastha and Irawan (1993) that quoted in Suwarni (2009) that marketing mix is combination of four variables of company’s marketing as the core system which are: product, price structure, promotion activity, and distribution system. Those four activities needed to be coordinate for the affectivity of company’s marketing activity.

On one hand, goods are anything that can be offered to a market for attention, acquisition, use or consumption that might satisfy a want or need. On the other hand, service is any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything (Kotler, cited in Londre, 2012, p.4).

Product is the goods and service combination the firm offers to the target market (Kotler & Armstrong, 2008). Londre (2012) said that product in marketing mix includes the variety of product mix, features, designs, packaging, sizes, services, warrantees and return policies. Products are the tangible or intangible characteristics that include the
packs, colors, prices, company’s or retailers’ prestige, services or the company or retailers, which gain by the buyers in fulfilling their wants and needs (Swastha & Irawan, 1993).

The definitions above mentioned that product known as the things which have the complex characteristic, either visible or invisible things, that received by the customer in order to satisfy their wants and needs.

Place in marketing mix is the places of products distribution. Place includes the company activities that make the product available to the target customers (Kotler & Armstrong, 2006). Swastha and Sukotjo (1998) also explained that distribution place is the access used by the producers to rout their products from producers to customers or industry users.

The definitions above can be seen in another point of view where the four Ps described as four Cs. If four Ps is in the company’s point of view, the four Cs are in customer’s point of view (Kotler & Armstrong, 2006). To make it simple, the following table concluded the explanations above.

<table>
<thead>
<tr>
<th>4Ps</th>
<th>4Cs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>Customer solution</td>
</tr>
<tr>
<td>Price</td>
<td>Customer cost</td>
</tr>
<tr>
<td>Place</td>
<td>Convenience</td>
</tr>
<tr>
<td>Promotion</td>
<td>Communication</td>
</tr>
</tbody>
</table>

Source: Kotler and Armstrong (2006)

The product in this research is chewing gum whose name is Doublemint stick. At the first place, Doublemint stick only has one flavor named peppermint flavor, but the company enlarge the business by adding some flavors which are green tea or tea mint flavor and spearmint flavor,
and in few years, this company add one more flavor which is winterfresh flavor.

Then, in 2012, this company tried to make one more product which resembles the Doublemint stick chewing gum. Unlike Doublemint stick, this new product has an innovation which is sugar free chewing gum. This product is not named under Doublemint brand, but under 5\textsuperscript{TM} and called 5gum (five gum).

The distribution places of Doublemint stick is both in general trade, or usually called traditional trade, and modern trade. The general trades are include the retailers, wholesalers, stalls, karaoke’s places, night clubs, restaurants, coffee shops, canteen, airport, railway stations, bus stations, and so on. Whereas, in modern trades are includes minimarkets, supermarkets, and hypermarkets.

In this research, the researcher will describe more about two variables of marketing mix which are price and promotion, because these two variables are the most related variables with this research.

2.4.2. Marketing Mix’s Price (Selling Price)

Price or selling price is included in four Ps of marketing mix. Kotler and Armstrong (2008) defined that selling price itself is the amount of money that customers have to pay to obtain the product their needs and wants. In customers’ point of view, price is called customer cost, which means that the customers have to pay some amounts of money in order to purchase the products they want or need.

Price is some amount of money needed in order to get some combinations of the products, includes the services available (Swastha & Sukotjo, 1998). Gitosudarmo (2008) clearly stated in Utami (2011:11) that
price is the amount of money that needed in obtaining amount of specific goods and services, or the combination of goods and services. Price is the thing that charged for something, people might give different name, but all business transaction in modern economics can be seen as money exchange tools is a price of something (McCharty & Parreault, 1995 cited in Suwarni, 2009, p.22).

The definition of price by Kotler (1997) cited in Suwarni (2009) is that price is the only element of marketing mix that produce the income for the business, whereas the other elements like product, distribution place, and promotions are cost for the business. We can see it because in making the product, in distributing the product, and also in promoting the product, business needs to spend some amounts of money.

According to Sutojo (2009) which cited in Utami (2011:18), price is the important part and cannot be separated from marketing mix, because it can’t be separated with the other three variables of marketing mix which are product, distribution place, and promotion. Price is visible aspect for some customers. For some customers who not really understand the technical thing of the products that they want or need, they usually use price as the only factor in purchasing them. Price often becomes the quality indicators, where the higher the price, the higher the quality of its product (Gregorius, 2002 cited in Utami, 2011, p.18).

The objectives of price determination are survival, profit maximization, sales maximization, prestige, and return on investment (ROI) (Lopiyoadi, 2008 cited in Utami, 2011, p.22). For further explanation, Lopiyoadi (2008) also describes the definition of each objective, as follows:

a. Survival is the effort to not implement the measures to increase profit when the company is in the unfavorable market condition, to survive the company itself.
b. The price determination aims to maximize the profit in a given period.

c. Price determination also aims to build the market share. It could be done by selling at the beginning of a disadvantage (put the unprofitable price in the beginning).

d. Pricing objective to prestige here means to position the company services such as the exclusive service.


The selling price used in PT. Wrigley Indonesia is the price for the distributor only, because this company only sells its product to its distributor. The distributor is only one, or usually called single distributor, and the distributor will distribute the products to the distribution places.

2.4.3. Marketing Mix’s Promotion

Another variable of marketing mix is promotion. Kotler and Armstrong (2008) defined promotion as activities that communicate the merits of the product and persuade target customers to buy it. Based on Sutojo (2009 cited in Utami, 2011, p.27), promotion is activities done in telling the customer about the existence of the products in the market, or other programs held by the company. Subagyo (2010 cited in Utami, 2011, p.27) described promotion above as all activities that intended to informing or communicating about the product to the target market, to give information about the feature, the useful, and the most important thing is about the existence, to change the attitude or to make people take steps in buying a product.
As mentioned by some experts above, promotion often called as the way of communications between business and customers in delivering the information of business’ products to be sold or other information to the customers like price discount, special events, and so on. This promotion done in order to persuade the customers to buy the products provided.

Promotion is persuasion of information that made in order to direct someone or organization into the action that creates the exchange in marketing. Promotion or Promotional Mix includes advertisement, sales promotion, public relations/publicity, personal selling, plus direct marketing and Internet/interactive media (Londe, 2012).

Machfoedz (2005 cited in Utami, 2011, p.28) said promotion is one of the elements of marketing which can be done by the marketer; the other elements are personal selling, direct marketing, advertising, and public relation. By those understanding, it mentioned that promotion has some other elements in it and often called promotion mix or marketing communication mix. The elements are sales promotion, personal selling, direct marketing, advertising, and public relation.

For further explanation of the marketing communications mix, it was explained by Kotler and Armstrong (2008) as the specific mix of advertising, personal selling, sales promotion, and public relations as company uses. They also explained the definition of each element as follows:

a. Advertising means any paid form of non personal presentation and promotion of ideas, goods, or services by an identified sponsor.

b. Sales promotion means short term incentives to encourage the purchase the purchase or sale of a product or service.
c. Public relations mean building good relations with the company’s various publics by obtaining favorable publicity, building up a good corporate image, and handling or heading off unfavorable rumors, stories, and events.

d. Personal selling means personal presentation by the firm’s sales force for the purpose of making sales and building customer relationships.

e. Direct marketing means direct connections with carefully targeted individual consumers to both obtain an immediate response and cultivate lasting customer relationships—the use of telephone, mail, fax, e-mail, the internet, and other tools to communicate directly with specific consumers (Kotler & Armstrong, 2008).

This research refers to the cost of promotions where advertisement and public relation are combined as one element, and all promotional activities (exclude advertising and public relation) are concluded into one which named merchandising and promotion cost.

Merchandising and Promotion Cost

As mentioned in the previous part, promotions consist of sales promotion, personal selling, and direct marketing. Personal selling includes sales presentations, trade shows, and incentive programs. Direct marketing includes catalog, telephone marketing, kiosks, the internet, and more (Kotler & Armstrong, 2006).

Kotler and Armstrong (2006) described that sales promotion itself includes the discounts, coupons, displays, and demonstrations. Swastha and Sukotjo (1998) explained that the tools needed in sales promotion are exhibition, prize or reward, samples, and so on. These tools could be use as the supporting tools for other promotion activities.
The promotions done by this company, PT. Wrigley Indonesia, are as follows:

a. Display units (include display stands)
b. Point of sales materials (include stickers, cases, boxes, plastics, etc.)
c. Other promotional materials (include rulers, note books, ballpoints, etc.)
d. Consumer and trade samples
e. Consumer and trade promotions (t-shirts, polo-shirts, sales kit, catalogs, etc.)

All promotions done needed some amount of money before, during, or after the process. The amount of money needed to be paid for the promotion called promotion cost. The costs of the promotions include the printing cost of the materials or merchandising as part of developing the merchandising.

Advertising Cost

Public relation is combined with advertisement because the purposes of both elements are same, both elements give information to customers by some media, where advertisement is advertising the product and public relation is in form of report or news about the individual, company, or product. Public relation includes press releases, sponsorships, special events, and web pages (Kotler & Armstrong, 2008).

Advertising is primary tools that firms use to affect the performance of their products. Therefore, advertising becomes crucial in making consumers aware of the existence and characteristics of the products (Barroso & Llobet, 2012). Advertising is structured and composed of non-personal communication of information, usually paid for and usually persuasive in nature, about products (goods & services) and ideas by identified sponsors through various media (Arens et al., 2011).
Advertising is any paid form of non-personal presentation and promotion of ideas, goods, or services by an identified sponsor (Kotler & Armstrong, 2012). Advertising consists of paid notices from identified sponsors normally delivered through communication media (Lane et al., 2011 cited in Londre, 2012, p.7).

Advertising is very expressive, because it allows the company to dramatize its product through the artful use of visuals, print, sound, and color. Advertising also can be used to build up a long-term image for a product. Advertising is non-individual communication with some costs, by some media that done by the company, and individuals. Its main objective is to increase the sales of goods and services (Kotler & Armstrong, 2008).

Advertising give a sales responses in both short-term and long-term sales impacts (Bruce et al., 2012). Some possible advertising objectives are mentioned by Philip Kotler and Gary Armstrong (2008) in Table 2-1. Possible Advertising Objectives, as follows:
Table 2 – 1. Possible Advertising Objectives

<table>
<thead>
<tr>
<th>Informative Advertising</th>
<th>Persuasive Advertising</th>
<th>Reminder Advertising</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating customer value</td>
<td>Informing the market of a price change</td>
<td>Maintaining customer relationship</td>
</tr>
<tr>
<td>Telling the market about new product</td>
<td>Describing available services</td>
<td>Reminding consumers where to buy the product</td>
</tr>
<tr>
<td>Explaining how the product works</td>
<td>Correcting false impressions</td>
<td>Reminding consumers that the product may be needed in the near future</td>
</tr>
<tr>
<td>Suggesting new uses for a product</td>
<td>Building a brand and company image</td>
<td>Keeping the brand in customer’s minds during off-seasons</td>
</tr>
</tbody>
</table>

Source: Kotler and Armstrong (2008)

Informative advertising is important when introducing a new product category. Persuasive advertising becomes more important as competition increases, and reminder advertising is important for mature products because it helps to maintain customer relationships and keep consumers thinking about the product (Kotler & Armstrong, 2008).

According to Kotler and Armstrong (2008), advertising media is the vehicles through which advertising messages are delivered to their intended audiences. Advertising can be done by some media which are newspapers, magazines, radio, televisions, and direct mail. There are some advantages and limitations of these advertising media will be explained below in Table 2-2. Profiles of Major Media Types
Table 2 – Profiles of Major Media Types

<table>
<thead>
<tr>
<th>Medium</th>
<th>Advantages</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspapers</td>
<td>Flexibility; timeliness; good local market coverage; broad acceptability; high believability</td>
<td>Short life; poor reproduction quality; small pass-along audience</td>
</tr>
<tr>
<td>Television</td>
<td>Good mass market coverage; low cost per exposure; combines sight, sound, and motion; appealing to the senses</td>
<td>High absolute costs; high clutter; fleeting exposure; less audience selectivity</td>
</tr>
<tr>
<td>Direct mail</td>
<td>High audience selectivity; flexibility; no ad competition within the same medium; allows personalization</td>
<td>Relatively high cost per exposure; “junk mail” image</td>
</tr>
<tr>
<td>Radio</td>
<td>Good local acceptance; high geographic and demographic selectivity; low cost</td>
<td>Audio only, fleeting exposure; low attention (the half-heard” medium); fragmented audiences</td>
</tr>
<tr>
<td>Magazines</td>
<td>High and demographic selectivity; credibility and prestige; high-quality reproduction; long life and good pass-along readership</td>
<td>Long ad purchase lead time; high cost; no guarantee of position</td>
</tr>
<tr>
<td>Outdoor</td>
<td>Flexibility; high repeat exposure; low cost; low message competition; good positional selectivity</td>
<td>Little audience selectivity, creative limitations</td>
</tr>
<tr>
<td>Online</td>
<td>High selectivity; low cost; immediacy; interactive capabilities</td>
<td>Small, demographically skewed audience; relatively low impact; audience controls exposure</td>
</tr>
</tbody>
</table>

Source: Kotler and Armstrong (2008)
2.5. Profitability as the Measurement of Company’s Earning Power

2.5.1. Definition of Profitability

Profitability is the efficiency of a company or industry at generating the earnings (MoneyChimp.com, Profitability - Definition). Profitability also defined as the ability of an investment, or a company to make a profit after costs, overheads, etc. Profitability is an income measurement which emerged from all company capital which asses by the company’s assets. This ratio shows the ability of the company to generate its income/profit.

Fridson and Alvarez (2002) defined profitability as a yardstick by which businesspeople can measure their achievements and justify their claims to the compensation. Profitability ratios show a company's overall efficiency and performance. We can divide profitability ratios into two types: margins and returns. Ratios that show margins represent the firm's ability to translate sales dollars into profits at various stages of measurement. Ratios that show returns represent the firm's ability to measure the overall efficiency of the firm in generating returns for its shareholders (LGH et al.).

Profitability ratios measure the income or operating success of a company for a given period of time. Profitability is the ability of a business to generate profits. The ability of a business to earn or generate profits depends on the effectiveness and efficiency of its operations as well as the resources available to it (Reeve et al., 2007).

Brigham and Gapenski (1994) explained that profitability is the net result of a number of policies and decisions. The other ratios examined in financial statement analysis provide some information about the way the
firm is operating, but the profitability ratios show the combined effects of liquidity, asset management, and debt management on operating result.

According to Ompusunggu and Trisnawati, profit and sales are engaged, so there is a residual return for the company in the sales. Fraser and Ormiston (2010 cited in Ompusunggu & Trisnawati, 2010, p.71) explained that return on investment (ROI) usually called as return on assets (ROA), which links to profit and investment or assets used in generating that profit.

To measure the company’s overall return on investment, the investments could be described as assets invested, so that return on investment might be called as return on assets. Return on investment itself is the return per dollar of the investments, and a measure of the efficiency with which the firm utilizes capital (Pringle & Harris, 1984). In this research, the measurement of company profitability is return on investment (ROI). Return on investment means a measure of managerial efficiency in the use of investments in assets, computed as income from operations divided by invested assets.

2.5.2. Factors Affecting Profitability (ROI)

Profitability analysis focused primarily on the relationship between operating results as reported in the income statement and resources available to the business as reported in the balance sheet. Return on investment could measure the company profitability, because it related to the profit and investment or the assets used in generating that profit. Return on investment usually called as return on assets (ROA) (Fraser & Ormiston, 2010 cited in Ompusunggu & Trisnawati, 2010, p. 71).

The rate of return on investment (ROI) is useful because the three factors subject to control by divisional managers are used in its computation. The factors are revenues, expenses, and invested assets. By
measuring profitability relative to the amount of assets invested in each division, the rate of return on investment can be used to compare the divisions (Reeve et al., 2007). Hansen and Mowen (2003) described return on investment as the profit gain per investment. The use of profit as the measurement of company performance will be effective if it related to the invested assets in obtaining those profits.

According to Bambang Rianto (2001), the two factors in measuring the return on investment are profit margin and investment turnover, whereas Swastha and Sukotjo (1998) described the analysis of profitability (ROI) by DuPont diagram. The DuPont diagram showed in Figure 2 – 1. DuPont Diagram of Profitability Analysis

![DuPont Diagram of Profitability Analysis](image)

**Figure 2 – 1. DuPont Analysis**

Source: Swastha and Sukotjo (1998)
Profit Margin (PM)

Profit margin is the ratio of net income from operations (net operating income) to net sales, and it showed in percentage. Profit margin often called as return on sales (ROS), it shows the operating profit per dollar of sales. Then, we will see the company’s efficiency by looking at the amount of profits related to the sales (Rianto, 2001 cited in Ekatherina, 2008, p.58).

$$\text{Profit Margin (PM)} = \frac{\text{Net Income After Tax}}{\text{Sales}} \times 100\%$$

Total Assets Turnover

Total assets turnover is the ratio of total assets used and the sales obtained in a specific period of time. It shows the rapidity of operating assets rotation in a specific period of time, so that, we can see the company’s efficiency by seeing the rapid rotation of operating assets (Rianto, 2001 cited in Ekatherina, 2008, p.58).

$$\text{Total Assets Turnover} = \frac{\text{Sales}}{\text{Total Assets}} \times 100\%$$
2.6. Relations of Selling Price, Promotion Cost, Advertising Cost, and Profitability (ROI)

As mentioned above, Lopiyoadi (2008) cited in Utami (2011) explained that the purposes of pricing are based on the achievement of the desired return on investment (ROI). In that research, Lopiyoadi (2008) also described that the pricing objective to support marketing strategy oriented on the primary demand if the company believes that lower prices can increase the number of users or level of use or repeat purchases in a specific product or category. The lower rate may reduce the risk of trying a new product or it can also increase the value of a new product relative to other products that already exist.

Schoeffler et al. (1974) explained that the return on investment (ROI) is the ratio of net, pretax operating income to the average investment, the investment could be the assets invested. Operating income is what is available after deduction of allocated corporate overhead expenses but before deduction of any financial charges on assets employed. Hansen and Mowen (2003) described return on investment as the profit gain per investment. The use of profit as the measurement of company performance will be effective if it related to the invested assets in obtaining those profits.

In increasing the company profitability, the company has to increase the profit margin and total assets turnover which known as the part or factors affecting profitability (Ekatherina O.K., 2008). Keown et al. (2004) mentioned that return on assets (ROA) often used as an indicator of company profitability. It also mentioned by Pringle and Harris (1984), because the investment in return on investment could be described assets invested.
Schoeffler et al. (1974) also described some factors that influence profitability or return on investment, which are: market share, product (service) quality, marketing expenditures, R&D expenditures, investment intensity, and corporate diversity. More explanation about these factors described as follows:

a. Market Share

Market share is the ratio of dollar sales by a business, in a given time period, to total sales by all competitors in the same market. The "market" includes all of the products or services, customer types, and geographic areas that are directly related to the activities of the business. For example, it includes all products and services that are competitive with those sold by the business.

b. Product (Service) Quality

Product (service) quality is the quality of each participating company's offerings, appraised in the following terms: What was the percentage of sales of products or services from each business in each year which was superior to those of competitors? What was the percentage of the equivalent products? What was the percentage of the inferior products?

c. Marketing Expenditures

Marketing expenditures are including the total costs for sales force, advertising, sales promotion, marketing research, and marketing administration. The figures do not include costs of physical distribution.
d. R&D Expenditures

R&D expenditures are including the total costs of product development and process improvement, including those costs incurred by corporate-level units which can be directly attributed to the individual business.

e. Investment Intensity

Investment intensity is the ratio of the total investment to sales.

f. Corporate Diversity

Corporate diversity is an index which reflects the number of different four-digit Standard Industrial Classification industries in which a corporation operates, the percentage of total corporate employment in each industry, and the degree of similarity or difference among the Industries in which it participates (Schoeffler et al, 1974).

The formula in calculating return on investment can be done by multiplying the margin (profit margin) with turnover (assets turnover). Margin is the ratio of operating income to the sales, whereas turnover shows the productivity in using the assets in measuring the sales (Cendrawati & Haryanto, 2011).

\[
ROI = \text{Profit Margin} \times \text{Total Assets Turnover}
\]

or

\[
ROI = \frac{\text{Net Income After Tax}}{\text{Total Assets}}
\]
The formula in calculating the net income can be done by doing the calculation from sales (or revenue) minus cost of goods sold, then minus by operating expenses, interest expense, and also income tax. This formula described in income statement below (Table 2 – 3. Annual Income Statement).

Table 2 – 3. Annual Income Statement

<table>
<thead>
<tr>
<th>INCOME STATEMENT</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
<td></td>
</tr>
<tr>
<td>Revenue (Sales)</td>
<td>$ xxxx</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>(xxxx)</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>$ xxxx</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>(xxxx)</td>
</tr>
<tr>
<td>Operating Income</td>
<td>$ xxxx</td>
</tr>
<tr>
<td>Interest Expense</td>
<td>(xxx)</td>
</tr>
<tr>
<td>Earning Before Income Tax</td>
<td>$ xxxx</td>
</tr>
<tr>
<td>Income Taxes</td>
<td>(xxx)</td>
</tr>
<tr>
<td><strong>Net Income</strong></td>
<td>$ xxxx</td>
</tr>
</tbody>
</table>

Source: Bodie et al. (2008)

The three independent variables which are selling price, promotion costs, and advertising costs are included in the calculation of the net income before calculating the return on investment. The calculation of sales (or revenue) can be done by multiplying the selling price with quantity (or sales volume), whereas the promotion costs and advertising costs are included in the operating expenses, it also described by Keown et al. (2005) and Bodie et al. (2008).
CHAPTER III

RESEARCH METHODOLOGY

3.1. Research Framework

In the process of research, there will be model and variables that will be develop in this research as seen below:

Figure 3 – 1. Research Framework
Source: Constructed by the researcher
3.2. Research Method

In conducting this research, the researcher would like to use Quantitative Research method as the research tool. According to Malhotra (2010 cited in Hadrianus, 2012, p.14), quantitative was a research methodology that seeks to quantify the data and, typically applies some form of statistical analysis. Copper & Schindler (2006 cited in Hadrianus, 2012, p.14) describe quantitative defined as the precise count of some behavior knowledge, opinion, or attitude.

Quantitative research method is a research method based on positivism philosophy, used to examine certain population or samples; sample selected was usually taken randomly, data collection uses research instrument, data analysis has quantitative characteristic to be tested on the decided hypothesis (Sugiyono, 2009 cited in Havidz, 2012, p.29). The purpose of using quantitative research was to find out the significances of product’s selling price, promotion cost, and advertising cost that affecting the company profitability in PT. Wrigley Indonesia.

3.3. Research Time and Place

This research was conducted in PT. Wrigley Indonesia, Kemang, South Jakarta, Indonesia. The research was starting from October 2012. During the period, the researcher decided to interview some candidates who involved in determining the product’s selling price, and also the finance department in PT. Wrigley Indonesia and getting the data needed for the research.

3.4. Research instrument

3.4.1. Data Collection

The appropriate data collection is needed in order to produce the accurate and valid data. The sources of the data collected by the researcher
can be collected from both primary and secondary data, but most data collected was from secondary data since the researcher needed the secondary data for this research.

**Primary Data**

The primary data was the information that was developed or gathered by the researcher specifically for the research project at hand. The researcher gathered the primary data by interviewed the finance department in the company, and also some employees which related to the determination of product selling price (marketing department, and sales department).

SPSS (Statistical Products and Solution Services V. 17.0) also become the functional data in analyzing the data gathered. Agusyana and Islandscript (2011 cited in Hadrianus, 2012, p.16) explained that SPSS was software that functioned to analyze and precede the statistical data.

**Secondary Data**

In this research, the researcher focused on the secondary data that gathered from the company itself. Secondary data have previously been gathered by someone other than the researcher and/or for some other purpose than the research project at hand.

Secondary data gathered itself can be collected from theories/journals/researches/literatures available in libraries, or the one published in internet. The types of secondary data gathered by the researcher for this research were:

1. Company profile of PT. Wrigley Indonesia
2. Organization chart of PT. Wrigley Indonesia
4. Income statement of PT. Wrigley Indonesia from 2008 until 2011

5. Doublemint stick’s selling price in PT. Wrigley Indonesia from 2008 until 2011

6. Doublemint stick’s sales volume in PT. Wrigley Indonesia from 2008 until 2011

3.4.2. Data Analysis

3.4.2.1. Normality Test

According to Everitt & Skrondal (2010), Normality was a term used to indicate that some variable of interest has a normal distribution. According to Dr. Riduwan, M.B.A., M.Pd (2010), normality test can be done in many ways, two of them are Liliefors Test, and Chi-Square Test.

Normality test is done in order to know if the data used in regression model, both dependent variable and independent variable, are normal or not. The good regression model is the normal distribution model. The normality test can be done by doing Kolmogorov – Smirnov (goodness of fit). The normality test by this method will show the frequency of the analysis is appropriate for the expected normal frequents (Ghozali, 2001 cited in Widjaja, 2010, p.50).

Normal Distribution would form straight diagonal line and data plotting would be compared to diagonal line. If data distribution is normal, the observe data would follow the diagonal line (Ghozali, 2001 cited in Widjaja, 2010, p.50).

By the passage above, the conclusion of normality test is that the objective of doing normality test is to know about the normal distribution
of the variables taken. This test can be done by doing the Kolmogorov – Smirnov.

3.4.2.2. Autocorrelation Test

Autocorrelation was defined to know if there is a correlation in the linear regression model in t-period with the previous period (t-1 period). The good regression model is the regression that has no autocorrelation (Widjaja, 2010).

The presence or absence of autocorrelation in this study detected using the Durbin Watson test. If Durbin Watson statistics value is in the range of -2 to +2, it means the coefficients of regression is free from autocorrelation problem. If the value of Durbin Watson statistic is smaller than -2, it means there are positive autocorrelation problem. If the value of Durbin Watson statistics is bigger than +2, it means there are negative autocorrelation problem (Santoso, 2000 cited in Havidz, 2012, p.32).

The independence of errors sometimes violated when the data are collected over the sequential time periods, because a residual at any one time period may tend to be similar to the residual at the next time periods. This pattern in the residual is called autocorrelation. The existence of autocorrelation may result the no minimum variant in the assessment, and the t test cannot be used, as it will give a wrong conclusion (Rietveld & Sunaryanto, 1994 cited in Indrayana, 2009, p.28).
3.4.2.3. Multicollinearity Test

Collinearity means the condition in which two or more of the independent variables are highly correlated with each other. In such situations, collinear variables do not provide unique information, and it becomes difficult to separate the effects of such variables on the dependent variable. Multicollinearity test has a purpose to test whether there are correlations between independent variable in the regression model (Mark et al., 2011 cited in Havidz, 2012, p.33).

Everitt & Skrondal (2010 cited in Hadriaus, 2012, p.20) explained that multicollinearity test was a term used in regression analysis to indicate the situations where the explanatory variables are related by a linear function, making the estimation of regression coefficient impossible. Approximate multicollinearity can also cause some problems when estimating regression coefficients. In particular, if the multiple correlations for the regression of a particular explanatory variable on the others are high, then the variance of the corresponding estimated regression coefficient will also be high.

The method to measure the collinearity is to determine the Variance Inflationary Factor (VIF) for each independent variable. The equation of Variance Inflationary Factor as follow (Mark et al., 2011 cited in Havidz, 2012, p.33):

\[ VIF_j = \frac{1}{1 - R_j^2} \]

In which \( R^2 \) is the coefficient of multiple determination for a regression model. To identify whether multicollinearity exist in regression model are as follows (Witjaksono, 2010 cited in Havidz, 2012, p.33):
1. The result of $R^2$ value of empirical regression model estimation is high but many of the variable independent does not significantly influence the dependent variable.

2. If there are high correlation between independent variable (usually above 0.90), it indicates multicollinearity exist.

3. Multicollinearity could be identified from the value of tolerance and Variance Inflation Factor (VIF). Multicollinearity exist if the value of VIF is higher than 10 and tolerance value is lower than 0.1.

3.4.2.4. Heteroscedasticity Test

Everitt & Skrondal (2010 cited in Hadriaus, 2012, p.21) also described about heteroscedasticity test that a random variable was heteroscedastic if its variance depends on the values of another variable. The opposite case was called homoscedasticity. In other word, heteroscedasticity test has a purpose to determine whether the variance from residual of the observed variable is similar or not in the regression model.

Imam Ghozali (2003, cited in Havidz, 2012, p.34) explained how to identify the existence of heteroscedasticity, it is by looking at a graphic plot between dependent variable with the residual. There would be no heteroscedasticity if the scatterplot between the dependent variable and the residual in the graphic does not form any pattern.

The consequence of the heteroscedasticity in the regression model is the assessment acquired inefficient, both in small samples and large samples. The detection of the heteroscedasticity can be done by using Glejser model which is by looking at the output of the larger significance.
If the value of the probability (Sig) is greater than 0.05, it means that there is no heteroscedasticity and vice versa (Imam Ghozali, 1995 cited in Indrayana, 2009, p.28).

3.4.2.5. Multiple Regression Analysis

Multiple regression analysis is a data analysis technique to determine the effect of the independent variable (described by $X_1$, $X_2$, and $X_3$ for the multiple variables) on the dependent variable (described by $Y$) (Djarwanto & Subagyo, 1993 cited in Indrayana, 2009, p.29).

According to Newbold, Carlson, and Thorne (2007 cited in Hadrianus, 2012, p.19), multiple regression enable us to determined the simultaneous effect of several independent variables on a dependent variable using the least squares principles. Multiple regressions can also be used to provide estimates of the effect of each variable in the combination with other variables.

The multiple regressions were the expansion from a simple regression, where several independent variables jointly influence a dependent variable, as follows:

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$
Where:

\[ Y = \text{Dimension scores of company profitability (ROI)} \]

\[ X_1 = \text{Dimension scores of selling price} \]

\[ X_2 = \text{Dimension scores of promotion cost} \]

\[ X_3 = \text{Dimension scores of advertising cost} \]

\[ \beta_1 = \text{Determine the contribution of selling price (Coefficient regression of selling price)} \]

\[ \beta_2 = \text{Determine the contribution of promotion cost (Coefficient regression of promotion cost)} \]

\[ \beta_3 = \text{Determine the contribution of advertising cost (Coefficient regression of advertising cost)} \]

\[ \varepsilon = \text{Error = Variables influence the value of Y but not included in the study} \]

3.5. Testing of Hypothesis

The hypothesis testing would be conducted by using multiple regression analysis. This analysis is used to examine the impacts of product’s selling price, promotion cost, and advertising cost to the company profitability in PT. Wrigley Indonesia. The hypotheses of this research are as follow:

\[ H_{01}: \text{There is no significant impacts of independent variables which are selling price, promotion cost, and advertising cost to the company profitability in PT. Wrigley Indonesia.} \]
Ha₁: There is significant impact of independent variables which are selling price, promotion cost, and advertising cost to the company profitability in PT. Wrigley Indonesia.

H₀₂: There is no significant impact of selling price to company profitability in PT. Wrigley Indonesia.

Ha₂: There is significant impact of selling price to company profitability in PT. Wrigley Indonesia.

H₀₃: There is no significant impact of promotion cost to company profitability in PT. Wrigley Indonesia.

Ha₃: There is significant impact of promotion cost to company profitability in PT. Wrigley Indonesia.

H₀₄: There is no significant impact of advertising cost to company profitability in PT. Wrigley Indonesia.

Ha₄: There is significant impact of advertising cost to company profitability in PT. Wrigley Indonesia.

3.5.1. F-Test

F-Test is a test to determine whether there is a significant relationship between the dependent variable and the entire set of independent variable. F-Test sees the correlation between the whole independent variables toward the dependent variables. The equation of F-Test is as follows (Mark et al, 2011 cited in Havidz, 2012, p.35):

\[ F_{STAT} = \frac{MSR}{MSE} \]
Where:

\[
F_{\text{STAT}} = \text{Test statistic from an F distribution with } k \text{ and } n - k - 1 \text{ degrees of freedom}
\]

\[
\text{MSR} = \text{Regression mean square}
\]

\[
\text{MSE} = \text{Mean square error}
\]

\[
K = \text{Number of independent variable in regression model}
\]

Because there is more than one independent variable, the following null and alternative hypotheses are as follows (with the level of significant used was \( \alpha = 0.05 \)):

\[
H_0 : \beta_{SP} = \beta_{PC} = \beta_{AC} = 0
\]

\[
H_i: \text{At least one } \beta_i \neq 0
\]

### 3.5.2. T-Test

Unlike F-Test, the T-Test sees the correlation between each independent variable toward the dependent variable. By using this t-Test, the researcher able to find out which variable or factor (selling price, promotion cost, or advertising cost) that has more impact in affecting the company profitability in PT. Wrigley Indonesia.

The equation of t-Test is as follows (with the level of significant used was \( \alpha = 0.05 \)):

\[
t_{\text{STAT}} = \frac{X - \bar{X}}{s} \frac{s}{\sqrt{n}}
\]
Where:

\[ X = \text{Sample mean} \]
\[ \mu = \text{Population mean} \]
\[ S = \text{Standard deviation} \]

If the significant value of T-Test is smaller than alpha (\( \alpha \)), it means the independent variable is partially significant influenced the dependent variable. The hypotheses that used are:

\[ H_0: \beta = 0, \text{if significant } t > 0.05, \text{accept } H_0 \]
\[ H_a: \beta \neq 0, \text{if significant } t < 0.05, \text{reject } H_0 \]

3.5.3. **Coefficient of Determination Test**

Coefficient of determination or usually called R-square is the number that shows about the amount of variance in the dependent variable that could be explained by the independent variables. The coefficient of determination value is between 0 and 1 (Ompusunggu & Trisnawati, 2010).

The bigger the coefficient of determination, the bigger the capability of independent variable to explain the variance of dependent variable, thus the closer the coefficient of determination value to 1, the dependent variable will provide more complete information to predict the variance of independent variables (Ghozali, 2001 cited in Havidz, 2012, p.43).
3.6. Limitation

There are some limitations or difficulties occurred during the research process. The main difficulties faced by researcher are in collecting data, in finding the references, and also in satisfying the assumption of multiple regression models. In the progress of completing this research, there were several obstacles occurred as follow:

1. Difficulties in collecting the data and references

   Collecting data is one of the obstacle that faced by the researcher in completing this research. There are some data or information that hard to gain whether from the internet or from the book to be the references in this research. The researcher also found that was difficult in gaining the secondary data from the company which actually are the main data in doing the research.

2. Difficulty in satisfying regression assumption

   In using multiple regression models, there are some assumptions that should be satisfied in order to ensure the validity of the multiple regression models. If the assumption test is not fulfilled, researcher should seek any way in order to overcome that obstacle to precede the research.
CHAPTER IV

ANALYSIS OF DATA AND INTERPRETATION OF RESULTS

4.1. Object Statistical Description

PT. Wrigley Indonesia involved in fast moving consumer goods industry. This company is located in Kemang, South Jakarta, Indonesia. PT. Wrigley Indonesia is concerned in confectionary industry, including the gum (chewing gum and bubble gum) and candy (soft-chew candy and gummy). This company’s product which has the biggest sales in Indonesia is Doublemint with the stick type of packaging, so that, this product was chosen to be the object of this research.

This research will analyze the impacts of Doublemint stick’s selling price, promotion costs, and advertising costs to the company profitability. Company profitability is the dependent variable, whereas the independent variables are product selling price, promotion costs, and advertising costs. The data gathered is monthly based in total of 48 months since January 2008 until December 2011.

4.1.1. Descriptive Statistics of Research Variable

The descriptive statistics below (see Table 4 – 1) designed in order to test the hypothesis, the table will provide the general information of the data observations.
Table 4 – Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitability (ROI)</td>
<td>48</td>
<td>-.016</td>
<td>.018</td>
<td>.00023</td>
<td>.010581</td>
</tr>
<tr>
<td>Selling Price</td>
<td>48</td>
<td>1104000.000</td>
<td>1422600.000</td>
<td>1.29566E6</td>
<td>9.598637E4</td>
</tr>
<tr>
<td>Promotion Cost</td>
<td>48</td>
<td>1.568E8</td>
<td>7.751E8</td>
<td>3.71440E8</td>
<td>1.517108E8</td>
</tr>
<tr>
<td>Advertising Cost</td>
<td>48</td>
<td>2.533E8</td>
<td>8.738E8</td>
<td>4.48310E8</td>
<td>1.456467E8</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>48</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Constructed by the researcher using SPSS

Based on the Descriptive Statistics table above, there are 4 variables used in this research. The dependent variable is company profitability (ROI), whereas the independent variables are product selling price, promotion cost, and advertising cost. The data used was the monthly data for 4 years (from year 2008 to year 2011), so the total for each variable is 48.

The data in Table 4-1 also describes the minimum, maximum, mean and the standard deviation of the variables used for the research. Standard deviation shows about how far the data from the average (mean) of the data values. Based on the statistic summary in Table 4-1, the information of dependent and independent variables is described as follows:

1. Company profitability (ROI) has a mean of 0.00023 and the standard deviation of 0.010581. The maximum value of company profitability (ROI) is 0.018 which happened in March 2011. The minimum value of company profitability (ROI) is -0.016 which happened in June 2008.

2. Product Selling Price has a mean of $1.29566 \times 10^6$ and standard deviation of $9.598637 \times 10^4$. The maximum value of product selling price is 1,422,600 which happened during May 2011 to December 2011. The minimum value of product selling price is 1,104,000 which happened during January 2008 to June 2008.
3. Promotion cost has a mean of $3.71440 \times 10^8$ and standard deviation of $1.517108 \times 10^8$. The maximum value of promotion cost is $7.751 \times 10^8$ which happened in December 2011. The minimum value of promotion cost is $1.568 \times 10^8$ which happened in June 2008.

4. Advertising Cost has a mean of $4.48310 \times 10^8$ and standard deviation of $1.456467 \times 10^8$. The maximum value of advertising cost is $8.738 \times 10^8$ which happened in December 2011, and the minimum value of advertising cost is $2.533 \times 10^8$ which happened in March 2008.

### 4.2. Multiple Regression Assumption Test

#### 4.2.1 Normality Test

Normality test is used in order to determine whether a set of data variable has normally distributed or not. The regression model will be significant if the data variable is normally distributed, so that, the result of the regression could be accepted. The test of normality will be conducted in normal probability plot. The result of normal probability plot of the normality test is shown as in Figure 4-1.

![Normal Probability Plot](image)

**Figure 4 – 1. Normal Probability Plot**

Source: Constructed by the researcher using SPSS
Based on the figure above, the distribution of data are scatter close to the diagonal line which means the distribution of data is normal.

4.2.2 Autocorrelation Test

Autocorrelation test is used in order to identify whether there is a correlation in a set of data in the same variables or not. The major cause of autocorrelation is a fault in specifies data (specification phase), such as ignoring a crucial variable or an improper form of function. In testing the existence of autocorrelation, an autocorrelation test is implemented by using Durbin Watson statistics test.

If the result of Durbin Watson statistic is smaller than -2, it means there are positive autocorrelation problem. If the value of Durbin Watson statistics is bigger than +2, it means there are negative autocorrelation problem, so that the value of Durbin Watson Test should be -2<\text{DW}<2 (Santoso, 2000 cited in Havidz, 2012, p.41). The result of Durbin Watson test for the research is as follows:

<table>
<thead>
<tr>
<th>Table 4-2. Durbin Watson Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durbin-Watson</td>
</tr>
<tr>
<td>1.140</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Advertising Cost, Selling Price, Promotion Cost
b. Dependent Variable: Profitability (ROI)

Source: Constructed by the researcher using SPSS

Based on Table 4-2 above, the value of Durbin Watson test is 1.140. The result of Durbin Watson statistics test shows that the value of Durbin Watson is between -2 to 2 (-2<\text{DW}<2). The conclusion of Durbin Watson statistics test of this research shows that the regression model has no tendency of the existence of autocorrelation.
4.2.3 Multicolinearity Test

Multicollinearity test is a test conducted to identify whether there are correlation between independent variable toward other independent variable. There are two indications that multicollinearity problem doesn’t exist. First, the value of tolerance is higher than 0.1 and lower than 10 (0.1<tolerance<10). Second, the value of VIF is lower than 10. The result of Multicollinearity test is shown in Table 4 – 3. Tolerance and VIF below.

Table 4-3. Tolerance and VIF

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td></td>
</tr>
<tr>
<td>Selling Price</td>
<td>.497</td>
</tr>
<tr>
<td>Promotion Cost</td>
<td>.202</td>
</tr>
<tr>
<td>Advertising Cost</td>
<td>.280</td>
</tr>
</tbody>
</table>

Source: Constructed by the researcher using SPSS

Based on Table 4-7 above, there are no indication of multicollinearity problem since the value of tolerance of each independent variable is higher than 0.1 and the value of Value Inflation Factor (VIF) if lower than 10. Product selling price’s tolerance is 0.497 and the VIF is 2.014. Promotion cost has tolerance of 0.202 and the VIF is 4.953. Advertising cost has 0.280 tolerance and VIF of 3.577.

4.2.4 Heteroscedasticity Test

Heteroscedasticity test is a test to identify whether a heteroscedasticity condition of data exist. The regression assumption would be satisfied if heteroscedasticity does not exist. The results of heteroscedasticity test are shown in Figure 4-3. Scatterplot (Heteroscedasticity Test).
4.3. Hypothesis Testing and Discussion

4.3.1 Coefficient of Determination

Coefficient of correlation (R-Square) measures the model capability to explain the variance of dependent variable. The value of coefficient of determination (R-square) is range from 0 to 1. The bigger the coefficient of determination, the bigger the capability of independent variable to explain the variance of dependent variable, thus the closer the coefficient of determination value to 1, the independent variable will provide more complete information to

**Table 4-4. Coefficient of Determination**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.956&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.915</td>
<td>.909</td>
<td>.003191</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Advertising Cost, Selling Price, Promotion Cost
b. Dependent Variable: Profitability (ROI)

Source: Constructed by the researcher using SPSS

Based on Table 4-8 above, the value of R-Square is 0.909. The value of R-Square means that 90.9% of the company profitability (ROI) could be explained by all of the independent variables which are product selling price, promotion cost, and advertising cost. The Remaining 9.1% will be explained by other variables outside of the model. The Coefficient of correlation value (R) indicates that the power of correlation between independent variables to dependent variable is 95.6%.

### 4.3.2 F-Test

F-test is used to determine whether there is significant influence between dependent variable and the entire set of independent variables. If the significant value is less than 0.5, the independent variables collectively have significant impact to the dependent variable (Ghozali, 2001 cited in Widjaja, 2010, p.51). The result of F-Test is shown in Table 4-5. ANOVA (F-Test).
Table 4-5. ANOVA (F-Test)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.005</td>
<td>3</td>
<td>.002</td>
<td>157.585</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>.000</td>
<td>44</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.005</td>
<td>47</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Advertising Cost, Selling Price, Promotion Cost

b. Dependent Variable: Profitability (ROI)

Source: Constructed by the researcher using SPSS

Based on Table 4 – 5. F-Test, the P-Value is 157.585 with the significant value is 0.000. Because the value of significant is lower than 0.05, it indicates that the product selling price, promotion cost, and advertising cost together significantly influence company profitability. Thus, the null hypothesis is rejected and the Ha hypothesis is accepted, because the Ha hypothesis stated that the independent variables which are product selling price, promotion cost, and advertising cost together has significant influence company profitability.

4.3.3. T-Test

T-test statistic has a purposed to measures the significant influence of independent variable partially to dependent variable (Ghozali, 2001 cited in Ardian Agung Witjaksono, 2010, p. 103). The results of T-Test are as follow in Table 4-6. T-Test below.
Based on Table 4-6, the equation of regression as follows:

$$ROI = 0.588 \text{SP} + 0.715 \text{PC} – 0.356 \text{AC}$$

Based on the regression model above, the coefficient value of product selling price is 0.588, and the coefficient value of promotion cost is 0.715. However, there is one independent variable that partially has inversely proportional affect to the company profitability (ROI) which is advertising cost since its coefficient value is -0.356.

The hypothesis result of T-Test on the product selling price, promotion cost, and advertising cost to company profitability (ROI) in PT. Wrigley Indonesia will be discussed below:

1. Based on the T-test and regression model, the final significant value of Product Selling Price is 0.000. Because the significant value is smaller than 5% ($\alpha$), product selling price partially has significant influence to company profitability (ROI) in PT. Wrigley Indonesia. Thus, $H_{a2}$ is accepted which is product selling price has significant impact to company profitability in PT Wrigley Indonesia.
2. Based on the T-test and regression model, the final significant value of promotion cost is 0.000. Because of the significant value that is smaller than 5% (α), promotion cost partially has significant influence to company profitability (ROI). Thus, \( H_a \) is accepted which is promotion cost has significant impact to company profitability in PT Wrigley Indonesia.

3. Based on the T-test and regression model, the final significant value of advertising cost is 0.000. Because of the significant value that is smaller than 5% (α), advertising cost partially has significant influence to company profitability (ROI). Thus, \( H_a \) is accepted which is advertising cost has significant impact to company profitability in PT Wrigley Indonesia.

4.4. Hypothesis Result Discussion

4.4.1. The Impacts of Product Selling Price, Promotion Cost, and Advertising Cost to the Company Profitability (ROI)

Based on the statistic result, the significant value of F-test for product selling price, promotion cost, and advertising cost is 0.000. The significant value of F-test means that product selling price, promotion cost, and advertising cost together influence the product selling price, promotion cost, and advertising cost to company profitability (ROI).

Return on investment (ROI) could be the measurement of company profitability, because it related to the profit and investment or the assets used in generating that profit. Return on investment usually called as return on assets (ROA) (Fraser & Ormiston, 2010 cited in Ompusunggu & Trisnawati, 2010, p.71).
The rate of return on investment (ROI) is useful because the three factors subject to control by divisional managers are used in its computation. The factors are revenues, expenses, and invested assets. By measuring profitability relative to the amount of assets invested in each division, the rate of return on investment can be used to compare the divisions. Hansen and Mowen (2003) described return on investment as the profit gain per investment. The use of profit as the measurement of company performance will be effective if it related to the invested assets in obtaining those profits.

4.4.2. The Influence of Product Selling Price to Company Profitability (ROI)

Base on the T-Test result, the significant value of product selling price T-Test is 0.000. The value of T-Test indicate that product selling price influences the company profitability (ROI), since it is smaller than 0.005. The coefficient value of product selling price is 0.588, it means that when product selling price increases by 1%, the company profitability (ROI) will increase 0.588 and vice versa.

Product selling price means the market value or agreed exchange value, which will purchase a definite quantity, weight, or other measure of a good or service. It is the actual final price of a product or service that company charged a purchaser to buy the item. Selling price is the cash price that a buyer must pay for purchased goods or services (McCracken, 2005). Price is some amount of money needed in order to get some combinations of the products, includes the services available (Swastha & Sukotjo, 1998).
4.4.3. The Influence of Promotion Cost to Company Profitability (ROI)

The T-Test value of promotion cost is 0.000. The t-test value indicates that there is significant influence of promotion cost to company profitability (ROI) since the significant value of promotion cost is smaller than 0.05. The coefficient value of promotion cost is 0.715. It means if the promotion cost increases by 1%, company profitability (ROI) will increase 0.715 and vice versa.

Promotion cost means the cost that business spends in order to keeps the product in the minds of the customer and helps stimulate demand for the product. The ongoing activities of advertising, sales and public relations are often considered aspects of promotions (Carter McNamara).

4.4.4. The Influence of Advertising Cost to Company Profitability (ROI)

Based on the T-Test, the value of advertising cost is 0.000. The T-Test value indicates that there is significant influence of advertising cost to company profitability (ROI), since the significant value of advertising cost is smaller than 0.05 (α). Therefore, the coefficient value of advertising cost is -0.356. It means the increases by 1% of advertising cost would decrease the company profitability (ROI) value for 0.356.

Advertising cost means the cost that businesses spend in bringing a product (or service) to the attention of potential and current customers. Advertising is typically done with signs, brochures, commercials, direct mailings or e-mail messages, personal contact, etc (Carter McNamara).
CHAPTER V

CONCLUSION AND RECOMMENDATION

5.1. Conclusion

Normality test shows that data is normal, because the data distribution are scattered close to the diagonal line in Normal Probability Plot. Autocorrelation test’s result using Durbin Watson was 1.140, which means the regression model has no autocorrelation. There is no indication of multicollinearity since all independent variables have more than 0.1 tolerance and the VIF was less than 10. There is no heteroscedasticity since the scatter of the data does not indicate to form any pattern in Heteroscedasticity test. The R-square showed that company profitability could be explained by all independent variables for 90.9%, and the rest is shown by other variables outside the model.

Based on the result of the analysis and the discussions in Chapter IV, the conclusion could be drawn as follows:

1. The result of the F-Test shown that product selling price, promotion cost, and advertising cost of Doublemint stick together have significant impacts to company profitability of PT. Wrigley Indonesia, as described by the significant value of 0.000.

2. The result of T-Test shown that all three independent variables have significant impacts to company profitability. Selling price and promotion cost give the positive impact to profitability, if selling price and promotion cost increase, company profitability will increase too. Advertising cost inversely impacts company profitability, so if advertising cost increases, company profitability will decrease. The most significant variable is promotion cost because it has the highest coefficient value of 0.715.
5.2. Recommendation

The researcher made recommendations that refer to the company and the next researcher who are willing to make future research that similar to this research.

For the company, as shown in the multiple regression analysis in this research, the advertising cost has inversely proportional to the return on investment (company profitability). The advertising supposed to give a sales impact to the customers, but when the advertising costs are too high, the sales does not always high too. The inversely proportional will happened when the advertising costs are too high and it will just increase the cost. There is a theory by Kotler and Armstrong (2008) that the more mature brand usually the advertising will cost less, but in this case, the advertising cost are increasing every year, whereas the brand is not in the new-born position. The company should adjust the advertising cost with the sales.

For the next researcher, the researcher recommends to add more independent variables for the research to know more about what variables that impact the company profitability and it could be the consideration in planning the budget or cost. The recommended variables from the researcher are production cost, distribution place, sales volume, and so on.
REFERENCES

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Journal Article


Thesis


Hadrianus (2012). The Impact of Cost, Academic and Reputation, Geographical Factor, and Other’s Influence in Choosing Private Universities in Indonesia by 12th Grade Student (A Case Study of Yos Sudarso Karawang Senior High School, Indonesia). Bachelor Degree. Cikarang: President University.


Online Article & Document


## APPENDIX 1

### COMPANY PROFITABILITY

<table>
<thead>
<tr>
<th>Month</th>
<th>2011</th>
<th>2010</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
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<td>0.015</td>
<td>0.003</td>
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<td>-0.014</td>
</tr>
<tr>
<td>Feb</td>
<td>0.013</td>
<td>0.002</td>
<td>-0.003</td>
<td>-0.014</td>
</tr>
<tr>
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<td>0.018</td>
<td>0.003</td>
<td>-0.004</td>
<td>-0.013</td>
</tr>
<tr>
<td>Apr</td>
<td>0.015</td>
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<td>-0.012</td>
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<tr>
<td>May</td>
<td>0.017</td>
<td>0.003</td>
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</tr>
<tr>
<td>Jun</td>
<td>0.017</td>
<td>0.003</td>
<td>-0.003</td>
<td>-0.016</td>
</tr>
<tr>
<td>Jul</td>
<td>0.017</td>
<td>0.002</td>
<td>-0.003</td>
<td>-0.015</td>
</tr>
<tr>
<td>Aug</td>
<td>0.012</td>
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<td>-0.003</td>
<td>-0.015</td>
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<td>Sept</td>
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<td>0.002</td>
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<td>-0.011</td>
</tr>
<tr>
<td>Oct</td>
<td>0.016</td>
<td>0.003</td>
<td>-0.003</td>
<td>-0.013</td>
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<tr>
<td>Nov</td>
<td>0.016</td>
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<td>-0.013</td>
</tr>
<tr>
<td>Dec</td>
<td>0.013</td>
<td>0.003</td>
<td>-0.002</td>
<td>-0.015</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>0.182</strong></td>
<td><strong>0.03</strong></td>
<td><strong>-0.037</strong></td>
<td><strong>-0.164</strong></td>
</tr>
</tbody>
</table>

### SELLING PRICE (Doublemint Stick)

*(price per case in Rupiah)*

<table>
<thead>
<tr>
<th>Month</th>
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<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
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<td>1287264</td>
<td>1287264</td>
<td>1104000</td>
</tr>
<tr>
<td>Feb</td>
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<td>1353200</td>
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</tr>
<tr>
<td>Oct</td>
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<td>1353200</td>
<td>1287264</td>
<td>1214400</td>
</tr>
<tr>
<td>Nov</td>
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<td>1422600</td>
<td>1353200</td>
<td>1287264</td>
<td>1214400</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>16,793,600</strong></td>
<td><strong>16,040,592</strong></td>
<td><strong>15,447,168</strong></td>
<td><strong>13,910,400</strong></td>
</tr>
</tbody>
</table>
**PROMOTION COST (Doublemint Stick)**  
*(in Rupiah)*

<table>
<thead>
<tr>
<th>Month</th>
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<th>2009</th>
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</table>

**TOTAL**  
6,964,849,811  
4,301,588,250  
3,839,844,403  
2,722,829,535

**ADVERTISING COST (Doublemint Stick)**  
*(in Rupiah)*

<table>
<thead>
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<td>Jul</td>
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<td>453319792</td>
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<td>873754821</td>
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<td>355308125</td>
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**TOTAL**  
6,708,190,929  
5,809,847,598  
5,197,537,964  
3,803,326,248
APPENDIX 2

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Profitability (ROI)

Histogram

Dependent Variable: Profitability (ROI)

Mean = 4.67E-15
Std. Dev. = 0.969
N = 48
One-Sample Kolmogorov-Smirnov Test

<table>
<thead>
<tr>
<th></th>
<th>Profitability (ROI)</th>
<th>Selling Price</th>
<th>Promotion Cost</th>
<th>Advertising Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>48</td>
<td>48</td>
<td>48</td>
<td>48</td>
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<tr>
<td>Normal Parameters(^{a,b})</td>
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<tr>
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<td>1.29566E6</td>
<td>3.71440E8</td>
<td>4.48310E8</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.010581</td>
<td>9.598637E4</td>
<td>1.517108E8</td>
<td>1.456467E8</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absolute</td>
<td>.147</td>
<td>.215</td>
<td>.173</td>
<td>.169</td>
</tr>
<tr>
<td>Positive</td>
<td>.147</td>
<td>.108</td>
<td>.173</td>
<td>.169</td>
</tr>
<tr>
<td>Negative</td>
<td>-.117</td>
<td>-.215</td>
<td>-.079</td>
<td>-.090</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
<td>1.016</td>
<td>1.491</td>
<td>1.196</td>
<td>1.169</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.253</td>
<td>.024</td>
<td>.114</td>
<td>.130</td>
</tr>
</tbody>
</table>

\(^a\) Test distribution is Normal.

\(^b\) Calculated from data.
APPENDIX 3

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>.956</td>
<td>.915</td>
<td>.909</td>
<td>.003191</td>
<td>1.140</td>
</tr>
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</table>

a. Predictors: (Constant), Advertising Cost, Selling Price, Promotion Cost
b. Dependent Variable: Profitability (ROI)

Scatterplot

Dependent Variable: Profitability (ROI)
## APPENDIX 4

### Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitability (ROI)</td>
<td>48</td>
<td>-0.016</td>
<td>0.018</td>
<td>0.0023</td>
<td>0.010581</td>
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<tr>
<td>Selling Price</td>
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<td>1422600.000</td>
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<td>9.598637E4</td>
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<td>Promotion Cost</td>
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<td>1.568E8</td>
<td>7.751E8</td>
<td>3.71440E8</td>
<td>1.517108E8</td>
</tr>
<tr>
<td>Advertising Cost</td>
<td>48</td>
<td>2.533E8</td>
<td>8.738E8</td>
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<td>1.456467E8</td>
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<tr>
<td>Valid N (listwise)</td>
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### ANOVA

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<th>Model</th>
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<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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<tr>
<td>1 Regression</td>
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<td>3</td>
<td>.002</td>
<td>157.585</td>
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<td>Residual</td>
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<td>.000</td>
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<td>Total</td>
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<td>.000</td>
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</table>

a. Predictors: (Constant), Advertising Cost, Selling Price, Promotion Cost

b. Dependent Variable: Profitability (ROI)

### Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1 (Constant)</td>
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<td>.008</td>
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<td>Selling Price</td>
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<td>.000</td>
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<td>Promotion Cost</td>
<td>4.990E-11</td>
<td>.000</td>
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<tr>
<td>Advertising Cost</td>
<td>-2.587E-11</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Profitability (ROI)