ADDIS ABABA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMENT OF MANAGEMENT

MBA PROGRAM

THE IMPACT OF ADVERTISING EXPENSE ON SALES VOLUME: THE CASE OF MOHA SOFT DRINK INDUSTRIES S.C.

BY:

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JUNE 2017

ADDIS ABABA, ETHIOPIA

THE IMPACT OF ADVERTISING EXPENSE ON SALES VOLUME: THE CASE OF MOHA SOFT DRINK INDUSTRIES S.C.

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A THESIS SUBMITTED TO COLLEGE OF BUSINESS AND ECONOMICS, DEPARTMENT OF MANAGEMENT ADDIS ABABA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION

JUNE 2017

ADDIS ABABA, ETHIOPIA

DECLARATION

I, Adugna Adare, hereby declare that the work in this thesis entitled the Impact of Advertising Expense on the Sales Volume of MOHA Soft Drinks Industries S.C. has been performed by me under the supervision of AtoTeshome Bekele. The information collected and materials used have been duly acknowledged by means of references. To the best of my knowledge and beliefs, it has not been previously presented in any form whatsoever in any application for the award of degree or Diploma in any University.

Name: Adugna Adare

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Date: June 2017

Place: Addis Ababa

Statement of certification

Addis Ababa University

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This is to certify that a thesis prepared by Adugna Adare, entitled: The Impact of Advertising Expense on Sales Volume: The Case of MOHA Soft Drink Industries S.C. submitted in partial fulfillment of the requirements for the Degree of Master of Business Administration complies with the regulation of the University and meets the accepted standards with respect to originality and quality.

Signed by the Examining Committee:

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ACKNOWLEDGEMENTS

I must say that I am most grateful to my advisor, Ato Teshome Bekele whose invaluable advice and guidance enabled me to successfully complete this program.

I also wish to thank the entire staff of MBA Program Coordinators, Addis Ababa University for their assistance and encouragement.

My thanks also go to my colleagues in Commercial Bank of Ethiopia who support me throughout the completion of the program by giving time and advice.

I cannot forget the love; encouragement and support received from my friends, my brothers and sisters and my parents; without whom this work could not have been completed. Above all, I am thankful to God Almighty for his grace.

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Abstract

Advertising is a prominent feature of modern business operations. One could encounter advertising messages, while watching TV, reading magazines, listening to the radio, using the internet or even simply walking down the street, as advertising has a stimulating influence on purchasing behavior of the consumers. Advertising provides a platform for companies to create awareness about their products or services and how consumers could make the best choice out of such products. This study evaluated the impact of advertising expenses on the sales volume of MOHA Soft Drinks Industries S.C. This study was based on secondary data collected for advertising expenditures and sales volume of the company over the period of 2000 to 2015 from its annual financial and sales reports. Among the objectives of the study is to determine the extent to which advertising costs impact on the sales volume of the company under study. It also seeks to study the nature of advertising as well as the relationship between advertising and sales. Explorative research design was adopted for the study to get deep insight of the impact that advertising cost *has on sales volume of the company. Statistical regression analysis using Ordinary Least Squares (OLS) and correlation analysis have been performed to test the hypothesis of the study. The test result showed that advertising expenses has a positive significant impact on sales volume of the companies; and also a test showed a positive significant relationship between advertising and sales volume of the company. Other variables which are not included in the model are explained by the error term in the model.*

The study concluded that that there is a significant improvement in the sales of the company as a result of advertising. It was recommended that organizations should educate the general public through advertising on the uses, functions and benefits of their products. The company should exhaustively advertise any change in the company which can increase sales volume. For instance, if there is a price discount or new product development or a prize coupon, it should be advertised.

Key words: Sales Volume, Advertising expense,

CHAPTER ONE: INTRODUCTION

1.1. Background of the organization

MOHA soft drink Industry S.C was established on May 15, 1996 acquiring Nifas silk plant, Teklehaymanot plant, Gonder plant, and Dessie plant from Ethiopian privatization agency with paid capital of birr 108,654,000.00. The company currently has eight operating units including summit plant, bure plant, and the recently inaugurated Hawassa and Mekelle plants.

The major products of MOHA soft drink Industry S.C. are: Pepsi Cola, Mirinda orange, 7-up, Mirunda Tonic, Mirinda Apple, and kool (Bure kool and Tossa bottled water products).

The annual turnover of the company has reached to birr 556 million and sales stands at average annual growth rate of 12%.

MOHA soft drink Industry S.C. has adhered to Pepsi cola International Standards and Good Manufacturing Practices (GMP).

MOHA holds 52% of the market share in soft drinks industry in the country, and an average annual increase of 15% in sales volume and corresponding profit growth is anticipated.

1.2. Background of the study

Nowadays, managers apparently agree that this time demands more efficiency and productivity than any other times in history. Businesses are striving to increase their performance. Managers have been struggling to succeed and put their company ahead of competitors. With this, different scholars, researchers and consultants have been contributing their part showing the best ways they think are helpful to the managers. (Davies, 1998)

The essence of being in business by any business enterprise is to produce for sales and profits. In order to remain in business an organization must generate enough sales from its products to cover operating costs and earn reasonable profits. For many organizations, sales estimate is the starting point in budgeting or profit. It is so because it must be determined, in most cases, before production units could be arrived at while production units will in turn affect material purchases. However, taking decision on sales is the most difficult tasks facing many business executives. This is because it is difficult to predict, estimate or determine with accuracy, potential customers' demands as they are uncontrollable factor external to an organization. Considering the importance of sales on business survival and the connection between customers and sales, it is vital for organizations to engage in programs that can influence consumers' decision to purchase its products. This is where advertising and brand management are relevant. Advertising is a subset of promotion mix which is one of the 4ps in the marketing mix i.e. product, price, place and promotion. As a promotional strategy, advertising serves as a major tool in creating product awareness and condition the mind of a potential consumer to take eventual purchase decision. (Fill, 1999)

Advertising is powerful communication force and an important tool. It helps the modern day marketers to sell goods, ideas and images by providing information and persuading people. Advertising has become an integral part in every society. Everybody encounters advertising every day, whenever we open newspapers go through a magazine, listen to radio, watch television, open letters play castle or walk down a busy street, we are exposed commercial messages. Popularly known as advertising therefore it is virtually impossible for any of us to escape contact with some form of advertising or the other (Sahu and Raut, 2003p 234).

According to William J Stanton (1994), advertising consists of all activities that involve presenting to a group, non personal, oral or visual sponsored messages regarding a product, service or idea of the company.

Advertising is directed to groups of people and is therefore non-personal. Companies usually sponsor advertising in order to convince the public that their products will benefit them. (Oladosu, 1993)

Besides advertisement, there are other factors that affect sales volume of the company. Some of the factors are total asset of the company, population, competitors, and unemployment rate. The effects of these variables are explained by the error term of the model.

1.3. Statement of the Problem

Different literature review revealed that there is no consensus on the economic effects of advertising expenses on sales volume. Different studies have shown diverse results. The study by Okeji (2008), Nigeria data; Abiodun (2011), Nigeria data; Akeem (2011), Nigeria data have found the significant impact of advertising expenditure on sales volume of the companies. Bloch

(1974), Ayanian (1975) and Demsetz (1979) treated advertising as an expense rather than as an investment.

However, in general, majority of the studies have directed positive relationship between the two. Most of the studies have used time series data to capture the long-term effects of advertising on sales.

Companies expect a return on the investment they make on advertising. It is fact that, promotional activities cost the company a lot and the companies need reasonable increase in sales volume. This study focuses on studying these relationships by seeking to measure the impact of advertisement spending by a company, on the company's sales volume.

- Now a day's companies are budgeting huge amount of money for advertisement which they think that it will increase their sales volume. Whatever the product quality and its importance if not known to the consumers at large does not bring any value to the company. However, the extent to which advertisement affects sales volume is not known specially in Ethiopia. That is the increase in sales volume of the company as a result of advertisement alone is not well known. The cost aspect of advertising is not considered by many researchers in Ethiopia. Only the media/language in which advertisement told is taken into account. It is to answer how and the extent to which the direct cost on advertisement affects sales volume of the company in our country. The impact of huge capital on advertisement must be measured and its contribution for sales should be estimated

So the study is to answer the questions like:

- Is the increase in the amount the company spends on advertising will automatically bring about an increase in sales?
- What effect does advertising expense have on sales when other variables are kept unchanged?

In the light of the above statements, examining the impact of advertising expenditure on the sales volume of a product, using MOHA Soft Drink Industries S.C. as a case is therefore a significant undertaking.

1.4. Objective of the study

The general objective of the study is to investigate how advertising affects and related to the sales volume of the company keeping other variables constant with reference to MOHA Soft Drink Industries S.C.

1.4.1. Specific Objectives

- To investigate the impact of company's advertising expenditure on its sales volume.

1.5. Hypothesis of the study

Based on literature review and the objective of the study, the expected relationship between independent variables and dependent variable is stated and the hypothesis is framed as follows:

Hypothesis

Null hypothesis ($H_{0)}$): advertisement has no statistically significant impact on sales volume of MOHA Soft Drink Industries S.C.

Alternative hypothesis ($H_{a)}$): advertisement has statistically significant impact on sales volume of MOHA Soft Drink Industries S.C.

1.6. Significance of the study

The study is expected to provide a number of desirable benefits, the most essential of which is contribution to existing knowledge. Even if companies spend huge capital to advertise their products and services, the attachment that advertisement has with sales volume was not so far explored. Specifically, the findings of the study will provide direction as to the effect of advertising costs or expenditures on the sales volume of soft drink companies. Thus, the study is expected to contribute to the not-so-well-developed area of knowledge regarding the association between advertising expenditures and the sales soft drink Company in Ethiopia by empirically ascertaining the effect of such costs on the sales volume of MOHA Soft Drinks Industry S.C. This is because the cost aspect of advertisement is overlooked by many researchers in Ethiopia and this study will pave the way for future researchers in Ethiopia. Similarly, the study also hopes to expand the frontiers of knowledge in the area of conducting its analysis through the use of techniques that have been so far overlooked by previous researchers on the effect of advertising on the sales of the companies in Ethiopia.

Finally, the study is also expected to give vital information to shareholders whose primary goal is to maximize their wealth. The findings of the study will help shareholders on how to manage their advertisement budget and ensure that only costs that will ensure the maximization of shareholders' wealth are incurred by managers on behalf of shareholders.

1.7. Organization of the Paper

This paper consists of five chapters with different sections and sub-sections. Chapter one presents the introduction for the main part of the paper, and chapter two states the theoretical and empirical literature review of study under consideration. Chapter three presents methodology and model specification with time series characteristic and chapter four introduce data presentation and analysis; It is about testing the hypothesis of the study and the interpretation of econometric outcomes and the last chapter as usual gives summary of the study, conclusion and recommendation.

1.8. Limitation of the study

One limitation of this research was the lack of studies conducted in Ethiopia investigating the impact of advertising cost on sales volume of the company making comparisons with this research impossible though companies are investing a large sum of their capital on advertising. In addition, there is no adequate literature which conducted in this area of study both at local and international level.

Beside, since the research study was conducted in one of the two soft drink companies in Ethiopia; it might not be generalized to other organizations. Therefore, future research should be conducted on large scale by considering more organizations. To add, the absence of well organized data and the company's non willingness to give the data is another setback to the study.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.1. Theoretical Review

2.1.1. Concept of Advertising

Advertising or advertizing is a form of communication for marketing and used to encourage, persuade, or manipulate an audience (viewers, readers or listeners; sometimes a specific group) to continue or take some new action. Most commonly, the desired result is to drive consumer behavior with respect to a commercial offering, although political and ideological advertising is also common. (Kotler, 2005)

In Latin, *advert ere,* means to turn toward. The purpose of advertising may also be to reassure employees or shareholders that a company is viable or successful. Advertising messages are usually paid for by sponsors and viewed via various traditional media; including mass media such as newspaper, magazines, television commercial, radio advertisement, outdoor advertising or direct mail; or new media such as blogs, websites or text messages. Modern advertising was created with the innovative techniques introduced with tobacco advertising in the year 1920, most significantly with the campaigns of Edward Bernays, which is often considered the founder of modern marketing (Kazmi, 2005).

Advertising is a tool of marketing for communicating ideas and information about goods and services to an identified group, which employs paid space or time in the media or uses another communication vehicle to carry its message. It openly identifies the advertiser and his relationship to the sales effort (Kazmi, 2005).

Advertising is any paid form of non-personal presentation and promotion of ideas and goods, or services by an identified sponsor, although advertising is used mostly by commercial firms, it is also used by a wide range of nonprofit organizations, professionals and social agencies that advertise their causes to various target publics (Philip Kotler and Garry Armstrong). Many advertisements are designed to generate increased consumption of those product and service through the creation and reinforcement of brand image and brand loyalty. Advertising is a non-personal communication of information usually paid for and persuasive in nature about products, services or new ideas by identified sponsors through various media (Arens, 1986). Advertising can also be defined as bringing a product or service to the attention of potential and current customers. Advertising is found on one particular product or service. Thus, an advertising plan for one product might be very different from the other product.

Advertisement in such a media as print (newspaper, magazines, billboards, flyers) or broadcast (radio, television) typically consist of pictures, headlines, information about the product and occasionally a response coupon. Broadcast advertisement on the other hand consists of an audio or video narrative that can range from 15seconds spots to longer segments known as infomercials, which generally last 30 to 60 minutes. (Busari, 2002)

Advertisements can also be seen on the seats of grocery carts, on the wall of airport walkways, on the sides of buses, airplane and train. Advertisements are usually placed anywhere an audience can easily and/or frequently an access visual and/or video. (Busari 2002)

Donald (2000) Opined that advertising is to encourage purchase by temporarily improving the value of a brand. The main objective of advertising is to translate favorable attitudes into actual purchase, improve attitude towards a brand and nurture brand loyalty at all times.

Donald (2000) stated that regardless of the exact technique employed, advertising should attempt to accomplish four fundamental tasks:

- Advertising objectives should relate to overall marketing and should be clearly measurable. This requires that the promotional strategies should adequately define what the promotion wishes to accomplish;

- Advertising technique should be used to supplement sales and advertising efforts;

- Advertising like other promotional forms should attract attention among those people they are intended to influence; and

- Advertising should generally persuade the target audience to place an order i.e. to really close the sale and perhaps assume it has been done. There must be readily recognizable link between the promotion and desirability of buying the particular product.

Modern commercial advertising is the persuasive force that aims at changing customer's behaviors. This is important because consumer wants and needs change as their economic positions improve and as they pass through different stages. It is therefore desirable for advertisers to assess the impact of advertisement on their products‟ performance from time to time (Kotler, 2000).

Advertising as a promotional tool is to remind, reassure and influence the decisions of the consumers because an advertisement itself enlightens, educates, and persuades consumers on their acceptability of the product offering ((Busari, 2002).

Advertisements can be attached on the seats of grocery carts, on the wall of airport walkways, on the sides of buses, airplane and train. Advertisements are usually placed anywhere an audience can easily and/or frequently an access visual and/or video (Busari, 2002).

2.1.1.1. Forms of Advertising

According to Kotler and Armstrong, there are various forms of advertising that is informative, persuasive and reminder advertising. Informative advertising is used to inform the customers about a new product or feature and to build the image of the company. (Kotler and Armstrong, 1999).

Persuasive advertising is one used to build selective demand for a brand by persuading consumers that it offers the best quality for their money. It persuades a customer to accept sales calls and to purchase now (some persuasive advertising has become comparison advertising, in which a company directly or indirectly compares its brand with one or more other brands. Reminder advertising is one used to keep consumers thinking about the product or service .it is important for mature products or services. It reminds customers that the products May be needed in their near future, where to buy the product and maintaining top of mind product awareness.

2.1.1.2. Purpose of Advertising

Advertising plays a vital role in marketing consumers' purchasing decision and promotion to particular. Most consumers have the erroneous impression that promotion is synonymous with advertising and vice-versa. The partnership between producers and consumers through advertisement is solely aimed at achieving certain mutually beneficial objectives. These are;

To introduce new product: One of the roles of advertising is to inform consumers about the existence of a new product in the market i.e. creation of awareness.

Persuade customers to buy: Advertising helps in arousing the customer's interest and by so doing persuades them to buy the product.

Creation of demand: Advertising stimulates demand by constantly reminding potential consumers about the availability of the product in the market.

To change consumer belief: Advertisement is a very good instrument that can be used to change consumer mind-set about a product or service. Hence, help to tap into their buying power and influence their thoughts.

To create brand loyalty: The demand of the consumers can be maintained by constantly arousing their interest on a particular product and this will ultimately create brand loyalty.

Develop large market: Advertising create large market segment which leads to the development of larger market.

To promote the image of the firm: Advertising builds a corporate image for a company.

2.1.1.3. Role of Advertisement

- **Improvement of Living Standard:**

Many things that make life easier and more pleasant like radio, television, fan, video, computer, and motor cars and so on are not necessities but comforts. The comparative inexpensiveness of these products are made feasible through mass demand, a "by- product" of mass awareness created by advertising. This evidently shows the link between advertising and standard of living in a society.

- **Provision of Entertainment and Relaxation:**

Many advertising companies especially broadcast media advertisement present their messages with humor and thus provide entertainment and relaxation for the audience. The presence of some characters in advertorial prints is geared towards providing entertainment and relaxation for the audience without the message being lost or submerged.

- **Provision of Employment Opportunities:**

The advertising business is such a lucrative one that very many people are employed in the sector as specialists and non-specialists.

- **Creation of Standards through Competition:**

Advertising message often extol the good qualities of products or service. For consumers to continue to buy these product or service, manufactures or organization are compelled to adhere to the advertised qualities, for if they allow the qualities to drop, consumers will buy less.

- **Advertising's role in the economy:**

In addition to its position in the value chain of the creative industries, the advertising industry also plays a role in the wider economy. The effects of this role are a source of much debate among economists as well as policy makers and regulators. This section has reviewed employment in the UK advertising industry for 2010 .It found that 'core' advertising employment within agencies stood at just over 89,000. However, taking into account a broader measure including self employed and those doing advertising roles in other industries, employment stood at between 249,000 and 300,000. Advertising is the 3rd largest UK creative industry in terms of employment. Advertising employment does not seem to have been significantly affected by the recent recession. (Weiss &Tellis, 1995)

Assmus *et al.* (1984) attempted to explain short-term & long-term advertising response as replication analyze for 128 econometric models linking the impact on sales. Weiss &Tellis (1995) suggested that advertisement has a major and positive impact on sales in certain period of time when demand is more. Long term and short term response of advertisement can be different according to product and occasion. Some insights into the effectiveness of past advertising may be obtained by measuring the relationship between the advertising expenditure and the total sales of the product.

A multiple regression analysis of advertising expenditure and sales over several time periods may be calculated. It would show how the changes in advertising expenditure have corresponding changes in sales volume. This technique estimates the contribution that advertising has made to explaining in a co relational manner rather than a casual sales, the variation in sales over the time periods covered in the study. The other measure of advertising effectiveness is the method of experimental control where a casual relationship between advertising and sales is established. This method is quite expensive when related to other advertising effectiveness measures yet it is possible to isolate advertising contribution to sales. As it is very difficult to measure the direct effect of advertising on company's profits or sales, most firms rely heavily on indirect measures. These measures do not evaluate the effects of advertisements directing on sales or profits but all other factors such as customer awareness or attitude or customer recall of advertising message affect the sales or profits or goals of the business indirectly. We will get the value of Coefficient of correlation and on the basis of the result we will show the relationship between advertising spending and sales volume.

2.1.1.4. Advertising Media

Advertising may be done through various media like visual, audio and print media. Visual media may include television, bill boards, posters, prices with company product name and broachers' print media may include newspapers, brochures, stickers, magazines, business cards, new letters, and mobile vehicles.

Other tools of advertising may include; infomercials, sponsoring events, taking part in trade shows, celebrity advertising ,email advertising , placing corporate logos and the side of boaster rockets and international space station, personal recommendations like; ―bring a friend‖, ― sell it", mobile phone adverts like multimedia messaging service picture ,video messages, 2D bar-code and social network advertising.

Table: 2.1. The Dimension of Advertising Media, Advantages and Limitations

Medium	Advantages	Limitations
Television	Combines sight, sound and motion; appealing to the sense; high attention; and high reach.	High absolute cost; high clutter, fleeting exposure, and less audience selectivity.
Radio	Mass use; high geographic and demographic selectivity; low cost	Audio presentation only; lowers attention than television; non standardized rate structures; fleeting exposure.
Newspaper	Flexibility, timeliness; good local market coverage, broad acceptance; and high believability.	Short life, poor reproduction quality and small "pass-along" audience.
Magazines	High geographic and demographic selectivity, credibility and prestige; high-quality reproduction; long life; good pass along readership.	Long ad purchase lead time some waster circulation; no guarantee of position.
Direct mail	Audience selectivity, flexibility, no ad competition within the same medium, and personalization.	Relatively high cost; "junk mail" image.

Outdoor	Flexibility, high repeat exposure; low competition	Limited audience selectivity creative limitations.
Yellow pages	Excellent local coverage; high believability; wide reach; low cost.	High competition; long ad purchase lead time; creative limitations.
Newsletters	Very high selectivity, full control, interactive opportunities, relative low cost.	Costs could run away`
Brochures	Flexibility, full control, can dramatize messages.	Over production could lead to run-away cost.
Telephone	Many users; opportunity to give a personal touch	Relative high cost unless volunteers are used.
Internet	High selectivity; interactive possibilities, relatively low cost	Relative new media with a low number of users in some countries.

Source: Kotler (2000)

The above table shows different medium of advertizing with their advantages and limitations. The advertisers or companies can decide to make use of any of them which is suitable to their needs. The left hand side shows the medium used for advertising, the advantages for each of the medium. While the right hand side depicts the limitations of the available medium used for advertising.

2.1.2. Concept of Sales

Sales in business terms are the actual sales in money values, a company receives after necessary collections are made from different sales channels of the original total production put on the market (Mc Cathy et al, 1994). It is sales that stimulate production in a company and consequently profits which are affected by various factors some of which are controllable like quality and others are uncontrollable like competition and general price changes.

Sales performance is an integrated frame work that enables organizations to plan and model sales strategies and ensure timely execution of sales initiatives while ensuring both front line sales people and decisions-markers have visibility into performance . Sales performance represents the next generation of best practices for sales. (Michael D, 2006).

Sales performance also refers to the total amount of firm’s output sold to the market especially on monthly or annually basis. This is affected by many factors including customer relationship, marketing management of the firm and sales force skills and motivation and even the pricing of the goods and services (Amanda D.H, 2002)

Sales revenue is the total amount of money that the firm gets from the sale of all its goods and services in a given period of time. This is usually six months or a year if a firm produced only one product or service, the sales revenue will be the price of the product multiplied by the number of products sold. In the case of more than one product or service the revenue from each needs to be added together (wood, 1996).

The figure for sales revenue in profit and loss account does not necessarily mean that the firm has received all the money because although they may have sold that quantity of the product, they may still be owed some of the money as debtors (Baker, 2001).

Sales performance refers to consistent and satisfactory turnover of goods and services produced and put on the market by an organization or company. It is the sole economic goal of companies to have as much goods sold on the market. This facilitates the rate of goods turn over and consequently revenue and increased production.

Designing or adopting sales methodology is critical, without this methodology in place; training is a tactical attempt to a larger problem. The selling methodology must be developed based on the company's unique situation in their market, their customers, how the customers buy, the complexity and price levels of the products and services the company offers, competitive pressures, reporting requirements, the participation partners and the skill level of their current sales people (Stein 2006).

Sales performance describes the trend of collections in terms of revenue when comparing different periods. It may be in form of offering products or services to consumers. Sales volume is the core interest of every organization and is based on sales and profit (MC Cathy, 1994).

2.2. Empirical Review

2.2.1. The relationship between Advertising and sales

The essence of advertising is to increase sales revenue hence improving sales performance (David et al, 1988). Advertising combines with a host of other influences to determine what contribution advertising makes to the buyer's purchase decision. The retailer john Wanamaker is said to have remarked that he knew that only half of his advertising was effective but he was unable to know which half it was.

It is through advertising or other forms of promotion that brands in different market segments can effectively tell people in the market that a product is intended specially for them. (Engel, 1991, mc Gann and Russell, 1998)

The significance of advertising is to let customers know that an established brand is still around and it has certain characteristics, uses and benefits. (Pride et al 1989) Effective advertising can provides consumers and other prospects with information about different products that are available to them. This enables consumers to compare and choose between the products and encourages competition. Competition encourages companies to be more price and quality conscious so as to retain customers and clients.

The decision to advertise implies a decision to compete in a new and aggressive way with in the market. This means, the provider will no longer rely too solely upon personal salesmanship to gain distribution. Instead, he implies his readiness to and intention of speaking directly to consumers in abroad countries. The decision to advertise also helps the marketer to expand his share in the market. Advertisement helps in development and expansion of the market and the consumer acceptance of the product.

Dunn (1968) points out that the market needs and conditions are changing; therefore there is need for creativity in selling. This will show the company what to produce so as to satisfy the needs of the users. When companies produce such a commodity and they advertise, there is an automatic high response in consumption.

Penchman (1992) found out that advertising has a greater potential of building awareness of people hence obtaining a high preference in the market share because a big percentage of the population has one or more of the mass medium such as radios and television. This fact introduces the advertised company to many people. If the advertising is satisfying, it will lead to increase in volume of sales.

Pride F et al (1999) observes that advertising often stimulates demand thus stimulating sales. For advertising to have a direct relationship with sales revenue, the entire market mix must be viewed by the customer as the right one (Engel et al 1991, McCathy and Perveault, 1988).

Gordon (1993) states that companies advertise in order to compete in a new and aggressive way within the market to increase their market share through increased customer, utilize the low cost way of teaching customers to create marketing approaches.

David et al (1988) recognizes that many scholars have heard different views on the effect of advertising on sales performance. However, most of them agree that effective advertising will eventually increase sales volume.

A lot of empirical studies have been carried out on advertising, one of such was carried out by Karounwi (1998), he said the producer's ultimate goal is to sell product and make profit and one of the ways which he could achieve this is through advertising. The researcher noted the fact that there are stiff competitions in the market especially with advertising messages reaching the ultimate consumers first. Wright (1991) believed in is tentative findings that consumers are not helpless victims of advertisement once they are constantly exposed to various kinds of advertisement, they become motivated. Olawuyi (2004) in his own study, says that men of the world who want the best wherever they find it know that advertised goods are invariably the best of its kind for reliable product can stand up to intensive publicity. The manufacturer who makes a public claim must be able to prove it by advertising goods that are good for buying.

Kassarijian et.al (1995) stated that increased social interaction permits the more rapid spread of new ideas and that there is a relationship between advertising appeals and social character. It may be necessary to mention that marketing activities are interwoven and no one's activities are in stage and except one stage is completed the company may not go over to the next stage. This has resulted in people seeing marketing as an integrated system.

Stanton (1978) in one of his books sees marketing as a total system in which we price, promote, and distribute satisfying goods and services to potential customers. Arising from Stanton's definition, it becomes evident that marketing activities are all geared toward consumer's wants, needs, and satisfaction with a view to making some level of profit.

Satisfying the needs of target market brings one to the use of 4p's in marketing otherwise known as marketing variable. When discussing the marketing variable many talk about the types of product, the price attached to the product, the advertising aspect to create product awareness, persuasion and finally, the place or distribution/logistics. For any good organization, the satisfaction of the needs of target market is highly dependent on its fashion and how it manipulates the four utilities to suit the needs of the consumers and the organization.

As a matter of fact, profit making should not be the primary objective of any organization rather, quality product will satisfy consumer's needs and enhance repeat purchase. Definitely the company will make some profit in order to remain in business. This is also applicable to the beverage industry; it is pertinent to mention that this will only be achieved when a company produces a quality product and this product is reasonably priced based on its value to the consumers and a good promotion employed to inform and create product awareness and the product is within the reach of the target consumers. According to Young (1965), advertising does not inform the public that a product exists but promotes its benefits, it also persuades, induces people to like, prefer and buy a product to others.

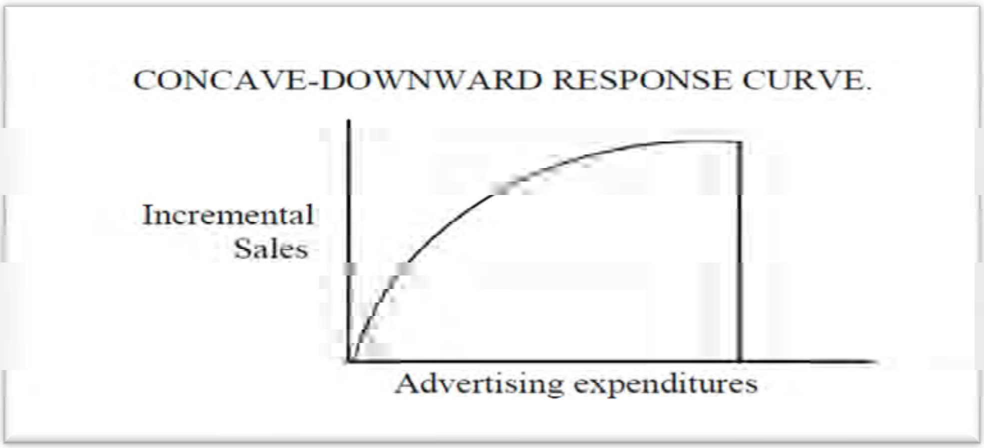
Empirical evidence on the relationship between advertising and sales is mixed. The pioneering study by Comanor and Wilson (1967) found a positive and statistically significant relationship between advertising and profits, as did an early study by Shephard (1972). These results were challenged by Bloch (1974), Ayanian (1975) and Demsetz (1979) because they treated advertising as an expense rather than as an investment, overstating the true rates of return to advertising.

After reviewing more than 100 studies of the effects of advertising on sales, Julian Simon and Johan Arndt concluded that the effects of advertising budgets follow the microeconomic law of diminishing returns.

That is, as the amount of advertising increases, its incremental value decreases. The logic is that those with the greatest potential to buy will likely act on the first (or earliest) exposures, while those less likely to buy are not likely to change as a result of the advertising. For those who may be potential buyers, each additional advert will supply little or no new information that will affect their decision. Thus, according to the concave-downward function model, the effect of advertising quickly begins to diminish. Budgeting under this model suggests that fewer advertising dollar may be needed to create the optimal influence on sales.

The researcher's finding came up with the following concave downward response curve of sales volume.

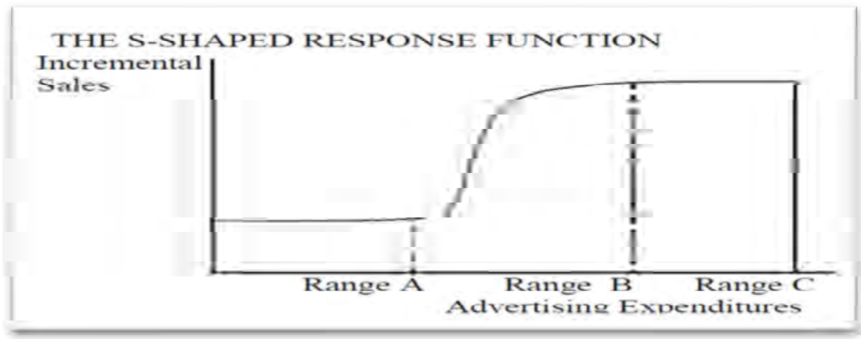
Figure: 2.1. Concave Downward Response Curve over Time



Source: George. Belch (2003)

Many advertising managers assume the s-shaped response curve (as shown below), which projects an S shaped response function to the budget outlay (again measured in sales). Initial outlays of the advertising budget have little impact (as indicated by the essentially flat sales curve in range A). After a certain budget level has been reached (the beginning of range B), advertising and promotional efforts begin to have an effect, as additional increments of expenditures result in increased sales. This incremental gain continues only to a point, however because at the beginning of range C additional expenditures begin to return little or nothing in the way of sales. This model suggests a small advertising budget is likely to have no impact beyond the sales that may have been generated through other means (for example, word of mouth). At the other extreme, more does not necessarily mean better: Additional dollars spent beyond range B have no additional impact on sales and for the most part can be considered wasted. As with marginal analysis; one would attempt to operate at that point on the curve in area B, where the maximum return for the money is attained.

Figure: 2.2. The S-shaped response Curve



From the above two findings the outcome of the study was different: the first one is came up with concave downward response curve of sales volume to advertising cost while the second one came up with the S shape response curve as shown above.

When we bring this to our country and our company we will see the result after the finding in this study.

2.3. Theoretical Framework

A number of theories have emerged over the decades to explain what advertising is and the behavioral influence it has on the consumers and the firms. However, it is noteworthy that most of the theories on advertising concentrate on its relationship to the consumer in terms of how it is able to persuade, create awareness and promote brand loyalty. Some of these include the persuasive argument, the informative view and competitive view (Leads and Shulz, 1997).

An argument often neglected is the sales effect of an effective advertising framework can create for the company. The sales effect model was put forward by Leads and Shultz (1990) and it is based on the argument that advertising like any other firm commitment that involves the use of its scarce resources should be measurable. They further contended that the best way to measure the effect of advertising is to critically analyze the extent to which it is able to influence the company's sales performance.

According to them, an effective advertising program should increase sales revenue of the advertising company by an amount or a proportion more than the expenditure on the advertising process or the advertising budget. Previous studies such as Pegan *e tal* (2001) expanded the argument further by contending that since all expenses relating to advertising are eventually deductible from gross earnings, the actual benefits of advertising will be more visible in the advertising company's net profit, if the company paints a truer picture of the real effects of the advertising program in monetary terms.

The focus of the study is to establish the link between advertising expenditure and the sales volume of MOHA Soft Drinks Industries S.C. Hence, the study adopted the sales effect theory as its framework. A company sponsors advertising in order to convince and influence people to buy its products. These can be shown in model below:

Source →	**Message** →	**Audience** →	**Effect**
(Advertising Agency)	(Advertisement) • Awareness • Persuading • Knowledge • Informing • reminding	Target Consumers	Increased sales

Figure: 2.3. Model of Advertising (Osuagwu, 1997)

From the above model, advertising could be explained in the following ways:

- Paid form

It is advertisement created and placed on the media, the costs of creation and time or space in the media must be paid for. This is a major area in which advertising different from public relations.

- Non personal

The advertising is directed to group of people with no particular person in mind and it thus non-personal in nature. Non personal selling involves the use of various media to reach the consumers.

- Communication

Of five senses of communication, only sought and sound is used in advertising.

- Identified sponsor

Identified sponsor means whosoever is putting out the advertising, must tell audience who they are. Legally, a sponsor must identify herself as sponsor of an advertisement. This equally establishes the truthfulness of the message unlike propaganda which is another promotion with

anonymous or hidden sponsors. A company sponsors advertising in order to convince and influence people to buy its products.
Obviously the ultimate function of advertisement is to help produce sales. This is the feedback expected from the consumer. The advertising message is put into a symbolic form such as pictures, written words or spoken words. The message is then transmitted to the consumer via means of advertisement like television, radio, newspaper and so on. But, advertisement cannot produce immediate sales; sales may come in the long run, since consumers normally don't switch from uninterested individuals to convinced consumers in one instant move or day (Richard F.T., 1996).

The model shows that advertising agencies are paid by the company to advertise the company's product or services through various media based on the target consumers. Then consumers will be aware, informed, and get knowledge about the product and these enables them to easily make the decision to buy or not buy. The advertisement message could also remind and convince the consumers in mass and these will result in increased purchase and market share. With increased purchase and market share, sales performance of the company will increase.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1. Introduction

In a research, it is of high significance that the information provided meets the purpose and should be reliable too. This is a function of data collection adopted. This chapter focuses on research design, source and method of data collection adopted and model specification and development for the study.

3.2. Research design

The research uses explorative research design in order to gain insights into the subject studied. It is meant to assess the importance attached to advertisement by Soft drink companies, factors affecting the company's decision to use advertising, relationship between advertising and company's performance in terms of sales volume, and justification of advertising expenditure.

This work has utilized correlation and regression statistical analysis to identify the relationship and the impact of the independent variable on dependent variable respectively. According to Mark *e tal* (2009), correlation is referred to when a change in one variable is accompanied by a change in another variable, but it is not clear which variable caused the other to change. The choice of the design is necessitated by the fact that the study sought to establish relationship among variables. Since the study specifically intended to establish the effect of advertising costs on the sales volume of MOHA Soft Drink Industries S.C., regression statistical tools will also be used. Hence, the appropriate design for the research is explorative design which could be expressed by using the correlation and regression statistical analysis to see both the relationship and the effect one variable (independent variable avers cost) has on the other variable (dependent variable sales volume). The variables used for this study were advertising expenditure as independent variable and total sales of the company as dependent variable.

3.3. Source and Method of Data Collection

Data for the study was collected purely through secondary sources by extracting the relevant data from the annual report and accounts of MOHA Soft Drink Industries S.C. from 2000 to 2015. The study therefore used annual figures for advertising expenses available in the annual report and accounts of the companies from 2000 to 2015 as a measure of advertising.

Further, data relating to the annual total sales volume of the company for the period of the study were also collected from the same annual report and accounts.

3.4. Techniques of Data Analysis

Once data is collected, it will be necessary to employ statistical techniques to analyze the information. As this study is quantitative in nature, data will be entered and analyzed using EVIEWS software. Correlation and regression statistical analysis will be used to measure the relationship among variables and to measure the effect of independent variables on dependent variable respectively.

Analysis was started first by establishing the stationarity of the variables used for the study. Given the fact that the variables employed for the study were collected over time, there was need to establish the stationarity of such variables to avoid the results being spurious. To address this, this study employed the Augmented Dickey-Fuller (ADF) test to establish the absence of unit root in the time series of advertising cost and sales volume of the company.

The null hypothesis for the presence of a unit root in the series was rejected if the Dickey-Fuller statistic was less than the critical value at a given alpha level and the alternate hypothesis of a stationarity time series was accepted. The reverse is true if the test statistic is greater than the critical value.

The study employed descriptive statistics and Ordinary Least Squares (OLS) simple regression analysis to ascertain the effect of advertising cost on the sales volume of the company. In order to ensure that none of the assumptions guiding OLS estimation was not violated, the residuals of the regression model was subjected to the Breusch-Godfrey serial correlation test with the help of **E-views version 9** in order to ensure that there was no serial dependence among the variables of the study. The significance of the t-statistic at a given critical value indicated the presence of serial correlation in the residuals, and vice versa. Further, the Breusch-Pegan-Godfrey test for heteroskedasticity was conducted on the residuals of the series to ensure that there were no traces of heteroskedasticity in the data series. The null hypothesis is that variance of the Residual is homoscedastic. Hence, the significance of the test indicates that the residual is heteroskedastic which is bad sign for the model.

The student't' test is used to test hypothesis of the study because it assists us to determine whether sales volume improved in the company due to advertising. The correlation analysis using ordinary least square (OLS) was also used to test hypothesis because it helps us to determine whether there is any relationship between advertising and sales volume.

3.5. Model Specification

The model of the study is ascertained on the simple linear relationship that advertising should have some sort of effect on sales volume. This relationship could be modeled below:

$$TS_t = \alpha + \beta AC_t + \epsilon_t$$

Where TS_t is total sales volume of the company at time t, α and β are the intercept and coefficients to be estimated, AC_t is advertising cost of the company at time t and ϵ_t is the random disturbance term of the model. Other variables which are not included in this model are explained by the random disturbance term.

Thus, hypothesis of the study would be tested using this equation.

Table: 3.1. Variable measurement

Variable Name	Variable Description
Advertising (independent variable)	Measured by annual total cost of advertising by the company
Total Sales (dependent variable)	Measured by annual total sales volume reported by the company
Error term (ϵ_t)	Measures the effect of all variables on sales other than variables included in the model

Source: Researcher's modeling of variables

The table above shows the advertising costs and total sales volume of MOHA Soft Drink Industries S.C. The values for these variables were used to measure the impact of advertising cost on the sales volume of the company for the period specified above.

CHAPTER FOUR: DATA PRESENTATION AND ANALYSIS

4.1. Introduction

In this chapter, data sourced from the annual financial reports of MOHA Soft Drink Industries S.C. were presented. Stationarity of the data is proved by using unit root test of each variable and regression and correlation statistical analysis was performed by using E-views Software to test the hypothesis of the study. Finally, the findings in this study were discussed in line with the regression results.

4.2. Forms of Advertising in the company

MOHA Soft Drink Industries S.C. uses almost all forms of advertising median; Visual media, Audio and print media.

Table: 4.1. Advert Media used by the company

Media	%age of the cost for advertising
TV	35
Radio	25
Newspapers and magazines	5
Billboards, brochures	20
Others	15

Source: Company's annual report

From the above table, about 35% of the company's advertisement expenditure goes to TV advertising. The next is radio advertising which is about 25% of total annual advertisement expenditure of the company. The preparation and use of Billboards and the production and distribution of brochures costs the company about 20% of the total annual advert expenditure.

The highest percentage share for TV advertising is due the expensiveness of TV advertising and it is not because the company uses more often this media.

4.3. Data Presentation

Table: 4.2. Annual Sales and Advert cost of MOHA Soft Drink Industries S.C.

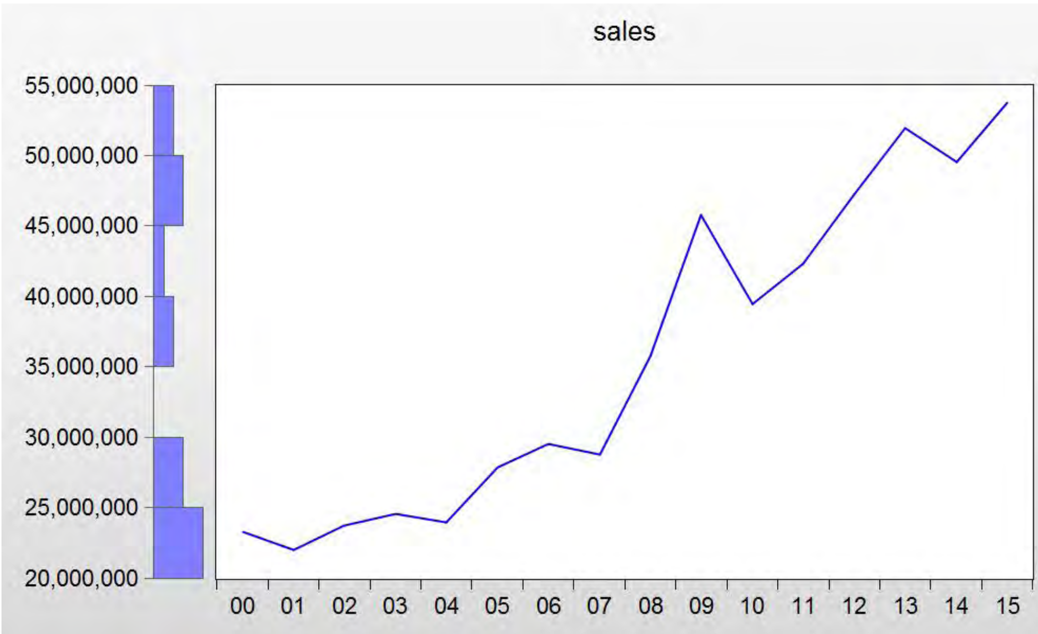
Year	Sales in Units	Advert in Birr
2000	23241000.00	215000.00
2001	21976000.00	225000.00
2002	23747000.00	213000.00
2003	24589000.00	245000.00
2004	23952000.00	295000.00
2005	27898000.00	352000.00
2006	29485000.00	465000.00
2007	28746000.00	525000.00
2008	35747000.00	539000.00
2009	45789200.00	495000.00
2010	39458000.00	475000.00
2011	42329000.00	565000.00
2012	47258000.00	750000.00
2013	51914000.00	825000.00
2014	49517000.00	865000.00
2015	53749000.00	915000.00

Source: Extracted from Annual Financial Reports of the Company

The table above shows the data collected for annual advert cost and Total Sales of MOHA Soft Drinks Industries S.C. from 2000 to 2015. Annual sales are obtained by summing up the monthly sales report of the company and advertising cost is annual advertisement cost report of the company.

4.4. Sales and Advert Trends in the Company

Figure: 4.1. Sales Trends of the Company

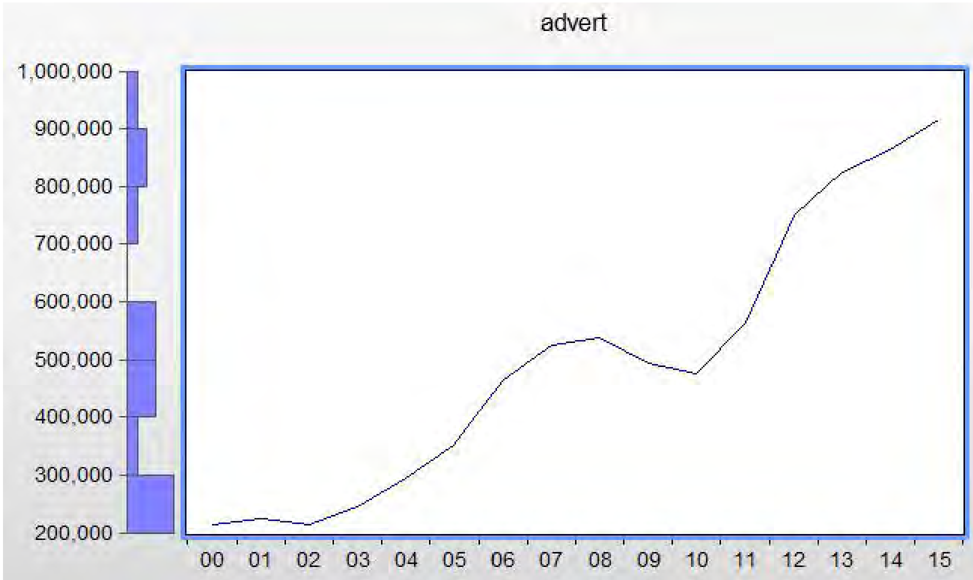


Source: E-views 9, Output

The curve of sales volume shown in the above Figure tells that, sales of the company increases across the period specified. At the introduction (year2000) of the curve total sales of the company about 23.24 million and shows slight decline in the next year which is about 21.98 million. Then after, sales of the company increases slightly up to the year 2006. After the year 2067, sales volume shows sharp increase till2008 and shows slight decline the following two years.

In general, sales volume of the company shows increment from time to time with some falls across the years specified.

Figure: 4.2. Advert Cost Trends of the Company



Source: E-views 9 Output, 2017

As the above figure shows, like sales of the company, advertisement expenditure of the company shows increment across the years the study covers.

4.5. Descriptive Statistics of the Variables

Table: 4.3.Summary of Descriptive Statistics of the Variables

	Total Sales	Advert cost
Mean	35587200.00	497750.00
Median	32616000.00	485000.00
Maximum	53749000.00	915000.00
Minimum	21976000.00	213000.00
Std.Dev.	11455969.00	238035.40
Skewness	0.279	0.409
Kurtosis	1.51	1.97
Observations	16	16

Source: E-views 9 Output, 2017

The basic characteristics of the variables under study were shown in the table above in form of descriptive statistic. The average expenditure on advert was Birr 497,950.00. Similarly, the average annual sales volume of the company is Birr 35,587,200.00. On the other hand, the minimum value for the advert was Birr 213,000.00 in the year 2000 and its maximum value stood at Birr 915,000.00 in the year 2015. The minimum value for the sales volume of the company was Birr 21,976,000.00 and its corresponding maximum value was Birr 53,749,000.00 for the period under study. The standard deviation of the variables is 11455969.00 and 238035.40 for sales and advertising costs respectively. It is an indication of the variables deviation from their respective mean.

In terms of skewness, the companies have portrayed the values of 0.279 and 0.409 for sales volume and advert cost respectively and were positively skewed. This implied that the variables exhibited a normal distribution with a right long tail. Further, in terms of kurtosis, advert cost has a value of 1.97 and sales volume has a value of 1.51, implying that the series nearly exhibited normal distribution. For perfect normal distribution, skewness and kurtosis are zero and three respectively. The study has 16 numbers of observations.

4.6. Stationarity Test

Table: 4.4. Regression Results for Stationarity Test

Variables	ADF	t-statistics at 5%	p-value	Decision
Total sales	-4.594682	-3.119910	0.0040	Stationary
Advert cost 1D	-3.694343	-3.119910	0.0187	Stationary

Source: E-views 9 output, 2017

The table above has shown the summary results of the stationarity test for sales volume and advertising cost of MOHA Soft Drinks Industries S.C. for the period under the study. As indicated in the table, the values of Augmented Dickey-Fuller test statistics are greater than their corresponding t-statistics at 5% level of significance for both variables. This implied that the data are stationary and using them would not lead to a spurious regression results. Another way of proving the stationarity nature of the variables is by looking at the P-values of the regression result. With this, the probability values of the respective variables which are less than the 5% test criteria imply that the data are stationary.

Besides stationarity test, we have performed auto correlation test and hetroscedasticity test to prove that residuals are not auto correlated and their variance is constant across time. With this, the model will be good regression model.

Table: 4.5. Regression Test Result for Serial correlation

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	2.188233	Prob. F(2,12)	0.1548
Obs*R-squared	4.275859	Prob. Chi-Square(2)	0.1179

Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 05/26/17 Time: 22:20
Sample: 2000 2015
Included observations: 16
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-539350.8	2410986.	-0.223706	0.8267
ADVERT	1.179525	4.449770	0.265076	0.7954
RESID(-1)	0.564134	0.273722	2.060979	0.0617
RESID(-2)	-0.346927	0.287929	-1.204906	0.2515

R-squared	0.267241	Mean dependent var	-6.26E-10
Adjusted R-squared	0.084051	S.D. dependent var	4116222.
S.E. of regression	3939439.	Akaike info criterion	33.42329
Sum squared resid	1.86E+14	Schwarz criterion	33.61644
Log likelihood	-263.3863	Hannan-Quinn criter.	33.43318
F-statistic	1.458822	Durbin-Watson stat	2.103933
Prob(F-statistic)	0.274994		

Source: E-views output, 2017

To prove whether the residuals are serially correlated or not the above Breush-Godfrey Serial Correlation LM Test is performed. The null hypothesis for the test is that residuals are not serially correlated. Hence, by looking at the observed R-squared of the above test result, the p-value associated with it is 0.1179(11.79%) which is greater than 5% significant level. Therefore, we can’t reject the null hypothesis and the residuals are not serially correlated. That is good sign for our model.

Table: 4.6. Test for Hetroskedasticity

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.007479	Prob. F(1,14)	0.9323
Obs*R-squared	0.008543	Prob. Chi-Square(1)	0.9264
Scaled explained SS	0.010444	Prob. Chi-Square(1)	0.9186

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 05/26/17 Time: 22:35
Sample: 2000 2015
Included observations: 16

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.45E+13	1.80E+13	0.801546	0.4362
ADVERT	2845850.	32906469	0.086483	0.9323

R-squared	0.000534	Mean dependent var	1.59E+13
Adjusted R-squared	-0.070856	S.D. dependent var	2.93E+13
S.E. of regression	3.03E+13	Akaike info criterion	65.04111
Sum squared resid	1.29E+28	Schwarz criterion	65.13768
Log likelihood	-518.3288	Hannan-Quinn criter.	65.04605
F-statistic	0.007479	Durbin-Watson stat	1.878788
Prob(F-statistic)	0.932307		

Source: E-views 9 output, 2017

For the above hetroskedasticity test, Breush-Pegan-Godfrey test is performed. Here the null hypothesis is that residuals are homoscedastic meaning it has constant variance. From the table above, the p-value for observed R-squared is 0.9264(92.64%) and it is above 5% significant level. So the residuals are homoscedastic and it is good sign for our model. After we see the property of our data and model, we go for test of our hypothesis in the following section.

4.7. Test of Hypothesis

After the data are established and the model is formulated the next is to test the hypothesis of the study which is the core purpose of the finding under the case. Therefore, test of the hypothesis is performed by **E-views 9 software** and the regression result is tabulated in the following section.

4.7.1. Test of Null Hypothesis

The result of the impact of advertisement cost on sales volume of MOHA Soft Drink Industries S.C. is presented below with E-views 9 regression result at 5% confidence interval.

Table: 4.7. Regression Results for the Test of null Hypothesis

Dependent Variable: SALES
Method: Least Squares
Date: 05/25/17 Time: 13:47
Sample: 2000 2015
Included observations: 16

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	13231666	2535047.	5.219496	0.0001
ADVERT	44.91318	4.621609	9.718082	0.0000

R-squared	0.870898	Mean dependent var	35587200
Adjusted R-squared	0.861676	S.D. dependent var	11455969
S.E. of regression	4260695.	Akaike info criterion	33.48423
Sum squared resid	2.54E+14	Schwarz criterion	33.58080
Log likelihood	-265.8739	Hannan-Quinn criter.	33.48918
F-statistic	94.44112	Durbin-Watson stat	1.154303
Prob(F-statistic)	0.000000		

Source: E-views 9 Output, 2017

The table above displayed the regression result of Ordinary Least Square (OLS) conducted on variables under study. The coefficient of the determination for the study R-squared is 0.87 i.e. 87% while it's Adjusted R-squared is 0.861 i.e.86.10%. This implied that the level of the relationship that exist between sales volume and advertisement cost for the company is accounted up to 86% and the remaining 14% is explained by other factors not explicitly captured by the model.

Null hypothesis stated that advertisement has no statistically significant impact on sales volume of MOHA Soft Drink Industries S.C. Thus, the coefficient of advertising expenditure stood at 44.913 indicating a positive impact it has with the sales volume of the company. Since the p-value of 0.0000 is less than 0.05% level of significance, we rejected the null hypothesis and concluded that there is enough evidence to suggest statistically significant impact of advertising costs on the sales volume of the company under study. Hence, at 0.05% level of significance, the result showed statistically significant impact advertising costs have on the sales volume of company. We therefore concluded that the model is fit. We are 95% confidence that the slope for advert cost is somewhere between 35.00 and 54.83. In other words, it implied that we are 95% confidence that for every single unit increase in advert cost, the sales will increase between 35.00 and 54.83units (see appendix for confidence interval).

From the above regression result, our equation for total sales is given below:

$$TS_t = \alpha + \beta AC_t + \epsilon_t$$

Where, TS_t is Total sales at time **t**, AC_t is Advertising expenditure at time **t** and ϵ_t is the error term of the model. α is the intercept and β is coefficient of Advert cost. That is the degree by how much a unit change in advert cost affects the sales volume of the company. When we substitute with number from the above regression result we have the following equation:

$$TS_t = 13{,}231{,}666 + 44.91AC_t + \epsilon_t$$

- **Interpretation of regression equation**
  - **The intercept or the constant(α)**

The value of the constant in the above model equation 13,231,666 tells us that, without making an advertisement the company can sale its products up to 13, 231,666 units keeping other things remain unchanged.

- **The coefficient of the independent variable**

Keeping other things remain unchanged, unit increase in advertisement expense will increase total sales by about 44.91 units.

The error term explains the effect other variables not included on the model. Brand of the company, price, competition, and product quality can be the variables that might affect sales volume of the company. However, all these variables can be effective if the company thoroughly advertise its product.

Table: 4.8. Summary of Coefficient Confidence Interval

Coefficient Confidence Intervals
Date: 05/26/17 Time: 21:31
Sample: 2000 2015
Included observations: 16

		95% CI	
Variable	Coefficient	Low	High
C	13231666	7794531.	18668801
ADVERT	44.91318	35.00081	54.82554

Source: E-views 9 output, 2017

The above table shows the lower and upper bound of the coefficients in the model. The above regression output portrayed that the coefficient of the advert lies somewhere between 35.00 and 54.83.

a. Coefficient test

This is another way of checking the impact of independent variable advert cost on dependent variable sales volume. We perform the Wald Test-coefficient restrictions by using E-views 9 software.

Table: 4.9. Summary Result for Coefficient Diagnostic

Wald Test:
Equation: Untitled

Test Statistic	Value	df	Probability
t-statistic	9.718082	14	0.0000
F-statistic	94.44112	(1, 14)	0.0000
Chi-square	94.44112	1	0.0000

Null Hypothesis: C(2)=0
Null Hypothesis Summary:

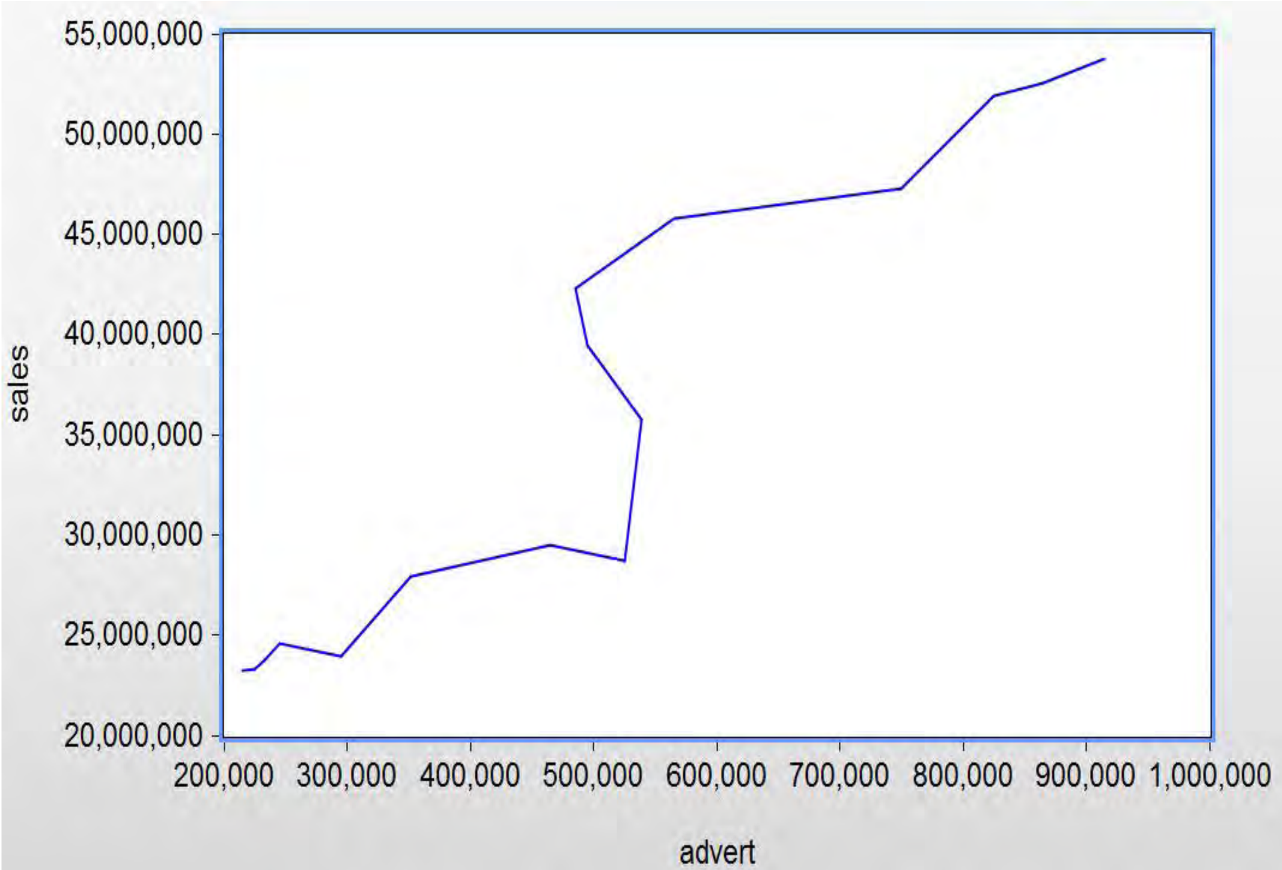
Normalized Restriction (= 0)	Value	Std. Err.
C(2)	44.91318	4.621609

Restrictions are linear in coefficients.

Source: E-views 9 output, 2017

The above table portrayed the E-views test result for coefficient of independent variable advert cost. Here, the null hypothesis is that the coefficient is restricted to zero($C_{(2)}$ =0). However, the test result for all test statistics is significant to reject the null hypothesis. That is, the p-value for t-test, f-test and chi-square test is 0.0000 which is less than 0.05(5%) level of significance. Thus, the coefficient of the variable is different from zero and this justifies that it has some sort of impact on the dependent variable sales volume of the company. Therefore, the null hypothesis is rejected again with this test result and the alternative hypothesis is considered.

Figure: 4.3.The way advertising expenditure affects sales volume over time



Source: E-views 9 output, 2017

The above graph shows the response curve of the impact of advertising expenditure on the sales volume of MOHA Soft Drink Industries S.C. from 2000 to 2015. At the beginning of the curve, the effect is somehow smooth with positive effect, in the middle of the curve almost the same advertising budget takes sales up particularly between the years 2007 to 2010. Then curve shows smooth increment at the beginning rapid increment in the middle and smooth increment the end of the years under the study.

With this, expenditure on advertisement by the company has a positive impact on the total sales of the company. More or less the curve looks like an S-shaped response curve sales volume to advertising cost.

4.7.2. Correlation Result for the Variables

The relationship between advertisement cost and sales volume of the company is presented below using correlation coefficients.

Table: 4.10. Summary Results of the correlation between advert cost and sales volume of the company

Correlation result

	Sales	Advert cost
Sales	1.000000	0.933219
Advert cost	0.933219	1.000000

Source: E-views 9 output, 2017

The correlation result in the above table also shows strong and positive relationship between the variables. The E-views output in the above table shows positive and significant relationship between the two variables with 0.933219 correlation coefficients. Thus, we reject the null hypothesis and it implies that there is the association between the variables.

4.8. Discussion of the Finding

The data on sales and advertising cost is used in testing the hypothesis of the study by computing the t-value using E-views 9 Software. Based on the hypothesis set which was to examine the improvement in sales as a result of advertising, OLS regression and correlation analysis is performed.

In this study, the results of the regression for the hypothesis test revealed that there is a statistically significant impact that advertising expenditure have on sales volume of the company under study. The coefficient of determination represented by r-squared is 86% for the firms explaining that the variation in sales volume was signified by advertising up to 86% for the firms while the remaining 14% is determined by other factors which were not captured by the model. The p-value of 0.0000 is less than the 0.05% level of significance. Thus, the null hypothesis which stated that advertising expenditure has no statistically significant impact on sales volume of the company under study is rejected. We are 95% confidence that the slope for advert cost is somewhere between 35.00 and 54.82. In other words, we are 95% confidence that for every single unit increase in advert cost, the sales volume increase between 54.00and 54.84 (see appendix).

The results were consistent with prior findings of Comanor and Wilson (1967), Chicago data; Shephard(1972), Akeem (2011), Nigeria data; Akanbi & Adeyeye (2011), Nigeria data who found significant relationship between advertising costs and the sales volume of the various companies. Thus, the implication of this finding is that advertising cost had made a significant impact on the sales revenue of the company under study for the period of the study.

The study reveals that the calculated value of coefficient of correlation permits positive relationship between sales and advertisement expenditure of MOHA Soft Drinks Industries S.C. over the increase of time. From the literature and analysis of this study it is concluded that there is a significant relationship between sales performance and advertisement expenditure of the company. The coefficient of correlation between the two variables is about 0.93 which shows statistically significant relationship between them. The result confirmed that a positive and significant relationship existed between advertising expenditure and sales volume. The positive relationship showed that an increase in advertising can lead to an increase in sales. Based on the result, it is clear that advertisement was significant. This study also shows that advertisement is significant in explaining sales.

There is no doubt that as the product is sold, the overall company's performance and productivity increases. Advertisement expenses are one of the various factors, though crucial, which determine sales of any company through increasing popularity of products or services among customers. Any change in the company, it might be price discount, new product development, or low competition, will bring a good result for the company with respect to increasing sales volume and market share if it is known to the target consumers at large. This can only be possible with the help of advertising and this is why it has such strong impact on sales of the company.

The findings have far reaching implications for the promotional policies of the manufacturing companies particularly for those companies in Ethiopia, where there is no such further investigation while spending a large sum of capital on promotional activities. In the data analysis and presentation above, the response curve sales volume to advertisement expenditure somehow looks like S-shape curve.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION

5.1. Summary

Advertising supports the overall marketing in selling the product by making the company and product known to potential buyer. Effective advertising makes the entire marketing strategy more efficient, often lowering total marketing and selling costs. In general, advertising can provide information on the company or its product awareness more efficiently than can personal selling. Unlike personal selling, it is mass communication to wider audience and important to persuade many consumers at a time.

This study examined the effect of advertising on the sales volume of MOHA Soft Drink Industries S.C. The study commenced by establishing the gap that necessitates this study. It was noted in the statement of the problem that though the advertising budget of the companies have grown over the years to constitute a reasonable portion of expenditure, little research attention has been paid to the effect of such advertising costs on the sales volume of the company under study in particular and in Ethiopia in general. Nowadays companies are spending huge capital to advertise their product in Ethiopia. However, a minimal attention is given to its effect on total sales and this why no empirical literature concerning its effect is found. So the study is to see its effect with our company in our country and it is to pave the way for other researchers.

Literatures were reviewed in chapter two of this study. Both theoretical and empirical literature review were assessed. Chapter three discussed the methodology adopted for this study. The research design used in this study is the explorative research design which allowed for the examination of the impact of advert cost on sales volume of the company under study. In chapter four, data were presented, analyzed and interpreted. Hypothesis one tested for this study found that advert cost has statistically significant impact on sales volume of the company under study. The test of hypothesis two for the study found a significant relationship between advertising costs and sales volume of the companies under study. Here correlation result has been seen and it shows positive correlation between the variables.

In chapter five of this study, summary was made and the study concluded that advertising has a paramount impact to influence sales volume of the company. Finally, it has made recommendation to management of the companies and the researchers so that they will give due attention on the subject.

5.2. Conclusion

Advertising policy is one of the inevitable laws of success in an organization. Advertising is a persuasive communication which attempted to change or reinforce one's prior attitude and it is basically done not only to inform customers about products, rather it is a process which further influences and persuades customers to purchase. This study sought to establish the extent to which advertising affect the sales volume of the company under study.

Test of hypothesis of the study revealed a statistically significant effect of advertising costs on the sales volume of the company. It could be concluded that the amount of money committed into advertising budgets of the company will result in increased sales volume for the company. This implies that the amount of resources committed to advertising was sufficient enough to stimulate increased sales volume of the company over the period. So the management of the company should give due attention for advertising budget and choice of media since the influence of adverting is enormous in increasing total sales.

The correlation result also indicated that the significant relationship between advertising costs and sales volume of the company. The relationship is positive and statistically significant. Besides, coefficient Diagnostic test for the independent variable showed the positive impact it has on the sales volume of the company.

The study was based on the secondary data collected for the advertising expenditure and sales volume of MOHA Soft Drink Industries S.C. the period of the study was from 2000 to 2015, both years inclusive. It could be taken into consideration that advertising expenditure has paramount impact on the total sales of the company as it was investigated by many literatures and this finding. Thus, the management needs to consider this element of business activities while formulating their strategies.

It could be concluded by stating that advertising is considered as one of the most important medium of communication influencing the company's performance in more than one ways if properly utilized.

5.3. Recommendation

Based on the literature reviewed and the finding of this study the following recommendations are put forward:

- The management should emphasize on advertising as an important and strategic policy aimed at increasing sales volume of the company while formulating creative advertising marketing strategies relating to the product promotion policy. This could be achieved through the commitment of more financial resources and the enhancement of advertisement budgets from time to time in tandem with economic realities.
- Management should use the right medium of advertising so that the message would reach the target consumers with the right products. By doing so, a large number of consumers would be reached. This could help to increase the support of the buyers leading to improving the sales volume of the company.
- The study recommended that there is the strong need for the management to review their existing advertising policy on their products so that multiple approaches could be used in a cost effective manner to reach out to target consumers.
- Consistent and up-to-date training on product information should be given to the advertising agency so that they will have the current knowledge and skills to handle the adverts and also to ensure that product information is being emphasized so as to enlighten the customers
- Finally, the company should embark on companywide awareness of advertising through seminar and workshops to educate and intimate all categories of the employees on the strategy. Top management should be involved in the continuous evaluation and monitoring of advertising to ensure that the goals and objectives set are achieved and appropriate corrective actions are taken in the event of deficiencies. The company should harmonize all departments so as to realize the goals and objectives of advertising.

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Appendixes

Appendix: 1. Annual Sales Report of MOHA Soft Drink Industries S.C.

MOHA SOFT DRINKS INDUSTRY S.C.								
Document No: FO/SAL/		Tittle:	Annual Sales Report					
Date Issued:								
Prepared by: Sales		Approved by:	Sales & Marketing Manager					
	Year							
	2000	2001	2002	2003	2004	2005	2006	2007
Sales Area	sales	sales	sales	sales	sales	sales	sales	sales
Addis Ababa	14652910	12086800	12585910	13032170	12694560	14785940	15627050	15235380
Upcountry	7803090	8131120	9736270	10081490	9820320	11438180	12088850	11785860
Agents	785000	1758080	1424820	1475340	1437120	1673880	1769100	1724760
Total sales	23241000	21976000	23747000	24589000	23952000	27898000	29485000	28746000

MOHA SOFT DRINKS INDUSTRY S.C.								
Document No: FO/SAL/		Tittle:	Annual Sales Report					
Date Issued:								
Prepared by: Sales		Approved by:	Sales & Marketing Manager					
	Year							
	2008	2009	2010	2011	2012	2013	2014	2015
Sales Area	sales	sales	sales	sales	sales	sales	sales	sales
Addis Ababa	18945910	24268276	20912740	22434370	25046740	27514420	26244010	28486970
Upcountry	14656270	18773572	16177780	17354890	19375780	21284740	20301970	22037090
Agents	2144820	2747352	2367480	2539740	2835480	3114840	2971020	3224940
Total sales	35747000	45789200	39458000	42329000	47258000	51914000	49517000	53749000

Source: Sales report of the company

Appendix: 2. Annual Advertising cost of MOHA Soft Drink Industries S.C.

MOHA SOFT DRINKS INDUSTRY S.C.								
Document No:		Title:	Annual Advertising cost Report					
Prepared by:		Approved by:	Sales & Marketing Manager					
	Year							
	2000	***2001***	***2002***	***2003***	***2004***	***2005***	***2006***	***2007***
Media	advert cost	advert cost	advert cost	advert cost	advert cost	advert cost	advert cost	advert cost
TV	75250	78750	74550	90650	115050	116160	167400	194250
Radio	53750	56250	53250	56350	67850	91520	125550	136500
others	86000	90000	85200	98000	112100	144320	172050	194250
Total sales	**215000**	**225000**	**213000**	**245000**	**295000**	**352000**	**465000**	**525000**

MOHA SOFT DRINKS INDUSTRY S.C.								
Document No:		Title:	Annual Advertising cost Report					
Prepared by:		Approved by:	Sales & Marketing Manager					
	Year							
	2008	***2009***	***2010***	***2011***	***2012***	***2013***	***2014***	***2015***
Media	advert cost	advert cost	advert cost	advert cost	advert cost	advert cost	advert cost	advert cost
TV	167090	158400	152000	220350	307500	346500	354650	366000
Radio	172480	163350	147250	169500	225000	255750	268150	283650
others	199430	173250	175750	175150	217500	222750	242200	265350
Total sales	**539000**	**495000**	**475000**	**565000**	**750000**	**825000**	**865000**	**915000**

Source: Annual financial and sales report of the Company

Appendix: 3.Augmented Dickey Fuller Unit root test on sales

Null Hypothesis: D(SALES) has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.594682	0.0040
Test critical values:	1% level	-4.057910	
	5% level	-3.119910	
	10% level	-2.701103	

*MacKinnon (1996) one-sided p-values.
Warning: Probabilities and critical values calculated for 20 observations and may not be accurate for a sample size of 13

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(SALES,2)
Method: Least Squares
Date: 05/24/17 Time: 23:38
Sample (adjusted): 2003 2015
Included observations: 13 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(SALES(-1))	-1.952371	0.424920	-4.594682	0.0010
D(SALES(-1),2)	0.541884	0.272841	1.986076	0.0751
C	4372667.	1397827.	3.128189	0.0107

R-squared	0.739972	Mean dependent var	189307.7
Adjusted R-squared	0.687967	S.D. dependent var	6797593.
S.E. of regression	3797132.	Akaike info criterion	33.33656
Sum squared resid	1.44E+14	Schwarz criterion	33.46694
Log likelihood	-213.6877	Hannan-Quinn criter.	33.30977
F-statistic	14.22871	Durbin-Watson stat	2.048913
Prob(F-statistic)	0.001189		

Appendix: 4.Augmented Dickey Fuller Unit root test on advert cost

Null Hypothesis: D(ADVERT) has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.694343	0.0187
Test critical values:	1% level	-4.057910	
	5% level	-3.119910	
	10% level	-2.701103	

*MacKinnon (1996) one-sided p-values.
Warning: Probabilities and critical values calculated for 20 observations
and may not be accurate for a sample size of 13

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(ADVERT,2)
Method: Least Squares
Date: 05/24/17 Time: 23:24
Sample (adjusted): 2003 2015
Included observations: 13 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(ADVERT(-1))	-0.922412	0.249682	-3.694343	0.0041
D(ADVERT(-1),2)	0.592296	0.235805	2.511809	0.0308
C	48813.44	17296.17	2.822210	0.0181

R-squared	0.586023	Mean dependent var	4769.231
Adjusted R-squared	0.503227	S.D. dependent var	63616.24
S.E. of regression	44838.07	Akaike info criterion	24.45868
Sum squared resid	2.01E+10	Schwarz criterion	24.58905
Log likelihood	-155.9814	Hannan-Quinn criter.	24.43188
F-statistic	7.077952	Durbin-Watson stat	2.196353
Prob(F-statistic)	0.012159		

Appendix: 5.Regression of advert cost and sales volume of the Company

Dependent Variable: SALES
Method: Least Squares
Date: 05/25/17 Time: 13:47
Sample: 2000 2015
Included observations: 16

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	13231666	2535047.	5.219496	0.0001
ADVERT	44.91318	4.621609	9.718082	0.0000

R-squared	0.870898	Mean dependent var	35587200
Adjusted R-squared	0.861676	S.D. dependent var	11455969
S.E. of regression	4260695.	Akaike info criterion	33.48423
Sum squared resid	2.54E+14	Schwarz criterion	33.58080
Log likelihood	-265.8739	Hannan-Quinn criter.	33.48918
F-statistic	94.44112	Durbin-Watson stat	1.154303
Prob(F-statistic)	0.000000		

Appendix: 6.Wald Test-Coefficient Diagnostic

Wald Test:
Equation: Untitled

Test Statistic	Value	df	Probability
t-statistic	9.718082	14	0.0000
F-statistic	94.44112	(1, 14)	0.0000
Chi-square	94.44112	1	0.0000

Null Hypothesis: C(2)=0
Null Hypothesis Summary:

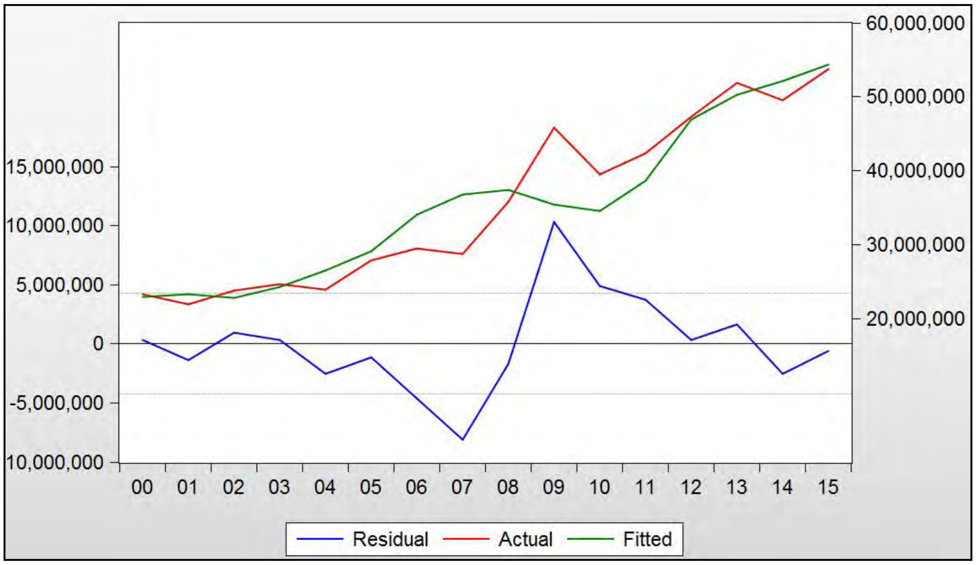
Normalized Restriction (= 0)	Value	Std. Err.
C(2)	44.91318	4.621609

Restrictions are linear in coefficients.

Appendix: 7.Correlation Variables Result

	ADVERT	SALES
ADVERT	1.000000	0.933219
SALES	0.933219	1.000000

Appendix: 8. Actual, Fitted and Residual Graph

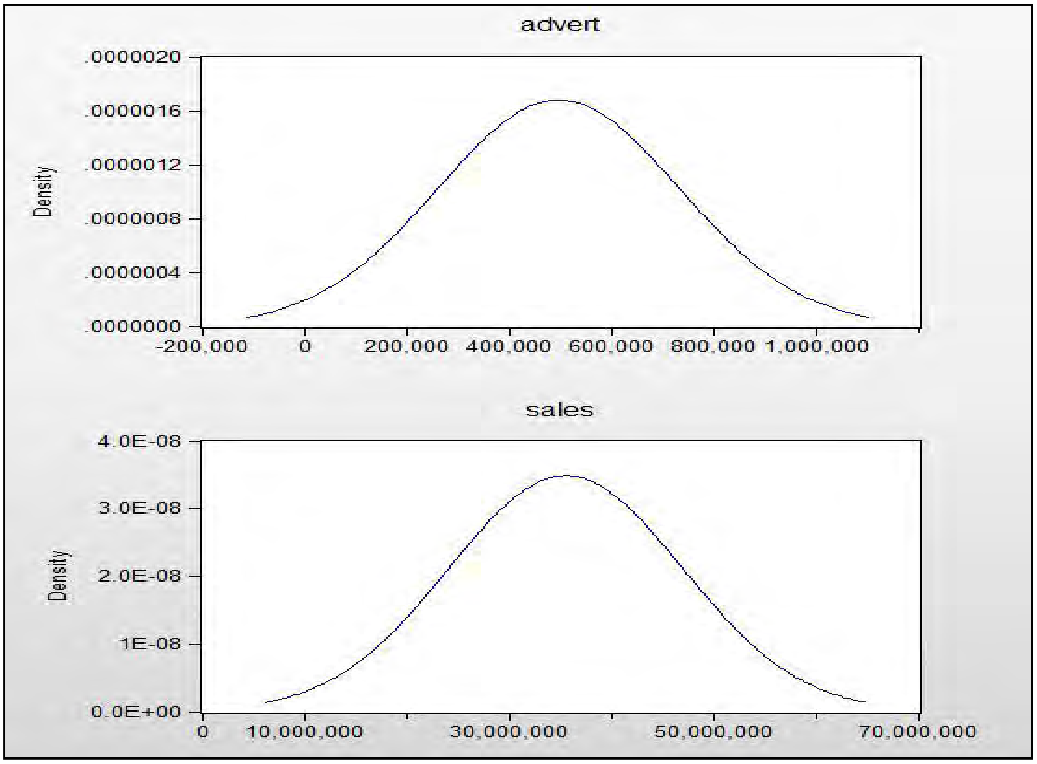


Appendix: 9.Confidence Interval

Coefficient Confidence Intervals
Date: 05/26/17 Time: 21:31
Sample: 2000 2015
Included observations: 16

Variable	Coefficient	95% CI Low	95% CI High
C	13231666	7794531.	18668801
ADVERT	44.91318	35.00081	54.82554

Appendix: 10. Theoretical Distribution of the Variables



Appendix: 11. Descriptive Statistics of the Variables

	ADVERT	SALES
Mean	497750.0	35587200
Median	485000.0	32616000
Maximum	915000.0	53749000
Minimum	213000.0	21976000
Std. Dev.	238035.4	11455969
Skewness	0.408696	0.278929
Kurtosis	1.966151	1.512857
Jarque-Bera	1.157982	1.681866
Probability	0.560464	0.431308
Sum	7964000.	5.69E+08
Sum Sq. Dev.	8.50E+11	1.97E+15
Observations	16	16