

ISSN 2310-6956

**Annual  
Research Journal  
Gidroshia  
Volume 1 No.1, 2013**



**Editor: *Idrees Waris***

# **UNIVERSITY OF TURBAT(KECH) BALOCHISTAN**

**Published annually by the  
University of Turbat, Balochistan-Pakistan.**

**@ University of Turbat 2013-1**

**Subscription rate (per annum) in Pakistan:**

**Institutions: Rs. 500/-**

**Individuals: Rs. 300/-**

**For the other countries:**

**Institutions: US\$ 50**

**Individuals: US\$ 30**

**Contact:**

**Annual Research Journal "Gidroshia"**

**University of Turbat Balochistan-Pakistan.**

**Tel: (92) (081) 9211255**

**Facsimile: (92) (081) 9211255**

**E-mail: [gidroshia@uot.edu.pk](mailto:gidroshia@uot.edu.pk)  
[idressbaloch@yahoo.co.uk](mailto:idressbaloch@yahoo.co.uk)**

**Website: [www.uot.edu.pk](http://www.uot.edu.pk)**

## **Guidelines/Parameters for the Contributors:**

Following are the Guidelines/Parameters for the scholars/researchers contributing articles to the annual research journal of University of Turbat “GIDROSHIA” **ISSN 2310-6956**”.

- The article should be in a ready to print form
- Authors are entitled to ten free off-prints and a copy of the issue in which their article is published.
- The articles should accompany a soft copy as well; to be sent through email preferably in PDF file format.
- Articles must focus on latest researches made in different fields/areas i.e. arts and crafts, architecture, archaeology, literature, language, economy, management, heritage and culture, politics, media, history etc. relevant to Balochistan.
- Any queries regarding the publication or acceptance of the article can be sought at the given address:

**Editor annual research journal “GIDROSHIA”, University of Turbat-Balochistan, Pakistan. [gidroshia@uot.edu.pk](mailto:gidroshia@uot.edu.pk) and [idressbaloch@yahoo.co.uk](mailto:idressbaloch@yahoo.co.uk)**

## **Style**

- The title should appear at the middle position of the first page
- The brief title (5 to 7 words) with author’s name also appearing in the top-left header position in the rest of the pages (running head).
- All authors’ full name and affiliations should also be explicit on the first page with the corresponding author’s postal and email addresses.
- The article should comprise an abstract, introduction (including review literature and rationale), results, discussion (including limitations and suggestions), and the references.
- The abstract should be of about 150-170 words.
- The article should be of maximum 4000 words in New Times Roman, font 12 with 1.5 line Spacing.
- Main heading should be bold with italic subheadings.
- Tables and figures should be in a separate file, in a ready to print form with sources given below the tables.
- All statistical symbols present in the article should be italic.
- References should be in author/date style throughout the text in the APA format

**ANNUAL RESEARCH JOURNAL “GIDROSHIA” ISSN 2310-6956”**  
**University of Turbat (Kech) Mekran-Pak Vol.1 No.1, 2013**

**EDITORIAL BOARD**

<b>Prof. Dr. Abdul Razzaq Sabir</b> Vice Chancellor UoT	Patron in chief
<b>Dr. Abdul Saboor</b> Pro Vice Chancellor UoT	Patron
<b>Idrees Waris</b> Lecturer Management Sciences UoT	Editor
<b>Dr.S.Badalkhan</b> Napples University Italy	Member
<b>Prof. Dr Carina Jehani</b> Uppsala University Sweden	Member
<b>Dr. Nek M. Buzdar</b> California State University USA	Member
<b>Prof. Dr. Saad Abudeyah</b> Department of Political Science University of Jordan-Amman	Member
<b>Dr. Gul Hasan</b> Pro Vice Chancellor LUWAMS Uthal	Member
<b>Prof. Dr. Akhtar Baloch</b> Chairman Dept: of Management Sciences University of Karachi	Member
<b>Dr. Jan Muhammad</b> Director IMS University of Balochistan Quetta	Member

**ANNUAL RESEARCH JOURNAL "GIDROSHIA" ISSN 2310-6956"**  
**University of Turbat (Kech) Mekran-Pak VOL.1 No.1, 2013**

**CONTENTS**

<b>Impact of lack of Finance on the Development of Date Processing Unit in Kech-Balochistan</b>	<b>09</b>
Abdul Majid Nasir & Musaddiq Rahim	
<b>Consumers' perception about Brand Equity of Carbonated drinks in Karachi</b>	<b>21</b>
Idrees Waris	
<b>Education and income Inequality: Evidence from Pakistan</b>	<b>37</b>
Muhammad Waris	
<b>The impact of Advertising on Brand Switching: Evidence from Hair Care Industry in Pakistan</b>	<b>53</b>
Shahzad	
<b>Impact of ERP on Roles of Management Accountant in Organizations</b>	<b>71</b>
Muhammad Azhar Sheikh, Jamal Abdul Nasir Ghulam Shabbir, & Dr. Naseebullah	
<b>Book Review</b>	<b>89</b>
<b>Shepherd of Koh-i-Sulaiman</b>	
by Nek M. Buzdar	
Reviewed by Dr. Abdul Razzaq Sabir	



**ANNUAL RESEARCH JOURNAL “GIDROSHIA” ISSN 2310-6956”,  
University of Turbat (Kech) Mekran-Pak Vol.1 No.1, 2013**

## **IMPACT OF LACK OF FINANCE ON THE DEVELOPMENT OF DATE PROCESSING UNIT IN KECH-BALUCHISTAN**

Abdul Majid Nasir<sup>1</sup>  
Musaddiq Rahim<sup>2</sup>

### **Abstract**

Date has a rich history on one side is a key economic ingredient for the people of Mekran on the other side. For the purpose of studying the issues of such a crucial economic factor, this study investigates the impact of lack of finance on the development of date processing unit in Kech. This study aims to find a way of development for the date processing unit in Kech. In this paper, the author conducted interviews and collected information from different intellectuals and the sampling design was disproportionate stratified random sampling. Moreover, on the basis of conclusion of this research it was found that lack of finance and lack of governmental support are the key factors which are constraints for development of date processing unit in Kech and the author found that the development of date processing unit helps the local economy and reduces poverty as well in terms of creating job opportunities.

**Key words: Date, Finance, Kech, Date Processing Unit**

### **Introduction:**

Date is considered as an important fruit for thousands of years, according to the SBI (2010) “Date fruit is considered as one of the oldest fruits found on

---

<sup>1</sup> Chairman Department of Commerce, University of Turbat

<sup>3</sup> Department of Management Sciences, University of Turbat

earth having the traces in prehistoric era Candolle (1806-1893), a noted French-Swiss botanist claimed that in pre-historic times date palm cultivation ranged from Senegal in the Western Africa to the basin of the River Indus in South Asia". Pakistan produces 5.5 lac tons dates annually, from these more than four lac tons produces in Balochistan. Mekran is most famous in the field of production of date. Mekran is producing a large amount of dates but unfortunately due to unavailability of date processing unit dates are being wasted in a huge amount.

### **Problem Statement:**

This study discusses the impact of lack of finance on the development of date processing unit in Kech. According to Kasanvi (2011) Iraq, Saudi Arabia, Egypt, and Iran dry the dates, pack the dates in date processing units and accordingly sell them in good prices. Date of Mekran is simply sold in raw form at a very cheap rate. It is not safe at all. This difference identifies the importance of date processing unit in a date owned region. Kech as being one of the oldest producers of date is still deprived of this facility. In this scenario this study is emphasizing on the key reasons for non-development of date processing unit.

### **Objectives**

This study aims at finding the hurdles for the development of date processing unit in Kech. The basic purpose of establishing date processing unit in Kech is to increase the national and international market of dates.

### **Significance of the Study:**

This study will help to provide a better platform to farmers for their dates. This study will help the management to establish a date processing unit in kech as it identifies the key constraints of the issue. There is not much competition in this field. Proper selling network, adequate publicity and consistency in quality shall be the important aspects.

Various researches have discussed the cold storage and date processing plant but there is no literature available about the impact of lack of finance on the development of date processing unit. So this study reveals the open area of discussion regarding the date processing unit.

## Literature review:

### History of date:

According to the SBI (2010) Not only in Pakistan date is also cultivated In Senegal, Mauritania, Mali, Nigeria, Libya, Egypt, Morocco, Sudan, Saudi Arabs, UAE, Oman, Chad, Iraq, and Tunisia. During the 12<sup>th</sup> to 15<sup>th</sup> centuries Arabs spread dates into Spain and southern European countries.

Mostly dates are being produced in Muslim countries. During the holy month of Ramadan Muslims use dates a lot and also some other religious ceremonies. This fruit is mentioned 22 times in holy Quran. Date has lot of benefits due to which our holy prophet (PBUH) liked it lot.

### Global Dates Production

According to SBI (2010) globally dates production is increases from 1.85 million tons in 1965 to 7 million tons in 2005-6. Moreover, the largest date growing countries are expected to cross the production of dare 7.5 million and these largest growing countries are Kingdom of Saudi Arabia, United Arab Emirates, Iran, Iraq, Tunisia, Algeria, Sudan, Oman, the USA and Israel.

### Date production in Pakistan

Pakistan is in fifth position of Date production. Pakistan produces 550,000 to 650,000 tons per year and 90,000 hectors date are cultivated in Pakistan.

According to EPB (2002) annually Pakistan produces 538 thousand tons in which Balochistan contributes 404 thousand tons which constitute 77% of national production.

	Year	Production (Tons)
1	2004-05	622,100
2	2005-06	496,576
3	2006-07	426,265
4	2007-08	557,500

Source: ITC/Pakistan statistical year book 2008

### Date export from Pakistan:

According to SMEDA (2006) Pakistani dates are mostly considered as industrial and humble dates. And Pakistan is second exporter after Tunisia.

Pakistan exports dates to Bangladesh, India, USA, UK, Germany, Canada, UAE, Japan, South Africa, Australia and Saudi Arabia.

USA imported 1079 tons of fresh dates and 667 tons of dry dates. Bangladesh and India are good date importers of Pakistan. Dates are playing a good role to increase the GDP of Pakistan. According to Kasanvi (2011) Pakistan exported 83 thousand tons date and get Rs 40 crores.

### **Dates Import in Pakistan**

According to SMEDA (2006) in 2008 Pakistan imported US\$ 3.3 million fresh and dried dates from the different countries of the world. Pakistan imports dates from Iran, Iraq, Saudi Arabia, UAE, Qatar, Kuwait, China and Bahrain. These imported dates do not have any effect on local date prices, and the local people give more importance to local dates rather than imported dates.

### **Dates Processing Plant**

According to SBI (2010) Dates processing plant is necessary for the date sector which can be a positive impact on the date markets. Establishment of this plant will help the stakeholder to earn more money for their hard work and also they can facilitate the local market and for international consumption.

### **Major Issues in Current Practices**

According to SMEDA (2008) there are a lot of problems which are in the recent dates processing scene. The first major issue is that there are some people who are unaware about the processing unit and its benefits. Moreover they have not been provided with required infrastructure support. On the other hand the farmers try to get rid from dates early because of destruction due to rains or infestation and sell them to agents, middle men, and business entities.

### **Dry Date Making & the Monsoon**

According to SBI (2010) monsoon rains has a huge effect on the dates, to secure dates it is necessary to process it as fast as possible and get them in the markets, this is just because of unavailability of cold storage and processing facilities.

There is one big threat in the form of monsoon season which coincides with the harvesting season every year. Although, this threat looms over the heads

of stake holders every year, fortunately, such an occurrence is found to be every three to four years. However, whenever this phenomenon takes place, it creates lots of problems for the poor farmers in terms of loss of major portion of their ready crops. Rain water is regarded as the major source of decay of dates present on the palms or lying over a vast land for drying purposes. As a result of any such incident, the poor farmers have to face enormous financial losses which take them back by at least three years.

### **Dates in Mekran**

According to Bakhsh (2012) date forming is the source of income for the citizen of Mekran. During the summer, dates are ripe and farmers collect the dates in garden and sell them into market in different prices. In Balochistan 60 kinds of dates are found, among which the Mozathi and Begam jangi are famous because of their rich taste and color. It is bigger than the other dates. However, it is an irony that there is no date processing plant. Dates crop is not marketed properly due to which 70% of dates spoiled in garden.

Farmers collect dates, safe them into gardens and wait for the dealers. The farmers are not aware about the real prices, Date dealers get the benefits and set their own prices and from there date is shifted to the international market.

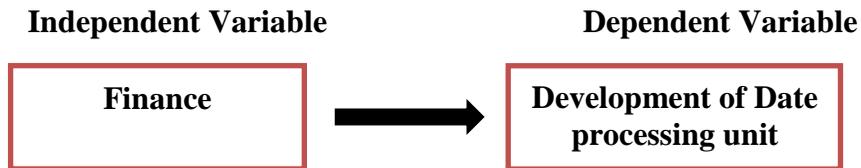
According to Kasanvi (2011) the demand of date is too much high in other countries. If the government establishes a date processing unit in kech, like other areas Mekran can export a good quality of date within the Pakistan and out of Pakistan as well. Due to unavailability of date processing unit in Kech, the farmer of kech are selling their date in a low amount but if we talk about other countries date has a good price but in Kech the price of one ton is RS800 but in Bangladesh and Malaysia date is 4000 to 6000 thousands rupees per ton.

According to Mehdi, Ekbal, Mustafa and Chudary (2009) farmers cannot do anything themselves they need the support of government, government should create a market in shape of date processing unit where farmer brings there product and they get a good return.

According to Arifeen (2010) the government launched a project for the date processing plant in District Khairpur with the help of Pakistan Horticulture Development and Export Company (PHDEC). The concerned minister provided Rs20 million for this project for the Export Development Fund. The

plant can process 3000 to 3500 tons of dates in one season. The rest of the money approximately Rs60 million paid by private investors.

### **Theoretical framework:**



As this study discusses about the impact of finance on the development of date processing unit in Kech, so, here finance is the independent variable and development of date processing unit is dependent variable.

### **Finance:**

According to Ferrel, and Hirt, the term finance refers to "all activities related to obtaining money and effective use".

According to the author, finance is the process of providing funds for business purchases, and investing activities. In other words, we can say the process of acquiring capital for the establishment of a business.

### **Development of date processing unit:**

According to World Bank the term "development in international parlance therefore encompasses the need and the means by which to provide better lives for people. It includes not only economic growth, although that is crucial, but also human development—providing for health, nutrition, education, and a clean environment".

According to the current study, development of date processing unit means the establishment and growth of a date processing unit where dates are cleaned, dried, and packed for the making quality products.

### **Hypothesis:**

**H1:** The increase of finance leads to the development of date processing unit

### **Research design:**

This is a descriptive research. This study is a casual study which analyses the impact of finance on development of date processing unit. Moreover, this is non-contrived research in which there is no intervention of the researcher. However, the data is collected from individuals and from different organizations through interview method. And the study addresses the issues which arise from the unavailability of date processing unit, and which are harmful to development of date processing unit in Kech. Besides, this is a cross sectional study.

### **Data collection and analyses:**

In this research the data is collected from different intellectuals and the sample was five. In this research the researcher used disproportionate stratified random sampling, moreover, the researcher found the impact of lack of finance on the development of date processing unit in Kech through the data collection and analysis. The data reduction method by Miles and Huber (1994) used in this paper and the findings are as follows:

### **Data Tabulation**

<b>S.No</b>	<b>Behavior/ Responses</b>	<b>Description</b>	<b>Number of behavior</b>	<b>% of behavior</b>
1	Lack of finance	Shortage of finance	5	11.11
2	Technical HR	Skilled employees for date processing unit	2	4.5
3	Lack of governmental support	No support from government	5	11.11
4	Lack of marketing facilities	Mobilization problem	2	4.5
5	Lack of investor	Non availability of investor	2	4.5

6	Poverty reduction	It reduce the poverty	5	11.11
7	Increase employment	Create employment opportunities	5	11.11
8	Lack of awareness	Lack of knowledge	3	6.67
9	Positive impact on local economy	Boost up the local economy	5	11.11
10	Waste of date	Not good utilization of date	3	6.67
11	Introduce in international market	Accessibility to international market	2	4.5
12	Positive effect on local economy	Good effect on environment	5	11.11
Total			45	

### **Data display:**

During the interview most responses indicated that the finance is the key factor behind the non-development of date processing units. This response was 11.11% of total responses Interviewees further responded that Finance plays a key role for the development of processing unit because for the development of a date processing unit requires good machinery for the grading, cleaning, packaging, and for fumigation process. Due to lack of finance it is not possible to develop a date processing unit in Kech and due to unavailability of date processing unit every year approximately 30 to 40 percent date is spoiled, if we get good finance through loan on easy terms and develop a date processing unit then the spoilage will reduce up to 5 percent. Besides, according to responses lack of governmental support is also affecting the development of date processing unit in Kech. 11.11% behavior stated that government has totally ignored the industry. They further added that they have good educated personals who have lot of knowledge regarding the processing unit but unfortunately only knowledge cannot develop a processing unit. Furthermore 4.5% behavior said that if the industry gets national and international investors then can complete this project because in our area we do not have such wealthy person who can invest on this project,

so if we get any support from outside such as UNICEF and UNDP that invest on this project then our dream will come true.

According to 4.5% behavior, the industry doesn't have good technical human resource for the date processing unit. If date processing unit develops then for the operating of those machines which are fixed in the processing unit it needs skilled worker which are not available in the region. So this factor also can influence the development of date processing unit in Kech.

According to 6.67% behavior, the farmers and the other common people are not aware about the importance of date processing unit and they also don't know that how much their dates are being wasted. Initially they should calculate the profit and loss ratio then they will be able to know that they are in loss or in profit. When farmers bring dates from date trees and keep them at an open place for drying, then 30 to 40 percent dates spoil.

According to 11.11% behavior, the development of date processing unit has a good impact on local economy, creates employment opportunities and reduces poverty. If such project develops then the local economy will boost because date will sell in a good price, due to which there income increases, living standard of the people can be better and they also can educate their child in good school. . Due to the development of date processing unit it also can be introduced nationally and internationally and create a good market. It also has a direct and indirect benefits, direct benefits for those who are working in farms and indirect benefits for those who are working in processing unit. It means that the development of date processing unit increases the employment opportunities. Moreover, if three persons are needed in farm for the cultivation of date then ten more are needed in processing unit for washing, cleaning, drying and fumigation etc. so in this way there is a lot of opportunity for employment on the development of date processing unit in Kech. There are different areas in the processing unit which need human resource, so in this regard the development of date processing unit will also decrease the unemployment.

According to 11.11% behavior, the development of date processing unit has no negative environmental effect. It will not affect the environment because it is not like other industries such as manufacturing and textile industry which spread pollution and waste material which affect the environment. Date processing unit does not produce pollution and waste material, may be at the time of fumigation, they use some chemicals but it will not affect the environment so much, because it may establish in an area which will be at a bit distance from the urban area so, will be far from population.

**Conclusion:**

This study is about the impact of finance on the development of date processing unit in Kech. This is a qualitative study and in data collection method the author used data reduction method (Milles and Huber, 1994). The author found two main factors which influence the date processing unit, namely lack of finance and lack of governmental support. On the basis of data collected and analyzed, this study concludes that lack of finance in particularly and lack of government support in generally are the key hurdles in the way of date processing unit in Kech. However, by resolving these issues, one can easily develop a date processing unit in the region. This can ultimately bring an economic development in Kech. In addition, this project would also create employment opportunities for residents.

## References:

Sind Board of Investment (2010). *Dates Processing Plant*. Retrieved from <http://www.sbi.gos.pk/74D4D2E6-3F53-46EF-A0AF-B020BCE423B3/FinalDownload/DownloadId-B7E56D0CBF70EA8D702FF8F1EA E865C5/74D4D2E6-3F53-46EF-A0AF-B020BCE423B3/pdf/Dates-DPP.pdf>

Small and Medium Development Authority (2009). *Dates Processing Plant*. Retrieved from <http://www.amis.pk/files/PrefeasibilityStudies/SMEDA%20Dates%20Processing%20Plant%20.pdf>

Ministry of Food Processing Industries (2008). *Date Processing and Packing*. Retrieved from [http://mofpi.nic.in/EDII\\_AHMD/Plantation\\_Spice\\_Products/11%20Date%20Processing%20&%20Packing.pdf](http://mofpi.nic.in/EDII_AHMD/Plantation_Spice_Products/11%20Date%20Processing%20&%20Packing.pdf)

Arifeen. Mohammad (n.d). Lack of storage facility. Retrieved from <http://www.thefinancialdaily.com/NewsDetail/151407.aspx....5/09/12..12.50>

Kasnvi. Bashir (2011). *Na mach machkdag*. Turbat: Balochistan Academy.

Mehdi., chudri., Ekbal., & Mustafa (2009). *Profile of district Kech*. Pakistan. South Asia Partnership-Pakistan.

Sekran. Uma, & Bogie. Roger (Ed.). (2009) *Business Research Methods*. Islamabad. National Book Foundation.

Miles., & Huberman (1994) (cited in Sekran. Uma, & Bogie. Roger (Ed.). (2009) *Business Research Methods*. Islamabad. National Book Foundation.)

Ferrel. C., & Geoffrey. Hirt (n.d.). *Finance*. Retrieved from <http://www.investopedia.com/terms/f/financing.asp#ixzz2A5YUvDml>.

World Bank (n.d.). *Development*. Retrieved from <http://www.globalization101.org/introduction-what-is-development-2/>

Date production in Pakistan (2008) (cited in Sind board of investment (2010). *Dates Processing Plant*. Retrieved from <http://www.sbi.gos.pk/74D4D2E6-3F53-46EF-A0AF-B020BCE423B3/FinalDownload/DownloadId-B7E56D0CBF70EA8D702FF8F1EAE865C5/74D4D2E6-3F53-46EF-A0AF-B020BCE423B3/pdf/Dates-DPP.pdf>

ANNUAL RESEARCH JOURNAL "GIDROSHIA" ISSN 2310-6956",  
University of Turbat (Kech) Mekran-Pak Vol.1 No.1, 2013

## CONSUMERS' PERCEPTION ABOUT BRAND EQUITY OF CARBONATED DRINKS IN KARACHI

Idrees Waris<sup>3</sup>

### ***Abstract:***

*The aim of this study is to calculate the consumer's perception about the brand equity of carbonated drinks in Karachi. The demand for carbonated drinks in Pakistan is increasing day by day and the brands are pursuing different marketing strategies in order to cater to the demands of consumers. This study is conducted to analyze the Aaker model of brand equity that consists of four dimensions i.e brand awareness, brand loyalty, brand association and brand perceived quality. In Pakistan seven carbonated drinks are popular to fulfill consumers' needs i.e Pepsi, Coca cola, Sprite, Mirinda, Dew, 7up and Fanta. The data has been collected from different regions of Karachi through cluster sampling method. Closed ended questionnaires were distributed to 250 respective respondents. The research was quantitative based and descriptive statistics has been used to measure the brand equity of carbonated drinks. The result of the study showed that Pepsi brand attained highest brand equity among carbonated drinks in Karachi which suggests that the role of brand equity is very vital for the success of any brand. Coca Cola and 7up secured second and third positions respectively.*

***Keywords: Brand Equity, Carbonated drinks, Brand awareness, Brand loyalty, Brand association, Brand Perceived quality.***

---

<sup>3</sup> Lecturer Department of Management Sciences University of Turbat (Kech-Mekran)  
Balochistan-Pak [idressbaloch@yahoo.co.uk](mailto:idressbaloch@yahoo.co.uk)

## **1. Introduction**

In the modern era customers have different taste and preferences and they choose different products and services to fulfill their needs. Marketers are pursuing different marketing strategies to fulfill customer's needs and creating worth of their brands and attaining brand equity. The era of internet has boosted the marketing activities which contribute a lot in the development of brand equity.

Despite the tough competition among the different brands some brands get success and lead the market by the virtue of their brand equity. The brand equity consisting of four dimensions that altogether contribute to the success of brand and thus the research focuses on carbonated drinks industry which carbonated drink is fulfilling customers need on the basis of brand equity dimension.

The objective of the study is to measure consumers' perception about the brand equity of carbonated drinks in Karachi and to determine the three most preferred brands in carbonated drink industry on the basis of brand equity dimensions.

This study would help managers and researchers to describe the link between the brand equity constructs and to build a more systematic way of understanding consumer behavior that suggest in formulation of long term decisions. The study will help the managers to make improvements in their marketing programs that will help to enhance the value of the brand.

## **2. Review of Literature**

Andersson et al (2006) investigated Coca-Cola or Pepsi; that is the Question- A study about different factors affecting consumer

preferences. Questionnaires were distributed to the respondents and the number of respondents in this study was 150 who were belonging to the ages between the ranges of 18 to 35. Variables international advertising, age, brand awareness, brand perceived quality and international sponsorship have been considered. Technique descriptive statistics was used in this research. Results showed that the role of advertisement has crucial importance if it is integrated with the factors of marketing, further it explained that there were many number of consumers in the local market who were unaware of the marketing activities.

Che-ha and hashim (2007) investigated brand equity dimensions of the Malaysian banking sectors. Variables Service Feature, Service Environment, Service Operation, Word of Mouth, Public Relation, Brand Aroused Feelings, Employees, Personality, Self Brand Image, Advertisement have been considered. The Techniques Multiple regression has been used. The result of the paper showed that the bankers should try to satisfy the consumers in order to make them loyal with the bank.

Atilgan at el (2005) investigated Determinants of the brand equity; A verification approach in the beverage industry in Turkey. The data of local university students were used. The total numbers of respondents were 255. Variables association; awareness, loyalty, and perceived quality were considered. Technique structural equation modeling has been used. The results showed that brand loyalty was the most influential dimension of brand equity and found brand awareness and perceived quality were the weakest among the dimensions of brand equity.

Rajh at el (2003) investigated creation food industry-brand equity in selected product category. Data collected through a telephone survey which included 495 respondents from different parts of Croatia. Variable loyalty was considered by dint of repeat purchase. Technique behavioral conceptualization of brand equity has been employed in this

research. Result showed relationship between market shares and repeat buying, and also indicates that the relationship between market share and repeat purchase is different for different types of products.

Pappu and Quester (2008) investigated Does brand equity varies between department stores and clothing stores. The data were collected from the Australian shopping mall where the majority of the buyers went for their shopping. Variables that were used in that study were the retailer associations, retailer awareness, retailer loyalty and retailer perceived quality. Results showed that the brand equity of retailer was found to be different between those two types of retails. The rating of Department store brands was higher than specialty store brands.

Rinivasan at el (2005) investigated An Approach to the Measurement, Analysis, and Prediction of Brand Equity and Its Sources. Data of the respondents in the four cities of Korea were taken who were the regular users of the cellular phones, the sample size for this research was 281. Variables attribute perception, last brand purchased, and awareness of brands, have been considered. Test sensitivity analysis was used. Result showed that the most significant role played is by the brand awareness and it is followed by the non- attribute preferences of the customers.

Anselmsson at el (2007) investigated Understanding price premium for grocery products. Data collection was based on the Personal telephone through which they interviewed and 150 respondents were selected randomly, on the basis of their geography, psycho graphical, behavioral characteristics. Variables that used in the research were awareness, loyalty; perceived quality, brand associations and uniqueness have been considered. The results showed that the unique role of grocery sector with pricing and brand equity brand equity and price premium along with the traditionally dimensions of the brand equity were suggested that are qualities, awareness, loyalty and associations.

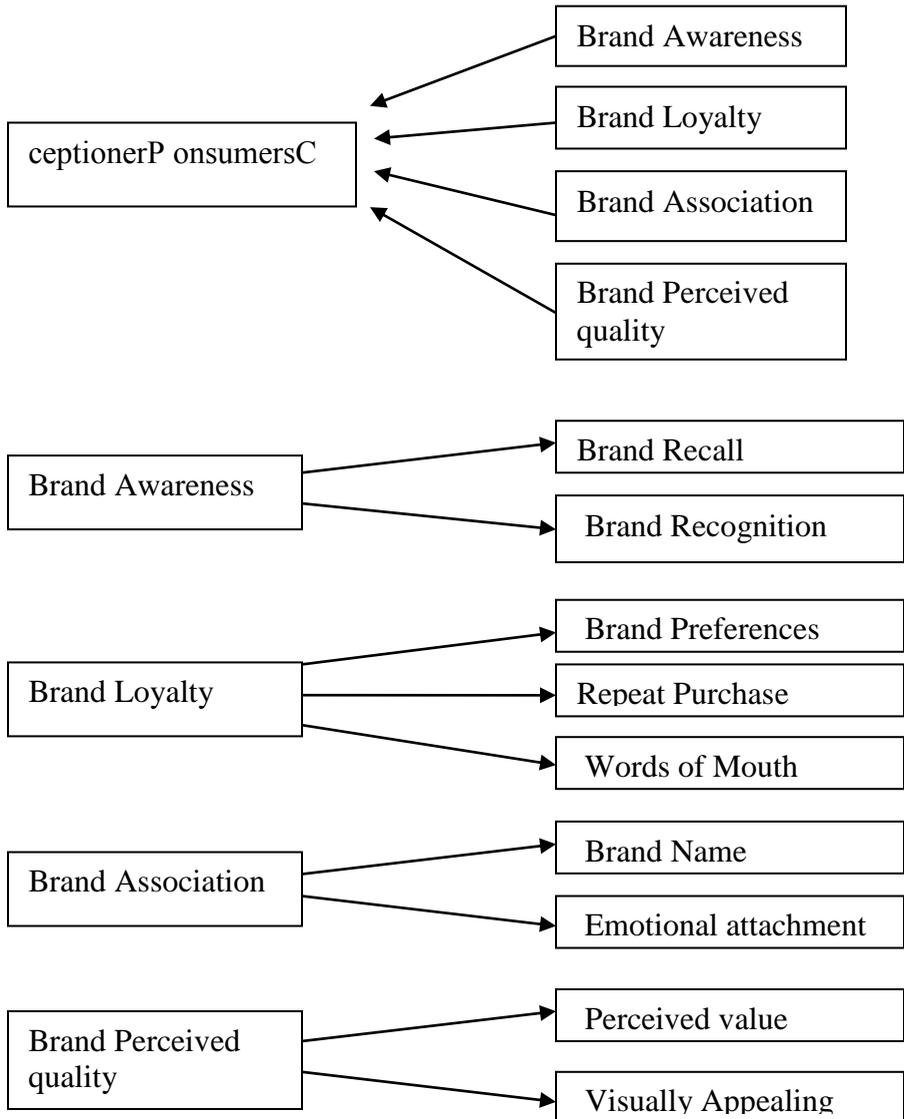
Raza and Jalees (2005) investigated the consumer's perception about the brand equity of fast food chain operating in Karachi. Closed ended questionnaire were distributed to 83 respondents. Variables awareness, usage, judgment, performance, imagery have been considered. The Techniques which was used in that test was one-way ANOVAs and two way ANOVAs. Result showed that the KFC has the highest mean which show that it is top brand in terms of brand equity and McDonalds was found to be in the second position.

Yoo et al (2000) conducted the study to analyze the brand equity of the famous brands on the basis of dimensions explained by Aaker, he examined the brand equity and suggested that the perceived quality, brand awareness, brand association, and commitment with the brand has a big role for the success of brands. Research explained that consumer loyalty for the brand depends upon the brand quality attributes.

Baldauf et al (2003) investigated Consumer's judgment about the brand is the perceived quality that shows the consumers perception for the brand and its benefits attached to the brand which the consumers seek to use as a substitute to another product. Thus the perceived quality is the capability of the product that provides satisfaction to the consumers in comparison to the other products.

Hamann et al (2007) examined that once the brand establish their image they communicate the positioning with the target audience and match that whether they meet the customers' expectations or not. The branded products are considered to provide more assurance and security to the consumer and it has the great preference on the consumer's choices for the brand once they are evaluated the brand with different alternative available.

### 3. Theoretical framework



Theoretical model of David A. Aaker has been adopted in this research and applied to evaluate consumers' perception about brand equity of carbonated drinks in Karachi.

#### **4. Methodology**

The research approach which is used in this research is quantitative, because the data of consumers are easily available and can be easily converted into likert scale.

The topic of the research is consumer's perception about the brand equity of carbonated drinks. To represent true population, the respondents were selected from Karachi city who are the regular users of carbonated drinks.

##### **Designing and Development of Research Instruments**

Close ended questions can be measured with the scale of 1 to 5 i.e. 1 will be indicating strongly disagree or totally disagree and 5 represents strongly agree or agree totally. The sample will be of 250 respondents and source for the collection of data will be primary.

##### **Reliability of the data**

The minimum range of consistent reliability is 0.50; Cronbach's alpha value is 0.609 for the data of this research showing that the data is consistent and reliable.

##### **Descriptive statistics**

Descriptive statistics was applied to measure the means of different carbonated drinks. Descriptive statistics is used to elaborate large amount of data in a simplified way. Results were performed on SPSS software and excel sheet to calculate brand loyalty, brand association, brand perceived quality and brand awareness of the different carbonated drinks.

## Results and Discussion

Brands weightage	Brands Name	Consumers
23%	Coca cola	57
28%	Pepsi	71
9%	Sprite	22
14%	7up	35
8%	Mirinda	21
4%	Fanta	11
14%	Dew	34
<b>100 %</b>		<b>250</b>

Total numbers of respondents were 250. The weight ages are given on the basis of consumers consumptions and on the basis of their consumptions patterns rest of the results were calculated.

**Table no. 1.1**

Brand loyalty							
	% of weightage	Quality	Price	DOB	Ads	COF	Total
<b>Pepsi</b>	28%	1.17	1.05	1.03	1.14	1.08	5.47
<b>Coca Cola</b>	23%	0.98	0.79	0.85	0.89	0.84	4.35
<b>Mirinda</b>	8%	0.38	0.28	0.28	0.24	0.22	1.4
<b>Dew</b>	14%	0.59	0.53	0.52	0.52	0.48	2.64
<b>7up</b>	14%	0.6	0.55	0.5	0.52	0.52	2.69
<b>Fanta</b>	4%	0.13	0.1	0.1	0.12	0.1	0.55
<b>Sprite</b>	9%	0.35	0.31	0.28	0.3	0.23	1.47

**Table no. 1.2**

<b>Brand loyalty</b>							
		<b>Sponsor ships</b>	<b>Slogan</b>	<b>B.Name</b>	<b>Reputation</b>	<b>life style</b>	<b>Total</b>
<b>Pepsi</b>	28%	1.05	1.08	1.12	1.12	1.02	5.39
<b>Coca Cola</b>	23%	0.87	0.9	0.99	0.94	0.8	4.5
<b>Mirinda</b>	8%	0.2	0.24	0.33	0.33	0.25	1.1
<b>Dew</b>	14%	0.42	0.52	0.56	0.57	0.44	2.51
<b>7up</b>	14%	0.46	0.56	0.54	0.58	0.55	2.69
<b>Fanta</b>	4%	0.12	0.15	0.13	0.14	0.1	0.64
<b>Sprite</b>	9%	0.31	0.31	0.29	0.33	0.22	1.46

**Table no. 1.3**

<b>Grand Total of Brand loyalty</b>						
Pepsi	Coca Cola	Mirinda	Dew	7up	Fanta	Sprite
<b>10.86</b>	<b>8.85</b>	<b>2.5</b>	<b>5.15</b>	<b>5.38</b>	<b>1.19</b>	<b>2.93</b>

Table (1.1, 1.2 and 1.3) showing the results of brand loyalty for different brands that how much the consumers like the underlying factors of these brands. The result shows that the brand loyalty of Pepsi is highest among all brands. The second brand in terms of brand loyalty is coca cola but the consumer's rate coca cola low in terms of price.

**Table no. 2.1** **Brand Association**

	% of weightage	Trend- y	Innova- -tive	Cool	Youth- -ful	Ads	Borin- -g	Total
<b>Pepsi</b>	28%	0.96	1	1.1	0.9	0.7	1.04	<b>5.7</b>
<b>Coca Cola</b>	23%	0.84	0.8	0.81	0.89	0.54	0.84	<b>4.72</b>
<b>Mirinda</b>	8%	0.34	0.31	0.34	0.29	0.14	0.26	<b>1.68</b>
<b>Dew</b>	14%	0.48	0.5	0.54	0.55	0.28	0.49	<b>2.84</b>
<b>7up</b>	14%	0.45	0.46	0.52	0.52	0.34	0.5	<b>2.79</b>
<b>Fanta</b>	4%	0.13	0.14	0.13	0.14	0.13	0.12	<b>0.79</b>
<b>Sprite</b>	9%	0.3	0.3	0.31	0.31	0.28	0.17	<b>1.67</b>

Table no. 2.1 consisting average values of brand association showing the results of brand association. The result depicts that the brand association of Pepsi is very high because most of the consumers associates themselves with Pepsi. Coca cola is the second brand in terms of its brand association and the consumers strongly associates coca cola with youthfulness. Dew and 7up have scores same in terms of its brand association but the consumers of 7up associates it with boring which is not good sign, as a whole brand association of dew is higher than 7up.

**Table no. 3.1****Brand Perceived Quality**

	% of weightage	High Quality	Sponsorships	Slogan	Traditional	Total
<b>Pepsi</b>	28%	1.18	1	1.04	0.91	<b>4.13</b>
<b>Coca Cola</b>	23%	0.91	0.79	0.92	0.76	<b>3.38</b>
<b>Mirinda</b>	8%	0.37	0.18	0.27	0.22	<b>1.04</b>
<b>Dew</b>	14%	0.55	0.44	0.51	0.44	<b>1.94</b>
<b>7up</b>	14%	0.56	0.43	0.52	0.52	<b>2.03</b>
<b>Fanta</b>	4%	0.14	0.12	0.14	0.16	<b>0.56</b>
<b>Sprite</b>	9%	0.31	0.27	0.3	0.25	<b>1.13</b>

Table no. 3.1 showing the results of perceived quality. In perceived quality Pepsi is at top and the consumers of Pepsi ranked high quality at the top. Coca cola is the second brand in terms of its perceived quality and the consumers of coca cola ranked high quality and slogan of coca cola at top which means that it coca cola quality and slogan attracts most of the consumers to buy it.7up is the third brand in terms of its perceived quality, in which the quality and slogan of the 7up played the vital role for attracting the consumers.

**Table no. 4.1**

**Brand Awareness Mean Values**

<b>Brands</b>	<b>% of weightage</b>	<b>TV</b>	<b>News Paper</b>	<b>Mag</b>	<b>Int</b>	<b>Radio</b>	<b>Recall</b>	<b>Recom-mendation</b>	<b>Total</b>
<b>Pepsi</b>	28%	1.26	0.96	0.86	0.9	0.88	1.48	1.07	<b>7.40</b>
<b>Coca Cola</b>	23%	0.97	0.75	0.69	0.8	0.61	1.05	0.94	<b>5.79</b>
<b>Mirinda</b>	8%	0.34	0.24	0.22	0.2	0.18	0.28	0.31	<b>1.78</b>
<b>Dew</b>	14%	0.61	0.45	0.39	0.4	0.34	0.49	0.57	<b>3.22</b>
<b>7up</b>	14%	0.59	0.47	0.41	0.4	0.38	0.58	0.55	<b>3.37</b>
<b>Fanta</b>	4%	0.21	0.12	0.11	0.1	0.07	0.097	0.14	<b>0.85</b>
<b>Sprite</b>	9%	0.34	0.25	0.26	0.2	0.19	0.29	0.35	<b>1.57</b>

The above table no. 4.1 showing the result of brand awareness, consumers of carbonated drinks were asked to rank the advertisements of the carbonated brands. The result showing that the brand awareness of Pepsi is very high as compared to other carbonated drinks. Coca cola is the second carbonated drinks in terms of brand awareness and the consumers of coca cola notice the advertisements of coca cola on television and internet. 7up is the third brand because 7up is being noticed on all media at equal proportion followed by the Dew which the fourth brand in terms of brand awareness.

## Conclusion and Recommendation

### Average values of calculated means

**Table no. 5.1**

#### BRAND EQUITY

<b>Brands</b>	<b>Brand Awareness</b>	<b>Brand Loyalty</b>	<b>Brand Association</b>	<b>Brand Perceived Quality</b>	<b>Total</b>
<b>Pepsi</b>	7.4	10.86	5.7	4.13	<b>28.09</b>
<b>Coca Cola</b>	5.79	8.85	4.72	3.38	<b>22.74</b>
<b>Mirinda</b>	1.78	2.75	1.68	1.04	<b>7.25</b>
<b>Dew</b>	3.22	5.15	2.84	1.94	<b>13.15</b>
<b>7up</b>	3.37	5.38	2.79	2.03	<b>13.57</b>
<b>Fanta</b>	0.85	1.19	0.79	0.56	<b>3.39</b>
<b>Sprite</b>	1.57	2.93	1.67	1.13	<b>7.3</b>

The table no. 5.1 consist the values of brand equity dimensions which is showing the final result of brand equity. Pepsi is the first brand in terms of brand equity in Karachi followed by Coca cola which stands at second position. Results suggest that Pepsi attains first position by virtue of its brand awareness and loyalty of the consumers with the brand. And on the basis of brand association and brand perceived quality Pepsi is competing with coca cola. 7up is the third brand but it is behind than Dew in terms brand association because Dew is well known for its adventurous advertisements and the consumers of the brand associates themselves more with the brand. 7up has to work more on advertisement contents in order to retain and associate their consumers with the brand otherwise dew can replace 7up in near future.

The research suggests that the brand having high brand awareness would be the brand which will be having the highest brand equity. It has a logical connection to increase the brand equity, and the brands gain popularity by the virtue of its brand awareness which in turns increase the thrust for the perceived quality of the brand and prospect starts associating themselves with the brand and they ultimately use or consume the brand and if they like the brand then they will use that brand for future consumption thus making them loyal with the brand.

## References

Andersson, Arvidsson and Lindström(2006). *Coca-cola or Pepsi;that is the question*. International marketing strategy

Anselmsson,j,johansson U, Persson, N.(2007). *understanding price premium for grocery products:A conceptual model of customer-based brand equity*. journal of products and brand management , 16(6):401-414.

Atilgan, E. Aksoy, S. and Akinci, S. (2005), “*Determinants of Brand Equity: A Verification approach in the beverage industry in Turkey*. Marketing Intelligence & Planning. Vol. 23, No. 3. pp.237-248. Emerald Group Publishing Limited

Baldauf, a. Cravens, k. S. And binder, g. (2003), “*performance consequences of brand equity management” evidence from organizations in the value chain.*” Journal of product and brand management, vol. 12, no. 4, pp 220-236 mcb up limited.

Che-ha, & hashim\*\*. (november 2007). *Brand equity, customer satisfaction & loyalty*:. International review of business , pp.123-133.

Hamann, d. William jr, r.l. and omar, m. (2007), “ *branding strategy and consumer high-technology product.*” Journal of product and brand management, vol.16, no.2, pp.98-111

Jalees and Raza (2005). *Brand Equity of Food Restaurants in Karachi*. Journal Market Forces, Vol. 01, No.02.

Pappu, r., quester, g.. P., & cooksey, w.r (2005). *The journal of product and brand*

*Management*. 14(2/3), pp.143-154.

*Edo Rajh, Tihomir Vranesevic, Davor Tolic, (2003) "Croatian food industry – brand equity in selected product categories", British Food Journal, Vol. 105 Iss: 4/5, pp.263 - 273*

Srinivasan, Su, Ryun (2005). *An Approach to the Measurement, Analysis, and Prediction of Brand Equity and Its Sources*. *management science journal*, Vol 51, issue 9, pp. 1433-1448.

Yoo, b., donthu, n., and lee, s. (2000). *An examination of selected marketing mix Elements and brand equity*. *Academy of marketing science*, 28(2), 195-212.



ANNUAL RESEARCH JOURNAL "GIDROSHIA" ISSN 2310-6956",  
University of Turbat (Kech) Mekran-Pak Vol.1 No.1, 2013

## EDUCATION AND INCOME INEQUALITY: EVIDENCE FROM PAKISTAN

Muhammad Waris<sup>4</sup>

### ***Abstract***

*The study meant to explore the impact of education over the income distribution using the time series data of Pakistan from 1970 to 2011. By using the multiple regression analysis the results have been obtained which indicate that all predictors show significant impact over the income distribution. The results indicate that increasing the government expenditure on education can increase the per capita income and more enrollments in education institution (Colleges, universities) also influence the income distribution. From the findings it is clear that public education expenditures have influence for decreasing the level of income inequality. This analysis suggests that increase of government expenditure can not only improve the level of income distribution of the people but also increase the economic growth of the country.*

**Key Words: Per Capita Income (Yt), Government expenditure on Education (PSE), Education Attainment (EA), Social and Special Education (SWE)**

### **Introduction**

Education plays a vital role in the economy of the country. It develops the human capital accumulation and generates efficient individuals from the country, resultantly speedy growth comes into economy and and

---

<sup>4</sup> Lecturer Department of Commerce University of Turbat Balochistan

equal income distribution will be possible. Education system of Pakistan is fragmented, eg education for rich class is totally different as compared to the poor class. This creates the factors for income inequality in these class systems. If education becomes accessible to the poor class and same structure for overall nation is set. Then the problem of income inequality will be resolved quickly. There is no uniformity in education sector of Pakistan because two different medium of school exist i.e English and Urdu medium.

In the past few decades, it has been studied by the great scholars and policy makers of the various countries with the conclusion that there is a relationship between education and income inequality. The researchers have found from the theoretical study that there exists an ambiguous relationship between education and income inequality like “<sup>5</sup>Pendaj Chintrakarn, (2011) shows the effect of human capital accumulation on income distribution it a can be decomposed into two forms of wage compression and composition effect” it is explained in other words that increase in education shows two different effect on earning distribution, composition effect enhances the relative size of group with more education brings more income inequality but wage effect decreases the premium on education which increases of supply of educated workers resulting in lowering the income inequality. The major reason of income inequality has been left behind by the researchers is education, they have ignored this factor. From the research of “Talat Anwar<sup>6</sup>” (2003) it is found that education and training only increase the earning power and therefore poverty could be reduced. They stress on increasing the earning power. This focus of the study remains on the relationship of income inequality and education, utilizing the penal data covering large portions of the country’s income earner and uses time series observation.

---

<sup>5</sup> Pendaj Chintrakarn researched on education and income inequality in United States in 2011.

<sup>6</sup> Talat Anwar is one of the researchers who worked on trends in inequality in Pakistan.

## Research Question

Is there significant impact of education over the income inequality in Pakistan?

## Literature Review

Many researches have been carried out by foreign researchers on this topic but the core issue of research had not clearly defined because it varies from country to country. Various researchers gave different thoughts about the effect of education and income inequality.

Pandey (2011) examined the relationship between the education and income inequality and the sample consisted on 48 states of United state from (1988-2003). The results shows that higher education plays a significant role in making income distribution more equal.

Seyit & Aytekin. (2007) investigated the impact of education and income inequality. The research has been conducted in Turkey for finding out the effect of variables. The researchers took the sample size 67 provinces of Turkey out of 81 because of 14 were taken as counties in the period of 1975 where time series data has been taken using ordinary least square method for finding out the results of research and multiple regression is applied which showed the significant impact of education on income inequality.

George *et al.* (2006) examined the relationship between the income inequality and finance through the empirical research and compared it with explanatory power. The research has been done in 83 countries in the period of 1960 and 1995 to find out the relationship between the economic growth and income inequality. The researchers took various variables as GDP, Bank Assets, Gini Coefficient, Inflation Rate and Government Consumption and using these variables for concluding the results, quantitative approach adopted by the researchers. The finding showed that with the help of the Ordinary Least Square (OLS) in regression model ,which applied for the explaining the results of study

there was significant impact of financial development and income growth which reduces the inequality among the poor and rich.

Campbell *et al.* (2005) examined the inequality in economic condition effect on educational achievement in new generation. The researcher investigates the effect in inequality increase on educational outcomes of children during 1970 to 1980. This research base on quantitative approach and correlational design is used to find out the result and analyze the economic condition on educational achievement. The researcher concludes that educational achievement is success linked with labor market and also increases in earnings inequality and found that tuition cost has a negative relationship with high school achievement.

Orlando (2004) tried to find out that the high education attainment would only be possible for wage distribution. The researcher showed the impact of high education over the income distribution using the annual data of Brazil. The data are collected from the period of 1976-2001 through the "National Household surveys" (PNAD). These surveys were done annually by the "Brazilian Institute of Geography and Statistics" from 1976 to 2001. It concluded that education would equalize the wage distribution, change the determinants of education and would not equalize the wage distribution strongly. It means that the impact of education over the income distribution is positive.

Gafer (2004) investigated the relationship among the income distribution, poverty and liberalization and inequality in his research. The research has been conducted in Guyana for finding out the effect of income distribution over above variables. This research has been done during the 1993-1999. The researcher took various variables for concluding the results of study and found out the significant effect of variables over the independent variable, he used quintile regression analysis. The results of the test have found that there is significant effect of growth over poverty.

Omar *et al.* (2004) developed a research for White and African descendent population living in Brazil. He focused the relationship about

the taken variables which are used in his research, education, family background and racial earning inequality between the white and African in Brazil. The researchers used household Survey data, consisted on 1996 PNAD and selected 57000 sample size including male workers at the age of 15-65 from the urban areas excluding small owners and unpaid workers. The results concluded from four various model that the racial earning inequality is an advantage due to white and investment in education gave more return to them. It shows significant impact over racial earning power.

Messias (2003) investigated that education impact over income inequality. The basic purpose of the research was to find out education impact and income inequality within Brazil and its various states. The research has been done within Brazil and 27 number of sample have been taken in this research. This research is done through the quantitative method and it was a correlational research along with two tests is applied for finding out the results of research. The Sample regression has been used which show negative impact of education over the income inequality and multiple regressions has shown positive impact of education over GDP as well as over literacy rate of the countries.

Jose & Jong (2002) found the impact of education on income inequality. This research has been conducted in cross countries. The basic purpose of this research was to find out the impact of education over income distribution. This research bases on quantitative technique in which various tests are applied for finding out the results of research. There were 23 countries data from 1965 and 71 countries in 1990. The results showed that the role of education in income distribution have significant impact. Countries with the higher attainment of education earn more income and distribution of income easily has handled in those countries.

## **Methodology**

### **Research Approach- Quantitative**

The variables are used for the research as income, public spending on education, education attainment, social, special education, and unemployment and among these variables mathematical model can be formulated; albeit the quantitative research approach is adopted for the research.

### **Hypothesis**

**H<sub>0</sub>**: There is insignificant impact of education on income inequality.

**H<sub>1</sub>**: There is significant impact of education on income inequality.

### **3.5 Model**

$$Y_t = \alpha + \beta_1 PSE + \beta_2 EA + \beta_3 SSE + \varepsilon$$

### **Where**

$\alpha$  = constant

$Y_t$  = Income Per Capita

PSE = Public Spending on Education as percentage of GDP

EA = Education Attainment / enrollment

SSE = Social and Special Education expenditure as percentage of GD

### **Data Analysis**

In this study the secondary data has been collected through the “Economic Survey of Pakistan, World Economic Survey, Statistical Survey of Pakistan, Federal Bureau of Statistics and Human Development Index”. The collected data has been analyzed through the statistical technique using multiple regression tests in which the obtained results are interpreted and also given the justification of results. There are 42 number of observation and the covering period of observation starts from 1970 to 2011.

### Pearson Correlation Coefficients

**Table 4.2 Pearson Correlation Coefficients:**

	<b>Per capita income</b>	<b>Public Expenditure on Education</b>	<b>Enrollment/Education Attainment</b>	<b>Social and Special Education Exp</b>
<b>Per capita income</b> Sig. (1-tailed) N	1 42	.947* (.000) 42	.897* (.000) 42	-.057 (.360) 42
<b>Public Expenditure on Education</b> Sig. (1-tailed) N	.947* (.000) 42	1 42	.972* (.000) 42	.201* (.100) 42
<b>Enrollment/Education Attainment</b> Sig. (1-tailed) N	.897* (.000) 42	.972* (.000) 42	1 42	.334* (.015) 42
<b>Social and Special Education Exp</b> Sig. (1-tailed) N	-.057 (.360) 42	.201* (.100) 42	.334* (.015) 42	1 42

\*Significant at 95% confident interval.

The intensity of association among the variables are assessed by Pearson's correlation coefficient (r). The value of Pearson's correlation lies between +1 to -1, when the value is at extreme i.e., +1 it means perfect positive relation among the variables and vice versa and 0 indicates no relationship.

The above table of Pearson correlation shows the correlation among the variables. Each variable shows the positive or negative relationship to individual variable. The correlation coefficient of Per capita income and education attainment is .897 which shows strong significant correlation, same as the correlation between Yt and public expenditure on education is .947 it shows the perfectly positive significant correlation and rest of variable is social and special education expenditure shows -.057 it means that it has negative insignificant correlation with Yt.

## Auto Correlation Correction

Durbin-Watson value lies between 0 to 4 and DW= 2 is value which shows no autocorrelation among the variables if the value of DW lies less than 2 it means that there are positive serial correlation exists if it shows greater than 2 it indicates that there are negative serial correlation among the variables. In the same way in our research shows serial correlation problems in the table of 4.3.

**Table 4.3: Autocorrelation (Durbin-Watson Test)**

	Order					
	1	2	3	4	5	6
DW	1.547*	1.9065	1.9501	1.7674	1.6345	1.6108
Pr<DW	(0.0291)	(0.3168)	(0.4654)	(0.3012)	(0.2258)	(0.2545)
Pr>DW	(0.9709)	(0.6832)	(0.5346)	(0.6988)	(0.7742)	(0.7455)

In the table 4.3 there is positive serial correlation among the variables which is not favorable for the research for that reason we use SAS software for removing autocorrelation which shows in third order, autocorrelation has removed among variables. Serial correlation problem has removed through the Cochrane Orcutt technique which has applied through statistical analysis software.

## 4.5 Ordinary Least Square Estimation & Multicollinearity Diagnostic:

**Table 4.5 Ordinary Least Square Estimation & Multicollinearity Diagnostic (Model 1):**

<b>Variables</b>	<b>Beta</b>	<b>t- stat</b>	<b>Probability</b>	<b>VIF</b>
<b>Constant</b>	235.292*	25.92	(<.0001)	
<b>Govt Education Exp</b>	0.156*	1.97	(0.0493)	2.762
<b>Education Attainment</b>	29.543*	3.94	(<.0001)	2.801
<b>Social and Special Edu</b>	-1.358*	-2.58	(0.0100)	1.613
<b>Adjusted r-square 0.963</b>	<b>Durbin-Watson 1.9501</b>	<b>F-stat 359.005 Probability (&lt;.0001)</b>		

$$Y_t = \alpha + \beta_1 PSE + \beta_2 EA + \beta_3 SWE + \varepsilon$$

From the table 4.5 we obtained the results by applying multiple regression analysis through the Statistical package for social science (SPSS) and Statistical Analysis System. The table contains T-statistic, Probability-value, Beta values, Durbin Watson with its P-value and F-statistics with its P-value adjusted R<sup>2</sup> and VIF of all variables.

From the research of Seyit and Aytekin <sup>7</sup>in which empirical results of the study shows significant impact of Government education expenditure and rate of enrolment in secondary education over income inequality at 5% confidence interval. The Durbin Watson indicates a serious problem

---

<sup>7</sup> Seyit Kose and Aytekin Guven have worked over the government education expenditure over income inequality: Evidence from provinces of Turkey.

of autocorrelation which has removed by the first order auto regression method and adjusted R-square depicts 0.59 in model 1 and 0.72 in model 4. F-statistic shows significant impact with the probability value which is <.05 shows the significant impact in four different models.

From this research the first column of table 4.5 explains the Beta coefficient which depicts the tendency of independent variable against of dependent variable. The impact of beta value as greater it shows larger impact over the dependent variable and vice versa. The first value is constant value in beta columns which shows 235.392 obtained from the maximum likelihood estimation after correction of autocorrelation it means that constant remain always constant when calculating the value of income distribution. The beta value of government expenditure .156, education attainment's beta value 29.543 and for social and special education expenditure beta value is -1.358; through the beta values and constant values regression model is constructed for estimating the dependent variable respondent of independent variables.

In the next two columns in table 4.5 is T-statics and P-value which depicts the significant of the independent variable over the dependent variable and it indicates that the null hypothesis is rejected if the p-value is less than.05. The probability value of government expenditure is <.0492, which shows significant impact over the income distribution. The value of education attainment is less than 0.0001 which also show significant impact over the income inequality. The last variable is social and special education which shows significant impact over the income distribution which has the p-value 0.010.

The last column is Variance inflation factor (VIF) which indicates that multicollinearity among the variables. In the table 4.5 the VIF value shows less than 10 values it means that there are not problem of multicollinearity among the variables. It means that independent variables do not have autocorrelation among one another.

### **Regression Model**

$$Y_t = 235.92 + 0.156 * PSE + 29.543 * EA - 1.358 * SWE$$

In the 4.5 table it shows the results of adjusted R-square which is 0.963 it means that the model accuracy is 96% perfectly favorable and it is indicated that the predicted value is exactly aligned with the actual value. The F-statistics value is 359.005 with the probability value show significant impact over the dependent variable through the combined impact of independent predictor into regression model. Each predictor value shows positive impact over dependent variable; the P-value which shows significant impact over the dependent variable except one variable which shows negative significant effect over the income.

The overall results of this study show significant impact education expenditure on income distribution. It means increasing education expenditure of percentage of GDP not only increase the income level of the people of the country but also bring the economic growth with the passage of time.; Increases in education attainment in the country will increase the human capital but this increment in education attainment bring equal income distribution in the country; and last predictor is as special and social education shows the negative value which decreases the per capita income. It means that social and special education expenditure does not show any incremental value in per capita income because this particular amount as expenditure would go useless in the country and only particular class would only get the benefits of such expenditure which shows negative results over per capita income.

## **5. Conclusion**

This paper analyzes the basic issue of income inequality through the pragmatic evidence using the time series data set of Pakistan's states from the 1970 to 2011 which has not explained by the previous researchers. This study is not only to reveal the evidence of income inequality but also guide that how this problem can be tackle down through the government policies and strategies.

From the Obtained results of the data it suggest that maximum expenditure on education needs to be allocated for bring down the income inequality in country so that minimum inter degree is required to have by the nation which has significant impact over the Income

inequality. Thus the finding indicate that increasing education level would increase the income per capita as (GDP) on the other hand more enrollment from inter degree to the university degree bring positive impact on income distribution.

However the impact of government expenditure on education and education attainment appeared massively on income distribution but rest of the variable shows lesser impact on it. But the effect of social and special education shows significant negative impact over the income distribution. It suggests that minimum amount of government expenditure required for social and special education because minimum number of people can avail benefits of such education expenditure which increases the effect of income inequality in country.

However this research depicts some realities about the income distribution which has very huge importance in current situation of Pakistan. The overall result of this study indicates that more and more expenditure is required on public education for lessening the income inequality. The current government expenditure is only 2.1% of GDP allocated for over all education system of Pakistan. This is insufficient for Pakistani educational institutions, as evident from the obtain results of above which recommends that almost 40% of every annual education budget requires to be allocated for colleges and universities degree, which produce positive results for equal income distribution.

The effect of education enrollment shows 168% impact over the income distribution which plays a very important role for increasing income per capita in the country. The empirical results indicate that more enrollments in college and university level increase the income of the people which reduce the income inequality in the country. Therefore more resources and equal system of education require administering in our country so that income inequality does not exist anyhow. These results suggest that increase in government expenditure and education attainment increase the per capita income of the country and bring high economic growth in the country.

## **Recommendation**

There are four basic implications of study first, proper analysis of education system in whole corner of the country to find out the weaknesses of whole education system and suggest immediate action plan for utilizing government resources in such a way that minimum wastage in education accrues. The optimum usage of government expenditure is advised on education so that more effective and efficient results can be acquired from it.

Secondly Government should not only spend on quantity of schools and colleges but also scrutinize over the quality of education, further check the effectiveness of education system whether significant impact is being gained from these education expenditure.

Thirdly more emphasis of government expenditure should be placed on market oriented approach in education system. Because private colleges and universities promptly put into practice such approaches in advance before government colleges and universities. Such kind of approach should be started from school level so that more human capital can be generated from poor and rich classes equally and their income level become equal.

Fourthly government should not only increase the number of institution in quantity but also improve the quality of the teachers along with the technological advancement of the globalization.

## Reference

1. Alexandra, R. (2001) "Education and Income Inequality: The Role of a Social Protection System", *Journal of Population Economics*, Vol. 14(3): 425-443
2. Anwar, T. (2003) "Trends in Inequality in Pakistan", *The Pakistan Development Review* Vol.42 (4): 809-821
3. Campbell, M., Haveman, R., Sandefur, G., & Wolfe, B. (1995) "Economic inequality and educational attainment across a generation", *Journal of Political Economy*, vol. 103(6): 1289-1301
4. Gafar, J. (2004) "Income Distribution, Inequality, and Poverty during Economic Reforms in Guyana", *Journal of Developing Areas*, Vol. 38(1): 55-77
5. George, R.G.C., Lixin, C.X., & Heng, F.Z. (2006) "Finance and Income Inequality: What Do the Data Tell Us", *Economic Journal*, Vol. 72(3): 578-596
6. Jose, D.G., & Jong, W.L. (2002) "Education and Income Inequality: New Evidence from Cross Country Data", *Review of Income and Wealth*, Vol. 48(3): 395-416
7. Messias, E. (2003), Income Inequality, Illiteracy Rate, and Life Expectancy in Brazil", *American Journal of Public Health August*, Vol. 93(8): 1294-1296
8. Omar, A., Gustavo, Y., & Luis T. (2002) "Education, family background and racial earnings inequality in Brazil", *International Journal of Manpower*, Vol. 25: 355-374
9. Orlando, J.S. (2004) "Education and Changes in Brazilian Wage Inequality", *Industrial and Labor Relations Review*, Vol. 58(1): 94-111

10. Pandej, C. (2011), "Education and Income Inequality: Evidence from US States", *International Research Journal of Finance and Economics*, Vol. 61: 15-18
  - a. <http://www.eurojournals.com/finance.htm>
11. Seyit, K., & Aytakin, G. (2007) "Government education expenditures and income inequality: evidence from provinces of Turkey"; *South-East Europe Review* S. 79 – 101



ANNUAL RESEARCH JOURNAL "GIDROSHIA" ISSN 2310-6956",  
University of Turbat (Kech) Mekran-Pak Vol.1 No.1, 2013

## THE IMPACT OF ADVERTISING ON BRAND SWITCHING: EVIDENCE FROM HAIR CARE INDUSTRY IN PAKISTAN

Shahzad<sup>8</sup>

### **Abstract**

*This research is conducted on the effectiveness of advertisement in the shampoo industry, which leads consumers towards brand switching. In this research brand switching is taken as dependent variable. The Celebrity, product price, brand image and product Quality in the advertising are taken as independent variables. The survey questionnaire is applied to collect perceptual data from consumers of shampoo industry. The questionnaire is applied to 300 respondents of beauty care category in shampoo industry. The factor analysis is applied to find out the factors and data accuracy of our sampling and the multiple regression is applied to evaluate the impact of advertising contents on brand switching. The result shows that there is significant impact of advertising contents i.e. Celebrity, Product Price, Product Quality and Brand Image on Brand Switching. The Celebrity, Product Quality, and Brand Image has positive impact on Brand switching whereas Product Price in the advertising has negative impact on Brand Switching. It has been concluded that the marketer should more focus on Celebrity, Product Quality and Brand Image contents in their advertising and they should avoid Product Price exposure in the advertising. The researcher should focus more on the effectiveness of advertising impact on brand switching with demographic variables in future.*

**Key words:** Brand Switching (BS), Celebrity (C), Product Price (P),  
Product Quality (Q), Brand Image (BI)

---

<sup>8</sup> Lecturer Department of Management Sciences University of Turbat

## **1. Introduction**

The market place is facing many changes i.e. high competition and changing customer's preferences. There is very high competition due to high product similarity and very proficient brand in the same market. Therefore it is become a battlefield and high concerned for researcher and marketer to increase their sales and market shares. This intense competition forces marketers to better understand their competitors as well as customers.

Advertising is one of the major factors which influences consumers towards brand switching. The marketers are trying to attract customers to increase their sales and marketer share. Therefore advertising is playing a very crucial role in attracting competitor's customers which increase the sales of advertised brand as well as increase its market share. That is why the marketer is trying to improve their advertising effectiveness. They are investing a lot of money in their advertising. In the return they want to increase their sales, profit and market share. But it has to identify the major factors in advertising which influence consumers towards brand switching. Consumers respond to different advertising in different ways. If advertising is done in an effective way, it leads to increase in the sales and market share of that company but if it is done in ineffective way it has negative consequences on advertised brand as well. Therefore it is necessary to identify the major advertising contents or factors which are influencing consumers towards brands switching.

Raj et al (1982) analyzed the impact of advertising both loyal and non loyal consumer segments. There is different impact of advertising in different consumer segments. It is found that consumers increase their purchase due to effective advertising in loyal consumer segments whereas the consumers switch to other brand due to its effective advertisement in non-loyal segment. Deighton et al (1994) analyzed the effect of advertising on brand switching and repeat purchasing. The

result shows that there is strong impact of advertising in leading to brand switching but it cannot influence repeat purchase at long run.

Ayanwale et al (2005) reported about the influence of advertising on brand preference. The results show that TV advertising showing product quality has strong impact on consumer brand preference. Advertising has different impact on consumer brand switching in different types of industry. Now there is also very high competition among the brands in different industries of Pakistan. Consumers are frequently changing its preference from one brand to another and they are excessively switching toward its brand. Advertising is the key role in changing of consumer preference from one brand to another brand.

Similarly there is very high product similarity and competition in the Pakistani hair care industry. There is high brand switching in this industry. So therefore the companies are trying to increase their sales and market shares through retaining his own customers as well as attracting competitor's customers in the Pakistani hair care (shampoo) market. They are trying to find out the major factors which are influencing the brand switching in hair care industry.

They analyzed that customers are frequently switching from one brand to another brand. They identify that Advertising is one of the major factors which influence consumers towards brand switching<sup>9</sup>. But there is very little research conducted regarding TV advertising impact on consumer brand switching behavior in hair care (shampoo) industry of Pakistan. It is very important to find out different advertising contents or information which affects the consumers towards brand switching. Thus in this research we are identifying different TV advertising contents or information which affect the consumers towards brand switching in shampoo industry of Pakistan.

---

## 1.2 Research question

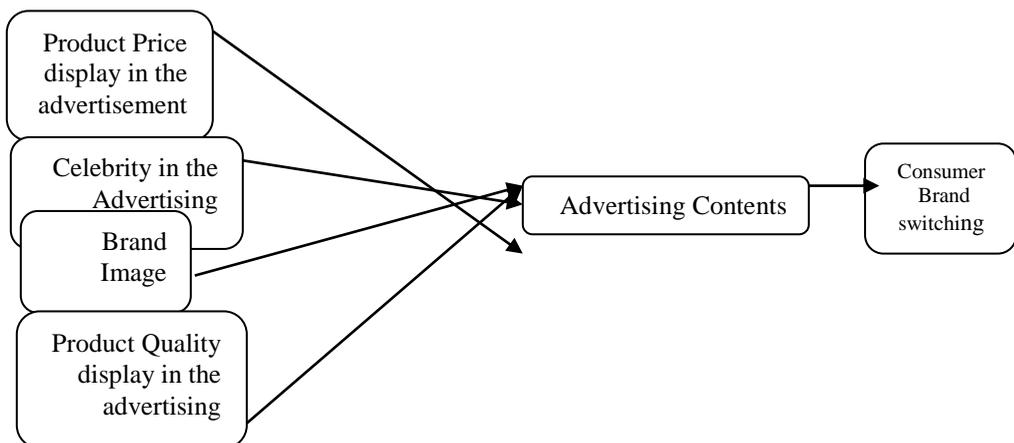
What are the different advertising contents which influence consumers towards brand switching?

## 2. Theoretical Backgrounds

The primary objective of advertising is to let consumers know about the brand and influence their attitude and buying behavior. The advertising creates top of the mind awareness of the brand in the mind of consumer. Advertising is also used to create favorable attitude for new product or service and brand, enforce existing favorable attitude and change negative attitude.

One of the main objectives of advertising is to attract consumers of competitive brand to increase its market share. Advertising often uses these three areas i.e. price, quality and availability to encourage brand switching through advertisings. Product Price is used in the advertising as brand switching strategy when they want to cater tight budget consumers or those who are very price conscious. The quality base Advertising is used as brand switching strategy when they are catering quality conscious consumers. They show in the advertisings that there product is more strength and better quality then the competitor's product.

### Theoretical frame work



Above theoretical frame work shows that there are four basic contents or elements in the advertising. These four contents i.e. Product price, celebrity, brand image and product quality are used in the advertising to influence the brand switching behavior of consumers.

## **2.2 Literature Review**

Shukla (2009) reported about the effect of contextual factors, brand switching and brand loyalty on purchase decisions. In the research the author take the young adult market for his survey. There is both quantitative and qualitative research methodology. The sample size is 340. The result shows that the contextual factors have strongest influence on purchase decision. It has also influence on brand switching and brand loyalty. This research is base for future researcher to further found different factors of consumer preferences.

Khaldoon *et al* (2010) reported about the effect of levels of consumers and price discounts frames on consumer perceptions in service industry. In the experiment four different low-end service types are used: retail services, mailing services, hotels, and restaurants. A total of students participated in research. The result shows that the levels of discount and price discount frameworks have affect on consumers, perception on quality service, intentions to purchase, and the value of the discount. In future the demographic factors: age, income, gender etc should be considered for further research in this area.

Clemes *et al* (2010) reported about” the Customer switching behavior in the Chinese retail banking industry”. The authors wanted to analyze the factors of bank customer switching behavior in Chinese retail banking industry. The data derived from the samples of 421 bank customers in Jiaozuo city of china. The factor analysis and logistic analysis are applied on data. The results shows that service quality, effective advertising, reputation, price, distance, involuntary switching, and switching cost have influence on switching behavior on banking customers. The young and upper class is often switch bank. This paper

help future researcher to investigate on customer switching behavior in retail banking.

El-aldy (2010) reported about the impact of advertising attitude on the intensity of T.V Ads avoiding behavior. In this the author wanted to evaluate how different advertising contents affect the consumer T.V avoidance behavior. Out of 400 questionnaires, 364 completed questionnaires are used in data analysis. T.V Ads avoidance, reliability of T.V ads, value distortion, enjoyment, consumer showing off, zapping, heavy avoiders, light avoiders etc are used as variables. Discriminate analysis, T-test, Principle component analysis are used. The result shows that the negative TV ads lead to T.V ads avoidance and vice versa. The advertisers should consider the viewer or consumer Ads avoidance attitude before executing Ads.

Dave and Saffer (2010) reported about the impact of direct to consumer advertising on pharmaceutical prescriptions drug's price and demand. In this dissertation the author identified the effect of both broadcast and non-broadcast direct to consumer advertising effects on demand and price of drugs. Four major therapeutic classes from 1994 to 2005 are taken as sample. The result shows that broadcaster DTCA has greater impact on sale and price than the non-broadcaster. Therefore the impact of DTCA on prescribed drugs price and demand is the combination of consumer behavior and health care provider.

Montaner *et al* (2011) reported about the gift promotion effect on consumer. The objective of this research is to analyses the four important factors of gift promotion: the promoted product nature, the fit between the product and the gift, promoted product brand and the deal-proneness. The 240 subjects of random sampling of were assigned between two product, gift and brand type respectively. The result shows that there is not any influence of promoted product type on consumer response. The promoted product has favorable influence on consumer response when there is high fit between brand equity and promoted gift. This research serves as guideline for useful design of gift promotion.

Singh and Bangar (2011) analyzed the effects of discounting on brand image. The authors have taken the garments brands of the northern India territory as a sample. They surveyed for 100 samples in different cities of the northern Indian states of Punjab, Haryana and Himachal Pradesh. They used Descriptive statistics, Correlation, Regression, Anova and Chi square test as statistical techniques for this purpose. The results show both loyal and non loyal buyers are affected by discount promotion.

Tung (2011) reported about the effective relationship among promotion effect, switching barriers, and loyalty in the department store. The data are collected from 374 respondents of 7 department stores by stratified sampling. The confirmatory factor analysis used for testing of hypothesis. The research shows that there is positive effect of interpersonal relationship and switching cost on brand loyalty. Price during contraction and expansion period but long-run effect is not altered.

Acquisti and Spiekerman (2011) reported about the effect of interruptive advertising on consumer's willingness to pay. In this research the authors wanted to identify the interruptive effect of advertising on consumer buying behavior. In this some subject diverted their attentions from computer game when interrupted ads comes during experiment test. The result shows that there is negative impact of such interruptive ads on consumer buying behavior. In this research one thing is clear that advertiser should consider the mood of consumer before advertising of their brand.

### **3. Methodology**

#### **3.1 Research Approach**

This is a quantitative research method because in this research the researcher identifies the advertising impact on brand switching by using mathematical or computational techniques. The quantitative data are used in this research. The data results are analyzed through statistical software.

### **3.2 Research Design**

This is a correlation design because in this research the relationship between two or more Quantitative variables are examined.

### **3.3 Data Source**

The primary data is used in this research. The data is derived through survey Questionnaire. This study is based on shampoo industry. So therefore the respondents of shampoo user of beauty care category are taken as target population.

### **3.4 Research Instrument**

In this research we are using survey questionnaire because it is appropriate for perceptual data gathering from consumer. The Questions are based on likert scale, which ranks from 1 to 5, in which 1 represents the strongly disagree to 5 represent strongly agree respectively

### **3.5 Hypothesis**

H<sub>01</sub>: There is insignificant influence of Product Price display in the advertisement contents on brand switching.

H<sub>02</sub>: There is insignificant influence of Celebrity in the Advertising in the advertisement contents on brand switching.

H<sub>03</sub>: There is insignificant influence of Brand Image in the Advertising in the advertisement contents on brand switching.

H<sub>04</sub>: There is insignificant influence of Product Quality display in the advertising in the advertisement contents on brand switching.

### **3.6 Model**

The impact of advertising on brand switching

$$B.S = \alpha + \beta_1P + \beta_2C + \beta_3BI + \beta_4Q + \mu_3$$

### 3.7 Sampling

The convenience sampling is used in this research because it is appropriate for Quantitative research. Due to short limit of the time the sample size of this academic research is 300.

## 4. Results and Discussion

### 4.1 Reliability

The reliability statistics test is applied on data to find the reliability of data. In this study it is found that the Cronbach's alpha is **0.869** means **86.9%**, and it indicates that the data is reliable because it is greater than 50%.

**Table 4.1.1**  
Reliability Statistics

Cronbach's Alpha	N of Items
0.869	19

### 4.2 Factor Analysis

**Table 4.2.1**  
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.803
Bartlett's Test of Sphericity, approx. Chi-Square	2752.39
Df	171.000
Sig.	.000

There confirmatory factor analysis is applied to ensure that the factors are correct which are already made. In the above table the KMO is 0.803 that is 80.3%. It means that 80.3% variance is explained by independent variables. It also indicates that the factors which we are made are correct.

**Table 4.2.2**  
**Rotated Component Matrix**

	Cronbach's alpha	Brand Switching	Product Price	Celebrity	Brand Image	Product Quality	
I usually switch shampoo brand due to dissatisfaction.	0.607	0.84					
I usually switch to another shampoo which gives me better features.		0.771					
Price in the ad influences me to switch to that shampoo brand.	0.594		0.788				
I usually switch to low price shampoo brand.			0.761				
I usually change to another shampoo brand because it is a high level of product with relatively higher price				0.729			
My choice of the shampoo brand depends on its price.				0.676			
I prefer affordable price shampoo brand				0.642			
Celebrity in the ad influences me to switch to that shampoo.		0.894			0.719		
I switch to that shampoo which takes prominent celebrity in the ads.					0.845		

I switch to that shampoo which takes attractive and beautiful celebrity in their ads.				0.838		
I do not switch to those shampoos which does not have credible and honest celebrity in the ads.				0.775		
I switch to that shampoo which takes brand-fit celebrity in the ads.				0.749		
Good image of the brand influences me to switch to that brand.	0.664				0.631	
I prefer to switch from low shampoo brand to premium shampoo brand.					0.489	
Product design, tagline and logo in shampoo ads influence me to switch to that brand.					0.6	
I prefer to switch from low quality shampoo to high quality shampoo brand.	0.79					0.713
I usually switch to that shampoo which gives me most features.						0.805
I usually switch to that shampoo which shows best product quality in the ads.						0.717
I like that shampoo which is naturally made.						0.736

The rotated component matrix shows the accuracy of the data of variables. The first factor is “Brand Switching” which has 2 items and the alpha value is 0.607 or 60.70%. The second factor is “Product Price” which has 5 items and the alpha value is 0.594 or 59.40%. The third factor is “Celebrity” which has also 5 items and the alpha value is 0.894 or 89.40%. The fourth factor is “Brand Image” which has 3 items and the alpha value is 0.664 or 66.40%. And the fifth factor is “Product Quality” which has 4 items and the alpha is 0.79 or 79%. In the above table it is found that the all the variable’s data are reliable because the alpha values of all individual variables are greater that 0.50 or 50%. Similarly it also shows that all the factors are reliable.

### 4.3 Regression Analysis

Here the regression analysis is applied on the data. The regression analysis is applied to check that weather the independent variables have significant impact on dependent variables and which variables are more significant and effective on dependent variable. It also shows the direction of influence of the independent variables on dependent variables.

**Table 4.3.1: Regression Coefficient (Brand Switching)**

<b>Variables</b>	<b>Coefficient</b>	<b>T-stats</b>	<b>Prob.</b>	<b>VIF</b>
<b>(Constant)</b>	2.563	8.322		
<b>Product Price</b>	-0.237	-3.145	0.002	1.014
<b>Celebrity</b>	0.157	2.371	0.018	1.607
<b>Brand Image</b>	0.17	2.134	0.034	1.827
<b>Product Quality</b>	0.14	2.078	0.039	1.463
<b>Adj. R<sup>2</sup></b>	0.143			
<b>F-stats (prob.)</b>	13.511 (0.000)			

\*\* The significant level is 5 % or 0.05

The regression coefficient table shows the beta value, co-linearity value, and significant value of both dependent and independent variables. The beta value identifies the relationship nature between dependant and independent variables. The positive beta shows that there is positive relationship between dependent and independent variable. The negative beta shows that there is negative relationship between dependent and independent variables. The above table shows that the Celebrity, Brand Image and Product Quality has positive and significant impact on Brand switching whereas, Product price has negative and significant impact on brand Switching. Now with the beta value the regression equation as follow:

$$\text{BS} = 2.563 - 0.237 \text{ P} + 0.157 \text{ C} + 0.170 \text{ BI} + 0.140 \text{ Q}$$

The relative importance of each variable in the model is shown by “t” value in above 4.3.1 table. In the above table all the independent variables i.e. Product Price, Celebrity, Brand image and Product Quality are significant because their “p” values are less than 0.05. Its mean each independent variable has significant impact on brand switching. In the above 4.3.1 table the multi co-linearity among variables is shown by VIP. The coefficients of multiple Collinearity shows whether there exit high correlation among variables or not. If there is high correlation among variables then its mean these variables is showing same information or phenomenon. When the value of VIP is greater than 10 then its mean there multi co-linearity is exist among the variables. In the above table it is proved that all the VIP values are less than 10. Its mean some changes in any variables value can not affect the other variables values because there is not any multi co-linearity among the variables. The adjusted R<sup>2</sup> value shows the adequacy of the model. In the above table the adjusted R<sup>2</sup> is 0.143. Its means all the independent variables i.e. Product Price, Celebrity, Brand image and Product Quality can predict 14.3% variance in dependent variable Brand Switching.

## 5. Conclusion

There is high competition in Pakistani hair care shampoo industry due to product similarity and consumer low involvement in the product

purchasing decision. Consumers easily switch from one shampoo brand to another shampoo brand. Advertising is one of the major factors which affect consumer brand switching behavior. The basic purpose of this research is to identify the basic advertising contents which affect the consumer brand switching behavior and which factors in advertising are more effective in leading consumers towards brand switching. This is a survey research which needs perceptual data from consumer. There a likert scale questionnaire is designed and filled with by 300 shampoo user respondents of beauty care category. Here the Brand switching is used as dependent variable and the independent variables are advertisement contents measured as Product price display in the advertisement, Celebrity in the advertisement, Brand image and product Quality display in the advertisement.

After data collection first of all the data reliability is analyzed through reliability statistics tests. Then factor analysis applied to generate accurate and reliable factors and check the sample adequacy. The regression analysis is applied to check the significant impact of advertising contents on consumers brand switching. The result shows that all the advertising contents has significant impact on consumer brand switching but Product price in the ads has negative impact on brand switching. Consumers tend to react negatively on product price display in the advertising because they think price indicate the quality of the product and they perceived low price of product as low quality. The result shows that Product price in advertising has negatively strong influence towards brand switching. Then brand image in advertising, Celebrity in the ads, and Product Quality in the ads has positively strong impact on brand switching respectively.

It is concluded from this research that company should more focus on advertisement effectiveness in hair care shampoo industry to beat the competitions. They should focus on effective advertising contents like Brand image, Celebrity and product Quality in their advertisement that influence the non loyal customers of competitors to switch to your brand as well as to retain his own loyal and non-loyal customers to move away.

It will also help company to increase its sales and profit and it will ultimately increase the market share of the company as well. The company should avoid repetitive exposure of product price in the advertisement because it has negative impact on brand switching because consumers perceived low price as low quality product. So therefore they do not tend to switch to your brand as you show the product price in the advertising.

## **5.1 Recommendations**

In this cut-throat competition age in the FMCG sector i.e. hair care (shampoo) industry, in which consumer are frequently switching from one brand to another brand due to high product similarity and low risk involvement, the marketers should adopt such advertising strategies which help them to influence competitor's customers to buy their brand as well as to retain their current customer. So the purpose of this study is to identify the effective advertising impact on consumer brand switching in hair care shampoo industry of Pakistan. The result shows that Product Price in the ads, Celebrity in the ads, Brand image and Product Quality in the ads has significant impact on brand switching. Price in the ads has negative impact on brand switching its mean the company should not advertise the Product price in the advertising because consumers perceived this as low quality of product. Following are the main recommendations which companies should adopt in their advertisement development.

- The marketer must display product quality and its attributes in the advertising because it shows the product strength. It encourages competitor's customers to switch to your brand as well as retain his own customers.
- The marketer should also focus to display brand and its eye catchy tag line etc with product attributes in the advertising. It will help customers to distinguish your brand from the other brands. The

consumers of competitive brands influence by your brand image and its unique features and they eventually switch to your brand.

- The marketers should also take attractive, brand-fit and trust worthy celebrities in their advertising because it has a huge impact on consumer brand switching behavior. It will influence the competitor's consumers to switch to your brand as well as retain his own customers.
- The marketer should not expose the Product price in the advertisement because consumers perceive this as low quality product. Consequently it will not influence consumers to switch to your brand.

## References

1. Acquisiti, A. and Spiekerman, S. (2011), Do Interruptions Pay Off? Effects of Interruptive Ads on Consumer's Willingness to Pay, "*Journal of interactive marketing*", Vol. 20, 1-15.
2. Ayanwale, A.B., Alimi, T., and Ayanbimipe, M.A. (2005), The Influence of Advertising on Consumer Brand Preference, "*Journal of Social Science*", Vol. 10(1), 9-16.
3. Clemes, M.D., Gan, C., and Zhang, D. (2010), Customer switching behavior in the Chinese retail banking industry, "*International Journal of Bank Marketing*", Vol. 28(7), 519-546.
4. Dave, D. and Saffer, S. (2010), The impact of Direct to Consumer Advertising on Pharmaceutical price and demand, "*National Bureau of Economic Research*", W15969.
5. Deighton, J., Hennderson, M.C., and Neslin, A. C. (1994), The effect of advertising on brand switching and repeat purchasing, "*Journal of marketing*", Vol. 31(1), 28-43.
6. Dix, S., Phau, I., and Pougnet, S. (2010), Bend it like Beckham: the influence of sports celebrities on young adult consumers, "*Young Consumers: Insight and Ideas for Responsible Marketers*", Vol. 11(1), 36-46.
7. EL-Adl, I.M.D. (2010), The impact of advertising attitudes on the intensity of TV Ads avoidance behavior, "*International Journal of business and social science*", Vol. 1(1), 1-14.
8. Erdem, T. Keane, P.M., and Sun, B. (2008), A Dynamic Model of the Brand Choice When Price and Advertising Signal product Quality, "*Marketing Science*", Vol. 27(6), 1111-1125.
9. Khaldoon, N., Yoon, H.J., Naipaul, S., and Parsa, H.G. (2010), Effect of price discount frames and levels on consumers' perceptions in low-end service industries, "*International Journal of Contemporary Hospitality Management*", Vol. 22(6), 814-835.
10. Montaner, T., Chernatony, L.D. and Buil, I. (2011), Consumer response to gift promotions, "*Journal of Product & Brand Management*", Vol. 20(2), 101-110.

11. Raj, S. P. (1982), The Effects of Advertising on High and Low Loyalty Consumer Segments, "*Journal of Consumer Research*", Vol. 9(1), 77-89.
12. Shukla, P. (2009), Impact of contextual factors, brand loyalty and brand switching on purchase decisions, "*Journal of Consumer Marketing*", Vol. 26(5), 348-357.
13. Singh, S., Bangar, S.K. (2011), Effect of discounting on the brand image, Available at SSRN: <http://ssrn.com/abstract=1839468>.
14. Tung, G.S., Kuo, C.J., and Kuo, Y.T. (2011), Promotion, Switching, Barriers and Loyalty, "*Australian journal of business and management science*", Vol. 1(2), 30-44.

**ANNUAL RESEARCH JOURNAL "GIDROSHIA" ISSN 2310-6956",  
University of Turbat (Kech) Mekran-Pak Vol.1 No.1, 2013**

**IMPACT OF ERP ON ROLES OF MANAGEMENT ACCOUNTANT  
IN ORGANIZATIONS**

**Muhammad Azhar Sheikh\* Jamal Abdul Nasir\*\*  
Ghulam Shabbir\*\*\*\* Dr. Naseebullah**

**ABSTRACT**

*Enterprise resource planning (ERP) systems are a fundamental element for organizations. Its purpose is to facilitate the flow of information between all business functions inside the boundaries of the organization. It gives you the opportunity of integrating every procedure of your business while improving the quality of several areas simultaneously. This study examines the impact of ERP systems on role of management accountants in Balochistan, Sindh, Punjab, and NWFP- all provinces of Pakistan as it evolves from a traditional role to a more dynamic involvement in the business*

**KEYWORDS: Enterprise resource planning systems, Organizations, Change management, Management accountant**

**1. INTRODUCTION:**

Enterprise Resource Planning is the latest high end solution, information technology has lent to business application. These days we are living in a globalized world, where competition is not absent. This is why, it is essential for managers of the enterprise to develop different

---

\* Department of Commerce, The Islamia University of Bahawalpur-Pakistan.

\*\* Faculty of Social and Human Sciences, University of Southampton, United Kingdom and Department of Statistics, Islamia University of Bahawalpur-Pakistan

\*\*\*\* Professor, Department of Media Studies, The Islamia University of Bahawalpur-Pakistan  
Assistant Professor Media and Journalism University of Balochistan, Quetta.

strategies to satisfy client needs, many of which have become hard to see. They are trying to anticipate what clients will want or need, and in that way they work to offer customized products. Companies are looking for software that can be capable of administrating every aspect of their business integrally. Many of them have been seeking new technological tools that can optimize their internal procedures and make them more efficient. The ERP solutions seek to streamline and integrate operation processes and information flows in the company to synergize the resources of an organization namely: men, material, money and machine through information. An attempt must be taken to strengthen the economy of Pakistan as it is very rich in mineral and other natural resources especially in case of Balochistan province which was severally neglected by the Federal Government. Today many companies in India have gone in for implementation of ERP and it is expected in the near future that 60% of the companies will be implementing one or the other ERP packages since this will become a must for gaining competitive advantage.

The aim of this paper is to demonstrate the impact of ERP implementation as a new system on management accounting practices. The management accounting and ERP system will be introduced and clarify how are they working together? This paper will also review a definition of an ERP system implementation, defining the management accounting, the dimensions of management accounting such as the roles and attributes of management accounting, finally implications of the impact of the ERP implementation on the management accounting.

## **2. A REVIEW OF THE ERP SYSTEMS ON THE ROLE OF MANAGEMENT ACCOUNTANTS:**

ERP is a broad term for any software application that integrates all business processes and data into a single system (Waxer, 2006). ERP facilitates company-wide Integrated Information System covering all functional areas. ERP provides for complete integration of Systems not only across the departments in a company but also across the companies under the same management. ERP not only addresses the current

requirements of the company but also provides the opportunity of continually improving and refining business processes.

ERP provides business intelligence tools like Decision Support Systems (DSS), Executive Information System (EIS), Reporting, Data Mining and Early Warning Systems (Robots) for enabling people to make better decisions and thus improve their business processes. As these ERP systems are integrated, all data are available to all personnel throughout the organization at any time (Aidan O' Mahony, John Doran 2008). These software packages can be customized to cater for the specific needs of an organization (Esteves and Pastor, 2001; Granlund and Malmi, 2002). ERP systems have become the system of choice for the majority of companies. These systems have changed the way accounting information is processed, evaluated and reported throughout the business. ERP systems are comprehensive systems as they operate throughout the entire company maintaining large amounts of data. They are also modular systems which are based on a client/server technology. Data are stored in a single database, which eliminates the need to update data in several different subsystems (Davenport, 1998; Rosemann, 1999). By providing universal, real-time access to operating and financial data, the systems allow companies to streamline their management structures, creating flatter, more flexible, and more democratic organizations (Davenport, 1998; Ross, 2000; Jackling and Spraakman, 2006).

The Institute of Certified Management Accountants (ICMA, Australia) describes the management accountant as someone who applies his or her professional knowledge and skill in the preparation and presentation of financial and other decision oriented information in such a way as to assist management in the formulation of policies and in the planning and control of the operation. The changes which are affecting the core role of the management accountant are in large part due to the popularity of ERP systems such as SAP and Baan, particularly in large companies (Foote, 2006; Jackling and Spraakman, 2006; Bae et al. 2004; Booth et al. 2000; Burns et al., 1999; Davenport 1998).

In this new environment the management accountant must acquire a broad knowledge of the business, and add value to the organization by bringing financial expertise to the management process and participating as team players. The management accountant must now move into the spotlight and become an integral part of the management team by using a broader range of skills, utilizing both financial and non-financial indicators; taking decision-making roles in cross functional teams; and integrating operational and strategic control. The management accountant must broaden the nature of their role and become a strategic manager (Collins, 2000; Murphy, 2004; Parker, 2002; Pierce, 2001).

ERP is a term used in industry for the wider set of activities supported by multi-module application software that help the manufactures or other business who manage the important parts of its business including product planning, parts purchasing, maintaining inventories, interacting with suppliers, providing customer service, and tracking orders.

In an organization, the ERP package is implemented using a phased manner strategy. A phased manner strategy includes a step by step method of implementing the ERP which will yield the better results as compared to big-bang strategy. However, the formal steps involved in the implementation of an ERP package are sketched in Figure 1. A standard model ERP package consists on the following: project planning, business and operational analysis including gap analysis, business process re-engineering, installation and configuration, project team training, post implementation.

Apart from discussing the above steps, the above steps are grouped and sub-divided into four major phases namely: 1) detailed discussions, 2) design and customization, 3) implementation and 4) production. The phases of implementation vis-à-vis their tasks and respective deliverables are shown in Figure 1. The main tasks and deliverables of these four phases of an ERP package are briefly mentioned here.

**Phase 1 (Detailed Discussion):** Task: - Project initialization, evaluation of current processes, business practices, set-up project organization  
 Deliverables:- Accepted norms and Conditions, project organization chart, identify work teams.

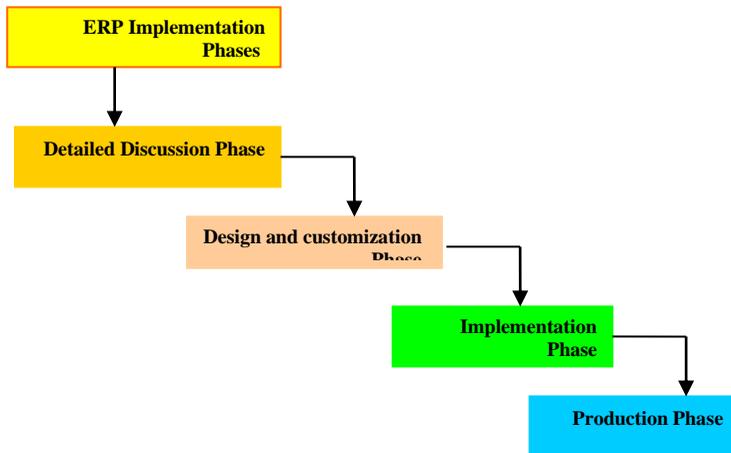
**Phase 2 (Design and customization):** Task: - Map organization, map business process, define functions and processes, ERP software configuration and Build ERP system modifications.  
 Deliverables: - Organization structure, design specification, process flow diagrams, function model, configuration recording and system modification.

**Phase 3 (Implementation):** Task: - Create go-live plan and documentation, Integrate applications, test the ERP customization, train users.

Deliverables: - Testing environment report, customization test report and implementation report

**Phase 4 (Production):** Task: - Run trial production, maintain systems

Deliverables: - Reconciliation reports, conversion plan execution.



**Figure 1: Stepwise phases of an enterprise resource planning (ERP) package**

## **2.1 Change in the Role of the Management Accountant:**

The suggestions in the literature that the role of the management accountant has changed and that one of the main reasons is the implementation of ERP systems is supported by the interviewees (Aidan O' Mahony, John Doran 2008). This is in line with similar literature where research shows that ERP systems have only a limited impact on management accounting practices (Fahy and Lynch, 1999; Granlund and Malmi, 2002; Scapens and Jazayeri, 2003). However there are conflicting views as some literature state that the adoption of an ERP system can bring around a redefinition in the tasks and responsibilities of the management accountant (Brazil and Li, 2005; Carruth, 2004; Gabriels, 2002). It is clear that ERP is influencing the management accountant and is a valuable tool which assists the management accountant in fulfilling their core activities. However the core responsibilities remain and there is still a high priority to provide the financials on a monthly basis. The extent to which the new system has had an impact on the role of management accountants was assessed by several.

***Changes in time spent on data collection*** - All firms agreed that the management accountants spent significantly less time on data collection following the implementation of the ERP system irrespective of whether the implementation was a success or not. There was also an indication that the type of data collected had changed. For example, company E indicated that the manual accruals had decreased considerably since implementation of the ERP system.

***Changes in time spent on data analysis*** - Most companies agreed that management accountants are spending a lot more time on data analysis. This was particularly the case for the more successful implementations. Management accountants: a profession dramatically changed by ERP systems.

***Changes in involvement in business decision-making*** - All companies agreed that management accountants were more involved in business decision-making following the implementation of the ERP system. This also varied with the relative success of the ERP implementation, with the

changed involvement in business decision-making being scored highly for the most successful implementations. Case studies in literature review showed that the extent to which the new system has had an impact on the role of management accountants was assessed by several criteria:

***Changes in focus on internal reporting*** - The focus of the management accountants on internal reporting (for example performance measures and control issues) increased most companies.

***Changes in focus on external environment*** - The focus of the management accountants on the external environment (for example benchmarking) had increased where it was applicable to the company. This change in focus was not related to the success or otherwise of the ERP system implementation.

***Changes in focus from historic to forward looking analysis*** - In all the organizations that had a successful implementation, the management accountants are involved in significantly more forward looking analyses. This is most likely a result of the capability of the ERP systems to generate virtually any desired historical-based report. As such, there is limited need for the management accountants to perform this type of task. The management accountants are spending much more time and effort on business planning.

***Changes in focus from domain specific to cross-functional analysis*** - The implementation of ERP systems is viewed as a prerequisite for cross-functional analysis for most of these organizations. In virtually every instance, prior to the implementation of the ERP system, the data wasn't available to undertake cross-functional analysis. Now that the data is available, the management accountants are able to be involved in cross-functional analysis.

***Changes in use of time resulting from elimination of routine report generation*** - Since routine report generation was previously the responsibility of the management accountants, they now have more time available to complete other tasks. In most organizations, this time has resulted in a change in how the management accountants approach their

job, and in how the management accountants are perceived by others in the organization. In some settings, the management accountant is becoming more of a business partner to senior management.

***Changes required in the management accountant's communication skills*** - Management accountants need to be technically competent, and must be able to communicate those technicalities. While communication was always important, the study found that the need for improved communication skills has expanded because of the way management accountants are now involved in discussions with the business management team. In order to be business partners, management accountants must provide insight and present the information at the time that the manager needs that information.

***Changes in the formal and informal communication structure resulting from the ERP system*** - No link was found between the implementation of the ERP system and the changes in the formal and informal communication structure. The ERP system, by its very nature, results in significant centralization of data. This is often associated with a more formal communication structure. The existing organizational structure and culture seems to have a greater impact on the communication structure than does the ERP system.

***Changes in the management accountant's satisfaction resulting from the ERP system*** - The ERP systems implementation generally resulted in increased job satisfaction for the management accountants. Job satisfaction needs to be examined over a period of time, rather than at a specific point in time. If asked immediately after the ERP system was implemented, most management accountants would be very frustrated with the software, the hours, the task, and many other aspects.

***The management accountants' contribution to the ERP system success*** - In a number of organizations, the management accountants played a critical role in the implementation and success of the ERP system. The more active the role played by the management accountants, the higher the level of perceived success for the ERP implementation. This was consistent across all organizations visited. If

the management accountants were actively involved in the ERP implementation from the beginning, and acted as a change agent, the system was a success.

### **3. THE MAIN ROLE FOR MANAGEMENT ACCOUNTING IN THE ORGANIZATION**

Management accounting is a system of providing and measuring operational and financial information that guides managerial actions, motivates behaviors, and supports and creates the cultural values necessary to achieve an organization's strategic objectives (Jan. et al, 1999).

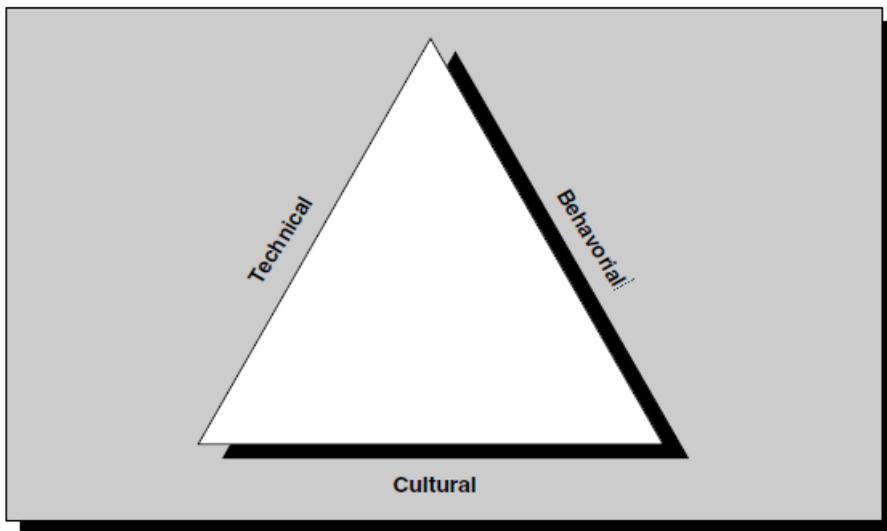
Management accounting is often defined as a system that provides useful information for managers in terms of decision making, planning, control and performance evaluation (Drury, 2004, p. 20). Atkinson et al., (2001) describes management accounting as a value adding continuous improvement process of planning, measuring, designing and operating a nonfinancial and financial information system that guides management action, motivates behavior, and supports and creates the cultural values necessary to achieve an organization's strategic, operating and tactical objective. Management accounting measures and reports financial and non-financial information that helps managers make decisions to fulfill the goals of an organization. Managers use management accounting information to choose, communicate and implement strategy, coordinate product design, production and marketing decisions, Management accounting focuses on internal reporting, and Management accounting is future oriented.

### **4. ATTRIBUTES OF A GOOD MANAGEMENT-ACCOUNTING SYSTEM**

The management accounting can be successful if it contains some attributes which enhance its process. Jan et al., (1999) have documented the attributes of a good management accounting system which are sketched in Figure 2.

### Attributes of a Good Management-Accounting System—The (TBC) Triangle

---



**Figure 2: The triangular diagram showing the attributes of a good management accounting system**

Figure 2 shows a good management accounting system information has three main attributes:

- *Technical*—it enhances the understanding of the phenomena measured and provides relevant information for strategic decisions.
- *Behavioral*—it encourages actions that are consistent with an organization's strategic objectives.
- *Cultural*—it supports and/or creates a set of shared cultural values, beliefs, and mindsets in an organization and society.

## **5. THE IMPACT OF ERP IMPLEMENTATION ON MANAGEMENT ACCOUNTING SYSTEM**

Management accountants are the key personals to implement the ERP in the organization; therefore, the involvement of management accountants can be seen as an important success factor for the ERP

implementations. Management accountants play a critical role in providing data and information to manage the business, their participation is critical to ensure that the needed data are available and so that the management accountants will know how the data are obtained and reported. Literature has shown that involvement of the management accountants results in better outcomes in the ERP implementation (<<Add>> cite three to four references here to support the argument). - In a number of organizations, the management accountants played a critical role in the implementation and success of the ERP system. The more active the role played by the management accountants, the higher the level of perceived success for the ERP implementation.

## **6. BENEFITS OF ERP**

The main benefits of using ERP systems identified could be summarized as follows

The benefits accruing to any business enterprise on account of implementing are unlimited. According to the companies say for example NIKE, DHL, Tektronix, Fujitsu, Millipore, Sun Microsystems, following are some of the benefits they achieved by implementing ERP packages.

1. By giving personal payable accounts has increased the control of invoicing and payment processing and thereby boosting their productivity and eliminating their reliance on computer personnel for these operations.
2. Reduce paper documents by providing on-line formats for quickly entering and retrieving information.
3. Improves timeliness of information by permitting, posting daily instead of monthly.
4. Greater accuracy of information with detailed content, better presentation, fully satisfactory for the Auditors. Improved Cost Control. Faster response and follow up on customers.
5. More efficient cash collection, say, material reduction in delay in payments by customers.
6. Better monitoring and quicker resolution of queries.

7. Enables quick response to change in business operations and market conditions.
8. Helps to achieve competitive advantage by improving its business process.
9. Improves supply-demand linkage with remote locations and branches in different countries.
10. Provides a unified customer database usable by all applications.
11. Improves International operations by supporting a variety of tax structures, invoicing schemes, multiple currencies, multiple period accounting and languages.
12. Improves information access and management throughout the enterprise.
13. Provides solution for problems like Y2K and Single Monetary Unit (SMU) or Euro Currency.

## **7. FINDINGS**

The findings of this study indicate that when management accountants are involved in the implementation of an ERP system there is an increased likelihood of success. The task is not easy and there was much frustration in the implementation process. However, in the successful implementations, data quality increases, there is more timely access to information, and decision-making is improved. Furthermore, a successful ERP implementation results in significant changes in the tasks of the management accountants. The management accountants become more closely involved in business decision-making and perform other value adding tasks rather than the mundane reporting tasks that are now performed automatically using the ERP.

## **8. CONCLUSION**

The study was started as a critical assessment of ERP on the role of management accountants. As a descriptive critical study a number of notable arguments put forward to understand the effectiveness of ERP through managers in the organizations. In sum, the findings suggest that

the ERP system has had a positive effect on the role of the management accountant, however, the rise of these ERP systems has not changed the ultimate responsibility of accountants which is the end of month figures. The ERP integrates operation processes and information flows in the company to synergize the resources of an organization namely men, material, money and machine through information. ERP effortlessly communicates information across various departments and improves efficiency, performance and productivity levels.

## **9. RECOMMENDATIONS FOR MANAGEMENT ACCOUNTANTS IN AN ERP ENVIRONMENT**

The participants in this research were very consistent with their perception of the skills needed by management accountants in ERP environments. All of the interviewees started from the perspective that the management accountant has both appropriate and adequate accounting training. Some believed that a formal accounting qualification was very desirable as a way to signal that a management accountant possesses the requisite skills. Almost every participant identified the need for good communication and interpersonal skills. Analytical skills and the ability to focus on objectives and prioritise work (work management) were also deemed important.

The increased importance in understanding the business was also emphasized, as was the need to have 'entrepreneurial salesman skills.' That is, the management accountants need to be able to communicate with the management team and synthesize and explain the results (the impact of the financial data) in a way that can be easily understood. The ERP system may strongly be recommended to be implemented in organizations situated in Balochistan province of Pakistan which is abundant in mineral and natural resources. Management accountants need to take on a partnership role with the managers. This will sometimes result in the management accountants supporting major decisions by influencing managers onto the right area through a thoughtful and reasoned explanation of what the information means.

Along with these skills, other non-traditional skills were identified. These included being an educator as the management accountants must be able to explain how the numbers were obtained and what they mean, and they might also be asked to explain how the system generates those numbers. Patience was also identified as needed since the ERP packages are very difficult to use when they are first implemented.

**REFERENCES**

- Atkinson, R. D. Banker, R. S. Kaplan and S. M. Young (2001): *Management Accounting*, 3rd edition, Prentice- Hall Inc, Upper Saddle River, New Jersey 07458
- Caglio (2003): Enterprise Resource Planning systems and accountants: towards hybridization? *European Accounting Review*, Vol. 12, Issue 1, pp. 123–153.
- Atkinson, R. Balakrishnan, P. Booth, J. M. Cote, T. Groot, T. Malmi, H. Roberts, E. Uliana and A. Wu (1997): New Directions in Management Accounting Research, *Journal of Management Accounting Research*, Vol. 9, pp. 79-108.
- Abdinnour-Helm, S., Lengnick-Hall, M.L., and Lengnick-Hall, C.A., "Pre-implementation attitudes and organizational readiness for implementing an Enterprise Resource Planning system", *European Journal of Operational Research*, Vol 146 (2), 2003, 258-273.
- Light, C. P. Holland, K. Wills (2001): ERP and best of breed: a comparative analysis, *Business Process Management Journal*, Vol. 7, No. 3, pp. 216-224.
- Pierce and T. O’Dea (2003): Management accounting information and the needs of managers Perceptions of managers and accountants compared, *The British Accounting Review*, Vol. 35, pp. 257-290.
- Booth, P., Matolcsy, Z., and. Wieder, B. (2000). *Integrated Information Systems (ERP-systems) and Accounting Practise – the Australian Experience*. Paper presented at the Third European Conference on Accounting Information Systems, Munich, Germany, pp. 27-28.
- Brazel, J. F. and Dang, Li (2005). The Effect of ERP System Implementations on the Usefulness of Accounting Information. *Managerial Auditing Journal*, Vol. 20, No. 6. pp. 619 – 631.

- Burns , J., Ezzamel M. and Scapens R. (1999). Management Accounting Change in the UK. *Management Accounting*, London, Vol.77 No.3, pp. 28-30.
- Carruth, B. (2004). Management Accounting-What's new? *Chartered Accountants Journal*. Sept. 2004 pp. 29-30.
- Ma, D. C. Chou and D. C. Yen (2000): Data warehousing, technology assessment and management, *Industrial Management and Data Systems*, Vol. 100, Issue 3, pp. 125-135.
- G. K. H. Li and E. Jordan (1999): *The Information Systems (IS) Role of Accountants: A*
- Case Study of an On-line Analytical Processing (OLAP) Implementation, paper presented at American Conference on Information Systems (AMCIS 1999), 13-15 August, Milwaukee, Wisconsin, the United States.
- Jacobs, F.R. and Whybark, D.C. (2001), *Why ERP ? A primer on SAP implementation* Irwin McGraw Hill
- J. Burns and G. Baldvinsdottir (2005): An Institutional Perspective of Accountants' New Roles – The Interplay of Contradictions and Praxis, *European Accounting Review*, Vol. 14, Issue 4, pp. 725-757.
- K. Lukka and M. Granlund (1996): Cost accounting in Finland: current practice and trends of development, *European Accounting Review*, Vol. 5, Issue 1, pp. 1-28.
- M. Newman, C. Smart and I. Vertinsky (1989): Occupational role dimensions: the profession of management accounting, *The British Accounting Review*, Vol. 21, Issue 2, pp. 127-140
- P. Booth, Z. Matolcsy and B. Wieder (2000): Integrated Information Systems (ERPsystems) and Accounting Practice – The Australian Experience, paper presented at the third European Conference on Accounting Information Systems (ECAIS), March 27-28, 2000, Munich, Germany.
- R.R.K. Sharma "ERP implementation and its effect on a few variables of organization structure and manager's job". *Journal of*

the Academy of Business and Economics. FindArticles.com. 12 Dec, 2010.

- S. Brignall and J. Ballantine (2004): Strategic Enterprise Management Systems: new directions for research, *Management Accounting Research*, Vol. 15, Issue 2, pp. 225-240.
- S. C. Lodh and M. J. R Gaffikin (2003): Implementation of an integrated accounting and cost management system using the SAP system: a field study, *European Accounting Review*, Vol. 12, Issue 1, pp. 85-121.
- U. J. Gelinas Jr., S. G. Sutton and J. E. Hunton (2005): *Accounting Information Systems*, 6th edition, Thomson/South-Western



**ANNUAL RESEARCH JOURNAL "GIDROSHIA" ISSN 2310-6956",  
University of Turbat (Kech) Mekran-Pak VOL.1 No.1, 2013**

**Book Review**

**THE SHEPHERDS OF KOH-I-SULAIMAN**

**By Dr. Naik M.Buzdar**

**Reviewed by Dr. Abdul Razzaq Sabir<sup>10</sup>**

One can easily say that in fact domestication of animals was first time made possible some ten thousand years ago near Neolithic archaeological site at Mehrgarh at the foothills of Bolan in Balochistan. The area has the additional distinction that the first shepherd or shepherdess in the human history in the south Asia was also born at the same place. Hence, Shepherds and mountains of Balochistan are more familiar to each other as compared to the other parts of the world. In the nomadic life shepherd is the backbone of the economy of the society, the life circle of the people revolves around him.

Geographically, Balochistan is the extension of famous Iranian plateau having famous barren mountain ranges, and intermountain valleys and plains. Balochistan can easily be called first land of shepherds or shepherd's land.

Considered to be a noble and honorable profession the nomads feel guide in choosing it as a profession and becoming shepherd. It is high priority the author was forced / compelled to investigate the role of shepherd and the social values and its economic utility for nomads.

The book under discussion is extended which is the enlarged version of Dr. Nek Buzdar's doctoral thesis, a comprehensive study of the life style and routine life of the Baloch tribes living in the Koh-i-Sulaiman or Sulaiman mountain.

The book entitled Shepherds of Koh-i-Sulaiman is highly informative with first-hand information about the Shepherds of Balochistan in general and Shepherds of Koh-i-Suleman in particular. The author himself has remained a part of that nomadic life and could

---

<sup>10</sup> Vice Chancellor University of Turbat (Kech) Balochistan-Pakistan

not detach himself and still feels himself to be a part of it. Hence, he has provided details in depth about the nomadic and tribal life in the area.

The author of this book observed that Balochistan despite having rich exploited and unexploited natural resources, is economically / cast developed and the people of Balochistan are the least literate and the most deprived of the basic necessities of life. The traditional economy of the province like animal breeding, dry farming and subsistence fishing still serves as a resource of living to the majority of the population.

The book spreads over 122 pages containing 8 chapters. In the first and introductory chapter the author discusses land and geography of Balochistan in general touching life style in typical Sulemainian villages, social institutions, resources and productivity etc. In the second and third chapters of the book procedure, overview of the author has offered a review of the literature, data collection, theoretical models used, including institutional behavioral model, conservation-economic behavioral model and analytical techniques. In the fourth chapter he has analyzed in detail theoretical analysis of relationship between social institutions and rangeland productivity in the Balochistan in general and Sulaiman Range in particular. In family system he says that marriages generally take place between members of the same tribe and between close kin preferably first cousins and only rarely between the members of the different tribes. In the same chapter he has mentioned the difference between traditional institutions, use rates and productivity and non-traditional institutions affecting use and productivity. In the fifth chapter of the book a theoretical analysis of relationships between economic forces and rangeland productivity, with special reference to the interest rates and credit system, taxes and contributions, income levels and interest rates, expenditure on basic necessities of life etc. The sixth and very important chapter of the book is an empirical analysis of relationships between institutions, economic forces and productivity. In this chapter the author has produced in detail stocking rates and its relationship with carrying capacity animal productivity and economic productivity. The seventh chapter is about local survey responses to questions of range productivity. The eighth and last chapter of the book comprises of the conclusion of the study, and the author's recommendations.

In his concluding remarks the author has described that he has tried to answer the following whether the tribal social institutions

influenced an individual animal raiser's behaviour towards resource use or stocking rates? (ii) Whether the economic forces influenced animal raiser's behaviour towards resource use? (iii) Whether different levels of resources utilization/stocking rates influenced the forage, animal and economic productivity of the rangelands?

In the book references to the original sources of the examples are accurate and exact, especially when it comes to the works published by the foreign authors. The reference books quoted in the bibliography are authentic on the subject but one can ask for a more exact examples referred in the books and journals published in Pakistan.

In his recommendations, about institutions, the author has recommended that new institutions may established on the basis of those traditional concepts of cooperation and constraints which have made the system viable for such a long period of time. One main reason behind overstocking and overgrazing is that no employment opportunities other than in animal shepherding business exist in that tribal area of Koh I Sulaiman. The best solution to overcome water shortage in Balochistan in general and Koh I Suleman in particular seems to be construction of small dams to store rain water for drinking and irrigation purposes. He further recommends for cultivation of fast growing and drought resistant varieties of grass and vegetation. In education sector reforms he says that economic growth and prosperity in the Sulaiman mountain region and in the rest of Balochistan cannot be achieved without radically reforming failed education system in the province. He further suggests that a system of free and compulsory elementary education should be introduced with immediate effect. An incentive system should be introduced in which those poor parents who send their children to the schools should be paid compensations. For what the teachers in the province should be paid salaries at par with the doctors and engineers.

This book can be called is a socio-economic profile of Koh-i-Suleman, but provides reasonable data about socio economic conditions of the entire Balochistan. The efforts of the author deserve appreciation not only by the Baloch writers and intellectuals but also by the academic and research circles of the province. The book not only provides first-hand information and data about Koh I Sulaiman and can serves as a reference book on the subject.

Finally, I appreciate efforts of the author for his thorough and valuable study of an exclusive subject on the socio-economic factors of Balochistan, in fact, it is a reference book for future researchers and scholars working on mountainous regions of Balochistan. (BR 2011)