

5th International Conference on Business and Economics Studies

August 10-12, 2018, New York, USA

CONFERENCE PROCEEDINGS

ISSN 2469-7540



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PREFACE

Complexities surrounding the globalization and the interconnectedness of nations are creating challenges for nation-states as well as other newly formed political structures. Innovative social, political, and economic structures are being formed and existing structures are being re-formed to adapt to the forces of globalization. With all these changes (and thus innovations), scholars and practitioners are trying to understand how they fit within these complexities and what the future will be like if we do not respond effectively.

Through this conference we brought experts from around the world to share their research and experiences in business, economics, finance and management. Our conference sparked some exceptional conversations around the very meaning of culture and cultural competencies.

Here, we present some of our scholarly discussions that took place during our conference in a more detailed manner and hope that these scholarly conversations continue to inform us all as we work towards an even more globalized world in which we can celebrate its unity.

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The Relationship between Leadership Styles and Organizational Commitment: A Mixed-Methods Systematic Review

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Abstract: In past decades, a plethora of studies conducted by researchers have investigated the correlational relationship between the unique leadership styles and how the use of those styles within an organizational context impact employee commitment and performance; this relationship is important because organizations rely on meeting the objectives that result in successful industry outcomes. While the studies in the scholarly literature illustrate these correlational relationships between leadership styles and organizational commitment, the need to explain why these relationships exist presented a promising research opportunity. The purpose of this dissertation proposal is to further investigate these relationships by forming a statement of assumptions and hypotheses relating to the phenomenon of interest. To achieve this, I conducted a mixed-methods research synthesis (MMRS) from 223 scholarly, primary peer-reviewed articles via an explanatory sequential approach to a.) identify the phenomenon of interest b.) further examine the relationships c.) meet quality assessment standards via the American Educational Research Association (AERA, 2006) standards d.) summarize the findings e.) synthesize the findings f.) identify the emergent patterns, themes, and metaphors to explain the phenomenon of interest. To explain the phenomenon of interest following the synthesis phase of the MMRS, a theoretical framework will be developed from the empirical data.

Keywords: Leadership Styles, Organizational Commitment, Employee Engagement, Employee Performance, Mixed-Methods Research Synthesis, Mixed-Methods Systematic Review

Examining Fans' Behaviors in The Relationship Between Social Media and Sports Marketing: Konyaspor Football Club Case

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Abstract: Sports nowadays is accepted as an activity that people are more interested in to have fun and to live a healthier life. Sports brings people from different cultures together without discrimination by age, race or religion. Thanks to the unifying nature of sports, people support teams in countries that they have never visited despite their lives in different cultures and countries, and they have an emotional connection with them. There is an undeniable influence of communication and marketing when sports become such an effective activity. Especially social media has become an important means of communication and marketing regarding both individual users and enterprises, especially in the last 10 years as a result of the developments in technology and new approaches in consumer behavior. The objective of this study is to examine the behaviors of fans as consumers of the licensed products of Konyaspor Football Club in the relationship between social media and sports marketing. The data of this research have been collected through questionnaire. 384 questionnaires were distributed to the fans. According to the results, there is a positive and significant relationship between getting information from social media channels of Konyaspor Football Club and fans' consuming behavior tendency.

Keywords: Social Media, Social Media Marketing, Sports Marketing, Consumer Behavior

An Empirical Study to Measure the Role of Consumer Ethnocentrism and Country of Origin in Purchasing Decisions

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Abstract: The concept of ethnocentrism, which has an important place in purchasing decisions, has been found as a consumer ethnocentrism in marketing literature. Consumer ethnocentrism, which has a critical prescription for the consumer profile, especially influenced by globalization, refers to the products of the countries to which the persons belong, in other words, to regard the domestic products as superior, not to buy the foreign products. Another concept associated with this concept, which has a critical prescription for the determination of consumer behavior by marketing researchers and the formation of accurate marketing strategies, is the concept of country of origin. The researchers provide important clues about the purchasing decisions of the country of origin, which correspond to the positive or negative effect of the purchased products on the consumer's country of origin. The main purpose of this study is; consumer ethnocentrism and the effect of country of origin on consumer purchasing decisions. For this purpose, a questionnaire was applied to the registered members of the Head of the Chamber of Crafts and Artisans of the Beysehir District of Konya and the data obtained from the questionnaires were analyzed with the SPSS 23.0 package program. As a result of the analysis; it was found that the vast majority of the participants had a moderate ethnocentric tendency and that consumers' purchasing decisions showed a significant difference between all groups according to the product categories of the country of origin effect.

Keywords: Ethnocentrism, Consumer Ethnocentrism, Country of Origin Effect, Purchase Decision

Exploring Highly Mobile Indonesian Professionals' Views On Life

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Abstract: This paper aims to obtain insights about highly mobile Indonesian professionals' life. These insights take the form of factors and characters that these professionals represent in their work life. These in turn act as supplements for the overall end result framework. It is the era of globalization and countries around the world are becoming more and more connected. Past findings have shown how globalization facilitates companies' inclination towards pursuing international expansions and linkages. As a result, it enables their employees to engage and interact with companies in other parts of the world frequently. Through a combination of both past literature and current information from interviews, data is analysed qualitatively using a template analysis, recognized as thematic analysis. A coding process is undertaken to obtain themes that will then be compared with existing frameworks to produce manager's characteristics and factors. Due to the many past findings related to this research, the result is compared with previous frameworks. Practical implications include most data obtained is secondary data while primary data is viewed as supplementary information to relate the theories in practice. This study combines theory on expatriate management, Hofstede cultural dimension, cross-cultural adjustment frameworks, diversity management and culture-general competencies.

Keywords: Manager; Indonesia; High Mobility; Cross-Cultural; Culture; Globalization; Professionals

Comparative Financial Efficiency Analysis of the Turkish and Azerbaijani Banking Sector

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Abstract: The purpose of this study is to measure the efficiency of commercial banks in Turkish and Azerbaijani banking sector using the Data Envelopment Analysis and investigate whether there is a development in their efficiency on a yearly basis by the help of Malmquist Total Factor Productivity Index. In this context, we have used uninterrupted data belonging to 11 commercial banks in the Turkish and Azerbaijani banking sector between 2015 and 2017. In the measurement of efficiency as inputs (Total deposits/Total assets, Interest expenses/Total assets and Other operating expenses/Total assets) were used and as outputs (Total loans and receivables/Total assets and Interest income/Total assets) were used. The efficiency levels of the banks were shared and the efficiency values of Turkish and Azerbaijani banks were compared.

Keywords: Turkish Banking Sector, Data Envelopment Analysis, Malmquist Total Factor Productivity, Financial Efficiency

The Impact of Imports on Skilled Immigration in Developed Countries

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Abstract: In the context of Donald Trump's policy to impose tariffs to the US imports, especially from China and Mexico, and his harsh anti-immigration stance, it is relevant to investigate how these two variables are related, namely imports and immigration. Existing studies have typically analyzed the effects of immigration on imports. But we wondered if the reverse could be true. Thus, this study explores the impacts of import restriction on migration across skill levels. The first part of the paper provides differential effects of barriers of imports on migration across education levels, and the second part presents how such barriers influence migration between skilled and unskilled labor. When a large country imposes import restrictions, the price level in the importing country increases while it decreases in the exporting country. Trade theory predicts that divergence in goods' prices between countries creates pressure for widening wage gaps. Wages in the importing country rise while they fall in the exporting country. Thus, workers in the exporting countries see a strong incentive to immigrate to the importing countries with the increase in import barriers such as tariffs and quotas. There are also reasons to believe that import barriers affect the propensity to immigrate of skilled and unskilled workers differently. Given that capital complement skilled workers, capital inflows may increase demand for skilled workers. Trade wars because of tariffs and other import restrictions appear to have decrease capital outflows and foreign direct investment to exporting countries in part by losing investors' confidence. Thus, net capital inflows increase with more tariffs. Therefore, skilled workers are more migratory than unskilled ones. Using a panel of 20 OECD countries for the period of 1980-2010 and an instrumental variable method, the results show that import barriers affect the immigration of workers and that such barriers have a stronger impact on the immigration of skilled-workers than those of unskilled.

Keywords: Tariff, Immigration, Foreign Direct Investment, Skilled and Unskilled Labor

Development of Job Matching Algorithm Using National Competency Standard (NCS) in Korean Labor Market

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Abstract: Youth unemployment has been one of the most serious economic and social problems for years in Korea, and, accordingly, many initiatives were developed to reduce youth unemployment. In academia, job mismatching between jobs requirements and workers' professional skills has been an important subject matter explaining youth unemployment. In Korea, National Competency Standard (NCS), "required knowledge, skills and attitudes needed to execute one's duties at work" (Kim & Do, 2016), was developed so that colleges/universities could address the youth unemployment problem. Specifically, NCS-based curriculum was developed so that higher education can strategically provide more career-focused and hands-on experience to the students. The purpose of this study is to discuss and explore alternative ways in which higher education, students, and companies can solve the problems of employment as well as recruitment using a case of a Korean labor market. To do so, this study develops a job matching algorithm which will propose the most optimal solution through strategically linking a student (n) to his/her competencies required by the company (m); that way the company can reduce turnover cost, increase retention rate, enhance organizational performance. Further, this study will develop an NCS-based employment framework based on the algorithm.

Keywords: Youth Unemployment, Job Matching, Algorithm.

An Investigation regarding Co-Branded Service Alliances

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Abstract: Co-branding scholars have found several rules for defining various types of co-branded service alliances. Co-branding researchers have shown that, when the level of integration is low, consumers can easily identify which brand to praise or criticize, and thus consumers' perceived brand equity of one brand partner is not influenced by the other partner. We argue that previous studies have totally neglected the impact of "bundling" on the lowly-integrated co-branded services. This study tries to bridge this critical gap. The theory-driven propositions are motivated to validate the following two statements. First, in a highly-integrated co-branded service, the post-alliance value of one brand can influence that of the other brand partner; second, in a lowly-integrated co-branded service, the CBBE of one brand is very likely to be affected by that of the other partnering brand, if consumers consider the services provided by each of the brand to be a bundle. We use a modeling approach to prove the above-mentioned two research propositions. We also adopt the survey method to validate the proposition. That is, we utilize the brand equity scale as the measurement instruments of the brand value. We collect 257 valid responses and conduct the paired samples t-test. Our results partially support the second proposition: when the value of one brand is low and that of the other is high, the brand value of the lower brand increases. The theoretical contributions of this study are threefold. First, we are the first to apply the "bundling" theory in the co-branded service context. That is, existing studies on service bundling have focused on the influences of consumer evaluations of the pricing mechanism on the purchase intentions, but we identify the influence of "branding" effect. Secondly, this study addresses the importance of the complements-in-use scenario in the context of co-branded services. Finally, our empirical results echo that the lower-status brand (e.g., the brand with a lower value) can gain more than the higher-status one. Practical implications are provided as well in this study.

Keywords: Co-Branding, Service Alliance, Bundling Strategy

Qualitative Assessment of Barriers to Effective Implementation of Risk Management in SMEs in the Netherlands

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Abstract: The implementation of risk management has the potential of delivering a much better performance and the realization of a sustainable competitive advantage in this age of uncertainties. The question of how SMEs can implement Risk Management successfully is of high relevance to management but of poor understanding. This qualitative research investigates the tendency and barriers SMEs in the Netherlands face with the implementation of Risk Management. The barriers were grouped into Implementation Barriers, comprising of barriers faced with the implementation of Risk Management and Introduction Barriers, consisting of barriers preventing Dutch SMEs from implementing Risk Management. Thirty respondents from 30 different Dutch SMEs were interviewed. The findings of the study were systematized and categorized using Nvivo, an effective qualitative research tool. The findings demonstrated that risk management can be implemented in SMEs. It also indicated that Dutch SMEs have a higher tendency to implement risk management. Lack of top management support, lack of risk management framework, complex frameworks, lack of effective communication, lack of finance and the lack of competent employees were identified as the Risk Management Implementation Barriers with Dutch SMEs. Introduction Barriers identified by the study were lack of awareness, lack of resources and lack of finance. This study contributes to research related to risk management and aids in the provision of increased knowledge and understanding in the practice of risk management with regards to SMEs in the Netherlands. The unveiling of the barriers aids SMEs to identify the facilitators and to annihilate the barriers or mitigate their impact to experience the full benefits of the risk management process. Finally, the study draws a list of recommendations for effective implementation of Risk Management and suggests further research opportunities, particularly in the area of Risk Management processes and enablers.

Keywords: Risk Management, Barriers, SMEs, Qualitative Assessment, Netherlands, Dutch.

Sign and Size Related Asymmetries in The Transmission of Daily and Weekly Returns from International Stock Markets into The Kuwait Stock Exchange

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Abstract: This study investigates sign- and size-related asymmetries in the transmission of daily and weekly returns from international stock markets into the Kuwait Stock Exchange during March 1997 – December 2016 by applying a VAR-EGARCH-based framework. The findings reveal significant and robust sign-related asymmetries and increasing influence of world markets in the Kuwait Stock Exchange. Evidence on the cross-border spillover of returns is more pronounced when weekly returns rather than daily returns, are used.

Keywords: Stock Returns, Spillover, Transmission, Asymmetric Impact

The Impact of Consumer Willingness to Engage in Co-Creation

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Abstract: Co-creation has shifted from the traditional style of marketing, where consumers were only seen as passive buyers and users to a kind where consumers have become actively involved in the product development as they buy and use the products they create. In this paper we emphasized that some factors, to mention a few are the reasons why consumers of Starbucks engage in co-creation activities. Consequently, the main purpose of this study was to find out what actually motivates a consumer to engage in co-creation activities. The hypotheses were tested using data collected from 250 experienced online consumers of Starbucks. The results showed that consumers are willing to co-create when they benefit from the process of doing so and as a way of sharing their experience with others. This notwithstanding, they are very much concerned about how their personal information are being used.

Keywords: Co-Creation, Willingness to Co-Create, Value Creation, Empowerment, Online Platform, Starbucks

Enhancing the Quality of Work Life of Production Line Workers in Automotive Parts Industry in Thailand

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Abstract: This research aims to (1) study the meaning of quality of work life of workers in the production line of automotive parts industry in Thailand; (2) study the quality of work life of workers in the production line of the industry; (3) study the ways of enhancing the quality of work life in the production line of automotive parts industry in Thailand. This research is a qualitative research study of social phenomena by using phenomenological methods. The Phenomenological approach is based on in-depth interviews with key informants who are working in the part of the production line of the automotive parts manufacturing industry in Thailand. The tools used in the research were interview questions. Analysis of data by inductive analysis and presented in descriptive form. The results show that the labor force in the automotive industry defines the meaning of quality of work life in four groups of meaning; (1) Satisfaction and happiness in work life; (2) Organization provides a good working environments for their employees; (3) Organization pays attention to employees and takes a good care of their employees; and (4) The balance between work life and personal life. Considering the quality of work life in the automotive industry by using theoretical concepts of Walton (1973) and Huse and Cummings (1985) found that the components and quality of work life are as follows; 1) Fair income and compensation 2) Safe working environment 3) Opportunities for development 4) Stability and progress in work 5) Good relationship with colleagues 6) Balance between work life and personal life 7) Rights and equality in work. Moreover, the guidelines to enhance the ways to improve the quality of work life are as follows; 1) Balance work and personal life. 2) Health care and work safety. 3) Management of personal and family expenses.

Keywords: Quality of Work Life, Work Life Balance, Labor Force in Production Line, Automotive Parts Industry

The Effect of Transformational Leadership on The Innovation Culture: A Conductive Study in Turkey

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Abstract: To achieve success in today's highly competitive environment, companies must establish an innovation culture and develop new products for international markets. In general, organizational culture has an enormous impact on the ability of an organization to innovate, while at the same time it is highly influential on how to innovate, what kind of innovation to focus on and how to deal with possible threats. Recent scientific studies in the new product development literatures state that one of the two certain soft dimensions, defined as the behavioral environment of the firm, is leadership and the other is organizational culture. In other words, both of leadership and innovation culture are identified to be two of the most crucial organizational elements in order for firms to compete successfully and to gain sustainable advantage. One of the most researched types of leadership in recent years is transformational leadership. The phenomenon of leadership has long been seen as a primary influence in the formation of organizational culture. Many Scholars have stated that the only thing of real importance that leaders have done is to create and manage organizational culture. When organizational culture applied to new product development, the literature speaks of the firm's innovation culture. Although there are many studies on the relationship between leadership and organizational culture, the number of studies on the influence of leadership on innovation culture is very limited. In this regard, the aim of this study is to analyze the impact of transformational leadership sub-components such as idealized influence (charisma), inspirational motivation, intellectual stimulation and individual consideration on management innovation. The research data are obtained through 198 Turkish public managers. The analyses reveal that individual consideration and inspirational motivation have a positive and significant impact on innovation culture, whereas other sub-components such as idealized influence (charisma), intellectual stimulation do not cause a significant impact.

Keywords: Organizational Culture, Innovation Culture, Innovation, Leadership, Transformational Leadership

Sentiment Analysis of Reddit Posts for Bitcoin Trading Algorithm

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Abstract: A trading algorithm embedding both a technical and a semantic analysis is described. The technical analysis is based on well-known MACD and candle analysis indicators frequently used on the stock market. Because the Bitcoin market is highly correlated to media trends, it is interesting to implement a semantic analysis to take advantage of them. While streaming Reddit posts, the semantic analysis parses them and returns their sentiment: positive, neutral or negative. Eventually, when the technical analysis does not take into account the feelings of investors, the semantic one corrects this imperfection and improves the benefits over the considered period. Pros and cons of implemented system are discussed along step by step detailed description of proposed methodology

Keywords: Sentiment Analysis, Reddit, Bitcoin, Trading, Algorithm

Examining The Impact of Karasek's Job-Demand- Control-Support Model On Employee Wellbeing and Quit Intentions

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Abstract: This study investigated the impact of the Karasek's Job Demand-Control-Social Support (JDSCS) model on employee well-being and quit intentions. Social support at work is measured by including both the peer support and the supervisor support. Furthermore, well-being is assessed by both happiness and health related indicators. To investigate the associations between job characteristics (e.g. JDSCS), well-being and quit intentions, the data was collected from the sales employees of four major insurance companies of Pakistan. Standard self report questionnaires were used to collect data. Regression analysis was used to test the proposed hypotheses from 311 usable responses. Results indicated that job characteristics were all linked with well-being, assessed by job satisfaction and burnout. In addition, job burnout along with supervisor and peer support is significant predictor of quit intentions. Furthermore, burnout partially mediates the effect of peer support on quit intentions and fully mediates the effect of job demands on quit intention. **KEY WORDS** Karasek's Job Demand-Control-Social Support (JDSCS) Model, Wellbeing, Peer support, Supervisor support and Quit intentions.

Keywords: Karasek's Job Demand-Control-Social Support (JDSCS) Model, Wellbeing, Peer support, Supervisor support and Quit intentions.

Understanding the University Students' Behavior towards Mobile Viral Marketing: An Application of the Theory of Planned Behavior

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Abstract: Past studies conducted about Mobile Viral Marketing focus on the usefulness of Mobile Viral Marketing from the marketers' perspective and little information exists regarding the motivations, attitudes, and behaviors of consumers engaged in the new phenomena of Mobile Viral Marketing especially in the context of developing countries such as Egypt. In the era of globalization and in the light of the on-going technological revolution, this knowledge is valuable and should be unveiled to provide a guiding light for marketers and companies on how to properly formulate a successful mobile viral marketing campaign that will reach target segment. The focus of this study is to utilize Ajzen's theory of planned behavior to study university students' actual mobile viral marketing behavior. To apply the theory of planned behavior, questionnaires were manually passed out to 404 Egyptian private university students to examine young Egyptian consumer's actual mobile viral marketing forwarding behavior through studying their mobile viral marketing attitude, subjective norm and perceived behavioral control and behavioral intention. The outcome of the study is that the young Egyptian consumer's attitude towards mobile viral marketing, subjective norm and perceived behavioral control collectively predicted their behavioral intention and their behavioral intention predicted their actual behavior towards mobile viral marketing. The study shed light for researchers and marketers alike on the critical components of mobile marketing strategies and sets the ground for future researches in the emerging field of mobile viral marketing.

Keywords: Mobile Viral Marketing, Globalization, E-business, Integrated Marketing Communication, Theory of Planned Behavior

Examination of Opportunity Identification by Nascent Entrepreneurs in South – Western Nigeria: An Effectuation Perspective

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Abstract: This study focused on an examination of opportunity identification by nascent Entrepreneurs in South–Western Nigeria using effectuation perspective. The study determined whether alertness affect opportunity identification by nascent entrepreneurs in South-Western Nigeria. It also examined the effect of social network on opportunity identification by nascent entrepreneurs in South-Western Nigeria. The study was carried out using a quantitative methodology through the administration of a structured questionnaire. The data gathered was analyzed using descriptive and inferential statistic such as percentages, one sample chi-square test at 0.05 level of significance and effectuation framework logics, with the aid of statistical package for social sciences (SPSS) version 20. The study was conducted in six states of south-western Nigeria are (Lagos, Ogun, Oyo, Osun, Ondo and Ekiti). The results show that: alertness can lead to opportunity identification; social networks such as interactions with friends and acquaintances, family and relations and social clubs enhance opportunity identification and establishing contacts with customer and financiers also lead to opportunity identification. This study has contributed to the literature on opportunity identification and effectuation is theory given that studies done in this area are mostly in developed countries

Keywords: Effectuation Theory, Nascent Entrepreneur, Opportunity Identification.

Review of India's Crude Oil Production History and Its Peak Oil Period Estimation Using Hubbert's Theory and A Technique Based On Statistical Analysis

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Abstract: Crude oil production and peak oil time estimation for any developing country serves as an indicator to decide the future energy security strategy. In this study, focus was on one of the fastest growing economies of the world, India. In this respect, complete information of Independent India's crude oil production history (1950-2016) was gathered along with the seven major factors influencing its production. The major seven factors influencing crude oil production are crude oil consumption, crude oil import, crude oil export, crude oil reserve, rig count, Brent and Gross Domestic Product. A non-linear regression of hypothetical models was performed to better understand the effect of each factor and henceforth to establish a relationship between the dependent variable and independent variables. The analysis, indicated rig count and crude oil consumption are the dominant factors influencing India's crude oil production. In addition, Hubbert's theory along with a newly developed technique was utilised to estimate and predict the peak time of Crude oil production of India. Here the peak time indicates the declining trend of the overall production of crude oil (Independent India) will start after reaching the peak and the production value will never cross the peak in future. This new theory indicates that the peak oil for conventional crude in India has already occurred in 2012 and the estimation of peak oil rate for India to occur in 2018 from Hubbert's theory might be an over estimate. However, if any new basin is discovered with tremendous crude oil potential, it might change the predicted peak time value. In addition, technological advancement, and various geopolitical issues might also affect the predicted peak time value. In this case, the peak oil time should be estimated again with the help of novel technique considering newly discovered basin, advancement of technology and present geopolitical issue. As data for crude oil production of India from 1950-2016 is for conventional crude oil therefore the peak estimation is also for conventional crude oil.

Keywords: Hubbert's Peak Oil Theory, Statistical Analysis, Pearson Correlation, Indian Crude Oil Production, Peak Oil Estimation

Beneficiary Assessment Based Evaluation of SME Policy – A Case of Pakistan

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Abstract: Small and Medium Enterprises (SMEs) constitute major proportion of businesses in the world, and make significant contribution towards economic development, employment generation, poverty alleviation and hence improving the lives of masses. However, because of their small size and access to limited resources, governments all across the world have to make policies and undertake interventions for providing a conducive business environment to SMEs. Literature abounds that despite being direct beneficiaries, small and medium enterprises remain ignored during the policy making process, especially in developing and under developed countries. Other powerful stakeholders like government bureaucrats, representatives of international development agencies and federal banks etc. often cast out the voice of SMEs and hence dominate policy making and implementation process. Beneficiary based assessment approach therefore has high pertinence for evaluation of SME Policy. In this background, the current study undertook first ever beneficiary based assessment of SME Policy of Pakistan. In-depth interviews were conducted from representatives of 09 leading SME sector associations of Pakistan. Data was analyzed by using Nvivo 11 software. The study assessed robustness of policy, efficacy of its implementation, and furnished recommendations for future course of action.

Keywords: SME Policy of Pakistan, Evaluation of SME Policy, Beneficiary assessment approach

Role of Industry Context in the Link Between Firms' Environmental and Financial Performance: Evidence from Extractive Sector

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Abstract: Many studies in the past on the relationship between corporate social/environmental performance and financial performance have produced contradictory results. Literature remains inconclusive largely due to faulty theorising and methodology. One key assumption is that the evidence from a particular research can be generalised across contexts, whereas these differ from industry to industry. A good example of an industry with theoretically and methodologically valid peculiarities is the extractive sector owing to the sector's centrality in the discourse on business role in climate change and environmental sustainability. We therefore argue for an idiographic perspective that allows theory and design that are sensitive to the industry's idiosyncrasies. In this paper, we draw on 94 firms that involve in extractive business based on the S&P 500 index. The results show an insignificant relationship between corporate environmental performance and financial performance in the extractive industry. Meanwhile, the results from the entire S&P 500 companies (including the extractive firms) depict a significant positive relationship. This confirms our hunch regarding the idiosyncratic nature of the extractive industry. We discuss the implications of the study.

Keywords: Environmental Performance, Financial Performance, Extractive Sector, S&P500, Positive/Negative Synergy Hypothesis

When and How Transformational Leadership Influences Team Performance

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Abstract: This study examined the direct and indirect relation between transformational leadership and team performance. In doing so, the study investigated the mediating role of collective efficacy in the relation between transformational leadership and team performance. Moreover, the moderating role of perceived organizational support in the relation between transformational leadership and collective efficacy was considered. Using social exchange theory as a foundation for our research framework, we found that transformational leadership has positive impact on team performance directly and indirectly through collective efficacy. The finding further revealed that perceived organizational support moderated the relationship between transformational leadership behavior and collective efficacy positively. Finally, the study addressed some theoretical and practical implications.

Keywords: Transformational Leadership, Team Performance, Perceived Organizational Support, Collective Efficacy

The Mediating Role of Workplace Ostracism on Workplace Incivility and Organizational Silence Relationship

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Abstract: The main purpose of this study is to determine when workers are exposed to workplace incivility, how much they are affected by this situation, and whether this situation causes organizational silence, it is aimed whether the workplace ostracism exists as a mediating role in the relation between workplace incivility and organizational silence. The study consists of two parts; theoretical and practical. First of all in the study, the theoretical part is presented in order to describe the variables involved in the research, and then the research part is given. Questionnaire technique has been used as the data gathering method. Cortina's Workplace Incivility scale, Cakici's Organizational Silence scale and Ferris and colleagues' Workplace Ostracism scale were used as data collection tools. Frequency and percentage, reliability, item total and principal component analysis, KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy, Barlett's test of sphericity and regression analysis in order to determine the effects of independent variable and its dimensions on the dependent variable are performed to the obtained data using by SPSS 23.0 software package. Results obtained from data are evaluated in % 95 confidence interval, $p < 0,05$ significance level. As a result of the research conducted on 200 nurses working in state hospitals in Izmir, it has been seen that workplace incivility, which workers are exposed to, causes organizational silence. As well as the fact that workplace incivility has a significant effect on workplace ostracism, workplace ostracism has a significant effect on organizational silence and it has a partial mediating role in the relation between workplace incivility and organizational silence. In future researches, the questionnaires can be applied in more hospitals and to more nurses to reach the full sample size. It can be also examined in future researches whether organizational identity functions as "mediating variable" in the relationship between workplace incivility and organizational silence. When the selected health care institutions are evaluated as a sample, it can be said that a large part of the jobs are urgent and can not be delayed. In hospitals where mistakes and slowly made decisions are so important, it can be said that behaviors such as incivility and ostracism may lead to negative consequences such as the decision of the employees to stay silent, and that these negative consequences may cause situations which are difficult to correct and compensate. Hence, it is very important that the problems encountered are clearly expressed by employees. Organizations should be proactive in this regard and should take precautions before problems arise. Good and effective orientation process can prevent employees' incivility and ostracism behavior.

Keywords: Workplace Ostracism, Workplace Incivility, Organizational Silence.

Abusing of Advertising Under Unfair Competition Regulations of Turkish Commercial Code Numbered 6102 and Its Reflections on the Marketing Practises

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Abstract: Competition can be accepted as the key for the success of the commercial life. Fundamentally, it has a pivotal role in supporting efficiency and encouraging innovative actions in markets. As the main benefits of competition, greater innovations, lower price and better products can be highlighted. In this respect, it is believed as the causative factor on the success of the free market economy. However, in order to get benefit from the advantages of competition, its limits should be drawn carefully, because all participants in markets cannot be granted with the unlimited competition rights. A key issue is that competition should be carried out in accordance with the rule of good faith in the commercial life. Hence, in order to be able to make competition lawful; firstly, the boundaries of the freedom of competition should be determined; secondly, competition against good faith should be avoided; and thirdly, effective rules for the efficient competition policies should be regulated by the policy-makers. Unfair competition rules may lay a bridge between the freedom and limits of competition. Primarily, its main objective is to create a commercial life where all participants are behaving in compliance with the ethical principles. In other words, it aims to prevent gaining of more customers by applying unlawful means. It is believed that advertising has an important role on behaviours of customers. Due to its convincing power, corporations may easily increase the number of customers for their own products. For example, for customers including old and young, may aware the availability of the variety of products, which are useful or essential for them. However, if it is not carried out under the rule of good faith, it may negative impact on competition in the trade life. Abusing of this convincing power with the misleading ads has been banned with unfair competition rules. Under the Turkish Commercial Code numbered 6102, this issue has also been regulated by policy-makers. The main aim of regulating the unfair competition rules under the new Turkish Commercial Code is to indicate the boundaries of the freedom of competition and in case of breaching these boundaries, to determine the legal remedies for the market participants. Unfair competition provisions have been regulated under Articles 54-63 of the TCC. In this study, only using of ad (advertisements) against the rule of good faith (one of the unfair competition clauses) will be deeply examining and

its reflections on the marketing examples will be evaluated. The main aim of this study is to examine abusing of advertising under unfair competition clauses with law and marketing perspective. Hence, this study can be divided into two parts. The first part of the study focuses on the legal basis and deterrence mechanisms of unfair competition practises in advertisements of commercial enterprises. The second part of the study evaluates the impact of illegal advertisements on customers' preferences and its advantages for commercial enterprises.

Keywords: Unfair Competition, Illegal Advertisements, Convincing Power, and Law&Marketing

a) Introduction

Competition can be accepted as the key for the success of the financial sector. Fundamentally, competition has a pivotal role in supporting efficiency and encouraging innovative actions in financial markets. Basically, it helps to improve efficiency and as a result it provides greater innovations, lower price and better products. In this respect, it is highlighted as the fundamental principal of the free market economy.

However, in order to obtain abovementioned advantages, competition policy limits should be drawn carefully. In order words, all participants in the financial markets cannot be granted with the unlimited competition rights. A key issue is that competition should be carried out in a good faith in the financial markets. In this respect, to be able to make competition lawful; firstly, the boundaries of the freedom of competition should be determined; secondly, competition against good faith should be avoided; and thirdly, effective rules for the efficient competition policies should be regulated by the policy-makers.

Limitation of competition by laws can be found controversial. However, a possible explanation for this might be that it is not duty of merchants to protect the interest of their competitors; but it is not allowed to behave as they wish to gain more costumers or to place any kind of ad without any restrictions or to give false information about himself/herself and others; or to use any mark as a brand (Ulgen and Others, 2015). Therefore, certain type of limitations for competition seems to be essential for the financial markets.

The main aim of regulating the unfair competition rules under the new Turkish Commercial Code is to indicate the boundaries for the freedom of competition and in case of breaching these boundaries, to determine the legal remedies for the market participants. Unfair competition provisions have been regulated under Articles 54-63 of the TCC. Article 54 gives a general

definition and draws a clear picture for the main principles of unfair competition. Article 55 indicates the leading unfair competition clauses within six subtitles as the examples. In this study, only using of ad (advertisements) against the rule of good faith (one of the unfair competition clauses) will be deeply examining and its reflections on the marketing examples will be evaluated by dividing within two parts.

Part 1:

1. The Unfair Competition Under the Turkish Commercial Code

The provisions of the Unfair Competition have been regulated between Articles 54-63 of the Turkish Commercial Code numbered 6102. Under Article 54, the aim and the principle of the Unfair Competition has been defined. In this respect, Article 54 can be taken into account by dividing into two parts. According to the first part of Article 54, *“the aim of the provisions with respect to the Unfair Competition is to ensure providing fair and undisputed competition in the interest of all participants”*. It can be highlighted that the first part of Article 54 indicates what is protected within the frame of the Unfair Competition provisions.

Although the second part of Article 54 indicates the general principle of unfair competition; it can also be accepted as a definition for an unfair competition. According to the second part of Article 54; *“behaviours or commercial practises that are misleading or in violation with the principle of good faith between commercial competitors or suppliers or customers are unfair and illegal”*.

In this respect, Article 54 draws a clear picture with regard to the main framework of unfair competition under the Turkish Commercial Code numbered 6102. Taken together, these results suggest that with the unfair competition provisions Turkish Commercial Code aims to protect the economic competition in commercial life by improving business ethics. Considering Article 54, the economic competition can be accepted as *“fair and undisputed competition”*. However, one question that needs to be asked is what fair or undisputed competition is. The background motivations that lie behind on fair or undisputed competition can be listed as follows (Ulgen and Others, 2015):

- The aim of unfair completion provisions is not only to protect the interest of rivals or suppliers or customers, but also all participants in the market.
- Unfair competition provisions aim to create a competitive environment that ensures all behaviours are in accordance with good faith in the market. Even if the results of these behaviours

do not have a negative impact on the competition, just violation of good faith will be enough in order to accept that the unfair competition takes place.

- Unfair competition provisions like competition law policies help to maintain and to support the process of competition in order to ensure effective use of resources by providing the freedom of economic action within the frame of good faith.

1.1. The Definition of Unfair Competition

Unfair competition rules can be accepted as a limitation of competition. However, it can be claimed that Adam Smith's "*invisible hand principle*" may not create an automatic solution in these highly complex and brutal competitive markets. Therefore, in order to be able to sustain '*ideal competition*', some certain limitations on competition itself seems to be essential. Otherwise, large-scale corporations may easily make their rivals out of the market by abusing their dominance position and so may have a negative impact on the competition.

In this respect, unfair competition rules play a key role on the success of effective competition in the market. Fundamentally, unfair competition provisions in the Turkish Commercial Code numbered 6102 lay a bridge between the interest and the behaviours of market participants. By determining the uncompetitive behaviours in the law, unfair competition provisions draw a clear picture for the limitation of competition.

It is necessary here to clarify exactly what is meant by unfair competition. Article 54/II of the Turkish Commercial Code gives a general definition about it. According to this Article; "*deceptive or other type of behaviors and commercial practices that are contrary to the good faith, which affects relationships between competitors or between suppliers and customers are unfair and unlawful*".

This definition may help us to highlight the general principles of unfair competition. First of all, in order to be able to understand whether a commercial practice or other types of behaviour is unlawful, the rule of good faith should be taken into consideration. In an ideal competitive market it is expected that all participants (customers, competitors and suppliers) shall carry out their commercial practices in accordance with the rule of good faith. Therefore any behaviour that is not complying with the rule of good faith shall be accepted as unfair competition (Sener, 2016).

These behaviours and commercial practices against the rule of good faith have been regulated under Article 55 of the Turkish Commercial Code numbered 6102. It can be useful to highlight here that Article 55 does not use the principle of *numerous clauses* in determining unfair competition clauses. In other words, Article 55 only indicates the main examples for unfair competition behaviours. Therefore, commercial courts also have a right to implement sanctions on other kind of unfair competition clauses that are not regulated under Article 55.

In the next part, behaviours and commercial practises against the rule of good faith will be evaluated by examining Article 55. Before continue, it may be also useful to discuss the main conditions for unfair competitions. In this respect, provisions of Article 54 may draw a clear picture for the main conditions or principals for unfair competition. According to Article 54 these conditions can be listed as follows;

- First of all, in order to be implemented the Unfair Competition Provisions; parties do not have to be competitors. These unfair competition rules not only prohibit anticompetitive behaviours for competitors but also suppliers and customers have a right to apply unfair competition rules (Ayhan and Caglar, 2017).
- A commercial practice or other type of behaviour should exist in the market and these practises or behaviours should also be deceptive and contrary to the rule of good faith (Ulgen and Others, 2015).
- It is not essential for perpetrator to gain advantage from his/her illegal activities. The existence of breaching the rule of good faith will be sufficient in implementing the unfair competition provisions (Ulgen and Others, 2015).
- In addition, the negligence of perpetrator and the loss of participants are not necessary to apply the unfair competition provisions. The negligence of perpetrator shall be only essential to make an action for compensation (Arkan, 2018; Ulgen and Others, 2015; Ayhan and Caglar, 2017).

1.2. The Main Unfair Competition Clauses

The main unfair competition clauses have been regulated under Article 55 of the TCC. As it was mentioned before, Article 55 does not use the principle of *numerous clauses* in determining unfair competition clauses. Therefore, other unfair competition clauses that are not regulated under Article 55 will also be accepted as violation of unfair competition provisions.

In Article 55, these main unfair competition clauses have been regulated within six subtitles and every subtitle has also its own subparagraphs. Hence, the main unfair competition clauses in Article 55 have been consisted on in total six subtitles and twenty-one subparagraphs (Ulgen and Others, 2015).

According to Article 55, the main unfair competition clauses can be listed as follows;

- *Using of ads and sales methods against the rule of good faith,*
- *Encouraging to infringe and to terminate the contract,*
- *Unauthorised using of others business product,*
- *Illegally disclosing of production and business secrets,*
- *Not to complying with the business conditions,*
- *Using of transactional conditions against the rule of good faith.*

In this study, only using of ads that cause an unfair competition clause will be deeply examined and its reflections on the marketing examples will be evaluated. For the rest of the unfair competition clauses, further studies are recommended.

1.2.1 Using of Ad Against the Rule of Good Faith

Advertising can be highlighted as one of the best strategies to communicate with customers. Thanks to the advertisement, all participants may have some benefits in the market. For example, for customers including old and young, may aware the availability of the variety of products, which are useful or essential for them. Additionally, advertising has a convincing power on customers. With the well-organised ads, companies may easily increase the number of customers for their own products. In this respect, it can be claimed that advertising may play a very critic role in competition.

There is no doubt that all corporations may get benefit from advertising for their own products in the trade life. However, they cannot abuse this convincing power by behaving against the rule of good faith. Abusing this power with misleading advertisement may have a negative impact on competition in the market by leading competitors to get out of the market. Therefore, all ads should be published by keeping up with the rule of good faith.

Article 55/1-a.2 of the TCC and the Commercial Advertisement and Unfair Business Practices Regulation; draw a certain framework for advertising. In fact, Article 55/1-a.2 prohibits disclosing of unrealistic or misleading information. Fundamentally, provisions of Article 55/1-a.2

and Articles of the Commercial Advertisement and Unfair Business Practices Regulation identify the clauses against the rule of good faith in advertising. In other words, these regulations aim to clarify puffery in advertising. Therefore, all-corporations shall prepare their ads in accordance with Article 55/1-a.2 and the Regulation. Ayhan and Caglar perfectly identify the clauses that lead to unfair competition by evaluating Article 55/1-a.2 and these clauses can be listed as follows (Ayhan and Caglar, 2017; Arkan, 2018):

- *Exaggerating,*
- *Ads based on scientific research results and witness statements,*
- *Using of prices in advertisements,*
- *Comparative Ads,*

In the following part all these abovementioned clauses in ads against the rule of good faith and causing to unfair competition will be briefly evaluated by examining Article 55/1-a.2 and the Commercial Advertisement and Unfair Business Practices Regulation.

b) 1.2.1.1 Exaggerating

Before continue, it can be useful to highlight the differences between false advertising and inflating the truth in advertising. False advertising is simply prohibited by almost all legal systems, such as the Lanham Act and the TCC. However, inflating the truth or puffing can be accepted as a common method in advertising. The terms “puffery” encompasses exaggeration and hyperbole. The main objective of this strategy is to get consumers attention and to make the brand memorable. Therefore, puffery in advertising cannot be highlighted as *per se* illegal (Arkan, 2018).

In this respect, it may be useful to analyse the differences between false advertising and puffery by taking into account some examples in ads. For example, a bed company may highlight its products’ comfort in the ads by stating that “*comfortable beds...like sleeping on a cloud*” (Puffery in Advertising: Definition & Examples, <https://study.com/academy/lesson/puffery-in-advertising-definition-examples.html>). This kind of expression in ads can be accepted as puffery in advertising. Therefore, these statements cannot be prohibited under the Unfair Competition Regulations. On the other hand, false advertising can be simply accepted as illegal claims in ads. It is fundamentally used for getting a competitive advantage by promoting a product with false statements. For instance, if a knife company claims, “*our knives are so sharp they can cut through*

a stone” this expression will be prohibited under Article 55/1-a.2 as long as it is not actually sharp (Differences between False Advertising & Puffery, <http://smallbusiness.chron.com/difference-between-false-advertising-puffery-66945.html>).

c) 1.2.1.2 Ads Based on Scientific Research and Witness Statements

As it was mentioned before, the advertisement may play a very critic role on promoting a product. With the ads, all enterprises may improve the number of their customers. Fundamentally, corporations try to improve their techniques on the ads. In this respect, the results of scientific researches can be applied on ads in order to get customers attention towards their product. As the motto highlights, “*the more you tell, the more you sell*” (Hopkins cited in Armstrong, 2011).

The ads based on scientific research and witness statements can be defined as the evidence-based advertising. Recently, there has been renewed interest in using the results of scientific researches on ads. However, according to Article 55/1-a.2, these results should reflect the truth. Otherwise, ads that do not contain accurate and true information lead to violations of the Unfair Competition Regulations (Ayhan and Caglar, 2017).

In this respect, the decision of the Board of Advertisement regarding a cosmetic product company can be analysed. In this advertisement with regard to the product of Thermal System Body Wrap, it was claimed that “*Yes Dear Followers: Without painful exercise or starving and without much effort or trouble, Thermal System Body Wrap helps you to drop a size within just three days. This campaign includes two units of thermal system instead of one unit and offers to pay at the door with no shipping charge. From Turkey it only costs 99 Turkish Liras and from the EU, it only costs 69 Euros. You can reach us from the EU by dialing 00902165178787, from Turkey by dialing 02165178787*” (Republic of Turkey Ministry of Customs and Trade, the Decisions of The Board of Advertisement; Press Statement, File Number: 2016/4401). According to the findings of the Board of Advertisement, this ad has been found as violation of the Unfair Regulations under the Commercial Advertisement and Unfair Business Practices Regulation due to not to be based on the scientific evidence and has been get fined (The Commercial Advertisement and Unfair Business Practices Regulation, Articles 5-b, 7/1, 7/2, 7/3, 7/4, 7/5-a, 9/1, 9/2, 9/3, 9/4 and 9/5).

d) 1.2.1.3 Using of Prices in Advertisements

According to Ayhan and Caglar, some expressions such as special offers, sales with gifts or wholesale purchase can be used in ads. However, this information that is given in ads should not be false or misleading. Otherwise, these ads are accepted as misleading ads and such ads are imposed sanctions under the Unfair Regulations of TCC.

e) 1.2.1.4 Comparative Ads

It can be highlighted that the comparative ads cannot be accepted as *per se* illegal in both the TCC and the Commercial Advertisement and Unfair Business Practices Regulation. In this respect, in order to make the comparative ads legal, two main legislations should be taken into account:

a) First of all, according to Article 61/5 of Law on Consumer Protection numbered 6502, comparative ads can only be made for the competitive products or services that meet the same purpose or the same needs for consumers.

b) Secondly, Article 8 of the Commercial Advertisement and Unfair Business Practices Regulation draws a clear picture for the main standards of the comparative ads.

In order to understand the main rules on the comparative ads, it may be useful to examine Article 8 of the Commercial Advertisement and Unfair Business Practices Regulation in a more detail.

According to Article 8, the main principles on the comparative ads can be listed as follows:

- I. The comparative ads shall not be deceptive or misleading,
- II. The comparative ads shall not lead to the unfair competition,
- III. The comparable goods or services in the comparative ads shall have the same quality and respond to the same needs or requests of consumers,
- IV. Consumers shall get benefits from the comparative ads,
- V. The comparison on the comparable goods or services in terms of price or other typical features shall be based on the objective criteria,
- VI. The claims that based on the objective, measurable and numerical data shall be proved with the scientific tests, reports or documents,
- VII. The intellectual and industrial property rights, commercial titles, business names, other distinctive marks, services or activities of competitors shall not be discredited or disgraced in the comparative ads,
- VIII. In comparison with the goods or services that specified in the origin, the goods or services shall be located in the same geographical location,

IX. The comparative ads shall not cause to confusion with regard to brands, commercial titles, business names or any other distinguishing marks between the advertiser and its competitors.

1.2.2 Conclusion

As mentioned in the literature review, it can be claimed that advertising with its convincing power, is one of the easiest way for corporations to increase the sales of their own products. Therefore, advertising may play a key role in the competitive market. However, the limits of this power should be determined carefully by the policy-makers; otherwise, careless using of this power may increase anti-competitive behaviours in the market.

All corporations may get benefit from advertising for their own products in the commercial life. Yet, they cannot abuse this convincing power by behaving against the rule of good faith. On the other hand in practise, it can be observed that enterprises are in tendency to make illegal behaviours by abusing the ads in the market. These illegal ads that against the rule of good faith can be accepted as the misleading or deceptive ads. The current study has showed that this problem has been tried to solve within two legislative frameworks in Turkey; Article 55/1-a.2 of the TCC and the Commercial Advertisement and Unfair Business Practices Regulation.

In general, it can be claimed that the aim of the Commercial Advertisement and Unfair Business Practices Regulation is to draw certain principals for all participants interested in advertising. By considering Article 5 of this regulation, the main principals in advertising can be listed as follows:

- i. *“The ads shall not contain images or expressions that are contrary to the general moral principals,*
- ii. *The ads shall not derange the public health,*
- iii. *The ads shall not contain elements that violate public order, include acts of violence, and indicate illegal or condemnable images,*
- iv. *The ads shall not include abusive images that exploit patients, children, elderly and disable people,*
- v. *The ads shall not encompass denigration, exploitation, prejudgment, discrimination regarding to language, race, colour, sex, political thought, philosophical belief, religion, sect and so on,*
- vi. *The ads shall not be carried out in a way that damages human dignity and personal rights,*
- vii. *The ads shall not contain statements or images of any persons’ private or social life without permission; shall not be attributed to that person; the private property of that person shall not be*

displayed as if it constitutes a personal influence of that person on the related product or organisation,

viii. *The ads shall not exploit the fears and superstitious belief of the consumers,*

ix. *The ads shall not include any expressions or images of patients regarding to pre/post treatments,*

x. *The ads shall not contain statements or images with regard to illness, injury and so on that give the society worry or mislead to the society,*

xi. *The ads shall not encompass any description or presentation that may create a safe hazard or the safety rules are ignored.”*

As it was mentioned before, the current study has just focused on the deceptive advertising that cause to unfair competition in the market. In this respect, this study is limited by the lack of information regarding to all regulations in the Commercial Advertisement and Unfair Business Practices Regulation. Further studies on the illegal advertising are recommended.

The findings of this research have showed that according to Article 55/1-a.2, the clauses that lead to unfair competition can be listed under four subtitles; *Exaggerating, Ads based on scientific research results and witness statements, Using of prices in advertisements, Comparative Ads.*

For exaggerating it can be claim that advertiser should make the balance between false advertising and inflating the truth. False advertising can be accepted as one of the examples for the deceptive ads that cause unfair competition. Hence, it is prohibited under the legislative frameworks of the nations due to its’ negative impact on the competitive market. On the other hand, puffery can be applied in advertising to get consumers attention and to make the brand memorable.

The evidence-based advertising can be highlighted as the second strategy that applied by advertiser. It can be observed that there has been renewed interest in using the results of scientific researches on ads. However, according to Article 55/1-a.2, these results should reflect the truth. Otherwise, such ads constitute unfair competition under the TCC.

Special offers, sales with gifts or wholesale purchase can be used in ads. Therefore, it is allowed to use of prices in advertising. Yet, all the information regarding these expressions should be true.

And last but not least, the comparative ads cannot be highlighted as *per se* illegal. As shown above, two main legislations in Turkish legislative framework draw a clear picture for the main principals of the comparative ads. Firstly, the Law on Consumer Protection numbered 6502

indicates the main features on the products or services that are subjected to a comparison in the ads. And secondly, the Commercial Advertisement and Unfair Business Practices Regulation regulates the main principals of the comparative ads. In this respect, any comparative ads that against to the main features of the Law on Consumer Protection numbered 6502 or the main principals of the Commercial Advertisement and Unfair Business Practices Regulation will be accepted as the unfair competition.

To sum up, it can be claimed that convincing power of the ads should be accordance with the rule of good faith. Otherwise, abusing this power with the illegal advertisement may have a negative impact on the competition in the market by constituting unfair competition clauses. Therefore, all ads should be published by keeping up with the ethical principals.

Part 2:

2. Reflection of Legal/Illegal Advertising on the Market Practises

In terms of undertakings, the concept of competitive advantage has increased its importance day by day. It can be claimed that being preferred by customers is the main aim of all undertakings in the market. When the historical development of marketing has been evaluated, it can be seen that the methods that has been used since the time of monopoly has taken place, are different; the results are always same: “*competitive advantage*”. During the evolution process of marketing, different marketing strategies have been applied, such as product-based or customer based. (Kotler and Armstrong, 2014) Finally, the concept of ethics has come to the front with the transition process from the strategy of saving the day to understanding of customers’ cares.

2.1. Marketing and Ethics

Marketing ethics can be defined as a systematic study that indicates how ethical standards of marketing are applied to marketing decisions, behaviours and institutions. Since the marketing is accepted as a natural process for most organizations, marketing ethics can be seen as a subset of business ethics (Lacznia, 2012). Marketing ethics is a moral principle that distinguishes between right and wrong behaviours related to marketing practises (Unal and Nardali, 2010). On the basis of marketing, the decisions of market practitioners about ethical questions can be observed. Ethical questions often arise in marketing when the actions are determined to be ethically inappropriate by those who implement marketing strategies (Lacznia, 2012). In terms of marketing, ethical approaches should be proactive. Besides the legal sanctions and handicaps, it can be useful to implement the preventive mechanism. It has a positive impact on the image of the undertakings.

The question that has been taken in the study of Robin and Reidenbach (1987) by citing the study of Dale Carnegie (1936) and Peters and Waterman (1982) will help us to understand the relations between ethics and marketing. In their study Robin and Reidenbach (1987) examined “*whether it is possible to survive and to be successful by acting ethically in a competitive world*”. In today’s rapidly changing dynamic competitive world, every undertaking must realise to pay attention of not only their own customers but also the whole society by taking into account the ethical perspective. It can be claimed that in the new competitive world, the ethics has become more important for conscious customers. In other words, for the market that consists of more organized, more cultured, more informed and more researched, ethics is very important in terms of sustainability and competition.

There is a large volume of published studies describing fictional, semantic and practical relations between marketing and ethics. One of the first and important studies to shape and model the theoretical underpinnings of marketing ethics has been published by Hunt and Vitell, 1986 in the Journal of Marketing and this study has been the key of many discussions in the literature. (Hunt and Vitell, 2006) Studies that focussed on the theoretical dimension of the concept of marketing ethics have continued after Hunt. Thompson (1995), who examines the conceptualization and modelling of marketing ethics with its variables; Jahdi and Acikdilli (2009), who deals with the concept of ethics in marketing communication in terms of corporate social responsibilities; Bush and others (2000), who analysis the relations between the marketing and ethics on the internet environment; Carrigan and others (2001), who evaluates whether the ethics play a role on consumer and their buying behaviours; Fan (2005), who studies impact of ethics on the business image; Tsalikis and Fritzsche (1989), who examines the relations between marketing and business ethics; Akaah (1989), who analysis the difference between male and female professionals understanding on ethical perception; Saeed and Zafar (2001), who evaluates the marketing ethics within the Islamic perspective; Dunfee and others (1999), who focuses on the business ethics in terms of the theory of social contract; Mascarenhas (1995), who examines the responsibilities of marketing managers due to their unethical behaviours; Fritzsche (1988), who evaluates the results of the decision-makers’ decisions on marketing ethics in accordance with their gender and position in the company; and Ferrel (1985), who explains and analyses the multiple variables that demonstrate how marketers make ethical/unethical decisions can be given some of the important examples in the literature.

The concept of ethics in marketing should be considered from the perspective of induction. Ethical concerns on the decision of price, product, distribution and promotion will provide ethical sensitivity in a holistic sense. Adoption of business ethics by both the marketing department and the organization itself as a whole will provide the success on this issue. Within the scope of this study, the relations between ethics and unfair competition regulations on the comparative ads has been analysed and evaluated.

Ethics in marketing communication is a matter of applying the usual ethical principles to marketing practises. The regulation of the content of marketing communications is also an important aspect of the ethical decision-making process and provides the essential elements. Legal sanctions shall be developed by a public authority in the form of a legal obligation. In most countries, advertising regulation play this role. Convincing power of advertising should be taken into control. In advertising, unethical and unfair competition practises can be frequently seen (Richard, 2006). Using of mass media and reaching of large masses within a short time maximises its effect. In this respect, advertising has increased its importance for undertakings. As seen Table 1 below, spending on the global advertising over the years proves the increased importance of undertakings.

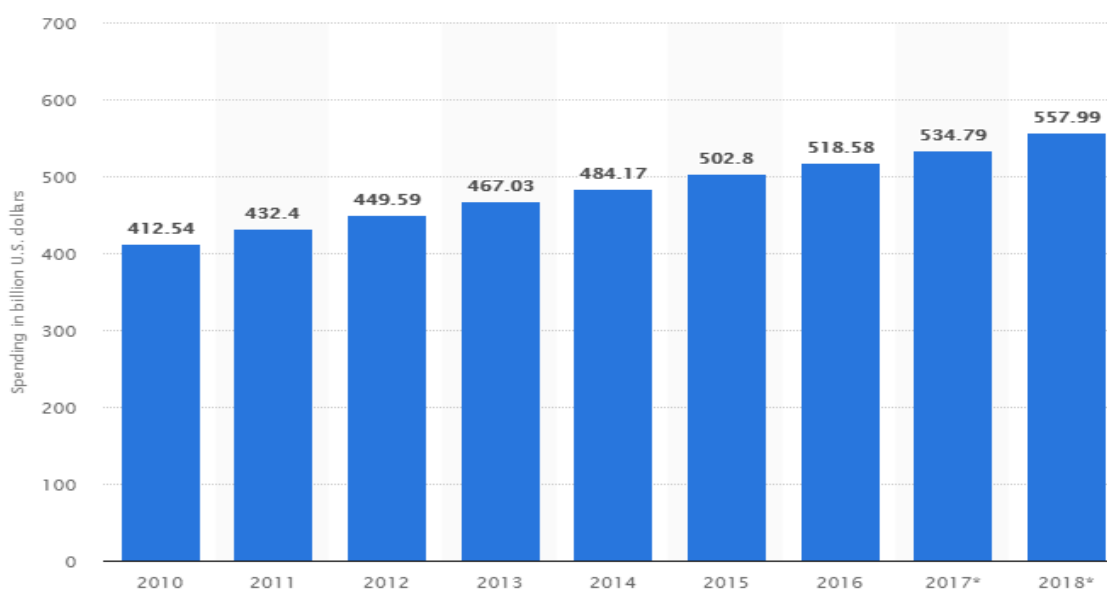


Table 1(The Statistics Portal, Global Advertising Spending From 2010 to 2018, <https://www.statista.com/statistics/236943/global-advertising-spending>)

It can be claimed that expenditures grow by an annual average %5, which makes it important for advertisements to effectively manage resources in terms of time, money and labour. The main problematic areas related to advertising and ethics can be classified as deceptive ads, comparative ads, ads that adversely affect children and women and ads with sexuality (Aytekin, 2010). It is important to highlight that the ethical approach of advertisement can be different from in terms of indicator and dynamics of advertisement; however, although these differences, the social trust approach, which can be defined as the main basic point, should be implemented in every kind of ads. In this study, the importance of ethics in ads has been emphasised with an observational study by making an interview with ten academic researchers. The details about this study will be given in the next part.

2.2. The Purpose and Importance of Research

In this study it is aimed to determine the point of view of marketing academics towards the concept of ethics and unfair competition in ads, which can be accepted as two important tools of marketing communication.

There are great numbers of studies addressing the concepts of unfair competition and ethics in the comparative ads separately. In this study, two important factors can be taken to the front. The first is to deal with the dimension of law and perception together. In this respect, to compare laws and perceptions and to identify differences can be a useful approach. And the second one concerns with participants involved in the research. It can be seen that previous works has generally focussed on marketing managers, professionals and customers. However, marketing educators and academics are also an important element of this work. Hence, it can be useful to understand the viewpoint of marketing academics about these concepts. Another important factors that need to be emphasised in this work that Y-gender representatives have been choose for the interview. Access to information with the Internet has become easy, fast and cheap. In particular, the social media has increased the interaction between the information and customers. In terms of marketing academics that identified as the target group in this work, the selection of Y-gender representatives can be considered as an important strategy to give an idea about the temporal change on the perception of the concepts.

2.3 Research Method and Scope

In this study, interview method was used as data collection. The interview can be defined as dual conversation that is made with specific person in a specific time (Padem and others, 2012). The

interview method was preferred because it allows direct access to the participants' criticism and views without any limitation (Nakip, 2003) and provides true and detailed information depending on the quality of communication (Gürbüz and Şahin, 2014). During the interview, two comparative advertisements that are composed of Burger King and McDonalds have been watched to ten researchers at Gazi University in the Department of Marketing in a single and isolated environment. These advertisements were repeatedly watched in the direction of their demands without any limitation. In order to be able to understand how they felt about advertising, it was expected to explain their thoughts with a marketing perspective without being subject to any direction. After watching these two advertisements, it was asked to indicate their thoughts and to evaluate two advertisements completely freely in the light of their marketing perspective that they learned during their master classes. During the interview, their evaluations have been recorded and participants were not restricted in terms of period of time. One-on-one interviewing method was preferred to prevent group pressure or influence on participants (Gegez, 2010).

2.4. Research Findings

2.4.1 Participant Information

Participant	Gender	Number of Courses (Marketing)
P1	Female	15
P2	Female	13
P3	Female	10
P4	Male	14
P5	Male	14
P6	Female	13
P7	Male	15
P8	Female	14
P9	Male	15
P10	Male	15

Table 2 Participant Information

As it can be seen from Table 2 that participants seem to have a significant number of marketing courses at both undergraduate and postgraduate level. Although they are at the beginning of their academic life, all marketing courses that they took helped to improve their marketing perspective in an academic sense.

2.4.2 Participants' Comments and Evaluations

In the following part, all comments and evaluations of participants have been indicated as follows:

1. Participant

First Advertising

a) I think that it is a very successful ad. Although McDonalds's number of branches is actually more than Burger King, it seems that Burger King has turned this ad into its own favour. It can be claimed that with this ad, Burger King gave the message about its superiority and is preferred by the customers in the market by mocking up with its competitors. In this respect I believe that the ad is successful and reaches its purpose.

Second Advertising

b) It can be thought as an ad that is smartly designed and also the creativity remains at the forefront. It can be seen that the superiority of the taste is strongly emphasised in the ad. Although it is not legally appropriate to attack and to denigrate the brand of Burger King by using its logo, I believe that it is a successful and joyful ad.

Comparative Analysis

c) In comparison, I think that Burger King's ad is more successful than McDonald's. In the ad, Burger King has not only given the message that consumers are aware of the small number of branches which can be accepted as an inappropriate situation for customers, but at the same time, it has turned this negative position into its own favour. In the other ad, it seems that the main idea is just to attack the brand of competitors.

2. Participant

First Advertising

a) I like the ad very much. I think brand loyalty has been focussed on by Burger King in this ad. The emphasis and the focus are on the concept of loyalty. In the commercial, where customers have taken a long distance to eat a hamburger have been performed, the main message is "the Whooper is not just a hamburger". It can be emphasis that the message in the ad is that the loyal customers see McDonalds's products (such as coffee) as just a snack until reaching Burger King. In this respect, this ad is so creative.

Second Advertising

b) In order to be convincing and impressive in an ad, it is essential to not to forget about the facts of credibility and reality. It is not realistic and also not ethic to state that Burger King is never preferred by customers. I did not like this ad, which is based on a complete ignorance of its competitors.

Comparative Analysis

c) The Burger King commercial has impressed me more. In order to gain a competitive advantage, an ethical and creative effort can be seen in this ad. In the other commercial, a complete ignorance perspective of the competitors can be defined as unattractive from my point of view.

3. Participant

First Advertising

a) I can claim that the brand loyalty has been processed in the first ad. The concept of loyalty has been built in the ad by highlighting that the distances are not important for customers. It is indicated that this distance can be travelled and is preferred to its competitors for Burger King.

Second Advertising

b) In the second ad, customer preferences for McDonalds's chips have been shown in an unethical way by denigrating its rivals. As a customer, I cannot say that I am impressed with this ad.

Comparative Analysis

c) An undertaking should consider its potential customers as much as its current customers within its promotional policies. I think the commercial that is developed by McDonalds has a disrespectful attitude towards Burger King's customers; in other words, its potential customers. In this respect, I think it is not a smart strategy or approach to ignore customers who like the Burger King's product.

4. Participant

First Advertising

a) In the first commercial, it has been admitted by Burger King that McDonalds is closer and more accessible to its customers with its drive services. Hence, an advantage of the rival has been indicated in this ad. In addition, while trying to state Burger King is a preferred undertaking by its customers, no message has been included about the weaknesses and also how to overcome these weaknesses. Therefore, I do not think that it is a successful ad.

Second Advertising

b) McDonalds has carried out a comparative study on potato chips in the belief that it provides a competitive advantage for itself and which is very confident in its product range. On the one hand, it tries to increase awareness by focussing on a product that has strengths than its competitors; on the other hand, it states that the competitor's product is an undesirable product compared to its own product.

Comparative Analysis

c) I think McDonalds has a comparative advantage in both commercial. In the second ad, the ethical concerns were ignored; however, it can be claimed that the message was impressive.

5. Participant

First Advertising

a) I think in the ad Burger King has used the advantage of the number of McDonalds' branches by turning it into its own benefit. I can clearly say that it is a very creative and clever commercial. In the given message, it has been emphasised that instead of the number of branches, the product is important for the costumers. In the commercial, the product has been prioritised. It can be emphasised that the humorous side of the ad has increased a potential sympathy on the product.

Second Advertising

b) At first, it can be seen as a fun by customers that McDonalds has shown itself to be preferred rather than its rival brand by using humorous elements in the commercial. However, causing the deterioration and the loss of prestige of the rival brand may pose a serious risk. It can be evaluated in the advertising category that is repulsive in terms of customers and far from convincing.

Comparative Analysis

c) In the first commercial, a weak side of Burger King has been taken into account by paying attention to ethical values and the rival brand has been treated without distinction; however, in the other commercial, this sensitivity has been ignored for a product that is thought as superior.

6. Participant

First Advertising

a) Creative advertising. When I watched the ad at first, I thought it was the ad for McDonalds as its brand was more visible. It is a promotional activity that is taken from a different point of view. It was emphasised in the commercial that customers are making efforts by tolerating long distance in order to reach the taste. This commercial creates an impression on the audience, which is "it was worth for it", when costumers eat the product after they have tolerated the long distance.

Second Advertising

b) In general, I prefer McDonalds. However, regardless of my preferences, it would be Burger King if I had to choose one of them after watching this ad. It is not right and ethical to damage the image of the rival and to show it as an unfavourable brand.

Comparative Analysis

c) I would claim that the burger King commercial is more creative and impressive. I found it more successful in terms of persistence and perceptivity. I think achievement or superiority should not be obtained from unethical deterioration of other businesses.

7.Participant

First Advertising

a) It is a comparative and very successful ad. It is emphasised that the meaning of the obstacles and negative factors has become almost meaningless for the loyal customers. It is a successful ad.

Second Advertising

b) It is expressed by using humour as a vehicle in the commercial that McDonalds is more preferred brand for children.

Comparative Analysis

c) Both sympathy and humour were included in the message by using children. In this respect, I think that the second ad gets more attention.

8.Participant

First Advertising

a) While watching the ad, Burger King has been understood as the main product and McDonalds' products can only be taken as a snack on the way up to Burger King. At the same time, the low number of branches was handled differently and extraordinarily by Burger King. This will provide empathy and awareness towards to the brand.

Second Advertising

b) The first message I received when I watched the ad and the thoughts that occurred in my mind is that the Burger King' products are not preferred and not wanted. I think it can be claimed that this ad has a subjective perspective.

Comparative Analysis

c) I think the second ad is funnier than the first one. On the other hand, it is not only amusing, but also contains serious problems when considering ethical and legal issues.

9.Participant

First Advertising

a) The ad is fun and has a well-thought scenario. In the ad, Burger King has featured to McDonalds, which is the biggest competitor globally, but has not shown a negative attitude towards the brand. It tried to explain that is preferred with a hilarious tongue and with a shortcoming that can be seen

as a disadvantage. In the ad, it was explained that McDonalds is a good enterprise; it can be preferred for its coffee; however, for the main product, hamburger, Burger King is the superior.

Second Advertising

b) It is more fun and creative than the first ad. But, I do not think that the message that Burger King is an undesirable brand is ethical.

Comparative Analysis

c) It would be misleading to see the fun as the only condition for the success of the ad. It is also important that ads should be reliable and realistic in terms of customers as well as fun. Indicating Burger King as an undesirable brand in the second ad can be considered as an unethical approach.

10.Participant

First Advertising

a) In the ad Burger King has presented its preference entertainingly. The items that are used in the ad make it feel immediately. It was also so sympathetic to make fun of its own deficiency. It can be also accepted as an amusing presentation to reflect the idea that the competitors can only be vehicles for reaching to it.

Second Advertising

b) McDonalds has tried to show that its product appeals to a broad costumers and unbearable. In the ad, McDonalds tries to impose the feeling that the kid cannot protect the product. At the same time, it tried to reflect that nobody cares about the rival brand. On the one hand, it is a fun ad; on the other hand, it is also a repellent ad. I did not find it right to use a child as an object in an unethical point of view.

Comparative Analysis

c) When the two advertisements have been taken into together, it can be claimed that Burger King gives a very sincere feeling in humiliating its competitors by adding its deficiency in the ad; however, the message of the dominance driving force of McDonalds in the second ad can be found as repellent. In this respect, if I wanted to eat a hamburger tomorrow, I would eat a whooper.

COMMENTS	Participants									
	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
Successful, Effective	A1, A2	A1	A1	-	A1	A1	A1	-	A1	A1
Unethical	A2	A2	A2	A2	A2	A2	-	A2	A2	A2
Unsuccessful	-	-	-	A1	-	-	-	-	-	A2

Joyful	A2	-	-	-	A1, A2	-	A2	A2	A2	A1, A2
Creative, Remarkable	A2	A1	-	A2	A1	A1	A2	A1	A2	-

Table 3 Comments and Evaluations of Participants

Conclusion

When the results of the research are examined, it can be seen that participants emphasize the concept of ethics without any guidance or direction or asking questions. The fact that marketing academics has indicated their sensitivity and awareness towards the ethical principals can be considered as a changing nature of customers. In addition, the second ad, which is evaluated as unethical, is also an ad that causes unfair competition. It can be accepted as an evidence to indicate the relations between the concept of ethics and unfair competition. It is interesting to highlight in here that the second ad, which was evaluated as unethical, was also seen creative and joyful. However, due to its unethical nature, a great majority of participants have highlighted it as an unacceptable ad. This research has showed that marketing perspective is changing in favour of the concept of ethics. Therefore, the philosophy of “*the ends justify the means*” (Machiavelli) can be no longer accepted as the key for the long-term success of corporations. The predatory strategy can only provide the success for the sort-term. In long-term, ethical principals should be taken into consideration. In other words, convincing power of ads should be in accordance with the rule of good faith. The question that needs to be asked in here is that do real/potential customers consider this unethical ad as also joyful and creative? If so, will it trigger purchasing impulse of customers? Or, like academics in interview, will unfair competition and ethical concepts also be an important factor on their buying behaviours? In this respect, further studies on non-academic or potential customers are recommended.

Bibliography

The Main Sources

1. Akaah, Ishmael P. "Differences in research ethics judgments between male and female marketing professionals." *Journal of Business Ethics* 8.5 (1989)
2. Arkan S., *Ticari İşletme Hukuku (Law of Commercial Enterprise)*, Bankacılık Enstitüsü Yayınları, 24.b/2018.
3. Aytekin, Pınar *Tutundurmada Etik*. (Ay, Canan, Burak Kartal, and Sinan Nardalı. *Pazarlamada etik yaklaşımlar*.) Detay Yayıncılık, 2010.

4. Bush, Victoria D., Beverly T. Venable, and Alan J. Bush. "Ethics and marketing on this internet: Practitioners' perceptions of societal, industry and company concerns." *Journal of business ethics* 23.3 (2000)
5. Carrigan, Marylyn, and Ahmad Attalla. "The myth of the ethical consumer—do ethics matter in purchase behaviour?." *Journal of consumer marketing* 18.7 (2001)
6. Christy, Richard. "Ethics in marketing communications." *C. Fill, Marketing Communications: engagement, strategies and practice, 4th edn, Harlow: FT Prentice Hall* (2006).
7. Dunfee, Thomas W., N. Craig Smith, and William T. Ross Jr. "Social contracts and marketing ethics." *The Journal of Marketing* (1999)
8. Fan, Ying. "Ethical branding and corporate reputation." *Corporate communications: An international journal* 10.4 (2005)
9. Ferrell, Odies C., and Larry G. Gresham. "A contingency framework for understanding ethical decision making in marketing." *The Journal of Marketing* (1985)
10. Fritzsche, David J. "An examination of marketing ethics: Role of the decision maker, consequences of the decision, management position, and sex of the respondent." *Journal of Macromarketing* 8.2 (1988)
11. Gegez, A. Ercan. *Pazarlama araştırmaları*. Beta Basım Yayım Dağıtım AŞ, (2010)
12. Gürbüz, Sait, and Faruk Şahin. "Sosyal bilimlerde araştırma yöntemleri." *Ankara: Seçkin Yayıncılık* (2014)
13. Hopkins C.C., *Scientific Advertising*, Cool Publications Limited, Bramhall/UK (1923).
14. Hunt, Shelby D., and Scott J. Vitell. "The general theory of marketing ethics: A revision and three questions." *Journal of Macromarketing* 26.2 (2006)
15. Jahdi, Khosro S., and Gaye Acikdilli. "Marketing communications and corporate social responsibility (CSR): Marriage of convenience or shotgun wedding?." *Journal of Business Ethics* 88.1 (2009)
16. Kotler, Philip, and G. Armstrong. "Principles of Marketing (15th Global Edition)." (2014)
17. Lacznia, Gene R. "Ethics of marketing." (2012)
18. Mascarenhas, Oswald AJ. "Exonerating unethical marketing executive behaviors: A diagnostic framework." *The Journal of Marketing* (1995)
19. Nakip, Mahir. "Pazarlama Araştırmaları." *Ankara: Seckin Yayınları* (2003)
20. PADEM, Hüseyin, Ali GÖKSU, and Zafer KONAKLI. "Araştırma Yöntemleri, SPSS Uygulamalı." (2012)
21. Rıza A. and Çağlar H., *Ticari İşletme Hukuku (Law of Commercial Enterprise)*, Yetkin Yayınları, 10.b/2017.

22. Robin, Donald P., and R. Eric Reidenbach. "Social responsibility, ethics, and marketing strategy: Closing the gap between concept and application." *The Journal of Marketing* (1987)
23. Saeed, Mohammad, Zafar U. Ahmed, and Syeda-Masooda Mukhtar. "International marketing ethics from an Islamic perspective: A value-maximization approach." *Journal of Business Ethics* 32.2 (2001)
24. Şener H.O., *Ticari İşletme Hukuku (Law of Commercial Enterprise)*, Seçkin Yayınları, Ankara/2016.
25. Tsalikis, John, and David J. Fritzsche. "Business ethics: A literature review with a focus on marketing ethics." *Journal of Business Ethics* 8.9 (1989)
26. Thompson, Craig J. "A contextualist proposal for the conceptualization and study of marketing ethics." *Journal of Public Policy & Marketing* (1995)
27. Ulgen H., Helvacı M., Kendigelen A., Kaya A., and Ertan F.N., *Ticari İşletme Hukuku (Law of Commercial Enterprise)*, Levha Yayıncılık 2015-İstanbul.
28. Unal, Aylin and Nardalı. Sinan *İşletme ve Pazarlama Etiğine Giriş*. (Ay, Canan, Burak Kartal, and Sinan Nardalı. *Pazarlamada etik yaklaşımlar*.) Detay Yayıncılık, 2010.

Web Sources

1. Armstrong S.J. Evidence-Based Advertising, Penn Libraries (2011), https://repository.upenn.edu/cgi/viewcontent.cgi?referer=https://www.google.com.tr/&httpsredir=1&article=1152&context=marketing_papers, accessed at 7.3.2018.
2. Differences between False Advertising & Puffery, <http://smallbusiness.chron.com/difference-between-false-advertising-puffery-66945.html>, accessed at 17.03.2018.
3. Puffery in Advertising: Definition & Examples, <https://study.com/academy/lesson/puffery-in-advertising-definition-examples.html>, accessed at 17.03.2018.
4. Republic of Turkey Ministry of Customs and Trade, the Decisions of The Board of Advertisement; Press Statement, File Number: 2016/4401, the date of publishing of ad: 25.08.2016, <http://tuketici.gtb.gov.tr/reklam-kurulu/reklam-kurulu-kararlari>, accessed at 25.03.2018.
5. The Statistics Portal, Global Advertising Spending From 2010 to 2018, <https://www.statista.com/statistics/236943/global-advertising-spending>, accessed 10.06.2018.

Impact of Technology on GDP and Employment: A Study on Selected Countries and Application on Saudi Arabia

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Abstract: This research paper aims at examining the role of technology in boosting economic activity and employment, by adopting different research methodologies and taking the Saudi economy as a case study. The research results support the notion that technological progress is a key factor in achieving development goals pertaining to economic growth and employment level. The study suggests that the leaders and policy-makers in Saudi Arabia should pay a great attention on adopting technology as a medium for achieving Saudi Vision 2030.

Section I: Introduction

Technology is immensely needed to prosper GDP growth and to lower unemployment rate. It helps in improving the education, the overall health, and to increase quality of life. An important measurement of the technology economy is observing the Worldwide IT spending volume, which is regarding the corporate spending for hardware, software, data centers, networks, and staff, both internal and outsourced IT services. Currently, this volume is close to \$6 trillion per year. To put this number on a more illustrative perspective, if we were to consider the global technology economy a country and its yearly spending its GDP, it would be ranked as the world's third largest economy, between the economies of China and Japan and more than twice the size of the UK economy (Cavallo, 2016).

Technology spending, gross margins and economic growth have a strong relationship when measured by productivity and GDP. A good example is that executives can predict with some accuracy the impact on the overall economy of a decline in technology spending. Whenever companies cut back on discretionary spending in order to improve profits during a downturn, they slash their investments in technology. Soon afterward, GDP falls dramatically, and, within a few years, labor productivity across the economy falls, as technological innovation is an important component of productivity.

Singapore, China, and United States are examples for countries that are embracing technology in order to flourish their GDP growth and to lower unemployment rate. For United States, the total value-added GDP from software in 2017 was \$1.14 trillion, which helped in creating 10.5 million jobs, thus contributed to the unemployment reduction, which is 4.1% as of December 2017 (Software Economic Impact Report, 2018 and Labor Force Statistics, 2018).

For Singapore, statistics show that the information and communication technologies sector has contributed by 20% in the overall GDP in 1996, and the unemployment rate is only 2.2% as of December 2017 (Singapore Department of Statistics Report, 2018 and Singapore Ministry of Manpower Report, 2018). China, which is the second largest economy, has technology accounted for 30% of its GDP, and the unemployment rate is 3.95% as of September 2017 (World Internet Conference Report, 2017).

Section II: Research Objectives

As illustrated above, technology is required to prosper GDP growth and to lower unemployment rate. However, that is only a noticeable correlation. This research aims to investigate further and it has below objectives:

1. Examine the relationship between technology adoption and the GDP.
2. Investigate the relationship between technology adoption and the unemployment rate.
3. Understand how Singapore, China and United States are utilizing technology as a pillar to grow GDP and to lower unemployment rate.
4. Specify the challenges in adopting technology in Saudi Arabia to boost economic growth and to lower unemployment rate.

Section III: Research Problem and Questions

The problem that this research is trying to solve is to understand the impact of technology on GDP and employment. Through this research, the following questions are going to be answered.

1. What is the relationship between technology adoption and the GDP?
2. What is the relationship between technology adoption and unemployment rate?
3. Is there an impact of adopting technology in Singapore, China and United States on employment in general and employing females in particular?
4. What are the challenges in adopting technology in Saudi Arabia to grow GDP and to lower unemployment rate?

Section IV: Research Hypotheses

Below are 3 hypotheses that are going to be tested in this research, based on the specific objectives and questions that were identified:

1. There is impact for adopting technology on GDP and unemployment rate.
2. There is impact for adopting technology on employment in general and employing females in particular in Singapore, China and United States.
3. The main challenges to adopt technology in Saudi Arabia are the unattractive environment for trading, poor infrastructure and the quality of education.

Section I: Literature Review

This research is going to study the impact of technology on GDP and employment in order to answer key questions related to utilizing technology to boost economic growth and lower unemployment rate. As a part of this study, a relevant literature review has been conducted to better understand published information around the topic.

I.I: Technology Impact on GDP and Growth

In a globalizing world economy, the explanation behind contrasts in financial development and between inter-country inequalities in income is clarified on the grounds of huge difference in technological implementation. The objective of science and innovation is to empower ventures and people to utilize advances all the more effectively, as this yield diminished expenses and augmentation of productivity. The utilization of new advancements prepares for the generation of new affordable merchandise and for capital aggregation and, so far as that is concerned, for an improved global rivalry intensity of individual nations, and to an upgraded quality for science research establishments. Simultaneously, it also leads to the social and political advancement of various societies. The nature of development rates is as equally essential as their size.

Technology includes the use of science particularly for mechanical or business purposes and utilization of logical techniques and materials keeping in mind the end goal to accomplish business or industrial objectives and making "developments" to the manufacturing sector, manufacturing strategies and commodities so as to expand the volume of production or effectiveness all subsequently leading to a competitive edge and appreciation in profit margins. In this manner, technological innovation assumes a key part in economic expansion on the grounds that appropriate or inappropriate utilization of the innovative advances may have substantial positive or negative ramification on a particular firm, segment or country (Spence, 2011).

Hence, it has been presupposed that innovative improvement and digital data is an external factor which has economic implications. Innovation attains the generation of particular merchandise with less input with regards to resources and production factors.

Furthermore, innovation is not intricate and it could be comprehended, sold and acquired effortlessly. Therefore, its exchange from one firm to the next does not necessitate excessive exertion and expenses and likewise, no issues emerge in its exchange from one country to the next. Technological improvement is a critical factor expanding the development rate of an economy at a macro level and gains in stock values at a micro level (Motohashi and Yuan, 2010).

The social improvement happens if a general public can generate technological advancements and implement them in their culture as well as social lives. It is apparent that economy has been directing innovations as the new technological developments also influence economic growth and ultimately the GDP. The countries that could productively disperse technological advancements and data to all regions in the global society can generate new employment opportunities in foreign nations. However, these new regions require a qualified task force. Therefore, important amendments ought to be made to the education-related policies to guarantee the advancement of human resources with such aptitudes underscoring the economic advancement.

It is widely acknowledged that innovative change is one of the most essential determinants for a quick increment in the income and volume of production and is an absolute necessity for accomplishing a global competitive edge. The competitive edge cannot only be considered from the aspect of enhancing societal wealth but also as the capacity to augment efficiency. In this respect, there is an indication that competitive rivalry is generated entirely among technology firms and cultivating the capacity to generate innovative components or systems in these organizations brings about both an expansion in the productivity and additionally offers corporations an upper hand on the global front.

Technological transformation does not merely mean an approach to expand the abundance and opulence of the countries, but it likewise enables the general population to achieve levels they could not attain previously. In this way, the novelty is a key determinant of whether an entire life quality will grow in a positive or negative manner. IT research indicates that in case a population has a greater ability for production as well as innovation, the GDP will grow exponentially due to increased circulation of money as well as increased international trade.

I.II: Technology Impact on Employment

The Information and Communications Technology (ICT) business has explicitly generated employment opportunities in the developed and the developing economies. In the OECD nations, for instance, the employment level of the ICT industry was at 5.74% of aggregate business industry employment. For the G20 member nations among this, the scope was within the bounds of 4.66 and 6.45%. Some developing economies have additionally profited. Brazil's IT industry accounted for 16 % of occupations made between the years 2010 and 2013 and had absorbed and excess of 1.3 million individuals by the years 2014. India's IT-BPO industry presently accounts for more than 3.5 million laborers; a third of whom are women. The additional implications of the IT industry are likewise noteworthy (Bharati and Chaudhury, 2006). Different researches demonstrate that computerized occupations produce approximately two and four times the job openings in different divisions of the economy. These occupations additionally regularly pay higher-than-normal wages which are also noted to grow more rapidly in comparison to various other sectors. Characteristic information from 2004-2005 for a group of G20 nations proposes that all things considered, PC software engineers gain net wages that are about a third higher in comparison with the national averages. As organizations and governments initiate integration of innovations into their procedures and undertakings, and people embrace these advances throughout various spheres of their lives, there is an expectation that the demand for digital laborers will appreciate. Specialists who have these (exceptionally high) aptitudes and can access these employment opportunities will profit substantially. Nevertheless, numerous nations are confronting a shortage in the number of qualified experts even as they may have individuals who are unemployed. Hence, having more individuals working in computerized jobs will require both the institution of the proper empowering conditions for organizations and also for people to embrace innovation.

Technology has also impacted employment through the introduction of computerized instruments. The propagation of affordable and highly capable technology worldwide has enabled more individuals to access digital devices that enable them to interface better with company resources and markets including the local and global labor markets. Three classes of these computerized devices have developed as essential empowering influences of labor markets. The first is transactional devices whereby a scope of computerized gadgets empower purchasers and vendors of different merchandise to execute their business operations with more proficiency and in a transparent manner. This incorporates the cell phone, which is acknowledged for enabling

different specialists to retrieve data on costs better (for instance farmers). This additionally incorporates electronic payment services, for instance, that enhances the dependability of monetary exchanges regardless of area of the purchaser or vendor.

Web-based business has likewise started to have a noteworthy effect. In China, village economies have changed and started to generate job opportunities beyond farming due to the fact that SMEs could offer different items, for example, furniture or handcrafted art through Taobao, the consumer to-customer branch of Alibaba. eBay, an online commercial center initially began in the U.S., presently has an excess of 25 million merchants—a considerable number of them SMEs—and 155 million purchasers and operates in 190 nations. Currently, 90 % of business dealers on eBay ship goods to different nations; the proportion is below 25 % among conventional small enterprises. Additionally, in India, these commercial centers have generated numerous job openings for delivery personnel.

The second class is composed of complementary devices. These devices incorporate the different hardware and software components that numerous associations and specialists now utilize, including business programming, processing plant robots, PCs, and smart mobile phones. The McKinsey Global Institute asserts that "organizations that have completely incorporated [the Internet] and utilize it broadly generating more than twice the number of job opportunities as the typical average, while the Internet has a neutral to marginally negative implication on organizations utilizing it just sparingly or not at all (Etro, 2009). Additionally, it is likely that the advancement of these innovations is set to exponentially expand. Highly advanced robots or artificial intelligence-based PCs can perform numerous assignments presently that were formally viewed as difficult to implement automation. Robots are starting to complement specialists and could be utilized to perform remote surgeries. As 3D printing becomes affordable and less intricate, it is conceivable that it could change production, lessening the requirement for assembly line laborers, however, increasing the number of job openings for architects and experts in 3D printing. The third class is matching devices. As the Internet and mobile networks have gradually become far-reaching, they have gradually transformed into a medium to link specialists with tasks or employment opportunities at various geographic levels. At the city level, these job matching services have opened unused rooms in homes (e.g. Airbnb), associated auto drivers with clients (e.g. Uber), and made markets for "gigs," where an individual executes particular and time

constrained undertakings that are regularly non-tradable (e.g. getting basic supplies or conveying packages).

At the national and worldwide levels, these matching services have been developed that enable hiring companies and workers to link up with each other. In some instances, these online platforms center around occupations (for instance Monster.com or SoukTel Jobmatch), while in different cases, they center on short tasks. Certain platforms, for example, oDesk-Elance and Amazon Mechanical Turk enable individuals to work on the web. With regards to oDesk-Elance and comparable web-based contracting services, online specialists linkup with hiring companies who establish a one-on-one relationship for a specific undertaking, and where the supervision is done online.

There are various emerging issues linked to technology with some of them being that innovative concepts will complement employees in various tasks in the future. On the other hand, some of the present-day jobs will also be substituted by innovation. This translates to future jobs being either digital or utilizing digital tools. There is, nevertheless, minimal consensus concerning how these developments might establish themselves, at what pace they might manifest, and the degree of distribution of the gains and losses (Galí and Rabanal, 2004). Therefore, there are mounting concerns related to whether the implementation of lower-cost or augmented technology by organization and governments could have undesirable implications on employment of result to inequality, permitting some proportion of the populace to gain disproportionately, while other might end up with inadequate economic opportunities.

I.III: Challenges in Adopting Technology

There are many studies has been founded regarding the challenges facing countries in adopting technology. What follows is an analysis of the literature organized thematically around Rogers's model of the diffusion of innovations. In his literature review for challenges of adopting technology, Jayson Richardson noted what has been published by Tiene and Hawkins that to increase adoption of ICTs in less developed countries, a focus must be placed on meeting the needs and addressing the limitations of the end user by demonstrating the advantages to adopting a given ICT innovation (Richardson, 2011). Tiene found that efforts to increase the adoption of ICTs in less developed countries often fail to improve educational efforts (Tiene, 2004). Tiene noted that

“one critical mistake is to be overly ambitious and overly optimistic about what technology can accomplish”.

It was found that schools in many developing countries fail to realize that ICTs are not constrained to simply having the right hardware. Tiene found that common challenges and barriers to technology adoption in less developed countries include a lack of ongoing support and a failure to include teachers in ICT planning. Many projects thus fail to capitalize on developing advantageous ICT solutions relative to the needs of the end user.

Cheng and Townsend cited four issues of compatibility with using ICTs in schools in the Asia-Pacific region. First, there is the difference between educational aims and the uses of ICTs. Second, there is a gap among hardware, software, and training. As Cheng and Tam have noted, the challenge for nations is to develop a comprehensive ICT package that includes “hardware, software, and training as well as an ICT platform to support and maintain the effective and efficient use of ICT in teaching and learning”. Third, nations are challenged to bridge the gap between ICT and curriculum development. Since rapid ICT advancements are the norm, curriculum developers in most Asia-Pacific countries have difficulty keeping up. Finally, nations in the Asia-Pacific region are experiencing challenges bridging technological change and cultural norms. Failure to adjust to the paradigm shift has caused strong resistance from school practitioners (Cheng, 2000, 2001, and 2007).

These four challenges each address unique aspects of an innovation’s compatibility with a community’s existing systems, norms, and beliefs. Pelgrum analyzed a worldwide survey of educational practitioners in primary and secondary schools in 26 countries at varying levels of development to understand the obstacles that hinder advancing ICT-related goals. Pelgrum compiled a list of 38 obstacles faced by school principals and technology experts (Pelgrum, 2001). Of the top-10 obstacles to successfully implementing ICT in Education initiatives, two dealt with the complexity of ICT. Pelgrum found that teachers often had a lack of knowledge and skills about ICTs and thus had difficulty integrating them in instruction. Further, Tiene noted that a main challenge of ICT adoption in less developed countries is the inability for the end user to troubleshoot hardware and software. This lack of troubleshooting ability increases the complexity of using the innovation.

In discussing ICT in Education initiatives, Law and Plomp noted that “staff development is the key element in the implementation plan for any education change” (Law and Plomp, 2003).

Staff development hints at Rogers's characteristic of trialability (Rogers, 2003). Staff development gives potential users a chance to try the ICT innovation in a guided environment. Kozma et al. stated that the World Bank program, called World Links for Development, provided schools and ministries of education in less developed countries with "sustainable solutions for mobilizing the necessary technologies, skills, and educational resources to prepare students and teachers to enter the Networked World" (Kozma, et al, 2000). In analyzing this project, Hawkins found that one of the key failures of this and many past ICT in Education initiatives in less developed countries is the lack of professional development at the national as well as at the grassroots level (Hawkins, 2002).

Hawkins found that lessons learned from the World Links for Development program included the following: ongoing technical support is imperative; wireless technology is more effective than wired technology; community involvement is needed for both ongoing financial support and to understand the needs of the stakeholders; and both formal and informal sustained teacher training is needed. Many aspects of these lessons point to the need for end users to practice using the innovation in an ongoing and supportive environment. Pelgrum's list of the top-10 obstacles to implementing ICT innovations in less developed countries includes eight issues centered on the fact that end users could not practice using the ICT innovation and achieve observable results.

Pelgrum (2001) listed the following as obstacles: insufficient number of computers, difficulty scheduling computer time, insufficient peripherals, not enough copies of software, insufficient teacher time, not enough simultaneous access to the Internet, not enough supervision staff, and a lack of technical assistance. Likewise, Rodrigo conducted a cross-sectional survey of all schools in metro Manila and found that challenges tended to focus on the inability of the end users to practice using the innovation because of an inadequate number of computers, limited software availability, and limited Internet connectivity (Rodrigo, 2005).

Section I: Research Methodology

To achieve the research objectives, the research questions should be answered by testing all aforementioned 3 hypotheses. As part of testing these hypotheses, the research methods to be utilized are qualitative and quantitative methods. To test the first hypothesis, that there is impact for adopting technology on GDP and unemployment rate, regression analysis will be used. To test

the second hypothesis, that there is impact for adopting technology on employment in general and employing females in particular in Singapore, China and United States, secondary data analysis will be used. To test the last hypothesis, that main challenges to adopt technology in Saudi Arabia are the unattractive environment for trading, poor infrastructure and the quality of education, combination of secondary data analysis and primary data collecting through interview and questionnaire techniques are going to be used.

I.I: Data Collection Techniques

This research is going to study the impact of adopting technology on GDP growth and employment. Such study requires exploring the literature around this topic to understand all aspects related to technology, GDP growth, and employment rate.

Therefore, exploring the literature will assist in identifying relative secondary data to this topic. That includes published historical information and statistics about technology, GDP and unemployment rate. Another technique that will be used is to collect primary data through interviews with technology executives in Saudi Arabia to understand their point of view on technology and economy. Moreover, a questionnaire is going to be published to gauge the answer of key questions developed by the researching team related to challenges in adopting technology in Saudi Arabia.

I.II: Research Protocol

As illustrated in the previous sections, to achieve the research objectives, the research questions should be answered by testing all aforementioned 3 hypotheses. As part of testing these hypotheses, the research methods to be utilized are qualitative and quantitative methods. Collecting data is required to feed such methods.

To test the first hypothesis, that there is impact for adopting technology on GDP and unemployment rate, regression analysis will be used. Such analysis will require collecting historical secondary data. The first secondary data is Real GDP Growth Rate, which is the growth rate for the GDP adjusted for price changes (Federal Reserve Bank of St Louis, 2018). The second secondary data is Real GDP per Capita, which is the ratio of Real GDP to the average population of a specific year (European Commission, 2018). The third secondary data is the unemployment

rate. Moreover, as the independent variable, the team developed a model to gauge the technology adoption rate. More details about this is going to be discussed in later section.

To test the second hypothesis, that there is impact for adopting technology on employment in general and employing females in particular in Singapore, China and United States, secondary data analysis will be used. The research team is going to rely mainly on collecting facts and statistics to help performing descriptive analysis to test the hypothesis and answer the question.

To test the last hypothesis, that main challenges to adopt technology in Saudi Arabia are the unattractive environment for trading, poor infrastructure and the quality of education, combination of secondary data analysis and primary data collecting through interview and questionnaire techniques are going to be used. The research team is going to conduct interviews with technology executives in Saudi Arabia to understand their point of view on technology and economy. Moreover, a questionnaire is going to be utilized to gauge the answer of key questions developed by the researching team related to challenges in adopting technology in Saudi Arabia. This should help in testing the hypothesis and answering the research question.

Section II: Secondary Research

The literature review section shed the light on the importance of technology and innovation to prosper the GDP growth and lower the unemployment rate as well as explored the challenges for adopting technology. This sections is going to explore in more depth the importance of female participation in the workforce to increase the GDP, challenges in achieving that, and how technology can help with increasing female participation in the workforce.

II.I: Importance of Female Participation in The Workforce

Gender equality has the effect of attracting better talent since a male-dominated job market is in general unappealing to women. This has a detrimental since women generally have greater educational achievements in comparison to their male counterparts. Essentially, a perceived shortage or absence of equality makes an economy highly susceptible of missing out on a large pool of talent (Barnett and Hyde, 2001). Other than skills and talent, a variety of perspectives that accompany diversity — and it's not merely about the female perspective, but perceptions sourced from the divergent cultures and socioeconomic backgrounds that they grew up in. For instance, in the United States, since the year 2000, labor force participation among American females, unfortunately, has begun reversing course from generational advancements.

Presently, approximately 57% of females in the U.S labor force are employed away from home, a drop from 60% at the dawn of the millennium. Particularly, the prime-age women rate of participation stood at 74% in the year 1990, at number 7 among the OECD nations. As that figure has stagnated in the U.S., the GDP of other developed economies have experienced significant gains, plummeting the United States to position 20 among the 22 OECD nations by the year 2016 with regards to the contribution of women to the GDP.

A 2012 report conducted by one of the women's advocacy groups, it was projected that a boost in female workforce participation by approximately 6% (matching it with that of Canada) would bolster the size and output of the Australian economy by approximately \$25 billion annually. This would be specifically true for the technology sector. It is widely acknowledged that innovative change is one of the most essential determinants for a quick increment in the income and volume of production and is an absolute necessity for accomplishing a global competitive edge (Bloom et al, 2009).

The competitive edge cannot only be considered from the aspect of enhancing societal wealth but also as the capacity to augment efficiency. In this respect, there is an indication that competitive rivalry is generated entirely among technology firms and cultivating the capacity to generate innovative components or systems in these organizations brings about both an expansion in the productivity and additionally offers corporations an upper hand on the global front.

Technological transformation does not merely mean an approach to expand the abundance and opulence of the countries but it likewise enables the general population to achieve levels they could not attain previously. In this way, the novelty is a key determinant of whether an entire life quality will grow in a positive or negative manner.

II.II: Challenges Facing Increasing Female Participation in The Workforce

The participation of females in line and staff roles exemplifies some of the firmly established hindrances to advancement to top-level positions. Females are extensively under-represented in line job positions in the Energy, Mobility, Basic and Infrastructure and Information and Communication Technology sectors, with line roles having a greater likelihood of equipping women with the skills and experience that are pertinent to these fields and that would thoroughly prepare them for senior positions (Jaumotte, 2003).

Research indicates that with regards to the barriers hampering the participation of women in the workforce diverge based on industry and typically mirror various industry cultures in

addition to the predominant societal and economic factors. Despite the fact that in almost all geographies and industries there has been a notable move away from the intentional marginalization of females from the workplace, there persist to be cultural beliefs that result in unconscious biases. This incorporates opinions that prosperous, competent females are less desirable, that solid performance by the female gender is attributable to hard work as opposed to skills. Additionally, there have been assumptions that females are less dedicated to their careers.

There has been noted trend that, particularly in well-established, older corporations, workplace structures that were intended for a past age still, typically inadvertently, show favoritism for men. In addition to this, women's historically low labor market participation translates to fewer role models for them to venture into all industries. Research also specifies that females typically have a very negative perception of top roles and also lack a perfect line of sight as the manner in which positions of senior leadership might assist them to attain their objectives, in the absence of role models who can demonstrate the benefits and trade-offs they convey.

In the United States, for example, Women's aspirations and confidence are considered to be another obstacle. Women have a lower probability of desiring a top job – noting the pressure or stress of the job description as a key deterrent. A normally noted obstacle is the absence of qualified incoming women talent in particular fields, particularly in STEM (Science, technology, engineering, and mathematics) education, where females presently comprise a mere 32% of all graduates all over the world.

Finally, where each industry stands particularly is typically influenced by how recently and industry has enhanced its gender balance. Owing to the fact that career selections are disproportionately influenced by prior bias and experience, conventionally men dominated fields normally find it challenging to appeal to women. Across all industries, industries, unconscious prejudice among company executives and the absence of a work-life balance are notes as the two main hindrances to female workforce integration over the next few decades. Some managers state that there is a concern with regards to the availability of competent talent, particularly, employers in the Energy and ICT industries.

II.III: How Technology Helps Increasing Female Participation in Workforce

As illustrated in the previous sections, increasing female participation in the workforce will be beneficial in increasing the GDP and lowering the unemployment rate. This section is going to

explore a study done to explain how women working in technology can be a drive for economic growth.

In the paper “Women in Tech as a Driver for Growth in Emerging Economies”, It is explained how the world is transitioning to a more of a digital economy, where many low- and middle-income countries are having the challenge of lacking qualified workers to fill the information and communication technology (ICT) jobs. Moreover, low representation of females in this sectors is an additional factor for such shortage. It is explained that the gap between the demand for ICT workers and the supply of job seekers with the necessary technical skills threatens the ability of those countries to participate in a powerful driver of growth in the twenty-first century—the digital economy. It is claimed that increasing the participation of women in the ICT labor force would help bridge this gap.

It is shared that expanding women’s access to ICT jobs would not only advance economic opportunities for women, their families, and their communities, but it would also help address the shortage of skilled workers for these jobs and grow the digital economy. As women become increasingly active users of technology, their participation in designing and developing tech products and services will help to enhance technology’s relevance for women as consumers, further boosting innovation and economic growth. Working together, the public and private sector should address the multiple barriers women and girls face, particularly in low- and middle-income countries whose economies stand to gain the most from greater participation of women in vital ICT jobs (Powell and Chang 2016).

Section III: Qualitative Research

In this study, qualitative research methods have been applied. Interviews and questionnaires were used to conduct an interpretative study. Questionnaires are self-report data collection tools which, answered at a distance from the researcher, eliminate personal influence. The technique used in the interviews was to utilize a single open-ended question to give the opportunity for the interviewee to express his view about challenges in adopting technology in Saudi Arabia. More details about responses for the interviews and the questionnaire are going to be discussed in later section.

III.I: Questionnaire Target Audience

Rigorous questionnaire design was undertaken to provide the research reliable measures that have been validated for this application also ensuring participants can understand the questions and

answer accurately with the most appropriate response. Our target population are employees within private and public sector and students in university. Both have direct relationship with technology every day.

III.II: Questionnaire Sampling Size

The researching team have chosen 200 responses as a target number of questionnaires responses with 95% confidence level and 5% margin error. The researching team received 161 responses.

Section I: Data Analysis

In order to achieve the research objectives, the research team relied on collecting secondary data through studying the literature related to the topic of technology impact on GDP growth and employment, as well as looking into historical published statistics related to Real GDP, Real GDP per Capita, and unemployment rates. Moreover, the team has also collected primary data related to the challenges for adopting technology in Saudi Arabia, through utilizing interviews with technology executives in Saudi Arabia as well as a questionnaire. This sections is going to discuss in further details the data that have been collected, why such techniques have been used, and interpretation for reached results.

I.I: Descriptive Data

The questionnaire's goal was to determine what employees and students perceived as obstacles and challenges facing Saudi Arabia to adopt technology in effective manner. At the beginning of the questionnaire the researcher explained the purpose of the survey and directions for filling out the questionnaire. The first section of the questionnaire was designed to capture demographic information such as age, occupation educational background. The second section was designed to obtain information on their understanding of technology and if there is relationship between technology and unemployment rate. The last section was designed to find out what respondents felt were the challenges and barriers facing Saudi Arabia to adopt technology in effective manner.

I.I.I: Interviews Overview

Interviews were conducted with executives in Saudi Arabia, in private and public sectors, to understand their point of view on technology and economy in general, and on challenges adopting technology in Saudi Arabia.. The first interviewee is Mr. Ibrahim Alfaifi, who is the IT Audit Director in AlRajhi Bank, which is the largest Islamic bank (Islamic Finance, 2015).

The second interviewee is Mr. Ali Alsagaby, who is the IT Audit Director in STC, which is the second largest internet and telecommunication company in the middle east, and ranking 18 on the world in telecommunication category (Forbes, 2017).

The third and last interviewee is Mr. Ibrahim Almojel, who is the CEO of Saudi Industrial Development Fund, which contributes effectively to the realization of the goals, policies and programs of the Kingdom's industrial development, by providing the finance and advisory services needed to support the growth and development of the local industrialization and upgrading the level of the industry performance (Saudi Industrial Development Fund, 2018).

I.I.II: Interviews Results

To utilize the strategic position of all interviewees, being executives leading their well performing organization, the researching team decided to ask only one open ended question “What are the challenges that faces Saudi Arabia to adopt technology”. Such question will allow each interviewee to express his answer in as much desired details, based on his experiences and point of view.

In the first interview with Mr. Ibrahim Alfaifi, the IT Audit Director in AlRajhi Bank, he expressed his view as following: “Actually, I think that there many challenges facing Saudi Arabia. One of the main challenges is the infrastructure, which I consider is partly ready, but I feel that major enhancement is needed to our infrastructure in order to adopt those new technologies such as smart cities. Also, in the network level, there is a need for more enhancement since the integration part is not well established, Also in policies and procedure level, we need to have applicable policies which reflect the intent of management toward adoption of technology in systematic manner. Another factor is the human resources within the kingdom that is not matured enough, as they might need consultants to facilitate the implementation of technology. The kingdom should have a look for the long term as well by having proper education for Saudi candidate to be leaders in this sector. Another concern is most of our government entities have their own ICT, and in order to face this challenge as well, we need to have consistency in all government technology by adopting the same technology patterns like banks, which are using almost the same technology.”

In the second interview with Mr. Ali Alsagaby, the IT Audit Director in STC, he expressed his view as following: “Implementing technology in general and automation is considered as transformation, and we have less experience in transformation in corporate culture history.

Experience is one factor which can be considered as a challenging factor in Saudi Arabia. Another factor is the legal factor. Yes, we have some regulation and laws defining violations regarding the misuse of technology, however there are some gaps that will require legal infrastructure to be developed in the country to overcome those challenges as well. The last thing is the technology itself, which keeps changing in nature and no matter how you follow up with technology, a new technology will come. We need to be agile to keep in pace with change in technology, so we need change in mindset as well. This might help us to face those challenges in our country.”

In the third and last interview with Mr. Ibrahim Almojel, the CEO of Saudi Industrial Development Fund, he expressed his view as following: “One of major challenges is that the nature of technology itself has been changed. We can define three areas where the change of technology is happening. The first one is the artificial intelligence and automation, which will change the nature of the jobs these days. The second factor is customization, were it allowed the customer to design and choose the material as he wants. The third one is the logistic services, which has been moved from global level to domestic level. So, you might ask me how is that affecting Saudi Arabia? I will say that customization has become more valuable than mass scale. Thanks to technology, the automation and artificial intelligence has become a competitor to humans. Even the countries with low pay jobs has been effected. China as example, in one of their factories, has replaced the humans with machines, which was more effective in doing the job and less costly compare to people work there and the efficiency has increased as a result. So what Saudi Arabia should do to faces those challenges or opportunities? First, they have to support domestic companies to adopt those technologies from financial perspective. Also, create a positive environment by supporting academic research and encourage student toward these research. Second, facilitate the regulation part regrading technology.”

I.I.III: Questionnaire Overview

The survey questionnaire was divided into three parts: demographic information, information technology knowledge, and perceived challenges and barriers facing Saudi Arabia to adopt technology in effective manner.

The questionnaire was accessed through the online survey website google survey. It was available online for 10 days. The total number of participants who responded to online survey to identify important challenges that faces Saudi Arabia to adopt technology was 161 respondents. All of them were classified as Saudi citizens and as Internet users who have the basic knowledge

about Internet, websites and its usage. The majority of participants are employees and that gave the research a clear view about their knowledge about technology.

I.I.IV: Questionnaire Results

The questionnaire results can be classified into 10 categories, where each category represents a set of answers on a particular question. Detailed survey information are available upon request.

Demographics Information

The data showed that the majority of respondents are between the ages of 20-30 years, which is about (50.3%) of the total number of respondents. (24.2%) were above 30 years of age, (13.%) were between ages 50-70 years old, and (12.4%) were between 41-50. Participants were mostly male employees and students with percentage about (53.2 %) and rest were female employees and students with (46.8 %). This section also identified the educational level of the respondents; it revealed that the majority of these participants held a bachelor degree that is (66.5%). (19.9%) of the respondents had higher than bachelor degree, (10.6%) had a high school degree, (3%) had doctorate degree. This explanation of section one of the research questionnaires will help in the interpretation of the following sections to answer the research questions.

Technology as a Driver for Economic Growth

Response for this question was (97 %) who think technology has improved the business and (3 %) were between saying No and to some extent. For sure technology has improved business in almost every process.

Technology as a Driver for Decreasing Unemployment Rate

Result of the survey shows that (55.3 %) believing that technology decrease the unemployment rate while (34.2 %) think that technology increase the unemployment rate. Other responses were split between No relationship and “don’t know”.

Saudi Human Resources as a Challenge in Adopting Technology

One of the main challenges that faces countries to adopt technology is having skilled capabilities to handle these technology in effective manner. The question was about is Saudi Arabia having skilled and enough resources to handle new technology. Our result shows that (46%) believe that Saudi Arabia has enough resources while (50.3 %) disagree, and (2%) doesn’t know.

Awareness as a Challenge in Adopting Technology

Awareness is one of the main challenges that faces Saudi Arabia as per our survey result were (68 %) believe that it's a real challenge while the rest have different opinion by (28 %) who believe it's not real challenge. And the rest doesn't know.

Level of Interest in Technology as a Challenge in Adopting Technology

As business become more demanding and competition increases between nation and private firms. there is level of interest in technology and this is what our survey shows. (84 %) believe that there is increase in technology interest within private and public sector. While (13 %) think there is no interest in technology aspect within private and public sector. And (3%) don't have answer for the question.

Information Technology Infrastructure as a Challenge in Adopting Technology

One of the main challenges face any county is the infrastructure, especially in IT infrastructure. As per our survey result, (67.7 %) believe that Saudi Arabia IT infrastructure is modern and scalable for long term while (30.4 %) think it's not scalable nor modern and it should be rebuild again and the rest (2%) doesn't know.

Privacy as a Challenge in Adopting Technology

As technology evolve, concern toward privacy are increased. This is what our survey show that there are (80.1%) think that privacy is real challenge that face Saudi Arabia, while (17.4%) don't see it as a challenges, and others don't have answers.

Society Culture as a Challenge in Adopting Technology

Resistant to new technology is a challenge by its own, and society culture is main factor to determine to which extent this factor could affect the new technology adopted. Based on our survey result. (82 %) believe that Saudi Arabia society are encourage the use of technology while (15.5 %) believe that society culture is challenge that face Saudi Arabia to implement or adopt new technology.

Policies and Procedure as a Challenge in Adopting Technology

In order to facilitate the management intent toward technology and other aspect within organization policy and procedure is one of these tools that could help. Our question was about policies and procedure and either they mentioned and inspire the use of technology or not. Based on survey result we found that (57.1 %) believe that policies and procedure covering the technology aspect and inspire the use of it. While (19 %) think that polices and procedure don't

support the use of technology and as result it's not mentioned. And the rest of the survey (23.6 %) don't have answer for this question.

Financial Support as a Challenge in Adopting Technology.

Companies and R&D departments in collage and public sector they all need financial support in order to adopt the new technology and to discover how to improve it as well, our survey was about if enough financial support are exist in our companies and our public sector offices and the result was (44 %) think that there is enough financial support from both public and private sector. While (35.4 %) believe that there is no enough support in technology improvement. And the rest (20.5 %) don't have answer for the question.

I.II: Regression Analysis

Adopting technology is immensely useful to prosper GDP growth and to lower unemployment rate. It helps in improving the education, the overall health, and to increase quality of life. As stated in previous sections, regression analysis is going to be utilized to understand the relationship between technology adoption and GDP and employment. Regression analysis is a set of statistical procedures for estimating the relationships among different variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables. More specifically, regression analysis help in understanding how a value of the dependent variable changes when any one of the independent variables is varied, while the other independent variables are held fixed.

I.II.I: Technology Adoption Index as Independent Variable

In order to test the first hypothesis, that there is impact for adopting technology on GDP and unemployment rate, regression analysis is identified to be the right method. The researching team modeled the Technology Adoption Index, which is the independent variable, as the summation of number of fixed telephone subscriptions, number of mobile-cellular subscription, number of individuals using the internet, and number of fixed broadband subscriptions in Saudi Arabia. The researching team collected all required data between 2000 and 2016. Consequently, Technology Adoption Index has been calculated for each year. The researching team selected 3 different angles when looking into the relationship between technology adoption and GDP and employment. Below is detailed overview for each angle.

I.II.II: Technology Adoption Impact on Real GDP Growth Rate

Gross Domestic Product (GDP) is defined as the aggregate measure of production equal to the sum of the gross values added of all resident institutional units engaged in production (plus any taxes, and minus any subsidies, on products not included in the value of their outputs). The sum of the final uses of goods and services (all uses except intermediate consumption) measured in purchasers' prices, less the value of imports of goods and services, or the sum of primary incomes distributed by resident producer units.

Real GDP is used to adjust the GDP for price changes resulted from inflation or deflation. Therefore, the researching team identified Real GDP Growth Rate as a key dependent variable. The research team developed the regression model between technology adoption and Real GDP growth as follows:

$$RGPDGROWTH_t = \beta_1 TECHAD_t + U_t$$

Where $RGPDGROWTH_t$ represents Real GDP Growth Rate and $TECHAD_t$ represents technology adoption index. The constant parameter (intercept) is not entered into the regression equation because the growth rates depend mainly on the lagged values of GDP and, therefore, it counts for the effect of other unspecified independent variables.

The regression results as follows:

Regression Results					
Dependent Variable: Real GDP Growth Rate ($RGPDGROWTH_t$)					
Independent Variables	Coefficient	T-value	p-value	F-significance	R ²
$TECHAD_t$	0.0006	(3.2)***	0.005	0.00061	0.39

Results can be interpreted as technological progress had a positive and statistically significant (at 99 percent confidence level) impact on economic growth, yet this effect is still modest (+0.06%) due to the fact that Saudi economy is still oil-driven economy.

I.II.III: Technology Adoption Impact on Real GDP per Capita

As explained in previous section, Real GDP is used to adjust the GDP for price changes resulted from inflation or deflation. To further adjust such number on the population growth, Real GDP per

Capita is used. The researching team wanted to take another angle when looking at GDP, hence included Real GDP per Capita as an additional possible dependent variable.

The researching team developed the regression model between technology adoption and Real GDP per Capita as follows:

$$RGPDP C_t = \alpha + \beta_1 TECHAD_t + U_t$$

Where $RGPDP C_t$ represents Real GDP Per Capita. The constant parameter (intercept) is now entered into the second regression equation because the growth rates of GDP are not included in the second equation and have been replaced by absolute values of GDP per Capita, which is not absolutely a function of time and the effects of other variables and, therefore, it should be counted for the effects of other unspecified independent variables.

The regression results as follows:

Regression Results					
Dependent Variable: Real GDP per Capita ($RGPDP C_t$)					
Independent Variables	Coefficient	T-value	p-value	F-significance	R ²
Constant	67376.3	(48.4)***	6.85573E-18	0.00006	0.67
TECHAD _t	140.6	(5.54)***	5.6169E-05		

The results support strongly the results of Table 1. That is, the Economic Activity adjusted for population growth and the price effects ($RGPDP C_t$) is strongly and significantly affected by Technological progress.

I.II.IV: Technology Adoption Impact on Unemployment Rate

As explained previously, employment rate can be defined as a measure of the extent to which available labor resources (people available to work) are being used. They are calculated as the ratio of the employed to the working age population. The working age population refers to people aged 15 to 64. This indicator is seasonally adjusted, and it is measured in terms of thousand persons aged 15 and over; and as a percentage of working age population. People who are retired from work, full-time students in an education system, or full-time housewives are excluded from the labor force.

After examining technology adoption impact on GDP, now it is the time to perform the same but on unemployment rate. The researching team developed the regression model between technology adoption and Unemployment Rate as follows:

$$\text{UNEMPL}_t = \alpha + \beta_1 \text{TECHAD}_t + \beta_2 \text{SAUDIZE}_t + U_t$$

Where UNEMPL_t represents Unemployment Rate, and SAUDIZE_t represents Saudization Index. To examine the effect of technology on unemployment and since a new independent variable (Saudize) has been entered into regression equation, the intercept is included in the model because the initial growth rates of unemployment were not entered into the regression equation and also maintain the significant level of goodness of fit of the model. Since unemployment in Saudi Arabia is strongly affected by government policy of Saudization, we should control for that intervention. Therefore, a proxy for Saudization index is entered into the model as a dummy variable taking an increasing value from 1 till 16.

The regression results as follows:

Regression Results					
Dependent Variable: Unemployment Rate (UNEMPL_t)					
Independent Variables	Coefficient	T-value	p-value	F-significance	R ²
Constant	6.46	(21.48)***	0.000	0.000	0.92
TECHAD_t	-0.014	-0.74	0.47		
Saudize	0.45	(3.93)***	0.002		

The result of the regression supports the theory that says technology has a positive impact on employment, i.e., negative impact on unemployment where the technology coefficient has a value of -0.014 yet this value is statistically insignificant, which might be attributed to lack of accurate measures for technological progress.

Section I: Research Findings

As illustrated in previous sections, in order to answer all the of research questions to achieve the research objectives, the researching team have studied the literature by performing a holistic literature review for topics related to GDP, employment, and technology. Therefore, a secondary data analysis has been performed to understand the impact of technology on GDP and employment,

and the challenges associated with adopting technology. To expand the secondary data analysis further, the researching team looked into the importance of female participation in the workforce, the challenges for female to participate in the workforce, and how technology helps overcoming such challenges.

Moreover, the team collected primary data to help in identifying challenges for adopting technology in Saudi Arabia. Set of interviews have been done with executive leaders from public and private sectors. Additionally, a questionnaire has been developed and shared to analyze the public opinions about such topic. This section is going to have detailed presentation of the research findings.

I.I: Technology Impact on GDP and Employment

Technology is immensely needed to prosper GDP growth and to lower unemployment rate. It helps in improving the education, the overall health, and to increase quality of life. Technology includes the use of science particularly for mechanical or business purposes and utilization of logical techniques and materials keeping in mind the end goal to accomplish business or industrial objectives and making "developments" to the manufacturing sector, manufacturing strategies and commodities so as to expand the volume of production or effectiveness all subsequently leading to a competitive edge and appreciation in profit margins. In this manner, technological innovation assumes a key part in economic expansion on the grounds that appropriate or inappropriate utilization of the innovative advances may have substantial positive or negative ramification on a particular firm, segment or country.

Technology has impacted employment through the introduction of computerized instruments. The propagation of affordable and highly capable technology worldwide has enabled more individuals to access digital devices that enable them to interface better with company resources and markets including the local and global labor markets. Three classes of these computerized devices have developed as essential empowering influences of labor markets.

The researching team found through analyzing secondary data using literature review and performing regression analysis that there is a positive impact on GDP when adopting technology. When there is more utilizing for technology, there has been an increase in GDP. Moreover, it has been also found there is a positive impact on employment when adopting technology. When there is more utilizing for technology, there has been a decrease in unemployment rate. Such proven information is crucial for leaders and policy makers to take strategic decisions that strongly

supports adopting technology in order to increase GDP growth, lower unemployment rate, and increase female participation in the workforce.

Singapore, China, and United States are examples for countries that are embracing technology in order to flourish their GDP growth and to lower unemployment rate. For United States, the total value-added GDP from software in 2017 was \$1.14 trillion, which helped in creating 10.5 million jobs, thus lowered the unemployment rate to be 4.1% as of December 2017.

For Singapore, statistics show that the information and communication technologies sector has contributed by 20% in the overall GDP in 1996, and the unemployment rate is only 2.2% as of December 2017. China, which is the second largest economy, has technology accounted for 30% of its GDP, and the unemployment rate is 3.95% as of September 2017.

I.II: Challenges in Adopting Technology in Saudi Arabia

After it has been proven that adopting technology can positively impact GDP growth and lower unemployment rate, the researching team performed secondary data analysis to identify the general challenges in adopting technology. Moreover, the researching team utilized primary data collection techniques such as interviews and a questionnaire to understand the challenges in adopting technology in Saudi Arabia. Such technique allowed the researching team to understand the global challenges in adopting technology, and how far Saudi Arabia has the advantage and the flexibility in overcoming them, and what are the unique challenges in Saudi Arabia.

It has been found that there are many general challenges that Saudi Arabia is already in good position against. Challenges such as absence of the right hardware, lack of professional support and training, absence of formal technical education, absence of wireless technologies, relatively too expensive software and hardware prices compared to the individual income, and the limited internet access, are general challenges that are not existing in Saudi Arabia compared to other less developed countries.

Saudi Arabia is one of the largest technology consumers in the middle east and in the world. The researching team found, as a part of collecting the secondary data for the purpose of performing the regression analysis, that in 2015, out of the Saudi Arabia population of ~ 31 million, there were ~ 50 million active mobile subscriptions. That number reflects the strong stance for the digital society that Saudi Arabia already have compared to other countries.

However, there are other challenges identified after conducting the interviews and analyzing the questionnaire that Saudi Arabia need to solve in order to have a stronger position in adopting

technology. The first challenge is related to overcoming the complex nature of technology. Technology is constantly changing and such characteristic requires highest attention to avoid problems and to seize opportunities. One technology identified to be promising by our executive interviewees is the Artificial Intelligence. As explained by our interviewees, artificial intelligence can introduce automation, which lowers costs and improve productivity, which in turn increases GDP and improve jobs quality. Another challenge is related to infrastructure. Although Saudi Arabia is already in good stance in spreading 3G and 4G wireless cellular networks, major enhancements are required to the infrastructure in order to be ready to adopt new technologies such as smart cities.

Another challenge raised by our executive interviewees is the absence of the policies and the legal framework that clearly define service level agreements and constraints of using technology. Another challenge is related to the culture and awareness. Our questionnaire showed that 68% of the total participants think that Saudi Arabia's culture and awareness is a challenge for adopting technology. For example, drones are banned since 2015 until today (Saudi General Authority of Civil Aviation Report, 2015). Another challenge raised by both the interviewees and the questionnaire participants is the skilled Saudi human resources. Although such challenge is getting faded by the Saudi government initiatives to up-skill Saudis, and by the presence and operation of international companies such as Cisco, Microsoft, and soon Apple, Saudi human resources are still in need for strategic training in leading the formulation, implementation, and evaluation of the technology in the country.

Section I: Research Conclusion

Studying and applying economics concept is paramount in order to ensure the best utilization of scarce resources such as time, money, labor, and land in the process of production, distribution, and consumption of goods and services. Macroeconomics is a branch of economics that examines major areas with a mission such as increasing national income growth, decreasing unemployment rate among the population, and controlling the inflationary increase in prices by using different fiscal and monetary instruments.

There are many indicators to determine the level of economic activity in a country, to understand how many goods and services a nation is producing, and to know how many and what are the kinds of jobs actually available. Gross Domestic Product (GDP) is a measure for the monetary value for final goods and services purchased by consumers. It an indication of the value creation in the

country. The other indicator to gauge the health of economy is the unemployment rate. Employment rate can be defined as a measure of the extent to which available labor resources (people available to work) are being used.

Technology is immensely needed to prosper GDP growth and to lower unemployment rate. It helps in improving the education, the overall health, and to increase quality of life. The objective of science and innovation is to empower ventures and people to utilize advances all the more effectively, as this yield diminished expenses and augmentation of productivity. The utilization of new advancements prepares for the generation of new affordable merchandise and for capital aggregation and, so far as that is concerned, for an improved global rivalry intensity of individual nations, and to an upgraded quality for science research establishments. Technological transformation does not merely mean an approach to expand the abundance and opulence of the countries but it likewise enables the general population to achieve levels they could not attain previously.

In this way, the novelty is a key determinant of whether an entire life quality will grow in a positive or negative manner. IT research indicates that in case a population has a greater ability for production as well as innovation, the GDP will grow exponentially due to increased circulation of money as well as increased international trade.

The Information and Communications Technology (ICT) business has explicitly generated employment opportunities in the developed and the developing economies. In the OECD nations, for instance, the employment level of the ICT industry was at 5.74% of aggregate business industry employment. For the G20 member nations among this, the scope was within the bounds of 4.66 and 6.45%. Some developing economies have additionally profited. Brazil's IT industry accounted for 16 % of occupations made between the years 2010 and 2013 and had absorbed and excess of 1.3 million individuals by the years 2014. India's IT-BPO industry presently accounts for more than 3.5 million laborers; a third of whom are women. The additional implications of the IT industry are likewise noteworthy.

There are various emerging issues linked to technology with some of them being that innovative concepts will complement employees in various tasks in the future. On the other hand, some of the present day jobs will also be substituted by innovation. This translates to future jobs being either digital or utilizing digital tools. There is, nevertheless, minimal consensus concerning how these developments might establish themselves, at what pace they might manifest, and the degree of

distribution of the gains and losses. Therefore, there are mounting concerns related to whether the implementation of lower-cost or augmented technology by organization and governments could have undesirable implications on employment of result to inequality, permitting some proportion of the populace to gain disproportionately, while other might end up with inadequate economic opportunities.

In conclusion, the research has proven the positive impact for adopting technology on GDP growth and employment. The research also identified the key challenges that are facing Saudi Arabia to increase technology adoption. Such information is crucial for leaders and policy makers to take strategic decisions that strongly supports adopting technology in order to increase GDP growth, lower unemployment rate, and increase female participation in the workforce.

Section II: Research Recommendations

After drawing the previous conclusion, there are many recommendations for leaders and policy makers to take strategic decisions that strongly supports adopting technology in order to increase GDP growth, lower unemployment rate, and increase female participation in the workforce. The following are the researching teams' recommendations.

Capitalize The Saudi Vision 2030

The 2030 Saudi Vision is targeting to lower the rate of unemployment from 11.6% to 7%, increase SMEs contribution to GDP from 20% to 35%, and to increase women's participation in the workforce from 22% to 30%.^[33] Such national target should be utilized as a motivation to increase technology adoption in order to achieve the Saudi Vision 2030 goals.

Invest in The Technology Infrastructure

A strong and modern information technology infrastructure in all Saudi governmental organization and agencies is the foundation stone of the technology adoption process. It should be in best shape to be ready before introducing new technologies. The weakness of IT infrastructure is an essential barrier for all technology implementation stages.

Formulate Security and Privacy Policies

Moreover, security and privacy are critical issues that need to take the highest level of priority in technology implementation process. A clear policy and procedure for information security that consider information security aspect starting from the planning of projects to the implementation stage.

Raise The General Awareness

Citizen's awareness of technology and the right use of it need be addressed. A comprehensive campaign is required to raise and promote the technology benefits and advantages also the negative part of it. This could be achieved also through training.

Overcome Culture Barriers

Issues relating to Saudi culture and societal structure should be addressed very carefully to influence and convince the Saudi citizens to participate and become involved in technology systems. Policy and procedure should be addressed to avoid misunderstanding and to implement the technology as per the best practice or as what firm or government want.

Invest in R&D and Human Resources

To increase the importance of technology aspect in Saudi Arabia in terms of manufacturing and adoption. Financial support should be there specially in universities and R&D departments in government sector. Human is critical factor in the success of adoption of this technology therefore, investment in people and their mind is one of the major success factors.

References

1. Barnett, R. C., & Hyde, J. S. (2001). *Women, men, work, and family: An expansionist theory*. American Psychologist, 56(10), 781-796.
2. Bharati, P. and Chaudhury, A. (2006). *Studying the current status of technology adoption*. Communications of the ACM, 49(10), pp.88-93.
3. Bloom, D., Canning, D., Fink, G. and Finlay, J. (2009). *Fertility, female labor force participation, and the demographic dividend*. Journal of Economic Growth, 14(2), pp.79-101.
4. Bureau of Labor Statistics Report (2018). Labor Force Statistics from the Current Population Survey, (2018). Bureau of Labor Statistics [online] Available at: <https://data.bls.gov/timeseries/LNS14000000> [Accessed 23 Feb. 2018].
5. Cavallo, M. (2016). *The growing importance of the technology economy*. [online] CIO. Available at: <https://www.cio.com/article/3152568/leadership-management/the-growing-importance-of-the-technology-economy.html> [Accessed 23 Feb. 2018].
6. Cheng, Y. (2001). *Educational Reforms in the Asia-Pacific Region: Trends, Challenges and Research*. the Second iAPED International Conference on Education Research, 25-26 October 2001, Hong Kong Institute of Education, Hong Kong.
7. Cheng, Y. C., and T. Townsend. (2000). *Educational Change and Development in the Asia-Pacific Region: Trends and Issues*. In Educational Change and Development in the Asia-Pacific Region: Challenges for the Future, ed.

8. Cheng, Y., W. Tam. (2007). *School Effectiveness and Improvement in Asia: Three Waves, Nine Trends and Challenges*. International Handbook of School Effectiveness and Improvement. New York: Springer.
9. Etro, Federico. (2009). *The economic impact of cloud computing on business creation, employment and output in Europe*. Review of Business and Economics 54.2, pp.179-208.
10. European Commission (2018). Eurostat: *Real GDP per capita, growth rate and totals - Eurostat*. [online] Available at: <http://ec.europa.eu/eurostat/web/products-datasets/-/tsdec100> [Accessed 5 Apr. 2018].
11. Federal Reserve Bank of St Louis (2018) – Economic Research – National Income and Product Accounts. [online] Available at: <https://fred.stlouisfed.org/series/GDPC1> [Accessed 5 Apr. 2018].
12. Forbes.com. (2017). *The World's Biggest Public Companies*. [online] Available at: <https://www.forbes.com/global2000/list/#industry:Telecommunications%20services> [Accessed 10 Apr. 2018].
13. GACA. (2015). *GACA bans all drones in Kingdom's airspace*. [online] Available at: <https://gaca.gov.sa/web/en-gb/news/gaca-bans-all-drones-in-kingdom-airspace> [Accessed 18 Apr. 2018].
14. Galí, J. and Rabanal, P. (2004). *Technology Shocks and Aggregate Fluctuations: How Well Does the Real Business Cycle Model Fit Postwar U.S. Data?*. NBER Macroeconomics Annual, 19, pp.225-288.
15. Hawkins, R. J. (2002). *Ten Lessons for ICT and Education in the Developing World*. The Global Information Technology Report 2001–2002. Oxford: Oxford University.
16. Islamic Finance. (2015). *Al Rajhi Remains World's Largest Islamic Bank*. [online] Available at: <https://www.islamicfinance.com/2015/07/al-rajhi-worlds-largest-islamic-bank/> [Accessed 10 Apr. 2018].
17. Jaumotte, F. (2003). *Female Labour Force Participation: Past Trends and Main Determinants in OECD Countries*. SSRN Electronic Journal.
18. Kozma, R., R. McGhee, C. Marder, K. Baisden, K. Valdes, A. Lewis, et al. (2000). *World Links for Development: Accomplishments and Challenges Monitoring and Evaluation Annual Report, 1998–1999*. Menlo Park, CA: SRI International.
19. Law, N., & Plomp, T. (2003). *Curriculum and staff development for ICT in education*. Cross-national policies and practices on ICT in education. Information Age Inc: Greenwich.
20. Motohashi, K. and Yuan, Y. (2010). *Productivity impact of technology spillover from multinationals to local firms: Comparing China's automobile and electronics industries*. Research Policy, 39(6), pp.790-798.
21. Pelgrum, W. J. (2001). *Obstacles to the Integration of ICT in Education: Results from a Worldwide Educational Assessment*. Computers and Education 37(2):163–78

22. Powell, C. and Chang, A (2016). *Women in Tech as a Driver for Economic Growth in Emerging Economies*.
23. Richardson, J. (2011). *Challenges of Adopting the Use of Technology in Less Developed Countries: The Case of Cambodia*. Comparative Education Review, 55(1), pp.008-029.
24. Rodrigo, M. M. T. (2005). *Quantifying the Divide: A Comparison of ICT Usage of Schools in Metro Manila and IEA-Surveyed Countries*. International Journal of Educational Development 25 (1): 53–68.
25. Rogers, E. M. (2003\). *Diffusion of Innovations*. 5th ed. New York: Free Press
26. Saudi Industrial Development Fund (2018). *Saudi Industrial Development Fund (SIDF)*. [online] Available at: <https://www.sidf.gov.sa/en/AboutSIDF/Pages/AboutUs.aspx> [Accessed 10 Apr. 2018].
27. Singapore Ministry of Manpower (2018). *Summary Table: Unemployment*. [online] Available at: <http://stats.mom.gov.sg/Pages/Unemployment-Summary-Table.aspx> [Accessed 23 Feb. 2018].
28. Singstat.gov.sg. (1998). *The Information and communication Technology Sector In The Singapore Economy*. [online] Available at: https://www.singstat.gov.sg/docs/default-source/default-document-library/publications/publications_and_papers//transport_and_communications/op-e11.pdf [Accessed 24 Feb. 2018].
29. Software.org. (2017). [online] Available at: https://software.org/wp-content/uploads/2017_Software_Economic_Impact_Report.pdf [Accessed 23 Feb. 2018].
30. Spence, Micheal. (2011). *The Impact of Globalization on Income and Employment*. Foreign Affairs (Council on Foreign Relations) 90(4): 28. Student Resources in Context. Web. 24 June 2014.
31. Tiene, D. (2004). *Bridging the Digital Divide in the Schools of Developing Countries*. International Journal of Instructional Media 31(1): 89–97.
32. Vision2030. *Saudi Vision 2030*. [online] Available at: <http://vision2030.gov.sa/download/file/fid/417> [Accessed 19 Apr. 2018].
33. World Internet Conference Report (2017). *The Full Text of the Overviews of 'Report on World Internet Development 2017' and 'Report on China Internet Development 2017'* [online] Available at: http://www.chinadaily.com.cn/business/4thwic/2017_12/05/content_35212111.htm [Accessed 24 Feb. 2018].

Analysis of the Financial Performance of BIST Insurance Index Companies

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Abstract

In the face of intense competition in the insurance sector, whose share is increasing day by day in the financial system, insurance companies should look for ways to improve their financial performance and to improve themselves in order to be able to protect themselves and improve. Having a developing financial market in Turkey, it is seen that the insurance industry to adapt to this development. However, Turkey's insurance sector has also yet to be made in economically developed countries do not reach the level of last year started to gain value and work with the new regulations. In order to take preventive measures against damages that might occur in risk situations, it is necessary to effectively manage the insurance sector which is an important tool in sectoral basis. The purpose of this study is to analyze the financial performances of companies in the Istanbul Stock Exchange (BIST) insurance index. In the study, financial ratios of companies for 2017 will be analyzed by TOPSİS method. As the result of this evaluation, ANHYT insurance company has the best financial performance and GUSGR insurance company has the lowest financial performance introduction

Keywords: Insurance, BIST Insurance Index, TOPSİS, Performance Analysis

INTRODUCTION

Insurance is the process of securing individuals and assets against risks that are not known to be likely to occur in the future, with payments made in advance to eliminate damages caused by the danger to be incurred. The insurance sector, on the other hand, plays a very effective and important role in the growth and development of the economy by providing functions such as strengthening the economy, creating funds and providing tax revenue to the state by providing long term resource finance to the country's economy. (Taş, 2015;134).

Insurance; people and businesses exposed to the same risk must come together and secure the damage to the insurance company under the contract they have made with the insurance company against the payment made to the insurance company in advance. Insurers or insurers give premiums to insurance companies to cover a portion of their current income in order to compensate

for the consequences of the possible risks that they have secured. In case of accident, the insured buyers of the insurance companies are expected to reimburse the damage claims. (Şenel, 2006:298).

The insurance sector is one of the cornerstones of modern economies. One of the basic functions of this sector is to create funds that can be used to finance investments. With this function, the insurance sector forms a pillar of the finance sector. An insurance company, which can be considered as a financial institution, needs to provide reliable and qualified services to its insurers in order to be able to withstand the intense competition in the insurance sector. Thus, it can maintain its competitiveness in the sector and ensure its continuity. (Kılıçkaplan and Baştürk, 2004:63).

The insurance sector is one of the most important sectors in developed countries, and it is the most dynamic and most vulnerable sector in developing countries. The fact that the insurance sector can be developed more rapidly in developing countries is at the heart of increasing the saving trend and transferring it to financial markets.

While the losses in the insurance sector's productivity levels are in other sectors as well as reducing the profitability and competition opportunities of the sector on the one hand, it is wasting resources on the other hand because they make production under the resources they can produce with the resources they use. Therefore, the losses in productivity have a separate proposal not only for the sector but also for the country economy.

Insurance for the first time with the introduction in 1872 in the British insurance companies over time has entered our lives with branch in Turkey into force of facilitating laws on insurance and insurance through the development of the insurance field and has begun to increase demand for the insurance sector. The increasing competition in the insurance sector, which is increasing day by day in the financial sector, and the measurement of the performance of insurance companies has also become an important issue. Since the financial performance evaluation of insurance companies is influenced by many factors, it is a very critical decision-making problem (Peker and Baki, 2011: 2). The insurance sector constitutes an important element of money and capital markets, especially in the banking sector. For this reason, there is a need for an analysis of the insurance sector, which is in intense relation with money and capital markets, and the structural state of the companies in this sector. The aim of this study is to evaluate the financial performance of six insurance companies traded in Borsa İstanbul A.Ş. and to subject them to a comparison with

each other in the frame of the findings obtained. In this framework, the financial ratios of insurance companies for the period of 2017 were analyzed by TOPSIS method and financial performance evaluation was made. Within the scope of the findings, the insurance companies' evaluations for the sector and investors are included.

LITERATURE INFORMATION

Mansor and Radam (2000) found that in individual pension companies in Malaysia, the effectiveness of the Malmquist-Total Factor Productivity Index was measured and that the result of the study was the most influential factor in the company's performance and technical efficiency and technical development.

Çiftçi (2004); Using the Data Envelopment Analysis method, it evaluated the activities of 62 insurance companies operating in life and non-life branches in the Turkish insurance sector. As a result of Data Envelopment Analysis, 41 insurance companies operating in non-life branches; 1 is active, 30 is not active.

Agiobenebo and Ezirim (2002) investigated the effect of the capital structure of insurance companies operating in Nigeria on profitability. As a result of their research, they found a positive relationship between insurance companies' premium ratio (Total Premiums / Total Assets) and their profitability. In addition, they obtained positive and statistically insignificant results between profitability and leverage ratio and investment expenditures.

Kılıçkaplan ve Karpas (2004); Using Data Envelopment Analysis (VZA) and TOBIT model, they investigated technical, pure and scale activities of life insurance companies in 1998-2002 period. In the study, 19 in 1998 and 1999; In 2000, 2001 and 2002, 23 life insurance companies were evaluated. As a result of the research, it was determined that the number of companies and technical activities are negatively related, the number of firms is positively related to the scale efficiency, the technical efficiency and scale efficiency decreased in the year when the earthquake occurred, and the crisis occurred in 2000, while the scale efficiency decreased.

Başkaya ve Akar (2005), T. C. Treasury Insurance Supervisory Board in 2003 in Turkey Insurance Activities on ensuring the data from the report working 12 insurance companies of sales performance data envelopment achieved evaluate and analyze the information Frontier Analyst and commented on by analyzing the professional package program. As a result of this analysis, Ak Insurance, Yapı Kredi, Başak, Ray and Commercial Union were identified as ineffective

insurance companies while Garanti, Axa Oyak, Switzerland, Anadolu, Koç Allianz and Güneş Sigorta were determined as the most effective insurance companies in terms of sales performance.

Barros, Borges and Barroso (2005) examined the effectiveness and efficiency of the Portuguese insurance market in 1995-2001. In the MTFV indexed study, the productivity of a large portion of companies increased while the productivity of some of them decreased, resulting in the need for management skills to increase the technical efficiency of many companies.

Turanlı and Köse (2005) tried to evaluate the success rates of companies in the non-life insurance sector in terms of financial ratios and decisions in 2003 with linear target programming method. In practice, 16 constraints (3 targets, 2 legal, 11 administrative) were identified. The solution values of the targets and constraints are reached with the help of WinQSB package program. The likelihood of success in the following year was assessed for each insurer examined and the companies that were successful or not in terms of financial performance were identified according to the results.

Turgutlu et al. (2007) have tried to determine the technical efficiency of Turkish insurance companies operating in non-life areas for the periods 1990-2004 by using the traditional VZA and recently developed lucky VZA. They found that there was a significant inefficiency problem in non-life areas in the Turkish insurance sector during the periods covered in the study. Huang, Lin, and Lin (2008) developed an evaluation model for determining insurance using AHP and fuzzy logic. Tsai, Huang and Wang (2008) determined the weight of the performance criteria with the Analytic Network Process (AAS) and ranked the insurance companies by TOPSIS method.

Ege and Bayrakdaroglu (2009) divided the insurances companies into two groups namely national and foreign-capitalized, and compared the performances of two groups based on the data of 2006. Financial factors were used as criteria and as a result foreign-capitalized insurance companies were found as better than the national ones in terms of effectiveness of assets, asset quality and liquidity, capital adequacy and profitability.

Salimi Altan (2010) chose data envelopment analysis in order to analyze the effectiveness in the Turkish insurance sector. In the study, we compared the 25 insurance companies that served the non-life field in the Turkish insurance sector in 2005, 2006 and 2007. In addition, attempts have been made to explain how much change should be made to the inputs or outputs in order to ensure that the inactive units are effective in order to guide ineffective insurance management. As a result of the analysis, 16 insurance companies in 2005, 14 insurance companies in 2006 and 15

insurance companies in 2007 were active and ineffective companies were able to become effective companies if they could increase their output by keeping their inputs fixed. Among the insurance companies active in each period are Ak insurance, Ankara, Aviva, Birlik, Generali, Güven, Koç Allianz, TEB, General Life, Güven Life; AIG, Güneş, Hür, Ticaret, Yapı Kredi and Demir Hayat are among the insurance companies that have not been active in any period.

Wang and Chang (2010) investigated the activities of Taiwanese insurance companies using the DEA method and concluded that those with high market share were more effective.

Köse (2010) has solved the models created by using Data Envelopment Analysis to measure the effectiveness of 18 life and life / pension companies in the Turkish insurance sector in 2004-2008 with the DEA Solver 3.0 package program. According to the results, there were 6 insurance companies in 2004, 8 in 2005, 9 in 2006, 6 in 2007 and 8 in 2008. As of last year, Acibadem, Başak Groupama Emeklilik and Garanti Emeklilik were among the three most effective companies while Vakıf Emeklilik, Allianz Emeklilik and Aegon Emeklilik ranked the companies with the worst activity.

Ozcan (2011), technical activities in the 2002-2009 period operating in the non-life insurance sector in Turkey in the work of DEA is considering using as input; number of employees, number of employees and fixed assets, premiums collected, balance sheet profit and technical profit, and at the end of the study it was determined that the insurance industry did not work effectively in 2003, 2005 and 2006.

Peker and Baki (2011) compared the financial performances of three insurance companies with the largest market share in terms of premiums sold in the insurance sector in 2008 using the Gray Relational Analysis technique. In the study, ten financial ratios were utilized in the three ratios of liquidity ratios, leverage ratios and profitability ratios. High financial performance of the companies was reached as a result of the high liquidity ratio. The companies surveyed have been identified as A, C and B, respectively, from the worst to the worst according to the liquidity ratio.

Yücenur and Demirel (2012) used an extended version of VIKOR method in the fuzzy setting for the selection of insurance companies. Elitaş and others (2012) evaluated the financial performances of 7 insurance companies traded in Istanbul Securities using the Gray Relational Analysis method in 2010 and 2011, taking into account the 10 financial ratios within the scope of liquidity, profitability and leverage. The study also found that liquidity ratios are the most

important factor affecting financial performance and Ak Sigorta has the best financial performance.

Akyuz and Kaya (2013), between 2007 and 2011 and the non-life insurance companies in Turkey, life / pension insurance companies have evaluated the financial performance of the TOPSIS method. At the end of the study, it was determined that the non-life insurance sector experienced the most successful period in 2007, when it experienced the most unsuccessful period in 2008. Life / pension companies have been unsuccessful in 2009 and have reached the most successful period in 2007, such as the non-life insurance sector.

Akhisar (2014), has Analytic Network Process between 2006 and 2010 using the method of large-scale corporate financial performance ranking serving in non-life insurance sector in Turkey. Capital adequacy, profitability and asset quality are evaluated according to 10 financial criteria of 3 main criteria and the highest criterion among the main criteria is the main criterion of profitability. In 2006 and 2007 Turkey General Insurance companies who identify as having the best performance Akhisar 2008, 2009 and having the best performance in 2010. The company has identified as Mapfre Genel Sigorta.

Kaya & Kaya (2015) examined the factors affecting financial performance by using the datas of 17 life insurance companies in the period of 2008-2013 via panel data analysis. Return on assets was used as financial performance criterion. Consequently, company size, currency ratio, activity period of companies, gross premium, and insurance leverage ratio were found as significantly effective on financial performance.

Caglar and Öztaş (2016) used the data envelopment analysis and analytic hierarchy process for the financial ratio analysis of insurance companies. The study analyzed the financial ratios of 14 non-life insurance companies in four categories, namely capital adequacy, asset quality and liquidity, activity rates and profitability ratios. A comparison matrix of financial ratios was created by taking two different expert opinions and according to the analysis results, Ziraat Sigorta and Liberty Sigorta became the first two most effective companies, while Sompo Japan Sigorta and Güneş Sigorta were in the last two places.

Kula and others (2016) measured the financial performances of seven insurance companies and an individual pension company traded in Stock Exchange Istanbul in 2013 with the help of Gray Relational Analysis method. It has been determined that Ak Sigorta ranks first in the study in which ten financial ratios are taken into consideration. Moreover, the findings of the study show

that a successful financial performance is possible by increasing the level of equity and liquidity in companies' capital structure and increasing their profitability levels.

Cakir (2016) evaluated the insurance companies listed in 2014 BIST with analytical hierarchy process and fuzzy Viktor methods. In the study, 5 items were weighted with analytic hierarchy process, totaling personnel expenses, written premiums, total assets, equity and paid claims and technical reserves. He used the fuzzy wikis method to evaluate alternatives and rank them by their performance. According to the evaluation results of companies A, B, C, D, E and F, company F has the best performance and company B has the worst performance.

III. METHODOLOGY

In this part of the study, the financial performances of companies traded in the Borsa İstanbul Insurance index were analyzed. For the analysis, TOPSİS (Technique for Order Preference by Similarity to Ideal Solution) method has been used as a multi-criteria decision making technique.

A. Multiple Criteria Decision Making Techniques

Those in the decision-making position in enterprises need to consider multiple alternatives in determining strategy and evaluating business performance. "Multiple Criteria Decision Making Techniques" are used to reach the optimal result in terms of the decision maker in the presence of multiple evaluation criteria. From a literary perspective, it seems that a large number of methods with different approaches are used. Although the methods are developed in-house, the most commonly used methods are generally AHP, AAS, GIA, TOPSIS, VIKOR, ELECTRE, PROMETHEE, Data Envelopment Analysis. It is not the right approach to discuss the superiority of any one to the other, since each of the approaches decision making in a different way. In making a multi-criteria decision, firstly the valuation criteria which will relate the capacity of the system to the targets of the system should be determined. After the criteria are determined, alternatives should be established in order to reach the targets, alternatives should be evaluated in terms of the determined criteria, and one of the alternatives should be considered as optimal. Finally, if the final solution can not be accepted, the most appropriate multi-criteria decision-making method should be applied by collecting new information and repeating the optimization (Saldanlı and Sirma, 2014:190).

B. *Topsis*

TOPSIS analysis is known as one of the Multi Criteria Decision Making methods that are used in enterprises to analyze and use the important elements and tools such as profit, cost, production and labor force in an effective way, and especially in business performance analysis (Kaya and Gülhan, 2010:71). The TOPSIS method developed by Hwang and Yoon (1981) is based on the assumption that the alternative solution point is the shortest distance to the ideal ideal solution and the farthest distance to the negative ideal solution. The positive-ideal solution is the combination of all the best criteria that can be achieved. The negative-ideal solution consists of the worst criterion values that can be achieved. The only assumption in this method is based on the assumption that each measure is either a monotone increasing or monotonously decreasing one-way benefit (Bülbül and Köse, 2011).

The process steps for applying TOPSIS are as follows (Özdemir, 2014; Orçun and Eren, 2017; Şit et al, 2017; İşseveroğlu and Sezer, 2015):

Step 1: Creating the Decision Matrix

The decision matrix is a matrix that must be created by the decision maker. The generated matrix will be an $m \times p$ -sized matrix. The decision-making rows show the decision points, while the columns contain the factors. This matrix can be shown as follows;

$$A_{ij} = \begin{bmatrix} a_{11} & a_{12} & \dots & a_{1p} \\ a_{21} & a_{22} & \dots & a_{2p} \\ \cdot & & & \cdot \\ \cdot & & & \cdot \\ \cdot & & & \cdot \\ a_{m1} & a_{m2} & \dots & a_{mp} \end{bmatrix}$$

Step 2: Obtaining Normalized Matrix

After the decision matrix is formed, squares of each a_{ij} values ($a_{11}^2, a_{21}^2, a_{31}^2 \dots a_{m1}^2$) are obtained, and column sums composed of the sum of these values are obtained and normalization is performed by dividing each column of the a_{ij} value by the square root thereof. The notation for this process is shown below;

$$N_{ij} = \frac{a_{ij}}{\sqrt{\sum_{i=1}^m a_{ij}^2}} \quad (i = 1, \dots, m \text{ ve } j = 1, \dots, n)$$

Normalize matrix is obtained as follows;

$$V_{ij} = \begin{bmatrix} w_1 n_{11} & w_2 n_{12} & \dots & w_n n_{1p} \\ w_1 n_{21} & w_2 n_{22} & \dots & w_n n_{2p} \\ \vdots & \vdots & \ddots & \vdots \\ w_1 n_{m1} & w_2 n_{m2} & \dots & w_n n_{mp} \end{bmatrix} \Rightarrow V_{ij} = \begin{bmatrix} v_{11} & v_{12} & \dots & v_{1p} \\ v_{21} & v_{22} & \dots & v_{2p} \\ \vdots & \vdots & \ddots & \vdots \\ v_{m1} & v_{m2} & \dots & v_{mp} \end{bmatrix}$$

Step 3: Obtaining Weighted Normalized Matrix

Each value of the normalized matrix is weighted with a value such as w_{ij} . The weighting process reveals the subjective direction of the TOPSIS method. Because weighting is done according to the importance of the factors. The only subjective parameter of the TOPSIS method is the weight.

Note that the sum of w_{ij} values is equal to 1. So it will be $\sum_{i=1}^n w_i = 1$. The weighted normalized matrix (V matrix) is obtained by multiplying the n_{ij} values obtained with the normalized matrix by the w_{ij} weights.

$$V_{ij} = \begin{bmatrix} w_1 n_{11} & w_2 n_{12} & \dots & w_n n_{1p} \\ w_1 n_{21} & w_2 n_{22} & \dots & w_n n_{2p} \\ \vdots & \vdots & \ddots & \vdots \\ w_1 n_{m1} & w_2 n_{m2} & \dots & w_n n_{mp} \end{bmatrix} \Rightarrow V_{ij} = \begin{bmatrix} v_{11} & v_{12} & \dots & v_{1p} \\ v_{21} & v_{22} & \dots & v_{2p} \\ \vdots & \vdots & \ddots & \vdots \\ v_{m1} & v_{m2} & \dots & v_{mp} \end{bmatrix}$$

Step 4: Obtaining Ideal and Negative Ideal Solution Values

Once the weighted normalized matrix (V matrix) is obtained, the maximal values of each column are determined, provided that our goal is maximization, provided that it depends on the structure

of the problem. These maximum values are our ideal solution values. Then, minimum values for each column are obtained again. This is the negative ideal solution value. If our goal is minimization, the values obtained will be the exact opposite. The notation for obtaining ideal and negative ideal solution values is shown below;

Ideal solution values:

$$A^* = \left\{ (\max_i v_{ij} \text{ to be}) \right\}$$

$$\Rightarrow A^* = \{v_1^*, v_2^*, \dots, v_n^*\} \text{ maximum values for each column,}$$

Negative ideal solution values:

$$A^- = \left\{ (\min_i v_{ij} \text{ to be}) \right\}$$

$$\Rightarrow A^- = \{v_1^-, v_2^-, \dots, v_n^-\} \text{ minimum values for each column,}$$

Step 5: Obtaining Ideal and Negative Ideal Distance Values

Euclidean distance is used when calculating ideal and ideal non-point distance values. In the calculation of the distance between the two known x and y coordinates in the coordinate plane, ie the calculation of the Euclidean distance the following formula is used.

$$d_{ij} = \sqrt{\sum_{k=1}^p (x_{ik} - x_{jk})^2}$$

Here; xik: i. Observe. Variable value xjk: j. Observe. Variable value p: indicates the variable number.

Ideal solving is attempted to determine the nearest Euclidean distance and the negative ideal solving the farthest distance. If this formula is generalized to be able to calculate the ideal and ideal non-point distance, the following calculation method is used;

Ideal distance:

$$S_i^* = \sqrt{\sum_{j=1}^n (v_{ij} - v_j^*)^2}$$

Negative ideal distance:

$$S_i^- = \sqrt{\sum_{j=1}^n (v_{ij} - v_j^-)^2}$$

Here, the number of decision points will be S_i^* and S_i^- .

Step 6: Calculation of Ideal Solving Relative Proximity

Ideal and ideal non-point spacing is used to calculate the ideal resolving relative proximity of each decision point. Ideally, the solution is symbolized by relative proximity C_i^* . Here, C_i^* value takes a value in the interval $0 \leq C_i^* \leq 1$, and $C_i^*=1$ indicates the ideal resolving absolute correspondence of the corresponding decision point, and $C_i^*=0$ indicates the negative ideal resolving absolute closeness of the respective decision point.

$$C_i^* = \frac{S_i^-}{S_i^- + S_i^*}$$

C. Data Set and Application

The purpose of this research is to analyze the financial performance of insurance companies. Financial ratios for the year 2017 were used for the analysis. The rates required for the research were obtained from the financial statements submitted to the Public Disclosure Platform (www.kap.org.tr). There are 6 firms in the BIST Insurance Index in the current period. As an evaluation factor in the survey, all of the firms were included in the analysis as the financial ratios and decision points. In Table 2 and Table 3, research decision points and evaluation factors are given.

TABLE II
DECISION POINTS AND BIST CODES

BIST Codes	Firm Names
AKGRT	Aksigorta A.Ş.
ANHYT	Anadolu Hayat Emeklilik A.Ş.
ANSGR	Anadolu Anonim Türk Sigorta A.Ş.
AVISA	Avivsa Emeklilik ve Hayat A.Ş.
GUSGR	Güneş Sigorta A.Ş.
RAYSG	Ray Sigorta A.Ş.

TABLE III
EVALUATION FACTORS

Code	Evaluation Factors	Formula
P1	Insurance Premium Income/Total Equity	Insurance Premium Income/Total Equity
P2	Total Equity/Total Assets	Total Equity/Total Assets
P3	Total Equity/Technical Provisions	Total Equity/Technical Provisions
P4	Liquid Assets/ Total Assets	(Cash and cash Assets+Financial Assests)/Total Assets
P5	Liquidity Ratio	(Cash and cash Assets+Financial Assests)/(Technical Provisions-Mathematical Reserves-Other Technical Provisions+Financial Payables+Operating Activity Payables+Due to Related Parties+Taxes and Other Liabilities to be Paid and Provisions Thereof+Provisions Related Other Risks+Income Relating to Future Months and Expense Accruals+Other Short Term Liabilities)
P6	Current Ratio	(Cash and cash Assets+Financial Assests+Receivables from Operational Activities+Due from Related Parties+Other Receivables)/(Technical Provisions-Mathematical Reserves-Other Technical Provisions+Financial Payables+Operating Activity Payables+Due to Related Parties+Taxes and Other Liabilities to be Paid and Provisions Thereof+Provisions Related Other Risks+Income Relating to Future Months

		and Expense Accruals+Other Short Term Liabilities)
P7	Premium and Reinsurance Receivables / Total Assets	Receivables from Operational Activities/Total Assets
P8	Conservation Ratio	Net Insurance Premium Income/ Insurance Premium Income
P9	Compensation Ratio	Paid Compensation/(Paid Compensation+Undecided Damage Provsions)
P10	Damage Premium Ratio	(Paid Compensation+Undecided Compensation Change)/(Written Premium- Change in Unearned Premiums)
P11	Earnings Before Taxes/ Insurance Premium Income	Earnings Before Taxes/ Insurance Premium Income
P12	Net Profit/ Insurance Premium Income	Net Profit/ Insurance Premium Income
P13	Technical Profit/ Insurance Premium Income	Technical Profit/ Insurance Premium Income

The evaluation factors used in the research were determined by taking into consideration the factors used in similar studies after the literature review.

TABLE IV
FACTOR WEIGHTS

	P1	P2	P3	P4	P5	P6	P7
Puan	7	9	8	8	8	7	7
w	0.098591549	0.126760563	0.112676056	0.112676056	0.112676056	0.098591549	0.098591549
	P8	P9	P10	P11	P12	P13	
Puan	8	9	9	8	9	9	
w	0.112676056	0.126760563	0.126760563	0.112676056	0.126760563	0.126760563	

There is no application in the TOPSIS method to determine the factor weights. It is possible to determine the weights of factors using methods such as Analytic Hierarchy Process, Swara, Entropy, or scoring scale 1-5, 1-9. Scoring system between 1-9 was used in our research. 1 represents the lowest (worst), 9 represents the highest (good) condition. Factor weights were found by dividing the scoring given for each factor by the total score and are shown in Table 4.

TABLE V
DECISION MATRIX

	P1	P2	P3	P4	P5	P6	P7
AKGRT	2.038	0.231	0.409	0.689	0.933	1.204	0.194
ANHYT	1.71	0.052	0.496	0.156	0.184	1.161	0.828
ANSGR	2.925	0.174	0.254	0.705	0.882	1.111	0.18
AVISA	1.559	0.015	0.331	0.067	2.105	2.179	0.924
GUSGR	1.202	0.312	0.598	0.398	0.607	0.926	0.207
RAYSG	1.487	0.251	0.526	0.607	0.869	0.87	0.214
Karesi	21.72	0.25	1.22	1.53	7.24	10.39	1.70
Karekök	4.660431632	0.496901399	1.105284579	1.235889963	2.690149438	3.224015354	1.303089022
	P8	P9	P10	P11	P12	P13	
AKGRT	0.343	0.589	0.656	0.13	0.099	0.166	
ANHYT	0.258	0.979	0.741	0.517	0.415	0.365	
ANSGR	0.183	0.75	0.848	0.076	0.06	0.088	
AVISA	0.761	0.922	0.248	0.316	0.246	0.166	
GUSGR	0.179	0.683	0.207	0.032	0.03	0.034	
RAYSG	0.206	0.513	0.792	0.113	0.077	0.093	
Karesi	0.87	3.45	2.43	0.40	0.25	0.21	
Karekök	0.933434518	1.856772469	1.55888999	0.635306225	0.502962225	0.453746625	

The decision matrices to be used in the calculation of the ideal and negative ideal solutions for each criterion were established with the help of relevant decision points and evaluation factors. The decision matrix for 2017 is shown in Table 5 and the TOPSIS method algorithm is processed.

TABLE VI
STANDARD (NORMALIZED) DECISION MATRIX

	P1	P2	P3	P4	P5	P6	P7
AKGRT	0.437298551	0.464880962	0.370040447	0.557492998	0.346820882	0.373447353	0.148877012
ANHYT	0.366918804	0.104648528	0.448753208	0.12622483	0.068397687	0.360109948	0.635413226
ANSGR	0.62762427	0.350170075	0.22980507	0.570439134	0.327862827	0.344601337	0.13813331
AVISA	0.334518371	0.030187075	0.299470387	0.054211946	0.782484411	0.675865268	0.709084325
GUSGR	0.257916025	0.627891169	0.541037133	0.322035142	0.225638023	0.287219476	0.158853307
RAYSG	0.319069159	0.505130395	0.475895539	0.491144049	0.323030382	0.269849832	0.164225158
	P8	P9	P10	P11	P12	P13	
AKGRT	0.367460163	0.317217112	0.420812247	0.20462573	0.196833868	0.365842941	
ANHYT	0.276398606	0.527259003	0.475338225	0.813780787	0.825111667	0.804413696	
ANSGR	0.196050174	0.403926713	0.543976808	0.11962735	0.119293253	0.193940836	
AVISA	0.815268758	0.496560573	0.159087557	0.497397928	0.489102337	0.365842941	
GUSGR	0.191764925	0.367842593	0.132786791	0.05036941	0.059646627	0.074931687	
RAYSG	0.22069036	0.276285872	0.508053811	0.17786698	0.153093008	0.204960202	

Once the decision matrix has been established, it is normalized. Normalization of the decision matrix; by dividing the square of the values in the respective column of each value in the columns by the square of the sum of the values in the corresponding column and reducing it to a single pension. Table 6 shows the normalized decision matrix.

TABLE VII
WEIGHTED STANDARD DECISION MATRIX

	P1	P2	P3	P4	P5	P6	P7
AKGRT	0.043113942	0.058928573	0.041694698	0.062816112	0.039078409	0.036818753	0.014678015
ANHYT	0.036175093	0.013265306	0.050563742	0.014222516	0.007706782	0.035503798	0.062646374
ANSGR	0.061878449	0.044387756	0.025893529	0.064274832	0.03694229	0.03397478	0.013618777
AVISA	0.032980685	0.003826531	0.033743142	0.006108388	0.088167258	0.066634604	0.069909722
GUSGR	0.02542834	0.079591838	0.060961931	0.03628565	0.025424003	0.028317413	0.015661594
RAYSG	0.031457523	0.064030614	0.053622033	0.055340174	0.036397789	0.026604913	0.016191213
	P8	P9	P10	P11	P12	P13	
AKGRT	0.041403962	0.04021062	0.053342398	0.02305642	0.024950772	0.046374457	
ANHYT	0.031143505	0.066835648	0.060254141	0.09169361	0.10459162	0.101967933	
ANSGR	0.02209016	0.051201978	0.068954807	0.013479138	0.01512168	0.02458405	
AVISA	0.091861268	0.062944298	0.020166028	0.056044837	0.061998888	0.046374457	
GUSGR	0.021607315	0.046627934	0.016832128	0.005675427	0.00756084	0.009498383	
RAYSG	0.024866519	0.035022153	0.064401187	0.02004135	0.019406156	0.025980871	

Each value in the normalized decision matrix is weighted by the weight value of each factor calculated in Table 4 and the calculated values are shown in Table 7 as the weighted standard decision matrix.

TABLE VIII
IDEAL AND NEGATIVE IDEAL SOLUTION SET

	P1	P2	P3	P4	P5	P6	P7
A*	0.061878449	0.079591838	0.060961931	0.064274832	0.088167258	0.066634604	0.069909722
A-	0.02542834	0.003826531	0.025893529	0.006108388	0.007706782	0.026604913	0.013618777
	P8	P9	P10	P11	P12	P13	
A*	0.091861268	0.066835648	0.068954807	0.09169361	0.10459162	0.101967933	
A-	0.021607315	0.035022153	0.016832128	0.005675427	0.00756084	0.009498383	

In the weighted decision matrix, ideal ideal solution for each column and negative ideal ideal solution for negative ideal solution are selected to form ideal and negative ideal solution sets. Table 8 shows the ideal and negative ideal solution sets.

TABLE IX
POSITIVE IDEAL DISCRIMINATION MEASURES

	P1	P2	P3	P4	P5	P6	P7
S1*	0.035210674	0.042697055	0.037122624	0.000212786	0.240971504	0.088898496	0.305054145
S2*	0.06606625	0.439920884	0.010812233	0.250523433	0.647388819	0.09691271	0.005275622
S3*	0	0.123932741	0.122979278	0	0.262399727	0.106666412	0.316867051
S4*	0.08350808	0.574038184	0.074086244	0.338333517	0	0	0
S5*	0.132861042	0	0	0.078339432	0.393671606	0.146820711	0.294285946
S6*	0.092543277	0.024215172	0.00538741	0.00798281	0.268007783	0.160237615	0.288567826
	P8	P9	P10	P11	P12	P13	
S1*	0.254593977	0.070889214	0.024374732	0.471106379	0.634266464	0.309063457	
S2*	0.368664681	0	0.007570158	0	0	0	
S3*	0.486800751	0.024441165	0	0.61175036	0.800487012	0.598826545	
S4*	0	0.001514261	0.238034488	0.127083501	0.181414081	0.309063457	
S5*	0.493561791	0.04083517	0.271677357	0.739912785	0.941497222	0.855061777	
S6*	0.448829639	0.101209849	0.002073545	0.513404635	0.725656324	0.577403369	

Table 9 shows the positive ideal solution distance of each decision factor.

TABLE X
NEGATIVE IDEAL DISCREPANCY MEASURES

	P1	P2	P3	P4	P5	P6	P7
S1-	0.031278049	0.303623502	0.024967695	0.321576597	0.098417901	0.010432253	0.000112199
S2-	0.01154927	0.008909049	0.060861939	0.006583907	0	0.007919015	0.240370531
S3-	0.132861042	0.1645213	0	0.338333517	0.085471497	0.005431494	0
S4-	0.00570379	0	0.006161643	0	0.647388819	0.160237615	0.316867051
S5-	0	0.574038184	0.122979278	0.091066711	0.031389992	0.000293266	0.00041731
S6-	0.003635104	0.362453159	0.076886991	0.242376877	0.082317393	0	0.000661743
	P8	P9	P10	P11	P12	P13	
S1-	0.039190721	0.002692019	0.133299975	0.030209894	0.030240973	0.135984487	
S2-	0.009093891	0.101209849	0.188547118	0.739912785	0.941497222	0.855061777	
S3-	2.33139E-05	0.026178674	0.271677357	0.006089791	0.00571663	0.022757734	
S4-	0.493561791	0.077964619	0.001111489	0.25370775	0.296350106	0.135984487	
S5-	0	0.013469417	0	0	0	0	
S6-	0.001062241	0	0.226281535	0.020637975	0.014031151	0.027167241	

In Table 10, the distance of each decision factor from the negative ideal solution was determined.

TABLE XI
DISCRIMINATION MEASURES AND RANKING

	Si*		Si-		Ci*		Sıralama
S1*	1.585705366	S1-	1.077973222	C1*	0.404693429	AKGRT	3
S2*	1.375912348	S2-	1.780875165	C2*	0.564141602	ANHYT	1
S3*	1.858803659	S3-	1.02910755	C3*	0.356350135	ANSGR	5
S4*	1.388191562	S4-	1.547591406	C4*	0.527147757	AVISA	2
S5*	2.094880626	S5-	0.913046635	C5*	0.30354678	GUSGR	6
S6*	1.793186899	S6-	1.028353738	C6*	0.364465329	RAYSG	4

At the end of the analysis, ideal and ideal nonpolar distances are used to calculate the ideal resolving relative proximity of each decision point. The values calculated with the help of the formula are shown in Table 11.

IV. CONCLUSION AND RECOMMENDATIONS

As the share of insurance in the financial sector has increased over the years, the evaluation of the financial performance of insurance companies, the measurement of the competition situation, the position in the sector or the development of this position have started to gain importance. When the literature survey on the insurance sector is conducted, it is seen that the data envelopment analysis is mostly preferred from the multi criteria decision making techniques in performance measurement. For this reason, the TOPSIS method, which is another multi-criteria decision making method, has been preferred. Findings within the scope of this study are important in terms of investors and managers of these companies in terms of offering comparative financial performance evaluation of the six companies with limited number of insurance companies due to being open to the public. In addition, this thesis can be used to evaluate the financial performance of large firms in the sector, and to use the results of the study partially in the evaluation of the sector. The companies were evaluated with the help of 13 financial ratios, which are profitability, activity, leverage and liquidity ratios. As the result of this evaluation, ANHYT insurance company has the best financial performance and GUSGR insurance company has the lowest financial performance.

In this study, 13 financial ratios were taken into consideration and TOPSIS methods were applied from multi-criteria decision making techniques. Performance sequencing can be done according to each method by increasing the number of financial ratios used in future work and by using other very criteria-based decision making techniques. In addition, the results obtained from the methods used can be analyzed comparatively. However, the financial performance of insurance companies can be examined over the years by increasing the analysis period.

References

- Agiobenebo, T. & Jones-Chinedu B. Ezirim (2002), “Impact of Financial Intermediation on the Profitability of Insurance Companies in Nigeria”, *First Bank of Nigeria Quarterly Review*, Vol. 2, No.1, pp. 20-31.
- Akhisar, İ. (2014). Performance Ranking of Turkish Insurance Companies: The ANP Application, *Finansal Araştırmalar ve Çalışmalar Dergisi*, 6(11), 1-13.
- Akyüz, Y. ve Kaya, Z. (2013). Türkiye’de Hayat Dışı ve Hayat/Emeklilik Sigorta Sektörünün Finansal Performans Analiz ve Değerlendirilmesi, *Selçuk Üniversitesi İktisadi ve İdari Bilimler Fakültesi sosyal ve Ekonomik Araştırmalar Dergisi*, 26, 355-371.
- Başkaya, Z. & Akar, C. (2005). Sigorta Şirketlerinin Satış Performanslarının Veri Zarflama Analizi yöntemiyle Belirlenmesi, *Muğla Üniversitesi Sosyal Bilimler Enstitüsü Dergisi (İlke)*, 15, 38-51.
- Borges,M.Rosa, Nektarios,Milton and Barros,C.Pestana.,(2008), “Analysing The Efficiency Of The Greek Life Insurance Industry”, **European Research Studies**, Vol. XI, Issue (3),pp.1-17
- Bülbül, S. & Köse, A. (2011) “Türk Gıda Şirketlerinin Finansal Performansının Çok Amaçlı Karar Verme Yöntemleriyle Değerlendirilmesi” *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 25:71-95
- Çağlar, A. & Öztaş, G.Z. (2016). Veri Zarflama Analizi ve Analitik Hiyerarşi Süreci İle Sigorta Şirketlerinin Finansal Oran Analizi, *Çankırı Karatekin Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 6(2), 221-248.
- Çakır, S. (2016). Türk Sigortacılık Sektöründe Çok Kriterli Karar Verme Teknikleri (ÇKKV) ile Performans Ölçümü: BIST Uygulaması, *Çukurova Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 20(1), 127-147.

- Çiftçi, H., (2004). “Türk Sigorta Sektörünün Sorunları; DEA Analizi ile Türk Sigorta Şirketlerinin Etkinlik Düzeylerinin Belirlenmesi”, *Çukurova Üniversitesi, Sosyal Bilimler Enstitüsü Dergi-si*, 13 (1): 121-149.
- Ege, İ., & Bayrakdaroğlu, A. (2009). Türk Sigorta Sektörüne Yabancı Sermayenin İlgisi: Ulusal ve Yabancı Sermayeli Sigorta Şirketlerinin Finansal Performanslarının Karşılaştırmalı Analizi. *MÖDAV*, 11(1), 61-84.
- Elitaş, C., Eleren, A., Yıldız, F. & Doğan, M. (2012). Gri İlişkisel Analiz ile Sigorta Şirketlerinin Performanslarının Belirlenmesi, *16.Finans Sempozyumu*, 521-530, Erzurum
- İşseveroğlu, G., & Sezer, O. (2015) “Financial Performance of Pension Companies Operating in Turkey with TOPSIS Analysis Method”, *International Journal of Academic Research in Accounting, Finance and Management Sciences*, Vol:5, No:1, pp.137-147.
- Kaya A. & Gülhan, Ü. (2010) “Küresel Finansal Krizin İşletmelerin Etkinlik ve Performans Düzeylerine Etkileri:2008 Finansal Kriz Örneği” *İstanbul Üniversitesi Ekonometri ve İstatistik Dergisi*, 11:61-89.
- Kaya, E. Ö., & Kaya, B. (2015). Türkiye’de Hayat Sigortası Şirketlerinin Finansal Performansını Belirleyen Firmaya Özgü Faktörler: Panel Veri Analizi. *Finansal Araştırmalar ve Çalışmalar Dergisi*, 7(12), 93-111.
- Kayaköy Taş, M. (2015). Dünya Sigorta Pazarında Türkiye’nin Yeri. *İstanbul Ticaret Üniversitesi Sosyal Bilimler Dergisi*, 14 (27), 133-148.
- Kılıçkaplan, S. & Baştürk Hayırsever, F., (2004). “Türkiye Hayat Dışı Alanda Faaliyet Gösteren Sigorta Şirketlerinin 2002 Yılındaki Etkinliklerinin Veri Zarflama Analizi (VZA) İle Ölçülme-si”, *Gazi Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 6 (2): 63-79.
- Kılıçkaplan, S. & Karpat, G., (2004). “Türkiye Hayat Sigortası Sektöründe Etkinliğin İncelenmesi”, *Dokuz Eylül Üniversitesi, İktisadi ve İdari Bilimler Fakültesi Dergisi*, 19 (1): 1-14.
- Köse, A. (2010). Türk Sigorta Sektörü Hayat ve Emeklilik Şirketlerinin Etkinlik Analizi, *Akademik Araştırmalar Dergisi*, 44, 85-100.
- Kula, V., Kandemir, T. & Baykut, E. (2016). Borsa İstanbul’da İşlem Gören Sigorta ve BES Şirketlerinin Finansal Performansının Gri İlişkisel Analiz Yöntemi İle İncelenmesi, *Afyon Kocatepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, XVIII(1), 37-53.
- Mansor Shazali Abu & Radam Alias, (2000). “Productivity and Efficiency Performance of the Malaysian Life Insurance Industry”, *Jurnal Ekonomi Malaysia*, 34, p. 93-105.
- Orçun, Ç., Eren, B.S., (2017), “TOPSIS Yöntemi ile Finansal Performans Değerlendirmesi: XUTEK Üzerinde Bir Uygulama”, *Muhasebe ve Finansman Dergisi (Özel Sayı)*, Sayı: 75, ss.139-154.

- Özcan, Anıl İlkem (2011), “Türkiye’de Hayat Dışı Sigorta Sektörünün 2002-2009 Dönemi İtibariyle Etkinlik Analizi”, Celal Bayar Üniversitesi Sosyal Bilimler Dergisi, Cilt 9, Sayı 1, ss. 61-78.
- Özdemir, M. (2014), Bolum Adi: *TOPSIS, Operasyonel, Yönetmel ve Stratejik Problemlerin Çözümünde Çok Kriterli Karar Verme Yöntemleri*, sayfa: 133-153, Dora Basım-Yayın Dağıtım, Bursa.
- Peker, İ. & Baki, B. (2011). Gri İlişkiyel Analiz Yöntemiyle Türk Sigortacılık Sektöründe Performans Ölçümü, 10(3), 1-17.
- Peker, İ. & Baki, B., (2011). “Gri İlişkiyel Analiz Yöntemiyle Türk Sigortacılık Sektöründe Performans Ölçümü”, *Uluslararası İktisadi ve İdari İncelemeler Dergisi*, 7 (4): 1-18.
- Saldanlı, A. & Sırma, İ. (2014) “Topsis Yönteminin Finansal Performans Göstergesi Olarak Kullanılabilirliği”, *Marmara Üniversitesi Öneri Dergisi*, Cilt:11, Sayı: 41, ss. 185-202. Doi: 10.14783/ÖNERI.2014414422.
- Salimi Altan, M. (2010). Türk Sigortacılık Sektöründe Etkinlik: Veri Zarflama Analizi Yöntemi İle Bir Uygulama, *Gazi Üniversitesi İktisadi ve İdari bilimler Fakültesi Dergisi*, 12(1), 185-204.
- Şenel, A., (2006). “Sigorta Şirketlerinde Mali Yeterlilik”, *Afyon Kocatepe Üniversitesi, İktisadi ve İdari Bilimler Fakültesi Dergisi*, VIII (2): 297-315.
- Şit, A., Ekşi, İ. & Hacıevliyagil, N. (2017) “BIST’te Ana Metal Sanayi Endeksinde Faaliyet Gösteren İşletmelerin Finansal Performans Ölçümü: 2011-2015 Dönemi”, *Süleyman Demirel Üniversitesi Vizyoner Dergisi*, Cilt:8, Sayı:17, ss. 83-91.
- Tsai, H. Y., Huang, B. H., & Wang, A. S. (2008). Combining ANP and TOPSIS concepts for evaluation the performance of property-liability insurance companies. *Journal of Social Scieces*, 4, 56–61. doi:10.3844/jssp.2008.56.61
- Turanlı, M. & Köse, A. (2005). Doğrusal Hedef Programlama Yöntemi İle Türkiye’deki Sigorta Şirketlerinin Performanslarının Değerlendirilmesi, *İstanbul Ticaret Üniversitesi Fen Bilimleri Dergisi*, 4(7), 19-39.
- Turgutlu, E., Kök, R. And Kasman, A. (2007), “Türk Sigortacılık Şirketlerinde Etkinlik: Deterministik ve Şans Kısıtlı Veri Zarflama Analizi”, *İktisat, İşletme ve Finans*, Cilt 22, Sayı 252, ss. 85-102.
- Wang Jiun-Hao & Chang Hung-Hao, (2010). “Examining The Types And Payments Of The Disabili-ties Of The Insurants in The National Farmers’ Health Insurance Program in Taiwan”, *Bio-Med Central Public Health*, 10, p.646.
- Yücenur, G. N., & Demirel, N. C. (2012). Group Decision Making Process For Insurance Company Selection Problem With Extended VIKOR Method Under Fuzzy Environment. *Expert Systems with Applications*, 39, 3702–3707. doi:10.1016/j.eswa.2011.09.065

Medical Tourism and Its Impact on Saudi Arabian Economy

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Abstract: The purpose of this research paper is to find out the scope of medical tourism in Saudi Arabia along with the economic benefits. For this purpose, a focused research is conducted to explore responses of Saudi Arabia's population and foreigners on medical tourism along with statistical analysis using data from government publications and in-depth interviews from experts. The research results suggest that massive reforms are required to utilize the opportunities of medical tourism in the country, Medical Tourism is proved to have positive and significant impact on economic growth and unemployment reduction.

1- Introduction

Tourism, in general, can be defined as an Industrial Sector including conventional industries that contribute to meet the tourism demand (Candela and Figini, 2010). Medical Tourism, specifically, is defined as a process in which people who live in one country travel to another country to get medical, dental and surgical treatment while they get same or greater care than they get in their own country of residence and are making journey to another country for affordability or getting access to higher medical facilities.

Similarly, there is a term "Domestic Medical Tourism" which used for patients who travel from one city to another to receive medical, dental or surgical treatment. People seek medical tourism for affordability, high quality of medical care or to have access to better technology of treatment. Saudi Arabia sent 12894 patients abroad for medical tourism in the last five years. Domestic medical tourism will not only save Saudi Arabia's government budget but also it will boost country's GDP because there are many patients who travel abroad privately for medical treatment. (Medical Tourism Association, 2017)

Tourism is one of the most popular industries in the World with fast growth. Medical tourism is a mix of tourism industry and healthcare industry. Medical tourism is dominating many other industries in the world today because medical tourism lures tourists from developed as well as developing nations which give economic benefit to developed countries as well as small countries or Islands like Costa Rica (Medical Tourism, 2017). Medical tourism is a great source of foreign

exchange earnings and can contribute to government revenues greatly. Medical tourism is a source of employment and business opportunities to the local population. The rapid growth of medical tourism helps in creating direct as well as indirect employment. Direct employment includes jobs, such as taxi services, motels, hotels, restaurants etc. and indirect employment includes delivery of goods and other services required by the industry. Medical Tourism does not only bring foreign exchange but also create government earnings in the form of taxes from people working in medical tourism sector.

The main focus of this study is Medical tourism in Saudi Arabia and its impact on the economy. Tourism in Saudi Arabia is the second largest source of income after oil. Tourism industry generates approximately \$13.8 billion annually and is one of the largest sources of employment. It is predicted that Saudi Arabia will be generating \$63.7 billion by 2019 (Khan & Alam, 2014) Almost all tourists come to Saudi Arabia for religious responsibilities or sighting of historical religious places. In recent years, it is noted that Saudi Arabia has started investing heavily in health industry with most of financing done by Government bodies. According to World Health Organization, 79.795 million Saudi Riyals are spent on 386 hospitals, 54,724 hospital bed and 55,000 physicians. So, it is evident that Saudi Arab has tremendous healthcare infrastructure and has a potential to be utilized fully for medical tourism. By August 2013 Saudi Arab had more than 40 Joint Commission International (JCI) accredited hospitals (Table 1). Accreditation develops more trust among foreign patients while they choose hospitals. Most doctors in medical facilities of Saudi Arabia have been well trained in western countries with well-known and trustworthy system.

Table (1): Countries and Number of Hospitals with JCI accreditation in August, 2013

Country	Number of Hospitals	Country	Number of Hospitals
Taiwan	12	Malaysia	6
Thailand	18	Qatar	5
China	16	Republic of Korea	13
Egypt	3	KSA	42
Germany	3	Singapore	14
UAE	39	Turkey	39

Source: Joint Commission International

Saudi Arabia welcomes 18 million tourists every year. In the last decade, healthcare system came

out as a priority for the government. Medical Tourism can emerge as high contributing industry in Saudi Arabia because Saudi Arabia has a well-established infrastructure for medical tourism. Saudi Arabia has various medical cities all over the country which includes King Fahd Medical City in Riyadh, King Abdullah Medical City, King Faisal Medical City, Prince Mohammed Bin Abdulaziz Medical City in Almadinah, and the King Khalid Medical City in Riyadh to fulfill medical needs of patients in different parts of the country (IMTJ, 2016).

As for the paper organization, Section 1 is the introduction, sections 2, 3, and 4 discuss the study importance and objectives, research questions and literature review. Methodology is the subject of Section 5. Research analyses, discussions, and conclusions are the dealt with in sections 6, 7, 8, and 9. Section 10 recommends and Section 11 lists the bibliography.

2- Study Importance Objectives

The country has infrastructure and tourist places but all it lacks is attention from the government on this sector. The purpose of this research is to make a comprehensive and brief case to support the idea that medical tourism industry and its positive impact on Saudi economy. Following are the main objectives of the study:

1. Evaluate the medical tourism effect on tourism sector in KSA as tourism sector is the second biggest contributor to the GDP.
2. What is the impact of the current medical tourism on employment rate?
3. What is the contribution of medical tourism on Saudi GDP?
4. To explore the international view of establishing a medical city in KSA
- 5.

3- Research Questions

Following are the research questions for the topic of Medical tourism:

1. Does the medical tourism significantly effect on tourism sector in KSA?
2. What is the effect the current medical tourism on employment rate?
3. What is the contribution of medical tourism on Saudi GDP?
4. Would the local/foreigners consider substituting international tourism if the same standards can be offered within Saudi Arabia?

4- Literature Review

4.1. Global Medical Tourism

To put in simple words, medical Tourism is an area of medical and tourism industry which is designed for people who want to travel to a different country, city, or state for the purpose of medical reasons. Moreover, medical tourism does not necessarily have to for patients who want to travel outside their country of resident, but also it is for patients who wish to get treated in the country of their own residents (International Medical Travel Journal, 2010).

Medical tourism is a very profitable market. Approximately more than 35 million trips are made each year for medical treatment. Moreover, the international medical tourism industry is valued at \$439 billion with a high positive future prospective. Furthermore, some countries around the globe have turned medical tourism into a nationwide industry with a hefty contribution to the country's GDP (Saaty & Syed, 2012). Asian states such as India, Malaysia, Singapore and Thailand have dominated in their regions whilst Middle Eastern countries such as United Arab Emirates and Jordan have a stronghold in MENA region. Above mentioned countries have greatly benefitted from medical tourism. For instance, the value of medical tourism industry of India is worth \$3 billion and is projected to be \$8 billion by 2020 (Economic Times, 2015).

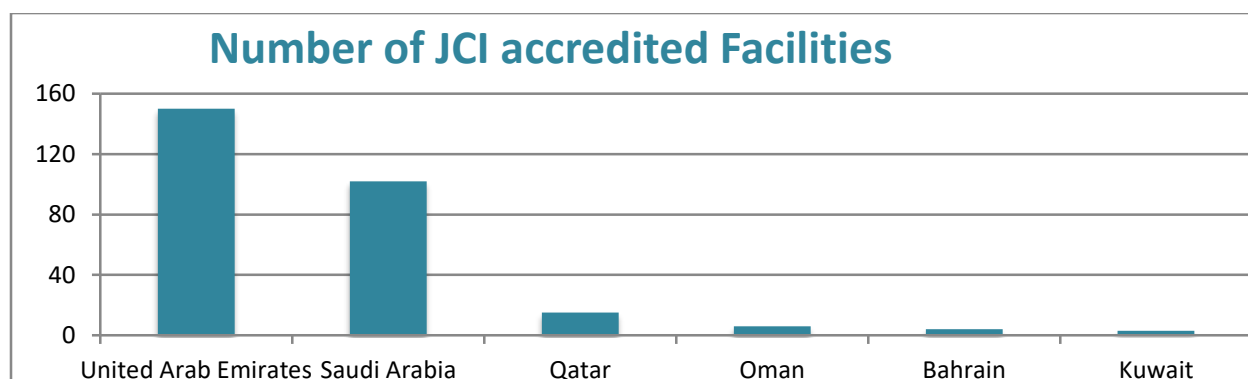
The impact of tourism, in general, on labor wage and employment was examined and it has been proved that the number of arrivals for tourism has a positive and significant impact on labor wage and employment (Borjas et al, 2012). In a country where migrants form 33% of the total population like Saudi Arabia, there might be a positive association between migration and tourism, King (1994), Williams and Hall (2002), Prescott et al (2005), and Seetaram and Dwyer (2009).

4.2. Medical Tourism in the Middle East

A widely adopted accrediting procedure adopted by hospitals in the world is the Joint Commission International (JCI) Accreditation. The Joint Commission International is a US body which accredits hospitals globally. The JCI also accredits great many hospitals in KSA and the Middle East.

The table below gives the number of JCI accredited facilities GCC (Figure 1; Joint Commission International, 2016)

Figure 1 - Number of JCI Accredited Facilities in 2016



Source: Joint Commission International, 2016.

As evident from above graph, United Arab Emirates leads the GCC with the most number of JCI accredited medical facilities. Webometrics issued their rankings of 300 hospitals in the Arab World. The ranking showed that five out of the Top Ten Hospitals belong to Saudi Arabia (Webometrics, 2015), surpassing hospitals in the UAE. On one end of the rope, medical tourism in UAE can pose a major competition to Saudi Arabia's.

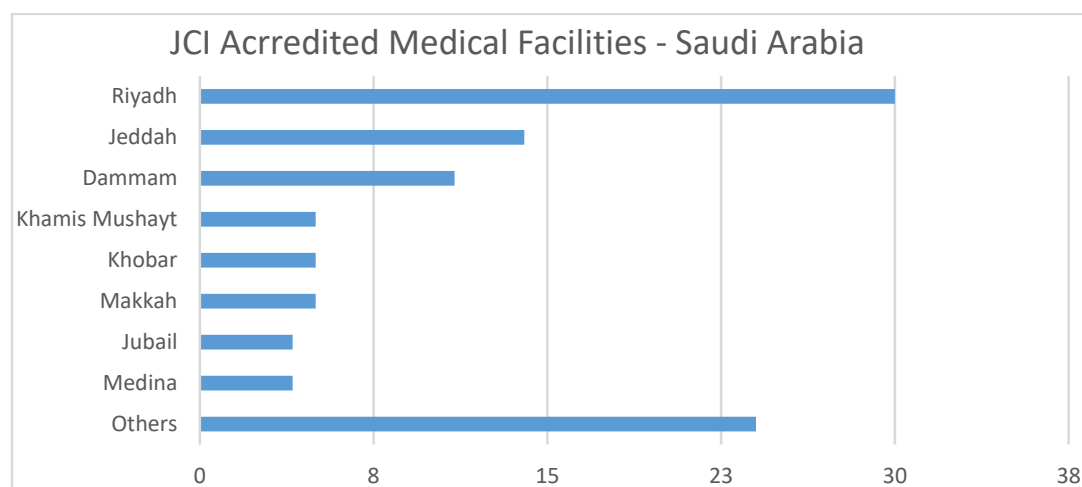
Medical tourism industry of UAE is on the continuous rise. UAE has also launched its first ever online portal which enables prospective medical tourists with ability to design their whole trip by accessing the web portal features (Gulf News, 2016). Moreover, the country is looking forward to increase medical tourists as much as 500,000 by the year 2020, it is also confirmed that an app version of the online medical portal will also be released and even made medical malpractice insurance options for medical tourists (Gulf News, 2016).

One the other end of the rope, Jordan has been taking huge leaps in enhancing medical tourism and is considered the most favorable medical tourism destination in the MENA region. Medical tourism in Jordan is considered more cost effective by saving a 70% on US based costs (Medical Tourism Cooperation, 2017). Moreover, Jordan also market its tourism in such a way that 6 million tourists arrive in the country per annum because of the easy visa policies for all nationalities (Medical Tourism Cooperation, 2017). Furthermore, the country earns \$1 billion per annum because of medical tourism initiatives. Other than that, most of the incoming patients are observed to be from Arab neighboring countries such as Yemen (29%), Libya (16%), Palestine (12%) and Sudan (7%). It is evident that there is a high demand for foreign treatment options within the GCC and countries such as UAE and Jordan are making the most out of this existing high demand.

4.3. Medical Tourism in Saudi Arabia

One of the definitions of medical tourism is a country's goal to intentionally attract patients from foreign countries to country's medical facilities. Recent research indicates that Saudi Arabia's government is interested in grooming medical tourism as an industry to generate significant amount of GDP for economic betterment (Saudi Vision 2030, 2016). Moreover, Saudi Arabia has increased accredited medical facilities for prospective patients to select from (Abdulghafour, 2010). According to JCI, Saudi Arabia has over 100 medical facilities which are JCI-accredited with 30 percent in Riyadh, 19 percent in Jeddah/Makkah, 11 percent in Dammam, and the remaining 40 percent are in different parts of the Kingdom (Figure – 2; Joint Commission International, 2016; Appendix). Moreover, Saudi Arabia's vision of 2030 has a great impact on the increasing number of medical facilities. Presently, the country has the largest healthcare market in the GCC which is likely to have a great rise through innovative digital medical solutions (Arab News, 2016).

Figure 2 - Accredited Medical Facilities - Saudi Arabia



Source: Joint Commission International

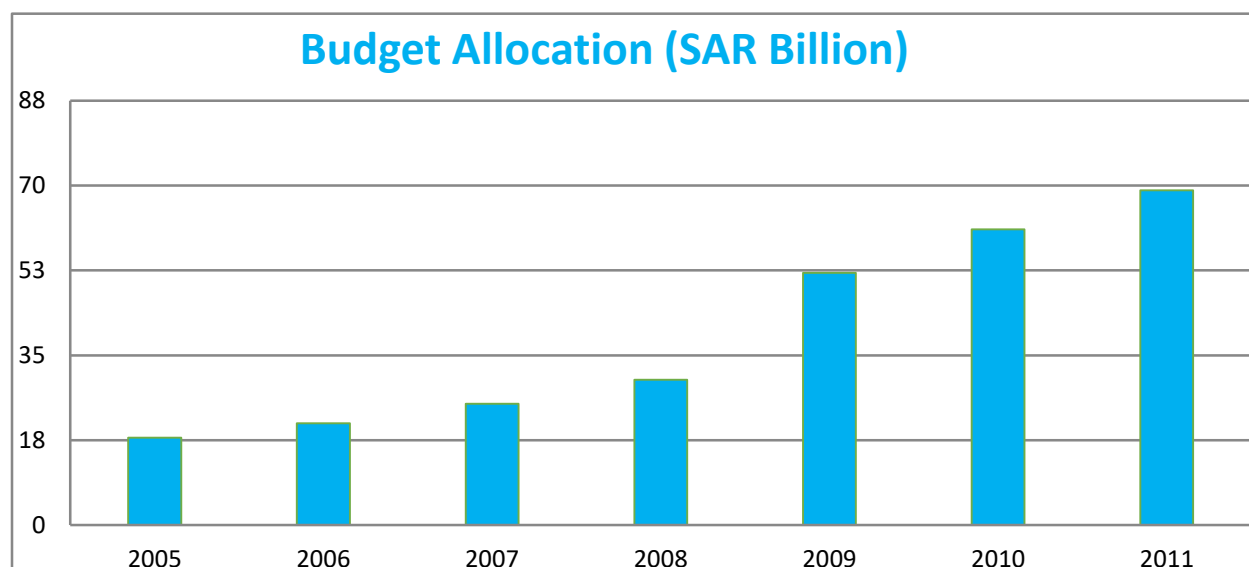
Despite having the potential, Saudi Arab's medical tourism industry is limited and conservative. Most visitors from other countries enter into Saudi Arabia for holy purposes (Khan & Alam, 2014). However, recent drop in crude oil prices for few years has forced Saudi Arabia to turn its eyes towards other industries and one of them in tourism industry. Prince Sultan Bin Salman, the head of the Saudi Commission for Tourism and National Heritage, said that his focus is to convince government to make lenient visa policies to allow Muslims and non-Muslims visitors to come to

Saudi Arabia for tourism. Presently, Visa-free entry is allowed to citizens of the Kuwait, UAE, Qatar, Bahrain and Oman (World Wide Visa Bureau, 2016). So, a first step would be to develop medical tourism for prospective medical tourists from GCC citizen only and later widen the horizon and target citizens from other countries that is subjected to development of Saudi Arabia's visa policies and laws. Nevertheless, Medical Tourism industry of Saudi Arabia is making an upward slop and more endeavors will be required to develop this industry and allow it to flourish (Forbes, 2011).

Government of Saudi Arabia will have to take initiative to open the country for prospective tourists from non GCC countries because it will be the key behind success of medical tourism in Saudi Arabia. Research indicates that prospective medical tourists will show interest in Saudi Medical Tourism if the country would offer more marketing efforts to make the process convenient (Saaty & Syed, 2012). Medical Tourism in Saudi Arabia is not only dependent on foreign patients but also on the domestic patients. There is a market segment in Saudi Arabia consisting of patients who seek medical tourism outside their native city or city of residence, but within the country, called domestic medical tourism (International Medical Travel Journal, 2010).

The government of Saudi Arabia has been sending patients of the country to foreign countries for medical treatment and also pay for their treatments. However, citizens who travel outside the country have decreased over the years because the Saudi government has been putting efforts to motivate private parties on making new advanced medical facilities, according to International Medical Tourism Journal (IMTJ, 2016). Also, the country has great many facilities and potential to attract international market. Presently, Saudi Arabia has 295 hospitals across different parts of the country with 38,970 beds. Moreover, expansion plans are also under execution for King Fahd Medical City in Riyadh, King Abdullah Medical City, King Faisal Medical City, Prince Mohammed Bin Abdul Aziz Medical City and the King Khalid Medical City to cater to the medical needs of different geographical regions of the country. Also, the budget spending of Saudi Arabia's healthcare sector has been continuously on a rise. In 2011, SR 69 billion was spent on healthcare sector, which represents 12% of the government budget (Figure 3; Colliers, 2012).

Figure 3 - Healthcare Budget Allocation



Source: Colliers, 2012.

4.4. Attributes of Medical Tourism

Medical Tourism is attributed to various reason including Affordability, Confidentiality, Economic and Political Statuses, Tourism, Technology, and International Standards, which can be briefly explained as follows:

Affordability: Medical treatment outside the country of resident of a patient has been considered cost-effective option. Medical tourism is growing rapidly because affordability is one of the main features. Presently, KSA has an affordable healthcare system which is beneficial for its citizen compared to other countries (IMTJ, 2016). Moreover, 1.4 million patients leave US for medical treatment because it is cheaper to get treatment in a foreign country. In fact, expenses are so low to travel abroad that even insurance companies have started showing interested in providing such initiatives. For example, a knee replacement surgery might require \$60,000 in United States but the same procedure can be done in \$23,000 in Costa Rica or India including airfare and accommodation for a patient and a companion. Saudi Arabia has relatively high medical treatment cost as compared to other Middle Eastern countries. The primary reason is that hospitals in Saudi Arabia depend heavily on foreign nurses, doctors and staff. This increases the cost of their accommodation, remittances and compensation. Jordan relies 100% on its local population for staff in medical hospitals and this is the reason that Jordan has observed increase in number of medical tourists.

Confidentiality: One of important reasons why people choose medical tourism is to have privacy. Privacy and confidentiality is ensured in countries like US but insurance companies and courts can have reach to information regarding people's medical records. Medical procedure in foreign country ensures privacy because these procedures are not required to be reported. Hence, patients take part in medical programs such as plastic surgery or drug rehabilitation without any hesitation.

Economy and Politics: Political and economic condition in the patient's country might push him to choose to go to outside the country for medical treatment. Healthcare has noticed to be increasing especially in United Kingdom and United States of America. Other than that, insurance companies do not normally cover costs for surgeries and other cosmetic and dental treatments. Certain medical procedures are prohibited in some countries, so a patient might go to another country where it is legal to get medical procedures which are prohibited in his country.

Tourism: Patients who go to other countries for medical treatment also get a feeling of a vacation. They can explore the country side by side with their medical treatment (Bookman & Bookman, 2007). Saudi Arabia is very special in such a regard because the country has great many historical religious places for tourists. Saudi Arab earns approximately \$64 billion annually from religious tourism.

Technology: Technology is one of the important factors which push people in other countries to opt for other countries because some countries have technologically advanced medical equipments and the better quality of medical solutions. Also, some countries have technology, but they are expensive; so affordability and technology both go hand in hand. For example: many people go to China or India for medical treatment because either they think their countries do not have advanced technology or advanced technology is expensive. Saudi Arabia has been investing on healthcare system and has imported latest medical technologies.

International Standards: International standards and regulations are very important while a patient chooses for a medical facility. Saudi Arabia has 101 medical facilities which are JCI accredited (Joint Commission International, 2016). International standards and accreditation both go hand in. For instance, Germany has few accredited hospitals but still attracts great many GCC residents for treatment because Germany has a reputation of having high international standards and regulations. As far as Saudi Arabia is concerned, the government policies include provisions to assure the total quality management in healthcare systems (Albejaidi, 2010) and (Al-Ahmadi and Roland, 2005).

5- Research Methodology

5.1. Empirical Framework

Saudi Arabian economy is an oil-driven economy. In 2016, oil sector accounts for roughly 87% of budget revenues, 42% of GDP, and 90% of export earnings. Post downfall of international oil prices, the policy makers in Saudi Arabia have noticed that using oil resources excessively and depending on oil sector only could make the economy vulnerable to internal and external shocks. Therefore, Saudi Arab's vision of 2030 aims at diversifying the capabilities of the economy, turning the kingdom's key strengths into enabling tools for a fully diversified future.

Among many definitions, Medical tourism is also defined as a country's aim to intentionally attract tourists based on the country's medical facilities. Likewise, research shows that Saudi Arabia's government is interested in developing the country's tourism sector for economic benefits (Saudi Vision 2030, 2016). In addition, Saudi Arabia boasts plenty of accredited health care facilities for potential patients to choose from (Joint Commission International, 2016). The number of Joint Commission International-accredited Saudi medical facilities is over a 100, with 30% in Riyadh, 19% in Jeddah/Makkah, 11% in Dammam, and the remaining 40% dispersed around the Kingdom. Furthermore, 2030 Vision has a huge impact on the expansion of the Saudi healthcare market. Currently, the country boasts the largest health care market in the GCC which is on track to have a substantial rise through innovative digital medical solutions (Arab News, 2016).

On the other hand, Saudi Arabia's Tourism Industry is limited and conservative. Most visitors of the country are entering the country for pilgrimage purposes (Khan & Alam, 2014). However, due to recent drops in crude oil prices over the last few years, Saudi Arabia is seizing the opportunity to develop its tourism sector. Recently, Prince Sultan bin Salman, the head of the Saudi Commission for Tourism and National Heritage stated that he is pushing for government officials to liberalize laws in order to allow Muslim and non-Muslim visitors to enter the country for tourism purposes. Currently, only citizens of the GCC, which includes Kuwait, United Arab Emirates, Qatar, Bahrain, and Oman, can enter Saudi Arabia visa-free (World Wide Visa Bureau, 2016). Therefore, developing the medical tourism project in Saudi Arabia will focus primarily on the market segment of prospective medical tourists that are Middle East citizens only, and later reach out to other countries based on the developments of Saudi Arabia's tourism law. Nonetheless, Saudi Arabia's Medical Tourism industry is on a slight rise and more efforts need to be taken to develop this industry and allow it to prosper (The Saudi Gazette, 2011).

5.2. Research Design

5.2.1. Type and Study of Research

This recent research is based on empirical study in order to examine the scope of medical tourism in Saudi Arabia and its impact on various economic indicators.

This research has been conducted by getting literature reviews from previous research work and it will further proceed with quantitative primary method. For conducting primary research, cross sectional study will be used and data will be gathered by field survey via questionnaire. In order to get reliable responses, questionnaire will be filled online followed by self-administered approach. Moreover, in depth interviews with doctors, nurses and medical staff of foreign countries will be conducted in order to find out the behavior of patients who come to their countries for medical tourism.

5.2.2. Instruments

The instrument used in this research is questionnaire for conducting survey and in-depth interview with doctors, nurses and other medical staff. The questionnaire is divided into two sections.

One section contains questions for locals of Saudi Arabia. The main purpose of this section is to find out the behavior of Saudis and how their mind works when they are looking for options for medical tourism. This questionnaire is collection because domestic medical tourism is also very important and a great source of contribution to GDP.

The other section contains questions for people other than Saudis. The main purpose of this section is to find out the behavior of international human beings while they choose a country for medical treatment. This section is very important because a large market of Saudi medical tourism will be dependent on international medical tourists. The objective of this questionnaire is to find out as to what makes international medical tourists go to a country for medical tourism.

The in-depth interview will give a perspective of doctors, nurses and other medical staff. The interviews will be taken from foreign doctors, nurses and medical staff to find out the behavior of medical tourists. Doctors, nurses and medical staff are in direct connection with patients from around the world and thus, their perspective will give a bird eye view as to why patients come to their respective countries for medical tourism. The interview questions are designed to get responses of Saudi and non-Saudi experts on the behavior of Saudi patients as domestic tourism is also an integral part of this research.

The mixture of questionnaires and in-depth interview will cover all important aspects of our primary research and help with statistical procedures.

5.3. Procedure of Data Collection Model

The data has been partially collected by conducting survey through questionnaire. The questionnaire will be answered by using online mode via Google Form or by conducting traditional face to face paper-and-pencil (PP) questionnaire filled in order to maintain high responses rate and data reliability. The questionnaire is structured in design and it will take around 15 minutes in answering questionnaire. Questionnaire, itself contains some relevant information related to study. The brief description about the purpose of this research will be delivered to respondents. In depth interviews will be taken by using various means such as face to face interview, audio interview, written interview and online interview. Furthermore, it will also be ensured to respondents about confidentiality of information to avoid any kind of biasness or avoid incorrect information. Secondary data will be collected to identify the relationship among GDP, tourism in Saudi Arabia, and impact on employment level. Secondary data will be collected from journal publications and official government bodies such as Ministry of Health and MAS. The data collection was really difficult because government officials do not easily give out confidential data which is not public.

6- Research Analysis

6.1. Primary Research Analysis

A brief primary research was conducted to find out the behavior of Saudis as well as Non- Saudis as to how their response is towards medical tourism and how they will reach if certain changes are made. We selected the sample size on the basis of target market as target market for medical tourism in Saudi Arabia will be local Saudis and foreign Muslims because Muslims will be the first ones to react because Saudi Arabia is very dear to Muslims because of the religious places. So, following is the summary of responses.

6.1.1. Analysis of Saudi Responses

The questionnaire was circulated to 204 Saudis from upper income class by using e-forms such as Google forms. In Google forms, respondents were given an opportunity to choose more than one option in some of the responses. The survey¹ results are analyzed as follow:

¹ Due to space constraint, detailed questionnaire's responses can be provided in a separate appendix (Appendix 1).

First: The survey shows that 47.5 % of the Saudis were not familiar with the term Medical Tourism. The reason why such a huge number of respondents do not know about the term might be that Saudi Arabia has been a country driven by oil resources for decades. Recently, the 2030 Vision has set new goals which are to build good industrial sectors other than petroleum sector. Tourism is one of the most emphasized sectors in 2030 Vision and medical tourism is a sub sector of Tourism. 47.5% negative responses might be an evidence that Vision of 2030 is not as popular as it should have been and people lack awareness of some potential industries.

Second: Based on the survey results, about 38% of Saudis prefer to go to Europe for medical services maybe because Europe is the heart of human civilization through wide range of systems being run at national level. Europe provides variety of health care services, which are funded through taxation. People are also offered European Health Insurance Card, so when there is an emergency it provides insurance to the particular individual. After Europe around 32% of Saudis chose North America for medical services, United States of America is the largest country in the world and it provides vast number of medical services to its citizens as well as foreigners. The Hospitals in North America have well trained doctors and high quality service. People do not only opt for medical tourism to get medical treatment but also to explore the host country; For example, a person who has travelled to Switzerland for medical treatment will also aspire to enjoy the natural beauty of the country as it helps patients get their minds off their medical problem and help in speedy recovery. North America has various landmarks and places for anyone to enjoy or even recover. 17% of the respondents have preferred to go to Saudi Arabia and the reason might be that respondents are mostly Saudis and some Saudis still have faith in Saudi Arabian medical facilities. However, only 2% of the people prefer to go to Middle Eastern countries maybe because the medical tourism market of Middle East is very popular and is expensive except Jordan. Moreover, people expect high quality of services when they go abroad for their medical treatment.

Third: The survey shows that 26.42% of Saudis prefer to go to their chosen countries on the criteria of specialized care. Specialized care is provided to patients who are suffering from diseases which are rare. Hospitals abroad are good in treating specialized conditions after the conditions have grown or developed. In an interview with Dr. Majed, a consultant in National Guard hospital /Harvard Grad, he said that people go aboard for definitive care and to seek solutions for their problems. 22.9% of the sample prefer to travel their chosen country mainly because of the medical staff. According to Dr. Hamid, who is a specialist in King Saud Medical Complex Hospital, most

Saudis believe that the treatment which is being offered abroad is better than the one which is being offered at KSA because there are no delays in the appointment, follow ups are provided and the patient does not have to wait months to get his/her appointment. Furthermore, Dr. Hamid believes that clinical diagnosis and treatment in abroad accuracy is 100% but he believes that it is unrealistic to say that there is 100% accuracy. Only 3.1% people look cost of treatment as a variable; however, in countries like America or Europe the cost is very high when it comes to medical services. A single treatment costs a lot and difficult for a person who does not have health insurance. Around 3.1% respondents want to visit the country which provides the lowest possible cost option.

Fourth: The survey shows that about 24.83% of the people think that the Saudi Government should work on their health care reputation as counties like Jordon, Thailand, UAE and Gulf are paying great amount of attention to the health care provided in their respective counties therefore securing a good place in the market, also in 2011 UAE witnessed an increase in the number of patients coming to seek medical treatment.

Medical care in Saudi Arab is very inefficient especially in the government sector as they do not manage the allocated budget properly. As a part of Vision of 2030, medical sector can be semi privatized because Saudi Arabia has funds but does not have expertise. It can be semi privatized with an organization or group of organizations who have medical expertise so that it will give better training for the staff. 16.77% to 19.46 of the people believe that Saudi government should consider looking at its medical staff and specialized care provided in the hospitals as when it comes to inbound medical tourism Saudi Arab has not made a significant mark in that area and it needs to make efforts and make effective plans accordingly. As in the non-major cities we have limited resources so therefore this is always a delay for major facilities and a critical case can take unto months. There are untrained staff therefore there is a devoid of post-employment training. Only 0.67% of the people think that Saudi government should improve its management system and the whole business model. Saudi Arab does not have a well-developed system of high quality organ transplants facilities. Hospitals do not have adequate highly qualified and professional doctors with the most advanced technology and full equipped health care units. Physiotherapy is a recently introduced specialty care but unfortunately, KSA lacks knowledge and experience in it. Saudi government witnessed limitations in specialists like accurate ovarian cancer. Hence, they should manage their budget and send them abroad to complete their studies.

Fifth: The study showed that 26.4 people prefer to travel abroad for oncology (cancer related treatment) Cancer is a dangerous disease and if not treated at right stage it can cause death, therefore an individual would prefer to travel to America or Western Europe for oncology treatment as they have professional oncology hospitals with trained medical staff, research centers, advanced treatment facilities and access to medication. 19.43% of the people prefer to travel abroad to seek diagnosis (modern diagnosis equipments or advances laboratory test) as early diagnosis can help save lives, the sooner it is known the sooner the treatment can take place. America and Europe have advanced diagnosis equipment and they provide accurate and correct information. Saudi Arab does not have advanced organ transplant set up which is eminent from the responses as 5.92% favor to travel abroad for an organ transplant. Only 0.23% of the people would want to travel to other countries for IVF or pregnancy assistance, as Saudi Arab has professional gynecologists available in the hospitals and people prefer to seek them for their treatment instead of spending a fortune to go to other countries. There is another limitation in Saudi Arabia which is the limited number of burn centers, and does not cater patients with severe injuries. Burn centers treat patients with severe burn injuries. Dr. Hamid says that there are only three centers with a centralized treatment for severe injuries are present in the capital. Only one room is available for the trauma causes every week while the cases exceed more than 60 every week.

Sixth: 62% of the Saudis are willing to spend 5%-15% of their income for medical health care system. 20.48% of the people are willing to spend 0-5% of their income for health care services. 10.24% of the people are not willing to sacrifice at all from their income for medical services while about 6.8% of the people are willing to sacrifice even more from their income for a better health care system or effective medical treatment and services.

Seventh” The study shows that 41.66% of the people are willing to spend SAR 0- 50,001 for medical tourism. 25.98% of the people are willing to go a little bit higher and spend SAR 50,001- 100,00 to go abroad and seek medical care. While, 15.19% of the people are willing to go higher and spend SAR 150,001 - 200,000 from their income and they will expect a well quality treatment from whichever country they will choose for medical services. However, only 0.49% of the people are willing to pay whatever it is required for medical tourism.

6.1.2. Analysis of Non-Saudi Responses

The questionnaire was circulated to 128 people from around the World by using e-forms such as Google forms. We selected the sample size by categorizing the target market as described earlier. In Google forms, respondents were given an opportunity to choose more than one option in some of the responses. The survey² results are analyzed as follow:

First: The study proves that about 28.12% of the people prefer to travel to Saudi Arab for medical tourism as one reason might be that mostly the respondents were from Islamic countries for physical and spiritual health, as there is a spiritual need when a person is ill. Religious tourism is the backbone of Saudi Arabia as it contains the two most holy places namely Makkah and Medina so usually people seek tourism packages with medical facilities packaged with Umrah or maybe even Hajj. Saudi Arabia also has a lot of medical facilities with 289 hospitals, 55,000 professional physicians and 55,724 beds. While 34.33% of the people refused to travel to Saudi Arabia for medical purposes, as patients travel to centers of excellence with serious diseases so they can be treated completely. There are also a lot of barriers like difficult visa processes as they usually delay visa which is not reasonable for someone who wants to seek early diagnosis. Inbound medical tourism has not as yet emerged in Saudi Arabia as well. Also, Saudi Arabi does not have affective campaign worldwide. There are also limited numbers of operating rooms in the hospitals. There is limited rehab access in Saudi Arabia and variation in medical facilities and medical in major and small cities which are highly populated like Najran, Jizan, Abha and Northern region. On small number of devices there is a significant demand from all over Saudi Arabia. We also lack specialists in all fields and they have less experience therefore cannot offer the best treatment. 37.5% of the people were confused so they answered maybe.

Second: 42.18% of the people chose Europe for international health tour as it provides high quality medical services, and most of the doctors usually speak English so language is not seen as a barrier. Also Europe universe health care system caters everyone so even if a foreigner is sick he/she will receive full treatment. Europe has pharmacists who can diagnose problem and prescribe medicines or remedies for it such has sinus problems, fevers, insomnia or urinary tract infections etc. 27.43% of the people prefer to go to middle east for international health tour, as UAE and Turkey are the top biggest middle eastern medical device markets, they have their own medical device

² Due to space constraint, detailed questionnaire's responses can be provided in a separate appendix (Appendix 2).

regulations, middle eastern countries usually import their medical devices from US or Europe so quality is guaranteed. Also if a person seeks to recover after treatment US is the best place to travel so about 15.62% of the people preferred to go to US for international medical tour, while the rest opted for Asia and Africa.

Third: The survey shows that 19.75% of the people are influenced by a country's environment as people are usually impressed by the high lifestyle, weather, economic condition, law and order condition of any country. It reduces stress and improves health. 18.51% of the people are influenced by the medical staff of the other countries as countries in Europe provides high quality medical services also India and Thailand provide good quality medical services but at an affordable price. Cost of treatment is also a factor which influenced 11.41% of the people as not everyone can afford high price medical treatment, for this they search a specific country which is cost effective. While 4.6% of the people are influenced by word of mouth and opt to choose a country.

Fourth: 23.82% of the people wanted to go to abroad for surgery, as surgery is treatment of injuries done by medical instruments or machines, there are various types of surgeries and there are a lot of risks involved in each type; therefore, people who want better quality treatment with little risk attached to surgery would choose to travel abroad to get the right and effective treatment. While majority respondents about 23.82% wanted to travel aboard for diagnosis, as diagnosis is important to know before the actual treatment starts because one can recover from a lethal disease. 17% of the people wanted to travel to abroad for cancer related treatment as not all countries have specialized oncologists or hospitals that provides early diagnosis or even treatment and since cancer needs to be treated critically and as early as possible otherwise it can lead to death. Other 10.5% of the people opted to go to abroad for cardiovascular diseases such as heart diseases, stroke and diabetes because these diseases require specialized treatment facilities and rehabilitation process. Specialized care and country's natural environment play a vital role in rehabilitation.

Fifth: Whenever an individual decides to travel abroad it is necessary for one to look at all the barriers involved, as from the survey about 23.41% of the people thought that language is a major barrier in order to travel to Saudi Arabia. Arabic is the native language of Saudi Arabia. A foreigner might face language issues during transportation, accommodation, navigation etc. 17.07% of the people thought that Saudi Arabia lacks the International standards health facilities as medical tourism in KSA is neglected by the private sector and government itself with no inbound medical tourism business present in the country. Saudi Arabia also has not collaborated with foreign

governments also they need to monitor their public hospitals. 16.58% people said Saudi A has a strict policy for visas non-Muslims, as Saudi Arabia is the major religious place for Muslims therefore they do not allow easy access to non-Muslims while, 15.12% of the people thought that the environment was unfriendly mainly because of their strict rules and policies for everyone especially women.

Sixth: The study shows that 57.3% of the people wanted to visit Saudi Arabi in the mere future for job opportunities as we have the biggest source of income from oil and then second biggest source of income from tourism (Muslims mainly) Also it is predicted that their income would reach in 2019 around US\$ 63.7 billion from international travel. Therefore a Muslim individual would want to seek job opportunities there also it will be easier for him/her to perform umrah or hajj. 26.22% of the people wanted to travel to Saudi Arabia in the future in other to meet with their family member or other relatives, while less respondents chose education, health tourism and hajj as an important factor to travel to Saudi Arabia.

Seventh: 36.2% would likely visit Saudi Arabia if it offers international standard of heath tourism. 26.6% people were very likely to travel if any such thing happens in the future. 14.51% would not want to go regardless if it offers international health tourism or not, while 20.96 % of the people were uncertain about their decision about travelling to Saudi Arab; while, few wanted to travel to Saudi Arabia if the trip was subsidized by the government which is very unlikely to happen.

Eighth: Around 50.76% of the people didn't know how much they are going to spend on their treatment in Saudi Arabia this might be due to lack of research or awareness among the people. 23.80% of the people would spend as much as needed as they might have already assigned a budget for medical care or treatment. People who were willing to spend SAR 50,001 - 100,000 from their income for treatment in Saudi Arabia were 9.52% and 8.73% of the people were willing to spend SAR 0 - 50,000. While the rest did not want to avail such services or did not believe that individuals should be charged for healthcare services.

7- Quantitative Analysis

Quantitative analysis is done to identify relationship between two variables and the dependency of one variable on another. Quantitative analysis is the essence of findings because qualitative data may not provide accurate answers to research objectives. Also, there are research questions whose answers cannot be found through qualitative research. For example: impact of tourism on GDP.

7.1. Prelude

Medical tourism is a sub sector of tourism industry. Tourism industry is one of the biggest contributors to GDP of Saudi Arabia however, medical tourism has not been a very popular sector because most tourists come to Saudi Arabia for religious reasons and the government had not focused on medical industry in past. So, data of from medical tourism industry has great outliers. Outliers do not provide actual picture of the analysis. The primary reason is that the industry has seen sudden ups in past couple of years, particularly in 2012. Therefore, data which portray the closest picture of the reality should be used and thus, we are going to use tourism statistics which are collected from MAS and MoH.

7.2. Variables

T_t : Total employment in time t

T_{t-1} : Total employment in time $t-1$

A_t : Number of arrivals in time t

M_t : Employment in tourism sector in time t

The following regression equations will be estimated:

$$T_t = \alpha + \beta_1 T_{t-1} + \beta_2 A_t + U_t \dots \dots \dots (1)$$

$$M_t = \gamma_0 + \gamma_1 A_t + U_t \dots \dots \dots (2)$$

Table (2): Regression results with initial values of total employment (T_{t-1}) and number of arrivals (A_t), Dependent Variable: Total employment (T_t):

Explanatory Variable	Coefficient	t-value	p-value	R^2	Adjusted R^2
Constant	4144367	2.60	0.03	0.80	0.75
T_{t-1}	0.08	0.23	0.82		
A_t	0.33	2.25	0.05		

Source: Author's estimations based on data collected from MAS and Trading Economics

Since the model is a multiple regression model, we will consider Adjusted- R^2 instead of R^2 . The model represents the goodness of fit. Clearly, tourism has a positive and significant impact on employment in Saudi Arabia.

Table (3): Regression results: Number of arrivals (A_t) is the independent variable. Dependent Variable is: Employment in tourism sector (M_t):

Explanatory Variable	Coefficient	t-value	p-value	R^2	Significance F
Constant	310649.6	2.94	0.016	0.36	0.05
A_t	0.02	2.24	0.051		

Source: Author's estimations based on data collected from Trading Economics and MAS

The coefficient of determination (R^2) is 0.36. This low value of R^2 is, clearly, because the regression equation includes only one explanatory variable (A_t). In spite of the small value of R^2 , we can rely on the model because the Significance-F is not greater than 0.05 and, hence, the model represents the goodness of fit. More importantly, the regression results show that employment in tourism sector is positively affected by the number of tourists with a 95 percent confidence level.

8- In Depth Interviews

Following are the in depth interviews we conducted. Details of Each of the following are discussed below in detail.

8.1. Interview with Dr. Fayed A. Aldandashi

An interview with Dr. Fayed A. Aldandashi, Assistant Deputy Minister of Health Investment Development, was conducted to find out what a government official has in mind about medical tourism. Government of KSA gave Dr. Fayed two years to come up with a proposal of medical tourism. He told that he told the government that medical tourism cannot flourish in KSA because KSA has a law in which the Ministry has the authority to select hospitals for patients. Also, patients are not allowed to stay unnecessarily after the necessary and primary care. Despite everything, he is convinced that medical tourism is possible in the Kingdom of the Saudi Arabia. When he gave his verdict, medical tourism was not possible because the country was totally oil driven and nobody was ready to own the medical tourism sector but now, Saudi Arabia is looking towards diversifying its economy and there are owners to own the initiative.

He identified some of the weaknesses in our medical sector. He identified that there is a shortage of staff in Saudi Arabia. Saudi Arabia is dependent upon foreign nurses, doctors and medical staff. If Saudi Arabia has to compete and flourish, local nurses and staff have to be trained because prices in other Middle eastern countries are low such as Jordan which has 100% local in medical faculty.

He believes that Saudi Arabia should also build infrastructure to cater advanced diseases such as cancer and also facilities for rehabilitation programs like drug addiction as this is easy and achievable.

Mr. Fayed identified a very crucial fact that the government of Saudi Arabia spends 4 billion SAR to send patients abroad for treatment. If it improves its own medical system, the government will receive a business of around 3 Billion SAR and this does not involve “OUTBUCKET” which are the number of patients who spend and travel within and outside KSA for treatment from their pocket. By some seriousness towards the sector, the government can stop 10 billion SAR that goes outside each year in the treatment of patients both gutbucket and sent by the government. He believes that the government should build more hospital like King Faisal Takhsusi Special Hospital for Tumor as this is the main hospital which attracts foreign patients.

8.2. Interview with Prof. Dacaro from Bern university hospital in Switzerland

An interview was conducted with Prof. Dacaro of the Bern Hospital to find out his opinion on the topic. He pointed out that patients’ main priority is good climate, safety and personal service before choosing a medical tourism destination. These features can be found in medical hotels and private clinics dedicated to wellness.

Saudi Arabia has aimed at diversifying sources of revenues and modernization, which includes the development of Red Sea Beach Resort. The Red Sea Beach Project could be an ideal location for the hotels and clinic structures dedicated to wellbeing and cosmetic improvement, thus creating the flow of medical tourists to the Kingdom.

He identified that the patients with serious diseases travel to mostly at University hospitals with modern technology and with experience in a given specialty. This added patients who to famous university hospitals are more of a burden than money generator however, most well known university medical centers and other non-profit institutions have well organized international patient services. In most cases the motivation is to enhance their reputation as centers of excellence and to emerge among competitors. The immediate consequence of an increased reputation is an increase in government funding. An example of this undisputable fact is Inselspital, the University Hospital of Bern. It is one of the top hospitals in Switzerland with relevance in most specialties. Its government supported budget is in the order of 1 billion Swiss Francs a year. The international activity generates a very small fraction of the total budget. Inselspital is a great and famous center

because of its staff and equipment. Staff includes not only doctors but technical personnel and nurses. The competence of the staff working at a non-profit institution is the backbone of the international reputation.

His opinions for medical tourism in Saudi Arabia were very positive. He said that a medical project attached to the Red Sea Resort development would have a guaranteed success in the field of wellness. Saudi Arabia has good hospitals which are perfectly able to treat most diseases. In order to improve the quality at an international level that could attract patients from other countries, the Kingdom should train its own nurses. It is known that Saudi hospitals rely on foreign nurses, who most of the time does not have the level of technical education that modern medicine requires. Saudi Arabia has the means and competence to develop an international medical insurance system available to Saudi nationals and to anyone in the Middle East. An international medical insurance with the financial backup of the KSA government would be a serious source of revenue to sustain a solid medical project, which ultimately would be the key for the development of the so called “medical tourism”.

8.3. Interview with Mayo clinic

An interview was conducted with representatives of Mayo Clinic. They identified that reputation and brand of any particular hospital or clinic differentiates with other institutions. Patients from abroad are frequently impressed by the proper system of the tertiary care and well established integrated care model. People prefer medical services which are nearby as location plays an important role. Good environment also is a factor that attracts international patients to any hospital, along with post management care and cost of therapy.

They also identified the reasons why Mayo Clinic is considered one of the best hospitals. Medical staff members are trained by either the doctors or the residents. Hire more professional doctors who are able to practice medical efficiently. Core concept of a hospital should be of putting the needs of the patients above everything. International conferences exposure is given to the staff members as it will expand the brand recognition. Original curriculum system can be easily developed through online methods as medical courses are required for medical licensure.

They were very positive about the scope of medical tourism in Saudi Arabia. He said that the red sea medical project will provide success for medical tourism in KSA. KSA already has high quality hospitals. In order to improve themselves, they should train their doctors and nurses, provide them with international exposure as well. International medical insurance system should be devolved

and should be used by Saudi citizens or even people from middle east. Through the international medical insurance system, the government of KSA will be in touch with the other foreign market and can become a huge source of revenue for KSA.

8.4. Other Interviews

Interviews were conducted to get opinions of people who work in Ministry of Health and the hospitals to get firsthand knowledge from their experiences. This section consists of four interviews. Following are the names of interviewees:

Mr. Amjad – Ministry of Health

Ms. Nora – Ministry of Health

Dr. Hamid – Specialist in King Saud Medical Complex

Dr, Majid – Consultant in National Guard Hospital

The experts were convinced that Saudi Arabia has the potential to be the medical tourism destination. Saudi Arabia has the best equipment and state of the art medical facilities but still locals do not trust the medical system of the country because of two reasons which are delay in scheduling the appointments and the inaccuracy of clinical diagnosis and ill performed treatment. The reasons behind inaccuracy are that medical problems are evolving day by day and accordingly, medical equipments but due to lack of research and development centers, the country imports medical equipment. Saudi Arabia has a disorganized healthcare system as identified by Dr. Amjad.

8.5. Findings from In-depth Interviews

To make the research more authentic, I conducted in depth interviews from medical experts in both Saudi Arabia and abroad. Following are the names of the experts:

Mr. Amjad – Ministry of Health

Ms. Nora – Ministry of Health

Dr. Hamid – Specialist in King Saud Medical Complex

Dr, Majid – Consultant in National Guard Hospital

Mr. Samir – Mayo Clinic in Singapore

Prof. Dacaro – Bern Hospital

Dr. Fayed - Assistant Deputy Minister of Health Investment Development

All of the above experts were convinced that reputation, perception and referral play an important role when a patient opts for medical tourism destination. Saudi Arabia has relatively poor reputation in the world when it comes to medical treatment. According to Dr. Hamid, Saudi Arabia

has the best equipment and best medical facilities available and his words are also backed by JCI accreditation in which there are more than 100 Saudi Hospitals that have accreditation. The main problem is that the locals do not trust in the Saudi Medical System and according to Dr. Hamid, two reasons stand out which are delay in scheduling the appointments and the accuracy of the clinical diagnosis and the treatment is not 100%. The main reason behind the first reason is mismanagement as identified by Dr. Amjad who identified Saudi Medical System as “Disorganized healthcare system” because the hospitals are run on so called American model. Ms. Nora rightly identified the main reason behind inaccuracy in clinical diagnosis and treatment. Diseases or variable in diseases are changing and equipment to treat and diagnose those diseases are also changing. She identified that Saudi Arabia is a follower as whatever new medical equipment is invented in west reaches KSA after a year or two and that causes inaccuracy because diseases do not wait one year to travel from one continent to another. One of the reasons is that Saudi Arabia is an importer of medical equipments. It does not have its own research and development centers. According to Mr. Amjad, people also check out factors like available of research center in hospitals before choosing a hospital. According to Global Buyers Survey, 54 percent of the patients are referred to a health care provider by a Medical Tourism Facilitator/insurance company or the government. 16 percent are referred by a physician. 22 percent of patients are self-directed finding a provider either by doing Internet research or via word of mouth.

Staff training is necessary because there are many expensive and complex equipments imported by the Saudi government but the staff is not trained enough to operate the equipments, according to Dr. Hamid. Moreover, the country needs to train local nurses because Saudi Arabia is known to rely on foreign nurses who lack professional skills and are not trained. Some of the barriers identified by experts are:

The main problem in Saudi Arabia is the underestimation and neglect of medical tourism by Government and the private sector. Saudi Arabia, according to the opinion of medical tour operators, has not been able to make its own position in the medical tourism sector or business. The only solution to this problem is to construct a long-term plan by the respected authorities or government and rebuilt the infrastructure for medical tourism.

Even after achieving quite a lot of benefits from E-health, there is a need to pay particular attention to the foreign patients who visit just for the sole propose to get medical attention in Saudi Arab.

For this the requirements are complete and proper information about where the patients want to visit for their medical treatment, a proper and more systematic national health information system should be arranged which could also be beneficial for the international community.

In Saudi Arab it is quite difficult arduous to get visa for medical purposes, there should not be a delay as it is unfavorable for those patients who visit with early diagnosis and medical treatment been their first priority. In order for this delay to get reduced the government should see the importance of emerging medical tourism and then make visa policies accordingly.

The most important thing is to maintain cogent partnerships with medical tour operators as these respective firms are specialized in travel facilities and are able to abet in the services throughout the entire trip. The medical units can take the responsibility of scheduling appointments, booking rooms in hotels and be assist people on how to get the medical visa.

As mentioned earlier, Saudi Arabia has enough medical facilities to treat complex diseases, but it lacks medical staff and doctors.

All experts are on the same page that good environment is also a key to attract international patients to the country because people do not only check medical facilities and reputation of hospitals but also the overall environment such as weather, lifestyle, natural beauty and tourist locations because environment plays an important role in after treatment phase of the patient. Rehabilitation is very important after surgery and good environment helps in rehabilitation process. According to Prof. Dacaro, the main priority of medical tourists is good climate, safety and personal service. This can be found in “medical hotels” and “private clinics” dedicated to “wellness”. Saudi Arabia has initiated a process of diversifying and modernizing the economy and its revenue streams and vision of 2030 is a living example of that. Similarly, Red Sea Beach Project has been launched in which 50 Red Sea islands will be converted in resorts for tourists. The Red Sea Beach Project would be an ideal location for hotel and clinic structures dedicated to wellbeing and cosmetic improvement, thus creating a flow of “medical tourists” to the Kingdom.

According to experts and JCI accreditation, Saudi Arabia has the best medical facilities but due to mismanagement and unavailability of medical staff, local and international people do not trust the medical system. According to experts, the country can make medical system attractive if medical system is privatized. Experts are convinced that privatization will increase level of services. According to Ms. Nora, the current system works on patient-oriented system. Privatization will convert this into recovery-oriented system. According to Dr. Majed, privatization will lead to

better Health Care sector, better training, adopting standardized quality assurance measures, research and development.

According to Dr. Hamid, Saudi Arabia is currently focused on transferring cases abroad instead of investment inside, Dr. Hamid believes that having the needed infrastructure and all necessary facilities to eventually address many of the public health challenges faster, better, and more cost-effectively than if they were addressed from the outside.

Table (4): Number of Patients Send Abroad in Last Five Years by Saudi Government:

Year	Number of Patients Sent Abroad For Medical Treatment
2016	1721
2015	3858
2014	3438
2013	2980
2012	897

Source: Ministry of Health

If Saudi Arabia's medical system improves and medical specialists are available, the country will not have to send these many patients abroad for medical treatment. People leave their home country and travel to other countries to seek better medical treatment. According to Global Buyers Survey, more than 50% of the patients who leave their home to receive medical care do so because they feel they can receive higher quality healthcare in another country. 22 percent travel outside their borders because the cost of healthcare in their own country is too high. Saudi Government should make the health sector better so that it does not have to send locals abroad for treatment but also attract foreigners to get medical services. This will eventually make the Saudi tourism and medical sectors better and will diversify Saudi Economy which is the vision of 2030.

9- Secondary Research Analysis

Saudi Arabia has great potential in not only international medical tourism but also domestic medical tourism. The medical tourism sector is not well developed as there are not enough doctors, nurses and staff but still people travel within the country for medical treatment. In 2016, the total number of domestic trips in the Kingdom for the purpose of medical tourism (325.6) thousand trips during 2016, and Riyadh has seen the largest number of trips, which amounted to (225.0) thousand trips, followed by the region of Mecca (30.9) thousand trips, and then Asir (17.7) and the

total number of domestic trips in the Kingdom for therapeutic tourism reached were 382.9 thousand trips. Riyadh region has the largest number of these flights, reaching 239.4 thousand trips, followed by the Eastern Region (50.4 thousand).

Medical Tourism has the potential to contribute handsomely to country's employment as medical tourism supports transportation and accommodation businesses naturally because when people are away from their hometowns, they need a place to live. It is imminent from the fact that hotel accommodation was the most used accommodation by the medical tourist trips by (60.8%) of the total trips as well as the trips of local medical tourism by 49.8%. You can see from the numbers that even local Saudis need accommodation when they move from one city to another. Domestic medical tourism also proves to be fruitful for restaurant industries as people who travel by road from one city to another city during the journey to eat. In 2016, the highest number of trips was in terms of transportation using 77.4% of total medical tourism trips, followed by flights by 21.4%. Medical tourism has the potential to increase number of SMEs because as you can see, people only spend 51.6% of the amount on medical treatment, the rest of the amount is spent on shopping, accommodation, internal transport and food and beverages. SMEs can be a great source of employment as well as contribution to the country's economy. The expenditure of tourists for the purpose of medical tourism during the year 2016 amounted to approximately (165.7) million Saudi Riyals, distributed as follows:

- o Treatment by (51.6%)
- o Shopping by (8.9%)
- o Accommodation facilities by (16.2%)
- o Internal transport by (8.4%)
- o Food and beverages by (11.0%)
- o Other (2.8%)

The expenditure of local tourists for the purpose of medical tourism during the year 2016 amounted to approximately (581.2) million Saudi Riyals distributed as follows:

- o Other by (23.6%)
- o Local transfers by (14.2%),
- o Accommodation facilities by (32.4%),
- o Shopping by (11.2%)

As you can see from above figures that medical tourism can be a great inducer for SMEs and a contributor to GDP and employment level.

Saudi Arabia has been sending its patients abroad for medical treatment and this has proved to be costly. The government has to find an alternative to minimize the cost. The country has 100 JCI accredited facilities but still, it is forced to send patients abroad because of the unavailability of professional doctors, nurses and staff. In 2016, the total number of departures for the purpose of medical tourism outside the Kingdom was 187.2 thousand trips during 2016. The GCC region and the Middle East witnessed the largest number of trips, with 162.7 thousand trips representing 86.9% (10.1) thousand trips by (5.4%). The expenditure of tourists leaving the Kingdom for the purpose of medical tourism in 2016 amounted to approximately (1.5) billion Saudi Riyals, distributed as follows:

- o Other (47.7%)
- o Accommodation by (24.4%),
- o Shopping by (1.5%),
- o Food and beverages by (15.7%)

Saudi Arabia is earning less from medical tourism than it is spending on sending patients abroad for medical treatment. The primary reason is that Saudi Arabia's medical sector is disorganized and mismanaged. The country has great medical facilities but does not have experts to maximize the return. The country has to train its nurses and doctors in order to compete with other medical tourism destination because one of the primary reasons is cost cutting and if people cannot save money by travelling to Saudi Arabia for medical treatment, they will choose Jordan or any other destination.

10- Recommendations

Saudi Arabia has great potential in medical tourism sector but due to lack of attention and lack of planning by the government, the sector has not been contributing to the GDP of the country. Saudi Arabia has the best medical facilities but due to lack of expertise, the medical resources of the country are underutilized.

For a start, Saudi Arabia has to identify the distinct secret or unique selling point for medical tourism. To have a sustainable growth in this sector, it is recommended to have a focus on few areas and have complete authority over it. This might be better than providing all kinds of services but not quality. We have examples in the world where some countries have focused on one area of

expertise like Thailand is the country known for mastery in cosmetic surgery, China has expertise in treating cells while Israel has focused on treating in-vitro fertilization. Therefore, it is very important for Saudi Arabia to identify different fields which can be focused and funnel down the fields to find the best one which can give Saudi Arabia competitive advantage.

Saudi Arabia can collaborate with international markets as this can bring benefits such as awareness and publicity across the borders and complete ingress facilities of Saudi Arabia. Moreover, Saudi Arabia relies heavily on foreign nurses and staff. A collaboration with international market will decrease the cost of travel, accommodation and compensation of staff and nurses. Saudi Arabia's government can pitch the idea of having the best medical facilities and contribution by collaboration with a foreign government will completely transform Saudi Arabia's medical sector.

Saudi Arabia should build a strong E health network which provides information to all foreigners about medical tourism in Saudi Arabia. The website or mobile app should help identify foreigners a potential hospital for their treatment and the total cost that will be incurred in accommodation, travel and food. This website or application will solve all the problems of medical tourist in one place. The medical tourist should be allowed to book a hotel, air ticket and everything through the website. So, it will make the process easier as many foreigners face trouble when they travel to Saudi Arabia because in Saudi Arabia, people generally speak Arabic.

Saudi Arabia should invest on training local nurses, doctors and staff because Saudi Arabia depends heavily on foreign nurses and doctors. This dependency increases the cost of treatment in Saudi Arabia because foreign nurses, doctors and staff require accommodation, traveling allowance, compensation and other benefits. The reason why Jordan is a cost effective medical tourism destination is because it depends completely on local nurses and doctors.

Saudi Arabia has strict visa policies which hinders the growth of tourism in Saudi Arabia. The government should make lenient visa policies so that it can attract patients from around the world. Moreover, Saudi Arabia has to build strong research and development centers because the government of Saudi Arabia depends heavily on western countries for medical equipments. The diseases are changing and the equipments are changing along with it. Saudi Arabia needs a strong research and development center.

Moreover, the government should attach medical tourism sector with Red Sea Beach Resort project as it will not only provide success to Red Sea beach resort project but also success to

medical tourism. Hotels in Red Sea resort can be turned into wellness and rehabilitation centers so that patients who come for medical treatment go to Red Sea resort for their post treatment and rehabilitation. Red Sea Resorts will be the perfect tourism location for patients.

Saudi Arabia's government needs to realize the importance of resources which are not utilized properly. Medical tourism sector is a great opportunity for Saudi Arabia to add diversification to the economy which is the aim of vision of 2030.

References

1. Abdelelah S Saaty and Rumaiya S Syed (2012) An Analysis of Scope of Medical Tourism in Saudi Arabia. American International Journal of Contemporary Research 2(7): 1-6.
2. AL-Ahmadi, H. and Roland, M. (2005). Quality of primary health care in Saudi Arabia: a comprehensive review. International Journal for Quality in Health Care 17(4): 331-346.
3. Borjas GJ, Grogger J, and Hanson GH. (2012) Comment: on estimating elasticities of substitution. Journal of the European Economic Association 10(1): 198-210.
4. Candela G and Figini P. (2010) *Economia del Turismo e delle Destinazioni*. Milano: McGraw-Hill.
16. Colliers International (2012). Saudi Arabia Healthcare Overview. Retrieved 6 September 2017, from <http://www.colliers.com/~media/files/emea/emea/research/speciality/2012q1-saudi-arabia-healthcare-overview.ashx>
5. Development of Medical Tourism in Europe. (2017). Wellness-Travels. Retrieved 9 November 2017, from <http://wellness-travels.com/europe-lead-the-world-medical-travel/>
6. Fahd M. Albejaidi (2010) Healthcare System in Saudi Arabia: An Analysis of Structure, Total Quality Management and Future Challenges. Journal of Alternative Perspectives in the Social Sciences 2(2): 794-818.
7. Forbes. (2017). Forbes.com. Retrieved 9 November 2017, from <https://www.forbes.com/forbes/welcome/?toURL=https://www.forbes.com/sites/luizaolsczucuk/2013/10/22/central-europe-becoming-a-big-destination-for-medical-tourism/&refURL=https://www.google.com.pk/&referrer=https://www.google.co.pk/>
17. Gulf News (2016). Gulf News – Health: Dubai prepares for influx of 1.3m medical tourists by 2021. Retrieved 6 September 2017, from <http://gulfnews.com/news/uae/health/dubai-prepares-for-influx-of-1-3m-medical-tourists-by-2021-1.1818558>.
18. Immigration (2006), Retrieved from <http://www.immi.gov.au/>

19. International Medical Tourism Journal – Country Report – Saudi Arabia (2017) International Medical Tourism Journal. Retrieved 22 October 2017, from foreword <https://www.imtj.com/country/SA/>
20. Joint Commission International (2013). Joint Commission International (JCI) accredited organizations. Retrieved 5 September 2017, from https://www.jointcommissioninternational.org/pathway/?mm_campaign=AF975E53D8A856D55A26A6274BD2C986&keyword=joint%20commission%20international&matchtype=p&snid=14&utm_source=google&utm_medium=cpc&utm_campaign=brand&adgroup=brand&k_clickid=dfc5be18-50f2-43be-b061-e6383968777f
8. King B (1994) What is ethnic tourism? An Australian perspective. *Tourism Management* 15(3): 173-176.
21. Living, I. (2017). Best Healthcare in the World: Top 5 Countries in 2017 - International Living. International Living. Retrieved 9 November 2017, from <https://internationalliving.com/countries-best-healthcare-world/>
22. Medical Tourism Association (2017) Medical Tourism FAQ. [Medicaltourismassociation.com](http://www.medicaltourismassociation.com). Retrieved 20 November 2017, from <http://www.medicaltourismassociation.com/en/medical-tourism-faq-s.html>
9. Medical Tourism Destinations | Health-Tourism.com. (2017). Health-tourism.com. Retrieved
23. Medical Tourism Magazine (2012) Saudi Arabia's Inbound and Outbound Medical Tourism- Interview with Medical Attaché. Retrieved 9 November 2017, from <http://www.medicaltourismmag.com/saudi-arabiaaes-inbound-and-outbound-medical-tourism-interview-with-a-medical-attacha/>
24. Medical Tourism. (2011). Michelle R.Yagoda, M.D., P.C. Retrieved from <http://www.dryagoda.com/surgeonssecrets/medical-tourism.html>
25. Medical Tourism: For the Beauty- and Travel-Obsessed. (2017). Thewisetraveller.com. Retrieved 9 November 2017, from <http://www.thewisetraveller.com/Articles/ID/4680/Medical-Tourism-Hotspots>
- 9 November 2017, from <https://www.health-tourism.com/destinations/>.
26. P.K. Abdulghafour (2010) Arab News: 21 government hospitals granted CBAHI accreditation. Retrieved 10 September 2017, from <http://www.arabnews.com/node/351192>.

10. Prescott D, Wilton D, Dadayli C, et al (2005) Travel to Canada: the role of Canada's immigration populations. *Applied Economics* 37(6): 651-663.
27. Ranking Web of Hospitals (2015) Top 300 Hospitals in the Arab World. The Cybermetrics Lab. Retrieved 20 October 2017, from http://hospitals.webometrics.info/en/arab_world
11. Saudi Arabia - Medical Tourism Index. (2017). Medical Tourism Index. Retrieved 9 November 2017, from <https://www.medicaltourismindex.com/destination/saudi-arabia/>
12. Saudi Arabia Medical Tourism | Health Care Centers in Saudi Arabia. (2017). Placidway.com. Retrieved 9 November 2017, from: <http://www.placidway.com/country/65/Saudi-Arabia-Medical-Tourism>.
13. Seetaram N and Dwyer L (2009) Immigration and tourism demand in Australia: a panel data analysis. *Anatolia: An International Journal of Tourism and Hospitality Research* 20(1): 212-222.
14. Shahzad Khan and Md. Shariful Alam (2014) Kingdom of Saudi Arabia: A potential destination for medical tourism. *Journal of Taibah University Medical Sciences* 9(4): 257-262.
28. The Department for Professional Employees (2016) The U.S. Health Care System: An International Perspective. Fact Sheet, August 2016. Retrieved 9 November 2017, from <http://dpeaflcio.org/wp-content/uploads/US-Health-Care-in-Intl-Perspective-2016.pdf>
29. The Economic Times (2015). The Economic Times – Healthcare. Retrieved 30 October 2017, from <https://economictimes.indiatimes.com/industry/healthcare/biotech/healthcare/indian-medical-tourism-industry-to-touch-8-billion-by-2020-grant-thornton/articleshow/49615898.cms>
30. Vision 2030's forward (2017). Vision 2030 Homepage. Retrieved 20 November 2017, from <http://vision2030.gov.sa/en/foreword>
15. Williams AM and Hall CM (2002) Tourism, migration, circulation, and mobility. The contingencies of time and place. In: Hall CM and Williams AM (eds), *Tourism and Migration. New Relationship between Production and Consumption*. Dordrecht: Kluwer Academic Publishers, pp. 1-52.
31. Worldwide Visa Bureau. (2017). Saudi Arabia Visa. Retrieved 9 November 2017, from <http://www.visabureau.com/worldwide/saudi-arabia-visa.aspx>.

A Literature Study Related to the Concepts of Consumer Ethnocentrism and Origin Country Effect

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The concept of ethnocentrism, which has an important place in purchasing decisions, has been found as a consumer ethnocentrism in marketing literature. Consumer ethnocentrism, which has a critical prescription for the consumer profile, especially influenced by globalization, refers to the products of the countries to which the persons belong, in other words, to regard the domestic products as superior, not to buy the foreign products, ie foreign products. Another concept associated with this concept, which has a critical prescription for the determination of consumer behavior by marketing researchers and the formation of accurate marketing strategies, is the concept of country of origin. The researchers provide important clues about the purchasing decisions of the country of origin, which correspond to the positive or negative effect of the purchased products on the consumer's country of origin.

As a result of the interpretation of the concept of ethnocentrism in consumer behavior, the concept of consumer ethnocentrism emerged. For the first time, Terence A. Shimp, in his study of what he had done, talked about the concept of ethnocentrism in relation to marketing. The main idea underlying the concept is; is the question of the correctness of purchasing foreign products in consumers' purchasing decisions. When the relevant literature is examined, it is concluded that the studies on consumer ethnocentrism have changed according to the regions. Ayse and Altuna's (2008), result of work where they have done in the Turkey and TRNC was found that TRNC consumer is less ethnocentric, has also achieved the results they show less ethnocentric consumer trends of the consumers of the TRNC in favor agreement with the Greek side. Javalgi et al. (2005) have indicated that young consumers are prone to consume domestic goods. Guo and Zhou (2017) conclude that consumers have more positive thoughts when evaluating domestic goods and services as a result of their work on ethnocentrism. The studies reveal that different variables such as social class, education, income, foreign travel frequency and purchasing frequency are inversely related to consumer ethnocentrism (Ari ve Madran, 2011: 18).

The first study on the influence of the country of origin, known as the effect that the positive image of the country imposed on the product had on the purchasing decisions, was made by Schoolar in 1965. As a result of this work in Guetemala, the country of origin has emerged as an important

factor in evaluating the products of consumers and the result that underdeveloped countries are negatively evaluated at this point is obtained (Coskun, 2013: 24). The "country of origin", which can be defined as the country in which an operator can be defined as the motherland of the product or service, or the company that markets the brand in the minds of consumers, is started to be perceived as a country image over time (Armağan and Gürsoy, 2011: 69-70, Pereira, 2005: 103). Although the concept of consumer ethnocentrism and the effect of country of origin are handled independently of each other, it is actually two important concepts closely related to each other. Namely; the effect of country of origin is a concept that is used in the purchasing phase according to the level of ethnocentrism of the consumer who faces the consumer while evaluating the product in consumer behavior and is basically related with ethnocentrism. According to Yoo and Donthu (2005), consumers with ethnocentric tendencies think that imports of foreign goods harm the country's local employment, economy, patriotism and nationalism, and therefore the product country of origin information is of great importance. Consumers without ethnocentric inclinations, on the other hand, show an objective approach to product imports, without regard to the country of origin of the product, so that consumers with high ethnocentrism levels prefer domestic products (Yoo and Donthu 2005, 12). Ha (1998) noted that the fact that imported products are not important for non-ethnocentric consumers is considered as merely beneficial objects, referring to the relationship between country of origin and consumer ethnocentrism. Thelen (2006) stated that the most important factor for consumers with low ethnocentrism is price, while for consumers with high ethnocentrism, the most important factor is the concept of country of origin.

Keywords: Ethnocentrism, Consumer ethnocentrism, Country of origin effect, Purchase Decision

References

- Arı, S. Emin ve Madran, Canan (2011). Satın Alma Kararlarında Tüketici Etnosentrizmi ve Menşeye Ülke Etkisinin Rolü. Öneri.Dergisi, C.9.S.35. Ocak 2011.15-33.
- ARMAĞAN, E., A., ve GÜRSOY, Ö., "Satın Alma Kararlarında Tüketici Etnosentrizmi ve Menşeye Ülke Etkisinin Cetscale Ölçeği ile Değerlendirilmesi", Organizasyon ve Yönetim Bilimleri Dergisi, 3(2), 2011 ISSN: 1309 -8039
- Aysuna, C. & Altuna, O.K. (2008). Türkiye ve KKTC Tüketicilerinin Demografik Özellikler Açısından Etnosentrizm Düzeylerinin ncelenmesine Yönelik Bir Karşılaştırma. Öneri, 8(29), 147-157.

- Coşkun, M. (2013). Tüketici Satın Alma Niyeti Üzerinde Menşe Ülke Bilgisinin Rolü: Deri Ayakkabı Sektöründe Bir Uygulama. İTÜ, Fen Bilimleri Enstitüsü, İşletme Mühendisliği Ana Bilim Dalı Yayınlanmamış Yüksek Lisans Tezi, İstanbul.
- Guo, G. ve Zhou, X. (2017). Consumer ethnocentrism on product judgment and willingness to buy: A meta-analysis. *Social Behavior and Personality: an international journal*, 45(1), ss. 163-176.
- Ha, C.L. (1998). The Influence of Consumer Ethnocentrism and Product Characteristics on Country of Origin Effects: A Comparison Between U.S. Consumers and Korean Consumers. Doktora Tezi, Faculty of the Graduate School of the University of Texas, Arlington.
- Helgeson, J. G., Kurpis, L. H. V., Supphellen, M. ve Ekici, A. (2017). Consumers' Use of Country-of-Manufacture Information? Norway and the United States: Ethnocentric, Economic, and Cultural Differences. *Journal of International Consumer Marketing*, 29(3), ss. 179-193.
- Javalgi, R.G.; Khare, V.P.; Gross, A.C. & Scherer, R.F. (2005). An application of the consumer ethnocentrism model to French consumers. *International Business Review*, 14(3), 325-344.
- PEREIRA, A., HSU, C., C., KUNDU, S., K., "Country-of-origin image: measurement and cross-national testing", *Journal of Business Research*, 58(1), 2005, s.103-106.
- Shimp, T.A. & Sharma, S. (1987). Consumer Ethnocentrism: Construction and Validation of the CETSCALE. *Journal of Marketing Research*, 24(3), 280- 289.
- Thelen, S. J.B., Ford, R.D. Honeycutt (2006). Assessing Russian Consumers imported Versus Domestic Product Bias. <https://doi.org/10.1002/tie.20116> Cited by: 13.
- YOO, B., ve DONTU, N.,(2005). "The Effect of Personal Cultural Orientation on Consumer Ethnocentrism: Evaluations and Behaviors of U.S. Consumers Toward Japanese Products", *Journal of International Consumer Marketing*, 18(1/2) 2005, 7-44.

Comparing The Effective Factors of Traditional Archers' Bow Brand Preferences

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Abstract

The effective factors of traditional archers' bow brand preferences were tried to explain for present study. According to that, the aim of this study is to compare and determine the effective factors of traditional archers' bow brands preferences from the multicultural perspective. In depth-interviews and focus group studies were conducted with senior and experienced traditional archers from different countries in order to collect the data. Content analysis technique was used to analyze the data and the proposed model was created accordingly. Traditional archers from Turkey and some European countries were participated to the research. According to the results of the analysis; perceived price of brand, customer relationships, product characteristics, and product availability were found as determiners of traditional archers' bow brand preferences.

Keywords: brand preference, traditional archery, content analysis

1. INTRODUCTION

From ancient times to the use of guns, the bow was a very significant hunting tool and weapon of battle field around the world. It is used by almost all cultures and is often mentioned as one of the most important inventions. The significance of bow and arrow has been subjected to many archery traditions and its practices until today, as well as many written and oral histories, artistic representations, literature, and folklore. Even though the use of bow and arrow for military and hunting activities declined after the invention of guns, archery has remained as a sport in many countries (Grayson, French and J. O'Brien, 2007). Many organizations were established to support archery activities. In the nineteenth and twentieth century, the Western traditions of recreational archery were developed to the modern sport of archery (Klopsteg, 2004). It is mainly a competitive sport and recreational activity. Both modern and traditional archery are practiced worldwide today among many countries.

Traditional archery has become widespread today. For the competitions, having a decent bow has gained importance. Therefore, necessity of differentiation and branding has become an obligation for bow makers to survive in this competitive era. According to that, the main purpose of this study

is to find out traditional archers' bow brand preferences. The concept of brand loyalty states that a consumer chooses a brand among the other brands and does not replace with another (Kotler and Keller, 2003). Product image is the component which plays an important role in the brand preference and that image is based on consumer's awareness and the related information about brands (Kwok, Uncles and Huang, 2006).

In this study, it is planned to find out traditional archers' bow brand preference and its effective factors. According to that, this study tries to find answer for the question: "How perceived price of brand, customer relationship management, product characteristics and product availability effect traditional archers' bow brand preferences?" For that purpose, in-depth interviews and focus group studies were conducted with traditional archers in some of the European countries and Turkey.

2. LITERATURE REVIEW

2.1. Perceived Price of Brand

Perceived price can be described as "the customer's judgment about a service's or product's average price in comparison to its competitors" (Chen, Gupta, and Rom, 1994). The concept of perceived price is based on the nature of the competitive-oriented pricing approach. This approach focuses on customers' concerns about whether they are being charged more than or about the same as charged by competitors. Ruyter, Bloemer, and Peeters, (1997) found that increases in service quality levels lead to an increase in satisfaction level, and pointed out that low perceived quality may also result in high service satisfaction. They also stated that customers may not necessarily buy the highest level of quality service. That is, price, convenience, and availability may increase customer satisfaction without actually influencing customer perceptions of service or product quality.

2.2. Customer Relationships

The idea of creating a relationship with customers based on quality, relationship, innovation, and learning is regarded as a more sustainable strategy and can be seen as largely inimitable by competitors in essence, a strategy that could create a long-term competitive advantage (Grönroos, 2000; Payne, 2000). Customer Relationship Management (CRM) has proven to be a critical tool

in increasing a firm's profitability by enabling it to identify the best customers and satisfy their needs, in order to make them remain loyal to the firm's activities (Thomas and Sullivan, 2005). The purpose of CRM implementation is that it should considerably enhance firm performance, a quality of any marketing activity (Lehmann, 2004; Rust et al., 2004; Krasnikov et al., 2009). According to that, pursuing long-term relationships with customers is more profitable for brands (Morgan and Hunt, 1994; Jayachandran et al., 2005).

2.3. Product Characteristics

The relationship between technical and physiological product characteristics and consumer quality perception has been formalized in (Hauser and Clausing, 1993), which has the aim of facilitating market-oriented product development. The relationship between physiological product characteristics and consumer quality perception is at the heart of market-oriented product development: In order to design products which will be accepted by consumers, it is necessary to translate consumer demands into product specifications that are actionable from the producer's point of view. A number of studies have found that product variety and uniqueness are two important factors that drive consumers to purchase a certain product (Sim and Koi, 2002).

2.4. Product Availability

The critical influence of product availability on consumer demand has been analyzed by previous literature (Bronnenberg, Mahajan, and Vanhonacker 2000; Bruno and Vilcassim 2008; Pancras 2011). Farris, Olver, and De Kluyver (1989) note that small stores tend to stock only popular or large-market-share brands, and given the limited choice set in such stores, consumers are often willing to compromise their purchase decisions by switching to an available brand. (Reibstein and Farris 1995).

3. DATA AND METHODOLOGY

3.1. Methodology

The aim of this research is to find out the effective factors of traditional archer's bow brand preferences. In-depth interviews were conducted with ten senior archers from European countries, eighteen experienced archers from Turkey. It is suggested that focus group studies should have at least six participants in a one group (Onwuegbuzie and Leech, 2007). Three focus group studies were also conducted with eighteen experienced archers to compare and determine the effective

factors of traditional archers' bow brand preferences. As an important contribution, qualitative research enables to explore the meaning of phenomena and to reach a better and deeper understanding of real-life behavior (Cornish, 2012). Furthermore, in-depth interviews enable to scrutinize the subconscious perceptions of respondents. The archers were chosen from different European countries in order to have a various sample for this research. In the study, six of the archers' out of twenty-five are concentrated on horseback archery, rest of them are concentrated on flight shooting archery, target archery, and bow-hunting.

The participants were acquainted with the research topic. During in-depth interviews, participants were not directed specifically by researchers to bring out their brand preferences. In-depth interviews lasted for each participant approximately one hour, and focus group studies lasted approximately two hours. According to Harris (2001), content analysis method is used to analyze the interviews that identifies the research questions and constructs, examines chosen texts to specify unit of analysis to classify the responds based on their themes, and generates coding scheme or coding rules respectively. According to that, the proposed conceptual model of the study is shown in Figure 1 based on the content analyses. It is also shown in Table1.

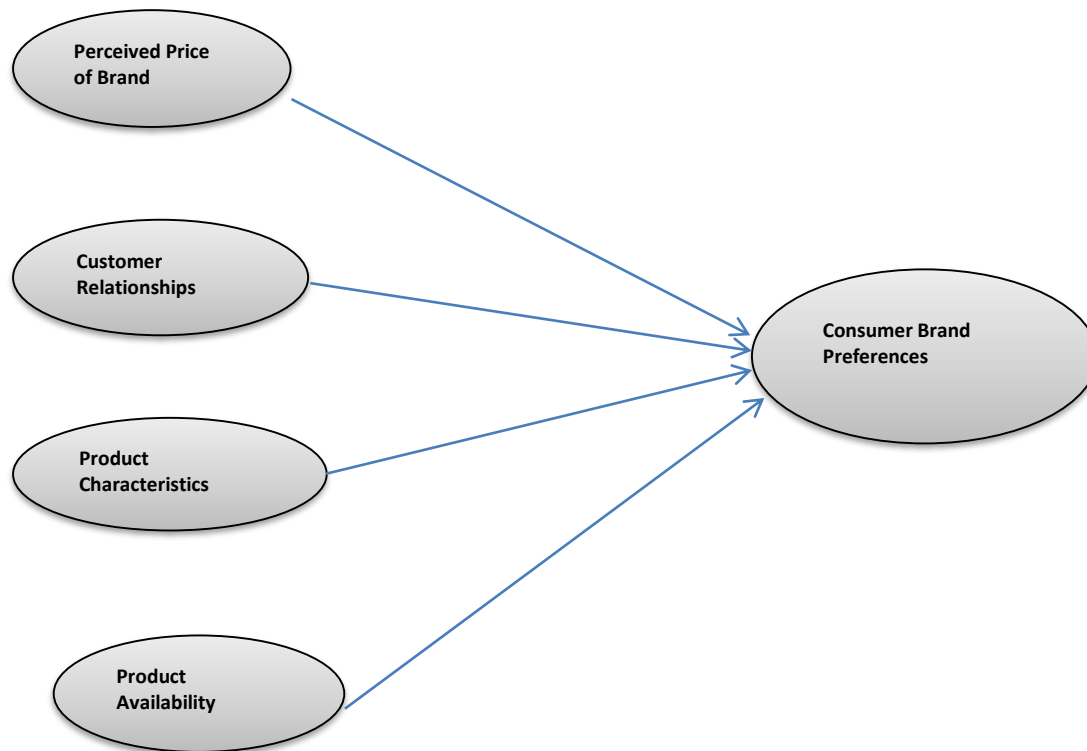


Figure 1: Proposed Conceptual Model

3.2. Findings

According to the results of in-depth interview and focus group studies, the variables of the study were determined as perceived price of brand, customer relationships, product characteristics and product availability. The variables were found according to the content analysis. The purpose of this study is to find out the effective factors of traditional archers' bow brands preferences. In this point, the experience of the archers in related disciplines such as target shooting, flight shooting, horseback archery and bow-hunting has gained importance. In the first place we asked to the participants to answer the questions "How many years have you been interested in traditional archery", and "Which disciplines are you interested in related to traditional archery?" Experiences of archers' in this study were between five and thirty years. Most of the archers were interested in both target and flight shooting, and the rest were horseback archers or bow-hunters. The other question that was asked to the participants was "Do you prefer domestic or foreign brands while purchasing your bow, and which brands are they?" The common response from most of the archers was: "I prefer good bow makers". Another supporting view was "Making a bow is more important than selling one". Similarly, "A bow maker is not only selling the product but also take his/her bow's responsibility"; "The most important thing when a bow maker sells a bow he/she takes care of his/her customer because to feel having a great support from producers brings customers satisfaction with it." Specifically Turkish archers' views were "We have mostly preferred foreign bows because of limited domestic product alternatives, but now domestic bows may be more preferable in Turkey compared to four years ago."

The following questions regarding to the archers' bow brand preferences were as such "Is there any bow brand and model do you mostly desire to use?", and "Is there any bow brand and model that you would never give up?" One of the over-twenty-years experienced horseback archers from Europe says "I have used many different bows until having my own bow type which is Living Arrow Bow". Keskin Bows as a domestic brand and Grózer Bows from Hungary as a foreign brand came in the first place as the most preferred choices of the participants from Turkey. The other recognized bow brands were Şimşek Bows and Yıldırım Bows from Turkey, Mariner Bows and Ali Bows from China, Saluki Bows from the USA, Végh Bows from Hungary, and Sylwester Styrzula Bows from Poland. It was not given a specific bow brand name by European archers they mostly prefer to use. However, two of the experienced archers from Europe stated their

preferences as “I prefer Végh’s Turkish bow model both for flight shooting and target shooting disciplines”; “I prefer Végh’s Turkish bow model for flight shooting and I also prefer Végh’s Tatar and Hun bow models for target shooting disciplines. Similarly, one of the Turkish archers stated “I never give up Grózer’s Turkish base bow model”, and another Turkish archer says, “I never give up Laminated Crimean Tartar Bow of Grózer”. Additionally, one of the archers from Turkey described a bow for not to give up has the characteristics of easy to pull, fast, durable and small sized. Moreover, one archer states “I never give up Grózer’s bow because it has longer life; however I also never give up Keskin Bows because of their good customer relationships”. When it was asked for which factors affect archers’ bow preferences, the following answers were given by the participants: high service quality, fair pricing, standardization, draw length, draw weight, draw experience, price, material, accessibility, design, durability, performance, and being tested by experts. Finally, participants were asked to reply “What are the services they expect from a bow maker?” According to the answers; quality, customer service, English-speaking customer service representative, no warranty hassles, fair pricing, open info about their products, transparency, customization, sponsorship, and lifelong warranty (that doesn’t result from user faults) have found as determinants of the expected services. According to the content analysis results the determinants of brand preferences have shown in Table 1.

Table 1. Content Analysis

Perceived Price of Brand	Fair pricing, Price Policy
Customer Relationships	After Sales Service, Warranty, Customer Service, Transparency, Customization, Sponsorship, Fast reply
Product Characteristics	Design, Quality, Authenticity, Standardization, Material, Stability, Performance, Durable, Fast, Strong, Precise, Well balanced, Draw Weight, Draw Length, Weight, Lightness, Speed, Appearance, no hand shock
Product Availability	Accessibility

3.3. Conclusion

Both European and Turkish archers from different disciplines have commonly given importance to perceived price of brand, customer relationships, product characteristics and product availability. European archers have chance to experience different bow brands and models because

they can easily access reasonable priced bows. In addition, European archers reach both domestic and foreign producers easily.

Another important finding is that it is an obligation for the bow makers to manage customer relations and build strong relations with customers so it delivers customer value. This is particularly an important finding because bow makers may embrace value from customers in the form of sales, profits, and customer loyalty for the brand in return. They also should understand the market place and archers' needs. European Bow makers can sell their products by applying fixed exchange rates to certain countries regarding their fluctuations in currency exchange rates. This causes bows to be more accessible for the archers who desire to use their most preferred bows. When we look at the brands that Turkish participants mostly prefer to use, Keskin and Grózer bow brands come to forefront. This result may have come to exist because of the characteristics including accessibility, affordable price, after sales services, and successful customer relationships. Additionally, Turkish archers may have higher level of brand loyalty than European archers due to the lack of particularly outstanding bow brands.

For the Further Study

In the literature, there have been many studies which show various effective factors that have significant impact on consumers' brand preferences, but this study shed light on traditional archers' brand preferences in a multicultural perspective with a qualitative research. In the further study, this research will be extended and will lead to a deeply quantitative investigation of traditional archers' brand preferences.

References

- Bloemer, J., & Ruyter, K. (1998). "On the Relationship Between Store Image, Store Satisfaction and Store Loyalty". *European Journal of Marketing*, 32, 499-513.
- Bronnenberg, B. J., Mahajan, V., & Vanhonacker, W. R. (2000). The emergence of market structure in new repeat-purchase categories: The interplay of market share and retailer distribution. *Journal of Marketing Research*, 37(1), 16-31.
- Bruno, Hernan A. and Naufel J. Vilcassim (2008). "Structural Demand Estimation with Varying Product Availability". *Marketing Science*, 27 (6), 1126-31.

- Chen, L. J., Gupta, A., & Rom, W. (1994). "A Study of Price and Quality in Service Operations". *International Journal of Service Industry Management*, 5, 23-34.
- Cornish, L. S. (2012). "It's Good For Me: It Has Added Fibre! An Exploration of the Role of Different Categories of Functional Foods in Consumer Diets". *Journal of Consumer Behaviour*, 11(4), 292-302.
- De Ruyter, K., Bloemer, J., & Peeters, P. (1997). Merging service quality and service satisfaction. An empirical test of an integrative model. *Journal of economic psychology*, 18(4), 387-406.
- Farris, Paul, James Olver, and Cornelis de Kluyver (1989). "The Relationship Between Distribution and Market Share". *Marketing Science*, 8 (2), 107-128.
- Grayson, C.E, French, M. and J. O'Brien, M. (2007) "Traditional Archery from 6th Continents". University of Missouri Press, Columbia, Missouri 65201
- Grönroos, C. (2000). "Service Management and Marketing: A Customer Relationship Management Approach". 2nd Edition, Wiley, Chichester.
- Hauser, J. R., & Clausing, D. (1993). "How Puritan-Bennett Used the house of quality", *Sloan Management Review*, Vol.34, No.3.
- Harris, H. (2001). Content analysis of secondary data: A study of courage in managerial decision making. *Journal of Business Ethics*, 34(3-4), 191-208.
- Jayachandran, S., Sharma, S., Kaufman, P. and Raman, P. (2005). "The Role of Relational Information Processes and Technology Use in Customer Relationship Management". *Journal of Marketing*, Vol. 69 No. 4, 177-92.
- Klopsteg P. E. (2004) Archery. *Encyclopedia Britannica*. www.britannica.com/eb/article-9001641/archery (last accessed 28.08.2018).
- Kotler, P. and Keller, K.L. (2006). *Marketing Management*, 12th Ed. Pearson Prentice-Hall, Upper Saddle River, NJ.
- Krasnikov, A., Jayachandran, S. and Kumar, V. (2009). "The Impact of Customer Relationship Management Implementation on Cost and Profit Efficiencies: Evidence From the US Commercial Banking Industry". *Journal of Marketing*, Vol. 73 No. 6.
- Kwok, S., Uncles, M., & Huang, Y. (2006). "Brand Preferences and Brand Choices Among Urban Chinese Consumers: An Investigation Of Country-Of-Origin Effects". *Asia Pacific Journal of Marketing And Logistics*, 18(3), 163-172.

- Lehmann, D.R. (2004). "Metrics for Making Marketing Matter". *Journal of Marketing*, Vol. 68, October, 73-75.
- Morgan, R.M. and Hunt, S.D. (1994). "The Commitment-Trust Theory of Relationship Marketing". *Journal of Marketing*, Vol. 58 No. 3, 20-38.
- Onwuegbuzie, A. J., & Leech, N. L. (2007). A call for qualitative power analyses. *Quality & Quantity*, 41(1), 105-121.
- Pancras, Joseph (2011). "The Nested Consideration Model: Investigating Dynamic Store Consideration Sets and Store Competition". *European Journal of Operational Research*, 214 (2), 340–347.
- Payne, A. (2000), "Relationship marketing: the U.K. perspective", in Sheth, J.N. and Parvatiyar, A. (Eds), *Handbook of Relationship Marketing*, Sage Publications, Thousand Oaks, CA, 39-67.
- Reibstein, David J. and Paul W. Farris (1995). "Market Share and Distribution: A Generalization, a Speculation, and Some Implications". *Marketing Science*, 14 (3), 190–202.
- Rust, R.T., Lemon, K.N. and Zeithaml, V.A. (2004). "Return on Marketing: Using Customer Equity to Focus Marketing Strategy". *Journal of Marketing*, Vol. 68 No. 1, 109-27.
- Sim, L. L., & Koi, S. M. (2002). "Singapore's Internet Shoppers and Their Impact on Traditional Shopping Patterns". *Journal of Retailing and Consumer Services*, 9(2), 115-124.
- Thomas, J.S. and Sullivan, U.Y. (2005). "Managing Marketing Communications with Multichannel Customers". *Journal of Marketing*, Vol. 69 No. 4, 239-51.

DESTINATION BRANDING IN SKI TOURISM FROM A QUALITY PERSPECTIVE: THE CASE OF SARIKAMIS SKI RESORT

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Abstract

Branding is all of the activities through which destinations position themselves. When it is considered to turn these destinations into brands, their historical, geographical, cultural and economic characteristics are used. The destinations which have one or more of above mentioned features may want to bring the feature or features into the fore front. However, before starting these activities, it is necessary to learn how the destination is known or perceived and to map out a route accordingly. The branding activities to be performed in line with the information obtained can be able to both accelerate the process of branding and contribute to healthier positioning of the destination. With this study, it is aimed to determine how domestic tourists visiting Sarıkamış ski resort and Sarıkamış which is one of the most important regions of Kars in terms of history and tourism perceive Sarıkamış as a destination brand in winter sport tourism. In the light of this main objective, to determine the reason why domestic tourists visit Sarıkamış ski resort and to determine their opinion about visiting again; to measure the perceptions of the tourists visiting the region about the quality of the services that they received and to determine whether they feel safe during their visit to Sarıkamış ski resort are among the sub-objectives of the study. In line with these objectives, a survey will be performed with the participants and the survey results will be presented.

Key words: *branding, winter sports tourism, destination branding, ski tourism, quality*

1.Introduction

A brand is a strong component to make a difference and for marketing. It is not only a product but also a valuable investment (Doğanlı, 2006, p.7). A brand is a powerful marketing tool that a company presents to consumers or clients within a product category and that reflects its difference from its competitors (Kavas, 2004, p.19). Branding in tourism is important, thus, in addition to the most popular trio of sea, beach, and sun in tourism, identification and improvement of other

tourism types are important activities for a sustainable tourism. Within this context, winter tourism, another important tourism type in our country, is gaining importance (Koçak ve Tandoğan, 2008,p.7).

Winter tourism is a type of tourism that allows for skiing and other activities such as hiking, walking, etc., that gained importance in the elevated belt which gets snow (Doğaner, 2001, p.178). Winter tourism is becoming more popular every day. Building facilities and promotional activities make it possible for winter tourism to develop which requires effective marketing of winter tourism destinations. Thus, by identifying the right marketing strategies and monitoring according to the destination, a winter tourism potential that contributes significantly to the nation's economy can be created (Vanat, 2013, p.7). Within the scope of destination marketing, creating a positive destination image and identifying a destination branding as well as developing marketing strategies accordingly are important in receiving loyal tourists. The pre-requisite for loyalty to destination requires creating a sense of belonging in tourists to destination. Within this context, to be able to get loyal customers for winter tourism destinations is highly effective in their sustainability and gaining a competitive advantage (Türkeri, 2014, p.46). Destination marketing is important in branding of destinations that tourists visit. Within this scope, this study examines the Sarıkamış ski center which is considered important in winter tourism (Ekinci ve Hosany, 2006).

Sarıkamış Ski Center is a candidate to become one of the important centers of winter tourism in Turkey. Cıbıltepe (2634m) ski center, located in the south of Sarıkamış town, was named as Kars Sarıkamış Süphan Cıbıltepe Balıkdağ Çamurludağ Tourism Center in the official gazette number 20876 on 20.05.1991. Then, in the years 1993, 2005, and 2006 changes were made and it received the name Kars Sarıkamış Winter Sports Tourism Center with the announcement in the official gazette number 27653 on 26.07.2010 (Çalışkan:2014, p.45).

Sarıkamış ski center is an attractive center with an important winter potential with its appropriate land, ski-tracks, and facilities for skiing. Revealing the brand value of this center in ski tourism is aimed. The results of this study contribute to the literature and to related institutions, organizations and managers.

2.Literature

This section addresses studies and topics that are similar to the current study. Destination branding entered the tourism literature towards the end of 1990s and started to be used widely. Ritchie & Ritchie (1998) conducted a literature review on destination branding and examined what can be

done in the future by examining the past. In his study, Cai (2002) stated that there are many studies on destination image. In his research, he studied the concepts of destination image, destination brand and identity and explained the difference between these concepts. He conducted a case study to prove his ideas and with the current data he had, he proposed “Cooperative Branding.” His focus was brand positioning. Iliachenko (2003) emphasized in his study that destinations can create a unique brand by being different from other destinations through its history, archeological, cultural, and natural-geographical resources. Morgan, Pritchard ve Piggott (2003) conducted a study in New Zealand focusing on stakeholders such as government executives, local administrations, private sector, public, media, etc., having important roles in destination branding. Foley & Fahy (2004) stated that branding has a unifying role in branding for tourism promotion. They explained the role of image in branding positioning by using Ireland as an example. Konecnik (2004) supported the importance of a destination image in their studies. They exhibited the concept of image in their study conducted in Slovenia. They evaluated the general image of Slovenia by using tourist guides’ perceptual and emotional aspects. Tosun & Bilim (2004) emphasized the change in the understanding of destination in the world. They stated that smaller destinations such as region, town, etc. embrace branding. Hatay was selected as the city for destination examination. Hankinson (2005) addressed destination branding in strategic marketing. Their study covered a fifteen-year old period and emphasized that destination branding showed a significant increase. They showed that destination branding is not only for countries, cities, and regions, but also for smaller places such as shopping malls and recreation parks. Doğanlı (2006) conducted a survey with 520 tourists who selected Antalya destination to determine the position of Turkish tourism during the branding process. The survey focused on whether visitors selecting Antalya destination consider Antalya as a brand or not.

Aksungur (2008), in his study on the importance of branding and promotional activities in tourism, conducted a comparative analysis between Spain and Turkey and emphasized the importance of promotional activities. Şahin (2010) focused on the fact that branding activities should be performed both at a global and regional scale. İpar (2011) conducted a survey with 413 tourists visiting Istanbul and examined tourists’ level of perception on Istanbul as a destination brand. Kavacık, Zafer & İnal (2012) examined Alanya for tourism destination branding. They addressed Alanya’s weaknesses and strengths, and focused on whether Alanya is a destination brand or not. Çetinsöz & Artuğer (2013), in their study, aimed to measure the brand value of the

city of Antalya. Based on the literature, destination brand identity and destination brand image constitute the essential components of destination brand. These studies showed that branding and destination brand are important (Yavuz, 2007, p.46).

2.1. Branding and Destination Branding

Branding is a self-positioning activity of destinations. In these activities, meaning that when destinations are considered to turn into brands, historical, geographical, cultural, and economical characteristics are used. Branding, an important term, entered the literature in 1940s (Guesdt, 1942). Under the light of this information, as it's not a topic that has been around for a long time, branding and destination branding are open for research.

2.1.1.Branding

Organizations and destinations in tourism sector are in the search for ways to differentiate in order to attract customer attention or to be able to be selected by customers. Within this context, destinations made branding a goal for themselves to raise awareness. "A brand, in general terms, is described as the name of a good product, organization or place" (Gartner & Ruzzier, 2010). Departing from this description, it is necessary to address the concepts related to the branding process to better understand branding. These concepts are described below:

a-Brand Awareness: The first reaction of consumers about the product and making a conscious purchase (Ak, 2009, p.10-11).

b-Brand Promise: A component that allows the product come forward by making a difference (Seyhan, 2007, p.21).

c-Brand Loyalty is defined as the increase of tendency in consumer's loyalty, trust, and interest as the consumer embraces the brand (Hassan, Hamid & Bohairy, 2010, p.273).

d-Brand Value: Benefits provided by the product to customers (Atilgan, Aksoy & Akıncı, 2012,p.239).

e-Brand Image: The impression that the differentiated product evokes in consumers (Özdemir & Karaca, 2009,p.117).

f-Brand Personality: Defined as the warm, hard, or cute object created in consumers' minds by the brand (Özdemir, 2008).

g-Brand Identity: Constitutes the total of all services that distinguish the product from other brand concepts (Ak, 2009,p.7).

h-Brand Positioning: Brand positioning is the approach of a consumer using the product. There are two concepts in brand positioning: (i) perception of the target population, and (ii) brand's position among its competitors. These two components should occur based on the population (Çiftçi & Cop, 2007,p.73).

i-Brand Management: Brand management is the process of creation and management of the information that is planned to be remembered by consumers (Uztug, 2005,p.51-52).

2.1.2. Destination Branding

Countries follow the path of creating a regional brand through revealing regional attractions rather than marketing as a whole due to the increase in competition. In this section, destination, destination branding and the process of destination branding will be addressed. Destination can simply be defined as the country, region, town or place of arrival (İlban, 2007,p.6). In broader terms, destination can be defined as a place that has attractions such as natural, cultural, historical and entertainment (Yavuz, 2007,p.38). Destination branding can be defined, by using the definition of brand, as the process to bring forward the characteristics that distinguish the destination from its competitors, making the destination distinct from other regions and developing an identity for the destination (İlban, 2007,p.48-50). For a region to become a tourism destination requires multi-faceted activities. The attractions of the destination should be presented separately but in a way that constitutes an entirety (Allan, 2006, p.5-6). After identifying the components that will be affective during the branding process, it is necessary to determine the pathway forward (İpar, 2011,p.167). In addition to this information, a team work from experts in their fields and stakeholders of the destination, and building activities on this foundation are necessary to achieve the components that are important for the brand and that constitute the branding process. Therefore, destination branding process consists of two phases which are discussed in detail below (Yavuz, 2007,p. 47).

a- Brand Culture During Destination Branding Process: Brand culture involves the character of the local people, their habits, traditions, food and drinks, historical structures and remains. In other words, brand culture represents the cultures of societies who live and have lived in the destination and this component constitutes the foundations of the destination's core and the value it will create (Doğanlı, 2006,p.99).

b- Brand Character During Destination Branding Process : Brand character is related to the consistency and reliability within the destination. As a result, brand character is associated with reliability and honesty. Terms used in brand character can be tolerant, mystical, peaceful, and relaxing (Kavas, 2004,p.19).

c- Brand Personality During Destination Branding Process: Brand personality is created by transferring humane characteristics to the destination. These characteristics can have meanings such as sincerity, age, socio-economic class, excitement, warm and romantic (Özdemir, 2008,p.20).

d-Brand Name During Destination Branding Process: The actual name of the destination and the significant effect it will have on potential visitors, the brand name, is important. The brand name should be powerful and unique as well as easy to remember, easy to pronounce and suitable for restructuring (Buhalis, 2000,p.99).

e-Brand Logo and Symbol During Destination Branding Process: Logo can be defined as the picture, color or emblem which defines and makes it easier to remember a destination. A destination's logo should be attention-grabbing, intriguing, and more importantly to be easy to remember (Ak, 2009,p.16). Destination symbol is different from a logo as it can be a person, a structure, local people or a landscape. Destination symbols should be easy to remember and should increase its competitiveness (Giritlioğlu & Avcıkurt, 2010,p.74-86).

f-Brand Slogan During Destination Branding: A slogan should express the promise given to destination's target audience or a summary of the promises (Doğanlı, 2006,p.91).

g- Image During Destination Branding Process: Destination image is one of the important components during the destination branding process. Image consists of organic or adapted thoughts and feelings of potential visitors on the information they have about the destination (Chen ve Tsai, 2007,p.1116). These emotions and opinions about the destination emerge with the use of tools such as advertisement, commercials or marketing (İpar, 2011,p.194).

h- Brand Promise during Destination Branding Process: Destination brand promise is the promise made to visitors on destination. This promise emphasizes that everything will be made to influence visitor perceptions and tourists positively (Çetin, 2014,p.14).

i- Brand Control During Destination Branding Process: The control should be maintained during destination branding process to not to lose the interest of visitors. Brand control is a process (Ak, 2009,p.26) and during this process first the destination image is researched and the benefits

of the destination are positioned with the image. By making a connection between these benefits and the target audience, visitors are attracted to the destination region. While these phases occur, advertisements, public relations and methods that would support destination branding are used (Ak, 2009,p.27-28).

j-Brand Internalization during Destination Branding Process: Internalization of destination brand is a process that affects all stakeholders (state, local administrations, organizations, local people and tradesmen). This process is the pathway map and the phase in which stakeholders play their parts in destination branding (İpar, 2011,p.180

k- Infrastructure and Superstructure Activities During Destination Branding Process: Available authentic resources during destination branding can be sufficient or insufficient. However, considering destinations that achieved branding in the world, it is not possible to be successful for destinations with insufficient infra-superstructure. Therefore, destinations should bring their infra and superstructure activities to a sufficient level during branding (Doğanlı, 2006,p.93; İpar, 2011,p.181).

l- Security During Destination Branding Process: Potential visitors of destinations prefer politically and socially secure places (Özdemir, 2008,p.19, Doğanlı, 2006,p.86). Security is one of the most important factors affecting the preference of tourism destination (Buhalis, 2000,p.8). Visitors want to be able to do sightseeing comfortably and do not want to experience physical or psychological harassment in places they stay. With the technological possibilities visitors can do research on several topics such as political, cultural and socio-economic structure of places around the world. When there is negative information that visitors find, their destination preference is affected. In order to prevent this negative effect, tourism institutions, government bodies and media should work together to make destinations secure and do what is necessary for these destinations to be known positively (Şahin, 2010,p.3; Leung ve Lee, 2010,p.124-140).

3.Method

3.1.Purpose of the Study: The purpose of this study is to identify how domestic tourists perceive Sarıkamış winter sports ski center, one of the important regions of Turkey for winter tourism, as a destination brand. With this purpose, the sub-purposes of this study are listed below:

- To identify the reasons of domestic tourists for visiting Sarıkamış winter sports ski center and thoughts on re-visiting,

- To measure the quality perceptions of tourists on the services they were provided,
- To identify whether visitors felt safe or not during their visit to Sarıkamış winter sports ski center.

3.2.Significance of the Study: Destinations succeeded in becoming a brand in the sector by first receiving local administrations' and the local people's support, and then using media and marketing tools to promote the destination. Thus, natural beauties, winter tourism and grief tourism of Sarıkamış have not received attention neither from local administrations nor from the media. In order for Sarıkamış to be among brand destinations, branding is necessary by using the beauties it has. Data that would help in branding of a destination were obtained from tourists who have visited the destination and their thoughts on the destination are taken into consideration. Within this context, this study is significant in terms of providing a foundation for the branding process of Sarıkamış, and gathering data that would support the local administration.

3.3.Research Method: A research method is described as a path or techniques used to solve a problem (Özdamar, 2011,p.70-74; Karasar, 2005,p.75). Özdamar (2011) categorizes research methods into two groups: descriptive and analytical. Descriptive studies reveal information such as the distribution of research variables in a society or in a sample, and frequency while analytical studies involve finding commonalities and generalizations in a society by testing certain hypotheses and research questions (Özdamar, 2011,p.70-71). Karasar (2005, p.76-87) describes research models in two groups; survey and testing. With the survey model, an existing situation can be observed while in the testing model researcher should produce what is desired to be observed (Karasar, 2005,p.77-81). This study falls under the descriptive category of research methods that Özdamar (2003) describes while it falls under single survey model category within survey models in terms of model context described by Karasar (2005). In this study, as the first step a literature review was conducted from secondary sources on the concept of brand and destination branding. Then, the surveys of Sedat İpar (2011) and Bilge Doğanlı (2006) that were tested for reliability and validity previously, and conducted in Istanbul and Antalya, were adapted to this study. Surveys were administered by using a one-on-one interview technique. The survey consisted of two sections. The first section included 15 items related to demographical and behavioral characteristics of participants while the second section included 17 items to measure the level of perception of tourists on Sarıkamış Winter Sports and Ski Center. 17 items were prepared in 5-point Likert scale ranging from 1 being strongly disagree to 5 being strongly agree.

Demographics		N	%
Gender	Female	176	42,5
	Male	238	57,5
Age	16-25	117	28,2
	26-35	185	44,7
	36+	112	27,1
Level of Education	Elementary	68	16,4
	High School	160	38,6
	Higher Education	130	31,4
	Graduate	56	13,6
Monthly Income	500 TL and 1500 TL	120	29
	1501-2500	205	49,5
	2501TL +	89	21,5

Table 1: Demographics

3.4.Sample Size: The population of this study was determined as domestic tourists visiting Sarıkamış. A convenience sampling was used to recruit participants. The purpose of convenience sampling is to include everyone who's willing to participate in the sample size (Ural ve Kılıç, 2011,p.44). The criteria for convenience sampling were; to be domestic tourists, to be visiting Sarıkamış and to have stayed at least one night in Sarıkamış.

3.5.Data Analysis: The data obtained were analyzed using a computer software. In analyzing the data, frequency distribution, independent pair samples T-test, one-way ANOVA and factor analyses were completed.

4.Findings and Discussion

The demographics of the participants show that 57.5% of the tourists were male. 44.7% of the participants were in the age range of 26-35. 70% of the participants completed high school and higher education. Income levels of tourists showed that 49.5% of the tourists have a monthly income level between 1501-2500 TL. In addition to the demographical characteristics of the participants, it is also necessary to examine the participants' behavioral characteristics.

Table 2: Number of Visits and the Reason for Visit

		N	%
How many times have you visited Sarıkamış?	First Visit	99	23,9
	Second Visit	179	43,2
	Third Visit and more	136	32,9
Reason for visiting Sarıkamış	Quality of Snow	240	58,0
	Entertainment	140	33,8
	Accessibility	34	8,2

As shown in table 2, 76.1% of the participants visited Sarıkamış more than once and when they were asked for the reason why they visited Sarıkamış, 58% answered ‘snow quality’.

Table 3: The First Thing that Comes to Mind When the Name Sarıkamış is Heard

First thing that comes to mind	N	%
Ski tourism	224	54,1
Sarıkamış martyrs	153	37,0
Economical Prices	13	3,1
Quality Service	5	1,2
Nature	19	4,6
Total	414	100,0

Participants were asked of the first thing that comes to their mind when they hear the word Sarıkamış and 54.1% responded ski tourism while 37% responded Sarıkamış martyrs.

Table 4: Revisiting and Recommending Sarıkamış

Would you come revisit Sarıkamış?	N	%	Would you recommend Sarıkamış?	N	%
Yes	285	68,8	Yes	293	70,8
No	129	31,2	No	121	29,2

Participants were asked if they would re-visit Sarıkamış and if they would recommend it to their friends. 68.8% of the participants expressed that they would revisit Sarıkamış and 70.8% responded they would recommend the place to their friends.

4.1.Factor Analysis

Table 5: Factor Analysis

FACTOR ANALYSIS	Loading	Özdeğeri	A.Varyans	Alfa
PHYSICAL STRUCTURE OF THE SKI CENTER (5 items)		2,7957	27,999	.901
3.Sarıkamış ski center does not have a super structure problem	.872			
2. Sarıkamış ski center does not have an infrastructure problem	.853			
4. Ski facility meets all the needs expected of winter tourism	.837			
5.Sarıkamış ski center is at the level where it needs to be	.772			
7. Promotional activities for Sarıkamış are sufficient	.619			
BRANDING IN WINTER TOURISM (4 items)		3,4076	22,880	.868
11.Sarıkamış is a winter tourism town	.766			
6. Local people of Sarıkamış are polite and hospitable	.742			
9. I prefer Sarıkamış ski center	.723			
10.Facilities in Sarıkamış center are generally clean	.695			
QUALITY OF THE SKI CENTER (5 items)		3,5966	22,633	.884
16. The snow quality of Sarıkamış is high	.837			
14. Sarıkamış is a safe ski holiday town	.793			
13.Services provided at Sarıkamış ski center are sufficient	.686			
15.Tourists feel safe and comfortable	.662			
17. A natural environment is present at the ski center	.611			
Factor extraction method: Principal components analysis; Rotation method: Varimax KMO Sampling Adequacy: %.89,9; Bartlett's Sphericity Test X^2 : 4,263E3; sd: 91; p<0.001; Explained total variance: %72,999; Response categories: 1: Strongly Disagree, 2: Disagree, 3: Neutral, 4: Agree, 5: Strongly Agree.				

A factor analysis was completed on the 17-item scale to identify whether domestic visitors of Sarıkamış perceive the Sarıkamış Ski Center as a touristic destination and a brand. In the analysis, Eigenvalues of over 1 were accepted. For an item to be loaded into a factor, it needs to have a minimum of .320 factor loading. When items crossload, the correlation difference between the two factors should be minimum .100 and we decided to use a varimax rotation (Çokluk, Şekercioglu ve Büyüköztürk, 2010: 223).

The factor analysis resulted in 4 factors, however, as the items 12 and 1 crossloaded, they were excluded from the analysis. A factor analysis was completed again on the remaining 15 items. The analysis revealed 3 factors, however, question number 8 of the item 2 had a loading value less than .320, it was removed from the survey. Another factor analysis was completed on the remaining 14 items which resulted in 3 factor structures. These three factors explain 72.999% of the total variance. The KMO sampling adequacy was found to be 89.9% and the Bartlett Sphericity test was significant ($p < .0001$). These two measures indicated that the data set is fit for factor analysis and the analysis can continue. This test, also presents an evidence of significant correlations between the items and thus, the data set is fit for factor analysis (Kalaycı, 2006: 327).

Factor analysis results are presented in table 5. The first factor consists of 5 items and explains 27.99% of the total variance. This factor is called Sarıkamış Ski Center's physical structure. The second factor is Sarıkamış Ski Center's branding in winter tourism and consists of 4 items. This factor explains 22.880% of the total variance. The third factor is Sarıkamış Ski Center's quality and consists of 5 items. This factor explains 22.633% of the total variance. Tourists visiting Sarıkamış showed positive attitude in these three factors with a mean of 2.4076 in branding in winter tourism and with a mean of 3.5966 in quality of the ski center. However, they had negative opinions on ski center's physical structure and indicated that the physical structure of Sarıkamış is insufficient.

5. Conclusion and Recommendations

This study focuses on the situation of Sarıkamış ski center during branding and how domestic tourists perceive ski center's branding. Considering the destination branding process, brand culture should be addressed first. Brand culture involves the character of a destination. Survey results revealed that 54.1% of the participants indicated that ski tourism constitutes the core of Sarıkamış destination. Domestic tourists' opinions revealed that this destination can be stronger by adding the dark tourism on top of the core of this destination. The second phase in destination branding is

the brand personality. Survey results showed that visitors of Sarıkamış ski center consist mostly of males with middle income with an age range of 25-35. Thus, it is recommended that local administrations and the ski center should do activities targeting particularly individuals in this group. The third phase of destination branding is brand name. The first name of the winter tourism in Sarıkamış was Kars Sarıkamış Süphan Cıbiltepe Balıkdağ Çamurludağ Tourism Center, however, it was changed to Sarıkamış Winter Sports Tourism Center due to the former name being difficult to remember. The fourth phase involves developing a positive image in destination branding and creating a consistent combination of brand components such as name, symbol, logo, design, color, architecture and cultural heritage. However, there were not enough activities done in this phase in Sarıkamış and there is not a logo or symbol of ski tourism. The sixth phase of destination branding is the brand slogan which is the summary of promises. The slogan for Sarıkamış ski center is the “country of dancing snow.” However, this slogan does not explain the promises, meaning that it is insufficient. The seventh phase of destination branding is the creation of brand promise and keeping the promises made. The results of the factor analysis showed that domestic tourists had a positive perception on the quality of services and indicated that promises were kept. Brand control is the eighth phase of destination branding. The purpose in this phase is to not to lose current visitors. The domestic tourists visiting were asked the question; “would you revisit the Sarıkamış ski center?” 68.8% responded ‘yes’ which indicates domestic tourists were satisfied with the Sarıkamış ski center. The ninth phase of destination branding is the internalization of the process by stakeholders. Infra- and superstructure activities constitute the tenth phase of destination branding. Tourists were asked if Sarıkamış had infra- and superstructure problems and 70% responded by saying Sarıkamış has infra and superstructure problems. The current study can guide the local administration in areas such as lack of infra and super structure. The factor analysis showed that participants consider the quality of services provided and the efforts of Sarıkamış ski center in branding as sufficient while they indicated that more efforts need to be made in the physical structure of the ski center. The recommendations presented above can only be possible with cooperation between central and local administration, private sector, non-governmental organizations and the public. This can be achieved by adopting a governance concept that gives voice to all stakeholders. This study is only a small step in identification of the tourist profile visiting the region and their perceptions. Further and more comprehensive studies in this matter would reveal different ideas in branding of Sarıkamış ski center.

References

- Ak, T. (2009). *Marka yönetimi ve tüketici karar sürecine etkileri*, Yayımlanmamış Yüksek Lisans Tezi, Karamanoğlu Mehmetbey Üniversitesi Sosyal Bilimler Enstitüsü, Karaman.
- Aksungur, A. G. (2011). *Turizmde Markalaşma ve Tanıtma Faaliyetlerinin Önemi: İspanya ve Türkiye'nin Karşılaştırmalı Analizi*, Kültür ve Turizm Bakanlığı-Tanıtma Genel Müdürlüğü, Uzmanlık Tezi, Ankara.
- Allan, M. S. (2006). *Destination brands: Managing place reputation*. London: Routledge.
- Atılğan, E., Aksoy, Ş. ve Akıncı, S. (2005). Determinants of the brand equity: A verification approach in the beverage industry in Turkey, *Marketing Intelligence & Planning*, 23(2/3), 237-248.
- Buhalis, D. (2000). Marketing the competitive destination of the future, *Tourism management* 21(1), 97-116.
- Cai, A.L. (2002), Cooperative branding for rural destinations, *Tourism Research*, 29(3), 720-742.
- Chen, C. ve Tsai, D. (2007). How destination image and evaluative factors affect behavioral intentions?, *Tourism management* 28(4), 1115-1122.
- Çalışkan, U. (2004). Sarıkamış Kayak Tesisleri ve Konaklama Hizmetleri Müşteri Memnuniyeti Araştırması, *Serhat Kalkınma Ajansı*.
- Çetin, N. (2014). *Kızkalesi'nin turizm destinasyonu olarak marka algısı*, Yayımlanmamış Yüksek Lisans Tezi, Mersin Üniversitesi Sosyal Bilimler Enstitüsü, Mersin.
- Çetinsöz, B. C. ve Artuğer, S. (2013). Antalya İli'nin marka değerinin ölçülmesine yönelik bir araştırma, *Anatolia: Turizm Araştırmaları Dergisi* 24(2), 200-210.
- Çiftçi S. ve Cop, R. (2007). Marka ve marka yönetimi kavramları: üniversite öğrencilerinin kot pantolon marka tercihlerine yönelik bir araştırma, *Finans Politik & Ekonomik Yorumlar* 44, 512.
- Çokluk, Ö., Şekercioğlu, G. ve Büyükoztürk, Ş. (2010). *Sosyal bilimler için çok değişkenli istatistik - spss ve lisrel uygulamalar*,. Ankara: Pegem Akademi.
- Doğaner, S. (2001). *Türkiye Turizm Coğrafyası*. İstanbul: Çantay Kitabevi.
- Doğanlı, B. (2006). *Turizmde destinasyon markalaşması ve Antalya örneği*. Yayımlanmamış Yüksek Lisans Tezi, Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü, Isparta.
- Ekinci, Y. ve Hosany, S. (2006). Destination personality: An application of brand personality to tourism destinations, *Journal of Travel Research* 45(2), 127-139.
- Foley, A. ve Fahy, F. (2004). Incongruity between expression and experience: The role of imagery in supporting the positioning of a tourism destination brand, *The Journal of Brand Management*, 11(3), 209-217.
- Gartner, W. C. ve Ruzzier, M. K. (2011). Tourism destination brand equity dimensions renewal versus repeat market, *Journal of Travel Research* 50(5), 471-481.
- Giritlioğlu, İ. ve Avcıkurt, C. (2010). Şehirlerin turistik bir ürün olarak pazarlanması, örnek şehirler ve Türkiye'deki şehirler üzerine öneriler (derlemeden oluşmuş bir uygulama), *Adıyaman Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* 3(4), 74-89.

- Guest, L. P. (1942). The genesis of brand awareness, *Journal of Applied Psychology*, 26 (6): 800–808.
- Gündoğdu, A. (2008). *Turizmde markalaşma ve tanıtma faaliyetlerinin önemi: İspanya ve Türkiye'nin karşılaştırmalı analizi*, Uzmanlık Tezi, Kültür ve Turizm Bakanlığı Tanıtma Genel Müdürlüğü, Ankara.
- Hankinson, G. (2005). Destination brand images: a business tourism perspective, *Journal of Services Marketing* 19(1), 24-32.
- Hassan, S. B., Hamid, M.S.B. ve Al Bohairy, H. (2010). Perception of destination branding measures: a case study of Alexandria destination marketing organizations, *International Journal of Euro-Mediterranean Studies*, 3(2), 271-288.
- Iliachenko, E. Y. (2003). Exploring culture, history and nature as tourist destination branding constructs: The case of a peripheral region in Sweden, *Nordic-Scottish Conference on Rural and Regional Development in association with the 14th Nordic Symposium*.
- İlban, M. O. (2008). Seyahat Acenta Yöneticilerinin Destinasyon Marka İmajı Algılamaları Üzerine Bir Araştırma”, *Ege Akademik Bakış*, 8(1): 121-152.
- İpar, M. S. (2011). *Turizmde destinasyon markalaşması ve İstanbul üzerine bir uygulama*. Yayınlanmamış Yüksek Lisans Tezi, Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü, Balıkesir.
- Karasar, N. (2005). *Bilimsel araştırma yöntemi*. Ankara: Nobel Yayın Dağıtım.
- Kavacık, M., Zafer, S. ve İnal, M. E. (2012). Turizmde destinasyon markalaması: Alanya örneği, *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 39, 169-192.
- Kavas, A. (2004). Marka değeri yaratma, *Pazarlama ve İletişim Kültür Dergisi*, 3(8), 16-25.
- Knapp, D. E. (2003). *Marka Akh*, Çevirmen: Azra Tuna Akartuna, 1.Basım, İstanbul: Mediacat Kitapları.
- Koçak, N. ve Karakaş Tandoğan, G. (2008). Kent Turizmi Kapsamında Fuar ve Sergilerin İzmir Turizmine Olası Etkileri: EXPO Örneği, *Seyahat ve Otel İşletmeciliği Dergisi* 5(2), 6-15.
- Konecnik, M. (2004). Evaluating Slovenia's image as a tourism destination: A self-analysis process towards building a destination brand, *The Journal of Brand Management*, 11(4), 307-316.
- Morgan, N. J., Pritchard, A. ve Piggott, R. (2003). Destination branding and the role of the stakeholders: The case of New Zealand, *Journal of Vacation Marketing* 9(3), 285-299.
- Özdamar, K. (2011). *Paket programlar ile istatistiksel veri analizi*, Eskişehir: Kaan Kitabevi.
- Özdemir, G.(2008). *Destinasyon Pazarlaması*, Ankara: Detay Yayıncılık.
- Özdemir, Ş. ve Karaca, Y. (2009). Kent markası ve marka imajının ölçümü: Afyonkarahisar kenti imajı üzerine bir araştırma, *Afyon Kocatepe Üniversitesi İ.İ.B.F. Dergisi*, 11(2), 113-134.
- Ritchie, B. J. R. ve Ritchie, J. R. R. (1998). The branding of tourism destinations, *Annual Congress of International Association of Scientific Experts in Tourism*, 1-31.
- Seyhan E. (2007). *Markalaşma sürecinde bütünleşik pazarlama iletişiminin yeri ve önemi*, Yayınlanmamış Yüksek Lisans Tezi, Gazi Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.

- Şahin, G. (2010). *Turizmde marka kent olmanın önemi: İstanbul örneği*. Yayınlanmamış Yüksek Lisans Tezi, Ankara Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.
- Tosun, C. ve Bilim, Y. (2004). Şehirlerin Turistik Açidan Pazarlanması: Hatay Örneği, *Anatolia: Turizm Araştırmaları Dergisi*, 15(2), 125-138.
- Türkeri, İ. (2014). *Destinasyon aidiyeti oluşturulmasında destinasyon imajının ve kişiliğinin rolü: kış turizmi örneği (Palandöken kayak merkezi)*, Yayınlanmamış Yüksek Lisans Tezi, Atatürk Üniversitesi Sosyal Bilimler Enstitüsü, Erzurum.
- Ural, A. ve Kılıç, İ. (2011). *Bilimsel araştırma süreci ve SPSS ile veri analizi*. Ankara: Detay Yayıncılık.
- Uztug, F. (2005). *Markan Kadar Konuş Marka İletişimi Stratejileri*, İstanbul: Mediacat Kitapları.
- Vanat, L. (2013). *International Report on Snow & Mountain Tourism - Overview of the key industry figures for ski resorts*, Erişim Tarihi: 08/03/2014, <http://www.vanat.ch/RM-world-report-2013.pdf>.
- Yavuz, M. C. (2007). *Uluslararası destinasyon markası oluşturulmasında kimlik geliştirme süreci: Adana örneği*, Yayınlanmamış Doktora Tezi, Çukurova Üniversitesi Sosyal Bilimler Enstitüsü, Adana.

Literature Review on Production Management

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Abstract

With the beginning of humanity, the need for conducting vital activities emerged and humanity continued its life by using natural sources. While some resources in nature can be used directly, some resources need to be used after being transformed. Transformation of resources to meet the needs of humanity since early times constitute the foundation for production processes. Over time, with the change of life standards, methods and strategies of production have changed and this led to the emergence of today's understanding of production management. Production function is the function that coordinates and audits the necessary resources used to produce goods and services used in meeting human needs. In this paper, concepts of production, product management, product management functions and categorization will be addressed.

1. PRODUCTION FUNCTION

Production function is the function that coordinates and audits the necessary resources used to produce goods and services used in meeting human needs. In this paper, concepts of production, product management, product management functions and categorization will be addressed.

1.1. The Concept of Production

Production, from an engineering perspective, is defined as to turn raw materials or semi-products into valuable products by making changes on a physical asset. There are accepted definitions of production in economics, business, and engineering fields. Production, from an economics perspective, is defined as the process that creates benefits by by making products and services to meet the needs of people by making the necessary changes on raw material.

Production from an organizational perspective is defined as the process of creating useful products and services by making physical and chemical changes in resources such as raw materials or semi-products. Organizations benefit from production factors in order to provide production. Production factors are the inputs necessary for good or service production. These include; labor, capital, natural resources, entrepreneur, and technology.

2. PRODUCTION MANAGEMENT

2.1. The Concept of Production Management

With the beginning of humanity, the need for conducting vital activities emerged and humanity continued its life by using natural sources. While some resources in nature can be used directly, some resources need to be used after being transformed. Transformation of resources to meet the needs of humanity since early times constitute the foundation for production processes. Over time, with the change of life standards, methods and strategies of production have changed and this led to the emergence of today's understanding of production management.

Today, production is the transformation process of human and material factors into products and services. Various business resources (organization resources) that are called production factors (labor, machines, raw material, cash capital, etc) enter the process as inputs and turn into outputs that are products and services to meet needs at the end of the process (Mucuk, 2005:186).

Production management is the process of bringing together the material, machinery, and human labor resources that an organization has to produce a certain product with desired qualities, in a desired time frame and with the lowest cost (Kobu, 2010:4). The main role of product management in organizations is to transform inputs (raw material, semi-product, building, human resource, etc) into outputs that provide benefits (products and services). This process is illustrated in figure 1.

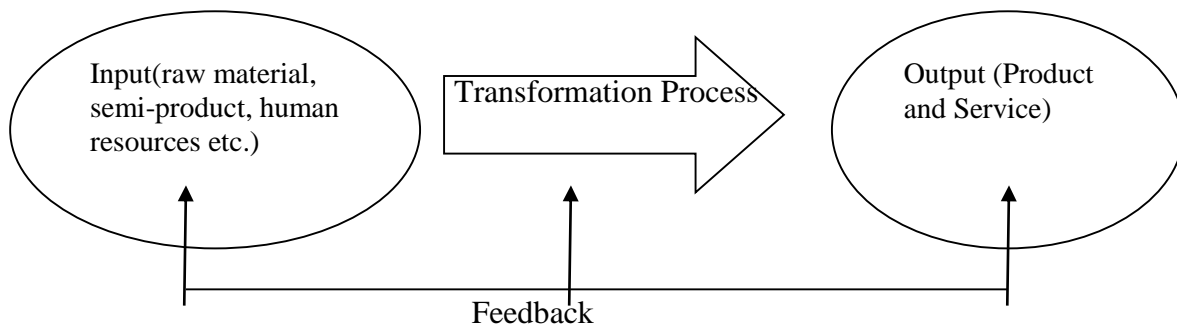


Figure 1. The Transformation Process of Production Management

2.2. The Purpose of Production Management

The purpose of production management is to provide constantly increasing values to customers by increasing organization's success constantly and developing its talents constantly (Evans, 1997). The customer is in the center of production and products that do not reach customers and that do not have the characteristics that the customer want do not have any value. Thus, the product that is manufactured should be where and when the customers desire it with the quality and cost they desire. These characteristics desired for the product determine the point where production aims to reach. Manufacturers should meet the criteria below during production to reach customer focused goals (Takci, 2013: 8).

- Optimizing integrated process and costs,
- Increasing and sustaining the quality of product and process,
- Sustaining the production factors,
- Increasing the level of benefitting from production factors
- Increasing the stock turnover by keeping the stock levels at minimum,
- Meeting the consumer demand and needs the best way.
-

2.3. Functions of Production Management

The functions of a production management department at an organization are determined depending on various factors such as the size of the organization, management policy, organizational structure, production type and methods, industry type, and production amount, etc. Generally the main functions of organizations are categorized in three groups that are; pre-planning, planning, and control. Functions of these main groups are described in the next section (Kobu, 2010:10).

a) Pre-Planning Group Functions

- **Consumer Research and Sales Projections:** Collecting and analyzing data on the type, cost, amount, and the time of the product requested by the customer

- **Product Design and Development:** Preparation of information that would provide transformations in alignment with the desired quality and design of the product.

- **Facility Investment Policies:** Providing the machinery and equipment to achieve the planned production.

- **Lay out:** Design of machinery and equipment locations in alignment with the identified work flow.

b) Planning Group Functions

- **Material:** Supplying the necessary raw material, semi-product, and ready parts at the desired time and location.

- **Workforce:** Having sufficient workforce to achieve the planned production.

- **Machinery:** Calculation of production capacities of machines to achieve the production.

- **Method:** Determining the machine types, procedures to be done and the time frame for the work.

These four factors need to be planned to fully meet the needs during production activities. After researching related possibilities and taking precautions, the other three functions of the planning group are executed.

- **Routing:** Arrangement of production activities, and determination of locations of work stations and interim storages within the organization.

- **Time Estimations:** Doing the necessary time and method studies by comparing the current work load and the work capacity of the workforce resources.

- **Programlama:** Zaman ve metot etütlerinin ardından yapılacak işlerin eldeki verilere göre programlanmasıdır.

c) Functions of the Control Group

- **Distribution:** Creation of work orders that include the date, amount, bench, employee and other information about the planned work in the production facility and distribution of these work orders to the concerned departments and persons.

- **Monitoring and Control:** Identification of obstacles that are difficult to foresee such as machine malfunction, discontinuity, inefficient work, and inclusion of urgent productions in the program while the process continues and taking the necessary precautions.

- **Exam:** Determining whether the manufactured products have the desired characteristics or not.

- **Evaluation:** Determining and evaluating the productivity of the organization, use of capacity, and deviations from programs by documenting the work done.

2.4. Production Management Planning

Planning has an important place for organizations as it allows future-oriented activities to be conducted efficiently and without problems. Organizations' function that is responsible for product and service production is important in terms of both production management and achieving goals by efficient planning. Thus, production planning should be done by production management to achieve goals effectively. Production management planning is defined as plans to identify which products will be produced how much, where and by whom. The main reason for this planning is to produce and deliver products within the identified budget and in accordance with the amount and quality previously identified by the management.

Production management needs production plans due to reasons listed below:

- Instability of the environment and constant change of environment due to globalization,
- Increase of competition in the market,
- Expansion of distribution activity areas,
- Complexities of activities in production systems,
- Market structure becoming complicated,
- Variation in consumer demands,
- The obligation to reduce resource loss to minimum due to scarce resources,
- The need to provide healthy and regular coordination within organizations.

The steps in production planning include;

1. **Identification of activities to be done:** Identification of necessary materials and the processes they will go through for the product to be manufactured.
2. **Identification of the production management timeline:** Identification of the products to be produced and the timeline for their production.
3. **Identification of Production Order:** Refers to which product will be manufactured in where and in which production bench.
4. **Demand estimations:** Identification of the market demand for the product and producing accordingly.
5. **Identification of stock level:** Identification of stock levels after demand estimations and determination of production amount of products.
6. **Identification of amounts to be produced and maintained in stock:** Clarification of the product and the amount to be produced.

7. **Time and activity study:** Identification of an exact time frame for the job to be done and making sure that the person doing that work can move efficiently.

3. STOCK CONTROL

Raw material, semi-product, material and product itself that are maintained to be used in the future by organizations are all included in the concept of stock. The main reasons for keeping stocks in organizations include prevention of obstacles that may arise in production processes, and preparation for potential changes in demand.

As maintaining stock creates additional costs for organizations, this is a concept that needs to be addressed by managers. Within this context, organization managers, particularly production management department managers should do stock controls. Stock control is a method to efficiently and productively identify the amount and variety of products to keep in the stock. Managers can prevent unnecessary stock costs by conducting an effective stock control activity. Additionally, stock control also helps prevent disruptions in production by eliminating losing resources due to sudden demand changes. Loss of stock can be prevented by storing parts that are brought to the organization through stock control.

4. QUALITY CONTROL

4.1. Quality Control

Quality control is the activities to identify whether a product is in accordance with the previously identified standards and whether it reached the quality standards identified previously. The main reason for quality control by organization managements is to prevent low quality in production and manufacture within the identified standards.

Quality control system helps production to be in alignment with customer expectations and helps organization to achieve their goals efficiently and productively. Additionally, quality control leads to an increase in efficiency in production while decreasing the costs. With a well-managed control by management, production occurs on time and results in quality product and service which helps with product promotion. Also, this method allows for early identification of changes or mistakes that are unforeseen and for loss to be minimized.

Quality control methods are grouped into three that are (Şimşek, 2010: 262);

- Hundred Percent Inspection Method.

- Statistical Quality Control (Sampling) Method,
- Inspection During Production Method.

4.1. Hundred Percent Inspection Method

This inspection method involves inspection by examining manufactured products one by one with special methods and techniques by experts. This method is generally used in job shop production.

4.2. Statistical Quality Inspection (Sampling) Method

In the statistical quality control method, certain statistical methods are used for sampling and a few pieces of products are taken for examination and control. In sectors in which batch productions are performed, as one by one examination is costly and difficult this control method became necessary.

4.3. Inspection Method During Production

The control method during production is performed as the production continues. These controls allow for identification of problematic parts that may result in defective products or that may affect product efficiency, and for intervening to take preliminary cautions.

References

1. Evans, J.,R. (1997), **Production/Operations Management Quality, Performance and Value**, West Publishing Company, USA.
2. Kobu, Bülent (2010), **Üretim Yönetimi**, Beta Yayınevi, İstanbul.
3. Mucuk, İsmet (2005), **Modern İşletmecilik**, Türkmen Kitabevi, İstanbul.
4. Şimşek, Şimşek (2010), **İşletme Bilimlerine Giriş**, Eğitim Kitabevi Konya.
5. Takcı, Ebru (2013), **Bir İmalat İşletmesinde Simülasyon Yardımıyla Süreç İyileştirme Uygulaması: Kayseri Gürkar Tekstil Örneği**, Yüksek Lisans Tezi, Nevşehir Hacı Bektaş Veli Üniversitesi.

Literature Review on Human Resources Management

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Abstract

Uncertainty, discontinuity and change are the concepts that best describe today's world. Especially technological formations and the dynamics of globalization are causing changes that affect each other in the elements of the environment in which the organizations function. Given such issues as change, uncertainty, discontinuity and competition, the difficulty of achieving organizational success will explicitly be seen. To continue their activities without being affected by this wave of change of, organizations, which are the main elements of the society, can not be expected. The most important resource of organizations are human beings, as they will distinguish organizations, which are social systems, from their competitors. The more human resources are strengthened within the organization and the more satisfied this resource is, the more the organization will develop in that direction and achieve its goals more easily and quickly. In this direction, human resource management that plays an active role in achieving the goals of organizations and in satisfaction levels of workers, is of vital importance in terms of businesses. In this paper, concepts of human resources, human resources management will be addressed.

1. HUMAN RESOURCES MANAGEMENT CONCEPT AND ITS IMPORTANCE

Human resource management, which covers all workers who are at the bottom level, as well as the executives at the top level within an organization, including the workforce outside the organisation that can be useful in terms of the organization, can be defined briefly as those activities that enable effective management of all the workers taking action in the organization. In broad terms, human resource management is a concept that deals with motivation and manipulation activities such as supply, selection and recruitment of workers, providing training for their development, evaluating their performances within organization as well as evaluating the environment, strategy development, and prediction of human resource (Yüksel, 2007: 9).

Human resources management strategically and extensively assesses human resources, which is the most valuable asset in an organization. All of the activities related to human resources management take place in line with strategic goals of organizations. When human resource management is considered in this respect, it appears that it has a vital priority in organizations in reaching their goals. Considering today's hyper-competitive environment, human resource

management with such an importance to achieve success in terms of organization focuses on the common interests of both management and workforce. Again, this concept deals with the generation of a positive culture within the organization and the consubstantiation of all the workers with their goals and values (Bingöl, 2006: 7).

2. CHARACTERISTICS OF HUMAN RESOURCES MANAGEMENT

The specification of the characteristics of human resources management is useful for understanding the importance of this function in terms of organizations and workers. These characteristics are listed below (Aykaç, 1999: 24).

- 1- Human resources management considers every manager in the organization as responsible and in charge for every matter and every question that may be related to human resources,
- 2- Human resources management is responsible for providing the human resources that organizations need,
- 3- Human resources management is responsible for the most effective and efficient use of personnel that is provided to the organization,
- 4- Human resources management demonstrates an approach that keeps managers responsible and in charge of manipulating the workers and making them part of the organization by providing the necessary motivation,
- 5- Human resources management values the attitudes and behaviors of the workers,
- 6- Human resources management gives importance to team work,
- 7- Human resources management provides integration within the organization by dwelling on the needs of the personnel,
- 8- Human resources management is the sequence of activities assumed by senior management, and responsibility for ensuring that management belongs to them,
- 9- Human resources management has a special characteristic to ensure a concordance between organizational culture and national and international culture,
- 10- Human resources management has a flexible structure,
- 11- In human resources management, prizes that will be given to the workers vary according to success and ability,
- 12- In human resources management, organizational principles are organic and local,

13- Human resources management adopts a participatory approach in management,

14- Human resources management has the characteristic of creating an integral structure within the organization by functioning in concordance with all the workers,

3. ENVIRONMENTAL FACTORS AFFECTING HUMAN RESOURCES MANAGEMENT

Environment is defined as physical, biological, social, economic and cultural ambience in which people and other living things maintain their relationship and interact throughout their lives. Environmental fact involves all the states, conditions and effects that influence and surround the development of an organism group (Francis et al, 1971: 25).

The environment, which has the power of direct or indirect effect on any organism, is very important in terms of organizations. Because organizations live together with their environment which provides resources to them and draw particular lines, and every organization, whatever specification it has, tries to perform its activities in an environment that offers opportunities and threats to it. Organizations that are constantly in contact with the environment transform the input they receive from their environment into the output they need and present it to their environment. The definition of environment which has a vital importance in terms of the organization can be made in the form of all internal and external factors that affect an organization's life and development (Naktiyok, 1999: 5). Organizations should have knowledge of these internal and external factors and influences in order to ensure their sustainability and reach their goals. Similarly, human resources management should be informed of internal and external factors as it perceives the organization as a whole of relationships arising from the interaction of internal and external environmental factors. The environmental factors that can be divided into internal environment and external environment are explained below (Bingöl, 2009: 73).

3.1. Internal Environment Factors

The internal environment can be defined as the environment within the boundaries of the organization, which can be influenced and controlled more easily by the organization. This environment consists of factors that directly affect human resources. In general, internal environmental factors;

- Mission, Goals and Targets,
- Plans and Policies,

- Organization Culture,
- Individual Characteristics and Interindividual Relations.

3.2. External Environmental Factors

The external environment can be defined as an environment that closely influences the organization, that is not, however, within the boundaries of the organization and can not be controlled by the organization. This environment plays important roles in the activities of human resources. The external environmental factors are listed below as 9 factors. These are;

- Labor Market,
- Legal Environment,
- Opponents,
- Economical Conditions,
- Community,
- Customers,
- Shareholders,
- Unions,
- Geographical Conditions.

4. FUNCTIONS OF HUMAN RESOURCES MANAGEMENT

In this part of the study, the functions that form the human resources management will be discussed. These functions can be assessed in 7 groups. These are;

- Human Resources Planning,
- Job Analysis and Job Design,
- Recruitment,
- Adaptation of Labor and Training,
- Performance Evaluation,
- Wage Management,
- Occupational Safety and Worker Health.

The ability of the human resources management to serve the organizational goals efficiently depends on the fulfillment of the above functions in a complete and proficient manner. If one or more of these functions is incomplete or can not be carried out by the management in a

healthy way, it could risk the future of the organization. The basic functions of human resources management are explained below respectively.

4.1. Human Resources Planning

As explained above, planning is the identification of the route map of what to do in the future and showing what is going to be done, when, why, by whom and how, in drafts. Human resources planning is the determination of where and how to meet the required amount and quality of workforce within the organization at the requested time. This planning function is the responsibility of the human resources management. If this department wishes to serve its organization's purposes successfully, it must plan how this workforce will be made ready within the organization.

In this direction, human resources management uses various estimation methods in human resources planning. Some of these are explained below.

Estimation Methods Based On The Opinions Of The Managers: This method based on the estimations of the knowledgeable persons like organization managers and human resources specialists. In this method of estimation, managers rely on their past experience and intuition and make an estimation aimed at workforce needs, especially considering the demands of the workforce in the past. The relevant method is used by the human resources managers due to being simple and fast method. However, when the method is used, care must be taken to ensure that there are similarities between the changes that may occur in the future and the experience of the past. Otherwise, this estimation method may fail. A similar method is a **prospective prediction model**. In this model, organization managers make estimations about workforce demand by using information from the past. For example; if five personnel were needed every six months in the past, the organization will need a total of 10 personnel next year without the influence of other variables.

Delphi Method: In this method, a predetermined group of managers or experts are asked their opinions on workforce demand independently of each other. These opinions are then collected, summarized and evaluated by another person. In the event of significant differences between the opinions, the summarized opinions are sent to the group again. The process is continued until a consensus is built between the managers in the group.

Index Calculation: In this method, workforce estimations for the future are made by taking into consideration the data of past years. More clearly, the relationship between the workforce in the past period and another variable with a significant relationship between them is assessed and an estimation of the future oriented workforce is made. For example, assume that there is a significant relationship between the number of workers and sales. If 3 workers are needed for every 50.000 TL increase in organization in the past years, future demand estimation can be determined by considering the increased rate of sales. If an increase of 150.000 TL is estimated, then the organization will need 9 workers.

Quantitative Techniques: These techniques are techniques that are made through statistical analysis methods and computer models and enable the obtaining of healthier results. The techniques above may not produce healthy results because they do not take into account some variables that influence workforce demand (Şimşek, 2010: 348).

4.2. Job Analysis and Job Design

4.2.1. Job Analysis

Job analysis is defined as the process of collecting, evaluating the information related to work from the relevant sources and systematically reviewing and interpreting this information in order for the work to be carried out in the organization in a healthier, effective and efficient manner (Şimşek, 2010: 352).

There are various purposes of performing job analysis. These can be listed as follows (Aşkun, 1978: 105);

- To improve working conditions,
- To provide detailed information about the job in order for the worker to succeed,
- To provide the necessary data for job evaluation,
- To increase personnel and labor productivity,
- To ensure the simplification of the work to be done and the improvement of the methods being used,
- To determine the business requirements for operations like workforce procurement, recruitment, promotion etc.,
- To help regulate the production standards.

When job analysis is done, it is necessary to go through certain stages. These stages are;

- 1- Determination Of The Job To Be Analyzed,
- 2- Preparation Of The Question Form,
- 3- Collection Of The Information Regarding The Job,
- 4- Evaluation, Interpretation Of The Collected Information.

The methods used when performing job analysis can also be divided into three parts;

- 1- Observation Method:** It is the technique in which the expert who will perform the job analysis observes the worker who carries on his/her activity and makes evaluations by registering the tasks that he/she fulfills.
- 2- Interview Method:** It is the technique in which the expert who performs the job analysis gets information from the worker about the jobs that he/she has carried out.
- 3- Question Form Method:** This is the technique in which the question form that collects information about how the work is done and the personal requirements needed for work to succeed is prepared by the experts who are performing job analysis and in which these forms are answered by the interviewers. (Ertürk, 1995: 240).

4.2.2. Job Design

The job design is a detailed specification of the work to be performed. In other words, the process of determining the tasks required to be performed, the methods used to perform these tasks, and the relationship between the job and the other works within the organization is called job design (Mondy v.d., 2002: 110). Job design enables workers to make more contributions to the success of the organization by providing activity and efficiency of them. There are various methods for job design. These are; Job simplification, job enrichment, job expansion and process renewal.

Job simplification: It is a process that aims to increase the efficiency of the task by decreasing the number of tasks that have to be done by the workers and eliminates the need for training and skill development by making the tasks simple, repetitive, standardized. With job simplification, the work divided into smaller parts is ensured to be performed by less qualified workers and the costs are lowered by giving more simple training.

Job enrichment: This job design method is a process that aims to bring together factors that provide high level of motivation (such as taking responsibility, being recognised, being

appreciated, personal development and growth, learning and success feelings) in the structure of work.

Job expansion: It is the process of giving the responsibility of more than one task to a worker, instead of giving the responsibility of one task and making him/her an expert in one subject and combining a series of tasks in order to make them broader and more interesting and giving these tasks to a worker.

Process Renewal: It refers to radically reviewing all the work processes and procedures established within the organization and restructuring it.

4.2.3. Job Description and Job Specifications

Written statements that explain what the worker does, when, where, and how the job is done and developed as a result of job analysis is called job description (Dessler, 1997: 96). Job descriptions are aimed at ensuring the job analysis is clearer and easier to understand.

Documents that specify the characteristics of the worker that should carry out the activities within the organization are called the job specifications. By means of these documents, it is possible to arrange the activities by providing the workforce supply according to the requirements of the work to be done.

4.3. Recruitment

Recruitment, in other words personnel supply, is the whole of the activities carried out in order to find the workforce in vacant positions in the organization. This activity, which has a vital importance for the organization, needs to be done correctly with the right people. The fact that the workforce, which is the main resource in the realization of the organization's activities, is the persons with the appropriate qualifications for the job, enables the organization to be survived in the market environment where it is constantly in competition and to gain competitive advantage (Aşkun, 1978: 105).

The recruitment operation goes through certain processes. The process begins with the application of persons who are suitable for the specifications of the job and ends with the decision made by the management on who will be hired. This process can be expressed in 7 stages (Şimşek, 2010: 358).

- Pre-acceptance,

- Recruitment Tests,
- Interviews,
- Mixed Interview,
- Reference Control,
- Health Check,
- Interview with an Executive and Final Decision.

4.4. Job Preparing and Training

Job preparing, which is one of the functions of human resources management, refers to the process of integration of the newly acquired worker. This process, that makes the worker a part of the organization, ensures that the worker accepts the organization.

There are methods used for the job preparing of the worker. These are (Bingöl, 2006: 236);

- Introducing the organization,
- Conference, Panel and Group Meetings,
- Visual Techniques (Film, Slide, etc.),
- Inter-organizational Trips,
- Job Preparing Interviews Conducted by Experts or Administrators,

The activities carried out by the organization in the workers' development process in order to ensure that the work done by the workers is more efficient and productive is expressed as worker training. By means of the trainings given, the worker increases his/her performance within the organization compared to the old performances. At the same time, increases in the quality and quantity of production occur, and organizational strategies are being supported. The trained worker increases his/her loyalty to the organization, which reduces worker's absenteeism and the recruitment cycle rate. Relations between the manager and the worker develop within the organization and the motivations of the workers increase.

4.5. Performance Evaluation

The identification of the adaptation degree of the worker that has passed through certain stages and brought to the organization according to the essentials and characteristics of the tasks given after the commencement of the work and the objective determination of how successful performance the worker exhibits when performing the job are defined as the performance

evaluation. Through performance evaluation, it is determined how the worker serves the purpose of the organization (Sabuncuoğlu, 1994: 164).

As a result of the evaluations made, the inadequacies of the workers are determined and thus it is determined how and in what aspects they can be trained. According to the performance levels of the workers, the level of wages to be given to them is also determined. As a result of the performance evaluations made, workers that do not perform in accordance with the quality of the job and the organizational goals are identified and the dismissal of these workers from the organization is taken into consideration. Again, this evaluation system becomes the main reference point in the process of promotion and displacement of the workers of the organization (Şimşek, 2010: 364).

4.6. Wage Management

The wage is defined as the amount paid by the employer for the work done by the worker. One of the most motivating tools for workers today is the wages paid to them for their work. Because individuals need money or price paid with goods in order to be able to live their life in certain standards and meet their general needs. Organization management should identify the wage system that will create satisfaction in the worker in comparison to the work done. In particular, if human resource management, which implies job analysis and job descriptions in a systematic way, correctly determines the salary of the personnel according to the quality of the work done, the satisfaction level and motivation of the personnel will increase. A fair wage system performed within the organization attracts qualified workers and creates a consistency within the organization. The workers that have increasing satisfaction will cause a decrease in the worker cycle rates as well.

4.7. Occupational Health and Safety

With the definition of the International Labor Organization (ILO) and the World Health Organization (WHO), occupational health and safety is explained as *"To maximize and protect the physical, mental and social health and well-being of all workers; the elimination of outcomes contrary to the health caused by the environment and produced goods; the elimination of risk factors that would expose workers to injuries and accidents; as well as the placement of the workers in work that is appropriate to their physical and mental characteristics and consequently the creation of a business environment suited to the physical and mental needs of the workers."*

(Özçer, 1988: 2). With simpler explanation, occupational health refers to the fact that a worker is not physically and emotionally exposed to illnesses and adversities related to the work, while occupational safety refers to the protection of workers from accidents and injuries that may result from business-related activities to take place while performing their duties within the organization.

Occupational health and occupational safety aim to protect workers from accidents that may occur due to work they have done. This function, which is one of the human resources management functions, has an important place in terms of workers. Because the accidents that can happen when workers do their jobs, may harm their health and may end with maiming and will cause them to suffer loss in the material and spiritual aspects. For this reason, human resource management should take precautions in particular to avoid occupational accidents that may harm the health of workers and ensure that workers continue to operate in a healthy work environment.

References

1. Aşkun, Cem İnal (1978), “İşgören”, , **İTİA Dergisi**, ss.105.
2. Aykaç, Burhan (1999), **İnsan Kaynakları Yönetimi ve İnsan Kaynaklarının Stratejik Planlaması**, Nobel Yayınları, Ankara.
3. Bingöl, Dursun (2006), **İnsan Kaynakları Yönetimi**, Beta Yayınevi, Denizli.
4. Dessler, G. (1997), “Human Resource Management”, **7th Edt., Prentice Hall, Englewood Cliffs, NJ**, ss. 96.
5. Ertürk, Mümin (1995), **İşletme Biliminin Temel İlkeleri**, Beta Basım Yayın, İstanbul.
6. Francis J. Bridges, Kenneth W. Olm., J. Allison Barnhill, (1971), **Management Decision and Organization Policy**, Ally Bacon Inc., London.
7. Naktiyok, Atılhan (1999), **Çevresel Çalkantı ve Örgüt Kültürü-Bir Uygulama-** Doktora Tezi, Erzurum.
8. Özçer, Sema (1988), “İş Sağlığı ve İş Güvenliğinin Çağdaş Anlamı”, **Verimlilik Dergisi-MPM**, Ankara,ss. 2.
9. R.Wayne Mondy, Robert M. Noe ve Shane R. Premeaux (2002), “Human Resource Management”, **8th Ed., Prentice Hall, N.J.**, ss.110.
10. Sabuncuoğlu, Zeyyat (1994), **Personel Yönetimi**, Nadir Kitapevi, Eskişehir.
11. Şimşek Şerif (2010), **İşletme Bilimlerine Giriş**, Eğitim Kitabevi, Konya.
12. Yüksel, Öznur (2007), **İnsan Kaynakları Yönetimi**, Gazi Kitabevi, Ankara.

İnternet Kaynağı

13. <http://www.jobnak.com/insan-kaynaklari> ansiklopedi.Is%20zeninlestirme.164.html

A Review on the Effects of Performance Management on Employees

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Abstract

In today's world in which the number of organizations increase rapidly, technological transformations increase and the competition between organizations are at the highest level. As these changes can be provided quantitatively in organizations, these changes are not sufficient in terms of competing. Organizations need a qualified workforce as well in order to be present in a sustainable competition within their sectors.

Employees are one of the most important stakeholders for organizations. They constitute a sociological mass that function within the organization they work. Employees should not be considered as costs for organizations. On the contrary, they should be considered as stakeholders and used more efficiently by providing them sociological and psychological support. For this purpose, employees' skills should be revealed and improved qualitatively. While the increase of employee qualifications individually do not mean much for organizations, these qualifications should be increased and improved to contribute to teamwork. This can be achieved by making employees happy at organizations they work.

Organizations need to use tangible and intangible resources efficiently and effectively in achieving the goals they identified. These resources are time, location and human resources. Organizations that desire to be successful should measure their employees' success and make efforts to increase their success in order to gain a competitive advantage. These efforts constitute performance management system.

Giving responsibilities to employees, identifying goals around responsibilities, evaluating performance by providing feedback within the scope of goals are achieved through a performance management system. Performance management system is significantly needed for an efficient and productive organization. Performance review activities conducted with performance management system are significantly important both for managers and employees. Employees at the managerial level can identify what employees do towards purposes and goals as well as the success level by processing performance review activities. Performance reviews of employees, social capital of organizations, are important from this aspect. Performance management system is an important system not only for managers but also for employees. Employees have the opportunity to see their

performance reviews with performance management system. These reviews reveal weaknesses of employee performances which provide employees an opportunity to strengthen them. Additionally, performance management system reveals the achievements of successful employees which increases the loyalty and trust of the employee towards the organization because employees would like to know that their achievements are valued.

Conducting performance reviews with performance management system provides important data to organizations. Therefore, performance management system has been and continues to be a widely used system by organizations. The use of this system is becoming more common both in public and private sectors.

EFFECTIVE PERFORMANCE MANAGEMENT

Considering the determination of whether the official performance management system of an organization is effective or not, and if the system is not effective, it is the responsibility of the human resources to take the steps towards fixing it [1]. The positive effects of effective performance management on employees make the responsibilities of human resources important. There are two main factors involved during the process of evaluation and/or re-design of the performance management system of an organization: new organizational leader team or tensions arising due to organizational crises related to current processes (for example, lawsuits filed against the organization or, loss of an employee with an important role in the organization). These types of situations require a change in the performance management system.

The benefits of an effective performance review are listed below [2];

- Provides a more effective performance planning.
- Provides a better guidance and performance management.
- Provides an environment to discuss performance and employee development topics.
- Makes necessary documentation that can be used in human resources decisions easier.

However, when reviews are ineffective, various problems emerge that affect individual performance and organizational outcomes negatively [3]. Some examples include;

- Damage in the relationship between employee and employers,
- Loss of motivation in managers and employees,
- Interruption of employee development,

- Negative attitudes,
- Mis-documentation of the contributions of an employee,
- Damage in the connection between employee performance and rewarding,
- Loss of the reliability of the organization's human resources function.

Effective performance review systems need three critical components to prevent negative outcomes such as listed above. These three components are, effective system design, effective management system applications, and effective performance review system support.

An effective system design requires a clear definition of the purpose of official performance evaluations so that it can be understood by everyone. There needs to be as much information input as possible from employees and managers regarding how the performance review system should work. Easy-to-conduct evaluation procedures and performance based ranking forms related to work are needed. Also, employees and managers should be trained on how the performance evaluation process works and what its rules are.

For an effective management system, effective management system applications with best results should be revealed. To do this, managers at all levels need to conduct an effective performance planning to clarify individual roles, goals, and expectations. Additionally, managers should provide regular and unofficial feedback to their employees on their performance and guide them how to improve their performances. Managers need to conduct written and one-on-one performance reviews effectively and honestly.

Unless these fundamental applications are part of the performance culture of the organization and the management style, even a well-designed system would fail.

The last component of an effective performance evaluation systems is performance evaluation system support. Evaluation systems that reveal the desired outcomes have a component of effective evaluation system-support that motivates managers for effective evaluation behaviors. This support component includes the sub-components listed below:

- Support for the evaluation process including the effective management evaluation by upper level management,
- Results directly tied to performance evaluation,
- Observation to make sure of user satisfaction and the ranking system is followed, and taking corrective actions when the desired outcomes are not achieved [2].

PHASES OF PERFORMANCE MANAGEMENT PROCESS AND ITS EFFECTS ON EMPLOYEES

In this section, the phases of performance management system will be briefly addressed to emphasize the different effects of different phases on employees. A successful performance management system within the organizations requires all stakeholders in the organization to implement and follow the phases of the performance management process [4]. These phases are interrelated and identified in a way that affects employee coordination positively [5].

The first phase of the performance management system is to identify job descriptions of employees and remind them about their responsibilities related to their duties. It is important for managers to define employees' job descriptions because through these descriptions employees can know what the expectations are from them. Another reason for identification of job descriptions is that managers can conduct an objective evaluation of employees based on these descriptions. Job descriptions should include detailed information about what employees are required to do. Information should be clear, precise and applicable. Job descriptions prepared in the required format have a positive affect on employees.

The second phase of the performance management process is to identify goals for employees by making a performance plan. Decisions made in this phase should be aligned with the existing performance goals. It is important to test and implement measurable goals for employee performance evaluation. With this, employees will be able to improve their performances towards their goals and unify their own goals with the organizational goals [5]. In other words, measurable goals should be identified in alignment with employee goals so that it can affect employees positively.

The third phase of the performance management process involves a mid-term evaluation of employees by managers. It is important for managers to evaluate employee performance and give feedback because this evaluation would increase employee motivation and/or allow them to take measures by identifying their mistakes [6]. Performance evaluation may identify areas for managers to provide consultancy and guidance. Research have shown that an informal feedback following a performance evaluation is what employees desire. It was also shown that employees do not really want to receive formal feedback [5]. Feedback should include certain aspects when presented to employees by managers such as being in alignment with the goals, being timely and regularly.

A main evaluation following a mid-term evaluation constitutes the fourth phase of performance management process. During this phase, managers identify the development of employees in the work process. This evaluation would reveal whether or not employees will be laid off [6]. In the main evaluation, managers not only evaluate their employees but employees also evaluate themselves. This would allow employees to realize their mistakes [7]. The purposes of the main evaluation are listed below [6].

- Identifying the current position in the process of achieving goals
- Finding solutions for performance situations
- Managers' guidance in needed areas
- Shedding light into activities for moving up the organizational ladder
- Strengthening the bond between managers and employees
- Increasing employees' loyalty to the organization

The fifth phase of the performance management process includes preparing individual self-development plans through meetings with managers and employees. During these meetings, employees' performances are discussed through brainstorming with employees. Individual self-development plans aim to improve employee performances. Thus, in these meetings all employees' experiences should be discussed and used [6]. By allowing all stakeholders share their opinions in making managerial decisions indicate that governance can be achieved which has a positive effect on employees.

The sixth phase of the performance management process involves making plans on how to improve employee performance. With the guidance of lackings identified in previous meetings, the causes of low performance should be revealed. Training sessions designed by managers and activities to improve performances of employees should be implemented [7]. Activities to improve employee performance are important for employees' career planning. Training sessions planned in this phase hold importance for employees who are in career planning. Thus, it would not be wrong to say that performance improvement plans prepared in this phase have positive effects on employees.

EXPECTATIONS OF EMPLOYEES FROM THE PERFORMANCE MANAGEMENT SYSTEM

Employees within an organization include both managers and non-managers. This section addresses the expectations of employees (both managers and non-managers) from the performance

management system. Managers and employees can have various expectations from the performance management system.

Expectations of Employees

Employees may have several expectations in every phase within the organization. Performance management system is one of the areas that employees have expectations. One of these areas of expectation is related to contributing during the evaluation process [8] because employees know better what the goals should be and the possibility of achieving those goals. Thus, it is normal for employees to be willing to contribute in the evaluation process conducted during the goal-achieving phase.

One other expectation of employees is to know how managers conduct evaluations during performance review and to be able to share their opinions by being part of the process as employees can defend the performance whether it is negative or positive. Also, employees want to see how their performance benefit the organization and their own careers.

Another expectation of employees is to receive awards that they think they deserve due to their performances. These awards can be tangible or intangible. Particularly monetary awards are expected by employees as well as getting promoted. Additionally, employees expect recognition from their supervisors. Thus, an award system based on performance is employees' priority. The evaluations should be performed fairly and reflected in the award system.

Employees also expect the identification of areas that need improvement through performance evaluation and receive training. Employees may have an expectation in terms of self-improvement. Performance evaluation and training systems should be related. This way, the areas of improvement would be identified and met.

Finally, expectations related to feedback from managers should be discussed. Employees who self-evaluate their performance with the feedback they receive can take precautions more. Feedback in the form of advice, on a regular basis, and being clear and precise are important aspects to consider.

Expectations of Managers

Managers can have expectations from performance management system like employees do. After aligning organization's goals with employees' goals, managers expect employees to work towards these goals as managers identify goals according to the performance level of employees, and revise

organization's goals which, they think, would increase performances of employees in reaching those goals.

Another expectation of managers from the performance management system is establishing standards with the purpose of evaluating employee performance. There should be performance measurement criteria for managers to be able to show their employees that they're fair and to be able to establish justice within the organization. Determining measurable goals during identification of goals in the performance system would reveal a fairer and just performance measurement system.

One other expectation of managers from the system is to find solutions to the problems that may arise during employees' career management process by establishing the harmony between employee goals and organizational goals. During this stage, managers may have expectations on areas such as identifying the skills of employees, and what kind of training they need. Managers, expect systems to help them with the support for employees' career management.

POSITIVE AND NEGATIVE EFFECTS OF PERFORMANCE MANAGEMENT SYSTEM ON EMPLOYEES AND MANAGERS

There are several positive and negative effects of performance management system on employees and managers. However, in general these effects are mostly positive. This section addresses the positive effects of performance management system which is followed by the effects that create problems for employee and manager performances.

Positive Effects of Performance Management System on Employees and Managers

Performance management system aims to identify goals for the organization towards the desired position it will be in the future and to increase employees' performance towards these goals. Additionally, by motivating employees, it aims to create a work environment where employees can be more determined and committed. Stakeholders in the organization are affected by this system in alignment with these purposes.

Positive Effects of the Performance Management System on Employees

Performance management system provides resources related to what employees need to do. Therefore, it reveals the mission of employees for the organization, their specific tasks, whether employees have the skills required for their task, whether they have enough knowledge or not. As this identifies clearly the place and task of employees within an organization, it has a positive

effect. Employees who are aware of themselves within these lines would provide positive contribution to the organization's performance.

Another positive effect of performance management system on employees is that it provides an opportunity for employees to contribute more to the management with the performance management system. Listening to employees' voices within the organization would refresh their self-confidence. As employees would not feel insecure, they can take on more responsibilities which would affect the organization positively.

Employees are positively affected by the performance management system in terms of their future and career management. They can plan their careers and receive advice from managers with the help of performance management system.

Positive Effects of Performance Management System on Managers

Performance management system has positive effects in terms of what managers need to do. The most important effect is helping managers to be honest, fair and just. Managers are able to do more objective evaluations and create the perception of a wanted manager. This would positively affect managers' performances.

Performance management system would allow managers to establish communication within the organization to increase organizational performance. This would convey organization's goals and purposes to employees in a more healthy way. Communication established particularly with employees would affect managers' decision making positively. It is also important to have horizontal communication between managers in terms of organization's efficiency and productivity because management in communication would resolve issues more accurately and faster.

Another positive effect of performance management system on managers is that it can serve as a reference in making strategic decisions. Managers should identify future-oriented goals by conducting a situation analysis, and identifying strategies to achieve these goals. Managers need a performance management system more in order to conduct a situation analysis for the organization. Performance system should be used particularly to identify the strengths and weaknesses of employees. A situation analysis would help identify the levels of employees and take precautionary measures.

Considering the positive effects of performance management systems in general, performance management system would increase organizational productivity. With more accurate

policies implemented in the organization, the outputs of the organizations will increase. More accurate decisions will be made in terms of budgeting and organizational goals will be based on more realistic grounds with the performance management systems.

Problematic Effects of Performance Management System for Employees and Managers

Although performance management system has positive effects in general, it can also create different problems in terms of stakeholder performances. First, the effects of problems caused by the system for employees will be discussed and then the effects of problems caused for managers will be addressed.

Problematic Aspects of Performance Management Systems for Employees

Employees may engage in negative behaviors toward unfair performance evaluations [9]. Performance evaluations conducted with different purposes can also lead to negative behaviors. Additionally, employees with the opinion that performance management system increases the workload think that the system creates problems.

Additionally, employees complain about the stress they experience during the performance evaluation phase because the objectivity of the evaluation conducted creates questions in employees' minds. Also, the stress caused by the performance management system may affect employees' performances.

The most important problematic aspect of the performance management system for employees is that employees working towards the organizational goals neglect their own goals. Employees may perceive performance management systems that divert them from the path employees carved out for themselves as problematic. This would affect employee performance negatively.

Aspects of Performance Management System That Create Problems for Managers

One of the problematic aspects of a performance management system is that managers perceive this as an additional burden for them. That's why managers may show negative attitudes and behaviors towards the system. It is difficult particularly for managers that are not loyal to consistently and actively conduct performance evaluations [9].

Another aspect that causes problems for managers is that the system forces managers towards doing a serious evaluation and making radical decisions. This would lead managers to be perceived as the unwanted manager which would create more problems for managers.

The most important aspect of performance management systems that is problematic for managers is the possibility of making a mistake during evaluation. These mistakes would stem from managers' several wrong applications and become an aspect of the system that causes problems.

These mistakes include;

- Halo effect
- Near future effect
- Central tendency effect
- Firmness
- Tolerance
- Error of comparison.

Organizations need to know the important effects of performance management systems on employees and to design and implement an evaluation system that increases efficiency to the maximum level.

References

- [1] Longenecker, C. and Fink, L. (2013a). Creating human resource management value in the 21st century. *Human Resources Management International Digest*, 21(2), 7-11.
- [2] Longenecker, C. and Fink, L. (2017) Lessons for improving your formal performance appraisal process. *Strategic HR Review*, 16(1), 32-38.
- [3] Longenecker, C. and Fink, L. (2013b). On performance appraisal and politics: observations and solutions. *The Journal of Compensation and Benefits*, 29(1), 25-33.
- [4] Canman, D. (1995). *Çağdaş personel yönetimi*. Ankara: TODAİE Yayınları.
- [5] Şen, N. (2014). *Yeni kamu yönetimi anlayışı çerçevesinde performans yönetimi değerlendirmesi*. Hasan Kalyoncu Üniversitesi Sosyal Bilimler Enstitüsü, Yayınlanmış Yüksek Lisans Tezi, Gaziantep.
- [6] Çalık, T. (2003). *Performans Yönetimi*. Ankara: Gündüz Eğitim ve Yayıncılık.
- [7] Barutçugil, İ. (2002) *Performans Yönetimi*, Ed. Canan Başoğlu. (2. Baskı), İstanbul, Kariyer Yayıncılık.
- [8] Fındıklı, F. (2008). *Performans yönetimi ve bir uygulama örneği*. Dumlupınar Üniversitesi Fen Bilimleri Enstitüsü, Yayınlanmış Yüksek Lisans Tezi, Kütahya.
- [9] Uyargil, C. (2013). *Performans yönetimi sistemi*. (3. Baskı). İstanbul: Beta Basım.

Investigating Read Meat Consumption Preferences in the Province of Erzurum

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ABSTRACT

The aim of this study is to identify red meat consumption preferences of individuals residing in the city of Erzurum and the factors that influence this consumption. For this purpose, 400 households in Erzurum were surveyed. Relationships between demographical characteristics of individuals and their red meat consumption were identified by using the chi-square method. Findings showed that individuals spend 223.65 TL on average per month on red meat and that they consume an average of 3.66 kg of red meat per month. Additionally, all the variables except for education level and professional occupation have significant effects on red meat consumption.

Keywords: Demand, Red meat, Chi-Square, Erzurum

1. INTRODUCTION

Demand for food products is on the increase due to the increase in the world's population. Thus, demand for meat and red meat products, which have an important role in human health and nutrition, is also on the increase. In Turkey, where the population is increasing fast, red meat and meat product consumption is important for a healthy and balanced nutrition (Tosun & Demirbaş, 2012: 94). In addition to its importance in human nutrition, red meat has an important place in Turkey where geographical characteristics are suitable for ovine and cattle farming (Saygın ve Demirbaş, 2017: 74).

Red meat being rich in protein has an important place among animal derived nutrients. As known, protein is one of the important essential components of all living organisms. The growth, reproduction, transferring hereditary characteristics from one generation to another are provided through nutrients that have proteins (Lorcu ve Bolat, 2012: 71). A balanced nutrition for individuals needs to be provided from childhood and on, meat consumption needs to be increased to establish a healthy societal structure for future, the reasons for low meat consumption and dietary habits of individuals need to be identified (Çivi vd., 1993:109).

Meat, which is as old as the human history, has become the most important food ingredient of society in time. Many studies show that individuals who are socio-economically in a higher income group have healthier nutritional patterns. Although a healthy diet is considered

to include less fat and meat, and more vegetables and fruits, meat is still an important food group for consumers particularly in developing countries (Cevger et al., 2008: 190).

Individuals residing in Turkey consume an average of 89.3 gram of meat per day and 32.6 kg per year. Out of 32.6 kg, 10.7 kg constitutes beef, 19.3 kg constitutes chicken and 1.5 kg mutton. The rest consists of meat of hunted animals. Considering the fact that daily red meat consumption per person should be 35 kg, there is a need to increase red meat consumption in Turkey (Kavakoğlu & Okur, 2012: 4-5).

The city of Erzurum is one of the important settlement centers in the region. In addition, the migration of population from villages to cities due to certain reasons increased the importance of Erzurum and caused several economical and social problems to emerge. Particularly the recent decrease in stockbreeding, which is the means of living in the region, added more to the existing problems of the region. The gap of animal protein due to the decrease in ovine and bovine became the most important problem of all (Kaya et al., 2010: 397).

The purpose of this study is to examine the red meat consumption preferences of individuals residing in the city of Erzurum and analyze the factors affecting consumption. Within this scope, the study has four sections. A literature review is presented in the second section while the third section presents the methodology of the study and the data set used. Additionally, the findings of the analyses are presented. In the fourth section, a discussion of the findings is presented.

2. LITERATURE REVIEW

There are many national and international studies in the literature. A review of these studies is presented below.

Çivi et al. (1993) analysed the red meat consumption behaviors of households in the city of Tokat. In this study, red meat consumption behaviors were identified based on the survey results conducted with 319 individuals. The results showed that the most consumed red meat was mutton and the red meat consumption per person per year was 18.36 kg.

Yıldırım & Ceylan (2007) studied the red meat consumption habits of individuals in the city of Van. By completing chi-square, ANOVA, and linear regression tests, they found that 74.3% of the participants consumed red meat and the average red meat consumption per year was 8.69 kg.

Karakuş et al. (2008) conducted a study to examine the red meat consumption habits of individuals in the city of Gaziantep. With this purpose, 516 individuals were surveyed between November and December in 2006. The survey results showed that 50.6% of the participants preferred red meat and the preference order of red meat was mutton (77.9%), beef (6.2%) and goat (2.3%) respectively.

Tosun & Hatırlı (2009) analysed the socio-economic factors affecting the red meat purchase locations and the preference of these locations of the households in the city of Antalya. In analyzing the data obtained from the surveys, a model estimation was completed by using a logit model. The results showed that 41.05% of families prefer butchershops for red meat purchase and freshness, hygiene, the opportunity to supply for the other needs in addition to meat and reliability were found as the factors for preferring supermarkets to purchase red meat.

Cankurt et al. (2010) identified the factors affecting the preference of beef of families in the city of Izmir. For this purpose, 2810 consumers were surveyed. By completing a logistic regression, they identified six variables affecting the possibility of beef consumption which are gender, age, education level, income level, number of people in the household, and presence of sick people in the household.

Yaylak et al. (2010) studied the factors affecting the consumption of beef, mutton and goat meat and the red meat consumption behaviors in the town of Odemis in Izmir. For this purpose, 497 individuals were surveyed. The survey results showed 87.1% of the participants consume red meat while 12.9% do not.

Lorcu & Bolat (2012), conducted a study to explore the amount of red meat consumption and preferences in the city of Edirne. They surveyed households in the city and analysed the data obtained from the survey with the tests of chi-square, Kruskal Wallis, and Mann Whitney U. Results showed that 55% of the participants preferred beef, that the red meat consumption varies depending on the income and education levels, and that there was no significant difference in the amount of consumption based on the number of children in the household.

Uzunöz & Karakaş (2012) identified the factors affecting red meat consumption and preferences of individuals in the urban part of the city of Tokat. A binary logistic regression model was completed to analyse the factors affecting consumption. The analysis results showed that gender, education level, the size of the household, and income level were the factors affecting red meat consumption.

Akçay & Vatansever (2013) studied the factors influencing the red meat consumption preferences and the red meat consumption by surveying 384 households during January and February in 2010 in the city of Kocaeli. The relationships between consumers' certain socio-economic and demographical characteristics and their red meat consumption were analysed with chi-square test. Results showed that there was a statistically significant relationship between gender, income level, total expenditure, expenditure on food and the consumption of red meat.

Karakaya & Kızıloğlu (2017) conducted a study to identify the red meat consumption habits of households in the city of Bingöl and the factors influencing these habits. 175 individuals were surveyed in this study and a chi-square and a F-test were completed in analyzing the data. The results showed that the red meat consumption ratio in households were 88% and a significant relationship between red meat consumption and the level of income.

3.1. METHODOLOGY

This study aims to identify the factors affecting red meat consumption preferences. The population of this study consist of individuals residing in the city of Erzurum. A survey was used as the data collection tool. According to the information obtained from Erzurum City Registration Office, the population of Erzurum is 760,476. The sample size of the study was identified as 384 with a 5% confidence level and 5% confidence interval (<http://www.surveysystem.com/sscalc.htm>). Although the minimum sample size was identified as being 384, considering the high representation power and the possibility of incomplete or inaccurate surveys, 400 individuals were surveyed in this study.

The surveys were administered in person by survey administrators to the identified sample size. The data obtained from the surveys were digitized by entering the data into Excel. Then, the data were analysed by using SPSS program.

A Pearson chi-square test was completed to identify the relationships between demographics and the variables that may be effective in red meat consumption. Chi-square distribution was first revealed by Karl Pearson in 1900s (Aytaç, 1999: 317). This method is widely used particularly in social sciences (Akgül, 2003: 195). A chi-square test is used to find out if there is a significant relationship between two or more data sets (Bryman & Cramer, 1990: 123). In other words, this method is used to test if there is a dependency between the identified characteristics of variables in the data set that are categorized as two or multi-way crosstabs based on different measures or a certain purpose (Yazıcıoğlu & Erdoğan, 2004: 210).

3.2. Findings

In this section, first the demographical characteristics were identified and then the factors affecting red meat consumption preferences and red meat consumption were testing by completing a Pearson chi-square test. Table 1 shows that the participants of this study consisted of a total of 400 individuals with 134 males and 266 females. The age range of participants was between 20 and 61 while mode was 42. 252 participants were married while 148 were single. In 89 couples, both individuals work while in 163 couples, only one work. Households included minimum 1 person and maximum 10 people. The mode of the number of people in the household was 4. Additionally, the minimum monthly income was 1000 TL, maximum 10200 TL while the mode was 3000TL. 12 participants were illiterate, 76 individuals were graduates of elementary, 162 of middle school while 150 individuals were graduates of higher education. Lastly, 25 participants were retired, 113 were state employees, 65 were workers, 84 were tradesmen, 74 were self-employed, 33 housewives, and 6 were unemployed.

The monthly red meat consumption expenses and the amount of consumption are presented with the values of variables that may affect red meat consumption preferences.

Table 1. Demographical Information

Characteristics	Frequenc	Percenta	Characteristics	Frequen	Percentag
Gender			Employment of Spouse		
Male	134	33,5	Yes	89	22,3
Female	266	66,5	No	163	40,8
Age			Marital Status		
20-30	212	53,2	Married	252	63,0
31-40	116	29,4	Single	148	37,0
41-50	47	10,9	Number of Family Members in the Household		
51 and older	25	6,5	1-3	136	34,1
Education Level			4-6	231	57,8
Illiterate	12	3,0	7-9	31	7,8
Primary education	76	19,0	10 +	2	0,5
Secondary	162	40,5	Occupation		
Higher education	150	37,5	Retired	25	6,3
Monthly Average Income			Civil servant	113	28,3
1000-3000	183	46,4	Worker	65	16,3
3001-5000	159	40,1	Tradesman	84	21,0
5001-7000	36	9,3	Self employed	74	18,5
7001-9000	13	3,4	Housewife	33	8,3
9001+	9	2,4	Unemployed	6	1,5

Table 2 shows that the minimum monthly expenses of red meat consumption of individuals are 0TL and maximum 800 TL while the mode of monthly red meat expenses is 200 TL. The minimum red meat consumption amount is 0 kg, and the maximum is 12 kg while the mode of red meat consumption amount is 2 kg. Similarly, it was found that 1 participant does not use red meat in meals, 204 participants consume red meat 1-2 days a week, 136 participants consume 3-4 days a week, 36 participants consume 5-6 days a week while 23 participants consume red meat every day. Also, 1 participant does not consume red meat, 333 participants consume beef while 61 participants consume mutton and 5 consume goat meat. The price increase in red meat does not affect the red meat consumption of 20 participants, while it affects the consumption for 46 participants. 37 participants do not have an idea, 231 participants are affected, and 66 participants are affected highly. In parallel, a significant increase in income does not affect red meat consumption of 15 participants while 60 participants are affected, 43 do not have any idea, 232 are affected and 50 are affected significantly. 55 participants showed an increase in red meat consumption compared to the previous year and 117 participants showed a decrease while 228 participants showed no change. The factor affecting the red meat type preference was found to be price for 140 participants, smell for 48, ease of cooking for 4, fat percentage for 8 and habit for 25 participants while 11 expressed no opinion in this matter. Additionally, the reason for red meat preference for 108 participants is taste, habit for 35, being a healthy food for 171 while for 85 participants the reason is because they like it. 224 participants who took the survey indicated that they prefer ground beef, while 133 prefer in small pieces, 12 participants prefer sausage and 10 prefer sirloin steak. 260 participants purchase red meat from butcher shop, 67 from Meat and Fish Authority, and 72 from grocery market. In terms of location preferences for purchase of meat, 51 participants indicated familiarity, 150 indicated reliability, 152 indicated hygiene, 10 indicated domestic meat, 28 indicated reasonable prices and 8 indicated they have no particular reason for picking the location to purchase meat. Lastly, freshness is important for 165 participants, price for 42 participants, fat percentage for 71, color for 84, smell for 27 and quality for 10 participants. Within this context, 41.3% of the sample size pay attention to freshness when purchasing red meat.

Table 2. Red Meat Consumption Preferences of Participants

Situation	Frequency	%	Situation	Frequency	%
Monthly Red Meat Expenses			Monthly Red Meat Consumption Amount		
0-200	250	63,0	0-3	198	49,9
201-400	120	30,2	3,01-6	172	43,1
401-600	25	6,4	6,01-9	18	4,6
601-800	5	1,3	9,01 +	12	3,0
Frequency of Red Meat Consumption in			Type of Red Meat		
Never	1	0,3	I don't consume red	1	0,3
1-2 days/week	204	51,0	Beef	333	83,3
3-4 days/week	136	34,0	Lamb meat	61	15,3
5-6 days/week	36	9,0	Goat meat	5	1,3
Everyday	23	5,8			
Effect of Price Increase on Meat			Effect of Income Increase on Meat		
Does not affect at all	20	5,0	Does not affect at all	15	3,8
Does not affect	46	11,5	Does not affect	60	15,0
I don't know	37	9,3	I don't know	43	10,8
Affects	231	57,8	Affects	232	58,0
Affects significantly	66	16,5	Affects significantly	50	12,5
Red Meat Consumption Compared to			Reason for Change Compared to Prev.		
Increased	55	13,8	Did not change	228	57,0
Decreased	117	29,3	Increase of prices	101	25,3
Did not change	228	57,0	Decrease in income	16	4,0
Factors Affecting the Red Meat			Decrease in prices	12	3,0
Price	140	35,0	Increase in income	12	3,0
Taste	164	41,0	Increase in the # of	29	7,3
Smell	48	12,0	Decrease in the # of	2	0,5
Easy cooking	4	1,0	Reasons for Red Meat Preference		
Fat percentage	8	2,0	Do not prefer	1	0,3
Habit	25	6,3	Taste	108	26,8
I have no idea	11	2,8	Habit	35	8,8
Red Meat Purchase Types			Healthy	171	42,8
Do not purchase	1	0,3	Like red meat	85	21,3
Ground beef	244	61,0	Location of Red Meat Purchase		
In small pieces	133	33,3	Do not purchase red	1	0,3
Sausage	12	3,0	Butchershop	260	65,0
Steak	10	2,5	Meat & Fish Authority	67	16,8
Reason for Selecting the Purchase			Grocery store	72	18,0
Do not prefer	1	0,3	Things Considered When Buying Red		
Familiarity	51	12,8	Freshness	165	41,3
Reliability	150	37,5	Price	42	10,5
Hygiene	152	38,0	Fat percentage	71	17,8
Meat being local	10	2,5	Color	84	21,0
Reasonable pricing	28	7,0	Smell	27	6,8

No special reason	8	2,0	Quality	10	2,5
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The relationships between the variables that are thought to affect in participants' red meat consumption and the monthly red meat consumption are analysed by Pearson Chi-Square test and the results are presented in table 3.

Table 3. Relationship Between Factors Affecting Participants' Red Meat Consumption and The Red Meat Consumption

Variable	χ^2	Pro	Variable	χ^2	Pro
Gender	30,516	0,02	Type of red meat	608,48	0,00
Age	822,57	0,00	Effect of price increase	92,309	0,02
Level of education	80,800	0,13	Effect of income increase	153,99	0,00
Marital status	33,240	0,01	Reason for red meat	137,76	0,01
Occupation	89,879	0,79	Reason for red meat	530,95	0,00
Spouse's occupation	81,088	0,00	Type of red meat	467,01	0,00
Number of family members	170,68	0,02	Location of purchase	457,74	0,00
Monthly income	2089,6	0,00	Reason for location	517,03	0,00
Characteristics of red meat	493,59	0,00			

According to table 3, when the probe values of variables based on the chi-square independence test, all the variables except for education level and occupation at the 5% confidence level, showed a significant relationship with red meat consumption (probe values are smaller than 0.05 for the related variables).

4. CONCLUSION

The purpose of this study was to identify the red meat consumption preferences and the factors affecting red meat consumption of households in the city of Erzurum. For this purpose, 400 households in the city were surveyed. The participants consisted of 134 males and 266 females with a total of 400.

The findings revealed that the monthly average income of participants was 3761,67 TL, monthly average of red meat expenses is 223.65TL and the monthly average of red meat consumption was 3.66 kg. The mean age of participants was 33.02 and the mean household size was 4.24 while 63% of the participants were married and 40.8% of the participants' spouses are unemployed.

The analysis revealed that most of the participants consume red meat in their meals 2-3 days a week and they prefer beef. Increase in meat prices and participants' incomes affect red meat

consumption significantly. There was not a significant increase in the red meat consumption compared to the previous year. The most important factor affecting the preference of red meat type was taste and health was an important role in red meat preference. Red meat is purchased as ground beef and from butcher shops in general, and the factor for location preference was reliability. Also, participants indicated that the most important thing they consider when purchasing meat is freshness.

Additionally, Pearson Chi-Square analysis showed a significant relationship between the variables except for education level and occupation and the red meat consumption at the 5% confidence level.

The results of the analyses are significant for producers, consumers, and policy makers. Taste, freshness, health, and reliability are the most important factors for participants of the study. Therefore, when producers take these factors into consideration for their production activities, their current market shares would increase significantly. Participants spend 6% of their income on red meat. Consumption of food that is rich in protein is important for a healthy diet. Within this context, activities such as decreasing the prices and increasing the individuals' incomes would increase red meat consumption.

References

- Akçay, Y. ve Ö. Vatansever, (2013), "Kırmızı Et Tüketimi Üzerine Bir Araştırma: Kocaeli İli Kentsel Alan Örneği", *Çankırı Karatekin Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 4(1), 43-60.
- Akgül, A., (2003), *Tıbbi Araştırmalarda İstatistiksel Analiz Teknikleri*, İkinci Baskı, Yeni Mustafa Kitabevi, Ankara.
- Aytaç, M., (1998), *Matematiksel İstatistik*, Uludağ Üniversitesi Basımevi, Bursa.
- Bryman, A., Cramer, D., (1990), *Quantitative Data Analysis for Social Scientists*, Routledge, London.
- Cankurt, M., B. Miran ve A. Şahin, (2010), "Sığır Eti Tercihlerini Etkileyen Faktörlerin Belirlenmesi Üzerine Bir Araştırma: İzmir İli Örneği", *Hayvansal Üretim*, 51 (2), 16-22.
- Cevger, Y., Aral, Y., Demir, P., Sarıözkan, S. (2008), "Ankara Üniversitesi Veteriner Fakültesi İnternet Öğrencilerinde Hayvansal Ürünlerin Tüketim Durumu ve Tüketici Tercihleri", *Ankara Üniversitesi Veterinerlik Fakültesi Dergisi*, 55, 189-194.

- Çivi, H., Z. Gürler, K. Esengün ve O. Karkacıer, (1993), “Tokat İl Merkezinde Yaşayan Hane Halklarının Önemli, Bazı Gıda Maddelerinin Tüketim Durumu Üzerine Bir Araştırma”, *Gaziosmanpaşa Üniversitesi Ziraat Fakültesi Dergisi*, 10 (1), 97-107.
- Karakaya, E. ve S. Kızıloğlu, (2017), “Bingöl İl Merkezinde Yaşayan Hanehalklarının Kırmızı Et Talebini Etkileyen Faktörlerin Analizi”, *Anadolu Tarım Bilim Dergisi*, 32, 1308-8769.
- Karakuş, K., T. Aygün ve E. Alarslan, (2008), “Gaziantep İli Merkez İlçede Kırmızı Et Tüketim Alışkanlıkları Yüzüncü Yıl Üniversitesi”, *Ziraat Fakültesi Tarım Bilimleri Dergisi*, 18(2), 113-120.
- Kaya, T. E., M. Külekçi, A. Sezgin, H. Kumbasaroğlu, (2010) “Erzurum İli’nde (Aziziye, Palandöken ve Yakutiye İlçeleri) Kırmızı Et Tüketim Alışkanlığı ve Buna Etki Eden Faktörlerin Belirlenmesi”, *Türkiye IX. Tarım Ekonomisi Kongresi*, Şanlıurfa, 396-403.
- Lorcu, F. ve Bolat, B., A. (2012), “Edirne İlinde Kırmızı Et Tüketim Tercihlerinin İncelenmesi”, *Tekirdağ Ziraat Fakültesi Dergisi*, 9(1), 71-85.
- Saygın, Ö. ve N. Demirbaş, (2017), “Türkiye’de Kırmızı Et Sektörünün Mevcut Durumu ve Çözüm Önerileri”, *Hayvansal Üretim*, 58(1), 74-80.
- Tosun, D. ve N. Demirbaş, (2012), “Türkiye’de Kırmızı Et ve Et Ürünleri Sanayiinde Gıda Güvenliği Sorunları ve Öneriler”, *U. Ü. Ziraat Fakültesi Dergisi*, 26 (1), 93-101.
- Tosun, Ö. O. ve Hatırlı, S. A. (2009), “Tüketicilerin Kırmızı Et Satın Alım Yerleri Tercihlerinin Analizi: Antalya İli Örneği”, *Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 14 (2), 433-445.
- Uzunöz, M. ve G. Karakaş, (2012), “Socio-Economic Determinants of Red Meat Consumption in Turkey: A Case Study”, *Çankırı Karatekin Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 5(1), 37-52.
- Yaylak, E., T. Taşkın, N. Koyubenbe ve Y. Konca, (2010), “İzmir İli Ödemiş İlçesinde Kırmızı Et Tüketim Davranışlarının Belirlenmesi Üzerine Bir Araştırma”, *Hayvansal Üretim*, 51(1), 21-30.
- Yazıcıoğlu, Y., Erdoğan, S., (2004), *SPSS Uygulamalı Bilimsel Araştırma Yöntemleri*, Detay Yayıncılık, Birinci Baskı, Ankara.
- Yıldırım, İ. ve Ceylan, M. (2007), “A Comparative Assessment of Urban and Rural Households' Behaviors Towards Fresh Red Meat Consumption: A Case Study in Eastern Part of Turkey”, *Nutrition & Food Science*, 37(4), 222-233.

Factors Affecting the Demand for Tea: A Study on the City of Erzurum

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Abstract

The purpose of this study is to explore the demands of individuals residing in Erzurum for tea and the factors affecting this demand. For this purpose, 400 individuals residing in the city of Erzurum were surveyed. In the study, the relationships between individuals' demographical characteristics and their demand for tea are identified by using the chi-square method. Results showed that variables such as level of education, quality, and price have a significant effect on the demand for tea.

Keywords: Demand, Tea, Chi-Square, Erzurum.

1. INTRODUCTION

Tea is obtained by boiling dried leaves of small tea trees. Small and curled with dark color, the leaves of this small tree are called tea (Duman, 2005: 15). Modest consumption of tea has multiple benefits such as regulating blood circulation in veins, eliminating physical and mental fatigue, stimulating nerves, helping with digestion, preventing calcinosis in veins as well as being a diuretic.

Tea's first introduction and preparation as a beverage dates back to 5000 years ago in China. It's told that while Shennong, Chinese agriculture god, sat under a tea tree (*Camellia Sinensis*), a few leaves fell into his bowl that was filled with hot water (B.C. 237). When Shennong drank it, he was healed. This beverage was first drunk as treatment, but later (A.C III. and VI. Centuries) it became a daily consumed beverage (*Güneş, 2012: 242-243*).

Countries in which tea is grown show different distributions between wide latitudes. For example, tea is grown between latitude of 42 in the Northern Hemisphere and latitude of 27 in the Southern Hemisphere. Tea plant can be grown in warm climates with great rain fall. However, in the world, places where tea is produced economically are limited. India, China, Sri Lanka, Bangladesh and Japan are the countries where tea plant is grown widely and where tea is produced. In Indonesia, Malaysia, Formosa, Uganda, Birmania, Nyasaland, Kenya, Tanganica, Uganda, Mosambic, Brazil, Chile, Argentina, Azerbaijan, Iran and Turkey tea is grown at an economical level and produced (*Alikılıç, 2016: 270*).

Tea was introduced in Turkey in 1787 with planting the tea seeds brought from Japan. First planting activities took place close to the city of Bursa, however, it failed due to negative climate conditions. However, in 1917 the vice principal of Halkali Agriculture School Ali Riza Erten, a botanist, conducted technical studies. With these studies, he laid the foundation for tea production in Rize in 1924. Tea production increased with the first tea factory founded in 1947. Since then, Turks like tea and consume this hot beverage any time during the day (Sarı, 2017: 205).

Tea became the national beverage of Turkish people. Turks prefer tea over other beverages for breakfast, after meals, evening gatherings or social events. For them, tea is more than just a beverage and economically the tea market in Turkey is well-developed. The history of tea dates back to the times before Jesus. For example, drinking tea was among the cultural activities of Chinese emperors. There are different legends in different countries on how tea was discovered. Today, tea is not only imported to Turkey but also produced and exported. The tea market in Turkey is a very comprehensive one that includes many public and private organizations. Therefore, it is important to examine the tea sector in Turkey (Mendi, 2018: 252).

The purpose of this study is to identify factors affecting the demand for tea of individuals residing in the city of Erzurum. Within this context, the study consists of four sections. In the second section a literature review on the topic is presented. The third section addresses the data set and methodologies used, and the findings of the analyses. In the fourth section, the findings of the study are discussed.

2. LITERATURE REVIEW

Literature search revealed that there is limited research on this topic nationally and internationally. Some of these studies from the literature are presented below.

Kılıç et al. (2012) conducted a study focusing on the black tea consumption behaviors of individuals residing in the city of Samsun. 150 individuals were surveyed in the study and a chi-square test was completed to analyse the relationship between the amount of tea consumption of families and socio-economical characteristics. The results showed a positive, significant relationship between the amount of tea consumption and the number of family members. Results also showed 75.33% of the participants prefer the same brand of tea and the most affective factor in brand preference is quality.

Sayılı & Gözener (2013) examined the tea consumption and habits of consumers residing in the town of Of in the city of Trabzon. 220 families were surveyed in the study. The results

showed that all of the families consume tea, the monthly tea consumption amount is 2.33 kg/family, that tea is consumed as brewed. The main factors affecting tea consumption were enjoyment and habit while the most important factor in purchasing tea is quality.

Alikılıç (2016) examined the history of tea, its cultivation and cultural affect as well as the emerged values with the integration of tea in the Turkish culture and life. In Turkey, there are significant problems related to tea, from tea gardens to factories, from production to marketing and trade. Although tea has a journey for more than hundred years, we still experience the problem of not being able to improve tea and tea products. Considering the tea derivatives in the world market, it is clearly seen that this field is behind in our country.

Akşit Aşık (2017) identified the most important factors affecting coffee consumption habits and the consumers' coffee preferences. In his study, he used a survey instrument. A convenient sampling was used in recruiting participants. 500 participants were administered surveys in person. He concluded that the most important factor affecting consumers' coffee preference is the taste and presentation of coffee which is followed by reasonable price, quality of service, large variety of coffee, and hygiene.

Onurlubaş et al. (2017) studied the factors affecting tea consumption of individuals residing in downtown Tokat. The results showed that 45.5% of consumers have a tea consumption of 0.5-1kg per month. 92.65% of the consumers prefer black tea while 76.1% consume hot tea. 59.19% of the consumers consume sweetened tea and 84.19% consume tea mostly in the winter season.

3.1. METHODOLOGY

To identify the factors affecting demand for tea, the data were collected from individuals residing in the city of Erzurum and a survey instrument was used to collect the data. According to the Erzurum Registration Office, the population of Erzurum is 760,476 as of 2017. The minimum sample size to represent the population was calculated to be 384 with a 5% significance level and 5% error margin (<http://www.surveysystem.com/sscalc.htm>). Although the minimum sample size was calculated as 384, considering the high representation power and the potential of incomplete or inaccurate survey responses, 400 participants were surveyed.

Surveys were administered in person and the data obtained from the surveys were entered into an Excel file. Then, the data were analysed using SPSS.

In the study, relationships between demographical characteristics and variable considered to have effects on tea consumption were analysed with a Pearson Chi-Square test. Chi-square distribution was first introduced by Karl Pearson in 1900s (Aytaç, 1999: 317).

A Chi-square test is based on the foundation whether the difference between observed frequencies and the expected frequencies are statistically significant or not. A chi-square test is characterized by degrees of freedom. The average of distribution is equal to sd and the variance is equal to 2 times the sd. Chi-square values range between zero and plus infinite. Although the distribution is skewed in small sd, it approached normal distribution as sd increases. Chi-square distribution is a continuous distribution. Chi-square distribution is generally used to test two independent qualitative criteria. Null hypothesis (H_0) shows two criteria are independent while the research hypothesis (H_R) show that there is a relationship between the two criteria (Güngör ve Bulut, 2008: 84). This method is a commonly used analysis method in social sciences (Akgül, 2003: 195).

3.2. Findings

Tablo 1. Sample Demographics

Demographics	Frequency	%	Demographics	Frequen	%
Gender			Level of Education		
Male	161	40,3	Not a student	84	21,0
Female	239	59,8	Student	316	79,0
Age			Marital Status		
18-21	142	35,5	Married	57	14,3
22-25	173	43,25	Single	343	85,8
26-29	19	4,5	Mother's Education Level		
29+	66	16,5	Illiterate	48	12,0
Father's Education Level			Primary education	202	50,5
Illiterate	13	3,3	Secondary education	125	31,3
Primary education	131	32,8	Higher education	25	6,3
Secondary education	176	44,0	Mother's Occupation		
Higher education	80	20,1	Retired	12	3,0
Father's Occupation			Civil servant	15	3,8
Retired	108	27,0	Worker	14	3,5
Civil servant	67	16,8	Tradeswoman	3	0,8
Worker	57	14,3	Self-employed	10	2,5
Tradesman	39	9,8	Farmer	3	0,8
Self-Employed	56	14,0	Housewife	343	85,8
Farmer	28	7,0	Number of family members in elementary		
Other	45	11,3	0	275	68,8
Number of Family Members			1	105	26,3

0-4	106	26,6	2+	20	5,1
5	121	30,3	Number of family members in secondary		
6-7	126	31,6	0	187	46,8
8+	47	11,9	1	164	41,0
Mother's Monthly Income			2+	49	12,4
0-1500	357	89,7	Family Members in Higher Ed.		
1501-3000	34	8,8	0	28	7,0
3001-4500	8	2,1	1	246	61,5
4501-5000	1	0,3	2+	126	31,5
Father's Monthly Income			Average Monthly Income		
0-2000	183	46,3	0-1500	293	74,6
2001-4000	175	44,0	1501-3000	70	18,0
4001-6000	30	7,7	3001-4000	17	4,4
6001+	12	3,3	4001+	20	5,3
Monthly Amount of Debt					
0-1000	373	94,3	2001-3000	2	0,5
1001-2000	21	5,4	3001+	4	1,1

In this section, first sample demographics are presented and then the relationship between the factors affecting participants' tea preferences and tea demand was analysed by a Pearson Chi-Square test. In table 1, the demographics of the participants are presented. There were 161 male and 239 female participants in the study with a total of 400 participants. 142 of the participants are in the 18-21 age group, 173 participants in the 22-25 age group, 19 in the 26-29 age group and 66 participants are in the 29+ age group. 316 participants continue their education. 57 of the participants are married while 343 participants are single. Fathers of 13 participants are illiterate, 131 participants' fathers completed elementary school, 176 participants' fathers completed middle school, 80 participants' fathers completed higher education. 48 participants' mothers are illiterate, 202 participants' mothers completed elementary school, 125 participants' mothers completed middle school, 25 participants' mothers completed higher education. Fathers of 108 participants are retired, 67 are civil servants, 57 are workers, 39 are tradesmen, 56 have independent business, 28 are farmers, and 45 are employed in other fields.

Mothers of 12 participants are retired, 15 are civil servants, 14 are workers, 3 are tradeswomen, 10 are self-employed, 3 are farmers, and 343 are housewives. The household of 106 participants have 0-4 family members, 121 participants have 5 members, 126 participants have 6-7 members, and 47 participants have 8 and more members. While the number of family members in elementary education in 275 participant households are 0, in 105 participant households there is 1 member in elementary education. 20 participant household have 2 and more in elementary education while in 187 participant households there are 0 members in secondary education. 164

participant households have 1 member in secondary education, 49 participant households have 2 and more members in secondary education.

The number of members in higher education in 28 participant households is 0 while this number is 1 in 246 participant households. In 126 participant households, there are 2 and more members in higher education. The monthly average income distribution showed that 293 participants have an income of 0-1500 TL, 70 participants have 1501-3000 TL, 17 participants have 3001-4000TL, and 20 participants have 4001 TL and more. Lastly, participants monthly debt amount distributions are examined. 373 participants have a debt of 0-1000 TL, 21 participants have 1001-2000TL, 2 participants have 2001-3000 TL and 4 participants have 3001TL and more.

Tablo 2. Preferences of Participants

Situation	Frequency	%	Situation	Frequency	%
Being Present in Coffee Shops, etc.			First Preference of Beverage in Coffee		
Yes	257	64,3	Tea/Herbal Tea	229	57,3
No	143	35,8	Coffee/Instant Coffee	123	30,8
Most Preferred Beverage			Soda/Carbonated	34	8,6
Tea/Herbal Tea	215	53,8	Juice	14	3,5
Coffee/Instant	118	29,5	Preferred Beverage on Special Occasions		
Soda/Carbonated	52	13	Tea/Herbal Tea	278	69,5
Juice	15	3,8	Coffee/Instant coffee	108	27,0
Frequency of Consumption			Soda/Carbonated	8	2
Never	10	2,5	Juice	6	1,5
1 per month	65	16,3	Location Where Tea is Consumed Mostly		
1 per week	52	13,0	Home	214	53,5
1-5 per day	218	54,5	Outside/Coffee shop	104	26,0
5-10 per day	107	26,8	Visits/Picnic	23	5,8
Tea Preferences			Workplace	10	2,5
Brewed Tea	243	60,8	Social	43	10,8
Tea bags	12	3,0	When Travelling	6	1,5
Brewed/Tea bag	145	36,3	Reasons for Tea Preference		
Reasons for not preferring teabags			I like it	112	28,0
Don't like the	161	40,3	Habit	92	23,0
Not good quality	53	13,3	Relaxation effect	60	15,0
Not economic	41	10,3	Affordability	76	19,0
Don't like teabags	60	15,0	Environmental effect	37	9,3
Not a habit	85	21,3	Other	23	5,8
Location of Tea Purchase					
ÇAYKUR Products	294	73,6	Foreign brand	42	10,5
Private sector	64	16,0			

In table 2, preferences of participants are presented. While 257 participants go to coffee shops frequently, 143 participants do not. Also, the most preferred beverage by 215 participants is tea/herbal tea while the least preferred beverage is juice by 15 participants. Similarly, 218 participants reported that they consume 1-5 glasses of tea while 10 participants do not consume tea at all. 229 participants reported that their first preference of beverage is tea/herbal tea. 278 participants prefer tea/herbal tea the most in special occasions. 214 participants stated that home is where tea is consumed the most and 6 participants stated that they consume tea the least during traveling.

When we examined the types of tea participants prefer, we found that 243 participants prefer tea bag (infusion), 12 participant tea bags, and 145 participants prefer brewed tea/tea bag together. In regards to reasons for not preferring tea bags, 161 participants stated that they do not like the taste/aroma, 53 participants do not think tea bags are not good quality, 41 participants do not find tea bags economical, 60 participants do not like using tea bags, and 85 participants do not have the habit of using tea bags. We identified that the CAYKUR brand products are preferred mostly. Lastly, 28% of the participants like tea and 23% have the habit of drinking tea, 15% of the participants think tea has a relaxation effect, 19% think it is affordable, 9.3% stated that they're influenced by others, and 5.8% prefer tea for other reasons.

Table 3. The Effects of Factors Influencing Tea Consumption on Tea Consumption

Factors	Not Effective at all	Not Effective	Undecided	Effective	Very Effective
Low pricing of tea	87	76	65	127	45
Tea campaign	62	77	75	134	52
Familiarity with the brand	37	32	51	173	107
Innovative Packaging	91	84	80	107	38
Promotions	68	53	86	119	74
Advertising	82	79	85	111	43
Effects of other consumers	68	64	88	125	55
Tea variety	73	67	108	118	34
Pricing of the tea brand	52	51	87	141	69
Aroma of the tea brand	31	26	50	159	134
Effects of the tea brand on health	26	43	91	144	96
Reliability of the tea brand	20	27	89	158	106
Quality of the tea brand	15	26	63	157	139

Having tried the tea brand previously	27	26	65	173	109
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Table 3 presents the level of effect that factors involved in tea consumption on tea consumption. Generally, participants think that all the factors listed in the table affect tea consumption significantly. For example, 127 participants stated that lower tea prices affect in purchasing tea and 45 participants stated that tea prices significantly affect the purchase. Similarly, campaigns are effective for 134 participants while they are not effective for 77 participants. 6.8% of the participants stated that having tried the tea brand previously do not have any affects on tea consumption while 16.3% stated they are indecisive, and 43.3% stated that previous experience with the tea brand affect the consumption. 27.3% stated that it is very effective on tea consumption.

On the other hand, the relationships between the variables that may have affects on tea preferences, and tea being the most consumed beverage were analysed using a Pearson chi-square test. The results are presented in table 4.

Table 4. The relationship between tea preference and variables that affect individuals' tea demand

Variable	χ^2	Pro	Variable	χ^2	Pro
Gender	3,857	0,69	Preferred tea type	44,122	0,00
Age	177,7	0,97	Influenced by the pricing	37,681	0,03
Education level	16,02	0,01	Tea campaign	35,890	0,05
Marital status	10,03	0,12	Familiarity with the	48,244	0,00
Father's occupation	40,14	0,29	Innovative packaging	20,697	0,65
Mother's occupation	64,30	0,03	Promotion	20,211	0,68
Number of family members	30,78	0,42	Commercial	18,388	0,78
Monthly income	335,7	0,97	Variety	32,514	0,11
Being in coffee shops, etc.	15,32	0,22	Price of the tea brand	28,502	0,03
Frequency of consumption	115,2	0,00	Aroma of the tea brand	21,732	0,59
Location of most	525,6	0,00	Effects on health	28,592	0,23
Beverage preferred in special	71,47	0,00	Reliability of the brand	35,828	0,04
Influenced by other	27,35	0,28	Having tried the brand	27,889	0,26
Quality of the tea brand	40,16	0,02	Reason for tea preference	71,934	0,00

According to table 4, chi-square test revealed a significant relationship between tea being the most preferred tea, and the variables of the level of education, mother's occupation, frequency of consumption, location where tea is consumed the most, the quality of the brand, preferred tea type, tea prices, tea campaigns, familiarity with the brand, reliability of the tea brand, and reasons for preferring tea at the 5% significance level ($p < 0.05$). However, no relationship was found with the other variables ($p > 0.05$).

4. RESULTS

This study aimed to identify the factors affecting the demand for tea from individuals in the city of Erzurum. Therefore, a survey was conducted with 400 individuals in Erzurum. The participants who took the survey consist of 16 males and 239 females.

The majority of the participants of the study are in the 22-25 age group with a monthly income of 0-1500 TL (74.6%). 257 (64.3%) participants go to coffeshops frequently, 57.3% prefer tea and 54.5% consume a daily of 1-5 glasses of tea.

The Pearson chi-square analysis showed that there was a significant relationship between the level of education, mother's occupation, the frequency of consumption, location where tea is consumed the most, the quality of the tea brand, preferred tea type, tea prices, tea campaigns, familiarity with the brand, reliability of the tea brand, the price of the tea brand and the reasons for tea preferences, and tea being the most consumed beverage.

The results of the analysis are significant for manufacturers. For example, the analysis revealed that variables such as innovative packaging, promotion, advertisement and product variety do not affect tea consumption. Therefore, manufacturers can focus on improving prices, quality, and reliability rather than innovative packaging, promotion, and advertisement.

Humans have unlimited needs and these needs can change over time. The change in human needs, consumer taste and preferences, societies income and education levels, the values attributed to housing prices will change. Therefore, the results of this study are valid only in the area and time that it was conducted and would show differences in regions with different characteristics at different times.

References

- Akgül, A., (2003), *Tıbbi Araştırmalarda İstatistiksel Analiz Teknikleri*, İkinci Baskı, Yeni Mustafa Kitabevi, Ankara.
- Akşit Aşık, N. (2017), "Değişen Kahve Tüketim Alışkanlıkları ve Türk Kahvesi Üzerine Bir Araştırma", *Journal of Tourism and Gastronomy Studies*, 5(4), 310-325.
- Alikılıç, D. (2016), "Çay'ın Karadeniz Bölgesi İçin Önemi ve Tarihi Seyri", *Karadeniz İncelemeleri Dergisi*, 21, 269-280.
- Aytaç, M., (1998), *Matematiksel İstatistik*, Uludağ Üniversitesi Basımevi, Bursa.
- Duman, M. (2005), *Çay Kitabı*, İstanbul.

- Güneş, S. (2012), “Türk Çay Kültürü ve Ürünleri”, *Milli Folklor*, 24(94), 242-243.
- Güngör, M. ve Y. Bulut, (2008), “Ki-Kare Testi Üzerine”, *Doğu Anadolu Bölgesi Araştırmaları*, 84-89.
- Kılıç, O., Gündüz, O. Aydın Eryılmaz, G. ve Emir, M. (2012), “Çay Tüketiminde Tüketici Davranışlarının Belirlenmesi: Samsun İli Örneği”, *HR.Ü.Z.F. Dergisi*, 16(4), 19-25.
- Mendi, A. F. (2018), “Türkiye Çay Endüstrisi: Sektörel ve Ampirik Bir Çalışma”, *International Journal of Social Sciences and Education Research*, 4(2), 252-274.
- Onurlubaş, E., Özdemir, B., Aydemir, A. ve Gençoğlu, H. (2017), “Çay Tüketim Tercihlerinin Belirlenmesi (Tokat İli Merkez İlçe Örneği)”, *Sosyal Bilimler Dergisi*, 4(16), 112-122.
- Sarı, İ. (2017), *Türk Gelenekleri, Nokta E-Kitap: İstanbul*.
- Sayılı, M. ve Gözener, B., (2013), “Trabzon İli Of İlçesinde Ailelerin Çay Tüketim Durumu ve Alışkanlıkları”, *Gıda Teknolojileri Elektronik Dergisi*, 8(2) 1-7

Financial Flexibility, Real options and Company Performance

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Abstract

The field of research on financial flexibility can be seen as a special part of the long-standing capital structure discussion. After the initiative paper by Modigliani / Miller of 1958, there was quite a lively debate about the optimal structure for financing companies. One part of the capital structure debate concentrates primarily on the direct cost of capital, risks and the resulting value of a company. Another part also takes into account the possible interaction between capital structure and real investments – and the related decisions.

The theoretical approach of understanding investment opportunities in special circumstances as real options – comparable to financial options – began in 1977 with the initiative paper of Myers. The discussion on the topic of financial flexibility encompasses and goes beyond the two theories mentioned by explaining the – potential – value of holding financial flexibility.

In this paper it is planned to analyse financial flexibility by combining the capital structure and the real options approach. Since real options go hand in hand with a structural understanding of financial flexibility, this paper examines financial flexibility in the form of a – financial – real option and then its potential correlation with corporate performance.

The results of a simple introductory empirical analysis then clearly show the relationship between financial flexibility and the performance indicators of companies. In addition, the study also uses an alternative definition of capital structure to the traditional one of debt to equity. Summarising, the analysis shows that firms that remain financially flexible by keeping a part of their debt capacity – in terms of an alternative capital structure measurement – open tend to perform relatively better.

Keywords: Capital Structure, Financial Flexibility, Real Options, Strategic Finance.

1. Introduction

The intention of this paper is to tie together two difference research areas both belonging to the field of corporate finance. The first of them is the *capital structure theory*; the second is the *real options theory*. Together, the two should contribute to discussing the research field of *financial flexibility*.

The debate about the ideal capital structure of companies is of great interest for financial theory and practice. An important question focuses on the possible existence of an optimal capital structure – which lowers the cost of capital, optimizes risk and ultimately increases the value of a company. The second important question tries to understand the possible relationship between the capital structure and the real world of a company. It is examined whether an interaction between the capital structure and the performance and the resulting value of a company is possible. If that were the case, how would this relationship work in detail? Since the question of the optimal capital structure can be of very practical importance, there has been an active debate about it for sixty years.

This paper focuses on the question whether the capital structure of a company correlates with its "real world", its investments, its performance, the decisions of its management and the resulting value. In addition, from the practical point of view of financial managers, the capital structure should not be understood solely as the ratio of debt to equity. Instead, more detailed figures should be used to describe the capital structure, as well as ratios that focus on credit rating approaches or - subsequently - debt covenants. The introductory approach of this paper uses only one financial indicator: the debt / EBITDA ratio, which is highly significant in practice.

The debate about real options began in 1977 with a paper by Myers. The question discussed here is whether real investments – under certain circumstances – can be seen, treated and analysed like financial options. It was pointed out that there is a value contribution of flexibility in deciding on investments. In detail, a value is that in a situation of high uncertainty, a company has the opportunity to wait with an investment decision until new information can be obtained about the prospects of success of the investment in question. The value in question is then the value of the open option. Finally, since the potential investments have to be financed, the issues of financial flexibility, capital structure and real options combine. Since the realisation of real options must also be financed, the question of value is finally raised. When structuring financing is may be advisable not to go too close to the limits of what is feasible. Finally, this paper discusses the relationship between "keeping real financial options open" and the performance of companies.

The first chapter – this one – delivers a condensed overview regarding the intention of this paper. Afterwards the second chapter presents a brief summary regarding the capital structure and the real options debate and presents a link to the issue of financial flexibility – combined with a brief literature review. The third chapter explains the theoretical and empirical methodology of this paper. In the following fourth chapter the results of the chosen empirical approach are presented. The fifth chapter then summarizes the results of this paper and suggests further research approaches.

2. Theoretical background

The theoretical financial literature already shows a quite active debate about capital structure theory. This is almost the same in relation to the theory of real options. Based on this, this section can only give a rough overview of both fields. This overview is presented below in conjunction with a brief literature review. Both theoretical directions are brought together in the approach of financial flexibility.

2.1. Capital structure debate

The debate about the capital structure began with the paper "The Cost of Capital, Corporate Finance, and the Theory of Investment" (Modigliani / Miller 1958) by Modigliani / Miller in 1958. Since then, many other works on this topic have been written. The so-called MM-theorem was a rather technical approach in its first version. Consequently, it provided a more or less theoretical result, because it did not take into account important parameters in the capital structure question such as taxes, insolvency costs, agency costs, risks and others. Since the world that Modigliani / Miller describe is not real, they later explained that the influence of the capital structure on the value of a company can be caused by imperfections in the financial markets (Modigliani / Miller 1963).

The following capital structure debate essentially discussed two theoretical directions: The *first*

one concentrated primarily on the question, if there may be an optimal capital structure that increases the value of a company – in a way by itself because of minimising capital costs. In fact, there are many contributions to be found concerning this apparently interesting question. Here many additional parameters have been analysed to get closer to the optimal capital structure. The approach of Ross (Ross 1977) stated that the debt policy of a company may be a signal to the market respective the profitability of the projects of a company. Then, different papers discussed the question that – direct and indirect – cost of debt could trade off debt's tax benefits because of the tax deductibility of interest payments. (Bradley / Jarrel / Kim 1984, Kraus / Litzenberger 1973 and others).

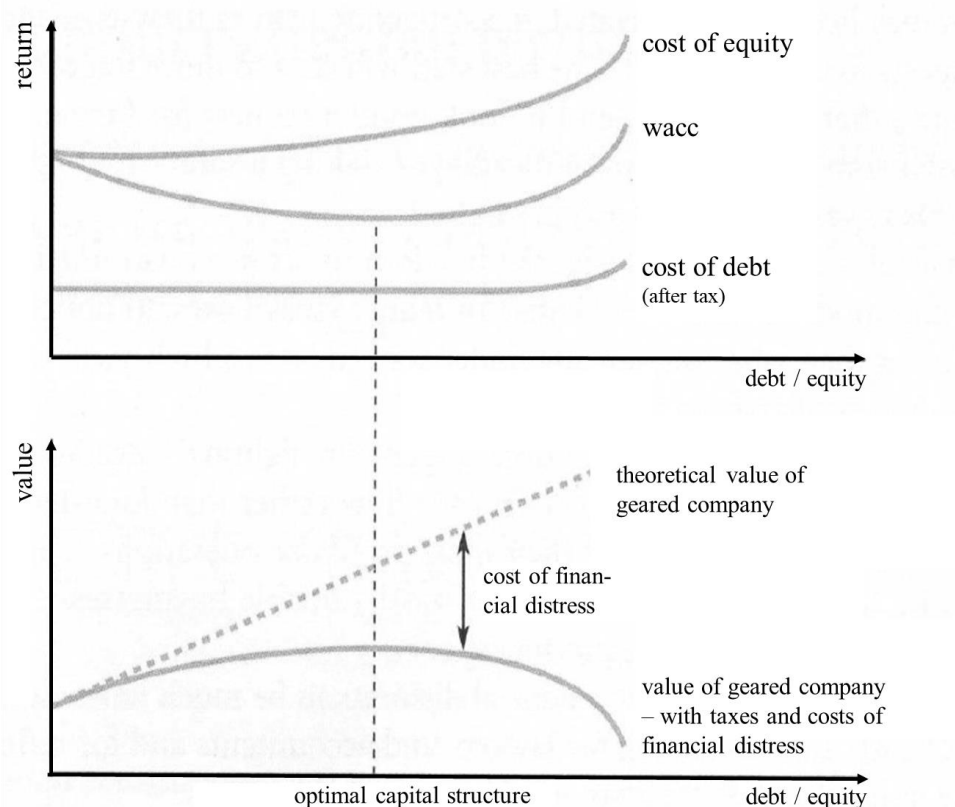


Fig. 1: Optimal capital structure – under special conditions

Taking into account the tax deductibility of interest and the – direct and indirect – cost of debt an optimal capital structure could exist as shown in figure 1. Unfortunately, although this explanation seems to be straightforward, it does not deliver the optimal gearing as the optimal relation of debt to equity. Despite all the different approaches discussed in theory, the one optimal capital structure that maximises the value of a company generally has not been found so far.

The *second* direction of the capital structure debate concentrates on the potential interaction between the capital structure of a company and its real world – or better real investment decisions and resulting company performance and then value. One aspect here is that the capital structure may affect the strategic decisions of a company (Gill / Bigger / Mathur 2011, Billet / King / Mauer 2007). On the other hand, different strategic decisions of a company could require different capital

structure decisions (Lowe / Naughton / Taylor 1994). There are different approaches that are being discussed on this topic. The question remains whether the capital structure can result in a better performance of a company or whether it is itself the result of better performance. Researchers mainly agree, that there may be a relation between capital structure and the value of a company, unfortunately the direction of this relation is not unequivocally clear (Stulz 1990).

Latest approaches to the capital structure debate take into account more detailed financial ratios and their relationship to the company's capital structure (Kisgen 2006, Devos / Rahman / Tsang 2017). They primarily discuss the question of whether a company adjusts its capital structure due to possible changes in its credit rating. Here, too, the real investment decisions of a company are indirectly affected. For the purposes of this paper, it is useful that these approaches prepare the way for a more practice-oriented view on the topic of capital structure. However, this paper goes even further by defining the capital structure itself on the basis of the relevant key financial ratios. (Rams 2018b).

2.2. Real options debate

Myers (Myers 1977) was the first to work out the similarities between real investments – seen as real options – and financial options under certain assumptions. He assumed that many corporate assets – particularly growth opportunities – may be regarded as call options. The special value of this real options then depends on discretionary future investments of the company. Ross (Ross 1978) followed with an application of this approach to particularly high-risk investments and supported the idea of using the term real options. The opinion here is, that it leads to false results if only the classical valuation approaches – such as the discounted cash flow approach – are applied to the specific real options. These then neglect the value of the strategic decision option (Rams 1999). Continuing the real option approach, Trigeorgis and Manson (Trigeorgis / Manson 1987) argued again and in more detail, that the real option approach is better suited to evaluate projects or investment opportunities in an environment of uncertainty about their success.

In a nutshell, a real option or the value of a real option exists when – in the face of greater uncertainty – a decision maker can wait to make a decision for or against an investment until further information about the probability of investment success is available. If it later turns out, that the investment in question is not promising, it will not be realised and the associated costs will remain low. If the investment turns out to be successful, it is implemented and the associated profits are realised.

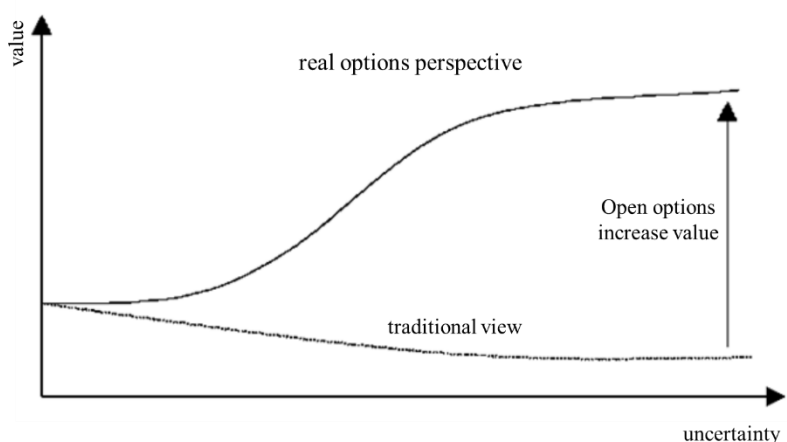


Fig. 2: Value perspective of real options (Amram / Kulatilaka 1999)

2.3. Financial flexibility

Financial flexibility can ideally combine the theory of capital structure and the theory of real options. Financial flexibility is then for the purpose of this paper defined as a company's ability to flexibly attract new financial resources – that is, sufficiently, quickly, smoothly, and at low direct and indirect costs.

As Gamba and Triantis (Gamba / Triantis 2008) stress, it is not realistic to assume that real options will ultimately always be financed if they turn out to be economically advantageous. However, since real options can only be open if the necessary financial resources are available, they must – necessarily – be linked to financial real options. A financial real option is therefore to be understood as the possibility of being able to procure funds flexibly at any time in order to realise the investments of a company. Finally, the financial real option means that the company's capital structure permits the raising of further funds. In connection with this paper, the possibility of further financing with borrowed capital and thus open debt capacity is considered. Once again, as already mentioned the financial flexibility approach ties together the capital structure theory and the real options theory:

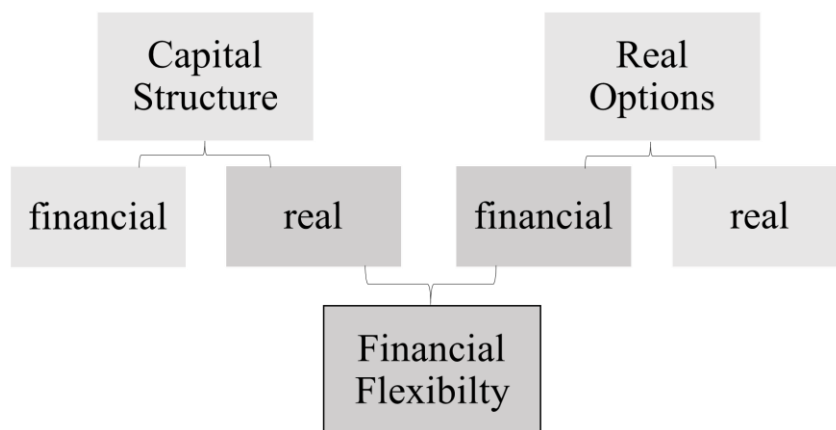


Fig. 3: Capital structure, real options and financial flexibility

3. Employed method

The methodology used in this paper to analyse the possible link between financial flexibility, real financial options and corporate performance is as follows. First, the term capital structure is used, which differs from the traditional ratio of debt to equity. Since the pure ratio of debt to equity appears relatively static, it does not ideally fit into the actual practice of financial managers. For this reason, the approach of this paper intends to use the – dynamic – ratio of debt to EBITDA to describe the capital structure. This financial ratio is suitable for describing the potential structural debt limit in relation to the cash flow-related ratio of earnings before interest, taxes, depreciation and amortization. In addition, the ratio of debt to EBITDA is well known in today's financial world and is focused by the majority of financial managers. Accordingly, financial flexibility must be defined by the – still – open ability to raise additional funds, whereby this paper focuses on debt borrowing. Financial flexibility is then the open credit space up to an agreed or accepted limit. The respective limits are determined by credit rating indicators. These are derived from tables that convert the financial ratios into credit ratings:

Three Year Medians (adjusted values)	AAA	AA	A	BBB	BB	B	CCC
EBIT interest coverage (x)	17,5	10,8	6,8	3,9	2,3	1,0	0,4
EBITDA interest coverage (x)	21,8	14,6	9,6	6,1	3,8	2,0	0,9
Total debt/EBITDA (x)	0,7	1,2	1,5	2,2	3,4	4,9	7,9
Total debt/capital (%)	26,9%	35,6%	40,1%	47,4%	61,3%	74,6%	113,5%

Fig. 4: Key financial figures and credit ratings (Rams 2018a)

In general, the approach of this paper proposes to define the capital structure by using more than one financial ratio - ideally 3 to 4. However, for simplicity's sake, this paper selects only one of them: the most important debt to EBITDA ratio – and at the same time the most important rating ratio.

The possible relationship between keeping financial real options open – and thus financial flexibility – is analysed empirically here. For this purpose, a data set with real financial ratios for the period from 2012 to 2016 of around 3,500 German SMEs is used.

Taking into account the BBB and BB ratings (see Fig. 4), which are acceptable to good for SMEs, 2.5 x EBITDA and 3.5 x EBITDA are used for the following calculation. From a practical point of view, the financial market agrees that 2.5 times EBITDA from a risk point of view represents quite solid debt (approx. BBB indication). The 3.5-fold EBITDA can also be accepted, but of course provides a higher debt volume and risk (approx. BB indication). The – open – debt capacity is then calculated as 2.5 or 3.5 x EBITDA less already existing financial liabilities. To determine the relative performance, in the next step both the ratio of EBIT and the net income for the year to the respective sales revenue are compared. The resulting value is then finally expressed in relation to the – open – debt capacity – representing financial flexibility.

Taking into account the often successful financial strategies of companies in business practice, it is assumed that companies that still keep part of their debt capacity open can generally achieve better performance. Accordingly, the regression analysis based on MS®-Excel should be able to derive a clear regression function from the individual values determined.

The calculations are carried out in detail according to these formulas:

2.5 debt capacity:

- Relative performance in relation to financial flexibility = $(\text{EBIT} / \text{turnover}) / ((2.5 \times \text{EBITDA} - \text{financial liabilities}) / \text{balance sheet total})$
- Relative performance in relation to financial flexibility = $(\text{EBIT} / \text{turnover}) / ((2.5 \times \text{EBITDA} - \text{financial liabilities}) / \text{balance sheet total})$

3.5 debt capacity:

- Relative performance in relation to financial flexibility = $(\text{EBIT} / \text{turnover}) / ((3.5 \times \text{EBITDA} - \text{financial liabilities}) / \text{balance sheet total})$
- Relative performance in relation to financial flexibility = $(\text{EBIT} / \text{turnover}) / ((3.5 \times \text{EBITDA} - \text{financial liabilities}) / \text{balance sheet total})$

4. Empirical results

The empirical analysis of the above financial data indeed provides clear linear functions that describe the (co-)relation of performance to sales as a percentage of the financial flexibility held. As described above, this is calculated as the multiplier of EBITDA less existing financial liabilities.

In summary, the results of the calculation are presented here as the function that results from the average of the individual correlations for the years 2012 to 2016. The then middle correlation functions – for 2.5 and 3.5 EBITDA – look as follows:

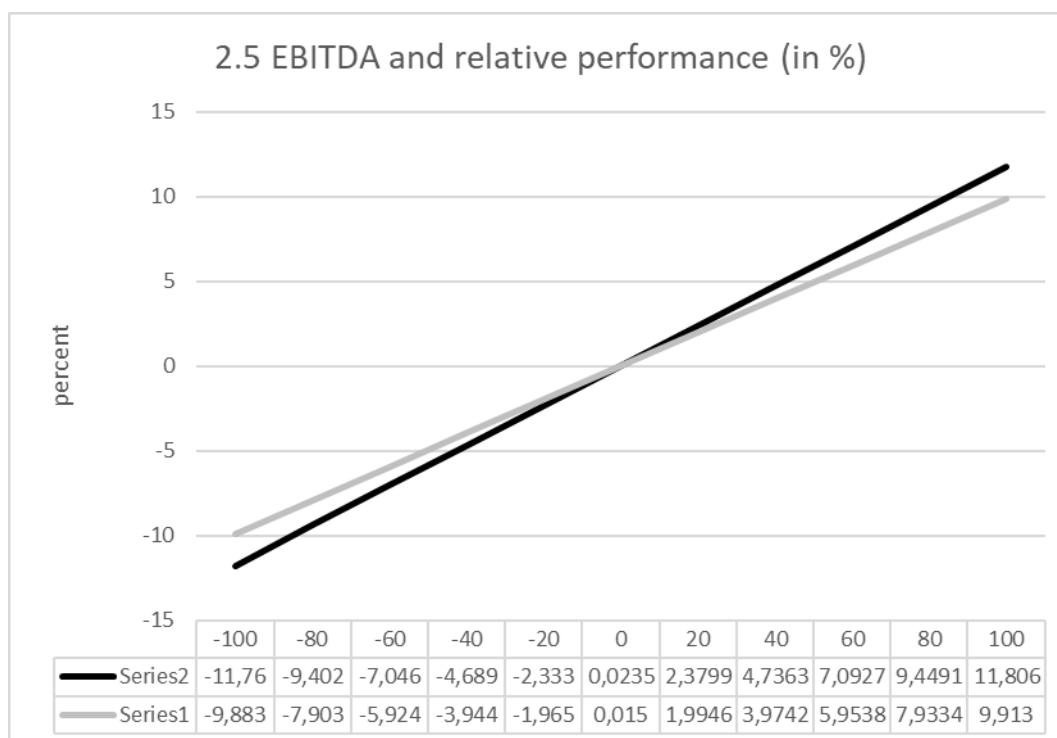


Fig. 5: Mean correlation function of relative performance to open (2.5) debt capacity 2012 to

2016

- Series 2: $Y = 0,11782 X + 0,02354$
(EBIT / turnover) / ((2.5 x EBITDA – financial liabilities) / balance sheet total)
- Series 1: $Y = 0,09898 X + 0,01496$
(net income / turnover) / ((2.5 x EBITDA – financial liabilities) / balance sheet total)

First of all the detected correlation appears to be quite stable. Second, it appears to be a little bit stronger for der EBIT-performance than for the net income performance.

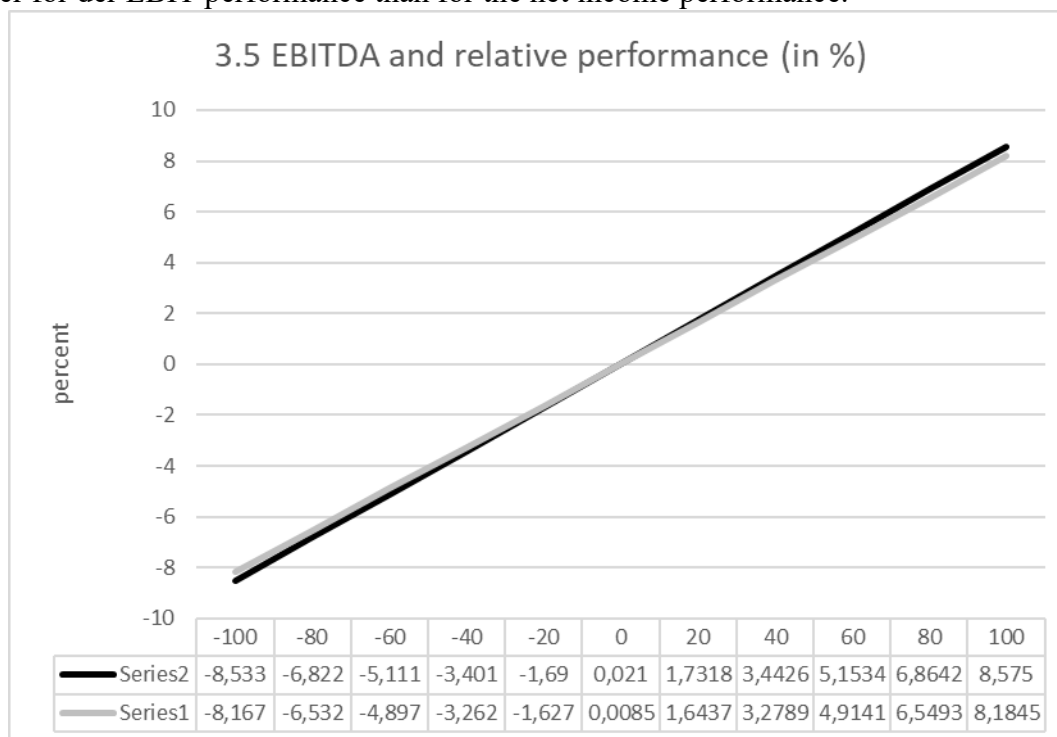


Fig. 5: Mean correlation function of relative performance to open (3.5) debt capacity 2012 to 2016

- Series 2: $Y = 0,08554 X + 0,02100$
(EBIT / turnover) / ((3.5 x EBITDA – financial liabilities) / balance sheet total)
- Series 1: $Y = 0,08176 X + 0,00854$
(net income / turnover) / ((3.5 x EBITDA – financial liabilities) / balance sheet total)

First of all the detected correlation again appears to be quite stable. Second, it again appears to be a little bit stronger for der EBIT-performance than for the net income performance – but here the difference is a quite small one.

The chosen – quite straightforward – theoretical approach has already been tested before (Rams

2018b), but is still quite new. The assumption that companies show relatively better performance if they do not go into debt to the limits possible for them could be confirmed on the basis of a quite simple empirical analysis. This result contradicts the first MM theorem. It rather confirms the possible value of maintaining financial flexibility.

5. Conclusion

The purpose of this paper was, first, to introduce and maintain a new dynamic definition of a company's capital structure. This was done by proposing the definition of the capital structure on the basis of a set of key financial ratios – of which here only the ratio of debt to EBITDA was used for simplicity's sake. The approach seems worth pursuing further as it adequately corresponds to the practice of corporate financing.

Furthermore, the goal was to analyse the value of financial flexibility by combining the capital structure theory and the real option theory. This was done on the basis of a transitional argumentation and a simple empirical analysis.

The result confirmed that there is a – slight – correlation between the holding of financial flexibility and the relative performance of companies. This was measured on the basis of a broad portfolio of SMEs in Germany for the years 2012 to 2016. Thus, the value of financial flexibility was confirmed - comprehensibly contrary to the first MM theorem.

On the basis of this result, further worthwhile analytical work is emerging. The static analysis should be continued in further steps. Cross-period calculations were to be carried out and further key figures were to be used. The separate analysis of different industries also offers itself. Furthermore, it seems worthwhile to also qualitatively analyse the reasons behind the correlation shown here.

As was to be expected, the present paper has answered interesting questions from the common field of capital structure theory, real option theory and financial flexibility and has raised a number of further questions.

References

- Amram, M., Kulatilaka, N. “Real Options: Managing Strategic Investment in an Uncertain World”, Harvard Business School Press, Boston, MA, 1999.
- Billet, M., King, T., Mauer, D., 2007. “Growth opportunities and the choice of leverage, debt maturity, and covenants”, *The Journal of Finance*, 62, pp. 697-730.
- Bradley, M., Jarrell, G., Kim, E., 1984. “On the existence of an optimal capital structure: Theory and evidence”, *Journal of Finance*, Vol. 39, pp. 857-78.
- Devos, E., Rahman, S., Tsang, D., 2017. “Debt covenants and the speed of capital structure adjustments”, *Journal of Corporate Finance*, Vol. 45, pp. 1-18.
- Gamba, A., Triantis, A.J., 2008. “The value of financial flexibility”, *Journal of Finance*, 2008, vol. 63, issue 5, pp. 2263-2296.
- Gill, A. Biger, N., Mathur, N., 2011. “The effect of capital structure on profitability: Evidence from the United States”, *International Journal of Management*, Vol. 28, No. 4, Part 1, pp. 3-15.
- Kisgen, D., 2006. “Credit ratings and capital structure”, *The Journal of Finance*, 61(3), pp. 1035-1072.

- Kraus, A., Litzenberger, R., 1973. "A State-Preference Model of Optimal Financial Leverage", *Journal of Finance*, 28, pp. 911-922.
- Lowe, J., Naughton, A. and Taylor, P., 1994. "The Impact of Corporate Strategy on the Capital Structure of Australian Companies", *Managerial and Decision Economics*, Vol. 15, pp. 245-257.
- Myers, St. C., 1977. "Determinants of corporate borrowing", *Journal of Financial Economics* 5 (1977), pp. 147-175.
- Modigliani, F., Miller, M.H., 1958. "The Cost of Capital, Corporate Finance, and the Theory of Investment", *American Economic Review*, Vol. 48, pp. 261-297.
- Modigliani, F., Miller, M.H., 1963. "Corporate Income Taxes and the Cost of Capital: A Correction", *American Economic Review*, Vol. 53, pp. 433-443.
- Rams, A. 1999. "Realoptionsbasierte Unternehmensbewertung", *Finanz-Betrieb, Zeitschrift für Unternehmensfinanzierung und Finanzmanagement*, Vol. 1.1999, 11, p. 349-364.
- Rams, A., 2018a. "Strukturierte Finanzierungen – Bedeutung und Einsatz von Covenants", Presentation at Frankfurt School of Finance and Management, Frankfurt, May 2018.
- Rams, A., 2018b. "Debt Capacity and Company Performance", *Proceedings of The IRES International Conference*, Philadelphia, USA, 28th-29th July 2018, pp. 3-8.
- Ross, S.A. 1977. "The Determination of Financial Structure: The Incentive-Signalling", *The Bell Journal of Economics*, Vol. 8, No. 1 (Spring, 1977), pp. 23-40.
- Ross, S.A., 1978. "A Simple Approach to the Valuation of Risky Income Streams", *Journal of Business*, Vol. 51, No. 3, 1978, pp. 453-475.
- Stulz, R., 1990. "Managerial discretion and optimal financing policies," *Journal of Financial Economics*, 1990, Vol.26, pp. 3-27.
- Trigeorgis, L., Mason, S. P. "Valuing Managerial Flexibility," *Midland Corporate Finance Journal*, Vol. 5, No. 1, 1987, pp. 14-21.