



PBR
ISSN 1561-8706

PAKISTAN BUSINESS REVIEW

Indexed and Abstracted by ECONLIT, Journal of Economic Literature
Indexed by EBSCO, USA

HEC Approved "Y" Category Journal

Volume 17 Number 1

April 2015

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RISK MANAGEMENT: A TOOL FOR ENHANCING ORGANIZATIONAL PERFORMANCE

(A Comparative Study between Conventional
and Islamic Banks)

Zahid Ali Channar¹, Piribhat Abbasi² & Manisha Bai Maheshwari³

Abstract

The purpose of this comparative study is to examine the risk management system of banks and its impact on their performance. For this study, the primary data was collected using closed - ended questionnaire and analyzed through independent sample T- Test and correlation. The secondary data was collected from financial statements of the banks and analyzed through financial ratios. The finding of research showed that Conventional Banks have more effective risk management process as compared to the Islamic Banks. The findings also showed that risk management has a negative non significant relation with operational performance where as it has positive relation with financial performance.

Keywords: Risk Management, Performance, Conventional Banks, Islamic Banks

JEL Classification: G 320

1-Dept of Management Sciences, Isra University, Hyderabad, Pakistan

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Introduction

Risk is inevitable and inborn in each and every economic activity. According to Brain (2001) risk occurs when outcome is uncertain. Risk exists as a part of an environment in which various organizations operate (Shafiq and Nasr, 2010) so each and every business has to face risk. Without taking risk, growth of business is like a nightmare (Asim et al., 2012). Banks like all businesses face various types of risk which arise due to the nature of their activities. The major aim of banks is to maximize profit by managing risk and by providing various financial services (Alimshan, 2011). In Practice we have two banking systems. One which follows normal interest based practices called conventional banking and second which follows Islamic law and perform interest free activities which is known as Islamic banking (Khattak et al., 2013). Both these banking systems are distinguished as conventional banks follow the SOPs prepared by their higher authority; their income is interest which is earned by lending money and they transfer the entire risk to others. While Islamic banks follow policies made by Sharia'h that prohibits interest that's why Islamic banks do not deal in interest and are trade-oriented banks, their income is profit which is earned by trading. They share risk with both lenders and borrowers (Ashfaq, 2009).

Risks faced by both Islamic and Conventional banks can be separated in two categories: financial risks and non-financial risks. Financial risk is further divided into credit risk, liquidity risk and market risk where as non-financial risks are divided into legal risk, operational risk and regulatory risk (Gleason, 2000). Other specific risks faced by Islamic banks include lack of riba free risk-hedging instruments, profit-loss sharing based government securities are under developed, Islamic banks have limited access to lender-of-last resort facilities provided by central bank due to lack of Sharia'h compatible lender-of-last resort facilities, value of funds and return rate are not certain, asymmetric information increase the possibilities of moral hazard (Mounira and Anas, 2008). Effective and efficient risk management process is

requisite due to these risks faced by banks. One of key task of bank is to discover and manage risks.(Fatemi and Fooladi, 2006). It is necessary for banks either conventional or Islamic, to make risk management an integral part of their business practices as constantly they have to deal with risky transactions either willingly or unwillingly.

Risk management is an essential component of strategic management of an organization. It is an ongoing process of risk assessment through different tools and methods which identify all possible risks, determine which risks are critical to solve as soon as possible and then execute strategies to deal with these risks (Tariquallah and Habib, 2001). Current risk management system based on the Basel II aims to promote financial stability (BCBS, 2006). The Basel Accord has consequently appeared as an attempt to protect banking system all around the world from the affects of financial crises and structures it by using a set of rules which allow for systematic risk management (Makwiramiti, 2008).

An efficient and effective risk management is the need of each and every organization and is one of the key responsibilities of bank. However effective risk management boosts the performance of an organization. The past financial crises uncovered shortcomings in the performance and risk management practices with many banks taking on excessive risk with too little regard for long run performance (Sitanta, 2011). Banks can grab opportunities with greater confidence only with an integrated approach of managing risk and performance.

Literature Review

Sitwat Habib et al. (2014) conducted research on Operational Risk Management in Corporate and Banking Sector of Pakistan. This research aims to find the reasons for the implementation or lack of adoption of integrated operational risk management approach. The paper revealed that risk management can improve organizational performance but in Pakistan, companies do not have appropriate

infrastructure and proper knowledge of risk management. Research showed that in banking sector of Pakistan the concept of operational risk management can be seen up to some extent.

Barati et al. (2013) have carried out an empirical study of Risk Management in Iranian Banks. The intention of this research was to study the factors which extensively influence the risk management practices and to study relationship between some banking ratios like cash to asset ratio, capital adequacy, size of bank and debt to equity with liquidity, credit and operational risks. This study concluded that all risks have positive relationship with capital adequacy and debt. On one hand, capital adequacy had a positive relationship with liquidity risk where as the sizes of banks, cash to asset and debt to equity ratios had an inverse relationship with liquidity risk. In case of credit risk, capital adequacy had an inverse relationship with it where as debt to equity ratio and credit risk are positively related and there weren't any relation between credit risk and other variables. On the other hand, the cash to asset ratio, sizes of banks and capital adequacy had an inverse relationship with operational risk. Finally the results of this study also showed that there weren't any relation between the debts to equity ratio and operational risk.

Emira et al (2013) have conducted research on Comparative Analysis of Risk Management in Conventional and Islamic Banks (The Case of Bosnia and Herzegovina). This research paper tried to determine the reliance of banks' financial performance on the risk management. The results of this research reveal that still practices of risk management are developing worldwide. Currently all the banks understand the value of risk management but still they do not have sufficient ways for risk management. Exposure of Islamic banks as compared to conventional banks to risk is much more but its dynamic risk management system allowed it to constantly compete with conventional banks and get good returns. Lastly, banks which have effective risk management system have better financial performance.

Ali Said (2013) has researched on Risks and Efficiency in the Islamic Banking Systems (the Case of Selected Islamic Banks in MENA Region). The objective of this study was to investigate how in Islamic banks, risks and efficiency are correlated with each other. This research concluded that credit risk has negative relationship with efficiency, while operational risk has found to be negatively correlated to efficiency too. The liquidity risk showed insignificant correlation to efficiency in Islamic banks in MENA area.

Naveed et al (2013) conducted research on Risk management practices and attitude of Pakistani Islamic banking system employees. This study was intended to explore the Risk Management Practices in Islamic Banks and to study the impact of independent variables on dependent variables. The independent variable of the study were understanding risk and risk management, risk assessment and analysis, risk identification, risk monitoring, credit risk analysis and the dependent variable was risk management practices. The result showed that four out of five independent variables have positive and significant impact on dependent variable.

Selma et al (2013) conducted research empirically on Risk Management Tools Practiced in Tunisian Commercial Banks. The purpose of the researchers was to investigate risk management practices and procedures followed by banks. The results revealed that banks in Tunisia know the importance of efficient risk management in enhancing bank performance and cost reduction. Moreover banks have active risk management structures in Tunisia. Further researchers concluded that risk management must be an ongoing process which systematically addresses all risks faced by organization in past, present and future.

Omar et al. (2011) conducted research on Risk management and the implementation of the Basel Accord in emerging countries (An application to Pakistan). The aim of this research was to examine attitudes of Pakistani banks towards Basel Accord implementation plans and thus to determine which factors create hindrances in the

Basel Accord implementation in these banks. Results of this research showed that managers' view regarding Basel Accord is positive though operational risk appears as a major obstacle for Basel Accord implementation in Pakistan. Private banks than public banks are technically more capable and favorably inclined towards Basel Accord implementation.

Salman and Zain (2011) conducted research that whether effective risk management affect organizational performance. Their major purpose was to examine the current practices of risk management and impact of these practices on performance of an organization and to identify the likelihood of improvements in software development sector of Pakistan. The finding showed that most of the organizations are not using properly risk management practices besides that most of the organizations do not have documented risk management policy accurately. It also concluded that the organizations which are using risk management practices have high performance compare to those organization which are not using risk management practices.

Naveed et al (2011) conducted research on Risk Management Practices and Islamic Banks: An Empirical Investigation from Pakistan. Their purpose of study was to examine the firm's level factors that have considerable impact on the risk management. The findings of study showed that bank's size and financial risks (credit and liquidity risk) are positively and significantly related with each other while bank's size has negative and statistically insignificant relation with operational risk. The debt to equity and NPLs ratios are negatively and significantly related to operational as well as liquidity risk while they are positively related to credit risk. The capital adequacy has positive significant relation with liquidity where as it is negatively and significantly related to operational and credit risk.

Afsheen et al. (2010) have researched on Risk Management Practices Followed by the Commercial Banks in Pakistan. This research paper aims to examine the awareness about risk management within the banking sector of Pakistan. Both Primary and secondary data

collection sources were used. Primary data was gathered from 15 commercial bank's risk management departments. The secondary data was collected from performance review of the banking system report of the period of 9 years from 2000 to 2008. Findings of this empirical study have shown that there is a considerable dissimilarity in the use of risk management aspects among the commercial banks in both public and private sectors. Also the financial reliability indicators differ in significance for each type of commercial bank. Although staff of commercial banks has a general understanding about risk and its management, still there is a need for commercial banks to provide training to staff in risk management tailored according to their needs.

Romzie (2009) has conducted research on Risk Management Practices and Risk Management Processes of Islamic Banks (A Proposed Framework). The aim of this research was to suggest conceptual framework and to study the relationship between risk management practices and risk management aspects like understanding risk and its management, its identification, its analysis and assessment and monitoring. This study recommended a conceptual framework on the basis of risk management aspects and its practices. The results showed that risk management practices and all of its aspects are positively related with one another.

Al-Tamimi and Al-Mazrooei (2007) conducted research to compare the risk management practices and techniques in dealing with different types of risk in national and foreign banks of UAE. The aim of research was to identify the risk management practices and procedures in UAE banks. The result showed that these banks are more capable for managing risk and also found that UAE national and foreign banks are unlike to each other in risk assessment, its analysis, examine and controlling.

Problem Statement

The failure of Lehman Brothers, one of the World's leading investment banks in the United States on 15 September, 2008, led to financial crises and recession in the United States that spread globally and results in global economic crises. Those financial crises uncover shortcomings in the performance and risk management practices with many banks taking on excessive risk with too little regard for long run performance. Its mean Organizations lack information regarding the impact of Risk Management on their performance.

Research Objectives

- To evaluate the implementation of risk management in conventional and Islamic banks.
- To study the relationship between risk management and performance of both type of banks.

Research Hypotheses Design

The study by Emira et al. (2013) showed that organization with effective risk management have higher performance and in our country conventional banks have higher performance then islamic banks so now we compare risk management in conventional banks is effective than islamic banks. Under the light of this justification we design our H_1 hypothesis that is:

H_1 : Conventional banks act more upon risk management as compared to Islamic banks.

A previous study by Salman & Zain (2011) showed that active risk management increase performance in project management (software industry). Now we are going to study the same in banking industry. For our research purpose we have divided performance into two types: operational performance and financial performance. Operational performance shows the efficiency whereas financial

performance shows the profitability of an organization. Under the light of this justification we design our H_2 and H_3 hypotheses that are:

H_2 : Risk management increases operational performance of the banks.

H_3 : Risk management increases financial performance of the banks.

Research Scope

Risk management was assessed in the Islamic and Conventional banks of Hyderabad district. Meezan Bank, Bank Islami, Soneri Islamic and Dubai Islamic Bank were taken as Islamic banks and HBL, UBL, MCB and Soneri Bank were taken as conventional banks.

Research Methodology

Population

The population of this study was finite in nature and the “content” of population was all employees and customers of both Islamic and Conventional banks, the “Extent” of population was Hyderabad District and “Time” was December 2013.

Sampling Technique

Probability based Sampling techniques was used for this research. From probability based sampling techniques, Stratified and random sampling method were used for collecting data. Stratified method was used for collecting data from employees and simple random sampling method was used for customers.

Sample Size

Total sample size for our study was 150. A sample size for Islamic banks was 75 and for conventional banks it was also 75. Out of which 10 samples were collected from top management, 20 from middle level management, 20 from lower level management and 25 were customers.

Data Collection

For this study a questionnaire was used for primary data collection and it was consisted of close-ended questions which were further divided into categorical and continuous variables. Primary data acquired from questionnaires was then analyzed through SPSS. Further secondary data was collected from financial statements of all 3 Islamic banks and 3 conventional banks over three years period from 2010 to 2012 (shown in table 7.4).

Instrument

Standard instruments for this study were used to measure the variables that were Employee satisfaction, Customer Satisfaction and Risk management.

- Employee Satisfaction was measured through eight questions taken from scale (alpha=0.81) evolved by Nick Foster (1999).
- Customer Satisfaction was measured by 9-items scale (alpha = 0.85) operationalized within Oliver's (1997) framework, and then was used by Bloemer en De Reuter (1998).
- For measuring Risk Management, the questionnaire used was similar to questionnaire used by Shaima Al Hussiny and Al-Tamimi and Al-Mazrooei (2007) in their studies.

Data Analysis

The first hypothesis was tested through Student's T-test (Independent Sample Test). For this test one categorical & one continuous variable is required. Here categorical variable is "Bank" which is divided into two categories- Islamic & Conventional; & one continuous variable is Risk Management.

Results yielded by this test, shown in table 8.1, show that the mean score of Islamic banks is 94.00 and Conventional banks is 103.24 on Risk Management scale, they are significant i.e. $P = 0.013$

(which is less than 0.05). These results help us to accept alternative hypothesis and reject null hypothesis.

H₀: Conventional banks do not act more upon risk management as compared to Islamic banks.

H₁: Conventional banks act more upon risk management as compared to Islamic banks.

Second Hypothesis, Risk management increases operational performance of the banks, was tested through correlation. In this hypothesis operational performance was operationalized through employee satisfaction and customer satisfaction. Therefore correlation of risk management was found with employee satisfaction and customer satisfaction separately.

For the first part of the hypothesis, two continuous variables used were Risk Management and Employee Satisfaction. And for the second part of the hypothesis, two continuous variables used were Risk Management and Customer Satisfaction.

Results shown in table 8.2 show that Risk Management has not only non significant negative relation with Employee satisfaction (-.220, p=.125) but also with Customer satisfaction (-.263, p=.065). Thus analysis showed that there was insignificant negative relation between risk management and operational performance. These results help us to accept null hypothesis and reject alternative hypothesis.

H₀: Risk management does not increase operational performance of the banks.

H₁: Risk management increases operational performance of the banks.

For testing third Hypothesis Financial Ratios analysis was used and then the findings were related with the risk management. Risk management is already measured above through student T-test

where as Financial performance is measured by following financial ratios:

Profitability Ratios

1. $\text{Return on asset (ROA)} = \text{Profit after tax} / \text{total asset}$
2. $\text{Return of equity (ROE)} = \text{Profit after tax} / \text{equity capital}$
3. $\text{Profit expense ratio (PER)} = \text{profit} / \text{total expense}.$

Risk and Solvency Ratios

1. $\text{Debt to equity ratio (DER)} = \text{Debt} / \text{total equity}$
2. $\text{Debt to total asset ratio (DAR)} = \text{Debt} / \text{total asset}$

Advances to Debt Ratios

1. $\text{Advances to deposits ratio (ADR)} = \text{Advances} / \text{deposits}$

Return on Assets (ROA)

The higher ROA ratio shows higher performance and bank's ability to transfer asset into income. In Figure 8.1 graph of "Return on Assets" showed that in Conventional banks MCB had high ROA as compare to other conventional banks where as in Islamic banks Meezan bank had higher ROA than other Islamic banks. Soneri Islamic had negative ROA in year 2011 whereas ROA of Dubai Islamic bank, Soneri and UBL slightly increase each year. ROA of HBL show fluctuations as high in 2010 then decrease in 2011 and again increase in 2012 where as ROA of Bank Islami decrease each year. Figure clearly showed that MCB had much higher ROA as compare to Meezan bank due greater and continuous increase in net income of MCB. In 2012, ratio of 2.7

means that MCB earns 2.7 rupees on each invested rupee where as Meezan bank earns 1.28 rupee on each rupee invested in sales.

Return on Equity (ROE)

The higher ROE ratio shows higher managerial performance. This ratio increase or decrease due to increase or decrease in paid up capital and net income. In Figure 8.1 graph of “Return on Equity” shows that in Conventional banks again MCB had high ROE as compare to other conventional banks where as in Islamic banks Meezan bank again had higher ROE than other Islamic banks. Dubai Islamic bank, Bank Islami, Soneri and UBL show good progress each year where as Soneri Islamic had negative ROE in year 2011 which improve in 2012 but still it was negative in 2012. ROE of HBL show fluctuations as high in 2010 then decrease in 2011 and again increase in 2012. MCB had slightly stable ROE as compare to Meezan bank as ROE of Meezan bank show great fluctuations from 14.88% in 2010 to 24.6% in 2011 because of great increase in its net income and again its ROE fall in 2012 from 24.6% in 2011 to 21.2% due to minimum increase in net income.

Profit Expense Ratio (PER)

A high PER shows cost efficiency of bank. In Figure 8.1 graph of “Profit Expense Ratio” point out that in Conventional banks again MCB had high PER as compare to other conventional banks where as in Islamic banks Meezan bank again had higher PER than other Islamic banks. PER of Dubai Islamic bank, Soneri and UBL slightly increase each year. PER of HBL and Bank Islami show fluctuations. Soneri Islamic had negative PER in year 2011 which improve in 2012 but still PER was negative in 2012. When compared relatively MCB had higher PER as compare to Meezan bank because MCB generates more returns out of its assets and income by effectively controlling its expenses.

Debt to Equity Ratio (DER)

DER shows that bank capital can absorb financial shocks and a lower DER ratio is preferable where as higher or increasing ratio is the result of aggressive debt financing by the banks for sake of growth. In Figure 8.1 graph of “Debt to Equity Ratio” showed that in Conventional banks again MCB had stable DER about 6% in each of three years as match up to other banks. DER of Islamic banks excluding Soneri Islamic bank increased each year. DER of UBL decrease each year where as DER of HBL increased over each of three years. DER of Soneri bank showed fluctuations as high in 2010 then decrease in 2011 and again increase in 2012.

Debt to Asset Ratio (DAR)

DAR ratio shows riskiness of bank’s business and its financial potency to pay its debtor. In Figure 8.1 graph of “Debt to Assets Ratio” clearly showed that MCB had much lower DAR as compare to other Conventional and Islamic banks excluding Soneri Islamic bank. Lower ratio revealed that less percentage of total assets of MCB and Soneri were financed by debt.

Advances to Deposits Ratio (ADR)

Advances to deposits ratio shows the extent to which the bank had utilized its available funds. A higher ratio means banks not have enough liquidity to face any unexpected fund requirements where as very low ratio reveals banks may not be earning as much as they could be. In Figure 8.1 graph of “Advances to Deposit Ratio” showed that ADR of both conventional and Islamic banks decreases. At one side it shows improvements in banks liquidity but on other side it indicates that banks have ample funds to give loan to public, it is not a good sign. ADR ratio declined due to increase in banks’ investment in government securities.

Results of Financial ratios reveal that financial performance of Islamic banks is lower when compared with conventional banks. In the same way results of above student T Test also show that Conventional banks act more upon risk management as compared to

Islamic banks. These results help us to accept alternative hypothesis and reject null hypothesis.

H₀: Risk management is not increases financial performance of the banks.

H₁: Risk management increases financial performance of the banks.

Conclusion

Study aims to examine the impact of risk management on the financial and operational performance of banks. Results reveal that Conventional banks have systematic risk management processes to deal with risks and it has been observed that they have the benefit of high financial performance and market leadership. Exposure of Islamic banks to risk is more than conventional bank and risk management practices are still not practiced widely in the Islamic banking industry of Pakistan. Results also show that there was non-significant negative correlation between risk management and operational performance. Results also prove that banks which have effective risk management system, have high financial performance in contrast to those banks which are not have effective risk management system. Study conducted by Emira Kozarević et al (2013) also reveal that higher the Risk management, the higher will be the financial performance.

Recommendations

As the lack of risk management practices in Islamic banks is observed in the study so it is suggested that they should develop a systematic process for risk management. They should provide trainings to their staff in risk management according to their needs.

References

- Abdelghani, E., Rajhi, M.T. and Selma, M.R.B. (2013). Risk management tools practiced in Tunisian commercial banks. *Studies in Business and Economics*, pp. 55-77.
- Abdullah, A., Khan, A.Q. and Nazir, N. (2012). A comparative study of credit risk management: a Case study of domestic and foreign banks in Pakistan. *Academic Research International*, Vol. 3, pp. 371-377.
- Ahmad, A. (2009). *A comparative study of Islamic banking in Pakistan: proposing and testing a model*. PhD Dissertation, Foundation University, Islamabad, Pakistan, pp. 1 – 42.
- Khan, T. and Ahmed, H. (2001). Risk management: an analysis of issues in Islamic financial industry. Occasional Paper No. 5, Islamic Development Bank, Jeddah, Saudi Arabia, pp. 28-39.
- Al-Tamimi, H., Al-Mazrooei, F. (2007). Banks' Risk Management: A Comparison Study of UAE National and Foreign Banks. *The Journal of Risk and Finance*, Vol. 8, pp. 394-409.
- Anas, E. and Mounira, B.A. (2008). Managing risks and liquidity in an interest free banking framework: the case of the Islamic banks. *International Journal of Business and Management*, Vol. 3, pp. 81-89.
- BCBS (2006). *International Convergence of Capital Measurement and Capital Standards: a Revised Framework*, Comprehensive Version, BIS.
- Burt, B.A. (2001). *Definitions of risk*. J Dent Educ 2001; 65:1007-8, pp. 3.
- Faizulayev, A. (2011). Comparative analysis between Islamic banking and conventional banking firms in terms of profitability, Master Dissertation, Eastern Mediterranean University, Gazimagusa, Turkey.
- Fatemi, A., Fooladi, I. (2006). Credit Risk Management: A Survey of Practices. *Managerial Finance*, Vol: 32, pp. 227-233.
- Fry, J. M. and Masood, O. (2011). Risk management and the implementation of the Basel accord in emerging countries: an

- application to Pakistan. *Munich Personal RePEc Archive*, Paper No. 34163, pp.1-20.
- Gleason, J. T. (2000). *Risk: The new management imperative in finance*. Bloomberg Press, Princeton, USA.
- Habib, S., Masood, H., Hassan, S.T., Mubin, M. and Baig, U. (2014). Operational Risk Management in Corporate and Banking Sector of Pakistan. *Information and Knowledge Management*, Vol. 4, pp. 1-10.
- Khattak, N.A., Khashif-ur-Rehman, Majeedullah and Wasimullah (2013). Risk management practices and attitude of Pakistani Islamic banking system employees. *African Journal of Business Management*, Vol. 7(33), pp. 3202-3210.
- Kozarević, E., Nuhanović, S. and Nurikić, M.B. (2013). Comparative analysis of risk management in Conventional and Islamic Banks: the case of Bosnia and Herzegovina. *International Business Research*, Vol. 6, pp. 180-193.
- Mathghamhna, S.N. (2011). Performance and Risk Management: Risk and Reward, **Waters** magazine, 03 October. Retrieved on 25 December 2013 from online. URL: www.waterstechnology.com/waters/feature/2114023/feature-performance-risk-management-risk-reward/.
- Said, A. (2013). Risks and efficiency in the Islamic banking systems: the case of selected Islamic banks in Mena region. *International Journal of Economics and Financial Issues*, Vol. 3, pp. 66-71.
- Saleem, S. and Zain-ul-Abideen (2011). Do effective risk management affect organizational performance. *European Journal of Business and Management*, Vol.3, pp. 258-266.
- Shafiq, A. and Nasr, M. (2010). Risk management practices followed by the commercial banks in Pakistan. *International Review of Business Research Papers*, Vol. 6, pp. 308-324.

Questionnaire

Instructions

Please read the questions carefully and on a scale of 1-5 (where 1 indicates “Strongly Disagree” and 5 indicates “Strongly Agree”) please rank the extent to which you agree with given statements. The questionnaire is designed to know your opinion in general. Please note it is not to test policies of your banks. There is no right or wrong answer. The data is being collected for purely academic purpose.

Part: 1

	Part-I # Risk Management	
1	Monitoring the effectiveness of risk management is an integral part of routine management reporting	
2	There is a common understanding of risk management across the bank	
3	Responsibility of risk management is clearly set out and well understood across the bank	
4	Accountability of risk management is clearly set out and well understood across the bank	
5	The management of risk makes an important contribution to the success of the bank	
6	The management of risk makes an important contribution to the financial stability of the bank in the current financial climate.	
7	Risk management helps to reduce costs and expected losses at the bank	
8	It is important to continuously review and update risk management techniques	
9	Your bank takes significant steps to keep up to date with current risk management trends	
10	Your bank understands the risk management systems used by other banks and their costs and benefits	
11	Your bank finds it difficult to identify and prioritize its main risks	
12	Your bank finds it difficult to manage its main risks	
13	Your bank effectively assesses the likelihood of different risks occurring	
14	Your bank uses numerical methods to assess risks	
15	Your bank is able to accurately evaluate the costs and benefits of taking risks	

16	Your bank is able to accurately evaluate and prioritize different risk treatments even when there are constraints on risk treatment implementation	
17	Your bank's level of risk control is appropriate for the risks that it faces	
18	Your bank's reporting and communication processes support the effective management of risk	
19	Your bank develops action plans for implementing decisions and management plans for identified risks	
20	Your bank's response to risk includes an assessment of the costs and benefits of addressing risks management	
21	Your bank's risk management processes are well documented and provide guidance to staff about the management of risk	
22	Your bank's training policies encourage formal training in risk management	
23	Your bank specifically looks to recruit highly trained and qualified people in risk management	
24	It is dangerous to concentrate bank funds in one sector of the economy	
25	Bank capital is adequate if the ratio of capital to risk weighted assets is 8%	
26	Your bank has excellent overall risk management practices and processes	
	Part-II # Employee Satisfaction	
27	You are satisfied from working environment	
28	You are satisfied from this job	
29	You are satisfied from this organization	
30	Opportunities are provided to you to make full use of your skills and experience, in this organization	
31	You are satisfied from your work performance and productivity in this organization	
32	You are committed (serious and sincere) to this job	
33	You are enthusiastic about your job	
34	You are interested to advance your career in this organization	
	Part-III # Customer Satisfaction	
35	I am really satisfied with the services quality of this bank.	
36	I am really satisfied with the services of this bank.	
37	Bank's priority is customer satisfaction.	
38	Bank has confirmed my expectations.	
39	I am satisfied with the charges of this bank.	
40	Overall satisfaction with organization is high.	
41	I receive value for money by this bank.	
42	Quality of services is better than other banks.	
43	Development of new services is better than other banks	

Part:2

General Information	Response				
Tick the Gender	? Male		? Female		
Tick the Age	? = 20 year	? 21-30 year	? 31-40 year	? 41-45year	= 50 year
Tick the Martial Status	? Single		? Married		
Tick the Education	? Bachelor	? Master	? MPhil		? Ph.D.
Tick the Organizational Status	? Islamic Bank		? Convent ion al Bank		

A COMPARATIVE ANALYSIS OF ECONOMIC EFFICIENCY OF CONVENTIONAL AND ISLAMIC INSURANCE INDUSTRY IN PAKISTAN

Pervez Zamurrad Janjua¹ and Muhammad Akmal²

Abstract

In this study Data Envelopment Analysis (DEA) and Ratios Analysis are applied to find the economic efficiency of conventional and Islamic insurance sector in Pakistan over the period from 2006 to 2011. The average cost efficiency through DEA of Islamic insurance sector was recorded 75 percent, while the average of conventional was 67 percent. The average allocative efficiency of Islamic was 77 percent while 67 percent for conventional insurance which is the main contributor to the cost inefficiency of both type of firms. Thus, through DEA economic efficiency of Islamic insurance sector is better than its conventional counterpart. The results of efficiency through ratios analysis indicate that on average the efficiency of conventional insurance companies is better than that of Islamic insurance companies. Being new entrants in the market the profitability of Islamic insurance companies was not good, therefore the economic efficiency of conventional insurance is better than that of Islamic insurance industry over the period of analysis by ratios analysis.

Keywords: Conventional Insurance, Islamic Insurance (Takāful), Technical Efficiency, Allocative Efficiency, Cost Efficiency, Data Envelopment Analysis (DEA), Ratios Analysis

JEL Classification: G 220

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Introduction

Efficiency and growth of financial institutions is considered as one of the main economic objectives of a country. Efficiency and growth of the financial sector leads to economic development and prosperity of the country. There exists a strong relationship between growth of economic and financial sector (Shahid et al. 2010). The role of financial sector in economic development of any country is very significant. Like other financial institutions, insurance firms are also a part of financial sector. This part plays an important role in the economic development of any country. An effective and productive insurance sector ultimately contributes to the economic growth of a country (SBP, 2005). Economic security is the most important factor after the assertion of human well-being in the present age. One of the effective instruments to achieve security is insurance. It provides indirect security to the lower strata of society and it definitely provides security to the business class for goods lost through natural, accidental or circumstantial mishap.

The efficiency of a firm means the best utilization of available resources. Efficient firms show better performance with least utilization of inputs. There are different types of efficiency concepts. Data Envelopment Analysis (DEA), being a non-parametric approach, measures economic performance in terms of technical and allocative efficiency. Technical efficiency or operating efficiency, for instance, estimates the capability of a firm to maximize its output from given inputs. Whereas, the allocative or price efficiency of a firm explains about the right mix of inputs to produce maximum outputs. The product of technical and allocative efficiency constitutes cost efficiency of a firm. Cost efficiency presents a clear picture about the best utilization of resources in order to maximize output with least cost. Resources are used as inputs and goods and services offered to customers are considered as outputs. In ratio analysis different profitability and leverage ratios are used to assess the performance of insurance firms.

Insurance companies operations are divided into life insurance business and non-life insurance business. In life insurance, companies provide risk coverage to individuals against death and

pay financial support to deceased family. The other function of life insurance companies is to provide retirement policies to individuals and groups that offer retirement benefits to policy holders. Life insurance companies, being institutional investors, collect money from policy holders and invest these small sums of money in a professional way for a longer period of time. Non-life insurance companies provide risk coverage to the individuals against property losses such as machinery, motor car and building.

Pakistan's financial sector comprises of commercial banks and other financial institutions, Islamic banks, investment banks, microfinance banks, *Mudārabah* companies, stock exchanges and insurance companies (Takāful). In Pakistan the regulatory authority of insurance industry is the Security and Exchange Commission of Pakistan (SECP), which allows the dual system, i.e. conventional and Islamic insurance system. Currently, 45 conventional insurance companies and 5 Islamic insurance companies are working in Pakistan (SECP, 2013). The progress of insurance industry in Pakistan has not been very impressive, yet the industry is not too tiny to be ignored. The assets of insurance industry for both conventional and Islamic counterparts were 386 and 501.8 billion rupee for the years 2009 and 2011, respectively (Economic Survey of Pakistan 2009-10 & 2011). Relatively, the insurance industry in Pakistan is small as compared to other emerging economies but it has huge potential for expansion.

According to the Financial Stability Review (2009), the growth rate in real premiums (inflation adjusted) in emerging economies was 3.5% whereas in Pakistan it was -3.9% and the average of the world was -1.1%. the contribution of insurance sector in GDP of Pakistan is also very low as compared to other similar countries, e.g. for the year 2008 in India it was 4.6%, Sri Lanka 1.5% and in Pakistan only 0.7% (SECP official website). According to the financial Stability Review (2011) an international comparison shows that Pakistan is not only consistently lagging behind in terms of density and penetration of the insurance industry but its standing among the regional

countries also remained low in recent years. Irrespective of the fact the annual growth of conventional insurance sector from 2007 to 2009 was 15.22%, whereas for Islamic insurance sector it was 90.37% in the same period. In the year 2011 the growth rates of the assets of conventional and Islamic insurance companies were 11.1% and 36.44 %, respectively (SBP, 2011).

The basic objective of this study is to compare the level of efficiency in Islamic and conventional insurance industry of Pakistan through DEA and Ratios analysis. To the best of our knowledge no study has been done as yet on the comparative efficiency of conventional and Islamic insurance sector of Pakistan. Some studies assessed the efficiency of conventional insurance sector but did not focus on the efficiency of Islamic insurance sector in Pakistan (e.g. Noreen, 2009; Jam-e-Kausar & Afza, 2010 and Afza & Asghar, 2010). Evaluating the efficiency of Islamic insurance independently might not be useful for the policy makers unless a comparison is made with conventional insurance. Thus, the present study will be beneficial for conventional and as well as Islamic insurance industry. It will also be helpful for practitioners and policy makers to address the weak areas of insurance industry in Pakistan.

Literature Review

This chapter is subdivided into two segments. First part deals with the aspect of efficiency of both types of insurance companies by using Data Envelopment Analysis (DEA). Second part discusses with the efficiency of both types of insurance companies in context of Ratio Analysis.

Measurement of Efficiency through Data Envelopment Analysis (DEA)

The term economic efficiency means that resources are used in such a way to generate maximum possible output with a given input. Data Envelopment Analysis is a tool to find the economic

efficiency of an entity. It explains whether entity is using cost effective resources in a best possible mix in order to maximize output.

Measurement of efficiency of insurance sector got a significant consideration in recent years, where the empirical researches observed various matters concerning to the efficiency of insurance business. For example, Hu & Hu, (2009) analyzed the efficiency of life insurance sector in China. The findings indicated that the efficiency scores at average for all the companies were in cyclic manner. Both the scale and technical efficiency touched their heights in 1999 & 2000 and bit by bit dropped down for the rest of the years under consideration until 2004 where efficiency in average enhanced again.

Similarly, Ward et al. (2006) analyzed the efficiency level of 78 UK & German life insurance companies from 1991 to 2002. They used DEA to calculate the efficiency and concluded that German companies were better in cost and technical efficiency but not in allocative efficiency as compared to UK insurance companies.

A number of authors investigated the efficiency of banks over time [e.g. Din et al. (1996); Iimi et al. (2003); Raoof et al. (2010); Akhtar et al. (2011)]. Similarly, some studies focused on the efficiency of insurance companies in Pakistan. Noreen (2009) estimated the efficiency of insurance industry in Pakistan over the years 2000-2007. Result showed that only two firms were found to be fully cost efficient and three were technically most efficient over others out of twelve companies. Jam-e-Kausar & Afza (2010) examined the scale efficiency, technical efficiency and pure technical efficiency of 27 insurance companies of Pakistan. They concluded that non-life insurance sector of Pakistan was 82.4 % technically efficient, 89.9 % scale efficient and 91.4 % pure technical efficient. Furthermore, it was noted that in

efficiency score the insurance companies with larger size achieved superior results than the smaller and medium size insurers.

In another study Afza & Asghar (2010) analyzed the efficiency of overall insurance industry in Pakistan over the years from 2003 to 2007. It was found that on average insurance companies were 92.7 percent technical efficient, 81.12 percent allocative efficient and 75.44 percent cost efficient. The study also found that allocative and cost efficiencies were improved from 2003 to 2005 but significantly decreased in 2006 whereas technical efficiency was increased over the period of study.

Some studies have made a comparison between conventional and Islamic insurance. In a study on Malaysia, Ismail & Bacha (2011) found that there was a significant difference in efficiency of *Takāful* and conventional insurance industry and *Takāful* industry was found less efficient than the conventional insurance industry in technical efficiency. In another study on Malaysian *Takāful* industry over the period from 2007 to 2009, Saad (2012) found that in context of overall efficiency *Takāful* companies were less efficient as compared to their conventional counterparts.

Measurement of Efficiency through Ratios Analysis

Basically, ratio is a relationship between two numbers of the same kind, i.e. proportion of one number to another number. Here in this research the focus is on the financial ratios which are used as a tool to assess the performance of different sectors including financial sector, i.e. banks, insurance firms etc. Financial ratios are considered as an old, simple and practical tool for financial and planning analysis. The tool is used by accountants and financial analysts. Financial ratios are utilized by external and internal stakeholders for their financial

decisions including performance evaluation and investment analysis (Kabajeh & Dahmash, 2012).

There are many studies in which financial ratios are used to assess the performance of banking and insurance firms [e.g. Olson & Zoubi (2008); Soekarno & Azhari (2009); Webb (2010) & Akhter et al. (2011)]. Webb & Kumbirai (2010) conducted a study on South Africa's commercial banking sector over the period 2005- 2009 and concluded that in first two years the performance of banks increased but later on due to international financial crunch the performance decreased. Samad (2004) compared the performance of seven local commercial banks of Gulf region with the performance of banking industry of Bahrain during the period 1994-2001 through ratios. Results depicted that Bahrain's banks were relatively less profitable and less liquid than other banking industry in Gulf region.

Kabajeh & Dahmash (2012) conducted a study on Jordanian's insurance sector from 2002 to 2007 to find the relationship between performances ratios namely return on asset (ROA), return on equity (ROE), return on investment (ROI) and market share price. In this study ROA, ROE and ROI ratios were used as a performance indicator for insurance firms. The study concluded that there was a positive relationship between these ratios and market share price.

Soekarno & Azhari (2009) conducted a study on Indonesia over the period 2005-2009. In this study researchers used profitability and solvency ratios for assessing the performance of Indonesian's insurance sector. Study found significant differences between the performance of top seven and bottom seven joint venture general insurance companies. Top seven showed better performance than the bottom seven companies.

In another study Malik (2011) investigated return on investment, return on equity and return on assets ratios to assess the performance and efficiency of insurance firms in Pakistan over the period 2005-2009. He concluded that profitability is positively related to size and volume of capital of the firm.

Thus, performance and efficiency of conventional and Islamic insurance can also be assessed with the help of financial ratios. Ratios analysis, in addition to DEA, will reveal an alternative view of the economic efficiency of insurance sector in Pakistan.

Methodology

Data Envelopment Analysis (DEA)

In this study we followed the Data Envelopment Analysis (DEA) approach to compute efficiency scores of insurance firms. At first the idea of cost efficiency was discussed by Farell (1957), who decomposed the cost efficiency into allocative and technical efficiency. According to him, it is always an important task for a producer to expand the level of output of business with same resources. Two different approaches are used by researchers for measurement of efficiency. One is parametric approach which can be categorized into Thick Frontier Analysis (TFA), Stochastic Frontier Analysis (SFA) and Distribution Free Analysis (DFA) [Cummins et al. (1993); Hussels & Ward, (2006)]. The other one is non-parametric approach which consists of Data Envelopment Analysis (DEA) and Free Disposal Hull (FDH). DEA approach is used by many researchers [e.g. Hu & Hu (2009); Noreen, (2009); Jam-e-Kausar & Afza (2010)].

DEA is a linear programming technique for construction of efficient frontier. It places the best performing Decision Making Units (DMUs) on efficient frontier. It has a number of advantages over other techniques. It is less data demanding, it doesn't require an assumption of a functional form, it can accommodate multiple inputs and outputs easily, etc. In this study we employed DEA model of Banker, Charnes

and Cooper (BCC) with Variable Return to Scale (VRS) version, because there is variation in the size of firms. Efficiency scores under VRS make different decision making units (DMUs) of similar size. Therefore, inefficiency lies only in management, resource allocation and productivity features (Afza & Asghar, 2010).

Specification of Variables for DEA and Ratios Analysis

To define input and output variables is most critical task to evaluate the efficiency of financial sector (Sealey et al. 1977). Thus the selection of input and output variables in insurance industry is a challenging job. It becomes even more difficult in case of conventional and Islamic insurance due to certain difference in the financial statements of both types of firms. Humphrey & Berger (1992) have described three different approaches for the selection of input and output variables, i.e. intermediation approach, user cost approach and value added approach. Following Cummins et al. (1999), Afza & Asghar (2010), Cummins et al. (2010) and Eling et al. (2010) in this study we adopted value added approach to extract the output variables, because this approach considers all categories of financial publications of firms to have some output characteristics rather than differentiating inputs from outputs. Thus, input variables are business services, debt, equity and labor which are used by many previous researchers [e.g. Cummins et al. (1999); Tone et al. (2005); Noreen (2009); Hu & Hu (2009); Afza & Asghar (2010); Jam-e-Kausa & Afza (2010) & Eling et al. (2010)]. Moreover, following Kazemipour (2011), we also used number of branches as input variable.

Different output variables have been used in different studies for the calculation of efficiency of insurance industry. In our study net premium, investment income and net claims are used as output variables. These variables have been used as output in many previous researches [e.g. Noreen (2009); Afza & Asghar (2010); Jam-e-Kausa & Afza (2010); Ismail et al. (2011); Ismail et al. (2011) & Gattoufil et al. (2012)]. Premium is adopted as output variable, because

it represents the risk pooling and risk bearing function of insurance companies. Investment income has been taken as an output variable due to the fact that a significant portion of net profit is generated from investment revenues (Worthington et al. 2002). Net claim (amount of payments) is used as an output variable by Eling et al. (2010) and Kazemipour (2011). Hence, input-output variables selected in this study are given below:

Table 1:

Input and Output Variables for DEA

Variables	Input/Output	Measure
Business services	Input	Commission paid and all operating expenses excluding depreciation and labor cost
Debt	Input	Total debt
Equity	Input	Total equity
Labor	Input	Number of employees on yearly basis
Number of branches	Input	Number of branches on yearly basis
Net premium	Output	Net premium revenues (Gross premiums – Reinsurance expenses)
Investment income	Output	Investment income
Net claims	Output	Net claims

For checking cost efficiency DEA requires input prices. Therefore, we calculated the price of business services as a ratio of expenses on business services to total assets. Debt consists of total debt. Ten years government bond rate in Pakistan is used as a proxy for price of debt. Price of equity capital is considered as a ratio of equity capital to total assets. Labor means number of employees working in a firm. Price of labor is determined as the total salaries, wages and benefits to employees divided by number of employees. Number of branches means how many branches the specific firm keeps on yearly basis. Price of branches is the ratio of fixed assets to number of branches. Data on fixed assets is extracted from the balance sheet of firms.

Ratios Analysis Variables

In this research we also selected 12 variables as financial ratios. These variables refer to appropriate financial ratios for general and life insurance in context of conventional and Islamic Insurance companies in Pakistan. The ratios are divided into two categories, namely profitability or efficiency ratios and solvency or liquidity ratios. The determination of these ratios are also adapted according to the needs of the industry and in correlation with the culture and business process of insurance industry. The variables of both categories are explained below:

Profitability/Efficiency Ratios

a) Return on Assets (ROA) = Net Profit (Loss) / Total Assets * 100

ROA expresses the capacity of earning profit by a firm on its total assets employed in the business. It is calculated as percentage of net profit after tax to total assets. It is a good measure of checking how efficiently firm is utilizing its assets to earn profit.

b) Return on Equity (ROE) = Net Profit (Loss) / Total Equity * 100

ROE reflects return on shareholders' equity. It is a direct measure of returns to the shareholders. It is calculated as a percentage of the net profit after tax to total shareholders' equity. It is also useful for insurance sector.

c) Return on Investment (ROI) = Net Investment Income / Investments * 100

ROI is the ratio between net investment income to investments. It is a good measure to check the efficiency of a firm in terms of investment.

d) Earning Per Share (EPS) = Net Profit (Loss) / Number of Ordinary Shares

EPS is the ratio between net profit after tax to number of shares outstanding at the end of the year as shown in balance sheet and its relevant notes to accounts. This ratio is also useful for

insurance sector to know how much company earns on per share basis.

e) Net Claims Expense / Net Premium * 100 (NC/NP)

NC/NP ratio expresses the efficiency of insurance company and is calculated as the net claim expenses on net premium. Higher ratio indicates that the claims are more than premiums. It is a useful measure for insurance companies.

f) Underwriting Profit to Profit After Taxes * 100 (UP/PAT)

UP/PAT ratio shows underwriting profit as percentage of net profit. Underwriting profit is net of underwriting income and expenses of the cost of obtaining new policies. This ratio is also useful in terms of measuring efficiency for insurance companies in reducing expenses.

g) Claims Incurred to Net Premium * 100 (CIN/NP)

CIN/NP ratio describes the proportion of claims incurred to net premium. Claims incurred include total underwriting provision, amount due to other insurers, advance premium and accrued expenses. It is also useful for insurance companies.

h) Net Investment Income Ratio = Investment Income to Net Premium * 100 (IIC/NP)

IIC/NP ratio demonstrates the relationship between investment income and net premium. This ratio is used to measure efficiency of an insurance company.

i) Shares Internal Value (SIV) = Total Equity Capital / Number of Ordinary Shares

SIV ratio explains the relationship between equity capital and number of ordinary shares and calculates the internal value of share.

Solvency/Liquidity Ratios

a) Debt Ratio = Total Liabilities / Total Assets

The ratio of liabilities to assets shows the proportion of firm assets, which are financed through debt.

b) Debt to Equity Ratio (D/E)= Total Liabilities / Total Equity

D/E ratio shows the proportion of firm's liabilities to equity capital.

c) Investment to Total Assets (I/TA)= Investments / Total Assets * 100

The ratio between investment and total assets reflects investment activity with reference to total assets of a firm. It indicates the portion of total assets used for investment in various investment avenues. This ratio is also very useful for insurance companies.

The selection of above mentioned ratios is based on literature review in order to assess the financial performance of an insurance industry [e.g. Soekarno & Azhari (2009); SBP (2011); IAP (2011); Malik (2011) & Kabajeh & Dahmash (2012)].

Data

According to SECP (2013), 49 life and non-life insurance companies are working in Pakistan. Out of 49 companies 5 are Islamic insurance companies. Focus of this study is on comparison between conventional and Islamic insurance sector of Pakistan. Thus, we selected 5 conventional and 5 Islamic insurance companies as a sample for this study. In selection of conventional insurance companies we kept in mind the element of representation from both life and non-life and also asset size of the company. We considered those companies whose asset size was similar to the asset size of Islamic insurance companies. Data for DEA analysis and ratio analysis was obtained from the annual audited financial reports of respective companies

over the period from 2006 to 2011. Two life- and 3 non-life insurance companies were selected for analysis from each sector.

Results and Discussion

This section is subdivided into two parts. First part deals with the results of efficiency through DEA. Second part contains the results of ratio analysis.

Results of Data Envelopment Analysis

Overall Efficiency of Insurance Sector

The average results obtained from this analysis are shown in Table 2. Results depict that technical efficiency of the industry over the period of consideration remain fully intact, although there was little variation shown in this period. However, on average insurance sector has shown lower allocative efficiency except during 2008, where it showed 86 percent allocative efficient. Average allocative efficiency decreased from 79 percent in 2006 to 64 percent in 2011. Allocative efficiency dominated the cost efficiency in this period. Cost efficiency has also shown a decreasing trend over the period of analysis. In 2006 industry was 79 percent cost efficient and in 2011 its efficiency decreased to 63 percent.

Table 2: *Overall Insurance Industry Year-wise Performance (DEA)*

Year	Technical Efficiency	Allocative Efficiency	Cost Efficiency
2006	1.000	0.789	0.789
2007	0.968	0.678	0.649
2008	0.982	0.857	0.841
2009	0.994	0.740	0.736
2010	0.979	0.741	0.728
2011	0.981	0.639	0.625
Average	0.984	0.741	0.728

Note: Making data acceptable for DEA, uniform +ve values were added in Net income &

Net Premium column

Results also indicate that on average the insurance sector remain 98 percent technical efficient during the period of analysis. On the other hand cost efficiency of this sector is recorded at 73 percent, which shows that insurance firms could reduce 27 percent of expenditure from the existing level at same level of output.

Comparative Efficiency of Islamic and Conventional Insurance

One of the basic objectives of this research is to compare Islamic and conventional insurance sector of Pakistan in context of efficiency. The results obtained from DEA in Table 3 depict that on average cost efficiency of Islamic insurance sector is higher than conventional insurance sector. Looking at firm-wise results, Islamic insurance companies are more efficient than conventional insurance companies except EFU. Over the period of analysis the cost efficiency of Islamic insurance sector is 75 percent while the conventional insurance is 67 percent cost efficient. Thus, Islamic insurance sector is more cost efficient than conventional insurance sector. One thing important to note is that allocative inefficiency is the main contributor toward the cost inefficiency of both types of firms.

Table 3:

Efficiency of Conventional and Islamic Insurance Companies (DEA)

Firms (C=Conventional, I=Islamic)	Technical Efficiency	Allocative Efficiency	Cost Efficiency
EFU-General Insurance (C)	1.000	1.000	1.000
EFU-Life Insurance (C)	1.000	1.000	1.000
Pak Qatar General Takaful (I)	1.000	0.988	0.988
Pak Kuwait General Takaful (I)	1.000	0.869	0.869
Dawood Family Life Takaful (I)	0.965	0.863	0.835
Pak-Qatar Life Takaful (I)	0.847	0.680	0.557
Askari General Insurance (C)	1.000	0.551	0.551
Saudi-Pak Insurance (C)	1.000	0.488	0.488
Takaful Pakistan (I)	0.995	0.487	0.485
Jublee Life Insurance (C)	1.000	0.316	0.316
Overall Average	0.981	0.724	0.709
Islamic Insurance Mean	0.961	0.777	0.747
Conventional Insurance Mean	1.000	0.671	0.671

In terms of technical efficiency conventional insurance sector is little bit more efficient than Islamic insurance sector but this difference is not much significant. It means that the insurers are more efficient in terms of technical efficiency. In other words at operational level firms are producing approximately at optimum level. The failure is at allocative efficiency level. Allocative efficiency of Islamic insurance sector is 77 percent, while conventional sector is 67 percent allocatively efficient. Although both types of firms are not equating their marginal products to input prices, but Islamic insurance sector is more efficient than conventional insurance sector on allocative efficiency. Thus, it can be concluded that by using DEA on VRS on average Islamic insurance sector is more cost efficient than conventional insurance sector in Pakistan over the period of analysis. One reason for more efficiency of Islamic insurance sector might be *Shari'ah* compatibility of firms. Other reason might be that this sector is new in Pakistan and it is striving hard to remain intact and make

Table 4:

Performance of Conventional and Islamic Insurance Companies (Ratios)

Note: All ratios are in percentage except EPS, SIV in rupee and Debt, D/E in times

Source: Annual audited financial statements and financial statement analysis of State Bank of Pakistan

Firm	ROE	ROA	ROI	EPS	CORPOR	UP/PAT	CCORP	NC/MP	SIV	U/A	Debt Ratio	D/E
Pak. General	9.34	3.07	62.34	0.48	108.03	1072.76	1.81	117.92	10.04	8.63	0.47	0.60
Pak. Q. General	-2.01	-1.58	13.01	-0.17	200.62	23128.1	-152.37	158.94	9.27	41.12	0.35	0.46
Islahat Pak	16.31	-5.9	18.78	-0.98	236.31	3.86	2.04	71.81	5.91	11.57	0.63	2.09
Pak. Q. Life	12.17	6.91	4.28	-0.86	21.97	-05.38	187.41	8.87	7.33	42.34	0.43	1.39
Desmond Life	6.16	4.54	9.36	0.57	46.32	0	25.59	4.09	8.82	51.2	0.15	0.21
Avon General	10.8	2.81	5.79	1.73	128.02	266.92	4.85	61.02	11.9	38.1	0.75	3.03
Sum. Pak	-11.15	-4	9.03	-0.71	242.04	-152.95	6.63	61.62	6.48	16.67	0.59	0.39
EEF General	14.48	6.41	9.28	20.1	184.68	24.25	29.64	71.33	88.85	53.64	0.58	1.8
ERU Life	31.52	2.64	6.14	7.53	13.98	522.82	17.81	21.84	18.99	86.27	0.18	0.92
Islahat Life	16.46	1.41	7.37	2.14	13.28	934.09	4.68	33.9	11.64	64.56	0.92	11.19
Conv. Mean	12.42	1.85	7.52	6.16	116.46	319.05	12.72	49.94	28.57	51.85	0.6	3.51
Islamic Mean	-5.46	-3.18	21.99	-0.42	122.65	-5238.68	12.89	72.29	8.27	30.97	0.4	0.96
Overall Mean	3.48	-0.66	14.76	2.87	119.55	-3469.82	12.81	61.11	18.32	41.41	0.5	2.24

Source: Annual audited financial statements and financial statement analysis of State Bank of Pakistan

progress in Pakistani market. However, both types of firms need to improve their allocative and cost efficiencies.

Results of Ratios Analysis

Efficiency of Islamic and Conventional Insurance Industry

In this section company wise and industry wise comparison is made between Islamic and conventional insurance companies over the period 2006-2011. The results are produced in the following table:

Results depicts that EFU is showing better results on ROE, ROA, ROI, EPS and SIV ratios as compared to all other companies. Pak-Kuwait *Takāful* is showing better results among Islamic insurance companies in same ratios. It might be due to the age and maturity of this Islamic insurance company in Pakistan.

According to the results the efficiency of conventional insurance companies on ROE, ROA, EPS and SIV ratios is better than Islamic insurance companies except on ROI. These ratios mostly depend on net profits of the firms. Net profits of conventional insurance firms were higher than Islamic insurance firms. This might be due to age factor and more investment avenues of the conventional insurance companies.

While comparing claim incurred to net premium (CIN/NP) ratios of conventional and Islamic insurance industries, it can be noticed that the result of former is better than the result of later. The CIN/NP ratio of conventional insurance industry in average is lower than the ratio of Islamic insurance industry. It shows that conventional insurance companies are more efficient to manage their claims, investments and profits.

Results of underwriting profits to profit after taxes (UP/PAT) indicate that the performance of conventional insurance industry

was better than Islamic insurance industry over the period of observation. The average ratio of UP/PAT of Islamic insurance industry is negative while conventional insurance industry results are in positive figure.

Investment to total assets (I/TA) ratio of conventional insurance was higher than that of Islamic insurance. Thus, on this ratio conventional insurance industry also showed better performance as compared to Islamic insurance industry.

Results on investment income to net premium (IIC/NP) indicate no significant difference between conventional and Islamic insurance firms. Conventional insurance firms also showed better performance on NC/NP ratio. The average of this ratio is lower for conventional insurance firms and higher for Islamic insurance firms. As discussed earlier, higher is the ratio, lower is the performance of the firm.

Debt and debt to equity ratios of Islamic insurance industry are better than conventional insurance industry because these ratios are lower for Islamic insurance industry as compared to conventional insurance industry. Islamic law does not permit the interest based debt. This might be one of the reasons that debt ratios of Islamic insurance companies are lower than the ratios of conventional insurance companies.

Thus, through ratios analysis it can be concluded that on average the efficiency of conventional insurance industry is better than that of Islamic insurance industry in Pakistan. It might be so because the Islamic insurance companies have not been showing better results in terms of profitability over the period of analysis as compared to the conventional insurance companies and in our analysis most of the ratios relate to profitability of the insurance industry. This could be due to the expansion in the network and high amount of

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expenses which results in low profitability of Islamic insurance industry.

Conclusions

Results on efficiency through DEA indicate that on average both types of firms remain technically efficient. Results also indicate that cost inefficiency of Islamic insurance companies is lower than the conventional insurance companies. Main reason of cost inefficiency in both types of firms is allocative inefficiency (price inefficiency). It means both type of firms are not successful in equating their marginal product to input price. Results also indicate that cost and allocative efficiencies are showing decreasing trends over the period of analysis. This would be due to increase in the prices of inputs and the expansion in the branch network and workforce over the period.

Results of efficiency through ratio analysis indicate that on average the efficiency of conventional insurance companies is better than that of Islamic insurance companies on ROE, ROA, EPS, CIN/NP, UP/PAT, I/TA, NC/NP and SIV ratios and approximately equal on IIC/NP. However, on ROI, Debt and D/E ratios, Islamic insurance companies showed better performance than their conventional counterparts. Overall results of conventional insurance industry on ratios analysis are better than the results of Islamic insurance industry. Therefore Islamic insurance industry should focus on above mentioned ratios in order to increase its efficiency to compete with its counterpart. It might be due to low profitability of Islamic insurance firms as compared to the conventional insurance companies.

Difference in the results of efficiencies through data envelopment analysis and ratios analysis might be due to different types of variables taken for both types of analyses. The other reasons

might be the factor of profitability. In ratio analysis the focus was on profitability ratios. Profitability figures of Islamic insurance companies are not good as compared to conventional insurance companies. Thus, results for conventional insurance industry are better than the results of Islamic insurance industry on ratio analysis.

In conclusion, both of conventional and Islamic insurance industries need to improve their cost efficiency. Both types of firms are required to make maximum use of inputs and make them more cost effective. Both types of firms are required to decrease their cost by rationalizing their expenditure on branch network and work force in order to maximize their economic efficiency. The Islamic insurance industry, being new entrant in market, needs to strive hard. Islamic insurance industry has to improve its ability to earn profit through cost effectiveness. Although this industry showed comparatively better results on cost efficiency but it still needs efforts to be fully cost efficient. Thus, Islamic insurance industry has to improve its efficiency for its own development and for its contribution towards the development of Pakistan.

Due to data limitation for present study future research may be extended to more companies and additional variables for assessing the efficiency of insurance sector of Pakistan.

Acknowledgment

We are thankful to Dr. Mumtaz Ahmed, Assistant Professor, COMSAT Islamabad, for providing support in the empirical estimation.

References

- Afza, T., & Asghar, M. J.-E.-K. (2010). Efficiency of the Insurance Industry in Pakistan: An Application of Non-parametric Approach. *Interdisciplinary Journal Of contemporary research In Business* VOL 2, NO 8, 84-98.
- Akhtar, M. F., Ali, K., & Sadaqat, S. (2011). Performance Efficiency Of Commercial Banks Of Pakistan: Non Parametric. *Asian Journal of Business and Management Sciences* Vol. 1 No. 2, 150-156.
- Akhter, D. W., Raza, A., Akram, O., & Muhammad. (2011). Efficiency and Performance of Islamic Banking: The Case of Pakistan. *Far East Journal of Psychology and Business* Vol. 2 No 2, 54-70.
- Cummins, J. D., a, M. A., Xie, X., & Zi, H. (2010). Economies of scope in financial services: A DEA efficiency analysis of the US insurance industry. *Journal of Banking & Finance*, 1525-1539.
- Cummins, J. D., Tennyson, S., & c, M. A. (1999). Consolidation and efficiency in the US life insurance industry. *Journal of Banking & Finance* 23, 325-357.
- Cummins, J. D., Turchetti, G., & Weiss, M. A. (1996). Productivity and Technical Efficiency Italian Insurance Industry. Working paper, 44.
- Cummins, J., & Weiss, M. A. (1993). Measuring cost efficiency in the property-liability insurance industry. *Journal of Banking & Finance*, 463-481.
- Din, M.-U., Ghani, E., & Quresh I, S. K. (1996). Scale and Scope Economies in Banking: A Case Study of the Agricultural Development Bank of Pakistan. *The Pakistan Development Review*, 203-213.
- Eling, M., & Luhn, M. (2010). Efficiency in the international insurance industry: A cross-country comparison. *Journal of Banking & Finance*, 1497-1509.
- Farrell, M. (1957). *Journal of the Royal Statistical Societies Series . Journal of Banking and Finance*, 253-290.

- Gattoufi, K. A.-A., & Al-Muharrami, S. (2012). Analyzing the technical efficiency of insurance companies in GCC. *The Journal of Risk Finance*, 362-380.
- Hu, X., Zhang, C., Hu, J.-L., & Zhu, N. (2009). Analyzing efficiency in the Chinese life insurance industry. *Emerald Article*, 905-920.
- Humphrey, A. N., & B., D. (1992). Measurement and Efficiency Issues in Commercial Banking. In *Output Measurement in the Service Sectors* (pp. 245-300). University of Chicago Press.
- Hussels, S., & Ward, D. R. (2006). The Impact of Deregulation on the German and UK Life Insurance Markets: An Analysis of Efficiency and Productivity between 1991-2002. *Cranfield Research Paper Series*.
- Iimi, & Atsushi. (2003). Efficiency in the Pakistani Banking Industry: Efficiency in the Pakistani Banking Industry: Empirical Evidence after the Structural Reform in the Late 1990s. *The Pakistan Development Review*, 41-57.
- Insurance Association of Pakistan(IAP), *Insurance Year Book* (2011).
- Ismail, N., Alhabshi, P. D., & Bacha, P. O. (2011). Organizational Form And Efficiency: The Coexistence Of Family Takāful And Life Insurance In Malaysia. *Journal Of Global Business And Economics* July 2011. Volume 3. Number 1, 122-137.
- Jam-e-Kausar, M., & Afza, T. (2010). Firm Size And Efficiency In The Non-Life Insurers Of Pakistan. *Journal of Quality and Technology Management*, 165-183.
- Kabajeh, D. M., & Dahmash, D. S. (2012). The Relationship between the ROA, ROE and ROI Ratios with Jordanian Insurance Public Companies Market Share Prices. *International Journal of Humanities and Social Science*, 115-120.
- Kazemipour, S.A., & Saeidy, P. (2011). Compare the performance of Private and Public Insurance Companies in Using Data Envelopment Analysis. *World Applied Science Journal*, Pp 998-998
- Kumbirai, M., & Webb, R. (2010). A financial Ratio Analysis of Commercial Bank Performance in South Africa. *African Review of Economics and Finance*, Vol. 2, No. 1, 30-53.

- Malik, H. (2011). Determinants Of Insurance Companies Profitability: An Analysis Of Insurance Sector Of Pakistan. *Academic Research International* Volume 1, Issue 3,, 315-321.
- Noreen, U. (2009). Cost Efficiency and Total Factor Productivity: A Empirical Analysis of Insurance Sector MS Thesis. IIU Islamabad.
- Olson, D., & Zoubi, T. A. (2008). Using accounting ratios to distinguish between Islamic and conventional banks in the GCC region. *The International Journal of Accounting*, 45-65.
- Raoof, Rehman, R. u., & Awais. (2010). Efficiencies of Pakistani Banking Sector: A Comparative Study. *International Research Journal of Finance and Economics*, 110-129.
- Saad, N. M. (2012). An Analysis On The Efficiency Of Takāful And Insurance Companies In Malaysia: A Non-Parametric Approach. *Society of Interdisciplinary Business Research*, 33-56.
- Samad, A. (2004). Bahrain Commercial Bank's Performance during 1994-2001. *Credit and Financial Management Review* 10(1) pp 33-40.
- State Bank of Pakistan (2005), Financial Sector Assessment.
- State Bank of Pakistan (2006, 2009, 2010 & 2011), Financial Stability Review.
- State Bank of Pakistan (2011), Financial Statement Analysis of Financial Sector (2007-2011).
- Sealey, C., & Lindely, J. R. (1977). Inputs, Outputs, and a Theory of Production and Cost at Depository Financial Institutions. *Journal of Finance*, 1251-1266.
- SECP. (2011). Retrieved 12 23, 2011, from http://www.secp.gov.pk: http://www.secp.gov.pk/ID/id_registeredentities.asp
- Shahid, H., Rehman, R. u., & Raoof, G. S. (2010). Efficiencies Comparison of Islamic and Conventional Banks of Pakistan. *International Research Journal of Finance and Economics*, 24-42.
- Soekarno, S., & Azhari, D. A. (2009). Analysis of Financial Ratio to Distinguish Indonesia Joint Venture General Insurance

- Company Performance using Discriminant Analysis. *The Asian Journal of Technology Management* Vol. 2 No. 2, 110-122.
- Tone, K., & Sahoo, B. K. (2005). Evaluating cost efficiency and returns to scale in the Life Insurance Corporation of India using data envelopment analysis. *Socio-Economic Planning Sciences* 39, 261-285.
- Ward, Hussels, S., & R., D. (2006). The Impact of Deregulation on the German and UK Life Insurance Markets: An Analysis of Efficiency and Productivity Between 1991 - 2002. Working paper, 26.
- Webb, M. K. (2010). A financial Ratio Analysis of Commercial Bank Performance in South Africa. *African Review of Economics and Finance*, Vol. 2, No. 1, 30-53.
- White, GERAL I. Sondhi, Ashwinpaul C. Fried, Dov. (2007). *The Analysis and Use of Financial Statement*. 5th ed.
- Worthington, A. ..., & Hurley, E. V. (2002). Cost Efficiency in Australian General Insurers: A. *The British Accounting Review* 34 (2), 89-108.

IMPACT OF MERGERS ON PERFORMANCE OF BANKING SECTOR OF PAKISTAN

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Abstract

This study empirically examines the impact of mergers on performance of the banks in Pakistan. The link between liquidity risk, leverage, capital adequacy, size and performance of merging banks, listed on Karachi Stock Exchange (KSE), which executed at least one merger during 2006-2010 has been discovered using Dougherty model. Moreover, paired t-test has been employed to compare three year pre and post-merger performance of each bank. StataSE Version12, SPSS Version 16 and Microsoft Office Excel 2007 have been used to analyze the data. Regression results show an insignificant impact of mergers on performance of banks and t-test proves that performance of each bidder bank has not improved significantly after mergers.

Keywords: Mergers, Performance.

JEL Classification: G210

1-Dept, Institute of Business & Management (IB&M), University of Engineering and Technology (UET), Lahore.

2-Dept, Institute of Business & Management (IB&M), University of Engineering and Technology (UET), Lahore.

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Historical Background

The banking sector has vital importance in Pakistan in terms of employment, import and export facilities, source of finance, payment settlement and financial management (Kemal, 2011; Arshad, 2012). Across Pakistan, unprecedented level of mergers is one of the most remarkable reforms affecting the banking sector over the last decade because Basel Accord has accelerated the financial consolidation of banks (Arshad, 2012). Basel accord was implemented to ensure capital obligations and to cope up with unexpected unabsorbed losses. According to this accord two capital standards have been imposed on Pakistani banks; the first one is known as minimum capital requirement (MCR) and the second one known as capital adequacy ratio (CAR). Every bank in Pakistan should fulfill both the limits for their survival otherwise their license could be cancelled. Moreover, SPB ordered each and every weak bank to merge with financially strong bank to fulfill capital requirements. The limitation of MCR was six billion in 2009, ten billion in 2010 and fifteen billion in 2011.

The benefit of consolidation is to improve the performance of weak banks in three ways; at first by improving shareholders' value and efficiency, secondly by enhancing personal supremacy, thirdly by improving financial condition of weak banks. Moreover, mergers can reap the benefits of economies, gain synergy⁴ and trim down costs (Prompitak, 2009; Sinha & Kaushik, 2010).

Eleven merging events have been taken place during 2006-2010. Karachi Stock Exchange reported that 18% bidder banks had repeatedly merged during this time period, where 40% mergers took place only in 2006. Large numbers of empirical studies have been devoted towards the issue of merger and performance across the globe (Altunbas & Marques, 2007; Badreldin & Kalhoefer, 2009) while few researchers have worked in context of Pakistan (Arshad, 12; Kemal,

4-Post-merger performance of companies greater than individual pre-merged companies

2011; Naveed, et al., 2011). This research has been designed to inspect the relationship of mergers and performance and the extent of variation in post-merger performance of banks. This research is helpful for policy makers to rationalize their decision and for bidder banks to review their performance level after mergers.

Literature Review

Many studies have been conducted across the globe to investigate various aspects of mergers by using different analysis models e.g., Data Analysis Envelopment Stochastic Frontier Analysis, Wilcoxon Signed-Rank Test and ratio analysis (Sufian & Fadzlan, 2004; Sinha & Kaushik, 2010, Koetter M., 2005 and Arshad, 12). The results of these studies vary dramatically.

Formerly, researchers focused on the stock market but today the trend is shifting from event study to organizational approach. Although research of corporate performance was difficult as compare to event study due to collection of data and construction of valid variables, yet many studies have used this approach to find out accurate results (Altunbas & Marques, 2007; Badreldin & Kalhoefer, 2009; Kemal, 2011 and Arshad, 2012).

Pawaskar (2001), empirically proved worse post-merger performance of Indian firms. The research was carried out for the time period of 1992-1995 using data retrieved from Capitoline-Ole database. Regression results indicated better performance of non-merging firms than merging firms over the defined time period. Moreover, the characteristics of all thirty six mergers showed that liquidity, leverage, profitability growth and tax savings did not show any remarkable significant change after mergers.

Sufian & Fadzlan (2004) investigated performance of ten commercial banks for the time period of 1998 to 2003 by using non-parameter frontier approach of data envelopment analysis (DEA). Three inputs i.e., labor, capital and deposits were used where as total

loan and investment and dealing securities were used as outputs. It was revealed that overall post-merger efficiency achieved by the Malaysian banks was about 96%.

Similarly, Koetter M., (2005) used the stochastic frontier analysis (SFA) to examine the German wave of mergers. Results showed that corporative banks performed better than savings banks. Pazarskis, Vogiatzogloy, Christodoulou, & Drogalas (2006), inspected opposite result during research on Greece's wave of mergers. Post-merger performance of fifty Greece companies listed on Athens stock exchange (ASE) during the time period of 1998 to 2002 was compared. Three pre and post-merger years were incorporated and the year of merging event was omitted to validate the results. Pyramid Approach and questionnaire approach witnessed a decreased in performance after mergers.

Furthermore, it was noted that European mergers mostly enjoy positive results due to their strong economy. According to Altunbas & Marques (2007), performance increased by approximately 2.5% and 1.2 % in cross border mergers and domestic mergers respectively. Results indicated that in case of domestic mergers, different capital structure and smaller target size enhanced domestic merging firm's performance and vice versa in case of cross border mergers. Indian financial Institutes also induced positive post-merger performance (Sinha & Kaushik, 2010). They examined seventeen companies during the time period 2000 to 2008 by using non- parametric approach of Wilcoxon Signed-Rank Test. Four parameters, i.e. profitability, liquidity, solvency and efficiency were used to inspect performance and proved significant relationship of performance with mergers and acquisitions. In contrast, Egyptian wave of mergers was not as profitable as in U.S., U.K and India because Egypt is new in the field of banking reforms (Badreldin & Kalhoefer, 2009). Further, ROE basic scheme witnessed that the impact of cross boarder as well as domestic mergers and acquisitions on Egyptian banking sector for year 2004-2007 was unclear.

In addition, Abdur-Rehman & Ayorinde (2011) examined the relationship of mergers and performance of Nigerian banks. They denoted merger by strategic decisions, i.e., liquidity risk, credit risk, capital structure, asset profile and operating efficiency. Return on equity, return on assets and net profit margin were used as performance indicators. Findings of multiple regression analysis revealed positive relationship of performance with mergers and it was suggested that mergers should be implemented to increase performance of banks.

The studies on impact of mergers on performance of banks in Pakistan have mainly focused on one or two banks. As Ullah, et al., (2010) investigated two merging events of Faysal investment bank limited and Atlas investment bank by comparing four years pre and post-merger performance. Three factors; profitability, capital adequacy and solvency were used to determine financial performance. T-test indicates that there was insignificant increase in profit while capital adequacy and solvency had improved significantly. After mergers both banks were in better position due to improvement in technology, administration, and elevated capacity of the banks to pay back their long term liability.

Recently, Kemal (2011) examined performance of one bidder bank by using twenty ratios for the time period of 2006-2009. He investigated the post-merger performance of Royal Bank of Scotland after it merged with ABN AMRO. Profitability, liquidity, leverage, asset management and cash flow were used as determinants of performance. He concluded that failure occurred after mergers. No test was used to verify these results. Similarly, no model was used to verify the post-merger performance during research of SCB (Arshad, 2012). She analyzed one bank's post-merger performance during research of SCB after it merged with Union bank. Profitability, liquidity and capital ratios were used to determine performance. Pre-merger period was 2004-2006 and post-merger period was 2007-2009. The results of eleven ratios declared a decrease in after-merger performance.

Furthermore it has been noted by many researchers (Altunbas & Marques, 2007; Kemal, 2011; Arshad, 12 and Ullah, et al., 2010) supported the fact that mergers have a significant impact on performance of banks and many factors such as liquidity, leverage, capital adequacy and size influence this performance. In addition most of studies used accounting based comparative research method instead of event studies⁵.

Methodology of The Study

Data Source

Secondary annual panel data of six merging banks⁶ for the time period of 2006-2010 has been analyzed by using financial ratios as an analytical instrument (Kemal, 2011; Arshad, 12; Sinha & Kaushik, 2010 and Altunbas & Marques, 2007). Data of was collected from KSE website, Lahore Stock Exchange, and annual reports of concerned banks.

Data Analysis Model

The performance of bidder banks has been investigated through two methods. In first phase, impact of mergers has been measured on performance by using Dougherty (2011) model. In second phase, twelve ratios consisting of 432 observations have been examined for comparative research through Paired T-Test with the mean of $\hat{i}_D = \hat{i}_1 - \hat{i}_2$ and unknown standard deviation $\hat{\sigma}_D$ as recommended by Pazarskis, et al., (2006), and Ullah, et al., (2010) to find the difference between two observations⁷.

5. This fact is supported by Kemal, 2011; Arshad, 12; Sinha & Kaushik, 2010; Ullah, et al., 2010; Pazarskis, et al., 2006.

6. Allied Bank Limited (ABL), Atlas Bank, Standard Chartered Bank Limited (SCB), NIB Bank, KASAB Bank, Askari Bank Limited (AKLB)

7. Year of mergers is omitted in this research because longer time span could distort the results, as it usually includes recognition of the number of atypical events, which distort a comparison (Badreldin & Kalhoefer, 2009; Altunbas & Marques, 2007).

Variables and Their Explanation

Profitability

Two aspects of profitability have been studied in this research; first, it has been used as an absolute proxy for performance to measure impact of mergers on performance in phase 1 as used by (Altunbas & Marques, 2007; Abul-Rahman & Ayorinde, 2013), secondly, it has been used as a determinant of performance along with other variables for comparison of annual rate of profitability before and after merging event in phase 2 as used by (Kemal, 2011). Here, return on equity (ROE), return on assets (ROA) and return on investment (ROI) have been used as proxies of profitability. This research finds a connection of profitability with liquidity, leverage, capital adequacy, and size that influence the profitability of bidder banks. This research also compares the performance of individual banks for the time period of 2003-2010. Hence, first hypothesis (H_1) is developed as follows:

H_1 = Mergers have significant impact on post-merger performance of banks in Pakistan.

Liquidity

It refers to ability of bidder banks to meet current liabilities through current assets. According to (Pazarskis, Vogiatzoglou, Christodoulou, & Drogas, 2006) liquidity increased after merger. That's why, after merger merging firms are in better position to meet the current obligations through current assets. Moreover, their research proved that Greek firms have better ability to buy services, and goods through short term funding after merger.

In this research proxies used for liquidity are advances to deposit ratio (ADR), advances to assets (ATA) and debt to assets (DAR) (Arshad, 2012). In case of Pakistan, it is expected that status

of bidders improves in terms of liquidity from the period of 2006 to 2010. Therefore, second hypothesis (H_2) is formulated as:

H_2 = Increase in liquidity has a significant positive impact on post-merger performance of banks in Pakistan

Leverage

Leverage shows execution of long-term obligations of bidder banks. It tells either these merged banks have any capacity to meet their outside duties or responsibilities or not. Moreover, (Ghosh & Jain, 2000) examined the theory of financial leverage associated with corporate merger on 239 mergers between the time periods of 1978 to 1987. They said leverage after mergers increase due to two reasons; firstly by unused debts or secondly by increasing debt capacity. This fact is also supported by (Lewellen, 1971). Furthermore, banks which had high leverage had more risk. Negative and significant relationship of leverage and performance was found by (Rehman & Nasr, 2007); (Saliha & Abdessatar, December 2011); (Abdioglu & Buyuksalvarci, 2011). Proxies used for leverage are debt to equity (DTR), debt ratio (DR) and deposit to equity (DEPE). This research intends to find significance of financial leverage (debts) in improving performance of banks, as well as it compares the leverage position for merging banks for the time period 2006- 2010. Thus, third hypothesis (H_3) is proposed as follow:

H_3 = Leverage has a significant negative impact on post-merger performance of banks in Pakistan.

Capital Adequacy

Capital adequacy act as defense line in case of threat of technical insolvency. Either bank has capital financing by the equity shareholders (owners) or by debt financing by creditor, in both cases, high capital adequacy ratio means lower risk and lower advances. Moreover, decrease in profitability took place due to higher capital asset ratio (Ahmad & Nafees) ; (Abdioglu & Buyuksalvarci, 2011). It

indicates the extent to which an institution's capital base covers the risk inherent in its operations. Capital adequacy works as a trigger for mergers in Pakistan (Kemal, 2011; Arshad, 12; Ullah, et al., 2010). Although both limits relate with capital but there is very fine difference between them. MCR means nominal amount which bank have to hold for its survival while 10% CAR is required on ongoing basis as prescribed by SBP. MCR could not be used to reduce as unabsorbed losses because that amount was not for risk management but for viability of business. Both limits are necessary for survival of banks in Pakistan. In absence of any one of them their license could be cancelled. According to SBP, many small banks fulfill MCR and increase their capital adequacy ratio by doing merger activity. The research considers ratio of shareholder's equity to customer deposits (SAR) and shareholder's equity to total assets (SEPE) as proxies for capital adequacy. Capital adequacy has negative impact on performance of banks Abdioglu and Buyuksalvarci (2011). So that, the hypothesis (H_4) is:

H_4 = Capital Adequacy has a significant negative impact on post-merger performance of banks in Pakistan.

Size

Here size of bidder banks instead of relative size is used to find accurate consequences because according to Powel (2005) relative size gives ambiguous results in case of mergers. Moreover, improvement in performance of larger banks took place after merger while vice verse results had been found in small banks (Cornett, McNuttand, & Tehranian, 2006). Large size of the firm is indication of increase in profitability. (Altunbas & Marques, 2007). Logarithm of size used as proxy for size. Therefore, fifth hypothesis (H_5) is formulated as:

H_5 = Size has a significant positive impact on post-merger performance of banks in Pakistan.

In addition, comparative performance of each bank is also examined because comparison is the ever best source to measure the performance of merging banks (Kemal, 2011; Arshad, 12 ; Sinha & Kaushik, 2010 ; Ullah, et al., 2010 ; Pazarskis, et al., 2006). For this reason a sixth hypothesis (H_6) is derived;

H_6 = Improvement in the financial ratios occur after mergers.

Model Selection for Post Merger Performance

Dougherty (2011) method has been applied to validate and scrutinize suitable model for performance measurement. It states that when random sampling is used, both random effect regression and fixed effect regression model should be applied. Secondly, Housman specification test has been applied to check the applicability of one of these two models. Based upon the results of Dougherty (2011) model, fixed effect regression model is favorable to measure the impact of mergers on performance as given in equation I and II.

Regression models

$$ROE = \beta_0 + \beta_1 (liq_{it}) + \beta_2 (lev_{it}) - \beta_3 (SAR_{it}) + \beta_4 (siz_{it}) + \mu_{it} \quad (I)$$

$$ROA = \beta_0 + \beta_1 (liq_{it}) + \beta_2 (lev_{it}) - \beta_3 (SAR_{it}) + \beta_4 (siz_{it}) + \mu_{it} \quad (II)$$

Where; ROE= return on equity of bank i at time t, ROA= return on assets of bank i at time t, Liq= liquidity of bank i at time t, Lev= leverage of bank i at time t, SAR= capital adequacy of bank i at time t, Siz= size of bank i at time t, μ_{it} =error term of bank i at time t and between banks error.

Findings and Discussion

In descriptive statistics (Table 1), ROE is -.3% with standard deviation of 72.7893%. Minimum value indicates a bidder bank loss 172.7% after merger. Mean value of ROA is -0.7% with the standard deviation of 3.8783%. Bidder banks earned 6.1% after merger. In case of liquidity, average liquidity is 105%. Higher post-merger liquidity is an indication

of soundness of the banking sector in terms of payment of short term liabilities. Furthermore, statistical descriptive showed that leverage is 509% before merger and becomes 1296% after merger. This drastic increase in leverage after merger is not a sign of good performance because bankruptcy could be occurred due to low level of shareholders funds as compared to debt financing (Saliha & Abdessatar, December 2011). Capital adequacy is 9% before mergers and becomes approximately double after merger, i.e., 16% it is equal to decrease in performance because mostly high rate of capital adequacy becomes burden instead of blessing due to poor management (Abdioglu & Buyuksalvarci, 2011). Bidder banks slightly decreased their performance in post merger time period by enhancing their size only by 1%. Mostly small firms enjoy better results and vice versa performance in case of large size due to diseconomies of scale Bohren & Schindele (2010).

Table 1:

Post-merger Descriptive Statistics

Variables	Minimum	Maximum	Mean	Std. Deviation
ROE	-1.727	1.912	-.00300	.727893
ROA	-.088	.061	-.00735	.038783
Liquidity	.460	5.120	1.05176	1.129304
Leverage	3.895	32.813	12.9621	8.068381
SAR	.025	1.003	.16482	.233953
Size	7.405	8.622	8.15424	.449685

Correlation

Pearson correlation matrix shows there is no multi-collinearity effect. ROE and ROA are strongly correlated with one and other at 90% with a significant level of 5%. Because of this reason, two dependent variables ROE and ROA have been used to estimate performance.

Table 2:*Post-merger Correlation*

	ROE	ROA	Liq	Lev	SAR	SIZ
ROE	1					
ROA	.899**	1				
Liq	-.375	-.504*	1			
Lev	.364	.232	-.184	1		
SAR	-.043	.067	-.047	-.467	1	
SIZ	.172	.444	-.333	.272	-.378	1

**Correlation is significant at the 0.05 level (2-tailed).

Impact of Mergers On Post-Merger Performance

In case of post-merger performance, fixed effect regression model is suitable as χ^2 of Hausman specification test is significant at 10%.

Table 3:*Fixed-effects model*

Variables	Coefficients	Standard Error	T	P-value
Liquidity	1.427838	1.367192	1.04	0.331
Leverage	-.0624967	.0621562	-1.01	0.348
SAR	-3.00605	1.634629	-1.84	0.109
Size	-3.591509	2.447521	-1.47	0.186
_cons	29.56803	20.08165	1.47	0.184

R-square within = 0.4456, between = 0.4607 and overall = 0.0536,
F = 1.41 Prob. > F = 0.3248

Table 4:

Random-effects model

Variables	Coefficients	Standard Error	Z	P-value
Liquidity	.5786016	1.185791	0.49	0.626
Leverage	.0245087	.0225853	1.09	0.278
SAR	.1485933	.7861494	0.19	0.850
Size	.3138364	.3868941	0.81	0.417
_cons	-3.195716	3.589175	-0.89	0.373

R-square within = 0.0132, between = 0.8740 and overall = 0.1303, Wald Chi² = 1.80 Prob. > Chi² = 0.7729

Table 5:

Hausman Specification Test

Variables	Fixed	Random	Difference
Liquidity	1.427838	.5786016	.8492366
Leverage	-.0624967	.0245087	-.0870055
SAR	-3.00605	.1485933	-3.154643
Size	-3.591509	.3138364	-3.905345

Chi² = 7.83, Prob. > Chi² = 0.0982*

Table 3 and 4 showed fixed effect regression and random effect regression in case of ROE as performance measure. R-Square of fix effect model is greater than random effect model while in between and overall R-Square is greater in fix effect model. Then Hausman test is applied (see table 5) to check the applicability of fixed effect model or random effect model. It shows fix effect model is suitable as Chi² is significant at 10%.

Table 6:

Fixed-effects model

Variables	Coefficients	Standard Error	T	P-value
Liquidity	.0174223	.0654399	0.27	0.798
Leverage	-.0003659	.0029751	-0.12	0.906
SAR	-.1365507	.0782406	-1.75	0.124
Size	-.2383074	.1171493	-2.03	0.081 *
_cons	1.946098	.9611976	2.02	0.083

R-square within = 0.4337, between = 0.7314 and overall = 0.3047, F = 1.34 Prob. > F = 0.3442

Table 7:*Random-effects model*

Variables	Coefficients	Standard Error	Z	P-value
Liquidity	.0068933	.0605712	0.11	0.909
Leverage	.0012685	.0012064	1.05	0.293
SAR	.0509711	.0409361	1.25	0.213
Size	.0459461	.0209574	2.19	0.028
				**
_cons	-.4064558	.192323	-2.11	0.035

R-square within = 0.1328 between = 0.9020 and overall = .3736 Wald Chi² = 5.82, Prob. > Chi² = 0.2129

Table 8:*Hausman Specification test*

Variables	Fixed	Random	Difference
LIQ	.0174223	.0068933	.010529
Lev	-.0003659	.0012685	-.0016344
SAR	-.1365507	.0509711	-.1875218
Siz	-.2383074	.0459461	-.2842534

Chi² = 8.64, Prob.> Chi² = 0.0709

In case of ROA, Fix and random effect model is shown in above tables. R-Square of fix effect model is greater than random effect model while in between and overall R-Square is greater in fix effect model. Then Hausman specification test is applied to check the applicability of fixed effect model or random effect model. It shows fix effect model is suitable as chi² is significant with value of 8.64 at 10%.

Final discussion of results of Phase 1:

According to table 9, liquidity has insignificantly positive relationship with profitability (Haron, 2004; Hayajneh and Yassine, 2011 and Pazarskis, et al., 2006) while leverage has a negative relationship with profitability (Saliha & Abdessatar, 2011 and Hayajneh & Yassine, 2011). Capital adequacy ratio also shows negative impact on post-merger performance of banking sector of Pakistan (Abdioglu & Buyuksalvarci, 2011). Size has also negative and insignificant

relationship with performance. It is same as found by Samilogu & Demirgunes, (2008). Moreover, negative relationship of size is contradicted from hypothesis H₄.

Results presented in table 9 prove insignificant impact of mergers on performance of banking sector of Pakistan. These results are inconsistent with research of Badreldin and Kalhoefer (2009).

Table 9:

Final Results & Discussion Phase 1

Variables	Post-Merger Performance	
	Coefficients Model1	Coefficients Model2
Liquidity	1.42784	.0174223
Leverage	-.0624967	-.0003659
Capital Adequacy	-3.00605	-.1365507
Size	-3.591509	-.2383074*
_cons	29.56803	1.946098
R-Square: within	0.4456	0.4337
Between	0.4607	0.7314
Overall	0.0536	0.3047
F Statistics	1.41	1.34

Results Phase 2:

It has been noted that there is no improvement in financial characteristics of any bidder bank where all mean values of ratios depicted no improvement and T-Test proves insignificance (see Table 10). Therefore, hypothesis (H₀) i.e. improvement in financial ratios occurs after mergers is rejected.

Only profitability of KASAB increases significantly in terms of ROI (M=.607, S.D=. 1167) condition; t (2)=-4.07, p=.042. While SCB indicates a significant decrease in its ROE after merger (M= -.138, S.D =. 2197) condition; t (2) = 3.21, p= .085. On the whole, post-merger profitability decreases insignificantly (Kemal, 2011; Arshad, 12).

Four out of six banks show an insignificant increase in ADR. Post-merger ATA significantly moves up only in case of the Atlas bank (M = -.9611, S.D =. 2031) condition; t (2) = -3.895, P = .06. Significant increase in DAR took place only in case of AKBL after

merger ($M = -.104$, $S.D = .005$) condition; $t(2) = -17$, $P = .037$. The liquidity position of bidder banks of Pakistan improves after mergers (Kemal, 2011; Pazarskis, et al., 2006; Lewellen, 1971; Arshad, 12).

Here all banks increase their post-merger leverage. Significant increase in post merger DTR takes place in case of Atlas bank ($M = 2.011$, $S.D = 3.795$) condition; $t(2) = -3.385$, $P = .077$. Significant increase of DTR also occurred in case of KASAB bank ($M = -40.083$, $S.D = 8.932$) condition; $t(2) = -3.47$, $P = .074$. DR shows a significant decrease in performance in case of Atlas bank ($M = -1.02$, $S.D = .063$) condition; $t(2) = -23.64$, $P = .002$. DEPE improves significantly for SCB during a post-merger period of time ($M = 4.575$, $S.D = 1.002$) condition; $t(2) = 12.243$, $P = .007$. KASAB bank showed an increase in DEPE ($M = -26.66$, $S.D = 5.1003$) condition; $t(2) = -4.75$, $P = .042$. These results supported by Ghosh & Jain (2000).

Table 10: T Test

Banks	Profitability	T	Liquidity	T	Leverage	T	Capital Adequacy	T	SIZ
ABL	ROE	-1.631	ADR	-2.881	DTR	-1.016	SAR	-.983	-13.5***
	ROA	-1.958	ATA	-2.291	DR	.981	SEPE	-1.048	
	ROI	-2.029	DAR	1.680	DEPE	-.982			
Atlas	ROE	1.684	ADR	-1.382	DTR	-3.39**	SAR	.103	-1.333
	ROA	.078	ATA	-3.89*	DR	-1.727	SEPE	.785	
	ROI	.833	DAR	-1.265	DEPE	-1.607			
SCB	ROE	3.212*	ADR	-1.119	DTR	-6.207	SAR	-8.2**	-33.5***
	ROA	2.263	ATA	2.021	DR	-1.762			
	ROI	2.092	DAR	1.868	DEPE	12.2***	SEPE	-1.628	
NIB	ROE	1.023	ADR	1.160	DTR	-2.624	SAR	-1.316	-1.117
	ROA	1.005	ATA	-.709	DR	-.100			
	ROI	1.267	DAR	-.854	DEPE	-1.049	SEPE	-1.437	
KASAB	ROE	-1.222	ADR	2.094	DTR	-3.470*	SAR	.313	-2.563
	ROA	-5.556	ATA	1.580	DR	.759			
	ROI	-4.70**	DAR	.807	DEPE	-4.75**	SEPE	-.356	
ASKARI	ROE	-.362	ADR	2.130	DTR	-2.664	SAR	13.0**	-12.143*
	ROA	.333	ATA	1.571	DR	-2.750	SEPE	57.0**	
	ROI	1.051	DAR	-17.0**	DEPE	-3.568			
Banks	Profitability	T	Liquidity	T	Leverage	T	Capital Adequacy	T	SIZ
ABL	ROE	-1.631	ADR	-2.881	DTR	-1.016	SAR	-.983	-13.5***
	ROA	-1.958	ATA	-2.291	DR	.981	SEPE	-1.048	
	ROI	-2.029	DAR	1.680	DEPE	-.982			
Atlas	ROE	1.684	ADR	-1.382	DTR	-3.39**	SAR	.103	-1.333
	ROA	.078	ATA	-3.89*	DR	-1.727	SEPE	.785	
	ROI	.833	DAR	-1.265	DEPE	-1.607			
SCB	ROE	3.212*	ADR	-1.119	DTR	-6.207	SAR	-8.2**	-33.5***
	ROA	2.263	ATA	2.021	DR	-1.762			
	ROI	2.092	DAR	1.868	DEPE	12.2***	SEPE	-1.628	
NIB	ROE	1.023	ADR	1.160	DTR	-2.624	SAR	-1.316	-1.117
	ROA	1.005	ATA	-.709	DR	-.100			
	ROI	1.267	DAR	-.854	DEPE	-1.049	SEPE	-1.437	
KASAB	ROE	-1.222	ADR	2.094	DTR	-3.470*	SAR	.313	-2.563
	ROA	-5.556	ATA	1.580	DR	.759			
	ROI	-4.70**	DAR	.807	DEPE	-4.75**	SEPE	-.356	
ASKARI	ROE	-.362	ADR	2.130	DTR	-2.664	SAR	13.0**	-12.143*
	ROA	.333	ATA	1.571	DR	-2.750	SEPE	57.0**	
	ROI	1.051	DAR	-17.0**	DEPE	-3.568			

Significant decrease in capital adequacy takes place in both ratios of AKBL (see Table 24). SAR decreases after merger ($M=.00044$, $S.D=.0022$), condition; $t(2) = 13$, $P=.049$. SEPE also decreased after merger ($M=.022$, $S.D=.0007$) condition; $t(2) = 57$, $P=.011$. SAR significantly takes place in case of SCB ($M=.125$, $S.D=.017$) condition; $t(2) = -8.2$, $P=.015$. All other ratios show insignificant results. Four banks showed increase while two banks showed decrease in CAR. Overall capital adequacy has increased after merger is equal to decrease in performance. Although capital is life blood for any financial institution and caused reduction of financial cost but due to poor regulatory frame work, bad personal and asset management or due to agency problems high capital cause negative impact on performance. It becomes burden instead of blessing (Abdioglu & Buyuksalvarci, 2011; Ross, 1977).

All banks increased their size after mergers. ABL shows a significant increase in size ($M=-.504$, $S.D=.049$) condition; $t(2) = -13.505$, $P=.005$. Change of size of SCB also occurs significantly ($M=-.5157$, $S.D=.0236$) condition; $t(2) = -33.479$, $P=.001$. AKBL also shows a significant change in size after merger ($M=-.5218$, $S.D=.0297$) condition; $t(2) = -12.143$, $P=.052$. As increase in size indicates a decrease in performance Bohren & Schindele (2010) that's why null hypothesis accepted.

Conclusion

This research is based on small set of six bidder banks, their limited secondary data prove that bidder banks did not improves their post-merger performance in term of profitability liquidity, leverage, capital adequacy and size. Secondary data was collected through Financial Statement analysis of Financial Sector and through websites of selected bidder banks from the time period of 2003 to 2012. During impact measurement, two dependent variables return on equity and return on assets are used while four independent variables liquidity risk, leverage, capital adequacy level and size of bidder banks. Dougherty (2011) method is applied to find the relationship between these strategic decisions and bank performance. In next phase,

performance has been measured through T-Test. Insignificant impact of mergers on performance is found by this research.

Only two banks Allied bank and Atlas bank improved their performance after merger while all other showed vice versa results. It's evident from this research that mergers did not play significant role in improvement of performance of selected bidder banks. These results are supported by (Kemal, 2011; Badreldin & Kalhoefer, 2009 and Pazarskis, et al., 2006) while contradict with European research of (Altunbas & Marques, 2007). It is fallacious to assume that mergers always fail to improve the performance of Pakistani banks only on the basis of this limited study of six banks that lacks full knowledge about all internal and external motives of bidder banks. Moreover, success or failure of any merger depends upon how they are planned assessed and executed. Furthermore, policy makers should review their decision of mergers and formulate and implement effective policies for improvement in performance of merging banks in Pakistan. This research is limited to a shorter time span. Further research can be done on same topic by using longer time span and various other important factors like inflation, market size, rules and regulation, corporate responsibilities, etc. Moreover, it forms a base for doing research on the topic of mergers in different industries of Pakistan.

References

- Abdioglu, H., & Buyuksalvarci, A. (2011). Determinants of Capital Adequacy Ratio in Turkish Bank : Panel data analysis. *African Journal of Business Management* .5 (25),pp.11199-11209, 11.
- Abul-Rahman, O. A. & Ayorinde, A. O. (2013). Post Merger Performance of Nigerine Selected Deposit Money Banks- An Econometric Prospective. *International Journal of Management and Sciences*, 2(8), pp. 49-59.
- Altunbas, Y., & Marques, D. (2007). Merger and Acquisition and Bank Performance in Europe: The Role of Strategic Similarities. *Journal of Economics and Business*, 19.
- Arshad, A. (2012). Post Merger Performance Analysis of Standard Chartered Bank Pakistan. *Interdisciplinary Journal of Contemporary Reasearch Bussiness* 4(6),pp. 164-173.
- Badreldin, A., & Kalhoefer, C. (2009, October). The Effect of Merger and Aquisition on Bank Performance in Eygypt. *Working Series*, p. 17.
- Bohren, L., & Schindele, I. (2010). Is there any relationship between growth and profitability. *BI Nowegian School of Management GRA 1900* .
- Dougherty, C., 2011. Introduction to Econometrics. 4rth ed. s.l.:Oxford University Press.
- Ghosh, A., & Jain, P. C. (2000). Financial Leverage Associated with Corporate Merger. *Journal of Corporate Finance* 6(2000),pp. 377-402.
- Kemal, M. U. (2011). Post-Merger Profitability: A Case of Royal Bank of Scotland (RBS). *International Journal of Business and Social Science* 2(5), pp. 157-162.
- Koetter, M. (2005, March). Evaluating the German Bank Merger Wave” Working Paper. *Utrecht School of Economics*, pp. 05-016.
- Lewellen, W. G. (1971). A pure financial rationale for conglomerate merger. *Journal of Finance*,pp. 521-537.

- Pazarskis, M., Vogiatzogloy, M., Christodoulou, P., & Drogalas, G. (2006). Exploring the Improvement of Corporate Performance after Merger. *International Research Journal of Finance and Economics*, 9, pp. 184-192.
- Promptak, D. (2009, December). The Impact of Bank Merger and Aquisition (M&A) on Bank Behaviour. *P.H.D Thesis, University of Birmingham*
- Samilogu, F., & Demirgunes, K. (2008). The Effect of Working Capital Management on Firm Profitability. *The International journal of applied Economics and Finance*, 44-50.
- Selcuk, E. A., & Yalmaz, A. A. (2011). Impact of Mergers and Aquisitions on Aquirer Performance : Evidence from Turkey. *Business and Economics Journal*, 2011 BEJ 22.
- Sinha, D., & Kaushik, K. P. (2010, November). Measuring Post Merger and Aquisition Performance. *International journal of Economics and Finance*, .2, pp. 190-200.
- Sufian, & Fadzlan. (2004). Efficiency Effect of Bank Mergers and Aquisitions in Developing Economy. *International Journal of Applied Econometrics and Quantitative Studies: 1(4)*, pp. 53-74.
- Ullah, O., Ullah, S., & Usman, A. (2010). Post merger Performance of Atlas Investment and AL-Faysal Investment Bank Ltd. in Pakistan. *International Journal of Finance and Economics*, pp. 168-174.

CAN MOMENTUM PORTFOLIOS EARN MORE IN THE KARACHI STOCK EXCHANGE?

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Abstract

In this study, we attempt to show empirical evidence of momentum profits in Karachi Stock Exchange (KSE) using monthly stocks returns data of 609 stocks over the period June 2004 to March 2014. Using Jegadeesh and Titman (1993) methodology, we find that investors can earn positive returns by holding a zero-investment momentum portfolio i.e. buying past winners stocks and selling past losers stocks. These results are robust to excluding small stocks (share price < PKR 5) as well as to using different sample periods. Further research in this area might consider factors such as risk, size, liquidity, book-to-market value, transaction costs, and trading volume to see which of these factors can explain momentum profits in KSE.

Keywords: Momentum Returns, Pakistan, Winners and Losers, Mean Reversion

JEL Classification: G 100

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Introduction

Modern financial theory suggests efficiency of markets and presumes that assets prices exhibit random walk and are unpredictable (Mandelbrot, 1966; Samuelson, 1965). However, evidences against the random walk hypothesis are also documented (Fama and Blume, 1966; Fama, Fisher, Jensen, and Roll, 1969; Jensen, 1986; Jensen, and Bennington, 1970; and Owen, 1986). Opponents of the efficient market hypothesis believe that smart investors can earn excess risk adjusted returns. Young (1971) found that monthly returns are negatively auto-correlated which exemplifies the non-random pattern in stock returns where the negative sign indicates price reversal pattern. On the other hand efficient market hypothesis postulates that current assets' prices are fully based on all available information which are unpredictable. Given that, individual stocks and whole market could follow any direction therefore, neither technician³ nor fundamentalists⁴ could beat the market (see e.g., Fama, 1970; Samuelson, 1965). However, the market efficiency proposition was opposed by others on the basis of empirical evidences by showing that prices are predictable in many manners including the momentum (see for further details Mackinlay, 1999). It is documented that over a short period of time (daily, weekly and monthly) securities' and market returns are serially positively auto-correlated, in addition, others have documented that over long period of time (three and above years) returns show negative correlation (see e.g., Fama and French, 1988; Poterba and Summers, 1988). Moreover, it is argued that these predictable patterns could help investors to accumulate higher than normal expected returns regardless of the issue whether the predictability exists due to as explained⁵ by the loyalists, revisionists and/ or heretics. Moreover all of the three views as explained by Boudoukh, Richardson, and Whitelaw (1994) in their study that markets are inefficient, or risk premium are unstable and helps in returns predictability, or that bubbles, fads, and overreaction

3-Technical analysts believe in the presence of useable patterns in the asset past prices for the future profitable investment

4-Fundamental analysts investigate business fundamentals e.g., earnings, dividends, future prospects and the like to make profitable investment decisions.

5- See for more details Boudoukh, Richardson, and Whitelaw (1994)

account for returns predictability could be argued to exist in the peculiar Pakistani stock market. Investors' response to information could be either in form of over -or under-reaction due to investors' human limitations or investors limited focus and interest in certain market and assets (Barberis, Shleifer and Vishny, 1998). When investors behave in relatively more optimistic manner to certain positive information, say for example expected innovative product development by a firm, and then they become willing to offer increased buying prices which depict their overreaction; however the increased prices might settle down at required or correct level progressively. In the case of under reaction, after the initial prices hike due to positive information prices continue to rise to reach to its fair level.

In the real world sources of information are not the same for the different investors and hence their reactions to information vary due to differences in time to behave and nature or degree of intensity of behaviors. Moreover, investors only partially accommodate new information in order to display their anchoring and adjustment behavior. In contrast to momentum strategy, contrarian strategy postulates that the past losers will be the future winners and thus suggests taking long position on poor performing stocks and short on positive performing stocks. The empirical evidences confirming the positive outcome of the contrarian strategy signifies the existence of investors' overreaction.

DeBondt and Thaler (1985, 1987) showed that long-term past winners (three- to five-years) were outperformed by long-term past losers over the next three to five years. Interestingly, return reversal for shorter periods of one week to one month are also reported in some studies (see e.g., Jegadeesh, 1990; Lehmann, 1990). Opposite to these findings, Jegadeesh and Titman (1993) reported that over investment horizon of three- to- twelve months, firms with lower past returns continue to be outperformed by firms with higher past returns over the same period. This behavior of stock returns is known as momentum and investor try to exploit this characteristic of stock prices and by selling past losers and buying past winners. Rouwenhorst (1998) used data on one dozen European stock markets and found the evidence to support the momentum strategy both in the individual and cross-country cases. However, Liu and Lee (2001) investigated Japanese (Tokoyo) stock market and concluded that over medium

term horizon (3 to 12 months) momentum strategy fail to earn relatively higher returns, in fact, they documented that momentum generated portfolios lost about 0.5% per month over the next equal period.

This study in the Karachi Stock Exchange (KSE), which is the largest stock market of Pakistan, is an endeavor to add and contribute to the scanty investigated area in Pakistan. The capital market in Pakistan has some unique characteristics. History of KSE with regards to returns and trading activities is full of surprises. These and other reasons suggest that Pakistani stock market also depart from the perfect market and/ or efficient market presumption as is the case of stock markets of many developing countries. This study specifically explores the objective to search for empirical evidence of the existence of momentum strategy in the KSE. The results of the study are expected to have influential impact on the investors' decision making behavior in KSE and have implications in general on investment decisions, risk management techniques, and could influence assets' valuation.

The following text Section 2, briefly describes the literature and, Section 3, explains the data, sample and methods of analysis. Section 4, discusses the results and Section 5 concludes the study.

Literature Review

Malkiel (2008) documented several empirical glimpses to provide valid reason to oppose the notion of market efficiency. He stated that patterns and anomalies in the capital assets' market exist and that these can be exploited to earn excess risk-adjusted returns. Boudoukh, Richardson, and Whitelaw (1994) summarized three different views about stock returns predictability by three different groups so called loyalists, revisionists and Heretics. Loyalists believe that stocks markets are inefficient; revisionists argue that risk premium of small firms stocks vary and due to this returns become predictable; and heretics believe that price bubbles, overreaction and market fads are responsible for the predictable nature of stocks returns.

Several studies have provided evidences that daily, weekly, and monthly average stocks' and market returns tend to exhibit positive

serial autocorrelation or the existence of short-run momentum in markets. For monthly returns differences Lo and Mackinley (1999) evidenced that the unit root variance is linear and exhibited a pattern. They reported that log variances of weekly prices were one fourth of the variances of monthly prices, but this pattern was not present in the stocks which were rarely traded. This suggests that this momentum pattern could be used in the evaluation of the stock prices. However the transactions costs are needed to be considered as the frequency of trading can increase these. It can also be argued that small investors in fact will face higher transaction costs due to increased frequency in the trading if they accommodate momentums into their investment decisions. Malkiel (2008) stated that momentum might not be profitable but suggest that capital markets are inefficient.

Lakonishok, Shleifer, and Vishny (1994) stated that under reaction give rise to momentum strategy as in this case, for a short while, investors' anchoring behavior generates positive autocorrelations of returns. Fama (1998) stated that like under reaction behavior, overreaction towards stock prices due to information availability also exist. Lakonishok, Shleifer, and Vishny (1994) argued that when similar type of news over a longer period of time, perhaps three to five years, consistently appear then investors start overreacting to the stock prices. Daniel, Hirshleifer, and Jegadeesh and Titman (1994) determined that not the investors' delayed response but their over reactions to news make stocks returns predictable. Inconsistent with the prevailing economic state, the evidences of negative autocorrelations (three to five years; monthly; and weekly horizons) as documented by DeBondt and Thaler (1985 & 1987), Jegadeesh (1990), and Lehmann (1990) etc is contributed to investors' overreaction by Cooper (1999). Daniel, Hirshleifer, and Subrahmanyam (1998, 2001) argued that knowledge of private information cause investors to overreact and change book-to-market ratio but in the long run reversal to mean also occur. The investors' characteristic self attribution maintains the overreaction they believe that successes are due to their efforts and failures are due to extraneous factors.

Thus momentum in stocks returns is generated. However in the long-run stock prices adjust to its fundamentals due to Bayesian updating by agents. Another explanation of overreaction is put forward by Barberis, Shleifer, and Vishny (1998), according to their view investors extrapolate small sample results to large sets of random cases and then lead to reversals. It is further added that conservatism results in underreaction and cause momentum. Hong and Stein (1999) stated that slow information diffusion is the cause of momentum and feedback traders create overreaction and buy more as they make decisions on the basis of past returns believing that if the past momentum traders have made use of news later on when positions are reversed causes momentum. The use of simplistic models and ignoring other information in the analysis of stocks generate bubbles and momentum (Hong, Kubik, and Stein, 2005). They added that continuous use of a single model with consistent positive expected returns could induce investors to overreact to changes in the forecasts. However according to Gutierrez and Kelley (2006) the illiquidity reason is the plausible explanation for the negative serial autocorrelation.

Fama and French (1988) contrary to the shorter holding periods, for longer investment horizons documented the pattern of negative autocorrelation in the average returns of stocks. They showed that 25% to 40% variation in returns is attributable to serial negative autocorrelation. Poterba and Summers (1988) also documented the mean reversion phenomenon in the stock returns and it is explained that investors sentiments and changes in them generate kinds of swings in the assets' prices (DeBondt and Thaler, 1985). The stocks mean reversion phenomenon translates into investment strategy so called contrarian strategy. According to this strategy investors shall buy stocks which are poorly performing for a while and sell those performing better for a while. Interestingly market efficiency can also produce mean reversion for example volatility in the interest rates which can cause flight in and out of capital from the stock market (Malkiel, 2008). Fluck, Malkiel, and Quandt (1997) tested the contrarian strategy but could not support the view if the strategy could earn

relatively more profits. They found that stocks with poor returns history earned more than stocks with good returns history in the following period but in the next period average returns for both groups were similar.

Some authors have explained that the probable reason of the resultant abnormal returns associated with the momentum or mean reversal phenomenon could be the underlying risks and if the risk/s is/are accounted for then these returns might no more be observable. Jegadeesh and Titman (1993) analyzed momentum returns but found no evidence of the notion that systematic risk could explain them. Fama and French (1996) employed their three factor model and reported that momentum returns were independent of the three factors (systematic risk, size, and book-to-market).

Griffin, Ji and Martin (2003) tried to explain momentum returns with the help of macroeconomic factors but they found no evidence to support this view.

Shiller (1984) view could be another reason of the momentum returns. He argued that social norms and attitudes guide investors. He explained that along with the risk, investors are incompetent and are liable to be influenced socially and ultimately could make erroneous judgments. Hence this aspect of the investors' psychology can affect the whole market.

Naranjo and Porter (2007) suggested that momentum strategy works better for managers who tend to move with the market. It is also argued that risk averse investors are the momentum investors who react to strong trading signals.

Chan, Jegadeesh and Lakonishok (1996) found evidence in support of the view that individual hold back their responses and partially display their behaviors to new information as such they are anchored to significant events of the past. If information about expected earnings come to the market, investors under react to them

and upward movement of prices persist even after the initial prices increase; if information are happened to be negative prices of stock keep moving downward after the instant prices decrease at the appearance of these bad news.

Data and Methodology

Data for this study is acquired from the official website of the KSE on 609 stocks for the period from June 2004 to March 2014. The daily stock prices data is used to compute monthly returns. In this study momentum portfolios are formed using the methodology of Jegadeesh and Titman (1993). All stocks are ranked into deciles using their past P-month returns (P equals one, two, three up to 24 months returns) and ten portfolios are formed (portfolio number one being the lowest performer 'loser' and number ten highest past performer 'winner'). These portfolios are held for S period (S equals one, two, and three up to 24 months) where in each case P and S are equal.. Further to account for the possible bouncing effect of bid-ask and lagged reaction effect on the performance and holding period returns another set of portfolios is also constructed by skipping one month each between formation and holding periods i-e., between P & S. In the light of the momentum strategy, each month, portfolios with positive returns are bought and those with negative returns are sold out and this position is maintained for S months. The portfolios in the strategies examined are with overlapping holding periods. Overlapping periods can better account for temporal shifts in market risk as well as helps in using all available information (see Jegadeesh and Titman, 1993).

In line with the view of Zarowin (1990) that a small change in price of relatively low price stocks could be substantial in impact therefore to avoid the bias so created we form a sample by excluding stocks with price lower than PKR 5. Moreover, the year 2008 is considered abnormal as the KSE 100 index was frozen in wake of severe market crash. The KSE 100 Index was 13,666 on January 1, 2008 and reached to 15,676 on April 18, whereas it experienced a steep fall

thereafter. The Index was 5,865 on Dec 31, 2008. This fluctuation in the market could have impact on the results and therefore we also present results for different sub-periods.

For all formation and holding period portfolios, we use the *asm*⁶ Stata program, written by Shah (2014).

Results and Discussion

Table 1 shows results of portfolios formed immediately at the end of period P and Table 2 reports results when one month period is skipped between the ranking and holding periods that is post ranking portfolio formation is delayed for one month period of time. From the left, the first column shows formation and holding periods. Column 1 to 4 reports results for the periods June 2004 to March 2014, June 2004 to March 2014 excluding year 2008, June 2004 to December 2014, and January 2009 to March 2014. The three sub-columns in each of these five columns report number of observations (Obs. i.e. unit is one month) of the T-statistics and average periodic returns (Winners – Losers) for the buy and sell strategy for whole sample (All Stocks) and sample excluding stocks with price less than 5 PKR (Less small stocks). Annual returns of the most successful strategies and their associated information are reported in Table 3.

The results of Table 1 & 2 show that the sample stocks confirm existence of momentum and that the strategy to buy past winners and sell past losers is profitable. These results, in general, are consistent across the different samples and periods.

In column 1 of Table 1 & 2 we find that buy & sell strategy produced higher significant returns for all formation and holding periods. In Table 1, the most successful among the 24 strategies is 2 months formation and holding with 15.42% annual returns and 3 months formation and holding with 16.6% annual returns in case of all stocks and less small stocks, respectively. However, when we skip

6-ASM is abbreviated term for *Attaullah Shah Momentum* portfolios program.

the holding period for one month, as shown in Table 2, the most successful strategies are 2 months formation and holding with annual yield of 15.54% & 15.9% respectively.

In column 2, in immediate formation when the abnormal period (year 2008) is dropped the returns of the last five and seventh last formation and holdings period becomes insignificant in all stock case and for the last three formations and holding periods in less small stock case. Whereas in formation skipped by one month out of the 24 last nine formation and holding period returns are insignificant for all stocks and only last three formation and holding period returns are insignificant for less small stock sample. The insignificance results suggests that the buy and sell strategies at these periods do not prove profitable. In the immediate formation, the most successful strategies 3 months formation and holding period produce 14.08% and 15.8% annual returns. In the case of formation skipped for one month, the most successful buy and sell strategies are 2 months formation and holding period (14.88% & 15.9%) in both the all stock and less small stock cases.

For the sample period from June 2004 to December 2007, the 5 and 6 month formation and holding period are insignificant in all stock sample and 6 month formation and holding period in sample excluding small stock as shown in column 3 of Table 1. Similarly in Table 2, 5 month formation and holding period and 5 and 6 month formation and holding period are insignificant. The most successful strategy in this period, in the two tables is 2 month formation and holding period with annual yields 20.4%, 19.74%, 20.16%, and 19.92%.

In total of 22 different strategies, returns associated with formation and holding periods beyond 14 and 16 month in column 4 of Table 1 and 13 and 14 month in Table 2 turns insignificant or produce significantly negative returns. The most successful buy and sell strategies in these cases are 4 & 9 month formation and holding period with annual returns of 14.25%, 15.78% & 15.6%, 17.47% respectively.

The returns pattern in Table 2 'skip' relative to that in Table 1 'immediate' suggests that delaying portfolio formation for one month period of time favors the winners relative to the losers and results in overall relatively higher returns. One can infer that probably returns of portfolios revert to mean at the first month that is the month next to the ranking period. Ignoring the transaction costs, in general the results suggest that investors can earn significantly higher returns by adopting strategy to buy past good performing stocks and selling past poor performing stocks in the Karachi stock market. However, relative to individual investors, large investors are expected to earn better profits by adopting this strategy.

These results are similar to those reported by Naranjo and Porter (2007) for emerging and developed markets. They analyzed the momentum profits based on data set from 1990 to 2004 for 18 emerging markets and found that only 5 were statistically significant. They excluded from the sample stocks with market capitalization under the 25th percentile of all NYSE stocks, arguing that this would avoid problems like illiquidity. However, although this exclusion criterion may be suitable for big markets, for emerging markets this screening seems to include too few stocks, creating a sample less representative with more concentration in big stocks.

Bekaert, Erb, Harvey, and Viskanta (1997) stated that past winners could not consistently over-perform in emerging stock markets, although they observed and reported that winners perform better when the investable indexes are examined. The results are also in line with those reported by Rouwenhorst (1999) that in emerging market stocks exhibit momentum. Hart, Slagter and Dijk (2002) analyzed data of 32 emerging markets to report significant momentum profits in 6 countries. In some of the sample country cases the numbers of stocks were few and inappropriate for the analysis. In the case of Brazil and Turkey contrary to expected momentum returns, the reversal phenomenon is reported by Bonomo and Dall'Agnol (2003) and Bildik and Gülay (2002) respectively. In case of Japan it is reported that past winners underperform to past losers during a holding period of up to

next two months, suggesting that momentum strategy does not perform positively in the shorter investment horizons (Chang, McLeavey, and Rhee, 1995). Similar results are reported for medium period horizon in the same market by Liu and Lee (2001).

Table – 1:

T-test of Winners minus Losers Monthly Returns

Formati on- Holding Periods	1		2		3		4	
	June 2004 to Mar 2014		June 2004 to Mar 2014 Excluding Year 2008		June 2004 to Dec 2007		Jan 2009 Dec 2014	
	ALL STOCKS	Less SMALL STOCKS	ALL STOCKS	Less SMALL STOCKS	ALL STOCKS	Less SMALL STOCKS	ALL STOCKS	Less SMALL STOCKS
	Mean (Winners - Losers)	Mean (Winners - Losers)	Mean (Winners - Losers)	Mean (Winners - Losers)	Mean (Winners - Losers)	Mean (Winners - Losers)	Mean (Winners - Losers)	Mean (Winners - Losers)
1	11	0.0119***	0.0127*	10	0.0114*	0.0123*	4	0.0128*
	7	**	**	5	**	**	2	*
2	11	0.0257***	0.0263*	10	0.0228*	0.0244*	4	0.034**
	5	**	**	4	**	**	0	*
3	11	0.038***	0.0415*	10	0.0352*	0.0395*	3	0.041**
	3	**	**	3	**	**	8	*
4	11	0.0485***	0.0516*	10	0.0433*	0.0472*	3	0.0367*
	1	**	**	2	**	**	6	**
5	10	0.044***	0.0504*	10	0.0407*	0.0483*	3	0.0208
	9	**	**	1	**	**	4	*
6	10	0.0444***	0.0487*	10	0.041**	0.0473*	3	0.0177
	7	**	**	0	*	**	2	*
7	10	0.0448***	0.0516*	99	0.044**	0.054**	3	0.0319*
	5	**	**	*	*	*	0	**
8	10	0.0555***	0.0593*	98	0.0551*	0.0631*	2	0.0541*
	3	**	**	**	**	**	8	**
9	10	0.0698***	0.0725*	97	0.0684*	0.0748*	2	0.0654*
	1	**	**	**	**	**	6	**
10	99	0.072***	0.0714*	96	0.0672*	0.0718*	2	0.0783*
		**	**	**	**	**	4	**
11	97	0.0737***	0.0805*	95	0.0664*	0.077**	2	0.0825*
		*	*	*	*	*	2	*
12	95	0.0766***	0.089**	94	0.0672*	0.0825*	2	0.0929*
		*	*	**	**	**	0	**
13	93	0.0783***	0.0883*	93	0.0646*	0.0774*		
		**	**	**	**	**	38	0.0851*
14	91	0.0766***	0.0972*	91	0.0548*	0.0783*		
		**	**	**	**	**	36	0.0641*
15	89	0.074***	0.0993*	89	0.0425*	0.0703*		
		**	**	**	**	**	34	0.0253
16	87	0.0725***	0.118**	87	0.0297*	0.0789*		
		*	*	*	*	*	32	-0.0138
17	85	0.0743***	0.115**	85	0.025*	0.07***		
		*	*	*	*	*	30	-0.0431
18	83	0.0761***	0.113**	83	0.021	0.0635*		
		*	*	*	*	*	28	-0.0601
19	81	0.0849***	0.114**	81	0.028*	0.0596*		
		*	*	*	*	*	26	-0.0496
20	79	0.086***	0.117**	79	0.0194	0.053**		
		*	*	*	*	*	24	-0.0708
21	77	0.092***	0.128**	77	0.0173	0.049**		
		*	*	*	*	*	22	-0.0948*
22	75	0.0841***	0.115**	75	0.00341	0.0335		
		*	*	*	*	*	20	-0.105*
23	73	0.0703***	0.105**	73	-0.0177	0.0157		
		*	*	*	*	*		
24	71	0.0728***	0.106**	71	-0.0193	0.0144		
		*	*	*	*	*		
No. of Firms	609	609	609	609	608	608	607	607
No. of Daily Returns	450314	429144	414513	394850	164855	158956	249658	235894

Columns with titles Less SMALL STOCKS exclude stocks with price below PKR 5. The portfolios are formed using past monthly returns and are held for the same number of month(s) as shown in the

column headed Formation-Holding Periods. The average periodic returns reported in columns headed as Mean (Winner-Losers) are calculated by subtracting average periodic returns of loser portfolio from the average periodic returns of winner portfolios. Marks ***, ** and, * shows significant at 1%, 5% and, at 10%.

Table – 2:

T-test of Winners minus Losers Monthly Returns – Holding Period Portfolio Formation Delayed by One Month

Formation-Holding Periods (in months)	1 June 2004 to Mar 2014		2 June 2004 to Mar 2014 Less Year 2008		3 June 2004 to Dec 2007		4 June 2009 to Mar 2014	
	ALL STOCK S	Less SMALL STOCKS	ALL STOCK S	Less SMALL STOCKS	ALL STOCK S	Less SMALL STOCKS	ALL STOCK S	Less SMALL STOCKS
	Mean (Winner s-)	Mean (Losers s-)	Mean (Winner s-)	Mean (Losers s-)	Mean (Winner s-)	Mean (Losers s-)	Mean (Winner s-)	Mean (Losers s-)
	No	No	No	No	No	No	No	No
1	11 6 0.012** 0.0124*	10 4 0.0117* 0.0129*	4 1 0.0146* 0.0151*	61 0.00979 0.011**	4 1 0.0146* 0.0151*	61 0.00979 0.011**	4 1 0.0146* 0.0151*	61 0.00979 0.011**
2	11 4 0.0259* 0.0265*	10 3 0.0248* 0.0265*	3 9 0.0336* 0.0332*	59 0.0201* 0.0232*	3 9 0.0336* 0.0332*	59 0.0201* 0.0232*	3 9 0.0336* 0.0332*	59 0.0201* 0.0232*
3	11 2 0.0375* 0.0378*	10 2 0.0334* 0.0356*	3 7 0.0291* 0.0326*	57 0.0383* 0.0402*	3 7 0.0291* 0.0326*	57 0.0383* 0.0402*	3 7 0.0291* 0.0326*	57 0.0383* 0.0402*
4	11 0 0.0366* 0.0395*	10 1 0.0338* 0.0369*	3 5 0.0204* 0.0266*	55 0.0407* 0.0436*	3 5 0.0204* 0.0266*	55 0.0407* 0.0436*	3 5 0.0204* 0.0266*	55 0.0407* 0.0436*
5	10 8 0.0352* 0.0408*	10 0 0.0346* 0.04***	3 3 0.00775 0.0177	53 0.0481* 0.0512*	3 3 0.00775 0.0177	53 0.0481* 0.0512*	3 3 0.00775 0.0177	53 0.0481* 0.0512*
6	10 6 0.0335* 0.038**	99 0.0337* 0.04***	3 1 0.0104 0.0138	51 0.0467* 0.0544*	3 1 0.0104 0.0138	51 0.0467* 0.0544*	3 1 0.0104 0.0138	51 0.0467* 0.0544*
7	10 4 0.0392* 0.0445*	98 0.0398* 0.0478*	2 9 0.0292* 0.0369*	49 0.0526* 0.0589*	2 9 0.0292* 0.0369*	49 0.0526* 0.0589*	2 9 0.0292* 0.0369*	49 0.0526* 0.0589*
8	10 2 0.0546* 0.0574*	97 0.0553* 0.0614*	2 7 0.0551* 0.0547*	47 0.0745* 0.0788*	2 7 0.0551* 0.0547*	47 0.0745* 0.0788*	2 7 0.0551* 0.0547*	47 0.0745* 0.0788*
9	10 0 0.0646* 0.0658*	96 0.0642* 0.0677*	2 5 0.0696* 0.0691*	45 0.0877* 0.0912*	2 5 0.0696* 0.0691*	45 0.0877* 0.0912*	2 5 0.0696* 0.0691*	45 0.0877* 0.0912*
10	98 0.0685* 0.0681*	95 0.0642* 0.0676*	2 3 0.087** 0.082**	43 0.0857* 0.0919*	2 3 0.087** 0.082**	43 0.0857* 0.0919*	2 3 0.087** 0.082**	43 0.0857* 0.0919*
11	96 0.0681* 0.0758*	94 0.0637* 0.073**	2 1 0.0792* 0.0888*	41 0.0879* 0.103**	2 1 0.0792* 0.0888*	41 0.0879* 0.103**	2 1 0.0792* 0.0888*	41 0.0879* 0.103**
12	94 0.0694* 0.081**	93 0.0598* 0.0723*	1 9 0.0925* 0.0983*	39 0.0795* 0.104**	1 9 0.0925* 0.0983*	39 0.0795* 0.104**	1 9 0.0925* 0.0983*	39 0.0795* 0.104**
13	92 0.0751* 0.0862*	92 0.0599* 0.0729*	37 0.076** 0.0886*	37 0.076** 0.0886*	37 0.076** 0.0886*	37 0.076** 0.0886*	37 0.076** 0.0886*	37 0.076** 0.0886*
14	90 0.0712* 0.0945*	90 0.0466* 0.0711*	35 0.0425 0.0744*	35 0.0425 0.0744*	35 0.0425 0.0744*	35 0.0425 0.0744*	35 0.0425 0.0744*	35 0.0425 0.0744*
15	88 0.0662* 0.0927*	88 0.0343* 0.0619*	33 -0.00267 0.0438	33 -0.00267 0.0438	33 -0.00267 0.0438	33 -0.00267 0.0438	33 -0.00267 0.0438	33 -0.00267 0.0438
16	86 0.0623* 0.107**	86 0.0198 0.0674*	31 -0.0442 0.0497	31 -0.0442 0.0497	31 -0.0442 0.0497	31 -0.0442 0.0497	31 -0.0442 0.0497	31 -0.0442 0.0497
17	84 0.0638* 0.108**	84 0.0155 0.0622*	29 0.0768* 0.0249	29 0.0768* 0.0249	29 0.0768* 0.0249	29 0.0768* 0.0249	29 0.0768* 0.0249	29 0.0768* 0.0249
18	82 0.0689* 0.106**	82 0.0172 0.0578*	27 0.0786* -0.0205	27 0.0786* -0.0205	27 0.0786* -0.0205	27 0.0786* -0.0205	27 0.0786* -0.0205	27 0.0786* -0.0205
19	80 0.0799* 0.108**	80 0.0221 0.0519*	25 -0.0668 -0.00796	25 -0.0668 -0.00796	25 -0.0668 -0.00796	25 -0.0668 -0.00796	25 -0.0668 -0.00796	25 -0.0668 -0.00796
20	78 0.0807* 0.111**	78 0.013 0.0455*	23 -0.0901* -0.0272	23 -0.0901* -0.0272	23 -0.0901* -0.0272	23 -0.0901* -0.0272	23 -0.0901* -0.0272	23 -0.0901* -0.0272
21	76 0.085** 0.124**	76 0.011 0.0444*	21 -0.111** -0.00733	21 -0.111** -0.00733	21 -0.111** -0.00733	21 -0.111** -0.00733	21 -0.111** -0.00733	21 -0.111** -0.00733
22	74 0.0792* 0.103**	74 0.00011 0.0227	19 -0.119* -0.0528	19 -0.119* -0.0528	19 -0.119* -0.0528	19 -0.119* -0.0528	19 -0.119* -0.0528	19 -0.119* -0.0528
23	72 0.061** 0.0969*	72 -0.0244 0.00976	17 -0.21*** -0.11*	17 -0.21*** -0.11*	17 -0.21*** -0.11*	17 -0.21*** -0.11*	17 -0.21*** -0.11*	17 -0.21*** -0.11*
24	70 0.0722* 0.108**	70 -0.0181 0.0205	15 0.182** -0.122**	15 0.182** -0.122**	15 0.182** -0.122**	15 0.182** -0.122**	15 0.182** -0.122**	15 0.182** -0.122**
No. of Firms	609	609	608	608	608	608	607	607
No. of Daily Returns	450314	429144	414513	394850	164855	158956	249658	235894

The table is similar to Table-1 however the portfolios based on past monthly returns are formed after one month of these returns. Marks ***, ** and, * shows significant at 1%, 5% and, at 10%.

Table-3:

Results Summary

Highest annual returns cases across the different periods, different formation and holding periods, and full sample and sample excluding small stocks with number of observations and level of significance are reported.

Sample Period		June 2004 to Mar 2014	June 2004 to Mar 2014 (less Year 2008)	June 2004 to Dec 2007	Jan 2009 to Mar 14
All Stocks	Formation-Holding Period (months)	2	3	2	4
	Annual Returns in %	15.42***	14.08***	20.4***	14.25***
	No. of Obsn.	115	103	40	56
All Less Small Stocks (Share Price <5)	Formation-Holding Period (months)	3	3	2	4
	Annual Returns in %	16.6***	15.8***	19.74***	15.78***
	No. of Obsn.	113	103	40	56
Holding Period Portfolio Formation Delayed One Month					
All Stocks	Formation-Holding Period (months)	2	2	2	3
	Annual Returns in %	15.54***	14.88***	20.16***	15.32***
	No. of Obsn.	114	103	39	57
All Less Small Stocks (Share Price <5)	Formation-Holding Period (months)	2	2	2	3
	Annual Returns in %	15.9***	15.9***	19.92***	16.08***
	No. of Obsn.	114	103	39	57

Conclusions

This study attempted to show empirical incidence of the existence of momentum pattern in KSE. The results suggest that, as in the case of most of the developing countries, returns exhibit statistically significant time-series pattern. The results indicate that momentum in stock returns exists up to 24 months in KSE; however, month on month incremental returns decreases in many cases after a given month.

Further research in this area is required and it is suggested that factors such as risk, size, liquidity, trading volume, and book-to-market value are considered to investigate which of these factors can

explain momentum profits in KSE. More importantly transaction costs need to be accounted for to see whether momentum strategy remain profitable after adjusting for such costs.

References

- Andy, C. W., Titman, S., and John Wei, K. C. (2000). "Momentum, Legal Systems and Ownership Structure: An Analysis of Asian Stock Market", Working paper, University of Texas.
- Barberis, N., Shleifer, A., and Vishny, R. A. (1998). "model of investor sentiment", *Journal of Financial Economics*, 49, pp. 307–343.
- Bekaert, G. Erb, C. Harvey, C. and Viskanta, T. (1997). "What matters for emerging equity market investments", *Emerging markets quarterly*, summer, pp.17-46.
- Bildik, R. and Guzman Gulay, G. (2002). "The Winners and Losers Effect: Evidence from the Istanbul Stock Exchange", EFMA 2002 London Meeting.
- Bonomo, Marco and Ivana Dall'Agnol, (2003). "Retornos Anormais e Estratégias Contrárias", *Revista Brasileira de Finanças*, 1, pp. 165-205.
- Boudoukh, J., Richardson, M. and Whitelaw, R. (1994). "A tale of three schools: Insights on autocorrelations of short-horizon stock returns", *Review of Financial Studies*, 7, pp.539-573.
- Chan, Louis K.C, Jegadeesh, N. and Lakonishok, J. (1996). "Momentum strategies", *Journal of Finance*, 51, pp.1681-1713.
- Chang, R., McLeavey, D., and Rhee, S. (1995). "Short-term abnormal returns of the contrarian strategy in the Japanese Stock Market", *Journal of Business Finance Account.* 22 (7), pp.1035–1048.
- Chui, Andy C. W., Titman, S. and John Wei, K. C. (2003). "Momentum, Legal Systems and Ownership Structure: An Analysis of Asian Stock Market", Working paper, University of Texas.
- Daniel, K. D., Hirshleifer, D., and Subrahmanyam, A. (1998). "Investor psychology and security market under and over-reactions", *Journal of Finance*, 53, pp. 1839-1886.
- Daniel, K. D., Hirshleifer, D., and Subrahmanyam, A. (2001). "Overconfidence, arbitrage and equilibrium asset pricing", *Journal of Finance*, 56, pp. 921–65.
- DeBondt, W. and Thaler, R. (1985). "Does the stock market overreact?", *Journal of Finance*, 40, 793–805.

- DeBondt, W. and Thaler, R. (1987) . “Further evidence on investor overreaction and stock market Seasonality”, *Journal of Finance*, 42, 557–581.
- Fama, E. F. (1970) . “Efficient capital markets: A review of theory and empirical work”, *Journal of Finance*, 25: 383–417.
- Fama, E. F., and Blume, M. (1966) . “Filter Rules and Stock Market Trading Profits”, *Journal of Business (Special Supplement)*, pp. 226-241.
- Fama, E. F., and French, K. R. (1988) . “Permanent and temporary components of stock prices”, *Journal of Political Economy*, 96:246–73.
- Fama, E. F., and French, K. R. (1998) . “Business Conditions and Expected Returns on Stocks and Bonds”, *Journal of Financial Economics*, 25, pp. 23-50.
- Fama, E. F., Fisher, L., Jensen, M. C., and Roll, R. (1969) . “The Adjustment of Stock Prices to New Information”, *International Economic Review*, pp. 1-21.
- Fama, E.F., and French, K. R. (1992) . “The cross-section of expected stock returns, *Journal of Finance*
- Fluck, Z. Malkiel, B. G., and Quandt, R. E. (1997) . “The predictability of stock returns: A cross-sectional simulation”, *Review of Economics and Statistics*, 79: 176–83.
- Griffin, Ji, and Martin (2003) . “For a study of momentum around the world Market states and momentum, *Journal of Finance*,
- Gutierrez, R. C., and Kelley, E. K. (2006) . “Evidence to the contrary: weekly returns have momentum”, *Working Paper*, University of Oregon.
- Hart, J. V. Slagter, E. and Dijk, D.V. (2002) . “Stock selection strategies in emerging markets”, *Journal of Empirical Finance*, pp. 194-213.
- Hong, H., and Stein, J. C. (1999). “A unified theory of underreaction, momentum trading and overreaction in asset markets”, *Journal of Finance*, 54, pp. 2143–2184.

- Hong, H., Kubik, J., and Stein, J. C. (2005). "Thy neighbor's portfolio: Word-of-mouth effects in the holdings and trades of money managers", *Journal of Finance*, 60, pp. 2801–24.
- Jegadeesh, N. (1990). "Evidence of predictable behavior of security returns", *Journal of Finance*, 45, pp. 881–98.
- Jegadeesh, N. and Titman, S. (1993). "Returns to buying winners and selling losers: Implications for stock market efficiency", *Journal of Finance*, 48, pp.65–91.
- Jegadeesh, N. and Titman, S. (2001). "Profitability of momentum strategies: An evaluation of alternative explanations", *Journal of Finance*, 56, 699-720.
- Jegadeesh, N., and Titman, S. (1994). "Overreaction, delayed reaction, and contrarian profits", University of Illinois at Urbana Champaign, Working paper.
- Jegadeesh, N., and Titman, S. (1995). "Overreaction, delayed reaction, and contrarian profits", *Review of Financial Studies*, 8, 973–993.
- Jensen, M. C. (1986). "The Performance of Mutual Funds in the Period 1945-1964", *Journal of Finance*, pp. 389-416.
- Jensen, M. C., and Bennington, G. A. (1970). "Random Walks and Technical Theories: Some Additional Evidence", *Journal of Finance*, pp. 469-482.
- Lakonishok, J., Shleifer, R. and Vishny, R. (1994). "Contrarian investment, extrapolation, and risk", *Journal of Finance*, 49, pp.1541-1578.
- Lehmann, B. N. (1990). "Fads, martingales and market efficiency", *Quarterly Journal of Economics*, 105, pp. 1–28.
- Liu, C. and Lee, Y. (2001). "Does the Momentum Strategy Work Universally? Evidence from the Japanese Stock Market", *Journal of Asia-Pacific Financial Markets*, 8, pp. 321-339.
- Lo, A. W., and MacKinlay, A. C. (1990). "When are contrarian profits due to stock market-overreaction?", *Review of Financial Studies*, 3, 175–208.
- Lo, A. W., and MacKinlay, A. C. (1999). "A Non-random Walk Down Wall Street", Princeton University Press, Princeton, NJ.

- Malkiel, G. B. (2008). "Stock Market Predictability", *International Encyclopedia of the social and Behavioral Sciences*, pp. 15126-15133.
- Mandelbrot, B. (1966). "Forecasts of Future Prices, Unbiased Markets, and Martingale Models." *Journal of Business (Special Supplement)*, pp. 242-255.
- McQueen, G., Pinegar, M., and Thorley, S. (1996). "Delayed Reaction to Good News and the Cross-Autocorrelation of Portfolio Returns", *The Journal of Finance*, Vol. 51(3), Papers and Proceedings of the Fifty-Sixth Annual Meeting of the American Finance Association, San Francisco, California, January 5-7, 1996, pp. 889-919.
- Naranjo, A. and Porter, B. (2007). "Including emerging markets in international momentum investment strategies", *Emerging Markets Review*, 8, pp. 147-166.
- Owen, J. (1986). "Analysis of Variance Tests for Local Trends in the Standard and Pdots Index" *Journal of Finance*, pp. 509-514.
- Poterba, J. M., and Summers, L. H. (1988). "Meanreversion in stock returns: Evidence and implications", *Journal of Financial Economics*, 22: 27-59.
- Rouwenhorst, K. (1998). "International momentum strategies", *Journal of Finance*, 53, 267-284.
- Samuelson, P. A. (1965). "Proof That Properly Anticipated Prices Fluctuate Randomly", *Industrial Management Review*, 6, pp. 41-49.
- Shah, Attaullah (2014). "Stata Program for Momentum J-K Portfolios", Working Paper.
- Shiller, R. J. (1984). "Stock prices and social dynamics", *Brookings Papers on Economic*, 457-510.
- Young, W. E. (1971). "Random Walk of Stock Prices: A Test of the Variance-Time Function", *Econometrica*, pp. 797-812.
- Zarowin, P. (1990). "Size, seasonality, and stock market overreaction", *Journal of Financial and Quantitative Analysis*, 25, pp. 113-125.

AIRLINE SERVICE QUALITY IN PAKISTAN –A CUSTOMER PREFERENCES APPROACH

Syed Sartaj Qasim¹

Abstract

This study attempts to identify the service and value factors that are given the highest importance by passengers travelling on domestic flights in Pakistan. A survey methodology involving personal interviews with 100 passengers was used on a convenience basis to gather the required information. This methodology has yielded data which was internally consistent in previous studies even though it is a non-probabilistic sampling technique. The study resulted in the following main findings. The results show that passengers of domestic flights in Pakistan attach the highest importance to the timeliness of flights. The next service dimension in order of importance was cabin service followed by cabin crew and convenience of booking.

Keywords: Airline Industry, Service Quality, Customer Preferences, Open Skies Policy, Gateways.

JEL Classification: Z000

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Introduction

In recent years research has been conducted in various countries on airline service quality ever since pioneering research by scholars established a relationship between passenger satisfaction and airline profitability (Namukasa, 2013; Bukhari, Ghoneim, Dennis & Jamjoom, 2013; McKechnie, Grant & Golawala, 2011). Earlier Nowak and Newton (2006) had reported a direct linear relationship between customer satisfaction and profits. This important relationship is substantiated by Park (2007) who concluded, not surprisingly, that high quality service is essential for a viable air transportation industry. During the 1990s, the Pakistani airline industry had undergone a dramatic transformation with the advent of deregulation and as a consequence of the open skies policy pursued by successive governments. This has resulted in the emergence of new gateways for international travel from Pakistan and the entry of new domestic airlines within the last twenty years. With the easing of barriers to entry several domestic airlines have started commercial operations on the domestic routes.

Literature Survey

According to researchers Park (2007) and Atalik (2007), the most effective way to ensure repeat customers is to provide a service that meets customers' expectations consistently. Second, an airline must keep the promises it makes. The reality is that most airlines fail to appreciate these factors and continue to ignore their importance in the planning phase with disastrous results.

Aksoy, et al. (2003) find that most companies do not recognize the importance of this approach "until driven to it by circumstances". Given a choice, dissatisfied customers are more likely to voice their complaints than satisfied customers are prone to provide positive feedback. Long term relationships with customers need to be nurtured by a carefully planned process of providing service and value. Aksoy

et al. (2003) highlighted that customer expectations strongly influence the service decisions at all points of service delivery. Thus it is imperative to find out airline passengers' expectations and then try to meet as many of them as possible.

Palmer (2008) has listed several 'critical incidents' between an airline and its customers e.g. Pre sales (initial inquiry, making reservations, issuing ticket), Post sales, Pre consumption (e.g. Baggage check-in, inspection of ticket, issuance of boarding pass, quality of waiting conditions), Consumption (e.g. Welcome on boarding aircraft, assisting in finding seat and stowing baggage, punctuality of departure, attentive in-flight service, quality of food service, etc), Post consumption (Baggage reclaim, information on arrival, queries regarding lost bags, etc.). The pattern of critical incidents has been used as a basis for defining passengers' expectations on domestic airline services in Pakistan and to compare it with earlier studies carried out in South Africa and Malaysia (De Jager, 2013).

Whereas Pakistan International Airlines and its predecessor dominated the domestic travel business since independence (1947), lately Shaheen Airlines and Air Blue have established themselves as viable players and steadily increased their market share. A number of new airlines (e.g. Aero Asia, Bhoja Air, Hajvairi, and Rajhi Aviation) have already exited from the industry as they could not survive in the intensely competitive domestic airline market leaving the aforementioned three carriers in the field. Of late, a new entrant called Air Indus has started flights on a few domestic sectors but, so far, its share of the domestic market is very small.

Once opened to competition, the Pakistani airline industry underwent a dramatic change and, for the first time, the domestic passengers were able to choose an airline. Faced with increasing competition, the domestic airlines had to offer the travelling public better services in order to retain their passengers or face the prospect

of an early exit from the market. The time had come when only satisfying customers was not enough for customer retention, word-of-mouth publicity and profitability. Poor service quality delivered by airlines results in diminished ability to retain passengers, loss of reputation and resultant loss of profitability.

There is a need to develop the domestic airline services in line with international standards of safety and operational and service efficiency. The burgeoning population growth rate puts enormous pressure on the airline industry to improve their services and maintain profitability to ensure their survival. Robust planning of all necessary facilities and services is a basic requirement for the orderly growth of the domestic airline industry (De Jager, 2012). If Pakistan is to come out of its dismal state of law and order, recover its reputation and regain its position as a major tourist destination in South Asia, it is of utmost importance that its domestic airline industry grows in an orderly fashion and is well positioned to meet the expectations of local and foreign passengers.

This objective can be achieved by continuously improving the product offered by the domestic airlines in line with international standards by focusing efforts on Customer Experience Management. As a first step this study attempts to identify service and value factors that are cherished by air travelers in Pakistan and to compare the same with other countries that exhibit similar level of economic and social advancement.

Methodology

The primary research objective was to identify those service aspects that airline passengers typically consider most and least important when travelling on a domestic airline in Pakistan. The mean importance ratings obtained for each of the service items were calculated and ranked from the highest to the lowest scores. Overall, the service factors were ranked within the following four dimensions

labeled: convenience of booking, cabin services, cabin crew, and timeliness of flight.

A questionnaire developed by De Jager (2013) has been adopted with modifications to measure the foregoing attributes and passengers' expectations regarding all phases of the travel experience. In order to gauge customers' expectations of airline services, the modified questionnaire was used to collect information from the domestic flights' passengers at Quaid-e-Azam International Airport, Karachi, over a two week period. Personal interviews were conducted with domestic passengers and the required information was recorded on the spot. Passengers were selected on a convenience basis. The average ratings of key items along with standard deviations were used for measuring the level of importance attached by passengers to each of the key elements in the modified structured questionnaire. Further to the previous study conducted by De Jager, Van Zyl and Toriola (2012), this study focused on measuring four of the most important service dimensions, namely, convenience of booking, cabin services, cabin crew and timeliness of flight. A 7-point Likert-type scale was used ranging from 1= most important to 7=not important at all.

Results and findings

The main research objective involved identifying those service aspects that domestic air passengers rate the highest and the lowest in importance. The mean importance ratings obtained for each of the service items were calculated and ranked from highest to lowest. The results are compared in Table 1 below with the service elements ranked within the four service dimensions mentioned earlier. The first service dimension is labeled 'convenience of booking' and includes such elements as convenience in making reservation/booking, online booking opportunity, allowable weight, pre-seating options, availability of airline website on internet, and adequacy of information on airline's website. The highest mean rating was given to convenience in making reservation/booking by the Pakistani passengers whereas

this element was rated second by both the South African as well as the Malaysian samples respectively.

The lowest rating (sixth) was accorded to adequacy of information on airline's website which was rated fourth and third by the S. African and Malaysian samples respectively. The factor rated second most important was allowable weight. This is not surprising since most passengers travelling by air on domestic flights need to carry all their personal effects including items of daily use as well as

Table:1 Passengers' rating of service items

	Mean	SD	Rank	Rank	Rank
			Pakistan	S.Africa	Malaysia
Convenience of booking					
Convenience in making reservation/booking	1.6	0.30	1	2	2
Allowable weight	1.67	0.28	2	6	5
Pre-seating options	1.73	0.33	3	5	6
Online booking opportunity	1.74	0.35	4	1	1
Availability of airline website on internet	1.76	0.40	5	3	4
Adequacy of information on airline's website	1.92	0.45	6	4	3
Cabin Service					
Variety of food served during flight	1.22	0.19	1	7	7
Quality of the food served	1.23	0.17	2	3	3
Cabin cleanliness	1.39	0.25	3	2	2
Comfort of the seats	1.46	0.24	4	1	1
Amount of the food served during flight	1.50	0.37	5	10	9
Cabin ventilation	1.56	0.41	6	4	5
Amenities in aircraft	1.69	0.31	7	8	8
Carry on (overhead) storage space	1.73	0.34	8	6	6
Timeliness of food and drink service	1.92	0.63	9	9	10
Continuous innovation and service improvement	2.02	0.42	10	5	4
Cabin crew					
Cabin crew's credibility	1.54	0.29	1	1	2
Cabin crew's ability to answer questions	1.58	0.29	2	2	1
Physical appearance of cabin crew	1.60	0.26	3	3	3
Timeliness of flight					
Speed of check-in	1.29	0.21	1	3	4
On-time luggage delivery on arrival	1.30	0.21	2	2	1
On-time departures and arrivals	1.33	0.22	3	1	2
Direct service to destination	1.72	0.22	4	4	3

gifts, books (students), samples (business travelers), electronic items such as laptops, cameras, etc. The pre-seating options scored third on the passengers' priorities as they prefer to be seated with their friends and families. Some passengers may prefer a window seat, a bulkhead seat or an aisle seat. Some elderly passengers may prefer a seat near the entrances.

The next item in order of preference was online booking opportunity. Although the use of computers is growing in the country at a fast rate, passengers living in rural areas still do not have access to the internet. As the country grows and the internet infrastructure spreads to the remotest corners of the country this element would grow in importance. Similarly, the availability of airline website on internet and the adequacy of information on airline's website were rated fifth and sixth respectively which is a reflection of the low level of literacy among the labor class as well as the older generation of passengers who grew up without exposure to computer technology. As the younger generation with a higher level of computer skills comes to dominate air travel in the next few years, the importance accorded to these last three elements would be likely to go up.

The second service dimension studied 'cabin service' relates to the provision of in-flight services. Although there is some variation in the level and variety of in-flight service offerings across airlines, for the purposes of this study these included such items as comfort of the seats, cabin cleanliness, food (quality, variety), timeliness of food and drink service, cabin ventilation, and onboard amenities. The three items rated most important by Pakistan sample were the variety of food served, quality of the food, and cabin cleanliness. The food served on board occupies a central place from the passengers' point of view. The main reason could be the lack of hygienic catering facilities on the ground. Some passengers whose travel originates from outside the big cities use public transportation like buses and trains to reach the airport and may have already spent a lot of time away from home. Obviously their most important need is an adequate meal. Although the flight duration of most domestic

flights in Pakistan is under two hours, the total journey time may stretch to as long as six hours or more including ground transportation and connecting times. The three items which obtained the lowest ratings were carry-on (overhead) storage space, timeliness of food and drink service, and continuous innovation and service improvement. These elements have probably scored relatively lower importance ratings because of the low level of expectations of the domestic passengers. Having had less than enjoyable experiences on past flights, some passengers might have permanently lowered their expectations of service on board. This is a direct result of the use of old aircraft on domestic routes by all airlines except Air Blue. PIA continued to operate F-27 Fokker aircraft on domestic routes for over thirty five years. Some of the new entrants started service using old aircraft (such as old BAC One Elevens and first generation Boeing 737s) which were prone to frequent breakdowns. Unless the airlines take urgent steps to modernize their fleets, they would not be able to meet their passengers' expectations.

The third service dimension studied, namely 'Cabin Crew' included such service elements as cabin crews' credibility, their ability to answer questions, and physical appearance of cabin crew. Cabin crew's credibility got the top service rating followed by their ability to answer questions, and physical appearance of cabin crew rated lowest. It is interesting to note that a similar rating pattern emerged from the South African sample whereas the Malaysian sample differed only in the rating accorded to the first two elements with cabin crew's ability to answer questions being given the first slot. The low value of the SD (between 0.26 and 0.29) shows a high degree of consistency of the data.

The last dimension studied was labeled 'timeliness of flight'. This service dimension consists of the elements of speed of check-in, on-time luggage delivery on arrival, on-time departures and arrivals, and direct service to destination. The highest importance rating was accorded to speed of check-in (1.29) closely followed by on-time luggage delivery on arrival (1.30) and the lowest priority was given to

direct service to destination. However it was noted that these four elements had the lowest SD values ranging between 0.21 and 0.22. The highest and lowest ratings for the S. African sample were given to on-time departures and arrivals and direct service to destination, whereas, for the Malaysian sample the highest and lowest-rated elements were on-time baggage delivery and speed of check-in respectively.

Importance of service dimensions when travelling on a domestic airline:

In the second phase of the study, the relative importance of the four service dimensions were analyzed. For this purpose a composite score was calculated for each dimension (Table 2). Lower average values depict higher relative importance. The results show that timeliness of flights (Mean 1.41) was rated as the most important broader service dimension amongst all three samples. The second position was accorded to cabin service (Mean 1.572) followed closely by cabin crew (Mean 1.573). Convenience of booking ranked lowest (Mean 1.74). The relative rankings for all three samples are shown in Table 2.

Table:2

Passengers' rating of service dimensions

Factors	Pakistan			S. Africa	Malaysia
	Mean	SD	Rank	Rank	Rank
Convenience of booking	1.74	0.09	4	2	3
Cabin services	1.572	0.25	2	3	4
Cabin crew	1.573	0.02	3	4	2
Timeliness of flight	1.41	0.17	1	1	1

Discussion and conclusion

The fact that timeliness of flights has been accorded the highest rating in all three samples clearly distinguishes this dimension. The fact is that most airline passengers are pressed for time and wish more than anything else to get to their destination in the shortest possible time. But if we look at the journey in a holistic manner, we find that many other variables enter the picture starting from the time when a passenger leaves home en route to the airport (he/she may well have to travel from out of town by train, bus or car) and then undergoing many stages of pre-departure formalities (finding trolleys, porters, parking space, security screening, checking-in, reaching the proper departure gate, waiting for boarding to start, and finally boarding the aircraft). After reaching the destination, the passenger has to deplane, ensure retrieval of his luggage, undergo further security screening, search for ground transportation (if not pre-arranged), and finally leave the airport for the last leg of his journey. Any major delay at any stage may result in inconvenience and costly disruptions in further arrangements including hotel booking cancellations/penalties. Thus, from the passenger's point of view flight timeliness is accorded prime importance. The practical consideration for the airlines is increased level of coordination with other agencies which are involved in the provision of the customer service mix. Chief among these are the Civil Aviation Authority and the Airports Security Force (responsible for providing security services at all airports in Pakistan) followed by various ground service providers like baggage handlers, porters, parking space providers, caterers, line maintenance, fuel suppliers, etc. These non-airline service providers (called 'situated agents' by Palmer (2008)) also affect the quality of the overall passenger satisfaction and the perceptions held about a particular airline.

While the actual quality of services offered by these 'situated agents' is beyond the control of the concerned airline, focus must be on the more direct encounters between the passengers and the airlines' front-line staff as their behaviors directly influence the passengers'

service perception. These include identifying those service and value factors that are accorded high importance level by the passengers. This study provides an insight into the four broader service dimensions measured in Pakistan for the first time: namely convenience of booking, cabin service, cabin crew, and timeliness of flight.

The results show that timeliness of flights was rated as the most important service dimension among all three samples studies so far. It is significantly more important than the other three service dimensions. Persons associated with the airline industry would appreciate the fact that passenger satisfaction is a team effort involving both front-line staff (those who come in direct contact with the passengers) as well as ground personnel such as aircraft technicians, refueling personnel, baggage loaders, caterers, cleaning and janitorial staff, etc. The quality of service provided by these ‘invisible’ staff is a moderating factor in the passenger satisfaction levels. In other words, unless all the teams involved in providing various aspects of the airline passenger services work in close coordination with one another and maintain proper level of support and the required service levels at all stages of the journey, the passenger is not likely to have a positive level of satisfaction.

As mentioned above, domestic travel often forms part of an international journey and passengers depend on the timely departures and arrivals of flights at gateways in order to connect with onward international flights which may be scheduled to leave within a short period. Any delay could result in mis-connection which has a high cost implication for such passengers, thus affecting levels of satisfaction.

The cabin service ratings reveal that passengers in Pakistan accord top priority to the variety of food served during flight, quality of food, and cabin cleanliness. This rating reflects the passengers’ desire to be well catered considering the overall amount of time spent away from home. Increasing traffic congestion and the absence of a

viable urban public transport system in all the big cities of Pakistan mean ever lengthening journey times for airline passengers. The factors accorded the lowest priority were carry-on (overhead) storage space, timeliness of food and drink service and continuous innovation and service improvement.

In the third dimension studied, cabin crew, the cabin crews' credibility obtained the highest average importance rating, followed by cabin crews' ability to answer questions. Physical appearance of cabin crew rated lowest. These ratings mirror the findings of the S. African sample.

With regard to the convenience of booking, the factor rated highest was convenience in making reservation/booking followed in second place by allowable weight and pre-seating options. The factor emerging with the lowest rating in this category was adequacy of information on airline's website. To conclude, these findings present a valuable starting point for airlines to assess the present levels of their service offerings. They may be shared with the relevant departments in the airline service delivery chain. By constantly striving to find, meet and exceed the passenger service needs and expectations, the airlines can ensure their passengers' continued patronage and, resultantly, their own survival and profitability. Through a constant and repetitive process of the above cycle, the airlines can ensure a high level of effectiveness of services rendered by the airline industry. The role played by situated agents (non-airline service providers), being crucial, cannot be ignored and would continue to play a significant role.

Limitations and opportunities for further research

A non probability sample was used due to time and cost limitations as this study was not sponsored by any agency. Having a larger sample would definitely improve the accuracy level of the results. However the opportunity to compare the results of this study with the

results of similar studies carried out in South Africa and Malaysia validates these findings and should serve as a benchmark for conducting detailed studies at other locations as well. Another limitation was the lack of demographic analysis which the author would like to investigate in a future study. These demographic features would include occupation, age distribution, and information regarding frequency and purpose of travel.

A second recommendation involves expanding the scope of a future study to find out the preferences of international passengers so that airlines can improve their service offerings accordingly.

Acknowledgements

The author would like to thank and acknowledge the help of: Prof. Johan W de Jager for granting permission to use the airline questionnaire; Mr. Ejaz Rashid for his valuable guidance and suggestions and Mr. Javed Khan for his help in organizing interviews at the Quaid-e-Azam International Airport, Karachi.

References

- Aksoy, S., Atilgan, E. & Akinci, S. (2003). Airline Services Marketing by domestic and foreign firms: differences from the customers' viewpoint. *Journal of Air Transport Management*, 9, 343-351.
- Atalik, O. (2007). Customer complaints about airline service: a preliminary study of Turkish frequent flyers. *Management Research News*, 30 (6), 409-419.
- Bukhari, S.M.F., Ghoneim, A., Dennis, C., & Jamjoom, B. (2013). The antecedents of travelers' e-satisfaction and intention to buy airline tickets online. *Journal of Enterprise Information Management*, 26(6), 624-641.
- De Jager, J.W. (2012). Domestic Airline service expectations in South Africa and Italy. *International Journal of Business Policy and Economics*, 5(1), 185-198.
- De Jager, J.W., van Zyl, D. & Toriola, A.L., (2012). Airline service quality in South Africa and Italy. *Journal of Air Transport Management*, 25, 19-21.
- De Jager, J.W., van Zyl, D. (2013). Airline service quality in South Africa and Malaysia- An international customer expectations approach. *Journal of Economics and Behavioral Studies*, 5 (11), 752-761
- McKechnie, D.S., Grant, J. & Golawala, F.S. (2011). Partitioning service encounters into touch points to enhance quality. *International Journal of Quality and Service Sciences*, 3(2), 146-165.
- Namukasa, J.(2013). The influence of airline service quality on passenger satisfaction and loyalty: The case of Uganda airline industry. *The TQM Journal*, 25(5), 520-532
- Nowak, L.I. & Newton, S.K. (2006). Using the taste room experience to create loyal customers. *International Journal of Wine Marketing*, 18(3), 157-165
- Palmer, A. (2008). Principles of services marketing, 5th ed. London: McGraw-Hill.
- Park, J.W. (2007). Passenger perception of service quality: Korean and Australian case studies. *Journal of Air Transport Management*, 13, 238-242.

ESTIMATION OF CONSUMPTION FUNCTIONS: THE CASE OF BANGLADESH, INDIA, NEPAL, PAKISTAN AND SRI LANKA

Khalid Khan¹, Sabeen Anwar², Manzoor Ahmed³ & M. Abdul Kamal⁴

Abstract

The study uses annual data from 1971 to 2013 and applies Keynesian Consumption Function (KCF) and the Permanent Income Hypothesis (PIH) in order to estimate consumption functions of SAARC countries. The empirical results show that in the short run, the difference between KCF and PIH under Marginal Propensity to Consume (MPCs) is quite large. This difference, therefore, indicates that in the short run consumers' consumption decision are based on current income. However, another point worth noting is that, in the short run smaller values of MPCs under the PIH indicate that consumers are unable to anticipate their future income in developing countries, like Bangladesh, India, Nepal, Pakistan and Sri Lanka. Moreover, the study also estimates the MPCs under the PIH in the long run. The results demonstrate that in the long run the values of MPCs are higher than the MPCs while using PIH, which indicates that in the long run consumers anticipate their future income and accordingly make consumption decisions on the basis of permanent income.

Keywords: SAARC, Keynesian Consumption Function, Marginal Propensity to Consume, Permanent Income Hypothesis

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Introduction

Considering the importance of the Marginal Propensity to Consume (MPC) in consumption function, policy makers and macro economists invariably keep a vigilant eye on its nature and behavior of MPC. Another important variable in macroeconomics is the Marginal Propensity to Save (MPS), which is often considered as the counter part of MPC. The value MPS plays a key role in capital accumulation. In Bangladesh, India, Nepal, Pakistan and Sri Lanka private consumption take the majority share of the Gross Domestic Product (GDP) of each respective country: approximately 66 percent⁵ of the GDP goes to private consumption. Thus, it is plausible to believe private consumption as one of the key determinants of aggregate demand. Given the importance of the private consumption in macro economic context the policy makers and researchers therefore are interested to find out both the pattern of individuals' consumption and the correct values of MPC under the KCF and PIH. It is important to know the accurate value of both PIH and KCF because the latter supports high value of MPC while the former holds a smaller value of MPC compare to the KCF. Moreover, it is also important to know the value of MPC both in the short and the long run.

The survey of the related literature demonstrates that consumption function, its trend and behavior received a sizeable attention from economists and policy makers. Furthermore, the literature discusses the consumption function under the theoretical perspective of both PIH and KCF. However, the literature does not deal with two crucial issues related to the consumption function. First, the short run and the long run trend and behavior of the MPC under both the PIH and KCF has not been discussed. Second, the trend of MPC is applying the theoretical perspective of PIH and KCF has not been studied for developing countries, especially for South Asian countries. Thus, in order to fill this gap in the literature, this study aims at estimating the short run and long run MPC under the KCF and PIH for Bangladesh, India, Nepal, Pakistan and Sri Lanka.

5-World Development Indicators (2013)

The concept of consumption function goes back as old as other major macro economic theories. Normally it is believed that the consumption function theory that the current macroeconomic deals with has begun with the startling work of J. M Keynes in 1936: the Keynesian Consumption Function. The Keynesian theory of Consumption was further followed by the Life Cycle Hypothesis (LCH) of Duesenberry (1948). Later the debate of consumption function came into limelight when the Melton Friedman (1957) presented his theory of consumption function: the Permanent Income Hypothesis, which was followed by the contentious consumption theory; the Random walk Hypothesis (RWH) of Hall (1978).

Looking at the available studies one may find the paper of Khan et al (2010) very interesting. They tested the PIH and Absolute Income Hypothesis (AIH) for Pakistan using a comprehensive annual data set from 1970 to 2010. The study concludes that PIH is not valid in Pakistan. The empirical results of the study are consistent with AIH theory based on Keynesian Consumption Function.

Another study worth mentioning is conducted by Nezhed et al (2011). They estimate MPC under the nonlinear framework for Iran. The aim of the study was to test the capacity of Iranian consumption function for nonlinear specified. And they use annual data from 1961 to 2009 to draw empirical results. The study applies various types of nonlinear models with the help of non linear least squares method in order to estimate the MPC of Iran. It is interesting to mention that the empirical findings support the nonlinear framework for Iranian MPC. Moreover the study also indicates that in Iran the current income has a greater power to explain private consumption than permanent income.

Similarly, Manitsaris (2006) examines the consumption function under the PIH for European Union countries, such as Austria, Belgium, France, Finland, Denmark, the Netherland, Luxembourg,

Germany, Greece, Spain, Sweden, Portugal, Ireland, Italy and the United Kingdom covers period from 1980 to 2005. The study uses partial adjustment and adaptive expectation model jointly. The findings of the study demonstrate that in all these European Countries, the Permanent Income Hypothesis practically holds. Thus, empirical results of Manitsaris (2006) support the PIH.

Likewise, Chow (1985) uses Rational Expectation Hypothesis (REH) in order to test the PIH for China. The findings of his study show that in China the PIH holds.

However, Zuchlke and Payne (1989) contend that the PIH may not hold all the time across all countries in the world. Zuchlke and Payne (1989) investigate the PIH for developing countries by using a rich data set. The study selects eight developing countries to test PIH alternatively for each one of them. It concludes that the PIH does not hold in any country in the sample. Thus, the paper rejects notion of the PIH for developing countries. Furthermore, their study reveals that because of the weak and dysfunctional financial institutions in developing countries, the validity of RWH is also doubtful.

Rao (2005) tested the Hall's PIH for Fiji. He applied the Campbell and Mankiw (1990) framework and showed that in Fiji two third of the households make their consumption decisions on the basis of current income. Rao (2007) tested the Hall's PIH hypothesis in Australia and Fiji. He partially rejected the PIH for both of the economies.

Gomes and Paz (2010) investigated the PIH for Brazil, Colombia, Peru and Venezuela. The results of the study indicated that PIH is not hold in Brazil and Colombia due to liquidity constraints because in these economies households are unable to smooth their consumption due to liquidity constraints while they found perverse asymmetry for Peru. However, in case of Venezuela the results are uninformative.

Khan et al. (2012) tested the Hall's Permanent Income Hypothesis and Campbell and Mankiw consumption hypothesis for Pakistan. The results of their study show that 68 percent of households in Pakistan are backwards looking while the remaining is forward looking. Such conclusion therefore, supports argument that current and disposable income is more crucial for the households in Pakistan rather than Permanent Income. Hence, it is plausible to hold that in a country like Pakistan, the PIH hardly holds.

The rest of the paper is organized as follows. Section 2 offers methodology while Section 3 presents the empirical results and discussions. Section 4 of the paper provides the conclusion.

Methodology

In order to estimate the consumption functions , there are several models in consumption literature that can be used. For instance the consumption functions proposed by Friedman (1959), Hall (1978), Campbell and Mankiw (1990) are more sophisticated models to be used. But for the sake of simplicity, we considered the simple form of consumption hypothesis that is based on KCF for our analysis. The model is presented as under:

$$C_t = \alpha_1 + \alpha_2 Y_t + u_t \quad (1)$$

Where C is private consumption, Y is disposable Income, t represents the given time period. The model also includes an error term, u_t . The slope of equation (1) is called Marginal Propensity to Consume (MPC), and the value of the MPC ranges from 0 to 1; that is, $0 < MPC < 1$. According to PIH, consumption of households depends upon its permanent income while permanent income is the current and expected future income of the households. Mathematically the PIH can be expressed as below:

$$C_t = f(Y_t, Y_{t-1}, Y_{t-2}, \dots, Y_{t-n}) \quad C_t = f(Y_t, Y_{t-1}, Y_{t-2}, \dots, Y_{t-n}) \quad (2)$$

As elaborated earlier for equation (1), C_t is the private consumption, Y_t is disposable income, Y_{t-1} is the one period lag of disposable income and Y_{t-n} is the nth lag of the disposable income of the representative households. In our analysis the lag length goes up to 16, thus $n=16$. By applying Koyek's geometric lag Structure (1954) on equation (2) we can derive the following equation:

$$C_t = \beta_1 Y_t + \beta_2 C_{t-1} + \varepsilon_t \quad (3)$$

Where β_1 in equation (3) is the MPC of short run, whereas the long run MPC is $\beta_1 / (1 - \beta_2)$.

Empirical Results

Annual data of five SAARC countries, i.e. Bangladesh, India, Nepal, Pakistan and Sri Lanka are used for the empirical analysis. We exclude Afghanistan, Bhutan and Maldives from the analysis mainly because of the unavailability of data from the whole sample period that we choose. Likewise, Hence, the annual data from 1971 to 2013 of private aggregate consumption and the Gross Domestic Product (GDP) for these countries is extracted from the World Development Indicators (WDI). The study uses the aggregate private consumption as an endogenous variable while the GDP as exogenous variable. Both of the variables are adjusted for inflation using both the Consumer Price Index (CPI) and the GDP deflator respectively.

Table 1:

Average Propensity to Consume (APC) of Bangladesh, India, Nepal Pakistan and Sri Lanka

APC	Bangladesh	India	Nepal	Pakistan	Sri Lanka
1985	0.93	0.8	0.89	0.92	0.99
2095	0.83	0.8	0.90	0.90	0.99
2005	0.77	0.7	0.91	0.88	0.90
2006	0.74	0.6	0.97	0.88	0.86
2007	0.74	0.6	0.97	0.86	0.84
2008	0.74	0.6	0.92	0.85	0.78
2009	0.74	0.6	0.92	0.85	0.80
2010	0.74	0.6	0.95	0.80	0.87
2011	0.75	0.5	0.98	0.82	0.87
2012	0.75	0.5	0.96	0.84	0.86
2013	0.75	0.5	0.96	0.82	0.85
Average APC	0.80	0.74	0.91	0.81	0.95
S.D of APC	0.043	0.1092	0.05389	0.0412	0.1112

Note: Calculations are conducted by authors using annual data from 1975 to 2013.

Data source: The WDI

Table 1 offers the values of Average Propensity to Consume (APC) of Bangladesh, India, Nepal, Pakistan and Sri Lanka. row two, three and four present the average values of APC from 1975 to 2005 for each decade respectively, whereas in row five to row thirteen the values of APCs are demonstrated for each year. Similarly, the last and second last rows respectively offer the average values of APC and standard deviation for the whole sample period.

Table 1 furthermore gives us the general view about the consumption pattern through APC. The average values of APC of Bangladesh, India, Nepal, Pakistan and Sri Lanka are 0.80, .74, 0.91, 0.81 and 0.95 respectively, which show that on average consumers devoted 80%, 74%, 91%, 81% and 95% of their respective income to the consumption. A point worth noting from table 1 is that the APC of Bangladesh shows a decreasing trend till 2010 and increasing slightly after 2010. In the same vein the APC of Nepal and Pakistan maintains a decreasing till 2009 and 2010 respectively and begins to increase there after. While the APC of India is continuously decreasing till 2013, the APC of Sri Lanka shows very high volume initially, albeit begins to decrease gradually after that.

Table 2:*The estimates of the MPCs under the KCF*

Coefficient	$C_t = \alpha_1 + \alpha_2 Y_t + u_t$						
	α_1	α_2	R^2	DW	LM(1)	JB	WH
Bangladesh	-2416**	1.40	0.66	1.24	1.893(0.1420)	0.152(0.412)	3.210(0.095)
India	18491	0.71***	0.65	1.79	2.034(0.1274)	0.215(0.301)	2.102(0.114)
Nepal	.443	0.86***	0.76	1.61	2.743(0.2100)	0.102(0.912)	4.512(0.1092)
Pakistan	3801	0.73*	0.68	1.71	2.153(0.1921)	0.170(0.201)	3.52(0.121)
Sri Lanka	4460***	0.79***	0.80	1.82	1.912(0.1102)	0.192(0.623)	3.286(0.147)

Note: ***p<0.01, **p<0.05, * p<0.10. However the p-value of the diagnostic tests in the parenthesis

Table 2 presents the values of MPCs under the KCF for Bangladesh, India, Nepal, Pakistan and Sri Lanka. As shown in the table 2, the MPC of Bangladesh is 1.40, which is indeed odd and does not adhere to the basic property of the KCF. However, the MPC of India, Nepal, Pakistan and Sri Lanka are recorded as 0.71, 0.86, 0.73 and 0.79 respectively, demonstrating that that current disposable income of house holds plays a critical role in the consumption decision of same households in India, Nepal and Sri Lanka.

Table 3:*The estimates of the MPCs under the PIH in the short run*

Coefficient	$C_t = \beta_1 Y_t + \beta_2 C_{t-1} + \varepsilon_t$						
	β_1	β_2	R^2	DW	LM(1)	JB	WH
Bangladesh	0.27***	0.64***	0.89	1.76	1.021(0.201)	0.501(0.592)	2.110(0.101)
India	0.18***	0.75***	0.92	1.36	1.63(0.301)	0.231(0.211)	2.911(0.011)
Nepal	0.78***	0.13***	0.96	1.26	2.65(0.121)	0.310(0.131)	4.182(0.0611)
Pakistan	0.32*	0.61**	0.81	1.31	2.18(0.101)	0.300(0.125)	3.112(0.092)
Sri Lanka	0.49***	0.39***	0.95	2.03	1.532(0.412)	0.415(0.210)	2.413(0.0518)

Note: ***p<0.01, **p<0.05, * p<0.10. However the p-value of the diagnostic tests in the parenthesis

Table 3 shows that in case of Bangladesh, India, Nepal, Pakistan and Sri Lanka the MPCs under the PIH are recorded as 0.27, 0.18, 0.78, 0.32 and 0.49 respectively. Hence it reveals the fact that in every circumstance, the MPCs under the PIH are smaller compared to the MPCs under the KCF. It is relevant to highlight that the empirical results reported in table 3 support the empirical results that are already reported in table 02; that is, in the short run consumers follow current income when making their consumption choice. However, the PIH hardly holds for developing countries such as Bangladesh, India, Nepal, Pakistan and Sri Lanka. That is because in developing countries

the major part of the disposable income of median households is hardly enough to meet the expense of the consumable commodities. Therefore, it is very unlikely for them to make their decision on the basis of permanent income in the short run.

Table 4:

The estimates of MPCs under the PIH in the long run

Coefficient	MPC in the short run	$(1 - \beta_2)$	MPC in Long Run
Bangladesh	0.27	0.36	0.75
India	0.18	0.25	0.72
Nepal	0.78	0.87	0.89
Pakistan	0.32	0.39	0.82
Sri Lanka	0.49	0.51	0.96

Table 4 reports the values of the long run MPCs which are derived using the short run MPCs under the PIH. As shown in the table 4, the MPC under the PIH are 0.75, 0.72, 0.89, 0.82 and 0.96 respectively. So, the results demonstrate that in the long run consumers can anticipate their future income therefore they duly make their consumption choices considering their permanent income in the long run.

Conclusion

To sum up, this study estimates the MPCs for five SAARC countries, namely Bangladesh, India, Nepal, Pakistan and Sri Lanka. The MPCs under the PIH are estimated in both: short run and long run. Results of the study show that in the short run the MPCs using the PIH is very small for Bangladesh, India, Pakistan and Sri Lanka. Hence, it indicates that in the short runs it is difficult for households to predict their permanent income in developing countries like Bangladesh, India, Pakistan and Sri Lanka. However, our empirical results demonstrate that in case of Nepal the MPCs are high in short and as well long run. Thus, it is concluded that in a small though developing country like Nepal the households can predict the permanent income in both short and in the long run. Hence the PIH holds for such countries.

References

- Campbell, J. and Mankiw, N. (1990). Permanent Income, Current Income, and Consumption. *Journal of Business and Economic Statistics*, 8, 265-279.
- Campbell, J.Y. and Mankiw, N.G. (1989) Consumption, Income and interest rates: re interpreting the time series evidence, Working Papers No. 2924, National Bureau of Economic research, Cambridge, MA
- Chow, Gregory C., 1985. "A Model of Chinese National Income Determination." *Journal of Political Economy*, 93(4): 782-792.
- Craig Well, Roland C., and Llewyn L. Roek., 1992."Evaluating the Retinal Expectation/ Permanent Income Hypothesis: Evidence from Caribbean Countries." *North American Journal of Economics and Finance* 3 (4):121-37.
- Duesenberry, J.S., 1948. "Income Consumption Relations and Their Implications." In L.A. Metzler (ed.), *Income, Employment and Public Policy: Essays in Honor of Alvin H. Hansen*. New York: W.W. Norton and Company.
- Friedman, M., 1959. *A Theory of the Consumption Function*. Princeton: Princeton University Press
- Gomes and Paz (2010) Consumption in South America: Myopia or liquidity constraints? *Economia Aplicada*, 14, 129-145
- Hall, R.E., 1978. "Stochastic Implications of the Life Cycle-Permanent Income Hypothesis: Theory and Evidence." *Journal of Political Economy*, 86(6): 971-987

- Johnston, J. (1984). *Econometrics methods*, 3rded. New York: McGraw-Hill
- Keynes, J.M., 1936. *The General Theory of Employment, Interest, and Money*, London: Macmillan.
- Khan, K. Ali M, and Nishat, M., 2010. "Estimation of Consumption function under the PIH: Evidence from Pakistan," *Kashmir Economic Review* 19 (1): 91-96
- Khan, K. and Manzoor, H. Memon. Che, 2012. "The Hall's Permanent Income Hypothesis: A Case Study of Pakistan." *Asian Economic and Financial Review*, 2(4): 518-522
- Koyck, L. M., 1954. *Distributed Lags and Investment Analysis*. Amsterdam: North-Holland
- Manitsaris, A., 2006 "Estimating the European Union Consumption Function under the Permanent Income Hypothesis." *International Research Journal of Finance and Economics*, 2(3):1450-2887
- Monjazez. M., 1995. Slection the Optimal Consumption Function in Iran, *Journal of Iran Economics*, (16) 42-56.
- NezhadZarra-.M, Saeidi, Naser, S., and Mansoury, Amin ,S, 2011. Estimation of Nonlinear Marginal Propensity to Consume in Iran. *European Journal of Economics, Finance and Administrative Sciences*, 41(2011): 65-72
- Rao, B. Bhaskara, 2005. Testing Hall's permanent income hypothesis for a developing country: the case of Fiji', *Applied Economics Letters*, 12:4, 245 — 248
- Rao, B. Bhaskara, 2007. testing the Permanent income hypothesis for developed countries a comparison between Fiji and Australia,

School of Economics University of South Pacific, working paper
No. 2007/09

Zuchlke, Thmas W. and Payne, James E., 1989. "Test of the Rational
Expectations Permanent Income Hypothesis for Developing
Countries," Journal of Macroeconomics summer 1989, 423-433

GAPS IN MARKETING COMPETENCIES BETWEEN EMPLOYERS' REQUIREMENTS AND GRADUATES' MARKETING SKILLS

Kausar Saeed¹

Abstract

This study was conducted to highlight the gaps in marketing competencies that are required by employers and those that graduates learn at business school. The existing literature was surveyed to identify the knowledge, skills and abilities required by employers in the field of marketing and then contextualized according to the requirements of employers in Pakistan. A survey of marketing graduates was conducted in two parts, competency survey 1 was designed to identify the importance of different competencies required in marketing jobs and competency survey 2 was to make out the level of those competencies present in fresh graduates, according to their (graduates) own perceptions. A comparison was made between the results of two cohorts and it was found that statistically significant gaps existed in required and actual level of few marketing competencies like 'design and implement marketing plan', 'conduct market research' and 'forecasting and budgeting'.

Keywords: Competency, Curriculum, Marketing Knowledge, Marketing Practitioners, Employability Traits.

JEL Classification: Z000

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Introduction

Background of the study

In the last two decades Business Schools have grown rapidly across Pakistan. There are approximately 60 universities and institutes that are providing business education in the country (HEC list). One of the success factors of a business institute is the consistent high demand of its graduates as mentioned by Salami (2007) in his report "The Challenge of Establishing World Class Universities". He states that one factor which differentiates high ranking universities from ordinary ones is that they produce well qualified graduates who are in high demand. Therefore in order to be one of the best business schools, an institute has to maintain high standards in education by upholding a future oriented approach and prepare the MBA graduates for the dynamic business world. The stakeholders of business institutes include their management and faculty, employers of graduates, alumni and present students. The input from all these stakeholders could prove very valuable to augment the education, curriculum and training in various business disciplines.

In order to help the graduates make a smooth transition from students to employees, business schools today are offering a number of courses keeping in consideration the employers' job requirements from fresh graduates, who step into the professional world. All these courses are offered to impart students the relevant subject knowledge and to prepare students for the workplace by developing generic and specific competencies that educators believe will be useful to employers (Rainsbury et al. 2002). Marketing is at the forefront of all businesses. Obviously organizations prefer to employ people who are proficient in marketing skills, like description, analysis and synthesis, presentation and reasoning also in teamwork and communication skills (Ellington, 2005). It is therefore the job of the business institutes to inculcate these skills in their MBAs to make them valuable for companies. It is in this regard that institutions are rigorously trying to identify gaps between what their academics provide and the required sets of knowledge and education in real practice. This study has been conducted to highlight and rank various marketing skills, interpersonal skills and personal traits that are

considered important by early marketing practitioners and the presence of those skills in fresh graduates.

Research Problem

The management of business schools constantly endeavor to ~~increase the employability~~² of their business graduates because the corporate sector demands a lot of professionalism. The more knowledge and skills business schools incorporate in their courses to address the competencies required by the marketing firms the better they would be preparing their students for corporate sector jobs. The first step is to identify the marketing skills that lack proper coverage through the curriculum. One of the best sources, in view of the author, to identify these aspects of marketing is by obtaining feedback from graduates graduated in the last five years and are employed by the corporate sector.

Research Objective

The ultimate objective of this research is to contribute in curriculum development for the marketing discipline to impart the right knowledge and skills that would embed employability attributes in MBA (marketing majors).

The aim of the study is to identify competencies perceived to be important by graduates of 2009-2010, who have spent 3-4 years in marketing jobs and then matching the presence of these competencies in fresh graduates of 2011-2012 with 1-2 years of work experience.

The outcome of the study covers several aspects.

A) To identify important competencies in the field of marketing to function effectively, as perceived by recent MBAs.

B) To point out those gaps where marketing students lack practical knowledge.

C) To identify perceptions of students toward the marketing courses that is most helpful in their jobs. (Least helpful are also extracted).

2-Employability skills is a term that is used to mean, '...key skills, core skills, life skills, essential skills, key competencies, necessary skills and transferable skills.'

Literature Review

Marketing is a challenging and dynamic field. To be effective marketers need a variety of core competencies that are not only technical i.e. marketing related but they fall into areas of hard as well as soft skills. Ellington (2003) work suggest that business education in general must provide business and analytical skills, societal values and ethics, theories, and models so as to make students effective in social and organizational settings. Marketing Education is responsible to instill the marketing competencies that culminate into desirable performance (ibid). Ideally marketing graduates should satisfy the demand of the employers by meeting the job requirements (Dolnicar and Stern, 2003). Relationship-driven model by Hilton et al (2008) of marketing education recommends that three parties, marketing faculty, marketing students and marketing practitioners must take part in curriculum development of marketing studies. The outcome of such work integrated program is to satisfy the demand of the employers by identifying the competencies that are believed to be needed by employers and then inculcating them in marketing students.

Much literature has been devoted to the employability skills of marketing graduates (Hefferman et al (2008), Wellman (2010)). Employability refers to “a set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy” (ESECT, 2003). The most preferable employability skills found in different researches have been summarized in table-1.

Most of the previous studies were conducted amongst employers of different industries as they are the prime customers of business graduates. (Yen et al. 2009; Hodges & Burchell; 2003, McClymont, 2005; Lee, 2009). All these studies provide lists of the desirable marketing competencies preferred by employers of fresh marketing graduates. Table 2 depicts the most preferable five marketing skills identified by each of the above mentioned studies on the subject.

Well (nil) concluded that many entry level graduates were engaged in operational and tactical roles such as promotions and

Table 1*Employability Skills*

Author	Methodology	1st	2nd	3rd	4th	5th
Wellman-2010	Meta analysis	Leadership	communications	Presentations	Numeric and quantitative analysis;	team work
Hefforman-2010		Communication	Teamwork;	Problem Solving Work Ethic	Desirable persona;	Customer focus;
Wellman-2005	Analysis of job listing	Marketing research,	selling,	Internet marketing,	promotion	public relations
Schlee and Harich (2009)	Analysis of job listing	Communication all types	Team/relational/leadership skills	Customer behavior Promotion/advertising	Marketing research	Sales management

channel management. It was less likely to get the chance to be involved in strategic marketing decisions. Therefore most of marketing curriculum that pertains to marketing education cannot be put into practice soon after graduation. Marketing-related work experience was also on the wish list of employers. Dolnicar and Stern, (2003) argues that 95% employers emphasize upon 'Marketing-related work experience and appearance'. Marketing experience was desired by most of the employers and appeared to be an influential factor on hiring decision. This substantiates the compulsory internship in business education.

Table 2*Competencies of Marketing Graduates*

Author of the Research	Methodology	Competencies				
		1	2	3	4	5
Yen.P et al -2009	Survey	Ability to adapt to new technologies	Ability to work in team	Communicate effectively.	Work independently.	Demonstrate ethical practices.
Dolnicar.S (2003)	Survey	Communication skills	A hard working attitude	Time Management	Willingness to learn continuously.	Capable of teamwork
Hodges. D and Burchell.N (2003)	Survey of employers	Ability & willingness to learn	Energy & passion	Teamwork & Cooperation	Interpersonal communication	Customer service orientation
McClymont -2005	Survey	Analyse data/ understand statistics	Conduct situation analysis	Ability to implement a marketing plan	Determine strategies for targeting/ positioning	Prepare a marketing plan
Berry.K et al -2004	Comparison of different majors in business	Understanding competitive environment	Communication skills	Work Ethics	Teamwork	Interpersonal skills
Rainsbury.E et al -2001	Survey of employers	Work planning;	Team-working;	Communications;	Problem solving and decision making.	Leadership, entrepreneurialism, and negotiation

Finally all competencies mentioned were merged and categorized into Marketing Skills, Communication/Interpersonal Skills and Personal attributes, this categorization is the same as used by Hager.P(1995) (Table 1-3). The most desirable qualities of marketing graduates identified by employers can be categorized as 'technical attributes' and 'personal attributes'. Technical attributes come from the marketing knowledge and its application when required like 'making a marketing plan' etc and personal attributes can be 'leadership qualities' and delivering work on time." Different authors have used different basis for grouping these competencies like Dolnicar and Stern (2003) divided the attributes and competencies in four categories. The first category was named 'Formal Qualifications (degree)', 'Skills' (leadership and communication skills) 'Attributes' like (hard-working) and "Work related Personal Characteristics" (Confident, Creative and Sociable). Camuffo and Gerli (2004) evaluated the competencies of MBA graduates and not particularly the marketing graduates in the form of managerial and functional skill profiles. Yen et al. (2009) provided the list of competencies without segmenting it in different sections. Hager (1995) grouped the vocational competencies in three groups, 1) task-based or behaviorist approach, 2) general personal attributes and 3) integrated competency standards. On the whole competencies remain more or less the same but labeled differently in different studies

In order to consolidate the list of competencies, attributes and skills that could make them valuable for employers, weak areas of marketing graduates, requirement of employability skills and employers' wish list are compared and contrasted. The result is summarized in Table 3.

Finally all competencies mentioned in the three columns of Table -3 were merged and categorized into Marketing Skills, Communication/Interpersonal Skills and Personal attributes as used by Hager (1995). Marketing Skills included i) Scan marketing environment , ii) Comprehend Business Processes, iii) Design and implemented marketing plan, iv) Identify marketing problems, v)

Table 3*Consolidated List*

	Weak Areas	EMPLOYABILITY SKILLS	EMPLOYERS' WISH LIST
Communication & Interpersonal Skills	Teamwork	Teamwork	Teamwork Flexibility
	Communication	Communication	Communication
	Problem solving		Problem solving
	Time Management		Time Management
Personal Attributes			Willingness to learn
			Leadership
			motivation
		Organization	
Marketing Skills		Networking	
	Identifying opportunities		Identifying opportunities
	Applying theory to work place		
	Business process management	Promotion	
		Market research	Market research
		Accuracy	Accuracy
		Merchandising	
		Selling	
		Internet marketing	
		Budgeting	
			Customer focus

Conduct Market Research, vi) Make budgets, vii) Design advertising and promotion strategy, viii) Manage promotional events, ix) Perform channel management function, x) Carry out merchandizing, xi) Identify sales issues and opportunities and xii) Measure customer satisfaction.

Interpersonal and communication skills contained presentation and business language, negotiation and persuasion skills, conflict resolution, networking, building relationships, teamwork, interpersonal problem solving and leadership skills. Finally the short listed personal attributes were willingness to learn, able to work independently, commitment to work, personal presentation and ability to deal with pressure, initiative/motivation and time management.

Nearly all the studies which the author was able to explore were relating to employers' requirements. They are the prime customer and their needs are important for business schools to tailor their products (students) accordingly. The researcher could find only one study that was focused on graduates to assess the relevance of their work to marketing courses they have studied. The feedback of graduates at entry level jobs could provide valuable insights for business schools to tailor their curriculum according to the market requirements. (Hilton et al, 2008). The findings of Adams (2000) work provided strong empirical support to the notion that evaluation of marketing courses by students based on three factors- Personal Relevance, Educational Value, and Life Skills.

Marketing Education is a process that is constantly evolving. Credibility and respect in marketing education can only be developed through the application and maintenance of high standards—for marketing teachers, their courses, programs, and students. Therefore, it must be continually examined for potential improvements. Academia, employers and graduates themselves must take the responsibility to flourish KSA required in marketing field.

Research Methodology

Research Design

Focus Group: To contextualize the extracted list of competencies from literature review a focus group of local employers was held. These employers belonged to various sectors including banking, FMCGs, media and advertising. Employers felt that they wanted to see aspirations, not score sheets. In terms of the profile of the prospective employee, members of the focus group said that they prefer those graduates who are willing to get involved in all processes of supply chain and have a customer orientation. Preferred skills required were conceptual, analytical, and interpersonal. They wanted good negotiators, team players, and adaptable, hardworking, dedicated

people willing to take initiatives. Local knowledge and knowledge of concept of ROI in all marketing functions was preferred. They preferred an all-rounder, a generalist rather than a specialist. Most of the required competencies by local employers matched the shortlisted competencies from literature survey.

This research is descriptive and quantitative in nature. Primary data is collected through the questionnaire on the website “kwiksurveys.com” containing close ended questions.

Sample Size and Sampling Method

The population for this cross sectional study was marketing graduates from the year 2009- 2012 of the three Business Institutes of Karachi. The Business Schools selected were Institute of Business Management (IBA), College of Business Management (CBM) and Shaheed Zulfiqar Ali Bhutto Institute of Technology (SZabist). Names and contacts were compiled from Graduate Directories of years 2009 to 2012 of the selected institutes.

The sample for this study was 137 marketing graduates of the last four years that are employed by national or multinational companies. The sampling method was non-probability convenience sampling; to be exact it was a voluntary sample.

Questionnaire

Two similar questionnaires were designed; competency survey 1 (CS 1) was for graduates 2009-2010, and competency survey 2 (CS 2) was for recent graduates 2011-2012. The questionnaires consisted of 5 introductory questions, 29 items under constructs of marketing skills, interpersonal/ communication skills and personal attributes. For competency survey 1, five point Likert scale ranged from ‘Low importance’, ‘Helpful’, ‘Desirable’, ‘Important’ and ‘Essential’ was defined, with the assumption that graduates

having few years of marketing experience could rate general requirements of different marketing competencies. In competency survey 2, recent marketing graduates were asked to rate the level of proficiency of competencies of survey 1 within themselves. Therefore same competencies were listed in the questionnaire with a different scale, ranging from 'Poor', 'satisfactory', 'Fair', 'Good', 'Excellent' , because now the intensity of a particular marketing skill was to be evaluated. The next two questions were identical in both questionnaires. In one, graduates were requested to rate their agreement or disagreement on statements related to CGPA and job performance, effect of marketing majors on job performance, practical knowledge gained during Internship and business ethics. The other question was to evaluate the courses in marketing during MBA program, that are most helpful in marketing careers of graduates, respondents were asked to check a dichotomous response category of yes, in case the learning of the course has positively influenced their jobs or no otherwise.

Online questionnaires were sent to all marketing graduates from 2009-2012. Email addresses were obtained from the graduate directories of IBA, CBM and Szabist. The response rate of both surveys was much lower than the expectations of the author. The obvious reason was that the e-mail addresses and mobile numbers of many graduates had changed since they graduated making it difficult to trace them. The invitation was originally sent to all graduates, CS1 was sent to 299 and CS2 was sent to 379 graduates.

Analysis of Data

A sample of 137 graduates participated in the survey. Out of these, 57 respondents formed the sample of competency survey 1 and 80 formed the sample of competency survey 2.

According to CS1 which it can be seen in Table 4, that the mean rating of the importance of almost all marketing skills lies between 2.93 and 4.18. A mean of more than 3.0 was interpreted by the author as being important and essential. Therefore all marketing competencies identified that were listed in the survey seemed imperative to be successful in early stage of marketing profession. In order to fulfill the second objective, the comparison of competency level which the fresh graduates believe that they possess, was checked against the level of importance mentioned by MBAs having 3-4 years of experience. In 11 out of 13 marketing skills identified, the mean value of marketing skills of CS2 was less than CS1. To check its statistical significance (via a t-test of equality of means) the differences in these means were tested. Three competencies 'design and implement marketing plan', 'to conduct market research' and 'forecasting/budgeting' were found to be statistically significant (table 4). This implies that faculty of marketing may need to concentrate on bringing in additional resources from the "real-world" to energize their teaching.

Figure 1

Comparison of between desired and actual level of marketing skills

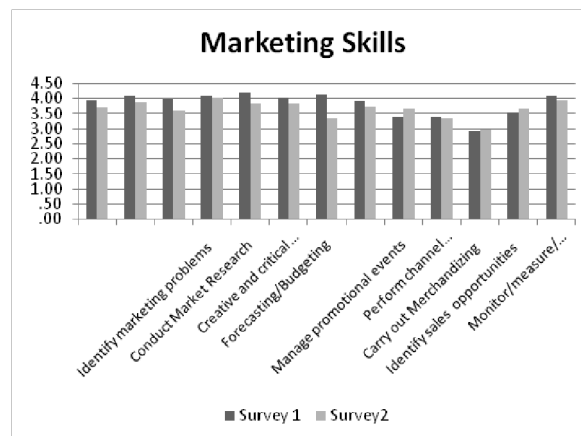


Table 4*T-test for Equality of Means of Marketing Skills*

	t	Sig. (2-tailed)	Mean Difference	Lower	Upper
Analyze the organization's marketing environment	1.431	0.155	0.242	0.093	0.577
	1.386	0.169	0.242	0.104	0.589
Comprehend Business Processes	1.574	0.118	0.225	0.058	0.508
	1.56	0.122	0.225	0.061	0.511
Design and implemented marketing plan	2.167	0.032	0.39	0.034	0.746
	2.09	0.039	0.39	0.02	0.76
Identify marketing problems	0.326	0.745	0.058	0.292	0.408
	0.313	0.755	0.058	0.308	0.423
Conduct Market Research	2.046	0.043	0.35	0.012	0.689
	2.027	0.045	0.35	0.008	0.693
Creative and critical thinking in Branding	0.992	0.323	0.18	0.179	0.539
	1.003	0.318	0.18	0.175	0.535
Forecasting/Budgeting	3.968	0	0.798	0.4	1.195
	4.14	0	0.798	0.417	1.179
Design advertising/promotion strategy	1.043	0.299	0.2	-0.179	0.579
	1.047	0.297	0.2	-0.178	0.578
Manage promotional events	-1.272	0.206	-0.264	-0.675	0.147
	-1.292	0.199	-0.264	-0.668	0.14
Perform channel management functions	0.093	0.926	0.018	-0.375	0.411
	0.095	0.925	0.018	-0.367	0.404
Carry out Merchandizing	-0.152	0.88	-0.033	-0.459	0.393
	-0.15	0.881	-0.033	-0.465	0.399
Identify sales issues and opportunities Manage promotional events	-0.676	0.5	-0.136	-0.534	0.262
	-0.671	0.504	-0.136	-0.538	0.266
Monitor/measure/evaluate customer satisfaction	0.639	0.524	0.121	-0.255	0.497
	0.627	0.532	0.121	-0.262	0.505

Similarly the next section of the questionnaire consisted of Communication/Interpersonal skills. Figure 2 shows the comparison of the mean importance of skills and actual level of expertise on that skill can also be seen in fig 2. A comparison of the mean importance of skills and actual level of expertise on that skill can also be seen in fig 2. The differences in these means were tested with t-test of equality of means and 'business language and expression', 'negotiation/persuasion', 'conflict resolution', 'networking', 'building relationships' and 'interpersonal problem solving skills' found to be statistical significant. This finding is in line with much of the previous research focusing on generic skills of entry-level positions which suggested

that as a novice in the marketing field graduates were placed mostly in support roles, they were required to develop workplace knowledge and learn internal communication methods (Walker, 2009).

Figure 2

Comparison between Desired and Actual Level of Communication/Interpersonal Skills

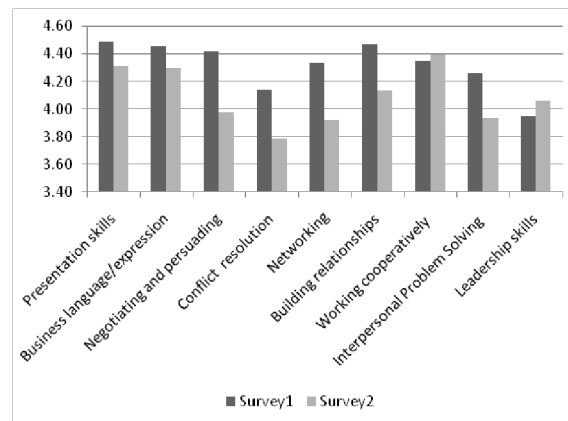


Table 5

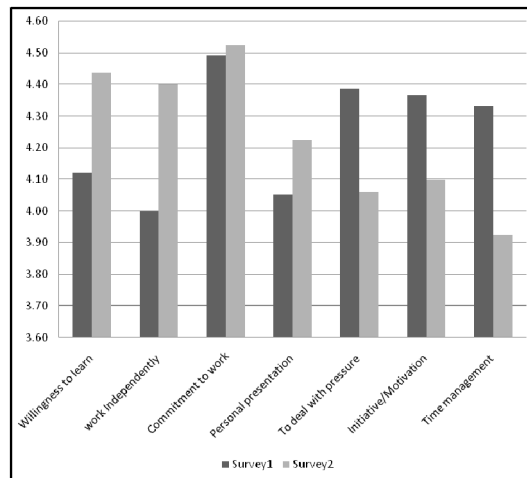
t-test for Equality of Means of Communication/Interpersonal Skills

Interpersonal/Communication Skills						95% Confidence Interval	
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Presentation skills	1.398	135	.164	.179	.128	-.074	.432
	1.337	100.057	.184	.179	.134	-.086	.444
Business language and expression	1.299	135	.196	.156	.120	-.082	.394
	1.319	126.876	.190	.156	.118	-.078	.390
Negotiating and persuading	3.528	135	.001	.446	.126	.196	.696
	3.526	120.575	.001	.446	.127	.196	.697
Conflict resolution	2.273	135	.025	.353	.155	.046	.660
	2.245	115.095	.027	.353	.157	.041	.664
Networking	2.734	135	.007	.408	.149	.113	.704
	2.669	109.692	.009	.408	.153	.105	.712
Building relationships	2.280	135	.024	.336	.147	.045	.628
	2.235	111.689	.027	.336	.150	.038	.634
Working cooperatively within a group	-.363	135	.717	-.049	.135	-.317	.218
	-.359	115.325	.720	-.049	.137	-.320	.222
Interpersonal Problem Solving Skills	2.358	135	.020	.326	.138	.052	.599
	2.325	114.462	.022	.326	.140	.048	.603
Leadership skills	-.751	135	.454	-.115	.153	-.418	.188
	-.721	101.471	.473	-.115	.160	-.432	.202

An interesting observation can be made that in two competencies, i.e. 'Leadership skills' and 'working cooperatively', the level of skills fresh graduates perceive to have, is more than the importance given to these interpersonal skills. Here the assumption can be drawn that fresh graduates being over ambitious rate themselves higher than what actually their capabilities are. Just because someone took a class in negotiations doesn't mean they are any good at it rather it could cause a number of problems. Confidence is good, but not when it overshadows the inability (Slater, 1995). Moreover experience with [leadership](#) comes working under the [leadership](#) of others. Lack of experience seems to show up the most when someone is put in charge of managing and [leading](#) others. Therefore MBAs need to have real experience with good results in management either before or after getting their master's degree.

Figure 3

Comparison between Desired and Actual Level of Personal Attributes



In the same way comparison of two surveys on the basis of mean ratings, identifying desired and actual level of personal attributes can be seen in figure 3. Out of listed personal attributes, 'ability to deal with pressure', 'initiative/motivation' and 'time management' was

found to be statistically significant (Table 6). In two traits 'willingness to learn' and 'commitment to work' fresh graduates rated themselves quite high. The reason can be cited in the words of Slater.J (1995) that "This is more of an issue with people who have had very little real work experience" Although MBA programs offer good content but simply being exposed to a lot of great ideas doesn't say much about ability to implement those ideas in real life. In previous researches 'willingness to learn' was considered to be the most important attribute (Rainsbury et al, 2002, Wellman.N, 2010) but in the present study it came on fifth position out of seven attributes listed.

Table 6

t-test for Equality of Means of Personal Attributes

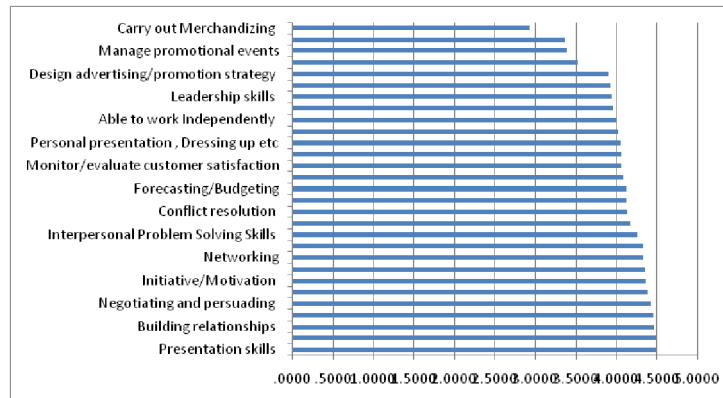
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Willingness to learn	-2.201	135	.029	-.315	.143	-.597	-.032
	-2.168	113.920	.032	-.315	.145	-.602	-.027
Able to work Independently	-2.777	135	.006	-.400	.144	-.685	-.115
	-2.743	115.224	.007	-.400	.146	-.689	-.111
Commitment to work	-.278	135	.781	-.034	.121	-.274	.206
	-.274	114.235	.784	-.034	.123	-.278	.210
Personal presentation , Dressing up etc	-1.069	135	.287	-.172	.161	-.491	.146
	-1.068	120.258	.288	-.172	.161	-.492	.147
Ability to deal with pressure	2.588	135	.011	.323	.125	.076	.571
	2.583	119.927	.011	.323	.125	.076	.571
Initiative/Motivation	2.085	135	.039	.268	.129	.014	.523
	2.101	123.972	.038	.268	.128	.016	.521
Time management	2.790	135	.006	.408	.146	.119	.698
	2.763	116.356	.007	.408	.148	.116	.701

Figure 4 represents mean importance of all the competencies under three constructs. It can be seen that soft skills or non-technical skills are ahead of hard skills or technical (marketing) skills. Much of the literature emphasizes the critical importance of developing marketers those who are all-rounders (Heffernan et al. 2010; Welman, nil). This is supported by the respondents of the competency survey

1, which placed equal importance on marketing, communication and interpersonal skills in the workplace. Personal attributes were ranked a little less than the aforesaid competencies.

Figure 4

Ranking of Workplace Competencies



The perception of graduates, from 2009-2012, was gauged on different aspects like CGPA, utility of marketing majors, internship experience and work ethics. The scale used was 5- point liker scale ranging from “strongly disagrees” to “strongly agree”.

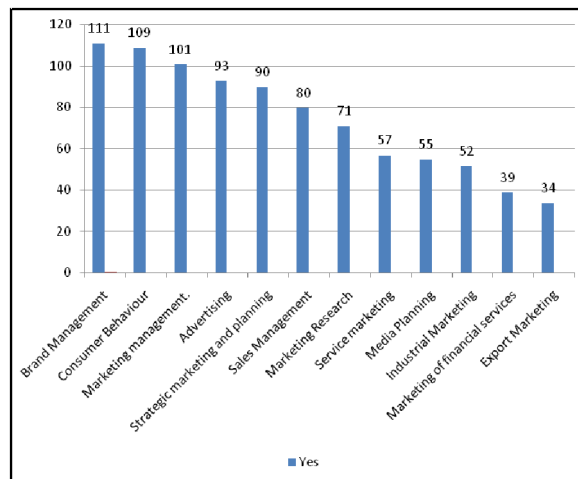
Graduates disagreed with the notion that a high CGPA is a prerequisite to perform well in the job. Graduates showed positive attitude towards courses offered in MBA as they perceived them worthwhile. The statement “*Internship experience enhanced my knowledge about working in the organization*” showed a general positive experience with internships. Most employers’ prefer that it was important for graduates entering business roles to have some business work experience prior to completing their Master’s degree as mentioned by Schlee and Harich (2010) “Most employers seek to hire applicants with skills and experience, rather than new college graduates”.

'Strong moral and ethical values' was one of the requirements of employers in the focus group that was conducted to contextualize the identified competencies. For the statement "*University has instilled strong work ethics in me*" the mean value is ($M=3.64$) which is more than neutral but for the characteristic that has been spelled out specifically by employers, the mean value of perception of graduates should have been higher. The author believes that business/marketing ethics is another area where business schools should concentrate as the overall values of society are on decline.

To address the last objective of the research that was to identify all those marketing courses that was helpful to the graduates while performing their jobs. The methodology used to evaluate the marketing courses is simply dichotomous question of 'yes' or 'no' according to the experience whether the listed marketing courses were helpful or not. Figure 5 shows the frequencies of yes meaning the knowledge gained from the course was applicable in professional life of graduates.

Figure 5

Graduates' Perception towards Practical Importance of Marketing Courses



Summary and Conclusions

The motivation to undertake this research was to identify and better understand the perceptions of marketing graduates about the skills, knowledge, and competencies that are essential to obtain and progress in a marketing positions. Once these competencies are identified, business schools could design their curricula to inculcate these competencies in their MBAs. Developing tomorrow's marketing professionals is not an easy task because of the rapid changes in the marketplace, fierce competition and the world truly becoming a global village. In this scenario marketing employers are expected to develop partnerships with universities to prepare individuals for the challenges ahead, and they should expect that nearly all marketing graduates would have acquired a set of common competencies. This study found out that both technical (marketing) skills as well as non- technical skills are important for fresh graduates to start in their marketing profession. According to the sample the three most required competencies were Presentation skills, Building relationships and Negotiation/persuasion skills. All of them belong to the construct of communication and interpersonal skills. Therefore it can be established that from new graduates' employers expect less marketing skills and more non-technical skills. This does not undermine the importance of marketing related Knowledge, Skills and Abilities; they are essential to provide a holistic approach in professional outlook but might be very initially after employment, fresh graduates need to display more communication/ interpersonal skills to perform in a support job role.

The general perception among graduates is that CGPA cannot be taken as the basis of good performance in marketing jobs. Although graduates conformed to the idea that marketing majors provided them with solid marketing background, they felt that there was room for improvement in curriculum and its delivery to raise them to the best of their potentials.

An important aspect in designing marketing curriculum for MBAs is that subjects offered in the program should be helpful in making new graduates settle down in the job. The study findings are positive about majority of marketing courses taught in most of the business schools i.e. they are relevant to marketing jobs. Mix of marketing courses offered seems to be appropriate. Courses like brand management and consumer behavior were found to be very helpful while stepping in practical world and it was also recommended by employers in focus group to make them as core courses. Other courses like marketing management, advertising and strategic marketing gave practical knowledge to students. However, marketing education's ability to remain viable in this new millennium will be dependent upon marketing educators' abilities to stay in tune with their graduates' and employers' of graduates' perceptions as well their abilities to deliver quality courses and programs.

The data collected is based on a small sample of graduates and no attempt has been made to evaluate whether the subjects the students said were helpful corresponded to job roles or not. It is nevertheless held that the findings send strong messages to the marketing faculty regarding the application of subjects graduates are most likely to encounter in their first and early career posts.

To conclude it is suggested that the standards' knowledge and understanding component could be used to form the basis of a marketing curriculum that is recognized by employers as being relevant to the workplace. The outcomes and behaviors of effective performance could be used as the basis of development of learning outcomes and assessment criteria which go beyond testing knowledge alone

Limitations

Initially four of the top business schools of Karachi on the HEC list, namely IBA, CBM, Szabist and Iqra were selected. However

graduates from Iqra were not included as only 2012 directory was available for that institute.

Another problem faced was that e-mail addresses and cell numbers of many graduates, specially the batches of 2009-2010, were no longer in use so it was not possible to contact them. Another handicap faced was the tendency of people to discard e-mails from anonymous contacts.

Future researchers may consider the study from all the employers hiring university graduates.

References

- Berry.K, Bryan.D and Cummings.M (2004). Secondary School Business Educators' Perceptions of the Knowledge, Skills and Abilities Needed by Information Systems Majors Relative to Other Business Majors. *Journal of Information Technology Education*, Volume 3.
- Dolnicar.S and D. Stern.(2003) What Do Australian Practitioners' Expect from Marketing Graduates? *Proceedings of the Australian and New Zealand Marketing Academy Conference ANZMAC*
- Ellington.R, (2003,) What Is Missing from Business Education? Meeting the Needs of Emerging Market Business Education. *The Business Education and Emerging Market Economies: Trends and Prospects Conference*
- ESECT, Are your Students Employable? National Union of Student Councils:
(<http://www.palatine.ac.uk/files/emp/1247.pdf>: Access: 27/5/2010)
- Hager, P. (1995). Competency Standards—A Help or a Hindrance. *Vocational Aspect of Education*, no. 2, volume 7, 141-151.
- Heffernan.T, Feng.W, Angell.R, Fang.Y (2010) Employability and Marketing Education: Insights from the United Kingdom, <http://anzmac2010.org/proceedings/pdf/anzmac10Final00140.pdf>
- Hilton.T, Bhat.R., Hyde, K. and Yingzi.X. (2007), The future-proofed practitioner: A service-centered marketing curriculum. *3R's Reputation, Responsibility & Relevance: The Proceedings of the Annual ANZMAC Conference*. December, Otago University, Dunedin
- Hodges.D and Burchell.N, (2003). Business Graduate Competencies: Employers' Views on Importance and Performance, Faculty of Business, *Asia- Pacific Journal of Cooperative Education*.

- Lee. Y.(2009). A Comparison Study of HRD Master's Degree Competencies, *Human Resource Development Quarterly* • DOI: 10.1002
- McClymont.H, Volkov.M and Gardiner.M. (2005). Employer (Dis)Satisfaction With Australian Marketing Graduates: The Development Of A Research Framework, Marketing Education, no 5 volume7, Fremantle, Western Australia.
- Rainsbury.E , Hodges.D, Burchell.N.(2002) Ranking Workplace Competencies: Student and Graduate perceptions. *Asia-Pacific Journal of Cooperative Education*
- Salami. J, The Challenge of Establishing World-Class Universities <http://portal.unesco.org/education/en/files/55825/12017990845Salami.pdf/Salmi.pdf>)
- Schlee.R and Harich (2010), Knowledge and Skill Requirements for Marketing Jobs in the 21st Century, *Journal of Marketing Education* 32(3) 341–352
- Walker.I, Tsarenko. Y and Wagstaff.P(2009). The Development of Competent Marketing Professionals, *Journal of Marketing Education*, Volume 31 Number 3
- Wellman, N (2010) 'Relating the curriculum to marketing competence: a conceptual framework', *The Marketing Review*, 10 (2); 119-134, doi: 10.1362/146934710X505735
- Wellman.N (nil), An empirical investigation to identify the attributes and qualifications requirements of employers for early career marketers.
- Wellman.N (2011), Job Profiles of Early-Career Graduate Marketers: an Analysis of Marketing Duties and Job roles, <http://smib.vuw.ac.nz:8081/www/anymac2005/cd-site/pdfs/8-Mktg-Edn/8-McClymont.pdf>
- Yen.P, Ng, Kamariah.S, Abdullah, Hwa.P, Huong.N, Tiew,(2009) Employers' Feedback On Business Graduates: An Exploratory Study In Curtin Sarawak. *International Review of Business Research Papers*, Vol. 5 No. 4, Pp. 306-321.

INTEGRATED USE OF RATIONAL AND INTUITIVE DECISION MAKING STYLE: MODERN TRENDS IN ORGANIZATIONAL DECISION MAKING

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Abstract

The present study reviewed the literature based on a century of the theoretical and empirical work on decision making styles. Both in theory and research, the traditional trends limited the decision makers to either rational or intuitive strategies in decision making. Limited amount of literature emphasized on both rationality and intuition in decision making until in the recent decades when some researchers emphasized the use of mixed strategies in decision making. Thus the present study illustrates the importance of combining the rational and intuitive style and using a mixed-style in decisional scenarios. Thus the rational-intuitive and the intuitive-rational style double the benefits as both styles have some shared and some other unique qualities which maximize the outcomes when used in connection. Finally, the present study suggests a transition from uni-style tradition to mixed style decision making.

Keywords: Rational style, Intuitive style, Mixed style.

JEL Classification: Z000

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Introduction

Decision making is an ancient art. Its imprints can be traced back into prehistoric regimes when human beings were used to obtain guidance from stars. With the passage of time, they developed more refined tools to solve their problems in a more sophisticated manner and now the decisions are as fast as an eye blink (Buchanan & O'Connell, 2006). From the ancient times until now, individuals used to make decisions in different modes and ways. Behaviourists labelled these individual's typical model of interpreting and responding to decisional tasks as decision making style (Driver, 1979; Harren, 1979). Scott and Bruce (1995) defined decision making style as "the learned, habitual response pattern exhibited by an individual when confronted with a decision situation" (p. 820). Right after the illustration of rigidly held trait-based human distinctions, behaviourists proposed the concept of style in order to describe individual differences (Andersen, 2000). Some researchers linked the decisional styles to cognitive styles in order to describe the sharp brain-based differences among individuals (Hunt, Krzystofiak, Meindle, & Yousry, 1989; Rayner & Riding, 1997). Such cognition-based sharp distinction limited decision researchers to uni-style trends and served as a barrier for the conception of mixed strategies in decision making (Riaz, 2009). But in the current decade, a bit transition taken place in the traditional uni-style trends and the conception of mixed-styles in decision making emerged (Singh & Greenhaus, 2004; Williams, 2003).

Decision making is a multifaceted and multi-dimensional phenomenon. The focus in decision making varies from discipline to discipline. The most important decision related disciplines are economics and psychology (Harrison, 1999). Rational style is the brainchild of economics (Chater, Oaksford, Nakisa, & Redington, 2003; Mangalindan, 2004) whereas intuitive style is the creation of psychology (Jung, 1976; Luthans, 2000). Harrison (1999) illustrates

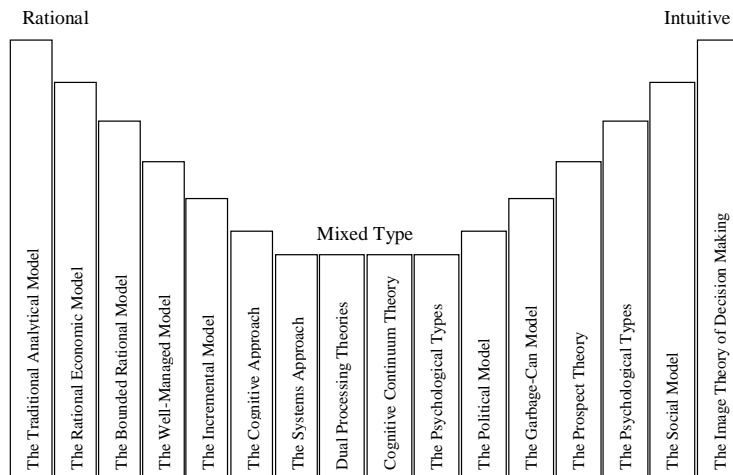
that an eclectic approach to decision making may better facilitate in understanding the scope and importance of decision making because both disciplines have different doctrines. The rational economic approaches advocated 'the economic man' who is maximizer in nature and uses all the means to reach at an ideal end (Hendry, 2000). On the other hand, intuitive decision making style is more satisfying in nature (Driver et al. 1990) which is more related to feelings, emotions, and impressions (Scott & Bruce, 1995). The present study is in part an attempt to integrate the economic-based rational style and psychology-based intuitive style of decision making into a mixed strategy.

Past literature indicates that decision theorists limited themselves to either rational or intuitive choices as two separate ways of making decisions. Like Wedley and Field's (1984) traditional analytical model of decision making completes the decisional tasks into structured eight step procedures which are led by rationality. Similarly, rational economic model based on neo-classical economic ideology was also governed by logic and rational analysis in decision scenarios (Hendry, 2000). All the options are considered, rationally evaluated, and the final decision is based on optimal choices (Hellreigel, Slocum, & Woodman, 2001; Mangalindan, 2004). The perfect rationalism was challenged with the passage of time. Simon (1957) criticized the mean-end sequence and proposed a bounded rational model which is well known as normative or administrative model of decision making. Thus the perfect rationality turned into bounded rationality based on limited information processing, judgment heuristics, and satisfying choices. In the later years, Lindblom's (1959) incremental model and Peter and Waterman's (1982) well-managed model were also based on limited rationality although these models were more flexible than perfect rationalism. The major transition took place when Kahneman and Tversky (1981) rejected the legacy of perfect rationality and proposed prospect theory of decision making.

Time constraints, decision speed, and cost of acquiring information restricted twentieth-century theorists to make decisions with an adequate amount of information (Buchanan & Connell, 2006). Intuitive decision making style earned much popularity in the recent years although its imprints can be traced back to Chester Barnard (1938). In his book, *Functions of the Executive*, Barnard not only introduced the term decision making in the business world but also introduced the rationality based logical and intuition based illogical process of decision making (Novicevic, Hensch, & Wren, 2002). The garbage-can model of organizational decision making (March, Olsen, & Christensen, 1976; March & Olsen, 1984), the dysfunctional conflicts based political model (Hoy & Miskel, 1991), and the social model of decision making (Fiske & Taylor, 1991; Luthans, 2000; Sherman, Judd, & Park, 1989) were more intuitive in nature. Finally, Beach and Mitchell's (1990) image theory introduced the concept of perfect intuitive decision making. In the heart of the theoretical work on decision making which limited theorists to either rational or intuitive strategies, Jung (1976) emphasized rationality and intuition in decision

Figure 1.

Theories of organizational decision making based on rationality, intuition and mixed type i.e. rationality and intuition



making at the same time and proposed that individual's decision making styles can be identified by assessing these two functional dimensions in conjunction (Andersen, 2000).

Decision literature depicts that past researchers introduced numerous unique decision making styles according to their cultures, contexts, and circumstances. But the shared aspect of the research on decision making styles is the consideration of rational and intuitive decision making style by almost all of the decision researchers (Arroba, 1977; Briggs & Myers, 1943; Harren, 1979; Mitroff & Kilmann, 1975; Phillips, Pazienza, & Ferrin, 1984; Scott & Bruce, 1995) although they considered both styles as distinctive dimensions of human nature. Researchers (Klaczynski, 2001; Stanovich & West, 2000; Sternberg, 1997) illustrated that the line of distinction between cognitive style, learning style, thinking style, and decision-making style is based on the distinction between rational and intuitive approaches. The past literature indicates that decision researchers were stick to the assumption that decisions are solely based either on rationality or on intuition.

Decision making researchers are of the view that mental processes operate in two distinct ways. Traditional rational deliberation or reasoning is the one mode and the rapid, mechanical and effortless intuition is the other mode (Kahneman, 2003). Dual process theories considered both sides of human nature i.e. rationality and intuition (Sloman, 2002; Hogarth, 2001; Gilbert, 2002; Kahneman & Frederick, 2002). In the heart of dual process theories, Stanovich and West (2002) introduced system 1 and system 2 as two types of cognitive systems that influence decision making. System 1 is characterized as a speedy, mechanical and effortless process (Slovic, Finucane, Peters, & MacGregor, 2002). These processes are related to the intuitive side of human nature (Payne & Bettman, 2004). Similarly system 2 is the effortful and logical process (Cobos, Almaraz & Garcia-Madruga, 2003). Time pressure and cognitive burden are considered

as two determinants of the choice of a specific system (Gilbert & Gill, 2000).

The most important issue to be considered is that these systems are not perfectly independent but are relatively independent (Sadler-Smith, & Sparrow, 2007). In spite of their relative nature, past literature indicates that researchers attempted to acknowledge the unique nature of these styles, but not many efforts were made to merge these two styles in order to unite their in-built benefits. Keeping this issue in consideration, Payne and Bettman (2004) suggested that attempts should be made to understand the interaction between these two systems instead of considering them as separate dimensions. According to researchers (Stanovich & West, 2002) these systems do not stand apart on the poles and are more interactive in nature.

The secondary important sources of distinction and integration in rational and intuitive decision making style are based on individual differences, organizational, contextual and environmental factors (Rowe & Boulgarides, 1992). In the present decade, decisions are made under mixed labour, mixed climate, mixed culture, and mixed environments. Due to the breakdown of glass-ceiling, now men and women work together. Less experienced employees in the growing organizations are mentored by more experienced employees. Less aged workers are welcomed from and replaced with freshmen. Similarly, mixed cultures prevail in the modern multinational organizations. In the large organizations, multiple layers exist and employees perform tasks under top, middle, and lower level management. Both programmed and non-programmed decisions are made by the managers. Similarly, both operational and strategic decisions are taken. Sometimes managers make decisions under time pressure, ambiguity, risk and uncertainty. Other times managers are certain and clear regarding decisions. Thus, the present-day decision environments are more suitable for mixed-strategies rather than simple rational or intuitive choices.

A good deal of research is evident that both rational and intuitive decision making style results in positive personal and job outcomes in organizations (Bruine de Bruin, Parker, & Fischhoff, 2007; Mau, 2000; Scott & Bruce, 1995; Riaz, 2009; Singh & Greenhaus, 2004; Shiloh & Shenhav-Sheffer, 2004; Thunholm, 2004). However, in the past years, the most prominent assumption in the body of literature was that decision makers are rational (Shafir & LeBoeuf, 2002). Past researchers (Harren, 1979; Holland, 1985; Super, 1980) considered it as an ideal style of decision making although evidence of its superiority is inconsistent (Philips, Paziienza, & Farrin, 1984). Rationality based decisional trends dominated in the organizations till 1980s when intuition was considered a neglected topic. In the early 1990s a transition took place from methodological rational analysis to emotions-related intuitive decision making (Bohm & Brun, 2008). Consequently, intuitive decision making was recognized as a hot and popular topic in the recent decade (Hogarth, 2001; Peters, Vastfjall, Garling, & Slovic, 2006).

Although both rational and intuitive style is related to positive organizational outcomes but still each style holds some unique features. In the times of emergency, complexity, ambiguity, uncertainty, risk, and time pressure, intuitive decision making style is more appropriate that involves a creative solution based on overall situational recognition instead of making a feature-by-feature analysis (Bergstrand, 2001; Bryant, 2002; Callan & Proctor, 2000). Similarly intuitive decision making style is more appropriate in strategic decisions (Khatri & Alving, 2010). Evidences indicate that both rational and intuitive decision making style results in mixed outcomes. Some researchers (Cooksey, 2000; Dunwoody, Haarbaaur, Mahan, Marino & Tang, 2000) advocate the superiority of rational style over intuitive style. Others illustrate that both are similar in effectiveness (Hammond, Hamm, Grassia & Pearson, 1997). Similarly, in the absence of the consensus and in the presence of uncertainty, rational style is inappropriate (Dean & Sharfman, 1993).

Hammond, et al. (1997) illustrate that both rational and intuitive style can be used on a continuum with reference to their relative position instead of considering them as two opposite poles of the continuum. In management, theories considering psychological constructs as ends are now more flexible in nature. Just like transactional and transformational leadership theory of Burns (1978) considered both styles as opposite poles but recent advancements in the theory suggested that both styles stand on a continuum on which an individual leader rates his or her leadership (Bass & Reggio, 2006). Now no one is perfectly transformational or transactional instead both share some qualities and their relative standing on the continuum determines their position as a leader (Bass & Avolio, 2003). Similarly keeping in view the stand point of Hammond, et al. (1997), rational and intuitive style should not be rigidly placed on the ends of a continuum instead an individual's relative standing between these two styles should determine his or her style. Thus an intuitive decision maker should share some rationality and a rational decision maker should consider some intuition to make superior choices.

The prior illustration depicts that both styles are related to positive outcomes. But rational decision making style is considered appropriate in well-planned, well-managed, and well-organized conditions where less time pressure, less ambiguity and less risk and uncertainty is present. In the opposite conditions, intuitive decision making style is considered suitable (Scott & Bruce, 1995). Therefore if the rational style serves the practical concerns, the intuitive style serves the time concerns. Beside these in-built qualities, intuitive decision makers are prone to miss some important information in haste and rational decision makers are more likely to involve in too much processing. Consequently, a balanced approach in decision making can be more appropriate for effective decision making (Spicer & Sadler-Smith, 2005). Rationality is head and intuition is heart. When both are considered at the same time, effective decisions can be made. Effective managers from different levels in organizations opt both rational and intuitive choices (Riaz, 2009).

Transition from Multiple to Mixed Strategies in Decision Making

No doubt some past researchers suggested the use of multiple styles in decision making. Decision research shows that only few people opt for one dominant decision making style. Most of the people are inclined toward opting for two or three decision making styles (Rowe & Mason, 1987). The majority of managers are predisposed to adopt a dominant style of decision making which is known as primary style other than they employ backup style by adjusting their styles according to situational demands. Individuals have one primary, one secondary and one least prefer style. It is one of the many reasons that most individuals employ decision styles in conjunction (Driver et al., 1993). But the issue is that most managers adopt the backup style or secondary style when the primary style fails. In this way, the managers limit themselves to one decision making style at one point in time. Singh and Greenhaus (2004) illustrate that decision makers are not limited and they must not limit themselves to one strategy while making important decisions. Continually involving in multiple decisional strategies is pretty effective. Therefore, it is more appropriate to use a mix-type style of decision making considering the rationality and intuition at the same time.

Williams (2003) illustrates that through brainstorming both left (rational) and right (intuitive) sides of the brain functions can be integrated which leads to creative problem solving and decision making. When the methodological based rational analysis is combined with emotion-laden intuitive style, it maximises its outcomes by incorporating the benefits of the both styles.

In fact in real decision scenarios, individuals use mixed strategies either consciously or without conscious awareness. When individuals claim to be rational decision makers, they are no longer perfectly rational (Simon, 1957). Similarly, when individuals claim to be intuitive, they are no longer perfectly intuitive because intuition involves synthesis of the information (Mitchell & Beach, 1990). Thus

integrating rational and intuitive decision making style into a mix-style which incorporates the inbuilt characteristics of the both styles can leads to superior organizational outcomes (Nygren & White, 2002). When managers make decisions solely based on the rationality, employees are less likely to accept the mechanic and rigidly defined methodological choices. Similarly, when managers make decision on the bases of intuitive decision making style involving feeling, emotions, and impressions, there is the probability that some practical concerns can be missed (Scott & Bruce, 1995). But if the head is combined with the heart and both are taken into consideration at the same time, an ideal decision is inevitable.

Conclusion

The present study is based on the review of the theoretical and empirical literature on rational and intuitive decision making styles. The current review suggests a new insight to change the traditional trends of uni-style usage in decision making and introduces the concept of mixed strategies. Thus the current study suggests that instead of using rational or intuitive styles, the managers should use rational-intuitive or intuitive-rational styles i.e. mixed styles in decision making. The mixed style can lead to various productive outcomes because of the integration of the in-built qualities of the both styles of decision making.

References

- Andersen, J. A. (2000). Intuition in managers: Are intuitive managers more effective? *Journal of Managerial Psychology*, 15(1), 46–63.
- Arroba, T. (1977). Styles of decision making and their use: An empirical study. *British Journal of Guidance and Counselling*, 5, 149–158.
- Barnard, C. I. (1938). *The functions of the executive*. Cambridge, MA: Harvard University Press.
- Bass, B. M., & Avolio, B. J. (2003). *Multifactor Leadership Questionnaire feedback report*. Redwood City, CA: Mind Garden.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Beach, L. R., & Mitchell, T. R. (1990). Image theory: A behavioural theory of image making in organizations. In B. M. Staw & L. L. Cummings (Eds.), *Research in Organizational Behaviour*, 12, 1–41. Greenwich, CT: JAI Press.
- Bergstrand, B. (2001). Situating the estimate: naturalistic decision making as an alternative to analytical decision making in the Canadian Forces. Retrieved on June 13, 2009, from <http://wps.cfc.dnd.ca/irc/nh9798/0021>
- Bohm, G., & Brun, W. (2008). Intuition and affect in risk perception and decision making. *Judgment and Decision Making*, 3(1), 1–4.
- Briggs, M. I., & Myers, P. B. (1980). *Gifts differing: Understanding personality type*. Mountain View, CA: Davies-Black Publishing.
- Bruine de Bruin, W., Parker, A. M., & Fischhoff, B. (2007). Individual differences in adult decision-making competence. *Journal of Personality and Social Psychology*, 92, 938–956.
- Bryant, D. J. (2002). *Making naturalistic decision making “fast and frugal”*. Toronto: Defence Research Development Canada.
- Buchanan, L. & O’Connell, A. (2006). A brief history of decision making. In T. A. Stewart (Ed.), *Decision making: Better, faster, smarter*. *Harvard Business Review*, 6(8), 33–41.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row Publishers Inc.
- Callan, J., & Proctor, S. (2000). Tactical decision making under uncertainty: Experiments I, and II. *Technical Report*, 1821, April,

- Pacific Science and Engineering Group*. California: SSC San Diego, Inc.
- Chater, N., Oaksford, M., Nakisa, R., & Redington, M. (2003). Fast, frugal, and rational: How rational norms explain behavior. *Organizational Behavior and Human Decision Processes*, 90, 63–86.
- Cobos, P. L., Almaraz, J., & Garcia-Madruga, J. A. (2003). An associative framework for probability judgment: An application to biases. *Journal of Experimental Psychology-Learning Memory and Cognition*, 29(1), 80-96
- Cooksey, R. W. (2000) Commentary on 'Cognitive adaptation and its consequences: A test of cognitive continuum theory'. *Journal of Behavioural Decision Making*, 13, 55–59.
- Dean, J., & Sharfman, M. (1993). Procedural rationality in the strategic decision-making process. *Journal of Management Studies*, 30, 587-610.
- Driver, M. J. (1979). Individual decision making and creativity. In S. Kerr, (Ed.), *Organizational behaviour*. Columbus, OH: Grid Publishing.
- Driver, M. J., Brousseau, P. L., & Hunsaker, P. L. (1993). *The dynamic decision maker*. San Francisco: Jossey Bass Publications.
- Dunwoody, P. T., Haarbaur, E., Mahan, R. P., Marino, C., & Tang, C. (2000). Cognitive adaptation and its consequences: a test of cognitive continuum theory. *Journal of Behavioural Decision Making*, 13, 55–59.
- Fiske, S. T., & Taylor, S. F. (1991). *Social cognition* (2nd ed.). New York: McGraw Hill.
- Gilbert, D. T. (2002). Inferential correction. In T. Gilovich, D. Griffin & D. Kahneman (Eds.), *Heuristics and biases* (pp.167–184). New York: Cambridge University Press.
- Hammond, K. R., Hamm, R. M., Grassia, J., & Pearson, T. (1997). Direct comparison of the efficacy of intuitive and analytical cognition in expert judgment. In W. M. Goldstein & R. M. Hogarth (Eds.), *Research on judgment and decision making: Currents, connections, and controversies* (pp. 144-180). Cambridge: Cambridge University Press.
- Harren, V. A. (1979). A model of career decision making for college students. *Journal of Vocational Behaviour*, 14, 119–33.
- Harrison, E. F. (1999). *The managerial decision-making process*. Boston, MA: Houghton

- Hellriegel, D., Slocum, J. W., & Woodman, R. W. (2001). *Organizational behaviour* (9th ed.). Cincinnati, Ohio: South-Western College Publishing.
- Hendry, J. (2000). Strategic decision making, discourse, and strategy as social practice. *The Journal of Management Studies*, 37(7), 955–977.
- Hogarth, R. M. (2001). *Educating intuition*. Chicago: University of Chicago Press.
- Holland, J. L. (1985). *Making vocational choices: A theory of careers*. (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Hoy, W. K., & Miskel, C. G. (1991). *Educational administration: Theory, research, and practice* (4th ed.). New York: McGraw-Hill.
- Hunt, R. G., Krzystofiak, F. J., Meindl, J. R., & Yousry, A. M. (1989). Cognitive style and decision making. *Organizational Behaviour and Human Decision Processes*, 44, 436–53.
- Jung, C. G. (1976). *TYPOLOGI. Till fragan om den psykologiska typerna (Typologie-Zur Frage der Psychologischen Typen (Translated from German))*. Stockholm: Berghs Forlag.
- Kahneman, D. (2003). Maps of bounded rationality: Psychology for behavioural economics. *American Economic Review*, 93(5), 1449–1475.
- Kahneman, D., & Frederick, S. (2002). Representativeness revisited: Attribute substitution in intuitive judgment. In T. Gilovich, D. Griffin & D. Kahneman (Eds.), *Heuristics and Biases* (pp. 49–81). New York: Cambridge University Press.
- Kahneman, D., & Tversky, A. (1981). Prospect theory: An analysis of decision making under risk. *Econometrical*, 47, 263–291.
- Khatri, N., & Alving, H. (2010). Role of intuition in strategic decision making. Unpublished Research. Nanyang Business School. Nanyang Technological University.
- Klaczynski, P. A. (2001). Analytic and heuristic processing influences on adolescent reasoning and decision-making. *Child Development*, 72, 844–861.
- Lindblom, C. E. (1959). The science of muddling thought. *Public Administrative Review*, 19, 79–99.
- Luthans, F. (2000). *Organizational behaviour*. (19th ed.). New York: McGraw-Hill.
- Mangalindan, M. (2004, March 29). The grow-up at Google. *The Wall Street Journal*. p. B1.

- March, J. G., & Olsen, J. P. (1984). *The new institutionalism organizational factors in political life*. Washington, D.C: American Political Science Review.
- March, J. G., Olsen, J. P., & Christensen, S. (1976). *Ambiguity and choice in organizations*. Bergen: Universitetsforlaget.
- Mau, W. (2000). Cultural differences in career decision-making styles and self-efficacy. *Journal of Vocational Behaviour*, 57, 365–378.
- Mitchell, T. R., & Beach, L. R. (1990). Do I love thee? Let me count...Toward an understanding of intuitive and automatic decision making. *Organizational Behaviour and Human Decision Processes*, 47, 1–20.
- Mitroff, I., & Kilmann, R. H. (1975). Stories managers tell: A new tool for organizational problem solving. *Management Review*, 64, 18–28.
- Novicevic, M. M., Hench, T. J., & Wren, D. A. (2002). Playing by ear in an incessant din of reasons: Chester Barnard and the history of intuition in management thought, *Management Decision*, 40(10), 992–1002.
- Nygren, T. E., & R. J. White (2002). Assessing individual differences in decision making styles: Analytical vs. intuitive. *Human Factors and Ergonomics Society 46th Annual Meeting, Baltimore, MD, HFES*.
- Payne, J. W., & Bettman, J. R. (2004). Walking with the scarecrow: the information-processing approach to decision research. In: Koehler D J, Harvey N (eds) *Blackwell handbook of judgment and decision making*. Blackwell Publishing, Malden, MA, p 110–132.
- Peter, T. J., & Waterman, R. H. (1982). *In search of excellence: Lessons from America's Best run companies*. New York: Hyper & Row.
- Philips, S., Pazienza, N., & Farrin, H. (1984). Decision making styles and problem solving appraisal. *Journal of Counselling Psychology*, 31, 497–502.
- Rayner, S., & Riding, R. J. (1997). Towards a categorization of cognitive styles and learning styles, *Educational Psychology*, 17, 5–27.
- Riaz, M. N. (2009). Leadership styles as predictors of decision making styles. Unpublished M. Phil dissertation, National Institute of Psychology, Quaid-i-Azam University Islamabad, Pakistan.
- Rowe, A. J. & Mason, R. O. (1987). *Managing with style*. San Francisco: Jossey Bass Publishers.
- Sadler-Smith, E., & Sparrow, P. R. (2008). *Intuition in organizational decision making*. The Oxford Handbook of Organizational Decision Making. Oxford: Oxford University Press.

- Scott, S. G., & Bruce, R. A. (1995). Decision-making style: The development and assessment of a new measure, *Educational and Psychological Measurement*, 55, 818–831.
- Shafir, E., & LeBoeuf, R. A. (2002). Rationality. *Annual Review of Psychology*, 53(1), 491–517.
- Sherman, S. J., Judd, C. M., & Park, B. (1989). Social cognition. *Annual Review of Psychology*, 40, 281–326.
- Shiloh, S., & Shenhav-Sheffer, M. (2004). Structure of difficulties in mate-selection decisions and its relationship to rational and intuitive cognitive styles. *Personality and Individual Differences* 37, 259–273.
- Simon, H. A. (1957). *Administrative behaviour* (2nd ed.). New York: Macmillan.
- Singh, R., & Greenhaus, J. H. (2004). The relation between career decision-making strategies and person–job fit: A study of job changers. *Journal of Vocational Behaviour*, 64(1), 198–221.
- Sloman, S. A. (2002). Two systems of reasoning. In T. Gilovich, D. Griffin & D. Kahneman (Eds.), *Heuristics and biases* (pp.379–396). Cambridge: Cambridge University Press.
- Slovic, P., Finucane, M. L., Peters, E., & MacGregor, D. G. (2002). The affect heuristic. In T. Gilovich & D. Griffin & D. Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment* (pp. 397–420). New York: Cambridge University Press.
- Spicer, D. P., & Sadler-Smith, E. (2005). An examination of the general decision making style questionnaire in two UK samples. *Journal of Managerial Psychology*, 20(2), 137–149.
- Stanovich, K. E., & West, R. F. (2000). Individual differences in reasoning: Implications for the rationality debate? *Behavioural and Brain Sciences*, 23, 645–726.
- Sternberg, R. J. (1997). *Thinking styles*. Cambridge University Press, Cambridge
- Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behaviour*, 16, 282–298.
- Thunholm, P. (2004). Decision-making style: Habit, style or both? *Personality and Individual Differences*, 36(4), 931–944.
- Wedley, W. C. & Field, R. H. G. (1984). A pre-decision support system. *Academy of Management Review*, 9, 696–703.
- Williams, M. R. (2003). *Mastering leadership: Key techniques for managing and leading a winning team* (1st ed.). New Delhi: Viva Books.

EFFECTIVENESS OF TNA BASED TRAINING IN KARACHI'S PHARMACEUTICAL INDUSTRY

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Abstract

This research sets out to examine the effectiveness of Training Need Analysis (TNA) based training and to determine whether it is helpful in achieving organizational goals, enhancing Knowledge Skills and Attitude and increasing number of customer (customer index). This research focuses on pharmaceutical organizations of Karachi. A survey of 180 sales employees of pharmaceutical companies was conducted. SPSS Software was used for statistical analysis. This research concluded that TNA based training enabled employees to reach their sales target, enhanced their Knowledge, Skills and Attitude and increased the customer index.

Keywords: Training, Organizational goals, KSA, Customer index, Measuring effectiveness of Training

JEL Classification: Z 000

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Introduction

Background of the Study

In this competitive era companies are looking to increase their revenues, improve their productivity and efficiency and finding ways to boost their workers performance. Companies used to consider training as a cost and training was usually the target of budget cuts but companies are now considering this as an investment. Though training is of immense importance, if the training is not right then it is a cost for the company. Therefore, it is essential to analyze the gap between the desired skills and current skills and then design the training program accordingly.

Problem Statement

From the background it can be derived that TNA plays an effective role in employee development and their performance. Yet, in Pakistan TNA is not given the importance before training which leads to ineffective training and hence training is then seen as more of a cost rather than investment. The research problem deals with the Merck's training program. To check whether TNA based trainings are effective or not. The study aims to focus on the following questions:

- ❖ Are TNA based trainings effective?
- ❖ Have such trainings played an important role in employee productivity?
- ❖ Are there significant differences in the skills transfer of participants after conducting TNA based trainings?

Research Objectives

The primary objective of this research is to measure the effectiveness of TNA based trainings. The secondary objectives of the study are presented here to guide the direction of research. These objectives are:

- ❖ Determine whether TNA based training has played significant role in achieving goals.

- ❖ Determine whether TNA based trainings has enhanced KSAs of participants
- ❖ Determine whether TNA based trainings has improved the customer index.

Literature Review

Training

Training can be defined as a planned learning process aimed at improving the competency of employees (Gillen, 2000). Part of the training process is Training Need Analysis (TNA). For an effective training program, Training Need Analysis is the essential step in identifying the gaps (weaknesses) through highlighting the desired level and current level (Mitchell, 1998). TNA can also focus on strengths and how will further training strengthen the capacity. TNA provides solid information and takes designing of the training program in the right direction (Caffarella, 2002). Therefore, organizations must conduct training need analysis before designing the training programs (Caffarella, 2002). Training need analysis helps an organization to identify the gap between the current knowledge & skills and desired knowledge & skills and Training need analysis is always derived from objectives of the business (Clevend, 2001). Effective and efficient training or development, basically depends on knowing that what is required - for the individual, than the respective department and finally the organisation as a whole (Conner, 1994). Moreover with restricted budgets along with the perquisite for cost-effective solutions, all the organisations need to confirm that the resources devoted in training are effectively targeted towards those areas, where training and development is needed and secondly an encouraging return on the investment is certain (Railey, Improving Employee Performance, 1999). Effective Training need analysis (TNA) is predominantly vibrant in today's changing workplace as new and improved technologies and springy working practices are becoming widespread, moreover, leading to parallel changes in the skills and abilities needed (Raily, 1999).

Training Need Analysis (TNA)

Training need analysis is basically an ongoing process to gather data which in turn describes the existing training needs, this all

helps in an organization to improve the employee performance and hence achieve the organizational objectives (Brown, 2002). The process is fundamental to the success of a training program. Often the organizations develop and implement the training program without first conducting a need analysis. Moreover these organizations run the risk of over doing training and not only this but also doing too little training or missing an important point completely. (Brown, 2002) Training need analysis assists company in identifying set of Knowledge, Skills and Attitude and helps in forming bottom line objectives for the training at 3 levels (Lowell, 2002). So analysing what the training needs are, is a vital precondition for any sort of effective training event or programme. Merely throwing training at individuals may miss priority needs, or even cover areas that are not indispensable or crucial (Lowell, 2002). Training need analysis allows the organisations to strain resources into the zones where they will basically contribute the most to employee development, and thus enhancing the employee performance as well as organizational performance and also leads towards enhancing the morale (Lowell, 2002). Training need analysis is a natural function of evaluation systems and also is key necessity for the award of Investors in People. Having completed TNA, findings should be implemented and evaluated and able to generate bottom line objective and results. (Philip, 2002)

Analysis of training needs is not only a task of specialists alone. Today managers are often answerable for many forms of people's management, comprising of the training and development of their team, and therefore should have a clear cut understanding of training needs analysis in order, to be able to implement it successfully (Bashir & Memon, 2005).

Basic Purpose of Training Need Assessment

Training needs analysis is the most important phase in planning the training, which will effectively close the gap between actual and desired situations (Osinski, 1996). It certifies that the right cure is applied to the right problem. As limited budgets are available for training, therefore the preferred areas of training must be those that ensure, that the expected outcome will be achieved, and there are

maximum gains for the professionals and their respective organization (Osinski, 1996).

Effectiveness of Training Need Analysis (TNA)

Effective and efficient Training Need Analysis (TNA) comprises of a systematic planning, examination and harmonization across the organisation, to guarantee that the priorities of the organization are taken into account, to avoid the duplication of priorities and lastly to achieve economies of scale (Mitchell, 1998). All prospective trainees must be included in the process, rather than merely depending on the idiosyncratic evaluation of managers (Mitchell, 1998).

Preferably, managers should also obtain training in the process of Training Need Analysis (TNA) itself, to elucidate what they are trying to achieve, and what their approach should be (Waldrop K., 2006).

For the training and development function training needs assessment is a very critical activity. One should be adept at performing a training needs assessment despite of the fact that whether he or she is a human resource generalist or a specialist (Caffarella, 2002).

The assessment begins with a “need” which can be recognized in numerous ways but is commonly described as a gap between what is presently in place and what is needed. Gaps can include differences between:

- What actually happens and what the organization expects to happen
- Current and preferred job performance.
- Current and desired skills and competencies (Waldrop, 2004)

Need assessment can also be used to assist with:

- Competencies and performance of work teams.
- Productivity or Problem solving issues.

- The need to prepare for an answer to the future changes in organization or the job duties (Brinkerhoff, 1987).

The outcome of the need assessment allows the training manager to establish the training objectives by mainly answering two key questions: who, if anybody, requires training and what training is required. Sometimes training alone is not the answer (Gillen, 2000). Some performance gaps can be abridged or removed through other management solutions for example communicating expectations, arranging consequences, providing a helpful work atmosphere checking job fit and removing obstacles. So once the need assessment is concluded, training objectives are clearly identified. (Osinski, 1996)

Doing a need assessment is very important. Secondly, if a training need is identified then you are in a better position to negotiate with the management as they usually are concerned with the budget and costs related to training (Cekada, 2011). So providing them with the information regarding the need assessment may earn you management support.

Thirdly and most importantly is that you are able to analyses the effectiveness of the training program on the employee's performance prior to its execution. This would help in determining the areas where the results could visibly be seen after the training session is conducted (Cekada, 2011). Then one aspect of this is also, that effective training need provides basis for the cost benefit analysis done for the training program being conducted. So that training is taken as in investment rather than a cost, but our research mainly focuses on the relationship between the training need analyses based trainings and the employee performance (Cekada, 2011)

It doesn't matters whether it's a profit or non-profit organization, training need analysis is critical for effective and efficient training. The main advantage of doing TNA is its clear linkage with organizational goals and strategies (Cekada, 2011). However, TNA has its impact on different areas but most importantly it is related to the employee performance. It directly improves and enhances the

knowledge, skills and attitude of an employee in whichever area required (Cekada, 2011).

Lack of Motivation or Absenteeism

Performance is highly correlated with the motivation of the person. According to Maud Emmanuelle Labesse, (2008) motivation can be increased through the value attributed to the work and level of its performance. The greater the value an individual attributes to their work, the higher the performance, and the greater will be the motivation of the individual. The opposite of this is also true. In such situations, a training need analysis can help detect the causes of lower performance or bring into consideration the undeveloped skills. Efficient training can quickly raise the level of self-confidence (Maud Emmanuelle Labesse, 2008).

Glennllopi, (2012) emphasized that motivation enhanced performance. There are many motivational theories but the challenge is to construct a connection between meaningful work and performance. To motivate employees, managers need to give them clear guidance about goals and rewards, admire creativity and make them notable, open doors for employee future but never underestimate or reject poor performance. Moreover managers need to understand the real motivating factor for an individual as it may be monetary or non-monetary.

Employee Performance

The employees having adequate knowledge in terms of job specific qualifications would be able to solve on the job problems more effectively and may finally develop expertise in their area (English, 2002). Secondly, in order to equip them with performing the tasks in limited time, improved skills may be required. Finally, once they are qualified and have the appropriate skills, it would motivate them to develop a positive attitude towards learning and training. (English, 2002)

Effectiveness of TNA for Employee Performance

Why TNA is closely associated with employee performance? It is because employees are said to be the most valuable asset of an organization (Hurst, 2002). They are the ones that do not have any depreciable value like other assets (Hurst, 2002). And it is through them that the organization can achieve their objective which is why the employees have to be competitive and qualified enough to have an edge over the other organizations, or in other words well trained and well learned employees are a prerequisite for an organization's competitive advantage. So Inadequate needs assessment can result in unsuitable and ineffectual interventions, which could either have no impact or have a venomous impact on the actual performance problem (Hurst, 2002)

Taking in view the employee's performance, there are basically two possible causes to poor performance, one is the contextual factors of an organization like inadequacy of equipment or poor reward systems, and secondly it is the lack of skills, knowledge and attitude of the employees that hinders effective performance (Thacke, 2003). And it is these employees who are sent for the training and this rule is in line with the definition of the training itself, which is a systematic procedure of providing an occasion to learn KSAs for current and future jobs (Thacke, 2003)

Hence training employees whose performance problems are not caused by lack of KSA is a big mistake (Jamil, 2005). As this puts a negative impact on employee's performance and make the training a cost for the organization rather than an investment, not only this, if doing TNA is the initial stage of the training process then assessing employee performance is the final stage of this cycle which also helps in evaluating our training. The cycle represents a clear relationship between doing TNA and employee performance. (Jamil, 2005)

Research Design and Methodology

Hypothesis

Following hypothesis were formulated

H1: TNA based training has played an important role in achievement of goals.

H2: TNA based training has enabled the participants to enhance their knowledge skills and abilities (KSA).

H3: TNA based trainings have increased number of customers (customer index).

Sample

Sample of 180 sales employees of local and multinational pharmaceutical organizations in Karachi were reviewed. Also, due to time, money and respondents' availability and other resources limitations, this convenient sampling method was adopted. The participants are permanent employees based in Karachi and employed in sales functions. With regard to demographics, the ages of the respondents' were from 28 to 40 and all participants were male. The qualifications of respondents were graduation and Masters.

Procedure

As discussed in the literature review that effectiveness of the training is measured through the performance of employees. To measure the effectiveness of training on sales people, it is easy if there targets are measured and their knowledge skills and abilities are checked. The data was collected in a questionnaire which consisted of five questions. The questionnaires were distributed and respondents filled questionnaires manually. Participation was voluntary and the responses were anonymous. The respondents were informed about the purpose of the research. As with all study participants, they were assured that all information would be kept confidential. As discussed earlier the significance of the response is crucial. The questionnaire was sent to 180 participants of whom 135 responded making the respond rate 75%. Five percent of the response was disregarded and not considered relevant.

Statistical Analysis

The result is compiled through SPSS software. Each question shows the frequency of how much the respondents have chosen a certain option. The tables show the mean independent one-sample t-test connected with a 0.05 significance level.

Data

The method adopted for primary data collection was 'Research Questionnaire'. Literature review is used to support the background of study and to build a conceptual framework.

Statistical significance

The hypotheses that were stated earlier will be tested in the next chapter where it will be rejected or accepted. Since any sample will almost certainly vary somewhat from its population, it must be judged whether these differences are statistically significant or insignificant (Cooper & Schindler, 2001:486). A probability value (p values) is a method of presenting a test statistic that reports agree or disagree of null hypothesis. This method has become popular because analyst wants to know what percentage of the sample lies beyond the curve. The p value is compared to the significance level (""). This helps in acceptance or rejection of null hypothesis. If the p values is less than the significance (0.05 or 0.001), the null hypothesis is rejected. If p value is greater than or equal to the significance level, the null hypothesis is not rejected.

Inferential statistics

It is the method used to draw conclusion for the population itself. Since the descriptive analysis allows the researcher to draw conclusion on sample of a population, the inferential analysis allows the researcher to make conclusions for the population. (Terre Blanche & Durrheim, 2002:101). Different inferential techniques will be used for inferential analysis such as: frequency distribution, chi-square test, t-test.

Data Analysis and Research Findings

This chapter deals with the data analysis and research findings, obtained after t-test, using SPSS software.

Hypothesis

- H1A₀: TNA based training has not enabled participants in achieving their sales goal
- H1A_a: TNA based training has enabled participants in achieving their sales goal
- H2A₀: TNA based training has not enhanced product knowledge of participants.
- H2A_a: TNA based training has enhanced product knowledge of participants.
- H2B₀: TNA based training has not enhanced selling skills of participants.
- H2B_b: TNA based training has enhanced selling skills of participants.
- H2C₀: TNA based training has not enhanced positive teamwork of participants
- H2C_c: TNA based training has not enhanced positive teamwork of participants
- H3A₀: TNA based training has not increased customer index.
- H3A_a: TNA based training has increased customer index.

Analysis and research findings for achievement of goals

- H₁: TNA has played an important role in achievement of goals.
- H_a: TNA has not played an important role in achievement of goals.

	N	Mean	Std. Deviation
Sales Target	135	2.3667	1.03335

One Sample Independent t-test

	F	Sig	T	df	p-value
Sales Target	0.000	1.00	.000	58	0.000

Conclusion: At 5% significance level it can be concluded that trainings based on TNA have enabled the participants to achieve goals with more success.

Analysis and research findings for increase in KSA

- H_{2a}: TNA has helped enhancing product knowledge of participants.

H2_a: TNA has not helped in enhancing product knowledge of participants.

	N	Mean	Std. Deviation
Sales Target	135	2.3667	1.03335

One Sample Independent t-test

	F	Sig	T	df	p-value
Sales Target	0.004	.810	.042	58	0.008

Conclusion: At 5% significance level, it can be concluded that TNA based trainings add more knowledge to the participants' existing knowledge.

Analysis and research findings for strengthened selling skills

H2_b: TNA based trainings has strengthened selling skills of participants.

H2_b: TNA based training has not strengthened selling skills of participants.

	N	Mean	Std. Deviation
Selling Skills	135	2.3667	1.03335

One Sample Independent t-test

	F	Sig	T	df	p-value
Selling Skills	0.000	.100	.000	58	0.000

Conclusion: At 5% significance level, it can be concluded that TNA based trainings has helped strengthened the selling skills.

Analysis and research findings for positive team work

H2_c: Trainings based on TNA have provided positive teamwork.

H_{2c}: Trainings based on TNA have not provided positive teamwork.

	N	Mean	Std. Deviation
Team work	135	2.3667	1.03335

One Sample Independent t-test

	F	Sig	T	df	p-value
Team work	0.004	.892	.000	58	0.009

Conclusion: At 5% significance level, it can be concluded that after TNA based trainings participants are seen to engage in positive teamwork.

Analysis and research findings of customer index

H₃: TNA based trainings have increased customer index.

H₃: TNA based trainings have not increased customer index.

	N	Mean	Std. Deviation
Team work	135	2.3667	1.03335

One Sample Independent t-test

	F	Sig	T	df	p-value
Team work	0.006	.894	.001	58	0.008

Conclusion: At 5% significance level, it can be concluded that trainings based on TNA have increased the customer index through retention and expansion of territory.

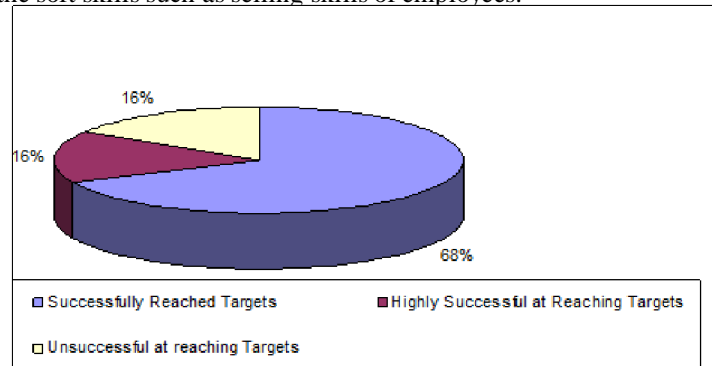
Results and Discussions

Summary

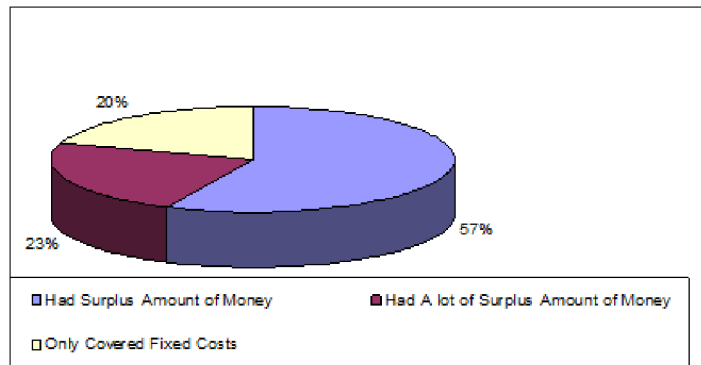
The results are summarized in the following format.

Hypothesis	Statement	p-value	Significance
Sales Target	TNA based training has enabled participants in achieving their sales goal.	0.000	Positive
Product Knowledge	TNA based training has enhanced product knowledge of participants.	0.008	Positive
Selling Skills	TNA based training has enhanced selling skills of participants.	0.000	Positive
Teamwork	TNA based training has enhanced positive teamwork of participants.	0.009	Positive
Customer Index	TNA based training has increased customer index	0.008	Positive

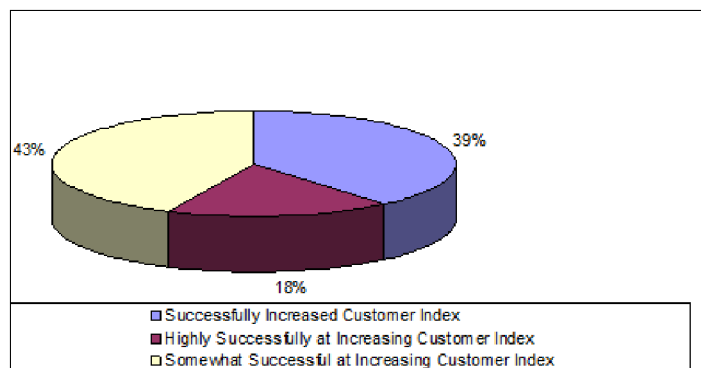
The study has demonstrated the significance of TNA based trainings. Training helps an organization to sustain and gain a competitive edge in the market. The pre requisite of training is training need analysis which leads to profitability. This research has proved that trainings that are conducted after appropriate gap analysis enhance the product knowledge and lead to increased customer index. This study has also identified that TNA based training strengthened the soft skills such as selling skills of employees.



This study also indicates that TNA based trainings help employees in reaching their targets. 68% of the participant shows that they have been successful in fulfillment of their targets after participating in trainings that are TNA based. 16% of the participants indicated that they have been highly successful in achieving their targets; however 16% of the participants said that they have not been successful.



When asked about success with respect to the territory coverage, 57% said that they have surplus amount of money and 23% said that they have a lot of surplus money. Whereas only 20% said that they only covered their fixed costs. This indicates that TNA based trainings lead to profitability.



When asked about the success in increasing the customer index, 39% said that they are successful and 18% said that they are highly successful in increasing the customer index after participating in TNA based trainings. Whereas 43% said that they are somewhat successful in increasing the customer index. This proves that TNA based trainings are of immense importance in an organization.

Discussions

TNA Based Training

Training needs analysis is the critical step training cycle. If it is done properly then it can effectively close the gap between actual and desired performance. It ensures that the right cure is applied to the right problem. As the training budgets are limited, therefore the preferred areas of training must be those that ensure, that the expected outcome will be achieved, and there are maximum gains for the professionals and their respective organization. TNA based training also makes training more of an investment rather than a cost for the organization as the benefits of it exceeds the cost. The result of TNA based training is enhanced KSA for the employee which in turn increases the ability to reach sales targets and increases customer index.

Performance Gaps

Organizational performance depends on having the right quality and quantity of human capital. Through TNA based training managers can analyze the current job performance and the preferred job performance. This answers two main questions: who, if anybody, requires training and what type of training is required. The result of this will be increased profitability.

Cost Benefit Analysis

Managers are usually concerned with the costs related to training and because TNA based training helps to analyses the effectiveness of the training program on the employee's performance prior to its execution, training can be focused on areas where the results could visibly be seen, hence, increasing the benefits of training and making it an investment rather than a cost. 57% of the managers claimed that they had sufficient about of surplus money available due to TNA based training, 23% claimed that had a lot of surplus money available and only 20% claimed to be just meeting their fixed costs.

Enhancing Knowledge Skills and Abilities - KSA

TNA based training makes sure the employees are getting trained in areas which are beneficial for the organization so as to reduce the performance gaps. This means that the employees are getting educated in a manner that is resulting in the organization meeting its goals. Training is will only be able to properly address the needs of employees if knowledge and skill deficit are properly identified. Hence, product knowledge gets increased due to TNA based training. Eliminating the knowledge deficit makes it easier for the employees to sell the product (increasing selling skills) and reduces the skill deficit. This creates a positive environment to work in (increases positive teamwork).

Achieving Sales Target

Once the Employees are able to eliminate their knowledge and skill deficit, it puts them at a better position to effectively and efficiently meet their sales target. Meeting the sales target is an important step for an organization as it helps to achieve the main organizational goal that has been set. Through TNA based training 68% of the employees said that they successfully reached their sales target, 16% said that they were highly effective at reaching their sales target whereas only 16% said that they were unsuccessful at reaching their sales target.

Increasing Customer Index

TNA based training empowers the employees in a way that motivates them as they are better able to perform their job effectively. This provides an incentive for them to work harder and give back to the organization. Hence, TNA based training increases the retention rate which results in an expansion of the territory for the organization. 39% of the employees stated that they successfully increased their customer index, 18% stated that they were highly successful at

increasing their customer index and only 43% stated that they were somewhat successful at increasing their customer index.

Implications for Managers

Training can be successful if training manager has properly identified the gap between the desired and the current skills of the employees and training will only be able to properly address the needs of employees if knowledge and skill deficit are properly identified. Following recommendations were identified during this study.

Awareness about TNA should be increased within an organization since it explores ways in which competency, capability and potential of an organization can be enriched. Proper communication between line manager and training manager is must, without it, training content could not be designed properly.

Proper usage of information regarding knowledge deficit is highly significant. After knowledge deficits are identified, that information should also be shared with line manager so they can work on reducing if not eliminating this deficit. Eliminating knowledge deficit will result in eliminating skills deficit as well. Once the employee has better knowledge he will be able to increase his selling skills which is highly beneficial for an organization.

Employees were seen to have met their sales target more efficiently after TNA based training, hence, this will increase the profitability of firms. Therefore, managers may even be able to increase their sales target for next year because of TNA based training.

Majority of employees that are dissatisfied with their work leave their current job as they either start looking for another one or are in the planning phase. One reason of this is that they are not motivated because they don't have sufficient knowledge or skills to meet their sales target. Managers can increase the retention rate and increase their territory through TNA based training.

Conclusion

This research paper concludes that training can be effective if the gaps or deficiencies are identified properly through Training Need Analysis. Employees who receive training on the basis of proper Training Need Analysis show improved results, achieved business targets and higher customer retention.

Limitations of the Study

The research is a part of course project requirement therefore the study conducted is based on the data collected from pharmaceutical organizations. Hence, the results are for pharmaceutical organizations and cannot be applied for all organizations of Pakistan and Pakistan as a whole. The results and analysis done is through SPSS, the results only show t-test to check effectiveness.

References

- Bashir, U., & Memon, S. B. (2005). Effectiveness of Training Need Analysis.
- Brinkerhoff, R. O. (1987). *Achieving results from Training*.
- Brown, J. (2002). Training Need Assessment: A must for developing an effective training program. *Public Personal Management* , 11.
- Caffarella, R. S. (2002). *Planning Programs for Adult Learners*.
- Cekada, T. L. (2011). Conducting an effective need assessment. *professional safety* , pg7.
- Conner, M. E. (1994). *Training in organization*. New York.
- English, M. (2002). *Making Training Count How to Conduct an Effective Training Needs Analysis*. IBEC.
- Gillen, M. L. (2000). Addressing the Spiritual Dimensions of Adult Learning.
- Hurst, W. (2002). *Training and Learner*. WAGON HUST.
- Jamil, R. a. (2005). *A survey of top 100 companies*. MALAYSIA.
- Lowell. (2002). Reliability Performance Enhancement: Doing the right training right.
- Maud Emmanuelle Labesse, r. o. (2008, JUNE). Terms of refrencing for traning need analysis. Pg 72.
- Mitchell. (1998). *Trainers Handbook: The AMA Guide to Effectiveness*.
- Osinski, J. A. (1996). Training need assessment, pg 5
- Philip. (2002). *Trainings and Training need analysis*.

Railey, D. (1999, May). Improving Employee Performance. Pg 6.

Thacke, B. (2003). Employees Performance, pg 156

Waldrop. (2004). *Training need analysis*. Digital Preservation Coalition.

Waldrop, K. (2006). *Training need analysis*. London: Chartered Management Institute

CIPD (2010) Learning and Development: Annual survey report, summer 2010.

Dr. Pruyne, E. (2009) Designing high-impact learning environments. The Ashridge journal, winter 2009-10

Donovan, P. and Townsend, J. (2004). The training evaluation pocket book. Management Pocket books Ltd, London, PP 6

PERFORMANCE RELATED PAY OF UNIVERSITY EMPLOYEES: A COMPARISON OF PUBLIC AND PRIVATE SECTOR UNIVERSITIES OF PAKISTAN

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Abstract

Performance related pay plays an important role in describing employee motivation towards work and their satisfaction from pay. The aim of the study was to explore performance related pay of employees of public and private sector universities of Pakistan. Our results indicate that performance related pay was positively correlated with motivation and job satisfaction ($r = .557$) was significantly higher than private sector employees. Simple linear regression demonstrated that demographic variables like young age, teaching experience, marital status, income, educational level and academic rank are predictors of performance related pay. Results also indicated that performance related pay (PRP) scale exhibit a high Cronbach Alpha.

Keywords: Performance related pay, Motivation, Job satisfaction

JEL Classification: Z 000

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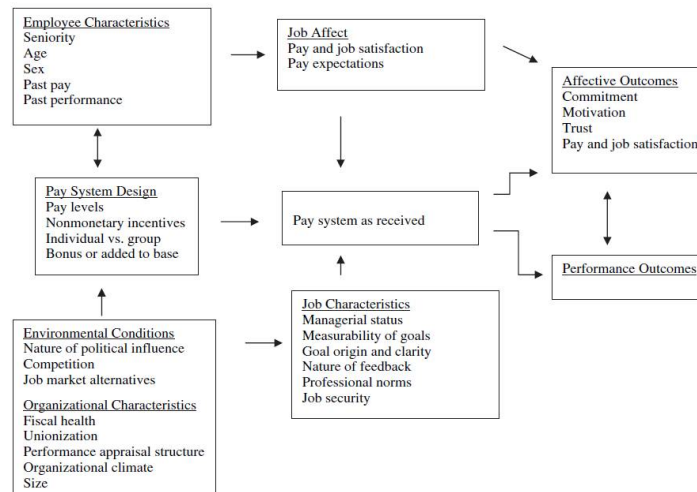
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Introduction

Salary or Pay plays an important role in motivating employees when they are given pay as per their performance, it will ultimately increase their level of satisfaction and ensure their contribution in the success of an organization. Performance related pay acts as a motivator. An organization tries to improve quality of work through performance related pay. According to Armstrong and Baron (1998) performance management (PM) did not become a familiar method till 1980; however, performance management was initially introduced in 1970. Murliss and Armstrong (1991) defined that performance related pay as the obvious relation with businesses and individuals performance in terms of monetary payments. According to Latt (2008) individuals may use salary to fulfill their desired requirements so the salary might be an important method to encourage motivation. Therefore, salary has a great impact in establishing employee diligence and commitment. Whitley (2002) explained that cash or salary may not increase performance and efficiency ranks at extended levels. Martinez (2001) stated the importance of performance management always changes. In 60s and 70s performance management often stayed associated with merit based performance and in 80s and 90s performance management was associated with some different management models like performance assessment, management by objectives, performance related pay and behavioral grading measures. Income data services study (1997) showed that it is important to recognize that performance related pay system requires that there is a performance management system in place. Armstrong (2006) defined the term performance as “the achievement of quantified objectives”.

Smith and Rupp (2003) elucidated that non monetary elements like performance responses, incentives and societal appreciation are motivational factors and organizations are applying these approaches to improve employee motivation and performance. They probed; “what kinds of employer motivate employee more or what kind of elements do you want for employer for motivation?” Wilms and Chapleau (1999)

took a negative view of performance related pay in education. According to them, performance related pay system was first introduced in 1970 in England which showed devastating outcomes with instructors who were given penalties and financial payments. A similar system was tried in 1876 in Canada. The notion came back as performance constricting in United States in 1969. The past researches showed that performance related pay reforms are just considerations of community frustration. Through figure Perry, Engbers and Yun (2009) highlighted an important relationship among key variables in performance related pay research.



Retrieved from (Perry, Engbers and Yun, 2009), p 41

The main objective of research is to realize that there is an association among job satisfaction, performance related pay and motivation. Job satisfaction can be defined as emotional state and/or sentimental reactions that are faced in different conditions (Smith et al., 1969). An organization can hope to increase its employee performance by linking pay to performance and employee performance is considered to be the product of motivation and job satisfaction. There are various motivational theories which examine the process of

motivation and they are also concerned with job satisfaction, i.e., impact on performance.

Literature Review

Herzberg et al (1957) described that intrinsic motivation is the element which affect individuals to change or perform in a specific trend. The elements comprise of accountability, autonomy, stimulating efforts and chances for progression, scope to improve expertise and capabilities. Whereas extrinsic motivation describes what is done for individuals so that they could be motivated. It comprises of compensations like better salary, withholding salary, upgradation and penalty like disciplinary action.

According to Buckman (2006) the following factors will result in employee better performance: (i) Commitment (ii) Recognition and Respect (iii) Growth (iv) Participative decision making (v) teamwork. Nelson (2006) exemplified that unsatisfied employees are less committed to organization and it will affect their performance and the performance of the organization. Bagozzi (1980) highlighted that empirical investigation does not fully endorse association among job performance and job satisfaction and organizational commitment. It also does not show if performance promotes job satisfaction or job satisfaction promotes performance. Kini and Hobson (2002) explained that content theories focus on the discovery of significant internal factors and their priority in people; the process theories are concerned with psychosomatic practices and pressure on the working of an individual's judgment organism. There is a strong link amongst job satisfaction and process and content motivation theories. The content theories are usually used with work satisfaction than process theories of motivation. Silva's (1998) findings showed that various organizations try to increase their effectiveness by salary increase, at the same time it also motivate employees and increase performance. Performance related pay is lower in the nations where there is a practice of unified mutual trading and great union density. Omar and Ogenyi

(2006) observed that all demographic variables do not decide satisfaction in employees but extra variations in salary increases satisfaction. Therefore, the most useful method to promote pay satisfaction is the introduction of performance related pay structure. Performance related pay shows a positive impact on job satisfaction of employees getting high salary (McCausland et al., 2005).

Lavy (2007) highlighted that developments to performance related pay systems are important for each and every kind of organization. Cacioppe and Mock (1984) indicated that the public sector officials have more job security as compared to the private sector. Private Sector employees have lesser value of financial and non financial remuneration than public sector employees. Chaudhry, Sabir, Rafi and Kalyar (2011) studied the pay satisfaction in several organizations in Pakistan and concluded that the element which increases job satisfaction is pay satisfaction. Another research discovered that salary structures are affected by increase in salary and bonuses which are related to performance based rewards. The performance related pay structures might be the best system to promote salary satisfaction (Oswald and Clark, 2002). Chaudhry, Sabir, Rafi, and Kalyar (2011) further illustrated that employees knowingly link pay related satisfaction with their job security and it can be seen very clearly that pay related satisfaction is greater in employees from public sector organizations. According to Pakistan's perspective the main reason of pleasure for employees is job satisfaction as Pakistani employees feel security in the public sector. In Pakistan's perspective, the Private sector is the originator of innovative learning culture and due to this reason job satisfaction is low in the private sector. However pay schemes are better in the private sector organizations yet it is lesser because of problems like job pressure, job insecurity and instability.

Leonard (1990) studied administrative salary arrangements for more than twenty thousand employees at various organizations. He examined the impact of long term incentive systems, bonus

schemes, promotions and pay equity on corporate performance. His findings showed that pay is hierarchically determined.

Rationale

Generally, in Pakistan the percentage of job stress is very high, most of the time, the jobs are very demanding. There are political conditions which are demotivating for highly educated people since they do not get the job according to their qualification. It is the major goal of any organization to recruit, retain and motivate its employees. It is believed that high quality workers are attracted to an organization and only good performers are valued, poor performers are not. The performance based salary is assumed to motivate employees to work harder and effectively.

Another important objective is to make employees more aware and committed to an organization. When employee's specific behavior and certain skills are rewarded in performance based salary system, employees also learn what it is that their employer consider important. According to O'Donnell (1998) performance related pay is based on an underlying view of motivation which proposes that employee performance is improved through the establishment of a clear link between effort, targets and rewards. A primary goal of an organization is to retain and motivate employees. Teacher's pay levels can influence student's performance because teachers who get more incentives tend to be more facilitating students in academic research. This research is of great importance as it will help in finding whether demographic variables describe performance or is it only the pay. In the same way, we need to pinpoint the demographic variables to express the predictor of performance related pay.

The Following hypotheses were made to fulfill the study objectives:

- The higher the pay, the greater the performance of employees.

- The higher the pay, the lesser the chances of employee demotivation.
- The higher the pay, the lesser the chances of job dissatisfaction.
- There will be a difference in performance related pay in employees of public and private sector universities.
- There will be a positive relationship in motivation and satisfaction of university employees.
- There will be a positive relationship between job satisfaction and performance related pay of university employees.
- Demographic variables will be the predictors of pay related performance.

Method

Scale Development Process

The study was completed in two phases and the detail is as follows:

Phase I: During phase one, the items for performance related pay was generated. A detailed review of literature was done and items related to criterion variable (i.e, performance related pay) were extracted. All the items were enlisted and checked for their fidelity and redundant items were excluded. 94 items were finalized including questions related to demographic information, income, job satisfaction and motivation. Cronbach Alpha was used to establish the reliability of the questionnaire. The index of the Cronbach alpha (0.956) show that performance related pay scale is highly reliable and items possess inter-item consistency. Demographic variables includes age, education, marital status, years of job, place/organization, job status, income, no. of dependent, total family income etc.

Phase II: During phase two, data was collected from sample using self constructed performance related pay (PRP) questionnaire. A sample consisting of 300 university teaching employees (i.e, 150 public sector universities and 150 private sector universities) was taken from public and private sector universities of Pakistan. Mean age of the sample was 35.17 and standard deviation was 9.12.

The data was collected through Performance Related Pay scale from public and private sector universities of Pakistan. The sample was chosen via non probability purposive sampling technique. In the current study only teaching employees were included with minimum job experience of two years. The filled questionnaire was processed by using SPSS 17.0 version and the results were saved in tabulated form.

Data Analysis

The data was analyzed using frequency distribution, descriptive statistics and reliability analysis. Bivariate correlation was applied to find the relationship between Motivation, Job satisfaction, Income and performance related pay. T-test was also employed to find out performance related pay in public and private sector universities and to find out the relationship between Motivation and job satisfaction. Multiple linear regression was also applied to find the predictors of performance related pay.

Results

From the present study it was found that average educational level of employees was M.phil or MS ($M=17.99$ and $SD=1.72$). It ranges from Bachelor to PhD. 54% of employees were married and 46% were unmarried. The employees with Government job were 9, 11 tenure track employees, 240 were university employees, 36 were visiting faculty and only 5 participants were contractual staff. Employees were belonging to grade 17-21. Employees were having job experience from 2.5 years to 37 years ($M=10.18$ and $SD=8.21$). Out of 300 employees, only 23 employees stated that they are being paid on the basis of performance. Descriptive statistics and Demographic data of sample is shown below:

Table 1:*Demographic Features of N=300*

Variables	Freq.	% age	<i>M</i>	<i>S.D</i>
University Status				
Public	150	50%		
Private	150	50%		
Age			35.1783	9.12771
Gender				
Male	70	23.3%		
Female	230	76.7%		
Teaching Experience			10.1833	8.21124
Marital Status				
Married	162	54%		
Unmarried	138	46%		
Income			50,000	40629
Education				
14	0	1.0%		
16	89	29.7%		
18	152	50.7%		
20	59	19.7%		
Academic Rank				
17	14	4.7%		
18	171	57.0%		
19	60	20.0%		
20	43	14.3%		
21	12	4.0%		
Nature of Job				
Punjab Government	9	3.0%		
Tenure Track	11	3.7%		
University employee	240	80.0%		
Visiting Faculty	36	12.0%		
Contractual Staff	4	1.3%		
Currently are you being paid on the basis of your performance?				
Yes	23	7.7%		
No	277	92.3%		
Do you want to be paid on the basis of your performance?				
Yes	296	98.7%		
No	4	1.3%		

The self constructed PRP scale has 94 items and it shows high alpha reliability $\alpha = 0.956$ ($M=43.04$ and $SD=2.65$).

The results indicated when employees will have higher pay then their performance will increase as $r = .564$, $p < 0.01$ and there will

be less demotivation when employees will be paid higher as $r = .388$, $p < 0.01$. The findings of the present study also showed positive correlation between Income and Job satisfaction, motivation and Job satisfaction, job satisfaction and Performance Related Pay as $r = .313$, $p < 0.01$; $r = .557$, $p < 0.01$; $r = .493$, $p < 0.01$.

Table 2*Correlations*

Bivariate correlation among motivation, job satisfaction and performance related pay

Subscale	1	2	3	4
1. Income	-	.388*	.313*	.564*
2. Motivation		-	.557*	.633*
3. Job Satisfaction			-	.493*
4. Performance related pay	.564*	.633*	.493*	-

Note: Correlations marked with an asterisk (*) were significant at $p < .01$

The change between Performance Related Pay in employees of public and private sector universities was identified through T-test. It was found that PRP in public sector employees was significantly higher ($M=2.32$, $SD=41.61$) than private sector employees ($M=2.25$, $SD=32.38$). The differences were significant, $t = 1.688$, $p < .01$.

Table 3

Performance related pay predictors from linear regression Analysis

PRP Predictors	<i>B</i>	<i>S.E</i>	β	<i>p</i>
Age	-.583	.532	-.142	.274
Teaching experience	-.162	.567	-.036	.066
Marital status	-.7.929	4.300	-1.06	.050*
Income	.000	.000	.522	.000*
Educational Level	-.066	1.295	-.003	.960
Academic Rank	7.971	4.218	.199	.050*
$R = .339$, $R^2 = .326$, $p < .001$				

Multiple linear regression was administered to identify the predictors of pay related performance. Results indicated that age, teaching experience and educational level are non significant predictors of pay related performance. However, beta value indicated that being a married employee, high income and high academic rank are the significant predictors of performance related pay (see table 3).

Table 4

Independent Sample t-test Comparing PRP in public and private sector university employees (N=300)

Independent Sample t-test Comparing PRP in public and private sector university employees (N=300)

Variables	Public (n =150)		Private (n = 150)		t	p	95% CI	
	M	SD	M	SD			LL	UL
PRP	2.32	41.61	2.25	32.38	1.688	.003*	-1.206	15.739

* $p < .01$

Discussion

The present study examined the performance related pay in public and private sector university employees. The findings of the current study show that frequency of performance related pay is high in public sector university employees than private sector university employees.

The first hypothesis explained that the higher the pay; the greater the performance of the employees ($r = .564, p < 0.01$). This hypothesis is supported by Armstrong and Murliss (1991) that pay plays an important role in motivating employees. When employees are given pay as per their performance then employee satisfaction will increase and it will ultimately result in an organization's success. On the same lines, Silva (1998) highlighted that many employees seek to sustain competitiveness through pay increase which is more related to performance and at the same time it will also motivate employees since it is a healthy competition. Launching a pay for performance

salary system may be the greatest effective technique to encourage salary level satisfaction.

The second hypothesis describes that the higher the pay, the lesser the chances of employees being demotivated ($r = .388$, $p < 0.01$). The existing literature is consistent with these findings as Ariely, Gneezy, Loewenstein and Mazar (2011) identified that increasing performance incentives will increase employee motivation and this increase in motivation will ultimately result in a better performance. Oshagbeni (2000) emphasized pay as a significant reward to motivate the employees towards the goals of the employer. Mardsen and Richardson (1992) also supported the findings of hypothesis by highlighting that Performance Related Pay acts as a motivator.

The third hypothesis that higher the pay, lesser the chances of job dissatisfaction ($r = .313$, $p < 0.01$) can be supported by Omer and Ogenyi (2006) findings that additional changes in pay will increase job satisfaction. Research suggests that higher job satisfaction reduces employee turnover intentions and may lead to performance gains for organizations (Rainey, 2003; Kim, 2005).

The fourth and fifth hypothesis was confirmed that there will be a relationship between motivation, job satisfaction and Performance Related Pay of university employees ($r = .557$, $p < 0.01$ and $r = .493$, $p < 0.01$). Similarly, Mishra's (2009) findings support the present hypothesis that Performance Related Pay is expected to produce positive changes in government culture which in turn will reduce corruption and increase motivation and job satisfaction in employees. Judge, Cable, and Higgins' (2000) research conducted by the evidence that pay satisfaction positively influences overall job satisfaction, motivation, performance and leads to less absenteeism and turnover behaviors of employees. Prendergast (1999) findings resulted that performance is considered as a product of motivation and job satisfaction. Igalens and Roussel (1999) stressed that reasonable salary may have a positive

impact on job satisfaction without having any effect on work motivation.

The sixth hypothesis was also confirmed that there will be a difference in Performance Related Pay in employees of public and private sector universities ($t = 1.688, p < 0.01$). This hypothesis is also supported by Pakistani research. Chaudhry, Sabir, Rafi and Kalyar (2011) elaborated that pay related satisfaction in Pakistan is high in public sector organizations as compared to private sector organizations as the present study is conducted in Pakistan so it is clear that Pakistani employees feel more security in the public sector. However, pay structure is better in private sector organizations. So it is evident that Performance Related Pay is high in public sector organizations. Similarly, Cacioppe and Mock (1984) also supported the present research that public sector employees have more job safety as compare to private sector. Smith and Simpson (1994) explained that moving towards Performance Related Pay showed that public sector employee pay would be more closely related to performance.

The seventh hypothesis that demographic variables will be the predictors of Performance Related Pay was also supported Omar and Ogenyi (2006) that high salary is considered as the most important predictor of job satisfaction and motivation than any other demographic variable. Prendergast (1999) also highlighted that rewards and incentives increase employee motivation for the job. The findings of the current study showed that demographic variables like young age, less teaching experience, married employees, high salary, more educational level and high academic rank are the predictors of performance related pay. The overall regression model yielded $R = .339$, $R^2 = .326, p < 0.01$

Limitations and Recommendations

In spite of the strengths of the present study in Pakistani workplaces, this study seems to have some shortcomings. It was

very difficult to collect data from all public and private sector universities. So the results cannot be generalized on all universities of Pakistan. The problem which was faced again and again was lack of cooperation by authorities of workplaces. Due to lack of research culture, they were reluctant to provide information regarding their pay and other related information. Purposive sampling was used in this research as the results cannot be generalized to all working men and women and workplaces. It was difficult to collect data from working men and women, because they were not willing to respond.

It is recommended that management of organizations must plan their organizational systems to analyze the rules and regulations so that the employees could be rewarded according to their performance. It will ultimately increase their job commitment and effectiveness for the organization.

Conclusion

It can be concluded from all the above findings that performance related pay is the key element to motivate employees and the pay illustrates a significant role in determining job motivation and job satisfaction. The current research demonstrates positive attitudes of the public sector university employees towards performance related pay. Pay must be in accordance to performance and employees must be rewarded to promote the success of an organization. In the Pakistani context, it can be determined that Performance Related Pay is high in public sector employees. No doubt, that the pay structure is better in private sector organizations but employees have more job security in public sector organizations and demographic variables have a strong relationship with Performance Related Pay.

References

- Ariely, D., Gneezy, U., Loewenstein, G., Mazar, N., (2011). *Large Stakes and Big Mistakes*, Working Paper. Retrieved from <http://www.bos.frb.org/economic/wp/wp2005/wp0511.pdf>
- Armstrong, M. (2006). *A Handbook of Human Resource Management Practice* (10th ed.). Kogan Page Limited.
- Armstrong, M. and Murliss, H. (1991). *Reward Management*. Kogan Page, London.
- Armstrong, M., Baron, A. (1998). *Performance Management-the new realities*. The institute of personnel development, London.
- Bagozzi, P.R (1980). Performance and satisfaction in an industrial sales force: An examination of their antecedents and simultaneity, *Journal of Marketing*, 44, No 2 (spring).
- Bertelli, Anthony M. (2007). Determinants of bureaucratic turnover intention: Evidence for the department of the Treasury. *Journal of Public Administration Research and Theory* 17. Pp 235-258.
- Buckman, E. S. (2006). *Motivating and retaining non-family employees in family-owned businesses*. The UMass Family Business Center. Retrieved October 31, 2008, from http://www.umass.edu/fambiz/motivate_key_employees.html.
- Cacioppe, R., and Mock, P. (1984). A comparison of the quality of work experience in government and private organizations. *Human Relations*, 37(11), 923-935.
- Chaudhry, M. S., Sabir, H. M., Rafi, N., Kalyar, M. N., (2011). Exploring the relationship between salary satisfaction and job satisfaction: A comparison of public and private sector organizations. *The Journal of Commerce*, 3(4), 1-14. Retrieved from http://joc.hcc.edu.pk/articlepdf/joc201143_1_14.pdf
- Clark, A. E., and Oswald, A. J. (2002). A simple statistical method for measuring how life events affect happiness. *International Journal of Epidemiology*, 31(6), 1139-1148.
- Felps, W., Mitchell, R. T., Heckman, R. D., Lee, W. T., Holtom, C. B. and Harman, S. W. (2009). Turnover contagion: How coworkers' job embeddedness and job searching behaviors influence quitting. *Academy of Management Journal* 52(3). pp 545-561.

- Herzberg, F. W., Mausner, B., and Snyderman, B. (1957). *The Motivation to Work*. Wiley, New
- Igalens, J. and Roussel, P. (1999). A Study of the Relationships between Compensation Package, Work Motivation and Job Satisfaction. *Journal of Organizational Behavior* 20(7). pp. 1003-1025.
- Incomes Data Services Study 626 (May, 1997) on Performance Management.U.K.
- Judge, T. A., Cable, D. M., and Higgins, C. A. (2000). The employment interview: A review of recent research and recommendations for future research. *Human Resource Management Review*, 10(4), 383-406.
- Kim, S. (2005). Individual-level factors and organizational performance in government organizations. *Journal of Public Administration Research and Theory* 15(2). pp 245-262.
- Kini, R. B., and Hobson, C. J. (2002). Motivational theories and successful total quality initiatives, *International Journal of Management* 19(4). Pp 605.
- Latt, A. K., (2008, February 02). *Motivating people on the way towards organizational performance*. Retrieved from <http://www.ethicalquote.com/docs/Motivatingpeople.pdf>
- Lavy, V. (2007). Using performance-based pay to improve the quality of teachers. *The future of children*, 17(1), 87-109.
- Leonard, J. S. (1990). Executive Pay and Firm Performance. *Industrial and Labor Relations Review*, 43 (3), 13S-29S.
- Marsden, D., Richardson, R. (1992). Performing for Pay? The Effects of "Merit Pay" on Motivation in a Public Service. *British Journal of Industrial Relations* 32(2). Pp 243-261.
- Martinez, J. (2001). *Assessing quality, outcome and performance management*. World trade organization, Geneva, Switzerland.
- McCausland, W. D., Pouliakas, K., and Theodossiou, I. (2005). Some are punished and some are rewarded: A study of the impact of performance pay on job satisfaction. *International Journal of Manpower*, 26(7/8), 636-659.

- Mishra, A., Mishra, A.S., (2009) *Formulating the concepts, principles, and parameters for Performance related incentives(PRI) in Government* . Retrieved from <http://india.gov.in/govt/studies/cluster-IV.pdf>
- Moynihan, D. P., Pandey, K. S. (2008). The ties that bind: Social networks, person-organization value fit, and turnover intention. *Journal of Public Administration Research and Theory* 18. pp 205-227.
- Nelson, N (2006). A little appreciation can go a long way toward employee job satisfaction. Wiley periodicals DOI 10, 1002/ert 20094, Sage Publications, Inc.
- O'Donnell, M. (1998). Creating a performance culture? Performance based pay in the Australian Public service. *Australian journal of public administration*, 57(3), 28-40
- Omar, O. E., and Ogenyi, V. O. (2006). Determinants of pay satisfaction of senior managers in the Nigerian Civil Service. *International Journal of Public Sector Management*, 19(7), 687-701.
- Oshagbemi, T. (2000). Correlates of pay satisfaction in higher education. *International Journal of Educational Management*, 14(1), 31-39.
- Perry J. L., Engbers, A. T., Jun, Y. S. (2009). Back to the Future? Performance-Related Pay, Empirical Research, and the Perils of Persistence. *Public Administration Review* pp 39-51.
- Prendergast, C. (1999). The Provision of Incentives in Firms. *Journal of Economic Literature*. 37(1). pp 7-63.
- Rainey, H. G. (2003). *Understanding and managing public organizations* (3rd Ed.). San Francisco, CA: Jossey-Bass.
- Rupp, A. D., and Smith, W. T., (2003). An examination of emerging strategy and sales performance: motivation, chaotic change and organizational structure. *Marketing Intelligence and Planning*, 21(3), pp. 156-167.
- Silva, S. D. (1998). *Performance-Related and skill-based pay:An Introduction*. Retrieved from <http://www.ilo.org/public/english/region/asro/bangkok/download/11-13dec02perform2.pdf>
- Smith, J., Simpson, J. (1994). Locally Determined Performance Related Pay: Better Levers

Exist For Improving Performance In A Health Service With Disparate Values. *British*

Medical Journal 309(6953). pp. 495-496.

Smith, P. C., Kendall, L. M., and Hulin, C. L. (1969). *The measurement of satisfaction in work and retirement*. Chicago, IL: Rand McNally.

Whitley, P. (2002). *Motivation*, Capstone Publishing, Oxford, Great Britain

Wilms, W. W., Chapleau, R. R. (1999). *The illusion of paying teachers for students performance*. Education week on the web. Retrieved from <http://www.edweek.org/ew/ewstory.cfm?slup=10wilms.h19>.

LEADERSHIP: WHAT IT IS, WHAT IT IS NOT

Samer Iqbal¹

Introduction

Leadership does not lie so much in the leader's respective behavior as in his motives. It can easily be diagnosed through intent. The intent of a person can primarily manifest in two ways. It can be *self-oriented*: i.e. just to take from others or it can be *people-oriented* just to give to others. When it is self-oriented it means the leader is more interested in his own agenda. When the leader is willing to suspend his own agenda and listen to subordinates then he is giving his attention to others. Stephen Covey emphasized that managers manage inside the organization; leaders manage the organization. (Nelson, 2013)

President Dwight D. Eisenhower's definition of leadership revealed that the art of the leader is getting others to follow the rules clearly defined and satisfy the conditions of the task. It is the employee's duty to embrace the mission of the organization and achieve it. (Mielach, 2012). These two experts focused on the self-oriented intent of leadership. These views are based on the pattern 'to get' from others. If the intent of a leader is self-oriented then he shows the power to take from others. People under this type of leadership, have to act like slaves and must be obedient to follow orders and gradually move in their career without any recognition.

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Literature Review

Matt Mickiewicz asserted that a leader must have a strong vision and have the courage to say no and not strive to make everyone happy. He shows his leadership through his attitude and actions instead of speeches and memorandums. (Mielach, 2012). In the same way Hopkins (2014) wrote that a leader has superior knowledge, has wisdom to deal with any problem and power to face the challenges. That makes him famous among his followers. They wouldn't follow him otherwise. While another characteristic of leadership is that he/she listens to everybody and picks up creative ideas and implements them. The leader should pay more heed and speak less — Jeffery Hayzlett, CEO of The Hayzlett Group. (Mielach, 2012)

Additionally, Rick Campbell, president and CEO shared his definition of leadership that if the people are focused, goal-oriented, willing to follow their leader, which is surely a symbol of the real leader. And if you just follow your leader to achieve your goals then you are following a dictator not a leader and that is not a suitable approach of leadership. (Mielach, 2012). The above quotations show that leaders who follow this approach are goal oriented not people oriented. In their views people are less important than organization's goals. They always prefer goals over their employees which is not the sign of a true leader.

While some authors, (Zenger, Folkman, Sherwin, & Steel, 2012) affirmed that a great leader isn't limited to his position and power. A leader is a person who influences others to reach their destinations. That could only happen if all his followers serve in their capacity to achieve a common goal. Furthermore, another research shows that emotions, attitudes, preferences, and dispositions create tradition and culture. Legitimate diversity issues always arise among generations. These issues need to be considered for developing vibrant leaders. (Arsenault, 2004). Then again leaders must know about the core value

of their followers to motivate them and communicate them through personal actions. (Fry, 2003) While shared leadership also helps to improve the system and the students' learning outcomes. (Heck & Hallinger, 2009). Malone & Fry (2003) have proposed a leadership model based on empowering the team and endowing the individual with autonomy to foster organizational commitment.

The Intent of a Leader

A leader's benevolent intent makes him a great leader. An ideal leader always takes actions to show care and growth of his employees, while the malevolent leadership intent always focuses on getting from others. Let's talk about the organizational setting to show how employers treat their employees. Organizational Leadership is based on organogram. This is a classic shape of how the hierarchy is created and maintained. When you look closely however an Organogram is shaped like a pyramid. Adriani revealed that in most of the organizations, all managerial and operational levels managed through pyramid model that is clearly and well-functioning framework to manage quality records. (Adriani & Sibinga, 2008) The most biting criticism of this idea that is seen as normal comes from Schuitema (2004) where he calls it an image of subservience. He points out that the pyramid model of leadership in Semitic mythology is most obvious where Moses and Pharaoh are opposite each other. Moses gave freedom to his people which led them towards life while Pharaoh enslaved people. So the balance between the power relation of employee and employer is extremely important. It is not the price of the service, it is acceptance of the justice of a power relationship between them. When employers empower their subordinates the power of their relationship is legitimate. The augmentation suspension of control is the empowerment of employee through employer. So the leader is here to give and act generously with courage. Giving is not about being nice. Giving is about being transactionally correct. The more correct you are, the more peace is likely to prevail. To empower and motivate the employees the leader should follow Care & Growth

Model as a solution. When the Boss wants his work to be done all the time the employee has little morale.

(Schuitema, 2004) introduced The Care and Growth Model™ of leadership. It is a tool of refinement with which a leader is able to find the correct and benevolent responses to emblematic circumstances. It is the basic transactional structure whereby the leader will transform and grow him or her. The effectiveness of this perspective is not administrative but relating to existence. Ultimately the aim is making better human beings. Once this perspective becomes real, the leader changes. Empowering and growing subordinates with great zeal is the main characteristic of a great leader.

Conclusion

A leader pursues through his nature and his capacity unconditional motives. (Schuitema, 2004) Whereas the technocratic style emphasized that all employees have to follow the clearly defined rules because, if they don't, they can neither be controlled nor managed. But one must know that the more you control the less control is possible. As a leader this is very crucial to see from the bird's eye view to empower all employees and motivate them towards an unconditional commitment to excellence. Schuitema, (2004) wrote in his book that nobody cares how long we live because we are all nearing death. The only matter is how honorably we live. And if we live honorably we die honorably. The tagline of the 1997 Oscar Winner for Best Picture BRAVEHEART is: "Every man dies. Not every man really lives" (Wallace, 1995). Actual leadership is to live morally and die morally and live forever in the hearts of their followers. Being unconditional is the trait of a true leader.

References

- Adriani, W., & Sibinga, S. (2008). The pyramid model as a structured way of quality management. *Asian Journal of Transfusion Science*, 2 (1), 6-8.
- Arsenault, P. M. (2004). Validating generational differences: A legitimate diversity and leadership issue. *Leadership & Organization Development Journal*, 25 (2), 124-141.
- Bhatta, C. P. (2000). Leadership values: Insights from ashoka's inscriptions. *Journal of Human Values October*, 6 (2), 103-113.
- Day, C. (2004). *A Passion for Teaching*. New York: RoutledgeFalmer.
- Fry, L. W. (2003). Toward a theory of spiritual leadership. *The Leadership Quarterly*, 14 (6), 693-727.
- Heck, R. H., & Hallinger, P. (2009). Assessing the contribution of distributed leadership to school improvement and growth in math achievement. *American Educational Research Journal*, 46 (3), 659-689.
- Hopkins, T. (2014, December 11). *Tom Hopkins Quotes*. Retrieved from <http://www.brainyquote.com>: http://www.brainyquote.com/quotes/authors/t/tom_hopkins.html
- Malone, P. N., & Fry, L. W. (2003). Transforming schools through spiritual leadership: A field experiment. *The American Educational Research Journal*, 1-40.
- Mielach, D. (2012, October 15). *Business news daily*. Retrieved from <http://www.businessnewsdaily.com/3269-how-to-be-a-leader.html>: <http://www.businessnewsdaily.com/3269-how-to-be-a-leader.html>

- Nelson, D. (2013). "Management Works in the System; Leadership Works on the System" The interpersonal skills on the corporate threshold. *Language in India* , 13 (4), 22-31.
- Schuitema, E. (2004). *Leadership: The care and growth model* (2 ed.). Cape Town: Orchard Publishing.
- Davey, B., Gibson, M., Ladd, A. (Producers), Wallace, R. (Writer), & Gibson, M. (Director). (1995). *Braveheart* [Motion Picture].
- Welch, J. (2014, December 11). *Jack Welch Quotes*. Retrieved from [www.brainyquote.com: http://www.brainyquote.com/quotes/authors/j/jack_welch.html](http://www.brainyquote.com/quotes/authors/j/jack_welch.html)
- Zenger, J., Folkman, J., Sherwin, R., & Steel, B. (2012). *How to be exceptional: Drive leadership success by magnifying your strengths*. South Florida: McGraw-Hill.

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