ISSN 1990-6587

Volume 10 Number 1 January - June 2015

Business Review

Leadership and Ideas for Tomorrow

RESEARCH JOURNAL
of
THE INSTITUTE OF BUSINESS ADMINISTRATION
KARACHI-PAKISTAN

BUSINESS REVIEW

Volume 10 Number 1

January - June 2015

Business Review is a peer reviewed bi-annual research journal of the Institute of Business Administration (IBA) Karachi. It is recognized by the Higher Education Commission (HEC) of Pakistan and is internationally abstracted/indexed in the Journal of Economic Literature (JEL) and EBSCO database. *Business Review* is a non profit Organization

BUSINESS REVIEW

RESEARCH JOURNAL
of
THE INSTITUTE OF BUSINESS ADMINISTRATION
KARACHI - PAKISTAN

Volume 10 Number 1 January - June 2015

CONTENTS

Editorial Perspective

TWO NARRATIVES and A DISCOURSE

"Remaking the world is an insignificant task."
"It is not the world that must be remade, but man."
Albert Camus, *Notebooks* 1942-1951, p.115

To rebuild the corporate world, we must strive to shift our paradigm, striving for an evaluative position in all the judgments we make, shifting our creative and co-creative emphasis away from the vaguely and partially defined position regarding the acceptance of *thus it is* and the *taken for granted* attitude to a radically examined position predicated on a creative and constitutive inter-subjective position based on the vision of clear and distinct perception of "*thus it ought to be*."

Although it is a single activity but the meaning is twofold. Firstly, it demands that we integrate into the corporate world-view the principle of movement which lends it the dynamic and transcendent possibility unfolding new, fresh and culturally oriented ways of being in the world. After all, why should the corporate world remain stigmatized by morbid ideas, petrifying beliefs and culturally retrograde attitudes and insipid lifestyle. It is needed to rethink the corporate world and to redefine its worldliness from a new perspective with a renewed sense of creative will, to rejuvenate new ways of making it *a lived-world* and a world we may call *our* world: the world which belongs to us and to which we belong.

Secondly, under the force of circumstance, it is imperative to revamp the conceptual structures and, more importantly, the idealizations of the corporate world to reflect the altered mood and temper of the man who feels that the shadows of the events that take place in the corporate world shall color his dreams and light the dawn of his hopes for tomorrow, and or a long time to come, if tomorrow comes.

To reach the desired goal, by moving in the right direction, it is indeed necessary to be on the right path and to move slowly and with measured steps, with the awareness that our supercilious attitude and a pious façade, will make us sink deeper into denial and bad faith. The corporate man is the measure of the genius of both the good and the evil of his heart and mind. And the measure of his sincerity lies in his honest-to-goodness realization that fatal flaws exist in the corporate system and need to be addressed before he is rendered transparent in our eyes and convicted in his mind. He needs to put his unexamined beliefs and ideas in parenthesis to contest the allegations that;

1. The corporate world is facing grave moral crisis generated by its own inherent fatal flaws.
2. The "corporate system' is threatened by the lack of knowledge about the nature of man and what light does this knowledge shed on the place of *Value* in the corporate culture and or *Decision* making in the corporate management.
3. Human nature and decision making are closely allied to the value judgment and attitude formation. Crisis, typically characteristic of the corporate world, confronts our business leadership with serious challenges, laden with moral consequences.

4. Remembering that the dubious ethical and moral practices and aberrations are not a monopoly of any system, how strong and convincing is the evidence that the corporate man does not suffer from grievous flaws of ethical conduct and moral behavior and that his character is above all reproach and denunciation?
5. Remembering also that the corporate functionary is not alone to suffer from moral lapses and that his ethical lassitude is human, all too human, and therefore not unjustly blame worthy in the context of human condition characterizing human situation.
6. In philosophy and in ethics, in life and in business, perennial questions of human relevance cannot be asked meaningfully outside the context of human situation.

   Therefore, both from the negative and affirmative standpoints the persisting areas of controversy remain and the debate lingers on; E.g.:

   a. How natural is human nature and,
   b. In the domain of human nature, what is the place of moral commitment and obligation? In the realm of value, is a free man by nature free to "enjoin the good and forbid the wrong?"
   c. Is he obliged to obey unjust corporate system incapable of rising above himself? He needs to remember that "unless above himself he can raise himself, what a poor thing is man!"
   d. Is human nature immutable? Is, by nature, a criminal condemned to remain a criminal and a poor man poor? Jean Paul Sartre, an existentialist philosopher, believes that 'man is condemned to be free', free to make and re-make himself, free to determine his destiny and his fate?, to give himself a nature and a character by his actions, decisions, evaluations and choices; by the way he exercises the freedom and his will to power.
   e. A free man is a 'particular universal'. He follows the Kantian categorical imperative 'to act in such a way that by his will his action becomes a law universal'.
   f. To be free, the corporate man needs to have ethical insight to know the truth and moral courage to will the truth. Above all, he must have the fortitude to do what is right.
   g. If he loves truth more than the thing he loves, does he uphold truth over and above his loyalty to whatever goes without saying and is taken for granted?
   h. Does he follow and must he abide by the law he is convinced is morally wrong and is not predicated on truth?
   i. As a lover of truth, is he willing to seek the truth everywhere or nowhere, at all?
   j. Straying from truth for so long, does he have the courage and character to outgrow his vehement insistence on *thus it is* and *it cannot be otherwise?* Consider then the narratives and the discourse, rational and human, constructed with so much understanding by
      a. Socrates in *Apology*
      b. Sophocles in *Antigone*
      c. Thomas Hobbes in *Leviathan*
      d. David Hume in *A Treatise of Human Nature*
      e. Immanuel Kant in his *Critique of Practical Reason*

The desire to reconcile the antithetical and antagonistic notions regarding "to be or not to be", 'thus it is' and 'thus it ought to be' has dominated human mind and soul ever since the advent of his reflective consciousness, and the problem of freedom has agonized him like a thorn in his heart.

Freedom, like character, is the most precious possession of man. In nothing else is he rich, in nothing else is he poor. Nothing in man's life is more vital and glorious than the character of a free man. But once it is dead, it is dustily dead and lost forever.

> "I think we have freedom of will and that it comes out of our uniqueness as individuals, perhaps wholly determined, yet to some degree unpredictable, it is one of our most precious possessions. As such, we should seek to enlarge it; yet that is not the direction in which we are going. On the contrary, many aspects of modern life threaten to erode it; and much that we are offered in the guise of future progress would tend to do the same,"
>
> John R. Platt, *New Views of the Nature of Man,* p.46

No strategy can be effective and relevant to rebuilding the corporate worldview without an ethical perspective. In the corporate world today, more than ever before, there exist growing need to place our unexamined beliefs and assumptions, in parenthesis for radical examination not only because they have not been questioned and radically examined before but more so because they have become sacrosanct. We must not transgress our fidelity to truth expediency and personality above character.

Our focus must now shift from *knowing* to *being* and in the ontogenetic realm of thinking we must develop fresh phenomenological attitude enshrined in its creative and dynamic spirit that will unfold the principle of transcendental movement. Our success in this regard will reflect dynamic spirit of the creative enthusiasm, methodological interpretation and the dynamic and transcendental spirit of our corporate worldview. It will radically deepen our understanding of man's-being-in-the-world, converging upon "to be or not to be" what we know and understand. This is a step closer to rebuilding the Corporate World by assiduously reconstructing the Corporate Man. Sadly, however, and it is writ large all over Corporate Pakistan, our dismal success in this respect betrays our huge failure as a man.

To achieve this goal we need to develop new analogies and new metaphors, new ways of seeing the world and new ways of being in it; above all being what we know and understand and are capable of becoming. All these possibilities are embedded in man's being-in-the-world, waiting to be translated into defining features of *world to be,* via man's courage to be and the efficacy of his creative imagination and the will to truth.

This is the most perilous part of the undertaking; to search and then to destroy the hidden persuaders, working anonymously and subliminally, they take ownership of our thoughts, emotions and the power to decide and choose to determine our value-judgments and attitudes. It is as if they know our heart and soul and mind. The corporate functionary has to rise above the stigmatizing and petrifying *status quo,* transcending his parochial inclinations to test the strength of purpose and the total integrity of his character, demonstrated in his conduct and behavior as a *sine qua non* and quintessential of his business organization's reputation and positive perception. The moral proclivity, phenomenological assumptions and presuppositions have built-in answers which must not be allowed to remain obscure to the creative imagination and the will to truth of the corporate man. Such proclivity and stinted bias have a decisive impact upon the profit orientation and financial bottom line of corporate business. They constitute the defining features of its identification and *raison d'etre.*

pIn this context, we need to examine

i. The nature of Acquisitive Ideal and Profit Motive (Peter Drucker)
ii. A New Code of Business Ethics (B. Randall)
iii. Business Morality; Some Unanswered (and perhaps unanswerable) Questions (A.S. Aitler)
iv. Thinking through Corporate Social Responsibility. Arguments for and Against (Richard Eells and Theodore Levitt)
v. Responsible Advertising, The Truth or the Product? (Games Webb Young)
vi. The Hidden Persuaders (Vance Packard) ‘and Idols of Mind (Bacon)
vii. The Ethics of Persuasion and The Art of Selling (Aldous Huxley)

. . . *to be continued* Tufail A Qureshi

> Beneath every serious dispute in the world of scholarship lies a judgment of value; and when that point is reached, science and scholarship must bow their heads in silence. Only one voice may still be heard; the voice of philosophy. There speaks reason. All else is only cries of emotion. Emotion is individual; transient. Reason is permanent.
>
> Gilber Highet, *Man’s Unconquerable Mind,* pp 96

ARTICLE

REVISITING COMPENSATING WAGE DIFFERENTIALS: THE EVIDENCE FROM EMPLOYER-PROVIDED HEALTH INSURANCE

Dan Qu
School of Economics and Trade, Hunan University, China

Abstract

This paper uses 1996 and 2001 Survey of Income and Program Participation to examine the evidence for compensating wage differentials associated with employer-provided health insurance (EHI) in the United States. The results provide no evidence of a tradeoff between wages and EHI coverage. On the other hand, the results do suggest that employees who work in states with income taxes are more likely to receive EHI than those in states without income taxes. Fixed effects, first differencing and instrumental variable estimation are used to address the potential ability bias and endogeneity problems in wage models with EHI as an independent variable. While both fixed effects and first-differencing estimation provide evidence of a positive relationship between wages and EHI, validity tests cast doubt on fixed effects estimation. Instrumental variable estimates, however, provide no evidence of a tradeoff in either direction.

Key Words: *Compensating Wage Differentials, Employer-Provided Health Insurance, First Differencing Estimation, Fixed Effects Estimation, Instrumental Variable Test*

JEL No I13, I14, I15, J3,

Introduction

Employer-provided health insurance (EHI) is the primary type of insurance for most of the Americans. At least two thirds of Americans under 65 years of age have health insurance at their workplaces. Regardless of that, a continuous decline of the percentage of population with EHI was observed in the past decade. For instance, it was reported that the percentage of the population under 65 years of age covered by EHI decreased from 66.7% in 2000 to 65% in 2002; reaching at 61% in 2006.[1]

Declines in EHI coverage and the number of insured do not change the fact that EHI is still accepted by most employees in the United States which is mainly due to the advantage of tax deductibility. Employees benefit extensively from buying health insurance through workplaces.

Building on the situation aforesaid, this study explores the question that whether employees who obtained EHI earn a lower wage compared to those who lost EHI. The labor market outcome of having or losing EHI may have significant implications for health insurance reforms.

1. Information about of EHI is also introduced in the report on health in the United States, issued by the National Center for Health Statistics (2007).

This study is based on the theory of compensating wage differentials. The pertinent theory was first suggested in the work of "The Wealth of Nations" (Smith, 1776). In a competitive labor market, an employer provides both pecuniary and non-pecuniary wages to workers. The non-pecuniary wage includes many aspects of a job; such as environment, location, how dangerous the work is, and all forms of benefits (vacation, pension, health insurance, etc.). Assuming that employees are all alike and that all jobs are identical, compensation packages for employees will locate on the same downward sloping budget constraint line. As a result, an employee who chooses a job offering higher health insurance coverage does so at the expense of giving up a certain amount of pecuniary wage. That is to say, the employer will pass at least a part of the cost of providing health insurance onto the employee in the form of a lower wage. An employee's willingness to give up some pecuniary wage and accept better health insurance critically depends on how much she values this health insurance. If the employee attaches higher value to EHI than to the amount of money she gives up, the cost may be passed wholly onto the employee. If the employee has other sources of health insurance, such as obtaining health insurance through his spouse, she may value the health insurance less; thus, the employer may bear some costs for providing the health insurance.

This study aims to contribute to the existing literature by empirically examining compensating wage differentials associated with EHI using the data from the Survey of Income and Program Participation (SIPP). First, SIPP is a nationally representative, longitudinal survey that provides extensive information on labor market behavior and health insurance status. Specifically, it not only collects information on whether the respondent has EHI, but also on the amount the employer pays for the health insurance and whether the employee obtains the health insurance through his/her dependent's or through her own employer.[2] Second, this paper discusses the advantages and disadvantages of available empirical methodologies employed in studying compensating wage differentials.

This paper includes the following sections: the next section highlights literature review, section III sets up the empirical specification, section IV shows the discussion of data, while section V propounds empirical results. Section VI concludes the paper.

Empirical Evidences from Previous Studies

Most empirical studies previously carried out on compensating wage differentials associated with health insurance find that results are either insignificant or contradictory to the theory (Leibowitz, 1983; Woodberry, 1983; Eberts and Stone, 1985; Monhiet et al., 1985; Gruber and Krueger, 1990; Royalty, 2000; Jensen and Morriesty, 2001; Baiker and Chandra, 2005). A common explanation for the contradiction is the omission of worker's personal ability. OLS estimation is criticized by researchers for failing to capture workers' unobserved characteristics. However, the evidence to support the theory from fixed effects and two-stage least squares (2SLS) estimation is also fairly limited.

2. SIPP asks respondents "Did ...'s employer/union pay all, part, or none of the premium of the plan?"

There are two critical problems generally found in previous studies. One is the data problem. Some studies use aggregated data (Woodbury, 1983; Gruber and Krueger, 1990; Gruber, 1994; Royalty, 2000), which tends to omit individual specific characteristics. The other problem is the application of OLS estimation. It has been discussed extensively that OLS estimation cannot capture all of a worker's unobserved characteristics (Brown, 1980, Duncan and Holmlund, 1983, Jensen and Morriesy, 2001, Simon, 2001; Miller, 2004, Olson, 2002, Baiker and Chandra, 2005). As an addition, this study uses a national longitudinal data set – SIPP to exploit individual level information in estimating the differential, and compares fixed effects estimates to the first-differencing and instrumental variable estimates.

Empirical Specification

The empirical estimation model is based on a human capital earnings model augmented with measurement of an employee's health insurance coverage.

(1) $$W_{it} = f(X_{it}, EHI_{it}, u_{it})$$

where W is the hourly wage rate for worker *i* at time t, *X* is a set of individual characteristics that determines one's wage, EHI is a vector of the worker's health insurance coverage, and u is a stochastic error term. The wage equation used in this study is log linear.

(2) $$\log(W_{it}) = X_{it}\beta + EHI_{it}\gamma + \alpha_i + u_{it},$$

where *i* indicates an individual. The problem in estimating equation 2 is that we may not observe all *X*'s. Some of the individual characteristics are observable (such as race, gender, age, etc.) and some are not (such as worker's intelligence, ability, etc.). The unobserved time-constant worker specific characteristic (such as α_i) can bias the OLS estimation of γ in 1 due to a possible correlation between these omitted variables and the worker's fringe benefits. As a result, $COV(EHI_{it}, u_{it}) \neq 0$. An employee with higher ability typically earns a higher wage and receives better health insurance given that all workers' other characteristics are alike. Therefore, if the unobserved characteristics are positively correlated with the wage level, γ will be less negative and even positive. However, it is almost impossible to precisely measure these unobserved characteristics. This is a problem that cross-sectional data and OLS estimation encounter and cannot solve.

One solution to the problem is to apply fixed effects estimation. The fixed effects estimation takes away these unobserved and time-constant characteristics by including a dummy variable and captures variation within each individual. Thus, by taking into consideration the covariance between health insurance coverage and unobserved variables, we can eliminate the bias in estimation.

On the basis of this consideration, the first-differencing method is also proposed in this study. The first-differencing method also eliminates the worker's unobserved characteristics. Compared to the fixed effects estimation, this method captures the changes in the log hourly wage and health insurance coverage from one period to the next. It estimates whether the hourly wage increases when an employee gains EHI. A negative coefficient of the change in health insurance coverage indicates that getting better health insurance benefit lowers the hourly wage. Therefore, compared to demeaning explanatory variables in the fixed effects estimation, the first-differencing estimation assumes faster adjustment of the wage to changes in EHI. In this case, the first-differencing estimation could be more appropriate than the fixed effects estimation.

Besides the fixed effects and the first-differencing estimation, an instrumental variable (IV) test is also applied in this study to solve the endogeneity problem. Valid instruments are required to be uncorrelated with the error term (unobserved personal characteristics), but be correlated with endogenous variable (an employee's EHI status). In order to see the compensating wage differentials for working wives, instruments in this study include husband's EHI status, education level, union status and firm sizes.

Data

This study uses 1996 and 2001 SIPP panel data and includes employees who work at private firms that are for profit and whose ages are between 25 and 65. [3] The dependent variable is the logarithm of the hourly wage at the current main job. This study uses information on the primary job. In order to protect the respondent's confidentiality, publicly used data on hourly wages and monthly wages in SIPP are top-coded, which follows a complex procedure.[4] This study applies the mean above the top-code to top-coded values. The mean above the top-code is estimated by the lognormal distribution provided by Boushey (2006).[5] Then hourly wage rate can be calculated.[6] Hourly wages that are less than $1 are excluded in this study.

EHI is a dummy variable, which equals "1" if covered by employer-provided health insurance and "0" otherwise. Personal information includes gender, race, marital status, age,

3. SIPP is a set of longitudinal survey data first collected in 1984 by the US Census of Bureau. Each panel of the survey is randomly divided into four groups. Each group is interviewed in a separate month. The same group is interviewed every four month, which is called a wave. Information in SIPP falls in two categories: core and topical. Core data includes information collected in every interview, and less frequently asked questions are collected in topical modules.
4. Hourly wages are top-coded at $30 dollars, and monthly wages are top-coded at $12,500 per month or 50,000 for four months. Any wage that is greater than the "acceptable threshold" will be assigned a value either equal to the threshold or coded in terms of the respondent's gender, race etc.
5. In "SIPP user notes", Boushey (2006) lists means above top-codes for both monthly wage and hourly wage. Two results are estimated by lognormal and Pareto distributions and one is calculated by the formula provided by the US Census Bureau. The mean provided by the US Census is much higher than the other two. This study chooses the mean estimated by lognormal distribution.
6. Hourly wage rate is calculated by $\left(\frac{S}{4.2H}\right)$, where S is the monthly wage rate and H is total hours worked per week.

and years of education. SIPP provides information on the highest grade employees attended. I apply the second reconciling strategy on educational-attainment questions introduced by Jaeger (1997) and recode these variables into how many years of education each employee attained. It ranges from 0 (didn't go to school at all) to 20 years (professional and Ph.D).

Labor market consequence variables include information on industry, occupation and firm sizes, part-time or full- time working schedule, and union membership. Individual's industry and occupation are coded in accordance with CPS system. Both include 14 categories. Full time workers are defined as those who work 35 hours or more per week[7]. Dummy variable "CHAGE" is "1" if the employee has ever changed jobs since last and "0" otherwise.

This study also includes year and state dummy variables. Seven year-dummy variables[8] capture the general changes in wages due to inflation and any specific shocks in a certain year. State dummies help to pick up differences in the cost of living across states. More importantly, generosity of compensation may be differently correlated with the wage level across states. An interaction term between EHI and union status is included to test the effect of unionization on compensating wage differentials for EHI. The second interaction term between married and EHI included is to test whether married couples may tradeoff wages and EHI differently. The third interaction term is between "JBCHANGE" and EHI to examine whether an employee who has ever changed the job and gained EHI may compensated with a lower wage level.

Besides the estimation of wage equation, this study also examines factors that may affect the probability that an individual employee obtains EHI at the workplace. In particular, the impact of state income taxes is examined. An income tax t is a dummy variable with "1" referring to states with income tax and "0" without income tax. A linear probability test is conducted in which the dependent variable EHI with "1" referring to having EHI and "0" otherwise.

V. Results

OLS, Fixed Effects and First-differencing estimation.

In table 2, EHI is significantly and positively correlated with wages, but the magnitude is smaller in first-differencing estimation. In first-differencing estimation, independent variables are changes of variables from the last period. The dependent variable is the change of an employee's log hourly wage. A significant positive estimate of EHI indicates that gaining EHI increases the growth rate of one's hourly wage by 2.4%. Changing the jobs lowers the growth rate of one's wage. The growth rate of wages for elder workers is higher than that for younger workers, but age has a decreasing marginal effect on the growth rate of wages.

7. Refer to CPS and American Time Use Survey.
8. Year dummy variables include years from 1996 to 1999, and from 2001 to 2003. This is an unbalanced panel data. The 2001 survey didn't finish all interviews that are supposed to be 12 waves, due to a funding problem.

Table 2. Estimation of log hourly wage (comparison of OLS and FE and FD)

IV	OLS (1)	FE (2)	FD (3)
EHI	.207***	.068***	.024**
	(.006)	(.009)	(.010)
Union member	.131***	.016***	.003
	(.003)	(.006)	(.006)
Firm with 25-99 employees	.013**	-.007	-.021*
	(.007)	(.009)	(.012)
Firm with 100+ employees	.071***	.005	-.007
	(.005)	(.008)	(.011)
changed jobs	--	--	-.154***
			(.006)
Male	.205***	--	--
	(.002)		
African American	-.029***	--	--
	(.006)		
White	.040***	--	--
	(.005)		
Age	.048***	.113***	.018**
	(.0008)	(.005)	(.007)
Age square	-.0005***	-.0008***	-.0002***
	(9.46e-06)	(.00006)	(.00008)
Married	.069***	.017**	.010
	(.002)	(.006)	(.008)
Education	.058***	--	--
	(.0005)		
Intercept	.201***	-.745***	.020**
	(.028)	(.132)	(.0008)
No. of obs	210360	210360	152904

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

This study follows the test of strict exogeneity in an expanded equation proposed by Wooldridge (2002) to test the validity of the two estimations. The results show that the first-differencing estimation is more appropriate than the fixed effects estimation.

Compensating Wage Differentials by Age and Gender Groups

With the knowledge that first-differencing estimation is more appropriate, table 3 and table 4 present first-differencing estimates by age and gender. The results in table 3 indicate that among middle-aged employees (age 35 ~ 54), there is a positive correlation between wage and health insurance. The estimates for younger employees and elder employees show no correlation between wages and health insurance benefits. The age differences between group (1) and (2) (t = 2.18) and group (1) and (3) (t = 2.22) are both significant. Therefore, compared to younger employers (age 25 ~ 34), middle-aged employees are more likely to gain both higher wages and better health insurance benefits. Age differences between group (2) and (4) (t =1.13) and (3) and (4) (t =1.25) are insignificant at 5% level.

Table 3. First-differencing estimation by age group

	Dependent variable = Δ log (hourly wage)			
	25-34	35-44	45-54	55-65
IV	(1)	(2)	(3)	(4)
Δ EHI	.026	.031*	.037*	-.001
	(.018)	(.019)	(.022)	(.021)
Δ union	.017	.007	-.004	-.016
	(.012)	(.009)	(.010)	(.016)
Δ firm with 25-99 employees	-.028	-.040**	.005	-.014
	(.023)	(.020)	(.021)	(.033)
Δ firm with 100+ employees	-.005	-.030	-.004	.034
	(.020)	(.019)	(.020)	(.029)
Changing jobs	-.157***	-.157***	-.168***	-.126***
	(.011)	(.012)	(.014)	(.017)
Δ married	.016	-.022	.055***	-.031
	(.012)	(.015)	(.020)	(.049)
Δ Age	-.012	.037	-.033	-.146
	(.037)	(.039)	(.055)	(.090)
Δ Age square	.0002	-.0005	.0004	.001
	(.0006)	(.0005)	(.0006)	(.0008)
Intercept	-.128***	-.138***	-.151	-.115
	(.011)	(.012)	(.014)	(.017)
No. of obs	40907	50957	41508	19532

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The results in table 4 indicate that a male employee tends to obtain both a higher wage and better health insurance. There is no correlation between wages and health insurance for a female employee (column 2). However, the gender difference is insignificant (t=.030).

Table 4. First-difference estimation by gender

	Dependent variable = Δ log (hourly wage)	
	Male	Female
IV	(1)	(2)
Δ EHI	.027*	.021
	(.014)	(.014)
Δ union	.001	.005
	(.007)	(.009)
Δ firm with 25-99 employees	-.024	-.021
	(.016)	(.018)
Δ firm with 100+ employees	-.009	-.005
	(.014)	(.016)
changing jobs	-.165	-.140***
	(.009)	(.009)
Δ Age	.020**	.014
	(.010)	(.011)
Δ Age square	-.0002*	-.0002*
	(.0001)	(.0001)
Δ married	.0005	.022
	(.011)	(.012)
Intercept	.018***	.023***
	(.001)	(.001)
No. of obs	90274	62630

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

First-difference Estimation with Interaction Terms.

In order to identify possible factors that might contribute to a positive correlation between wages and EHI coverage, three interaction terms are included. Using first-differencing estimation, these effects are examined. The results in table 5 indicate that changing jobs contribute to a positive correlation between hourly wage rise and EHI coverage.

Table 5. First-difference estimation with interaction terms

Variables	(1)	(2)	(3)	(4)
EHI	.024**	.015	.024**	.015
	(.010)	(.010)	(.010)	(.010)
Δ Union membership * Δ EHI	-.090			-.090
	(.057)			(.056)
changing jobs* Δ EHI		.072**		.072**
		(.032)		(.032)
Δ Married* Δ EHI			.065	.065
			(.088)	(.085)
No. of obs.	152904			

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The Impact of Income Taxes on the Probability of Receiving EHI.

Table 6 presents results of the probability that an employee obtains EHI. The empirical results (column 1) show that an employee who lives in a state with income taxes is 10% more likely to have EHI. Union membership, being married, working in a larger firm and working longer hours increase the probability of having EHI. The likelihood of having EHI increases as age increases, but eventually decreases with increasing age. Female employees are more likely to have EHI than male employees. This may be because of a greater demand for EHI by women; as they tend to make more use of the health care system at younger ages. The results also show that higher education is associated with a lower likelihood of having EHI. This may be because more educated employees pay more attention to the cost of health insurance than less educated ones, and so are less likely to sacrifice pay for EHI. In any case, this is a surprising result; education increases wages which is generally associated with a higher probability of having EHI.

In column 2, an interaction term between gender and the education level is added to the regression to indentify any differences between female and more educated employees and others. The result indicates that female and more educated workers do not behave differently from others in having EHI. Column 3, 4 and 5 test the probabilities of obtaining EHI of married employees, husbands and wives. Results match well with those using the whole sample in column 1.

IV Estimation.

Instrumental variable estimation is also a method used to alleviate omitted variable problems. Column 1 and 2 in table 8 used the same instruments that Olson used in his study. The results show that the EHI has no influence on wages, which is different from the results in Olsen's study. Before conducting other IV estimation, the weak instruments test and erogeneity test (in table 7) showed that that instrumental variables should include HEHI, HUNION, HSIZE, and HEDU. Column 6 and 7 suggest that instruments are not weak and the over-identification test does not reject the null hypothesis. When including SPEDU (column 8), exogeneity test suggests that SPEDU is an invalid instrument.

IV estimation of the whole sample and full-time working wives are presented in table 8. Following the discussion in Olson's paper (2002), the spouse′s education level is included in the wage equation. Columns 3 to 5 use the sample of full-time working wives with three different sets of instruments. Columns 6 to 8 use the sample of all employees. Estimates for the two samples are very similar. When using the spouse's education as the only instrument, there is a positive correlation between the wage level and EHI coverage. When using the other two sets of instruments, estimates are insignificant. Therefore, there is no evidence of a connection between the wage level and EHI coverage.

First differenced IV and fixed effects IV estimation are also applied for full-time working wives. Estimates of EHI in both fixed effects IV and first differenced IV are negative but insignificant, especially in first differenced IV estimation the coefficient is even more negative.

Table 6. The probability of obtaining employer-provided health insurance

Independent variables	All employees (1)	All employees (2)	Married employees (3)	Husband (4)	Wives (5)
Male	-.082***	-.051***	-.006	--	--
	(.023)	(.114)	(.036)		
Education	-.026***	-.027***	-.016***	-.022***	-.025***
	(.005)	(.006)	(.006)	(.005)	(.005)
Tax (have state income tax=1)	.101***	.101***	.128***	.099***	.124***
	(.028)	(.028)	(.036)	(.032)	(.031)
Union membership	.544***	.544***	.522***	.540***	.527***
	(.037)	(.037)	(.049)	(.041)	(.043)
Age	.053***	.053***	.039***	.051***	.055***
	(.008)	(.008)	(.010)	(.009)	(.009)
Age square	-.0007***	-.0007***	-.0006***	-.0007***	-.0007***
	(.00009)	(.00009)	(.0001)	(.00010)	(.00010)
Married	.107***	.107*	--	--	--
	(.022)	(.022)			
Working hours	.023***	. 023***	.019***	.020***	.021***
	(.001)	(.001)	(.002)	(.001)	(.005)
African American	.137***	.137**	.115*	.068	.164***
	(.053)	(.053)	(.068)	(.060)	(.058)
White	.104**	.103**	.163***	.097*	.145***
	(.046)	(.046)	(.057)	(.051)	(.050)
Firm with 25-99 employees	.308***	.308***	.303***	.336***	.278***
	(.041)	(.041)	(.052)	(.045)	(.045)
Firm with 100+ employees	. 537***	.538***	.535***	.540***	.534***
	(.034)	(.034)	(.043)	(.045)	(.038)
Female employee with higher educational level	--	.002	--	--	--
		(.008)			
Intercept	-.287	-.306	-.012	-.210	-.257
	(.217)	(.229)	(.287)	(.239)	(.249)
No. of obs.	210525	210525	139891	174185	176231

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 7. Instrumental relevance and exogeneity tests

	Instruments							
	SPUNION	SPSIZE	SPUNION SPSIZE	SPEHI	SPEHI SPEDU	SPEHI SPUNION SPSIZE	SPEHI SPUNION SPIZE	SPEHI SPUNION SPSIZE SPEDU
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Weak instruments tests (p-value)	.701	.450	.653	.000	.000	.000	.000	.000
Chi-square test of the exogeneity of instruments (Anderson-Rubin Wald test p-value)					.000	.380	.647	.0015
SPEDU is in an individual's wage equation	Yes	Yes	Yes	Yes		Yes	No	

Table 8. The instrumental variable estimation

	Full-time working wives					Married emplyees		
Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
First Stage Estimates: DV= the probability that full-time working wives have own EHI						DV = the probability that an individual has own EHI		
Instruments for wives' EHI/employees' EHI								
Spouse is a union member		.002 (.0022)		-.003 (.003)	-.003 (.003)		.0004 (.002)	.0003 (.002)
Spouse works at firms with 25-99 employees	.005 (.006)			-.018** (.009)	-.019** (.008)		.009** (.004)	.009** (.004)
Spouse works at firms with 100+ employees	.008* (.005)			-.012 (.007)	-.012* (.006)		.010*** (.004)	.011*** (.004)
Spouse has EHI (HEHI=1 if having EHI)			.110*** (.010)	.167*** (.028)	.166*** (.007)	.076*** (.002)	.124*** (.004)	.122*** (.004)
Spouses' payment of tax (tax = 1 if paying tax)	--	--	--	--	.011 (.036)	--	--	-.020 (.024)

Table 8. cont.

Variables	Full-time working wives					Married employees		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Second Stage Estimates: DV = full working wives' wage						DV = Employee's wage		
EHI	-2.414	9.848	.338***	.065	.060	.288**	.031	.043
	(2.972)	(11.181)	(.107)	(.152)	(.154)	(.120)	(.171)	(.173)
Union member	.113***	-.00004	.097***	.108***	.107***	.118***	.124***	.124***
	(.035)	(.103)	(.014)	(.017)	(.017)	(.008)	(.010)	(.010)
Firm with 25-99 employees	.109	-.446	.017	.008	.007	-.005	.010	.008
	(.130)	(.539)	(.027)	(.028)	(.029)	(.020)	(.023)	(.024)
Firm with 100+ employees	.216	-.441	.094***	.083***	.084***	.068***	.075***	.074***
	(.148)	(.621)	(.024)	(.026)	(.029)	(.018)	(.021)	(.024)
Age	.057***	.010	.042***	.044***	.044***	.039***	.036***	.036***
	(.011)	(.048)	(.004)	(.005)	(.005)	(.003)	(.004)	(.004)
Age square	-.0006***	-5.41e-06	-.0004***	-.0005***	-.0005***	-.0004***	-.0004***	-.0004***
	(.0002)	(.0006)	(.00005)	(.00006)	(.00006)	(.00003)	(.00004)	(.00004)
African American	.078	-.063	.019	.019	.019	-.015	-.021	-.021
	(.053)	(.147)	(.025)	(.030)	(.030)	(.019)	(.023)	(.023)
White	.082*	-.029	.058***	.051*	.052*	.076***	.064***	.064
	(.046)	(.131)	(.022)	(.026)	(.027)	(.017)	(.021)	(.021)
Education	.065***	.057***	.063***	.063***	.064***	.069***	.067***	.067***
	(.004)	(.009)	(.002)	(.003)	(.003)	(.002)	(.002)	(.002)
Husband's education/	.010	.013**	.008***	.008***	.008***	.011***	.010***	.010***
Spouse's education	(.002)	(.006)	(.001)	(.002)	(.002)	(.001)	(.002)	(.002)
Intercept	2.275	-8.057	.110	.394**	.416**	.231*	.563***	.564***
	(2.450)	(9.412)	(.149)	(.195)	(.196)	(.134)	(.186)	(.187)
Number of obs.	19304	28204	36166	20197	20104	80258	40531	40350

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Conclusions

This study uses SIPP data to test compensating wage differentials associated with employer-provided health insurance. To solve the omitted variable problem, fixed effects estimation, first-differencing estimation, IV estimation, first differenced IV estimation, and fixed effects IV estimation methods are employed. Results of fixed effects and first-difference estimation lead to the conclusion that employees tend to receive higher wages when they gain EHI. A validity test of the two indicates that the first-differencing estimation is more appropriate than the fixed effects estimation. IV estimation, fixed effects IV estimation and first differenced estimation suggest that EHI has no influence on wages.

This study suggests that employees who live in states that collect income taxes are more likely to have EHI than those who live in states without income taxes. This could be because of the tax advantage from having EHI. Changing jobs contributes to a positive correlation between having EHI and the wage growth.

In the future study of compensating wage differentials, to uncover the correlation between wage and EHI coverage, it may be interesting to consider the following three aspects. First, it would be useful to consider information on employers' preferences of providing benefit packages. It is possible that an employer would prefer to provide a higher wage premium and better health insurance benefit in order to avoid worker's shirking. Second, it would be useful to apply continuous data for EHI coverage rather than the dummy indicator. Third, the tax rate information could also indicate the level and progressivity of the state tax system.

Acknowledgements

This work was supported by Hunan University under Grant No. 531107022116 and China Scholarship Council under Grant No. 757234005.

References

Baicker, Katherine and Chandra, Amitabh. "The Labor Market Effects of Rising Health Insurance Premiums." NBER working paper, 2005.

Brown, Charles. "Equalizing Differences in the Labor Market." *The Quarterly Journal of Economics*, 1980, Vol.94, pp.113-134.

Boushey, Heather. "SIPP User Notes on Set D: Labor Market and Employment Outcomes." Washington, DC: Center for Economic and Policy Research, 2006.

Boushey, Heather and Schmitt, John. "Using Wage Data from the Survey of Income and Program Participation (SIPP)." Washington, DC: Center for Economic and Policy Research, 2004.

Currie, Janet and Madrian, Brigitte. "Health, Health Insurance and the Labor Market," in O. Ashenfelter and D. Card, ed. Handbook of Labor Economics, 1999, Vol.3, pp.3309-3415.

Daniel, Christophe and Sofer, Catherine. "Bargainin, Compensating Wage Differentials, and Dualism of the Labor Market: Theory and Evidence for France." *Journal of Labor Economics*, 1998, Vol. 16, No. 3, pp.546-575.

Davidson, R. and J. G. MacKinnon. "Estimation and Inference in Econometrics." New York: Oxford University Press, 1993.

Duncan, Greg and Holmlund, Bertil. "Was Adam Smith Right After All? Another Test of the Theory of Compensating Wage Differentials." *Journal of Labor Economics*, Vol., 1983, pp.366-379.

Eberts, Randall W. and Stone, Joe A. "Wages, Fringe Benefits, and Working Conditions: An Analysis of Compensating Differentials." *Southern Economic Journal*, 1985, Vol.52, pp. 274-280.

Gould, Elise. "Health Insurance Eroding for Working Families." EPI briefing paper, 2006.

Gould, Elise. "The Chronic Problem of Declining Health Coverage: Employer-Provided Health Insurance Falls for Third Consecutive Year." Economic Policy Institute Issue Brief #202, 2004.

Gruber, Jonathan. "The incidence of mandated maternity benefits." *The American Economic Review.* 1994, Vol.84, No.3, pp.622-641.

Gruber, Jonathan. "Health Insurance and the Labor Market." NBER working paper series,1998.

Gruber, Jonathan and Krueger, Alan B. "The Incidence of Mandated Employer-Provided Insurance: Lessons from Workers' Compensation Insurance." *Tax Policy and the Economy*, 1991, Vol.5, pp.111-143.

Gruber, J. and J. Poterba "Fundamentai Tax Reform and Employer-Provided Health Insurance." in Henry J. Aaron and William G. Gale, ed., *Economic Effects of Fundamental Tax Reform.* 1996, pp.125-170.

Jaeger, David A. "Reconciling the Old and New Census Bureau Education Questions:

Recommendations for Researchers." *Journal of Business and Economic Statistics*, 1997, Vol.15, No.3, pp.300-309.

Jensen, Gail A. and Morrisey, Michael A. "Endogenous Fringe Benefits, Compensating Wage Differentials and Older Workers." *International Journal of Health Care Finance and Economics,* 1, 2001, pp.203-226.

Kletzer, L. "Job Displacement." *Journal of Economic Perspectives*, 1998, 12(1), pp.115-136.

Leibowitz, A. "Fringe Benefits in Employee Compensation," in Jack E. Triplett, ed., *The Measurement of Labor Cost.* Chicage: The University of Chicago Press.

Madrian, Brigitte C. "The U.S. Health Care System and Labor Markets," NBER working paper,2006.

Miller, Richard. "Estimating the Compensating Differential for Employer-Provided Health Insurance." (2004)

Mincer, Jacob "Schooling, Experience, and Earnings," 1974, New York: Columbia University Press.

Monheit, A., Hagan, M. Berk and Farley, P. "The Employed and Uninsured and the Role of Public Policy." *Inquiry,*1985, 22, pp.348-364.

Olson, Craig A. "Do Workers Accept Lower Wages in Exchange for Health Benefits?" *Journal of Labor Economics,* 2002, Vol.20, No.2, pp.91-114.

Pear, Robert. "Gender Gap Discovered in Health Insurance." *The San Diego Union Tribune*. October 30, 2008 (http://legacy.signonsandiego.com/uniontrib/20081030/news_1n30insure.html)

Royalty, Anne Beeson. "A Discrete Choice Approach to Estimating Workers' Marginal Valuation of Fringe Benefits." working paper, 2000.

Sheiner, Louise. "Health Care Costs, Wages, and Aging." working paper, 1999.

Smith, R. S. "Compensating Wage Differentials and Public Policy: A Review." in N. Terleckyj, ed., *Household Production and Consumption*, New York: National Bureau of Economic Research, 1975.

Woodbury, Stephen A. "Substitution between Wage and Nonwage Benefits." *The American Economic Review,* 1983, Vol.73, No.1, pp.66-182.

Wooldridge, Jeffrey M. "Econometric Analysis of Cross Section and Panel Data." The MIT press, 2002.

APPENDIX

Literature on compensating wage differentials in health insurance

Author	Data	Method	Result
Compensating wage differentials for work characteristics			
Brown (1980)	1966-71 and 1973 NLS Young men's sample (470 observations)	Fixed effects estimation	Positive but insignificant correlation between wage and job characteristics. No significant improvement, compared to level estimation.
Duncan and Holmlund(1983)	Self-report survey of a sample of Swedish men in 1968 and 1974	Fixed effects estimation	Compared to Brown's results, their results (of correlation between wage and job characteristics) are improved, although some results are still insignificant.
Compensating wage differentials for fringe benefits			
Leibowitz (1983)	1978 RAND Health Insurance Study, full-time workers (136 observations)	OLS	Positive and insignificant correlation between health insurance and wages
Woodbery (1983)	1966-74 BLS survey and a sample of independent school districts from the 1977 Census of Governments	Estimation of indirect utility function that involves the elasticity of substitutability of wage and fringe benefits	Wage and fringe benefits are substitutes. The elasticity of the substitutability is greater than 1.
Eberts and Stone (1985)	1972-73 and 1976-77 full-time elementary	Fixed effects estimation	Negative and significant correlation between health

	and secondary classroom teachers in N.Y.		benefits and wages
Monhiet et al. (1985)	1977 NMCES, full-time workers	OLS estimation by occupation	Positive correlation in most occupations, professional and technical workers showed negative but insignificant correlation.
Gruber and Krueger (1990)	1979-81 and 1987-88 CPS data, and 1979-88 state-level employer reported data from BLS	OLS, first differencing	Insignificant results by OLS estimation except for truck drivers,
Gruber (1994)	CPS, states that passed state maternity mandates after 1974 and federal mandates after 1978 and states that didn't	Differences-in-differences-in-differences	Negative and significant correlation between wage and mandated health insurance for 20-40 married women.
Sheiner (1999)	Matching the wage data from 1990 and 1991 March CPS with the health care cost data obtained from Milliman and Robertson survey.	OLS	Older worker suffers larger decrease in wage than young worker, result is significant for male workers, but insignificant for female
Royalty (2000)	RWJ-EHIS (1993-94) aggregated to firm-level	Logit estimation	Negative and insignificant correlation between wages and health insurance
Jensen and Morriesy (2001)	1994 and 1998 Health and Retirement Survey	IV estimation	Correlation between wage and health insurance and pension are negative and insignificant.
Simon (2001)	1984-2000 even year DWS data	Fixed effects estimation	Displaced worker who find a new job gains wage when having EHI, and loses wage when losing EHI
Olson (2002)	March-June 1990-93 CPS for full-time working wives	IV estimation	Full-time working wives will accept jobs with health insurance when wages decrease by 20%.
Miller (2004)	1988-90 CEX	Fixed effects estimation	Negative and significant between the change in wages and the change in health insurance status
Baiker and Chandra (2005)	Kaiser Family Foundation	IV estimation	Negative but insignificant correlation between wages and health insurance

ARTICLE

THE EX-DIVIDEND DAY STOCK PRICE BEHAVIOR: EVIDENCE FROM PAKISTAN

Sana Tauseef
Institute of Business Administration Karachi, Pakistan

Mohammad Nishat
Institute of Business Administration Karachi, Pakistan

Abstract

The paper examines the ex-dividend day price behavior of the listed stocks in Karachi Stock Exchange for the period January 2009 to June 2010. During the examined period, there was no capital gain tax; however a 10% withholding tax applied on dividends. We use the standard event study methodology to examine the abnormal returns for days surrounding the ex-dividend day. The study reports a very low price drop ratios compared to their theoretical values. No significant excess returns are found on the ex-dividend day; however, significant positive abnormal returns are observed in the pre-event window and negative excess returns are observed in the post event window. The study provides evidence of short-term trading hypothesis surrounding the ex-dividend days on Karachi Stock Exchange.

Key Words: *Ex-Dividend Date, Clientele Effect, Market Microstructure, Short-Term Trading, Karachi Stock Exchange.*

JEL Classification: G35, G14

Introduction

In the absence of taxes, transaction costs and uncertainty, the stock price on the ex-dividend day must drop by the amount of dividend. The proposition given by Miller and Modigliani (1961) implied that the investors are indifferent to either dividend income or capital gains. In one of the early studies, Campbell and Beranek (1955) observed an average stock price drop by an amount slightly less than the dividend on the ex-dividend date, making a tax-paying individual better-off through selling the stock before an ex-dividend date. Since then, studies have been conducted in different markets and reported deviation from the predictions of Miller and Modigliani (1961). Different explanations are given for these deviations. Most popular theories include the tax clientele, short-term trading and market microstructure theories.

Elton and Gruber (1970) suggested that the ex-dividend behavior of a corporation's common stock is related to the tax rate of its marginal stockholders. Their work supported the "***clientele effect***", suggesting that the investors in high income tax brackets prefer to hold low dividend yield stocks, while those in lower income tax brackets will keep their holdings in high dividend yield stocks. The study reported a positive correlation between the ex-dividend relative price drop and the dividend yield. Milonas, Travlos, Xiao and Tan (2002) examined the ex-dividend day prices in Chinese stock market, where the cash dividends could either be taxable or non-taxable, depending on their magnitude relative to the one-year estimated interest income on the face value of the corresponding stocks. The empirical findings from China are consistent with the tax hypothesis. The prices of the non-taxable stocks on the ex-dividend day decline by the amount of dividend paid, regardless of the dividend yield. For the taxable stocks with low dividend yields, the ex-dividend day prices drop by an amount equal to the tax-adjusted dividend. However, with an effective tax rate of 20% on dividend income, high dividend yield stocks experience a price drop larger than the tax-adjusted dividend.

According to Kalay (1982), the marginal tax rates of stockholders cannot be inferred from the relative price drop since the tax differential is not the only reason for the ex-day price movement. Kalay argues that the institutional investors who face the same tax rate on dividends and capital gains have non-tax related reasons for entering the market and they arbitrage the price differentials up to the limit posed by the transaction costs. The presence of abnormally high trading volumes around the ex-day is an evidence of ***short-term trading***. Dasilas (2007) investigated the ex-dividend stock price and trading volume behavior in the Greek stock market where there are no taxes imposed on dividends and capital gains. The study concluded that despite of the inexistence of taxes, the ex-day price did not drop by the full amount of dividend, thus supporting the short-term trading hypothesis. The study also reported significant abnormal returns on the ex-dividend day and abnormal trading volume concentrated on the last cum-dividend day and ex-dividend day. Borges (2009) rejected the tax clientele hypothesis and reported the presence of positive abnormal trading volumes surrounding the ex-days. He concluded that the transaction costs restrict the arbitrage opportunities and so there are no market forces pushing the price to a unique market equilibrium.

Market microstructure theories relate the ex-day price behavior to the market frictions arising from price discreteness and bid-and-ask spreads. Bali and Hite (1998) proposed this model and claimed that the ex-day price of a stock will change by a price increment equal to or just smaller than the size of the dividend payment. If the dividend is not a multiple of minimum tick size, then the price drops by less than the dividend. Borges (2009) ruled out the price discreteness model by observing price drop lesser than dividend for Portuguese market where the price tick is very small and dividends are always integer multiples of tick size.

In the recent past, a few researches have been conducted to study the determinants of dividends and the reaction to dividend announcement at Karachi Stock Exchange. Ahmed and Javid (2009) examined the determinants of dividend payout policy of non-financial firms listed in Karachi Stock Exchange using a sample of 320 firms. The results showed that dividend payments in Pakistan are more sensitive to current earnings than the prior dividend payments. The ownership structure was also found to have a major impact on the dividend payout decision. The firms with major inside shareholdings pay more dividends to their shareholders in Pakistan. Moreover, the market capitalization and firm size were found to have a negative impact on the dividend payout of Pakistani firms. Akbar and Baig (2010) in their study to test the semi-strong form of market efficiency in Pakistan found that the reaction of stock prices to cash dividend announcements is statistically insignificant. The returns (ignoring) during the 41-day event window were found to be mostly negative, which might be attributed to the tax effect of cash dividends. The results for stock dividend announcements and for simultaneous cash and stock dividends were found to be positive and significant. The positive reaction to stock dividends was attributed to the zero taxes on stock dividends and capital gains in Pakistan's equity market. No research, so far, is done to explore the ex-dividend day price movement for Pakistani stocks. This study extends the international evidence on the ex-dividend day stock price behavior by studying Pakistani stocks and tests the different theoretical explanations proposed for the ex-day price reaction for Pakistani market.

Karachi Stock Exchange

Karachi Stock Exchange (KSE) is the biggest and most liquid exchange in Pakistan. As of December, 2009, 654 companies were listed on KSE with a market capitalization of Rs. 2.561 trillion (US$ 30.5 billion).

There are three general forms of dividends that the companies listed on KSE declare and pay: Cash, Stock (bonus shares), and a combination of two. There is a 10% withholding tax applied on the cash dividends on KSE. On the capital gains, no tax was applicable for the examined period. However, in Feb 2010, the government and directors of Karachi Stock Exchange (KSE) decided to have a capital gain tax effective from July 1, 2010.

Data and Methodology

The sample includes all listed stocks that paid cash dividends during the period from January 2009 to June 2010. The stocks offering the bonus dividends or stock splits with the cash dividend payments are excluded from the sample. The sample initially consisted of 269 dividend payments. From these dividend distributions, we have included the stocks having at least 200 trading days prior to the dividend payment date. On basis of the availability of stock prices over the event and estimated window, our final data, consists of 236 cash dividend distributions. Data on all dividend payment events by the listed firms during the covered period was collected from the website of Karachi Stock Exchange (www.kse.com.pk). The daily share prices and trading volumes for the sample stocks and market indices for KSE were obtained from the website of Daily Business Recorder (www.brecorder.com.pk).

We use a number of approaches to analyze the stock price drop around the ex-dividend date. Considering no taxes on dividends and capital gains and no transaction costs, the price drop on the ex-dividend day is equal to the amount of dividend paid. Let P_c the closing price on the cum-dividend day, P_e the closing price on ex-dividend day and D the amount of dividend paid, then

$$P_c – P_e = D \tag{1}$$

If we divide both sides by D, we get the raw price ratio (RPR):

$$RPR = (P_c – P_e)/D = D/D = 1 \tag{2}$$

The raw price ratio measures the price change from the last cum-dividend day to the ex-dividend day in terms of dividend paid and has a theoretical value of 1.

In the case where dividends are taxable, we can rewrite equations (1) and (2) by taking into account the tax that must be paid on the dividends. With a 10% tax on dividends, the equations can be re-written as follows:

$$P_c – P_e = 0.90*D \tag{3}$$

$$RPR = (P_c – P_e)/D = (0.90*D)/D = 0.90 \tag{4}$$

Because the raw price ratio is subject to market influences between the two days, we adjust the ex-day closing price for the market return by discounting the ex-dividend price by the market return, proxied by KSE 100 index, between the two days. Ignoring taxes, this market-adjusted price ratio (MAPR) has a theoretical value of 1 and is given as:

$$MAPR = [P_c – (P_e)/(1+R_m)] /D \tag{5}$$

The price change given by equation (2) can also be expressed in terms of the price on last cum-dividend day. The ratio called the raw price drop ratio is given as:

$$RPDR = (P_c - P_e)/ P_c \quad (6)$$

As before we can also adjust the raw price drop ratio for market influences between the last cum-dividend day and the ex-dividend day to get the market-adjusted price drop ratio:

$$MAPDR = [P_c - (P_e)/(1+R_m)]/P_c \quad (7)$$

Ignoring taxes on dividends, all raw price drop ratios have a theoretical value equal to the dividend yield (DY) which is computed as the dividend per share divided by the stock price on the last cum-dividend day.

$$DY = D/P_c \quad (8)$$

With a 10% tax on dividends, the value for price drop ratios should equal 0.90*DY.

Finally, the abnormal raw returns on the ex-dividend days is calculated as given:

$$ARR = (P_e + 0.90*D - P_c)/P_c \quad (9)$$

Our study tests the following null hypotheses:

$\mathbf{H_1}$ = The mean of RPR = 0.90

$\mathbf{H_2}$ = The mean of MAPR = 0.90

$\mathbf{H_3}$ = The mean of RPDR = 0.90*DY

$\mathbf{H_4}$ = The mean of MAPDR = 0.90*DY

$\mathbf{H_5}$ = The mean of ARR = 0

We also examine the market reaction on and around the ex-dividend days using the standard event study methodology. The event window has been taken from ***t=-20*** to ***t=+20,*** where t=-20 represents 20 days before the ex-dividend date (t=0) and t=+20 represents 20 days after the stock goes ex-dividend. We employ the single-factor market model to compute the abnormal return for each stock in the 40-day window. The market model parameters are computed using an estimation period of 180 days before the window period for each participating firm. The period of 20 days prior to the ex-dividend date is not included in this clean period to prevent the event's influence on the parameter estimates.

The following market model is employed for the parameter estimations:

$$\mathbf{AR}_{it} = \mathbf{R}_{it} - \mathbf{E}(\mathbf{R}_{it}) \quad (10)$$

where, AR_{it} = Abnormal return for stock *i* on day *t*.

R_{it} = Actual return of stock *i* at time *t*.

$E(R_{it})$ = Expected return on stock *i* at time *t*. This is measured by the following equation: $\mathbf{E(R_{it}) = \alpha + \beta R_{mt}}$

α = Ordinary least squares estimate of the intercept of the market model regression.

β = Ordinary least squares estimate of the coefficient in the market model regression.

The cumulative abnormal returns are computed for the period surrounding the ex-dividend days (-20 to +20), i.e., from 20 days before the ex-dividend date to 20 days after the ex-dividend date, using the following equation:

$$\mathbf{CAR} = \sum_{t=-20}^{t=20} \mathbf{AR}_t \tag{11}$$

We anticipate a mean abnormal return on ex-days and a cumulative abnormal return pre- and post-ex-dividend period equal to zero. That is, the null hypotheses are:

H_6 = The mean of abnormal returns on ex-days (ARs) = 0

H_7 = The cumulative abnormal returns pre- and post-ex-dividend period (CARs) = 0

Empirical Results

Exhibit 1 shows the descriptive statistics of the sample dividend payments. The mean dividend is PKR4.718 and the mean dividend yield is 5.5%. The average price change on ex-dividend day is -0.202 indicating that on average, the stock prices have slightly increased on the ex-dividend days for the observed period. The mean raw price ratio (RPR) is 0.010 and the market adjusted price ratio (MAPR) is 0.033. The mean abnormal raw return on ex-dividend day is 4.9%.

The mean RPR, mean MAPR, mean RPDR, mean MAPDR, mean ARR and the theoretical values of these ratios are given in exhibit 2. T-statistics to measure the differences of the means from their corresponding theoretical values are also presented in the exhibit. The mean RPR, mean MAPR, mean RPDR, and mean MAPDR ratios are all very small compared to their theoretical values.

Exhibit 1: Descriptive Statistics

n=236	Dividend	Div. Yield	$P_c - P_e$	RPR	MAPR	RPDR	MAPDR	ARR
Mean	4.718	0.055	-0.202	0.010	0.033	0.001	0.001	0.049
Standard Deviation	7.477	0.053	9.846	1.914	2.001	0.035	0.037	0.058
Minimum	0.010	0.003	-58.360	-11.672	-17.459	-0.081	-0.119	-0.266
Maximum	60.000	0.338	67.000	15.073	16.046	0.283	0.301	0.301
Range	59.990	0.335	125.360	26.745	33.505	0.364	0.420	0.567

The mean RPR (0.010) with a t- statistic of -7.145 and mean MAPR (0.033) with a t-statistic of -6.659 are statistically lesser compared to their theoretical values. The mean RPDR is 0.001 with a t-statistic of -21.378 and mean MAPDR is 0.001 with a t-statistic of -19.983. These two ratios are also statistically lower than their theoretical values. The abnormal raw return (ARR) of 4.9% has a t-statistic of 12.96 and is significantly positive. These results, thus, reject the hypothesis that the stock prices drop by the after-tax dividend amount on ex-dividend days on Karachi Stock Exchange. On KSE, the ex-dividend day price decline is not equal to the tax-adjusted amount of dividend. The price drop is significantly lesser than the tax-adjusted dividend and therefore, the tax hypothesis does not explain the ex-day price behavior of Pakistani stocks. The results are consistent with the results of the similar study conducted in Greece which also reported the inexistence of the stock price drop equal to the dividend amount on ex-days (Dasilas, 2007).

Exhibit 3 and 4 give the average abnormal returns and cumulative abnormal returns for the dividend paying stocks for a 41-day event window surrounding the ex-dividend days. The excess returns and CARs are calculated using the single factor market model. On the ex-dividend day (t=0), the mean AR is -0.163% and is not statistically significant. However, positive and significant excess returns are observed on some days in the event period. These positive ARs are clustered in the pre-event period. There is an AR of 0.308% on day -3 and is significant at 5%. On day -5, AR is 0.31% and is significant at 10%.

Exhibit 2: Ex-Dividend Day Price Behavior

n=236	**Theoretical Value**	**Mean**	**t-Statistic**
RPR	0.900	0.010	-7.145
MAPR	0.900	0.033	-6.659
RPDR	0.050	0.001	-21.378
MAPDR	0.050	0.001	-19.982
ARR	0.000	0.049	12.960

* Significant at 1%

Exhibit 4 displays the average cumulative abnormal returns over the event period. Mean CAR shows an increasing trend since 20 days prior to the ex-day till the last cum-day. On this day (t = -1), the mean CAR is 4.10%. Since the ex-dividend day, the average CAR decreases till 7 days after the ex-day when it reaches 2.963%.

Exhibit 3: ARs and CARs surrounding the Ex-Dividend Days

Event Day	**Avg. AR**	**Std. Dev**	**t-statistic**	**Avg. CAR**	**Std Dev**	**t-statistic**
-20	**0.002815323**	**0.035906222**	**1.204521219**	**0.002791464**	**0.035754038**	**1.19939689**
-19	**0.004490403**	**0.049000021**	**1.407813289**	**0.00726284**	**0.063795241**	**1.748937089**
-18	**0.002078567**	**0.043378544**	**0.736113969**	**0.009341407**	**0.078938688**	**1.817935144**
-17	**-0.001128693**	**0.033759705**	**-0.513609479**	**0.008212714**	**0.088221754**	**1.430102038**
-16	**0.00215905**	**0.028246027**	**1.174251849**	**0.010371764**	**0.09640049**	**1.652834541**
-15	**0.00178837**	**0.030496956**	**0.90085921**	**0.012160134**	**0.106030195**	**1.761833256**

-14	0.002291793	0.029838925	1.179908243	0.014451927	0.112141454	1.979773843
-13	0.001319796	0.03118935	0.650064791	0.015771724	0.118049726	2.052438606
-12	0.001272329	0.028648587	0.68226337	0.017044052	0.121289683	2.158763138
-11	0.003485152	0.035360206	1.514129325	0.020529204	0.129327797	2.438575684
-10	0.007407368	0.035828161	3.176108921	0.027936572	0.138810303	3.091771661
-9	0.001352804	0.032849978	0.632638835	0.029289376	0.144240608	3.119453937
-8	0.002730928	0.031165	1.346167789	0.032020305	0.147174579	3.342324856
-7	0.001752954	0.025370168	1.061459142	0.033773259	0.155393429	3.338845494
-6	0.000323957	0.026463959	0.188056841	0.034097216	0.157767614	3.320145144
-5	0.003139218	0.026450289	1.823253673	0.037236435	0.161776219	3.535976831
-4	0.00158229	0.024669747	0.985320102	0.038818724	0.165623013	3.600614128
-3	0.003083475	0.023029587	2.056886154	0.041902199	0.171681992	3.749454388
-2	-0.002294258	0.027605892	-1.276722318	0.039607941	0.172578715	3.525746168
-1	0.001403483	0.039106927	0.551327349	0.041011425	0.172483542	3.652693197
0	-0.001628118	0.032386159	-0.77229355	0.039383307	0.177276035	3.412857454
1	-0.002481455	0.026134629	-1.45863308	0.036901852	0.181588546	3.121876436
2	-0.002762924	0.02998637	-1.415471453	0.034138927	0.184669233	2.839954131
3	-0.000202003	0.028142556	-0.110268117	0.033936924	0.186126587	2.801044886
4	-0.001992726	0.035455676	-0.863411419	0.031944199	0.194974205	2.516928278
5	-0.002131812	0.02938273	-1.114584073	0.029812386	0.196580989	2.329760217
6	3.06798E-05	0.029861587	0.015783229	0.029843066	0.197386794	2.322637051
7	-0.000208136	0.030073571	-0.106320861	0.02963493	0.198689881	2.29131162

8	**0.000910408**	**0.027330183**	**0.511740215**	**0.030545338**	**0.202383279**	**2.318602543**
9	**0.000215425**	**0.032514607**	**0.101782688**	**0.030760763**	**0.207987666**	**2.272037657**
10	**0.000482333**	**0.029933347**	**0.247541479**	**0.031243096**	**0.210698504**	**2.277973248**
11	**0.000549957**	**0.030559266**	**0.276466284**	**0.031793054**	**0.217486576**	**2.245720959**
12	**0.00358907**	**0.028672721**	**1.922954319**	**0.035382124**	**0.225360738**	**2.411913005**
13	**-0.002344773**	**0.024904756**	**-1.446353403**	**0.033037351**	**0.228609622**	**2.220070235**
14	**0.000589479**	**0.026976974**	**0.335684486**	**0.03362683**	**0.230141729**	**2.244639291**
15	**0.00089711**	**0.027625016**	**0.498883716**	**0.034523941**	**0.230911595**	**2.296839354**
16	**0.002118491**	**0.04701951**	**0.692156818**	**0.036642431**	**0.231534502**	**2.431221736**
17	**0.002899193**	**0.034307517**	**1.298206591**	**0.039541624**	**0.232605874**	**2.611498787**
18	**0.001982424**	**0.029002949**	**1.05005096**	**0.041524048**	**0.234798516**	**2.716816714**
19	**0.000706711**	**0.0316208**	**0.343340432**	**0.042230759**	**0.241155398**	**2.690220648**
20	**-0.001423589**	**0.032536676**	**-0.672151945**	**0.04080717**	**0.241710666**	**2.593562179**

Exhibit 4: ARs and CARs surrounding the Ex-Dividend Days

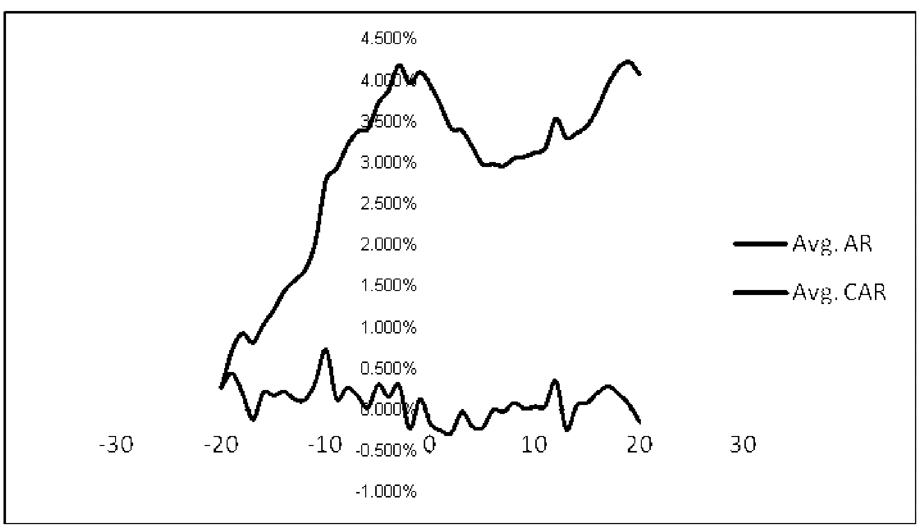


Exhibit 5 shows the mean CAR over the various sub-periods in the total event window of 41 days. CARs for all sub periods prior to ex-day are positive. The highest CAR is accumulated for the period -20 to -10, which is the period closest to the dividend announcement date. For the period after ex-day, CAR declines. The decrease in CAR is mostly concentrated in the first 5 days after the ex-day. The CAR values over the various event periods are consistent with the short-term trading hypothesis, which suggests positive price changes in the pre-event period due to buying pressures and negative price changes in the post period due to selling pressures.

Exhibit 5: Mean CAR for Sub-Periods

Sub-period	-20 to -10	-10 to -5	-5 to -1	0	+1 to +5	+6 to +10	+11 to +20
CAR	2.5145	0.9299	0.3775	-0.1628	-0.9571	0.1431	0.9564

Conclusion:

The study examines the ex-dividend day price behavior on Karachi Stock Market during the period January 2009 to June 2010. For the examined period there was no capital gains tax while a tax of 10% applied on the dividends. The price drop ratios are reported to be smaller compared to their theoretical values, indicating a lesser drop in price compared to the tax-adjusted dividends. The study also examines the abnormal returns surrounding the ex-days using the single-factor market model. The study evidences the existence of short-term trading and reports positive abnormal returns concentrated in the pre-event window and negative abnormal returns in the post-event period.

The study provides the evidence from the period where tax is applicable only on dividends and no tax is applied on capital gains. Since the capital gain tax has been implemented in Karachi Stock Exchange effective from July 1, 2010, future research can examine the ex-day price behavior when the tax is applicable on both dividends and capital gains.

References

Ahmed, H. and Javid, A. (2009). Dynamics and Determinants of Dividend Policy in Pakistan (Evidence from Karachi Stock Exchange Non-Financial Listed Firms). International Research Journal of Finance and Economics, Vol. 25, pp. 148-171.

Akbar, M. and Baig, H. H. (2010). Reaction of Stock Prices to Dividend Announcements and Market Efficiency in Pakistan. The Lahore Journal of Economics,Vol. 15, No. 1, pp. 103-125.

Bali, R. and Hite, G. L. (1998). Ex-Dividend Day Stock Price Behavior: Discreteness or Tax-Induced Clienteles. Journal of Financial Economics, Vol. 47, No. 2, pp. 127-159.

Borges, M. R. (2009). A Model of Stock Price Adjustment after Dividends. Journal of Economic Studies, Vol. 36, No. 5, pp. 508-521.

Campbell, J. A. and Beranek, W. (1955). Stock Price Behavior on Ex-Dividend Dates. The Journal of Finance, Vol. X, No. 4, pp. 425-429.

Dasilas, A. (2007). The Ex-Dividend Day Stock Price Anomaly: Evidence from Greece.

Durand, D. and May, A. M. The Ex-Dividend Behavior of American Telephone and Telegraph Stock. The Journal of Finance, pp. 19-31.

Elton, E. and Gruber, M. (1970). Marginal Stockholders Tax Rates and the Clientele Effect. Review of Economics and Statistics, Vol. 52, pp. 68-74.

Kalay, A. (1982). The Ex-Dividend Day Behavior of Stock Prices: A Re-examination of Clientele Effect. Journal of Finance, Vol. 38, pp. 1059-1070.

Miller, H. M. and Modigliani, F. (1961). Dividend Policy, Growth, and the Valuation of Shares. Journal of Business, Vol. 34, pp. 411-433.

Milonas, N., Travlos, N., Xiao, J.Z. and Tan, C. (2002). The Ex-Dividend Day Stock Price Behavior in the Chinese Stock Market.

Shah, S. Z. A.,Yuan, H. and Zafar, N. (2010). Earnings Management and Dividend Policy: An Empirical comparison between Pakistani Listed Companies and Chinese listed Companies. International Research Journal of Finance and Economics, Vol. 35, pp. 51-60.

> One of the hardest tasks of leadership is understanding that you are not what you are, but what you're perceived to be by others.
>
> Edward I. Flom

ARTICLE

PROFILING ORGANIZATIONAL CULTURE OF DIFFERENT SECTORS IN PAKISTAN

Zaki Rashidi
SZABIST, Karachi, Pakistan

Nadeem A Syed
SZABIST, Karachi, Pakistan

Sajida Zaki
NED University of Engineering and Technology, Karachi, Pakistan

Abstract

Organizational Culture is gaining importance in the modern organization theory and research. Mangers are more emphasizing to understand the culture and climate of their organization to enhance the effectiveness and productivity of the organization. Organizational development practitioners and change management flag bearers harmoniously favoring to comprehend the culture of any organization for any kind of change or transformation. Organizational Culture Profile (OCP) provides the basic tool to analyze and figure out the type and nature of cultural stream of any organization. The OCP helps to create the cultural-profile of the organization through a survey of the employees. This study encompasses the applicability of OCP in various organizations of different sectors of Pakistan. An extensive research survey conducted in eight different sectors to collect the primary data to identify the dominant cultural aspect of these sectors. The research study is conducted in banking, insurance, pharmaceuticals, hospitals, manufacturing, textile, media and other service sectors. The analyses reveal that these sectors have their own specific dominant cultural trait and there are different dominant factors in each cultural type. Hospitals have 'social responsibility' as the salient characteristic, while banking and insurance have 'performance orientation' and 'emphasis on reward' as the key cultural indicators to prevail in this sector. Interestingly 'innovation' is found as the lowest priority in all organizational-sectors of Pakistan. The study reveals further interesting statistics and provides the insight into the organizations. This study is useful for managers, leaders and other consultants who are interested to understand the local organizational culture to transform these organizations and enhance their effectiveness. It will also provide a base to those researchers who are interested to develop a profile of their organization or any specific sector.

Keywords: Organizational Culture, Organizational Cultural Profile (OCP), Cultural Dimensions

Introduction

In last three decades the concept of organizational culture has gained wide acceptance in order to understand human systems and many researchers along with popular business publications had emerged. Famous books like: Theory Z (Ouchi, 1981), Corporate Cultures (Deal & Kennedy, 1982), In Search of Excellence (Peters & Waterman, 1982), Organizational Culture (Frost, Moore, Louis, Lundberg, & Martin, 1985), Organizational

Culture and Leadership (Schein, 2010), Diagnosing and changing organizational culture: Based on the competing values framework (Cameron & Quinn, 2011), created greater awareness among the organizations; while popular press explored culture and published special issues on organizational cultures like Administrative Science Quarterly. However, still many organizations are entangling with the concept of the culture of their organization to embrace innovative change and provide agile leadership (Schein, 2010). They are not only trying to profile their organizational culture but befitting with the national cultures of their diverse global operating branches as well (Cameron & Quinn, 2011).

Organizational culture, also known as corporate culture, comprises of the attitudes, experiences, beliefs and values of an organization posses. It has been defined by Hill and Johns (2001) as:

> "... the specific collection of values and norms that are shared by people and groups in an organization and that control the way they interact with each other and with stakeholders outside the organization. Organizational values are beliefs and ideas about what kinds of goals members of an organization should pursue and ideas about the appropriate kinds or standards of behaviour organizational members should use to achieve these goals. From organizational values develop organizational norms, guidelines or expectations that prescribe appropriate kinds of behaviour by employees in particular situations and control the behaviour of organizational members towards one another" (p.416).

The culture of a group can be defined as, "a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (Shein, 2010, p.32). In other words, as groups evolve over time, they face two basic challenges: integrating individuals into an effective whole, and adapting effectively to the external environment in order to survive (Borg, et al. 2011; Dann, 1996). As groups find solutions to these problems over time, they engage in a kind of collective learning that creates the set of shared assumptions and beliefs we call "culture" (Alvesson, 1993, Hertnel, Ou, & Kinicki, 2011, O'Reilly, Chatman & Caldwell, 1991). The concept of culture is particularly important when attempting to manage organization-wide change. Practitioners are coming to realize that, despite the best-laid plans, organizational change must include not only changing structures and processes, but also changing the corporate culture as well (Rudelj, 2012).

Elements of organizational culture may include stated and un-stated values, overt and implicit expectations for member behaviour, customs and rituals, stories and myths about the history of the group etc. (Narenjo-Valencia, Jimenz-Jimenz, & Sanz-Valle, 2011). Because the culture is so deeply rooted in an organization's history and collective experience, working to change it requires a major investment of time and resources (Cabera & Bonache, 1999, Rudelj, 2012, Schein, 2010, Schneider, 1980). In Pakistan different sectors have evolved over last fifty years, and they have gone through various transactional and transformational changes in terms of structure and processes through local and global pressures. Different sectors like banking, manufacturing, healthcare, and media sectors have evolved their own cultural identity, which is shared across the organizations in that sector. There is lack of research and literature related to local cultural profiles. The current study is an attempt to prepare a cultural profile of different sectors based on local and multinational organizations operating in Pakistan. It creates an understanding of the cultural profile of different sectors and helps the organizations to implement the strategic plans and bring the desired changes; along with motivating employees; enhancing effectiveness by understanding the cultural differences in a given sector.

The aim of this study is to develop Organizational Culture Profile (OCP) of different sectors of Pakistan. This profile will help to prevailing culture of the organization and ultimately provide a support and assistance in transforming the organizations to meet the challenges of 21st century. The study is revolving around one central research question; what are the dominant cultural characteristics of different sectors and how these characteristics can be profiled to differentiate them? The objectives of the study are to: identify different corporate cultures prevailing in the organizations of Pakistan; classify these cultures according to sectors; explore the dominant cultural characteristics in these organizations; and to seek whether OCP scale is suitable to explore the cultures in Pakistan. The outcomes of this study will help researchers, strategic level managers, and organizational development consultants to understand the aspects of culture in different sectors of organizations working in Pakistan. It will further aid the OD consultants to decide about the suitable mode of interventions according to the culture profile and help leaders, CEOs, and other stake holders to bring positive change with minimum risk of failure.

Literature Review

Organizations are defined as "social inventions for accomplishing common goals through group efforts" where the term 'social inventions' refers to the coordinated presence of people (Cummings & Worley, 2005). There are several ways to define an organization for example; organizations are social entities, goal directed, and designed to as deliberate structure to deliver goods and services by taking input from their environment (Daft, 2004, Martin, 2000). There are various types of organizations, some are large, multinational corporations, operating globally, and some are small like family business with their local presence; they can be for-profit and not-for-profit. Organizations are all around us shaping our lives in many ways (Handy, 1985; Parker, 2000). They exist to bring resources to achieve desired goals and outcomes, produce goods and services efficiently, facilitate innovation, adapt to and influence a changing environment, create value and satisfaction for owners, employees, and customers, accommodate ongoing challenges of diversity and ethics, and sustain by absorbing the external pressures of the environment (Black, 2003, Daft, 2004). Organizations differ in many ways like their structure, size, processes, capital, working environment and culture etc. Culture plays an important in shaping the organizations and creating effectiveness (Sarros, Cooper & Santora, 2008, Trice & Beyer, 1992).

The culture, originally an anthropological term, refers to the underlying values, beliefs and codes of practice that makes a community (Gregory et al., 2009). The customs of society, the self–image of its members, the things that make it different from other societies, are its culture (Kotter, 1992). Culture is powerfully subjective and reflects the meanings and understandings that we typically attribute to situations, the solutions that we apply to common problems in our common life (Jermier, 1991). Organizations are the part of the society and employees of any organizations come directly from the society hence they bring along with themselves their own culture with them (Yarbrough, Morgan & Vorhies, 2011). However, it is still possible for organizations to have cultures of their own as they possess the paradoxical quality of being both 'part' of and 'apart' from society (Bellou, 2010, Sarros, Cooper, & Santora, 2008). They are embedded in the wider societal context but they are also communities of their own with distinct rules and values (Ouchi, 1981). In fact, the term 'culture' is generally agreed in organizational research as, 'reflections in the practices, values, beliefs and underlying assumptions of formal and informal groups' (Schien, 2010). Kaarst-Brown et al. (2004) quoted the definition of Schein (1985) as:

> "Culture – a pattern of basic assumptions – invented, discovered, or developed by a given group as it leans to cope with its problems of external adaptation and internal integration – that has worked well enough to be considered valid and, therefore, to be taught new members as the correct way to perceive, think, and feel in relation to those problems (p.9)."

There are several definitions of organizational cultures available in literature; however, all of them emphasize on prevailing norms, shared beliefs and common values (Phegan, 2000, Trice & Beyer, 1993). Organizational culture is the set of values, norms, guiding beliefs, and understandings that is shared by the members of an organization and taught to new members as correct (Brown & Starkey, 1994; Duncan, 1989; Smircich, 1983). It represents the unwritten, feeling part of the organization. Schein (2005) stated that organizational culture is, "A pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration that has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems." In other words, as groups evolve over time, they face two basic challenges: integrating individuals into an effective whole, and adapting effectively to the external environment in order to survive (Gregory et al., 2009). As groups find solutions to these problems over time, they engage in a kind of collective learning that creates the set of shared assumptions and beliefs we call "culture." According to Morgan (1997) culture is, "an active living phenomenon through which people jointly create and recreate the worlds in which they live" (Hartnell, Ou, &Kinicki, 2011, Rudelj, 2012).

Culture has long been on the agenda of management theorists (Schein, 2005, 2010). Often management scientists try to understand the culture to bring change in the organizations (Schneider, 1980). Where change means changing the corporate ethos, the images and values that inform action and this new way of understanding organizational life must be brought into the management process (Black, 2003; Joyce & Slocum, 1982). There are a number of central aspects of culture: There is an evaluative element involving social expectations and standards; the values and beliefs that people hold central and that bind organizational groups (Pettigrew, 1987). Culture is also a set of more material elements or artefacts. These are the signs and symbols that the organization is recognized by but they are also the events, behaviours and people that embody culture (Morgan 1997, Sarros, Cooper, & Santora, 2008, Yarbrough, Morgan, & Vorhies, 2011).

Deal and Kennedy (1982) argue that culture is the single most important factor accounting for success or failure of an organization (Parker & Bradley, 2000). They identified four key dimensions of culture. Values, the beliefs that lie at the heart of the corporate culture; heroes, the people who embody values; rites and rituals i.e. routines of interaction that have strong symbolic qualities; and the culture network which is the informal communication system or hidden hierarchy of power in the organization. Peters and Waterman (1982) proposed a psychological theory to link between business performance and organizational culture. Culture can be considered as a reward of work; where employees sacrifice much to the organization and in turn the corporate culture emerged as a form of return.

Hofstede (1993, 1999), the most promising writer on culture, described, culture is symbolic and it can be explained by telling stories about how we feel about the organization. A symbol stands for something more than itself and can be many things, but the point is that a symbol is invested with meaning by us and expresses forms of understanding derived from our past collective experiences (Hofstede, 1993). The sociological view is that organizations exist in the minds of the members. Stories about culture show how it acts as a sense - making device (Peter & Waterman, 1982). Culture is unifying and refers to the processes that bind the organization together. Culture is then considered as consensual but not in conflict (Joyce & Slocum, 1982). The idea of corporate culture reinforces the unifying strengths of central goals and creates a sense of common responsibility (Bellou, 2010, Kotter, 1992, Martin, 2002). Culture is holistic and refers to the essence – how people deal with each other and what behaviours are expected from each other in an organizational setting (Martin, 2002). All of the above elements are interlocking; culture is rooted deep in unconscious sources but is represented in superficial practices and behaviour codes. Because organizations are social organisms and not mechanisms, the whole is present in the parts and symbolic events become microcosms of the whole (Hofstede, 1999, Parker, 2000, Hartnell, Ou & Kinicki, 2011).

Many researchers (e.g. Carmeli, 2005, Denison, 2003, Khan & Rashid, 2012, Yiing & Zaman, 2009) have worked to develop the tools to measure the dimensions of culture or attempted to establish them various outcome variables. Through various studies it is established that the culture has either direct or mediating relationship with organizational performance (Kotter, 1992), Strategic success of the organization (Black, 2003), communication and information (Brown & Starkey, 1994), competing values (Cameron & Quinn, 2011, Quinn & Rohbaugh, 1983), leadership (Phegan, 2000, Sarros, Cooper & Santro, 2008, Schein, 2010). Besides these other prominent studies related the organizational culture to the strategy (Cabera & Bonache, 1999, Yarbrough, Morgan & Vorhies, 2011), organizational identity (Parker, 2000), person organization fit (O'Reilly, Chatman & Caldwell, 1991), organizational climate (Schneider, 1980), organizational effectiveness (Hartnell, Ou & Kinicki, 2011, Gregory et al., 2011) innovation (Naranjo-Valencia, 2011) and job satisfaction (Bellou, 2010).

Ying and Zaman (2009) have reported the mediating affect of different types of cultures like bureaucratic, supportive, and innovative on leadership behaviour and organizational commitment (Khan & Rashid, 2012). Another important study, Carmeli (2005) supported the relationship of organizational culture with employee behaviour and concluded that organizational culture affects the behaviour of employees that consequently changes the functioning and productivity of the organization, and further may lead to employee withdrawal behaviour. Organizational culture is considered an important factor in explaining the variation in organizational performance. Several studies reported a link that organizational culture and leadership are the two most important elements that affect the performance of an organization. Other studies also identified the relationship of culture with employee retention, quality of work, customer satisfaction, and organizational effectiveness (Sarros, Gray & Desnten, 2000; Willmott, 1993).

Various qualitative and quantitative studies proposed the methods and scales to measure the culture depending on the goals and purpose of research (Sackmann, 2011). Among these scales, most widely used and quoted measures are organizational culture inventory (Murphey, Cook & Lopez, 2013, Cameron & Quinn, 2011); Organizational Beliefs Questionnaire (Sashkin, 1984), and Organizational Culture Profile (O'Reilly, Chatman, & Caldwell, 1991, Agle & Caldwell, 1999). Organizational culture inventory comprises of 120 items based on five-point Likert scale and has internal reliability range from .67 to .92 (Detert et al., 2000), which evaluates styles with an organization along three dimensions. Organizational beliefs questionnaire consists of 50 items based on five-point Likert scale and reports a range of internal reliability as .35 to .78 (Xenikon & Furnham, 1996), divided into 10 dimensions used as subscales to measure culture of an organization. Whereas organizational culture profile (OCP) reports 54 items (O'Reilley et al., 1999) with average reliability .88 and used to assess the person organizational fit (Taras et al., 2013).

Ashkanasay et al. (2000) conducted a detailed review of 18 cultural measures published in different research studies from 1975 to 1992; and it is found that reliability and validity of these instruments were not much reported by the researchers. Later various modifications are proposed in those scales, for example, Judge and Cable (1997) proposed modifications in the scale developed by Cook and Laferty (1987), which was further revised and shortened by Sarros et al. (2005) by incorporating new cultural dimensions. Sinha and Arora (2012) have conducted an exploratory study to find a fit between organizational culture and business excellence. This study attempted to find cultural dimensions that lead to business excellence by using the Ashkansay and Broadfoot (2000) OCP by collecting the data from 400 executives and 1900 non-executives and reported the differences through 15 dimensions.

Research Methodology

This research study is based on post-positivist philosophy, and deductive approach is adopted to test the prevailing nature of culture in different sectors of Pakistan. A cross-sectional survey is conducted of employees belong to different organizations in eight selected sectors. The sectors selected for this study are banking and insurance, manufacturing and textile, healthcare and pharmaceuticals, media and services. These sectors are selected on the basis of diverse cultural background across different organizations. Population of the study comprises of all the employees working in these sectors in a large metropolitan city and associated to the same organizations for at least two years to understand, absorb and reflect upon the prevailing culture. As the target population size is very large (above one million), therefore minimum sample size is estimated 384, on the basis of 95% confidence interval and 5% margin of error (Saunders et al., 2013). In practice sample size is considered of 1000 due to two reasons; first, eight sectors are considered therefore to provide more representations to them minimum sample size of each sector would be less than 50, which is not a suitable representation for an entire sector; and second most important reason to run factor analysis on different sectors a fairly large sample is required (Brown, 2012; Hair et al., 2010). The questionnaire is distributed through trained enumerators and follow-up is made after every two weeks. After three follow-up visits total forms collected are 639 of which 587 forms are found usable. Therefore actual response rate of the questionnaire is 58.7%.

The scale of OCP is adapted from Sarros, Gray, Densten & Cooper (2005), face and content validity of the scale items are ascertained through pilot testing and expert evaluation. The reliability of the scale through pilot study by 48 sampling units (different from actual sample) is found to be .81 (28 items). Through minor changes in the language, without deleting any item, and by adding demographic profile questions, final questionnaire is prepared which is based on five-point Likert Scale (1=not at all, 2=minimally, 3= moderately, 4=considerably, 5=very much). Seven constructs, viz. competitiveness, social responsibility, supportiveness, innovation, emphasis of reward, performance orientation, and stability having four items each with total 28 items included in the final OCP scale. Statistical analysis is applied to achieve the research objectives; and factor analysis is applied to verify the suitability and appropriateness of the constructs.

Data Analysis and Findings

The data analysis is applied to those forms only which have completed in all respects, i.e. complete case approach is adopted to avoid missing value treatment. The reliability of the scale, by using Cronbach's alpha is found to be .92 (28 items) of 587 cases; whereas split half reliability is reported the value of Spearman-Brown .8653 with alpha of first 14 items as .86 and next 14 as .85. The sector-wise reliability analysis is performed and it is found that all the sectors have the reliability coefficient Cronbach' alpha above .85. The sample composed of 22.1% from banking, 5.3% from hospital, 5.3% from insurance, 12.3% from manufacturing, 5.1% from media, 23% of pharmaceuticals, 23% of services, and 6.6% of textile of the total sample unit of 587. The sample composition according to the age-group is found about 18% to 20% data is uniformly divided in various age groups. Majority of the sample, 70% is composed of the age group 25 to 40 years. It contains 91% males and 9% females; hence it is male-oriented sample. In fact in some of the cases females hesitated to provide the data. According to marital status there are approximately 75% people involved in the survey are married while 24% are unmarried, while others have not reported the status.

Table 1: Demographic profile of respondents

		Frequency	Percentage
Gender	Male	534	91%
	Female	53	9%
Age	Less than 25	40	6.81
	25 – 35	212	36.11
	Above 35	335	75.08
Marital Status	Married	438	74.6
	Unmarried	149	25.4
Industry / Sector	Banking	130	22.1
	Insurance	31	5.3
	Services	119	20.3
	Media	30	5.1
	Pharmaceuticals	135	23.0
	Healthcare	31	5.3
	Manufacturing	72	12.3
	Textile	39	6.6

The cross-sectional analysis reveals that in hospitals, insurance, pharmaceutical and textile sector majority of respondents included are from upper strata of age while in media lower stratum of age group are dominant. The composition of the sample according to the gender represent that highest number of female participants are from banking and services and next in pharmaceuticals. In terms of percentages, banking, hospitals, insurance and services are the sectors in which women are about 13% of the respective group sample. In terms of percentage in media sector about 40% sample respondents are unmarried, while in hospitals are the most 93.5% people are married. The highest experience is found in manufacturing and insurance sectors, after that the next higher average experience is found in hospitals, textile and pharmaceutical industries, whereas the lowest previous experience is found in banking, media and services industries. The highest association is also found in manufacturing and after that insurance and hospitals. The lowest association is again found in banking sector, which indicates a quick turnover in this industry.

Following are the means and standard deviations of seven factors (variables) considered in this study. These seven factors are competitiveness, social responsibility, supportiveness, innovation, emphasis on reward, performance oriented, and stability.

Table 2: Descriptive statistics and reliability (Cronbach alpha) of OCP factors

Factors	No. of items	Reliability (Cronbach Alpha)	Mean	Standard Deviation	Rank (by mean)
1. Competitiveness	4	.765	3.7713	.8381	4
2. Social Responsibility	4	.694	3.8152	.7779	1
3. Supportiveness	4	.658	3.6848	.7780	6
4. Innovation	4	.681	3.5711	.8259	7
5. Emphasis on Reward	4	.737	3.7739	.8242	3
6. Performance Orientation	4	.669	3.8109	.7507	2
7. Stability	4	.713	3.7147	.8309	5

The table shows that overall highest average is found for social responsibility i.e. 3.8152 on a scale of 1 to 5 (where these scales are representing as 1- Not at all, 2-Minimally, 3-Moderately, 4-Considerably, 5-Very much). Hence our sample suggests the organizations included in sample are considerably socially responsible in the eyes of their employees. The next factors after this are 'performance orientation' and 'emphasis on reward'. The factor having the smallest mean is 'innovation'. Hence the organizations in Pakistan are considered less innovative and supportive by their employees.

The following table shows the correlation among seven factors considered in this study.

Table 3: Correlations Matrix among seven OCP factors

	1	2	3	4	5	6	7
1. Competitiveness	1						
2. Social responsibility	.574	1					
3. Supportiveness	.520	.463	1				
4. Innovation	.478	.482	.550	1			
5. Emphasis on reward	.536	.522	.485	.502	1		
6. Performance orientation	.553	.540	.533	.518	.620	1	
7. Stability	.431	.452	.456	.477	.477	.502	1

All coefficients are significant at .01 level of significance

The correlation table suggests that highest correlation is found between factor 5 and 6 i.e. emphasis on reward and performance orientation; although all correlations are significant at 1% level of significance. Hence those organizations that give emphasis on reward also demand performance from their employees. These factors also are highly almost highly correlated with the remaining factors. Stability is found least correlated with all other six factors.

Sector-wise correlation analysis reveals that in banking sector all factors are highly correlated with each other while innovation and stability are found highly correlated with almost all other factors except supportiveness. The lower correlations are found among supportiveness and social responsibility. In hospital sector, all factors are not correlated with each other. For example competitiveness is not correlated with performance orientation. Social responsibility is not correlated with innovation, and social responsibility is not correlated with emphasis on reward. In insurance sector ‘stability’ is not correlated with emphasis on reward and performance orientation; while the highest correlation is found in between competitiveness and performance orientation. In manufacturing all factors are correlated with each other, whereas lowest correlation is found in between stability and emphasis on reward. In media sector, no correlation is found between emphasis on reward and performance orientation, emphasis on reward and social responsibility, and competitiveness and stability; while other factors are moderately correlated. In pharmaceutical industries all factors are correlated with each other except competitiveness and stability, and social responsibility and stability. In services no correlation is found in between innovation and emphasis on reward, while stability is very low correlated with all other factors. In textiles, there is no correlation among these seven factors. All correlations are very low or negative. Negative correlations are found of competitiveness with social responsibility and performance orientation. There is only one moderate correlation is found between supportiveness and performance orientation.

Before performing the factor analysis KMO and Bartlett’s tests are applied for sampling adequacy and suitability for factor analysis. KMO measure of sampling adequacy is found as .934. The Bartlett’s test of Sphericity is significant at 0.000 with approx chi-square value of 5166.967 and df 378. The factor analysis confirms the seven factors with approximately 56% variance explained through principle component analysis.

Table 4: Total variance explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.650	30.891	30.891	8.650	30.891	30.891	2.631	9.396	9.396
2	1.501	5.360	36.251	1.501	5.360	36.251	2.398	8.563	17.959
3	1.334	4.766	41.017	1.334	4.766	41.017	2.375	8.482	26.441
4	1.218	4.349	45.365	1.218	4.349	45.365	2.316	8.273	34.714
5	1.074	3.835	49.200	1.074	3.835	49.200	2.296	8.202	42.916
6	1.062	3.792	52.993	1.062	3.792	52.993	1.906	6.808	49.724
7	.895	3.197	56.189	.895	3.197	56.189	1.810	6.465	56.189

Extraction Method: Principal Component Analysis.

One of the important requirements of the analysis is to develop the profile of different sectors on the basis of seven OCP factors. For this purpose mean analysis of seven factors is applied to see the dominance factor. The following table provides mean of seven variables according to the each sector considered in this study.

Table 5: Mean of OCP factors according to Sector

	Banking	Health care	Insurance	Manufact	Media	Pharma	Services	Textile
Competitiveness	3.7635	**4.2258**	**4.0000**	**3.5556**	**3.7667**	**3.8296**	**3.6176**	**3.9231**
Social Responsibility	3.7288	**4.3306**	**4.2500**	**3.4444**	**3.7167**	**3.9037**	**3.7668**	**3.9487**
Supportiveness	3.5769	**3.7500**	**4.0645**	**3.4792**	**3.7250**	**3.6259**	**3.8319**	**3.7949**
Innovation	3.6192	**3.6774**	**3.6935**	**3.2778**	**3.5667**	**3.5796**	**3.6197**	**3.5962**
Emphasis on Reward	3.8019	**3.8548**	**3.7339**	**3.3889**	**3.8667**	**3.9148**	**3.8277**	**3.6346**
Performance Orientation	3.7519	**4.1048**	**4.0726**	**3.4201**	**3.8083**	**3.8963**	**3.8466**	**3.8846**
Stability	3.5942	**4.0403**	**4.0887**	**3.5972**	**3.5083**	**3.7944**	**3.7773**	**3.4679**

It is also desired to seek whether these seven factors are statistically significantly different among different sectors. For this purpose analysis of variance is applied for each factor to compare the equality of means across the sectors. Following table represents this analysis. The findings reveal that all sectors are significantly different on six variables i.e. competitiveness, social responsibility, supportiveness, emphasis on reward, performance orientation, and stability; but not for innovation.

Table 6: Comparison of different sectors for each OCP factor by analysis of variance

		Sum of Squares	df	Mean Square	F	Sig.
Competitiveness	Between Groups	15.552	7	2.222	3.248	.002
	Within Groups	396.056	579	.684		
	Total	411.609	586			
Social Responsibility	Between Groups	27.286	7	3.898	6.896	.000
	Within Groups	327.284	579	.565		

	Total	354.570	586			
Supportiveness	Between Groups	12.724	7	1.818	3.078	.003
	Within Groups	341.971	579	.591		
	Total	354.695	586			
Innovation	Between Groups	7.628	7	1.090	1.609	.130
	Within Groups	392.090	579	.677		
	Total	399.718	586			
Emphasis on Reward	Between Groups	15.068	7	2.153	3.254	.002
	Within Groups	382.973	579	.661		
	Total	398.041	586			
Performance Orientation	Between Groups	17.596	7	2.514	4.655	.000
	Within Groups	312.664	579	.540		
	Total	330.260	586			
Stability	Between Groups	15.481	7	2.212	3.291	.002
	Within Groups	389.098	579	.672		
	Total	404.579	586			

The dominance of cultural factor is sought by sorting through the mean. Most and least prevailing cultural factors are identified for each sector. Emphasis on reward and social responsibility are found the most prevailing factors. On the contrary innovation and stability are least prevailing cultural factors in different sectors as perceived by the employees. The factors for different sectors on the basis of mean of each sector are given in the following table.

Table 7: Most and least significant factor among the sectors on the basis of mean

Sector	Most	Least
Banking	Emphasis on reward, Competitiveness	Supportiveness
Hospitals	Social responsibility, Competitiveness	Innovation
Insurance	Social responsibility, Stability	Innovation
Manufacturing	Stability, Competitiveness,	Innovation
Media	Emphasis on reward, Performance orientation	Stability
Pharmaceutical	Emphasis on reward, Social responsibility	Innovation
Services	Supportiveness, Emphasis on reward	Competitiveness
Textile	Social responsibility, Competitiveness	Stability

Conclusion and Recommendations

The organizational culture profile (OCP) analysis of eight sectors viz. banking, hospitals, insurance, manufacturing, media, pharmaceutical, services, and textile in Pakistan is conducted through a standard OCP questionnaire. This questionnaire contains 28 items divided into seven factors, namely, Competitiveness, Social responsibility, Supportiveness, Innovation, Emphasis on Reward, Performance Orientation, and Stability.

From various analyses and statistical tests performed on the data collected, following key findings are obtained.

1. Out of seven factors, on basis of overall average, it is found that 'social responsibility' is the dominant factor. Hence our sample suggests the organizations included in sample are considerably 'socially responsible' in the eyes of their employees. The next factors after this are 'performance orientation' and 'emphasis on reward'. The factor having the smallest mean is 'innovation'. Hence the organizations in Pakistan are considered less innovative and supportive as perceived by their employees.
2. The overall correlation analysis suggests that highest correlation is found between 'emphasis on reward' and 'performance orientation'; however, the correlations among all seven factors are statistically significant. Therefore those organizations that give emphasis on reward also demand performance from their employees.
3. According to the analysis on different sectors, it is found that 'emphasis on reward', 'social responsibility' and 'competitiveness' have high means while 'innovation' and 'stability' have low scores.
4. In sector analysis, banking sector has a low score for supportiveness; hospitals, pharmaceuticals and manufacturing are low in innovation, while media and textile are low in stability.
5. The correlation analysis reveals that there are various factors that are not correlated in every sector. In banking and insurance all factors are correlated with each other. While in hospitals social responsibility is more correlated with other factors. In manufacturing all factors are correlated withy each other, whereas lowest correlation is found in between

stability and emphasis on reward. In media sector, no correlation is found between emphasis on reward and performance orientation, emphasis on reward and social responsibility, and competitiveness and stability; while other factors are moderately correlated. In pharmaceutical industries all factors are correlated with each other except competitiveness and stability, and social responsibility and stability. In services no correlation is found in between innovation and emphasis on reward, while stability is very low correlated with all other factors. In textiles, there is no correlation among these seven factors. All correlations are very low or negative. Negative correlations are found of competitiveness with social responsibility and performance orientation. There is only one moderate correlation is found between supportiveness and performance orientation.

6. The overall analysis of variance indicates that the means of all seven factors are not equal. The sector analysis shows that hospitals, pharmaceuticals, and textile sectors have not equal means of all seven variables, while in remaining five sectors mean of all the variables are equal.

7. Different sectors are dominated by different factors; hospitals and insurance sectors have 'social responsibility; banking, pharmaceuticals, and media has 'emphasis on reward'; manufacturing and textile has competitiveness; and services has 'supportiveness' as the dominant characteristic.

The organizational cultural profile analysis for different sectors of Pakistan reveals that different sectors have their dominant characteristics. These characteristics also vary from different demographic factors, like gender, age, previous experience, and marital status. All seven factors considered in this study are highly relevant to the industries and different business sectors in Pakistan. The OCP is quite reliable in nature and valid in drawing various conclusions. We can conclude that the tool of OCP can be used to perform organizational analysis of different industries or individual organizations in Pakistan. Different sectors have their own specific organizational profile with its explicit characteristics.

It is recommended that this questionnaire should be used to individual sectors with much larger sample and with extensive demographic data to understand the nature of different sectors. Also, this should be repeated in Lahore and Islamabad or other large cities of Pakistan, for the comparison of the organizational culture of different cities. This will also provide a good comparison of organizations that are operating in different cities of Pakistan; for example for large number of branches operating of various banks in Pakistan.

References

Agle, B. R., & Caldwell, C. B. (1999). Understanding research on values in business a level of analysis framework. *Business & Society*, *38*(3), 326-387.

Ashkanasy, N. M., Broadfoot, L. E., & Falkus, S. (2000). Questionnaire measures of organizational culture. InN. M. Ashkanasy, CPM Wilderom, & MF Peterson (Eds.), Handbook of organizational culture and climate (pp. 131-146).

Alvesson, M. (1993). *Cultural Perspectives on organizations*, Cambridge University Press, Cambridge, England.

Bellou, V. (2010). Organizational culture as a predictor of job satisfaction: the role of gender and age. Career Development International, 15(1), 4-19.

Black, R. J. (2003). *Organisational Culture: Creating the Influence Needed for Strategic Success*, London UK.

Borg, I., Groenen, P. J., Jehn, K. A., Bilsky, W., & Schwartz, S. H. (2011). Embedding the organizational culture profile into Schwartz's theory of universals in values. Journal of Personnel Psychology, 10(1), 1-12.

Brown, A. D. and Starkey, K. (1994). The effect of organizational culture on communication and information, *Journal of Management Studies*, 31(6), 807 – 828.

Brown, T. A. (2012). Confirmatory factor analysis for applied research, Guilford Press.

Cabera, E. F. and J. Bonache (1999). An expert HR system for aligning organizational culture and strategy, *Human Resource Planning*, 22(1), 51–60.

Cameron, K. S., & Quinn, R. E. (2011). Diagnosing and changing organizational culture: Based on the competing values framework. John Wiley & Sons.

Carmeli, A. The relationship between organizational culture and withdrawal intentions and behavior. *International Journal of Manpower* 26.2 (2005): 177-195.

Cummings, T. G. and Worley, C. G. (2005). *Organization Development and Change*, 8th ed., Thomson South-Western, USA.

Daft, R. L. (2004). *Organizational Theory and Design*, 8th ed. Thompson South-Western, Singapore.

Dann, S. (1996). Public sector reform and the long-term public servant", *Journal of Public Sector Management,* 9(2), 28-35.

Deal T. E. and Kennedy, A. A. (1982). *Corporate Cultures: The Rites and Rituals of Corporate Life*, Harmondsworth, Penguin Books.

Denison, D. R. (1996). What is the difference between organizational culture and organizational climate? *Academy of Management Review*, 21(3), 619 – 654.

Detert, J. R., Schroeder, R. G., & Mauriel, J. J. (2000). A framework for linking culture and improvement initiatives in organizations. *The Academy of Management Review*.

Duncan, W. J. (1989). Organizational culture: getting a fix on an elusive concept, *Academy of Management Executive*, 3 229 – 236.

Frost, P., Moore, L., Louis, M., Lundberg, C., & Martin, J. (Eds.). (1985). *Organizational culture.* Beverly Hills, CA: Sage Publications, Inc.

Gregory, B. T., Harris, S. G., Armenakis, A. A., & Shook, C. L. (2009). Organizational culture and effectiveness: A study of values, attitudes, and organizational outcomes. Journal of Business Research, 62(7), 673-679.

Handy, C.B. (1985). *Understanding Organizations*, 3rd ed., Harmondsworth, Penguin Books.

Hartnell, C. A., Ou, A. Y., & Kinicki, A. (2011). Organizational culture and organizational effectiveness: a meta-analytic investigation of the competing values framework's theoretical suppositions. Journal of Applied Psychology, 96(4), 677.

Hill, C. W. L., and Jones, G. R. (2001). *Strategic Management.* Houghton Mifflin.

Hofstede, G. (1980). *Culture's Consequences: International Differences in Work Related Values*, Beverly Hills, CA, Sage Publications

Hofstede, G., Neuijen, B., Daval Ohayv, D., and Sanders, G. (1990). Measuring organization cultures: A qualitative and quantitative study across twenty cases *Administrative Science Quarterly*, 35, 286-316.

Hofstede, G. (1993). Cultural constraints in management theories. *Academy of Management Executive,* 7(1)*,* 81-94.

Hofstede, G. (1999). Problems remain, but theories will change: The universal and specific in 21st century global management. *Organization Dynamics,* 21(1), 34-44.

Jermier, J. (1991). Reflections on Street Corner Society, in P. Frost, L. Moore, M. Louis, C. Lundberg, & J. Martin (eds.) Reframing Organizational Culture, Newbury Park, CA: Sage, 223–233.

Judge, T. A., & Cable, D. M. (1997). Applicant personality, organizational culture, and organization attraction. *Personnel Psychology*, *50*(2), 359-394.

Joyce, W. F. & Slocum, J. (1982). Climate discrepancy: Refining the concepts of psychological and organizational climate, *Human Relations*, 35, 951 – 972.

Kaarst-Brown, M. L., Nicholson, S. and Von Dran, G. M. and Stanton, J. M. (2004). Organizational cultures of libraries as a strategic resource, *Library Trends* 53(1), 33-53.

Khan, S. K., & Rashid, M. Z. A. (2012). The mediating effect of organizational commitment in the organizational culture, leadership and organizational justice relationship with organizational citizenship behavior: A study of academicians in private higher learning institutions in Malaysia. *International Journal of Business and Social Science*, *3*(8), 83-91.

Kotter, J. (1992). *Corporate Culture and Performance*, Free Press, New York.

Martin, J. (2002). *Organizational culture: Mapping the terrain*. Thousand Oaks, CA: Sage.

Morgan, G. (1997). *Images of organization*, Thousand Oaks, CA: Sage Publications.

Murphy, P. J., Cooke, R. A., & Lopez, Y. (2013). Firm culture and performance: intensity's effects and limits. *Management Decision*, *51*(3), 661-679.

Naranjo-Valencia, J. C., Jiménez-Jiménez, D., & Sanz-Valle, R. (2011). Innovation or imitation? The role of organizational culture. Management Decision, 49(1), 55-72.

O'Reilly, C. A., Chatman, J. and Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit, *Academy of Management Journal*, 34(3), 487 – 516.

Ouchi, W. (1981). *Theory Z: How American business can meet the Japanese challenge*, Reading, MA: Addison-Wesley

Parker, M. (2000). *Organizational Culture and Identity*, London: Sage.

Parker, R. & Bradley, L. (2000). Organization culture in the public sector: Evidence from six organizations, *The International Journal of Public Sector Management,* 13(2)*,* 125-141.

Peter, T., & Waterman, R. (1982). *In search of excellence: Lessons from American's best-run companies.* NY, NY: Warner Books.

Pettigrew, A. (1987). Context and action in the transformation of the firm, Journal of Management Studies, 24, 649-670.

Phegan, B. (2000). Developing Your Company Culture, A Handbook for Leaders and Managers, Context Press.

Quinn, R. E. and Rohrbaugh J. (1983). A spatial model of effectiveness criteria: Toward a competing values approach to organizational analysis, management Science, 29(3), 363 – 377.

Rudelj, S. (2012). Model of the preferred organizational culture. Strategic Management, 17(1), 27-41.

Sackmann, S. A. (2011). Culture and performance. *The handbook of organizational culture and climate*, *2*, 188-224.

Sarros, J. C., Cooper, B. K., & Santora, J. C. (2008). Building a climate for innovation through transformational leadership and organizational culture. Journal of Leadership & Organizational Studies, 15(2), 145-158.

Sarros, J. C., Gray J, and Densten I. L (2004). The nest generation of the organizational culture profile. *Working Paper Series*, Monash University, Australia.

Sashkin, M. (1984). The Organizational Beliefs Questionnaire. *Bryn Mawr, PA: Organization Design and Development*.

Schein, E. H. (1985). Defining organizational culture. *Classics of organization theory*, *3*, 490-502.

Schein, E. H. (2005). Organizational Culture and Leadership, 3rd ed., Jossey-Bass, San Francisco.

Schein, E. H. (2010). Organizational culture and leadership (Vol. 2). John Wiley & Sons.

Schneider, B. (1980). *Organizational climate and culture*, Jossey-Bass, San Francisoc.

Sinha, A., & Arora, B. (2012). Fit between Organizational Culture and Business Excellence: A Case Study of Heavy Electrical Equipment Plant, BHEL.*Vikalpa: The Journal for Decision Makers*, *37*(3), 19-27.

Smircich, L. (1983). Concepts of culture and organizational analysis, Administrative Science Quarterly, 28, 339 – 358.

Taras, V., Caprar, D., Rottig, D., Sarala, R., Zakaria, N., Zhao, F., ... & Huang, V. (2013). A global classroom? Evaluating the effectiveness of global virtual collaboration as a teaching tool in management education. *Academy of Management Learning & Education*, amle-2012.

Trice, H., & Beyer, J. (1993). *The cultures of work organizations*. Englewood Cliffs, NJ: Prentice Hall.

Willmott, H. (1993). Strength is ignorance; slavery is freedom: managing culture in modern organizations, *Journal of Management Studies*, 30(4), 515-552.

Xenikon, A.M. & Furnham, A. (1996) A correlation and factor analytic study of four questionnaire measures of organisational culture, Human Relations, 49, pp. 349 – 373.

Yarbrough, L., Morgan, N. A., & Vorhies, D. W. (2011). The impact of product market strategy-organizational culture fit on business performance. Journal of the Academy of Marketing Science, 39(4), 555-573.

Yiing, H. L., & Zaman A, K. (2009). The moderating effects of organizational culture on the relationships between leadership behaviour and organizational commitment and between organizational commitment and job satisfaction and performance. *Leadership & Organization Development Journal*,*30*(1), 53-86.

ARTICLE

WHAT LIES AT THE CORE OF CORE INFLATION? AN EMPIRICAL ANALYSISTO IDENTIFY THE DETERMINANTS OF CORE INFLATION IN PAKISTAN

Mehwish Ghulam Ali
Institute of Business Administration, Karachi Pakistan

Muhammad Ather Elahi
Institute of Business Administration, Karachi Pakistan

Qazi Masood Ahmed
Institute of Business Administration, Karachi Pakistan

Abstract

Core inflation leads to erosion of purchasing power and distorts income distribution in favour of the rich and the creditors. Further, it aggravates poverty due to its regressive effect. By targeting core inflation, the Central Bank attempts to reduce poverty and improve income distribution. The Central Bank does and should target core inflation for the aforementioned objectives, hence it becomes necessary to identify if factors apart from monetary policy affect core inflation. This paper aims to identify the determinants of core inflation in Pakistan. This study is motivated by the lack of work done in identifying the determinants of core inflation in Pakistan. Using OLS analysis, we find that adaptive expectations, loans to private sector, real GDP growth rate and exchange rate all impact core inflation. Adaptive expectations are the largest contributor to core inflation.

***Keywords*:** Inflation, Monetary Policy

JEL Classification:E31,E52

Introduction

A low and stable level of inflation is necessary for economic growth, but if it exceeds a threshold level it will cause more harm than good to the economy. In the case of Pakistan the threshold level is 9 percent based on CPI headline inflation (Mubarik, 2005). However, using headline inflation may not always be a preferred option for policy making. This is because headline inflation is affected by transitory changes in prices that are not in the control of monetary authorities. Under the umbrella of "inflation" we find three categories namely *food* inflation, *non-food* (also sometimes referred to as fuel inflation) inflation and *core* inflation. While food and fuel inflation are self-explanatory terms, core inflation warrants some introduction. It is the long run trend of inflation and is most commonly referred to food non fuel inflation. Specifically, it is headline inflation adjusted for transient and non-monetary shocks. All three categories i.e. food, fuel and core inflation, contribute to overall inflation rate in the economy and each of the three is affected by different factors. Knowledge of the causes of the transitory component and general trend is important for policy makers for devising the most suitable policies.

In recent times, an increasing number of Central Banks are identifying price stability as their operational goal. This is because inflation leads to erosion of purchasing power and distorts income distribution in favour of the rich and creditors. Further, it aggravates poverty due to its regressive effect. By targeting inflation, the Central Banks attempt to reduce poverty and improve income distribution. Identifying the determinants of each type of inflation will help identify which policy makers are most apt to deal with which kind of inflation. Policies to counter food and fuel inflation may not fall directly under the domain of the Central Bank whose focus is core inflation. The tools available to the Central Bank, when addressing inflation, are the various channels of the monetary policy transmission mechanism. There exists a gap when the question comes of identifying how these and other factors affect core inflation. This hidden information about core inflation needs to be extracted. In this paper we conduct this exercise for Pakistan by analyzing the determinants of core inflation. At policy level, the knowledge will help in better management of monetary policy in Pakistan

The objectives of this paper are threefold:

1. A re-assessment of the relationship between monetary policy and core inflation in Pakistan.
2. An analysis of the determinants of core inflation in Pakistan i.e. once adjusting for transient and non-monetary shocks are there any factors, including transmission mechanism of monetary policy, which systematically affect inflation in the long run
3. An empirical estimation of the contribution of determinants of core inflation in Pakistan.

Using data from 1981-2012, this paper attempts to understand what factors affect core inflation. The rest of the paper is organized as follows: Section II provides a review of literature, Section III discusses the trend of core inflation in Pakistan, Section IV discusses data and methodology, Section V provides results and Section VI concludes.

Review of Literature

Calculation of Core Inflation

The first step is to understand how core inflation is calculated. We explore the methods employed by the State Bank of Pakistan to calculate core inflation. (Tahir, 2003) Explains that CPI changes are both positively skewed and leptokurtic in Pakistan. This means that for the CPI, exceptionally large price changes are more common than in a normal distribution and that exceptional price rises are more common than exceptional price declines. Headline inflation, is not a robust estimator for studying the general trend of inflation. Two methods for estimating core inflation are provided by the author: exclusion approach and trimmed mean approach.

The exclusion approach excludes prices of food and energy groups from the calculation of core inflation. While this method is transparent and easily verifiable, the exclusion is arbitrary. Another limitation in this approach is potential information loss due to exclusion of food and energy prices. And finally, excluding food and energy groups does not guarantee that the remaining price items will not include transitory shocks.

This justifies use of the second method which is the Trimmed Mean Approach. In this approach price changes are arranged from lowest to highest in each period and then zero weights are attached to a fixed percentage of items from both ends of the tails while calculating the mean. This removes the need to exclude any item a priori. However, the percentage of items to which zero weights need to be attached still needs to be decided. For a core inflation measure to be accurate it should fulfill two criteria. One is that over a long period of time average rate for both core and headline inflation is the same. The rationale is that in the long run transitory effects die down. The second is that core inflation should move closely with the trend rate of inflation. The author finds that trimmed mean levels of core inflation at 10%, 15% and 20% all fulfill the first criteria. Further, out of the three trimming at 15% seems to fulfill the second criteria best.[1]

There is no one infallible measure of calculating core inflation(Lodhi, 2007)evaluates the core inflation measures in Pakistan and discusses the limitations of the exclusion and trimmed mean approach. He finds that exclusion approach is not strictly exogenous and has dual causation with headline inflation. Trimmed mean approach while satisfying the erogeneity criteria systematically understates true core inflation because of uniformly trimming from the top and bottom of the distribution.

For a policy maker, knowing what determines inflation is as important as studying its trend. (Khan & Schimmelpfennig, 2006)correctly point out that if inflation in Pakistan is a monetary phenomenon then the Central Bank is right authority to tackle it, however if it is affected by supply side factors such as support prices of wheat then it should be tackled by Ministry of Agriculture. They find that in the short run wheat support prices affect inflation while in the long run it remains a monetary phenomenon with a one year lag.

Adaptive expectations play a key role in determining the rate of inflation. (Khan, Bukhari, & Ahmed, 2007)address this question when they study the effect of both demand and supply side factors on headline inflation in Pakistan. They find that historically and more recently till 2005-06 adaptive expectations contributes have a pivotal effect on headline inflation. This is through the food channel, which comprises of half the budget for household expenditures.

Much work has been done to see what affects food and non-food inflation. (Khan & Qasim, 1996) disaggregate inflation into food and non-food inflation. Further they calculate non-food inflation by deriving the residual from total inflation when effect of food inflation has been extracted. Using co integration they find current money supply to impact overall inflation, food inflation and non-food inflation positively. The inertia effect of money supply on overall inflation and non-food is positive but wears off. Imported prices have a positive effect on overall and non-food inflation but the effect wears off subsequently as well. All three inflation categories have a negative relationship with supply side variables suggesting that an increase in GDP (food and non-food) would lead to a reduction in inflation. Wheat support price has a huge and positive impact on food inflation.

Determinants of Core Inflation

The Central Bank targets core inflation for price stability either through money supply or interest rate. These two factors individually and jointly affect macroeconomic variables through various channels. For Pakistan, the four most pertinent channels are: the

[1](Riazuddin, Lodhi, Ashfaq, & Ahmad, 2013)have worked further using the Trimmed Mean Approach to calculate core inflation based exclusively on the permanent part of CPI based on monthly data. This allows including those food and fuel items that display persistent price behaviour in Pakistan. This new measure has been named Relatively Stable Component of CPI (RSC-CPI)

interest rate channel, the credit channel, asset price channel and the exchange rate channel. This mechanism has also been known as the transmission mechanism of monetary policy.(Agha, Ahmed, Mubarik, & Shah, 2005)A discussion of each of these branches follows.

The process for changing money supply starts with open market operations and from there it can affect the economy jointly or individually through any of the following channels. Altering the discount rate directly affects market interest rates and deposit and lending rates of the banking sector. This is the interest rate channel. A higher discount rate (or a lower money supply) would affect the loans made out by commercial banks through the credit channel. Current monetary policy and expectations about future monetary policy based on the present can lead to revision in asset prices (e.g. changes in the stock market index) through the asset price channel. The exchange rate channel can affect prices directly though price of imports (though it might have more of an effect on headline inflation rather than core inflation). It can also have an effect through speculation.[2]

In determining the long term trend of prices, it is expected that people will use past prices in forming perceptions about future prices i.e. in the absence of complete information, it can be expected that people will assume, in some part, that the trend of prices which has occurred in the past can be expected to continue in the future. If prices have been high in the past, people will predict prices to be higher in the future as well. This predictive behaviour of people then becomes a self-fulfilling prophecy[3]. However, given additional information, people will revise their perceptions. This is where the role of a central bank is pivotal. If a central bank announces and goes on to implement a monetary policy which causes people to revise their perceptions of prices in a desired manner then that policy of the central bank is credible. However, if people do not revise their perceptions, even after a policy has been set in place, then that policy is not effective in controlling core inflation. In reality it may be the case the individuals use both their past perceptions and review their perceptions after policy measures.

Trend Analysis

Figure 1 shows the trend of core inflation from 1984-2011. From Mid 1980's to 1990 core inflation was at 4.87%. But in the early 1990's core inflation increased sharply before following a downward trend with the average rate for the period 1990-1995 being in double digits at 12.4%. The 1990s were an era of trade liberalization policies and changing governments. In 1988 Pakistan moved from a military regime to a democratic government where Benazir Bhutto became the prime minister of Pakistan. In 1991 there is a structural break in core inflation, with core inflation sky rocketing to 18% and reaching a high of 30% in 1992 before falling sharply to slightly below 10% in 1993. In July 1998 the Pakistani exchange rate shifted to a managed exchange rate. In 1999 the democratic government was overthrown in a military coup by General Pervez Musharraf. This accounts for the second structural break in1999 when core inflation increased from about 10% to 17%.

Figure 1: Core Inflation In Pakistan 1984-2011 (Appendix Page 56)

2http://www.ecb.europa.eu/mopo/intro/transmission/html/index.en.html

[3]E.g. if shop keepers will raise prices, expecting market prices to be higher and in turn market prices will actually become higher since the shop keepers increased their own prices to begin with.

During the military rule of General Pervaiz Musharraf core inflation is seen to fall in the 2000's. Generally military regimes are known to favour the reduction in populist policies which lead to lower and more disciplined government borrowing. Core inflation fell sharply in 2000 and then remained at a low level till 2003 before beginning a rising trend from 2004. It would be imprudent not to mention here that the terrorist attacks of 9/11 and Pakistan's joining the war on terror led to an increase in foreign inflows into the country and could explain the decrease in government borrowing from domestic sources. A rapid monetary expansion in 2004-2005 led to an increase in core inflation in the following years. In 2008 Musharraf resigned and the impact was felt immediately with core inflation increasing amongst this uncertainty in 2009. In 2008/2009 there was a sharp increase in core inflation which was at high of 18.75% in the second quarter of 2009 and then gradually settled at 10.71% in the second quarter of 2010. Since then it has hovered near the 10% level.

Core Inflation and Monetary Policy

The inflation rate which State Bank would focus on is the core inflation. It warrants asking whether there has been any systematic relationship between the monetary policy and core inflation.

Figure 2 illustrates the relationship between the growth in broad based money supply and core inflation across time.[4]The graph suggests that a decrease in money supply (tightening of monetary policy) leads to an increase in core inflation (e.g. growth in money supply was falling in periods from 1988-1990, 1993-1996, 1998-2000 but core inflation has been increasing, relatively stable and increasing respectively. Growth in money supply is highly fluctuating from 2001-2007 however core inflation remained relatively stable before increasing. From then from 2008-2010 money supply increased but so did inflation.

Figure 2: Core Inflation and Money Supply In Pakistan 1984-2011

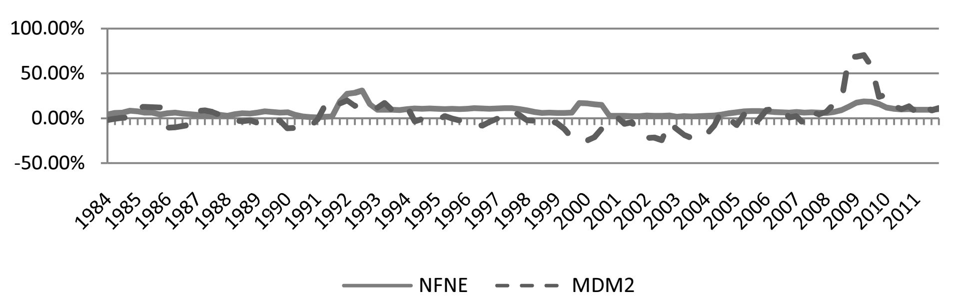
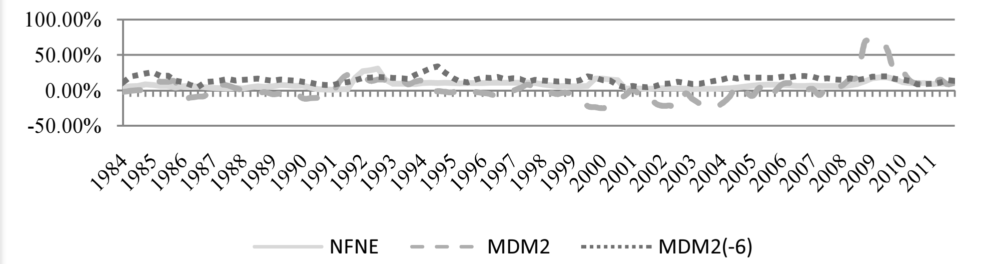


Figure 2 illustrates that a tightening of monetary policy is actually leading to an increase in core inflation. This has been described as the price puzzle by (Javid & Munir, 2013). They describe this puzzle as an increase in interest rates leads to an increase and not decrease in prices.

[4] We have not shown the relationship between core inflation and discount rate since discount rate has been only a recent tool in controlling inflation. The relationship is shown in Appendix A1

The decrease in prices due to a tightening of monetary policy comes much later (Javid & Munir, 2013) The impact of money supply on the price level is seen 4-6 quarters after the policy has been implemented. If money supply was changed in t=0, the effect on prices would be seen in year t=1 or year t=1.5. Figure 3 illustrates that money supply growth at a lag of 6[5] quarters follows a closer relationship with core inflation than current money supply growth.

Figure 3: Core Inflation and Money Supply In Pakistan 1984-2011 with Lags



This answers the first objective i.e. is there a relationship between core inflation and monetary policy. We find that a relationship does exist between current money supply and core inflation though not one we would expect. We also find that money supply seems to have the desired effect on core inflation after a lag of 6 quarters.

What are the various channels through which monetary policy affects core inflation? Apart from monetary policy do some other factors systematically affect core inflation? We address these questions in our next section.

Data and methodology

Table 1 : List of Variables with Descriptive Statistics

The time period of data is from 1981 to 2012. Table 1 provides descriptive statistics of the data used. The major focus in designing methodology was to provide a comprehensive list of factors affecting core inflation. The following equation was estimated:

$$\text{Log}(NFNE_t) = \beta_0+\beta_1\text{Log}\,(\textit{Money Supply}_t)+\beta_2\text{Log}\,(\textit{Money Supply}_{t-6})+\beta_3(\textit{Discount Rate}_t)+\beta_4(\textit{Discount Rate}_{t-6})+\beta_5\text{Log}(\textit{KSE Index}_t)+\beta_6\text{Log}(\textit{KSE Index}_{t-4})+\beta_7(\textit{Exchange Rates}_t)+\beta_8(\textit{Exchange Rates}_{t-4})+\beta_9\text{Log}(\textit{Loans to private sector as a ratio of money supply}_t)+\beta_{10}\text{Log}\,(\textit{Loans to private sector as a ratio of money supply}_{t-4})+\beta_{11}(\textit{T-Bill Rate}_t)+\beta_{12}(\textit{T-Bill Rate}_{t-4})+\beta_{13}\text{Log}(\textit{Domestic Government Borrowing as a ratio of Real GDP}_t)+\beta_{14}\text{Log}(\textit{Domestic Government Borrowing as a Ratio of Real GDP}_{t-6})+\beta_{15}(\textit{Dummy.91})+\beta_{16}(\textit{Dummy.99})+\beta_{17}(\textit{Dummy.09})+\beta_{18}\text{Log}(NFNE_{t-1})+\beta_{19}\text{Log}(NFNE_{t-4})+\beta_{20}\text{Log}(NFNE_{t-6})+\beta_{21}\text{Log}(\textit{Real GDP}_t)+\beta_{21}\text{Log}(\textit{Real GDP}_{t-4})$$

[5] We conducted a similar exercise for money supply with a lag of 4 quarters (12 months).

In the above specification, NFNE is Non Food Non Energy Inflation. Money supply, discount rate and four channels of monetary policy transmission mechanism are used to determine core inflation. These include KSE Index, Exchange rates, loans to private sector, real GDP growth rate and t-bill rate. We include domestic government borrowing because of inflationary pressures of government borrowing on headline inflation. Time dummies specify structural breaks in data.

Any factor which will have a persistent effect on inflation in the long run will also affect core inflation. Adaptive expectation plays a critical role in the persistence of trend of inflation. Even when volatility in prices is not considered, people take current prices as a measure by which to gauge and predict what future prices might be. If current prices are high, then even under normal demand and supply conditions of economy these higher prices will be carried forward because people will *expect* them to be higher. This in turn will affect how people *perceive* their salaries and expenditures should change in order to keep purchasing power constant, whether they should buy certain goods today in the anticipation of higher prices in the future, there might be speculator pressures in asset and credit markets and resources may be diverted from investments into manufacturing good into savings today in lieu of expectations of higher prices in the future. If on average the expectation of higher prices in the future is a trend, then this will translate in higher prices in the future even in the absence of shocks to the system. To capture this effect the lags of NFNE are taken at 4 and 6 quarters The expected sign is positive i.e. since people on average assume prices to be higher in future, then on average a long term trend of higher prices is observed.

To study the impact of the transmission mechanism of monetary policy on core inflation, we look at the following variables: Broad Money M2, Discount Rate, Loans to private sector as a ratio of money supply, T-bill rate, Karachi stock exchange index and real effective exchange rate. An explanation for the use of these variables has already been described previously.

The effect of domestic government borrowing on core inflation can go either way depending on how the money is spent and more importantly how the debt is serviced. If the money is spent in lucrative economic activities, then theoretically, the government debt should refinance itself. If however, the money was not spent in profitable economic activities then the government debt can be financed by printing money or monetization of debt. This will lead to inflationary pressures. In essence the amount of nominal goods in the economy would increase (currency) while the amount of real goods in the economy would not (It could remain unchanged or fall). Either way this would drive up prices. If on average monetization of debt is a frequent occurrence in an economy then this would affect core inflation. The amount of the effect would vary depending on how far the economy is from the potential.

The impact of real GDP on core inflation can go either way. In case of the economy operating near full employment levels, an increase in real GDP can induce inflation. However, for countries operating away from full employment level i.e. countries where there is unutilized excess capacity then an increase in real GDP can actually reduce inflationary pressures. For Pakistan, we expect this effect to be negative.

The dummy variables have been included to account for structural break in data at time periods 1991, 1999 and 2009.

Results

The first task was to check the stationary conditions of the variables under consideration. For this we apply the Augmented Dicky-Fuller Test to check whether any variable has a unit root. The results indicate that all variables except growth in KSE Index and growth in exchange rate have a unit root at level but not at first difference.

Table 2: Augmented Dickey-Fuller Test of Residuals

All coefficients, except the time dummies, discount rate and t bill rate are in log form along with the dependent variable NFNE and hence they can be interpreted as elasticity

Table 3: Dependent Variable Core Inflation (Non Food Non energy)

Immediate impact of adaptive expectations is significant but further impacts are not. Of the four channels of monetary policy transmission mechanism, the credit channel and the exchange rate channel have a significant impact on core inflation. The credit channel operates through loans to private sector as a ratio of money supply and real GDP. Both current and lagged loans to private sector as a ratio of money supply are significant. Current real GDP is highly significant whereas lagged real GDP is weakly significant. Current exchange rates do not have an impact on core inflation but lagged exchange rates are significant. The interest channel and the asset price channel are insignificant. Once accounting for these channels, both monetary policy instruments are insignificant and so is government borrowing. Of the three time dummies, 1999 and 2009 are significant.

Adaptive expectations, current loans to private sector, lagged exchange rate and time dummies all have a positive impact on inflation, as expected and discussed. Current and lagged real GDP have a negative impact on core inflation.

Figure 4 summarizes the contribution of each determinant to total core inflation. It is striking that adaptive expectations consistently affect core inflation.

A look at figure 4 reveals that from mid-1980 to mid-2005 the role of adaptive expectations in determining core inflation was increasing. This era was characterised as one with a high level of uncertainty. This era saw a shift in government from military dictatorship to democracy to a military coup. Pakistan had nine different governments from 1988-2001 and entered into 9 different IMF agreements (Husain, 2002). As Pakistan began to experience trade liberalization she also underwent exchange change regime transformations.(Hamid & Hamid, 1982)Amidst this uncertainty, it can be expected that role of adaptive expectations be large. Exchange rate was contributing significantly and positively to the core inflation. This is most evident in the mid-1980s and mid-1990s. Pakistan had recently moved from a fixed exchange rate system to a managed float. Briefly multiple exchange rates were considered before moving onto a dirty float in 1999 and then adopting a full-fledged market exchange rate in 2000.(Hyder & Mahboob, 2005)

From 2000 onwards as the government of General Pervaiz Musharaf took over, the role of adaptive expectations again increased. This can be justified by the events of 9/11 and later Pakistan joining the war on terror. During the same time two factors may have impacted core inflation. One, Pakistan joined the War on Terror and hence began to receive international aid. Two, the relationship between the IMF and the Musharraf government in the initial phases was strained at best. As a sign of good faith, the government took extreme measures to apply the conditions put forth by the IMF. These included, among other things, reduction in overall budget deficits, removal or distortions from economy, improved governance and increased spending on poverty. Out of the nine IMF agreements during the 1988-2001 era, only the one in Musharraf era was fully implemented.

Figure 4: Temporal Contribution To Core Inflation

From 2008 as the PPP government took over, the impact of loans to private sector on core inflation virtually vanishes. As external finance inflows declined, banking sector credit to the public sector was increasing during this time period to finance the rising government borrowing. This rise in government borrowing due to rising budget deficit was due to a weak fiscal structure and increased fiscal decentralization without any clear rules, a large strain on government expenditures due to subsidies and government support of loss making public sector enterprises. During the same time impact of adaptive expectations rose.

Conclusion and Policy Implications

In this paper we attempt to answer three questions related to the relationship between monetary policy and core inflation, determinants of core inflation and contribution of each determinant to core inflation.

First, does monetary policy have an impact on core inflation? We find that it does have the expected impact through the credit channel and exchange rate channel.
Second, we outline what factors determine core inflation and to what extent. In addition the credit channel and exchange rate channel, adaptive expectations play a pivotal role in determining core inflation.

Finally, to what extent do each of these determinants contribute to core inflation? We find that adaptive expectations have a significant impact on core inflation. Adaptive expectations have the largest impact on core inflation and loans to private sector are the second largest contributor to core inflation.

Why do adaptive expectations play such a large role in determining core inflation? This is particularly important when there is an active monetary policy which targets core inflation in Pakistan. The main question is that is the Central Bank effectively able to curb core inflation through its channels?

Acknowledgement

We would like to thank Adnan Haider for useful discussions on this topic. Any errors or omissions in this paper are our own responsibility. Views expressed here are those of the authors and not necessarily of the Institute of Business Administration, Karachi, Pakistan.

References

Khan, A. A., Bukhari, S., & Ahmed, Q. (2007). *DETERMINANTS OF RECENT INFLATION IN PAKISTAN.* Pakistan Insitute of Development Economics.

Agha, A., Ahmed, N., Mubarik, Y., & Shah, H. (2005). *Transmission Mechanism of Monetary Policy in Pakistan.* SBP-Research Bulletin Volume 1.

Hamid, N., & Hamid, J. (1982). *Exchange Rate Reform in Pakistan.* Economic Development Institute of the World Bank.

Husain, D. I. (2002). Pakistan and the IMF : 1988-2002. *International Expert Workshop* . German Foundation for Development .

Hyder, Z., & Mahboob, A. (2005). *Equilibrium Real Effective Exchange Rate and Exchange Rate Misalignment in Pakistan.* SBP Conference 2005.

IMF. (2012). *IMF Country Report No. 12/35.* International Monetary Fund.

Javid , M., & Munir, K. (2013). *The price puzzle and monetary policy transmission mechanism in Pakistan: Structural VAR approach.* 29th AGM and Conference PIDE.

Khan , M., & Schimmelpfennig, A. (2006). *Inflation in Pakistan: Money or Wheat?* IMF Working Paper WP/06/60.

Khan, A., & Qasim, M. (1996). *Inflation in Pakistan Revisited.* The Pakistan Development Review.

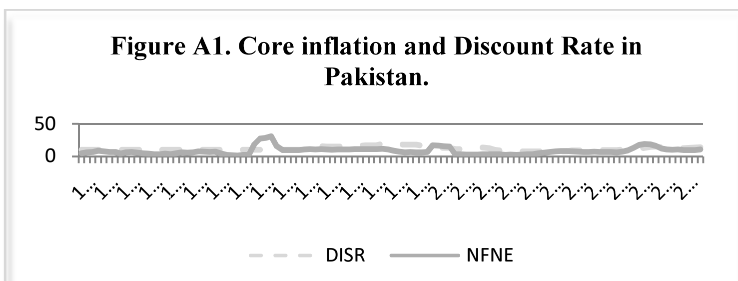
Lodhi, M. A. (2007). *Evaluating Core Inflation Measures in.* Karachi: State Bank Of Pakistan.

Mubarik, Y. A. (2005). *Inflation and Growth: An Estimate of the threshhold level inflation in pakistan.* SBP-Research Bulletin Volume 1.

Riazuddin, R., Lodhi, M., Ashfaq, M., & Ahmad, B. (2013, October). A New Measure of Core Inflation in Pakistan No 66. *SBP Working Paper Series*.

Tahir, S. (2003). *Core Inflation Measures for Pakistan.* Karachi: State Bank of Pakistan.

Appendix



Source: State Bank of Pakistan
Tables and Figures

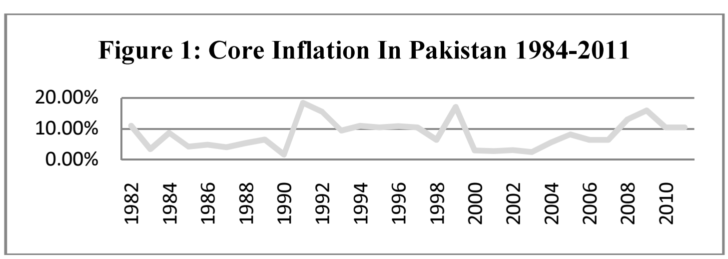


Table 1: List of Variables with Descriptive Statistics

Variable	*Core Inflation*	*Growth in Money Supply*	*Discount Rate*	*Growth in Loans to Private Sector*	*Exchange Rate*	*T Bill Rate*	*KSE Index*	*Domestic Government Borrowing*
Source	PBS	SBP	SBP	SBP	SBP	SBP	KSE	SBP
Mean	0.011	0.000	0.009	0.001	0.000	0.061	-0.003	0.004
Median	-0.004	0.000	-0.181	-0.019	0.001	0.112	0.013	0.003
Maximum	0.193	0.074	3.272	0.147	0.059	3.853	0.597	0.347
Minimum	-0.023	-0.053	-3.096	-0.094	-0.071	-3.932	-0.819	-0.233
Std. Dev.	0.042	0.030	1.371	0.065	0.029	1.744	0.194	0.140
Skewness	2.579	0.231	0.323	0.696	-0.131	-0.202	-0.626	0.088
Kurtosis	9.165	1.943	2.896	2.297	2.592	2.741	6.514	2.080
Jarque-Bera	218.053	4.493	1.449	8.215	0.792	0.776	46.957	2.959
Probability	0.000	0.106	0.485	0.016	0.673	0.678	0.000	0.228
Sum	0.867	0.001	0.769	0.088	0.038	4.914	-0.261	0.316
Sum Sq. Dev.	0.142	0.074	150.415	0.339	0.066	243.230	3.017	1.567
Observations	81.000	81.000	81.000	81.000	81.000	81.000	81.000	81.000

Table Note:

PBS = Pakistan Bureau of Statistics SBP = State Bank of Pakistan KSE = Karachi Stock Exchange

Table 2: Augmented Dickey-Fuller Test of Residuals*

	Level		Difference	
Variable	t-Statistic	Probability	t-Statistic	Probability
Discount Rate	-0.2711	0.5866	-9.7158	0.0000
Domestic Government Borrowing	2.4362	0.9964	-7.1662	0.0000
Growth in KSE Index	-7.3450	0.0000	.	.
Growth in Loans to Private Sector	-2.0101	0.5898	-13.2802	0.0000
Growth in Money Supply	-3.0259	0.1297	-7.8969	0.0000
Core Inflation	-1.8055	0.6963	-8.2601	0.0000
Growth in Exchange Rate	-5.9427	0.0000	.	.
T-Bill Rate	-2.0379	0.5723	-6.5947	0.0000

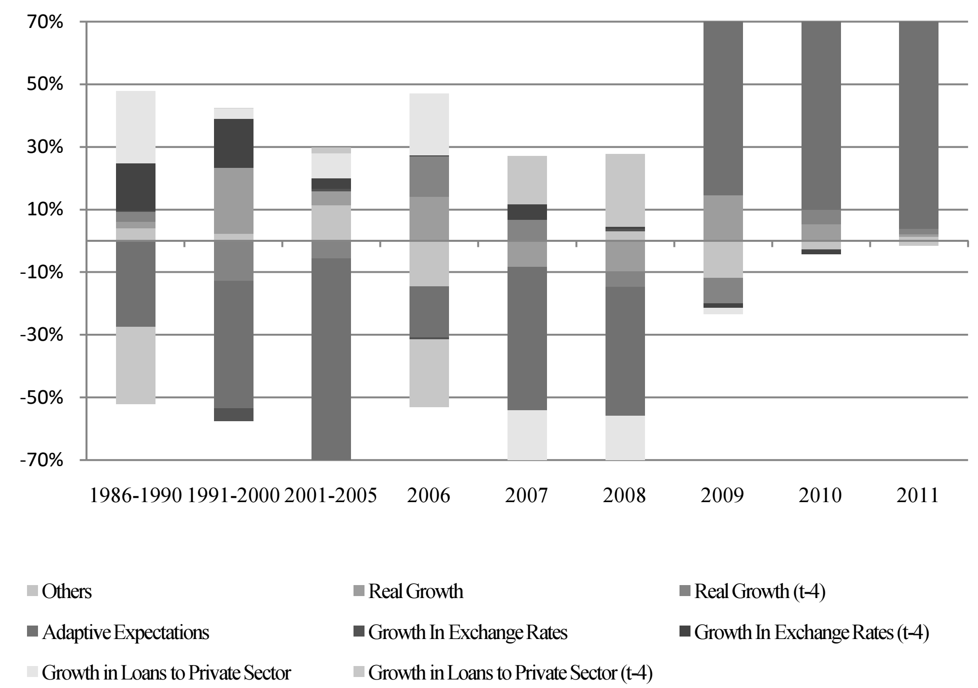
*(optimal lag length is selected by AIC)

Table 3: Dependent Variable Core Inflation (Non Food Non energy)

Sample (adjusted): 1992Q3 2011Q4

Variable	Coefficient	t-Statistic
Constant		
Adaptive Expectations		
Core Inflation (t-1)	0.8776	12.8836
Core Inflation (t-4)	0.1048	1.2854
Core Inflation (t-6)	0.141	1.7505
Loans to Private Sector as a Ratio of Money Supply (t)	0.1587	2.4779
Loans to Private Sector as a Ratio of Money Supply (t-4)	-0.1486	-2.6837
Exchange Rate (t)	-0.0259	-0.438
Exchange Rate (t-4)	0.1383	2.3113
Real GDP Growth	-1.4118	-3.1806
Real GDP Growth (t-4)	-0.9302	-1.8336
T-Bill Rate (t)	-0.0022	-1.5854
T-Bill Rate (t-4)	0.0001	0.0963
Growth in KSE Index (t)	-0.0049	-0.5584
Growth in KSE Index (t-4)	0.0024	0.2443
Growth in Money Supply	0.1075	1.1702
Growth in Money Supply (t-6)	-0.0043	-0.0623
Discount Rate (t)	0.0012	0.7815
Discount Rate (t-6)	0.000	-0.0052
Domestic Government Borrowing as a Ratio of Real GDP (t)	-0.0345	-1.284
Domestic Government Borrowing as a Ratio of Real GDP (t-6)	-0.0224	-0.8489
Dummy for 1991	-0.0019	-0.1592
Dummy for 1999	0.1134	7.4159
Dummy for 2009	0.0172	2.7011
R-squared	0.9227	
Adjusted R-squared	0.8918	
Durbin-Watson stat	2.0983	
Breusch-Godfrey Serial Correlation LM Test:		
F-statistic	0.5251	
Probability	0.7865	
Obs*R-squared	4.7125	
Probability	0.5812	

Figure 4: Temporal Contribution To Core Inflation



MOTIF

If there were in the world today any large number who desired their own happiness more than they desired the unhappiness of others, we could have paradise in few years

Bertrand Russel

ARTICLE

ASSET PRICE BUBBLES WITH SPECIFIC FOCUS ON STOCK PRICES IN PAKISTAN

Nawaz Ahmad
Indus University, PAKISTAN

Rizwan Raheem Ahmed
Indus University, PAKISTAN

Yaseen Ahmed Meenai
Institute of Business Administration, Karachi, PAKISTAN

Abstract

This research paper is an attempt to investigate Asset Price Bubbles (APB) with reference to Pakistan stock market. The analysis of time series graph shows a linear trend between Consumer Price Index (CPI) and Money Supply Index (M_2I) whereas a nonlinear trend with stock prices. Moreover, the graph also shows an unequal spread with the stock prices, which indicate Heteroskedasticity. Then, descriptive statistics test shows high Standard Deviations for stock prices compared with CPI and M_2I, which indicate a higher volatility in stock prices. Finally, the hypothesis test for equality of variance concluded the presence of Asset Price Bubbles by rejecting null hypothesis of equal volatility against the alternative hypothesis of greater volatility in stock prices.

Keywords: Asset Price Bubbles; Stock Prices; Consumer Price Index; Heteroskedasticity; volatility

Introduction

A stock market bubble is a type of economic bubble taking place in stock markets when price of stocks rise and become overvalued by any measure of stock valuation. The existence of stock market bubbles is at odds with the assumptions of efficient market theory which assumes rational investor behavior. Behavioral finance theory attribute stock market bubbles to cognitive biases that lead to groupthink and herd behavior. Bubbles occur not only in real-world markets, with their inherent uncertainty and noise, but also in highly predictable experimental markets.

Investing in real estate and stocks

Investing in real estate and stock market has become a national preoccupation in Pakistan in the recent past. This has become a speculatory opening at the cost of industrialization. This is mainly because of unattractive rate of return on deposits. Moreover, rates of real estate in different sectors of federal capital have increased by over 500 percent in the last seven years. In principle, property's value is determined on the basis of returns it generates. The property is over-valued if its return is below than alternative investments. Here, the real estate price bubble arises.

Monetarists' Theory

Modern monetary economics was developed after World war two by Chicago's Milton Friedman (1969) and his numerous colleagues and followers. Under Friedman's leadership, monetarists challenged the Keynesian approach to macroeconomics and emphasized the importance of monetary policy in macroeconomic stabilization [1].

In principle, a monetarist might recommend using monetary policy line to fine-tune the economy. But monetarist has taken a different track, arguing that the private economy is stable and that the government tends to destabilize the economy. Moreover, monetarists believe that money affects output only after long and variable lags, so the design of effective stabilization policies is a formidable task [1].

How Monetary Policy Can Make A Bubble More Likely

Some economists have proposed that a monetary policy regime that targets low and stable inflation can increase the probability of asset-price bubbles forming because the stability associated with inflation targeting can fuel excessive optimism about the future profit potential of new technology. Other economists think that an inflation-targeting regime reduces the likelihood of asset-price bubbles, but that inappropriate implementation of monetary policy within that regime can contribute to the formation of a bubble. These suppositions have arisen in part because of evidence that asset-price swings have been greater in recent business cycles than in previous business cycles, despite the success of many countries in attaining a low-inflation environment [2].

Asset prices are less volatile in stable monetary regimes, such as those that target inflation, and hence the probability of a bubble in those regimes is lower. The increase in asset price misalignments in low inflation countries in recent years may therefore be the result of positive technology (rather than monetary) shocks, which, because of their uneven and uncertain effect on production possibilities, have an effect on revenue streams that is difficult for investors to predict [3]. So, what do economists exactly mean by "bubbles"? There is no simple answer. From a research point of view, the exact definition varies from one model to another. Rather than to adopt one particular model, this paper uses a reduced-form approach that incorporates salient features of bubbles shared by many important models in the literature.

According to Jean Claude [4] in the development of asset price boom, there are two important factors, developments in the monetary aggregates and credit, which play a pivot role. Although the issue of empirical causality between asset prices on one hand and money and credit developments on the other is a complicated one, the potential role of credit and money in driving asset prices is straightforward. A bubble is more likely to develop when investors can leverage their positions by investing borrowed funds. One would expect to see similar developments in credit and money as credit is the main counterpart of money [5]. So far the issue of imperical causality is concern, according to Ahmad, Nawaz there is a uni-causal relationship runs from money supply to stock prices in Pakistan scenario [6].

Froot and Obstfeld [7] introduced the notion of an intrinsic asset price bubble. The bubble generates highly persistent overvaluations and undervaluation due to excessive reactions to fundamentals. Authors argue that linking, albeit incompletely, asset price bubbles to fundamentals provides a more realistic specification of a bubble. One branch of theory posits that investors acting on irrational or erroneous beliefs can cause bubbles. These beliefs are owing to fads or overly optimistic agents. In this framework, an asset-price bubble could occur because of exaggerated confidence in the fundamentals underlying the asset (a new technology or organizational structure, for example) to generate future earnings. [8].

According to Kindleberger [9], asset price bubbles were permanent features of the economic environment that arose because of the nature of human behavior. He bases his understanding of bubbles on Minsky's model of financial imbalances rather than on the constraints imposed by the assumption of perfectly rational, far-sighted investors. In Minsky's model [10], a speculative bubble arises from an exogenous factor - possibly a new invention, a political outcome, a financial liberalization, etc - that presents new profit opportunities. If the future looks sufficiently bright for a large enough group of consumers and investors, the boom becomes self-sustaining and possibly self-reinforcing. Real-side developments may then interact with the financial intermediation sector, which, through an elastic credit creation process, stokes the flames of optimism. "Irrational exuberance" is responsible for the rise in equity prices in the United States in the second half of the 1990s. This explanation emphasizes the excessive optimism stemming from positive developments in the real side of the economy that contribute to the underestimation of risk and the overextension of credit [11].

According to Shiratsuka [12] Japan's experience since the late 1980s where economic fluctuations were led by the emergence and bursting of the bubbles which show a close relation between both, financial and macroeconomic instability, and large fluctuations in asset prices. The study characterized such bubble by *euphoria*, that is, excessively optimistic expectations with respect to future economic fundamentals, which lasted for several years and then burst. Kindleberger [13] employs the concept of *euphoria* to describe financial history of major asset price bubbles. Shiller [14] terms the same concept as "irrational exuberance". Andrew Filardo [15] raised a critical issue about the causal versus predictive role of asset prices. This distinction highlights the need to differentiate between macroeconomic asset price bubbles and general asset price movements, especially when examining the challenges facing monetary authorities. Put bluntly, in a causal sense, macroeconomic asset price bubbles matter and the fundamental component of asset prices does not.

Ahmed and Rosser [16] studied Pakistani market for speculative bubbles. They studied exchange rates and both stock market indices. Their results were consistent with the impression of great volatility and unpredictability. They found strong evidence of presence of speculative bubbles in Pakistani market. The reason most frequently cited for not responding to asset-price bubbles is the difficulty of identifying bubbles, such difficulty arises in large part because, as Richards [17] points out, any operational definition of an asset-price bubble is highly subjective. The subjectivity arises largely from two sources. First, an asset price bubble is often defined as a major deviation of an asset price from its fundamental value, and there are many different yet legitimate ways to think about fundamental value. Second, how far and how long an asset price must move away from its fundamental value before it is considered a bubble is also highly subjective.

Material And Methods

The main concern of this study is to develop a statistical framework of analysis to identify whether there are asset price bubbles or simply a swing in the prices. In the first phase of analysis, time series graphs are sketched which show an overall trend. In second phase of analysis, descriptive statistics are calculated. Since asset price bubbles are the result of abrupt fluctuations and high volatility in asset prices that is why a special attention is given to *Standard Deviation* – a measure of volatility in a data set. In third phase of analysis, applying equality of variance test using F – Statistics with the following hypothesis, further validates the results of descriptive statistics:

$$H_{01}: \sigma_{KSE\ 100} = \sigma_{M2I}\ ; \qquad H_{a1}: \sigma_{KSE\ 100} > \sigma_{M2I}$$
$$H_{02}: \sigma_{SBGI} = \sigma_{M2I}\ ; \qquad H_{a2}: \sigma_{SBGI} > \sigma_{M2I}$$
$$H_{03}: \sigma_{KSE\ 100} = \sigma_{CPI}\ ; \qquad H_{a3}: \sigma_{KSE\ 100} > \sigma_{CPI}$$
$$H_{04}: \sigma_{SBGI} = \sigma_{CPI}\ ; \qquad H_{a4}: \sigma_{SBGI} > \sigma_{CPI}$$

We assume that macroeconomic fundamentals i.e. Money supply index (M_2I) and Consumer price index (CPI), and Stock prices i.e. Karachi stock exchange 100 index (KSE 100) and State bank general price index (SBGI) are equally volatile against the alternative hypothesis of greater volatility in stock prices.

Data Sources

Data has been collected from secondary sources; our measure on the stance of monetary policy in Pakistan is the Money Supply (M_2). House rent price index (HRPI) represents monthly index of house rentals. State bank turnover index of stock (SBTIS) represents monthly index of shares turnover at Karachi stock exchange. Since M_2 is available in absolute terms, it has been converted into index form and Money Supply Index (M_2I) is obtained so that apples could be matched with apples. This data has been obtained from different issues of Statistical bulletins published by State bank of Pakistan.

Monthly data on all share index i.e., State Bank General Index (SBGI) have been obtained from the State Bank while the data on Karachi Stock Exchange 100 Index (KSE I00) has been obtained from Karachi Stock Exchange (KSE). The price level is given by the Consumer Price Index (CPI), which is gathered from Federal Bureau of Statistics (FBS). All data consists of monthly observations started from July 2001 to May 2007 except SBTIS, which was available up to June 2006.

A broader range of assets e.g. real estate – commercial and residential – may be included to cover the wealth effects, however, due to data limitations, we used stock market equity, keeping in mind that these may serve as a proxy for broader range of assets as well. Typically, peaks in equity prices tend to lead those in real estate prices. However, the relationship is somewhat less clear-cut around troughs.

Statistical Model

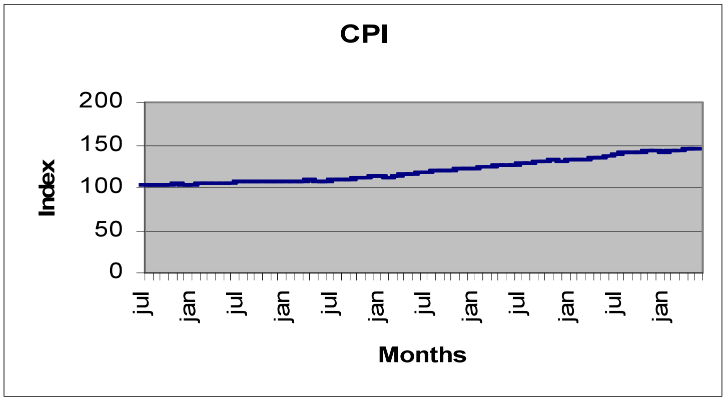
The modal applied is Standard Deviation – a measure of volatility, which is further validated by applying equality of variance test using F – Statistics. Computer aided packages executed the model. Apart from MS Excel, Mega Stat and PH Stat were used.

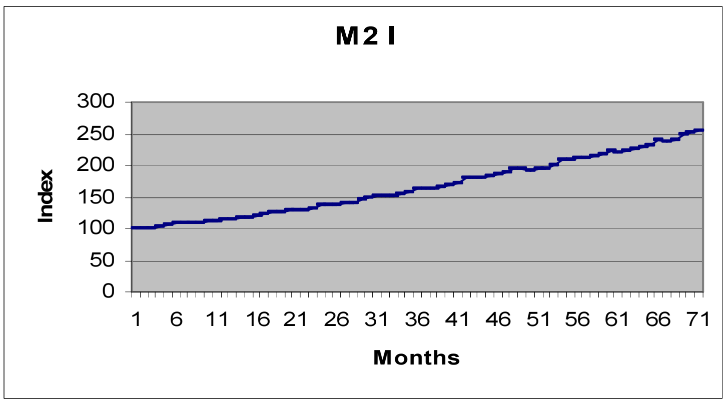
Results And Discussion

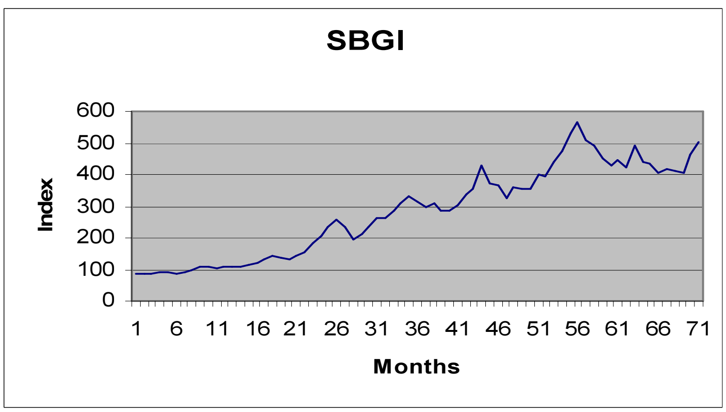
Time Series Graphs

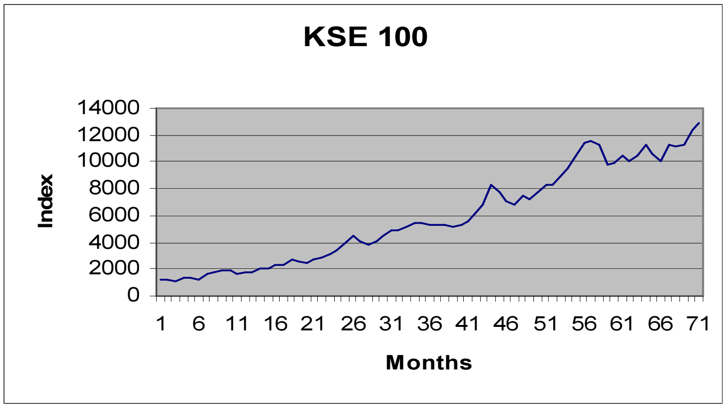
In the first step of analysis, we sketched time series graphs. All the graphs show increasing trend. CPI and M_2I graphs show a smoother trend with less volatility compared with KSE 100 and SBGI which show some abrupt movements, first in 2003-04, and then in early 2005, third in the end of 2005 and the beginning of 2006 were observed. Such movements describe high volatility. Interestingly, SBTIS, apart from small fluctuations show two big fluctuations, one between Oct 2004 and Jan 2005 then in early 2006. The fluctuations in stock turnover are purely speculative.

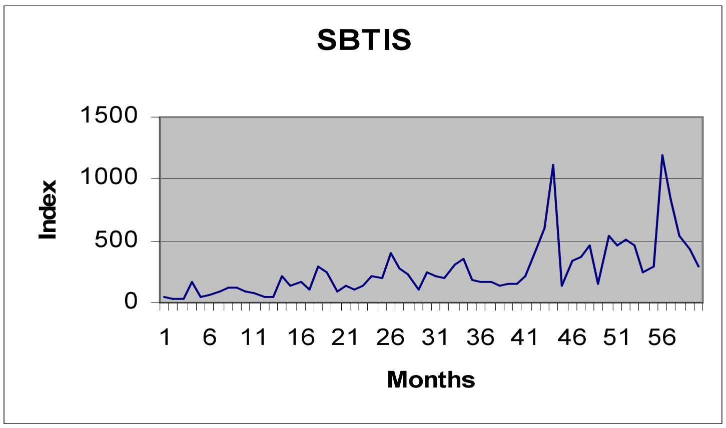
(Graphical Presentations)











(Source: Undertaken Study)

Descriptive Statistics

In second step of analysis, the said volatility has been measured through descriptive statistics by using Standard Deviation – a measure of dispersion. It is calculated in two phases: for overall tenure i.e. from July 2001 to May 2007 and secondly the data has been divided into six parts, each consists of 12 observations except the last which consists of 11, so that we could have a year to year cross-sectional analysis. In overall descriptive statistics, standard deviations of stock prices and stock turnover index are substantially greater than that of CPI and M_2I.

Table 1: Descriptive Statistics

Variables	Standard Deviation
CPI	13.7735
M2I	45.78
KSE 100	3587.5635
SBGI	142.8099
HRPI	14.8708
SBTIS	233.3328

Cross Sectional Analysis

So far the cross-sectional analysis is concern, it shows the trend – volatility of the said variables has been observed over the tenure on yearly basis. KSE 100 Index, SBGI, M2I reflect highly volatile trends, and SBTI compared with CPI and M2I.

Table 2: Cross Sectional Analysis

sd\ year	1	2	3	4	5	6
KSE 100	273.2259	480.8718	608.0445	1,081.3387	1,483.8296	912.633
SBGI	9.148049	28.5702	42.50773	42.75661402	67.84188453	33.58653
CPI	1.063266	0.397648	2.56443	3.171833424	2.597071194	2.003213
M_2I	5.170032	6.706848	8.341543	10.28202056	10.78023123	11.627
SBTIS	42.83442	71.5059	82.63825	282.672362	281.4866842	–

(Source: Undertaken Study)

Equality of Variance Test

In third step of analysis, the results of descriptive statistics (except for SBTI, which is not available for complete tenure) are further validated by applying equality of variance test by using F – Statistics with the following hypothesis:

$$H_{01}: \sigma_{KSE\ 100} = \sigma_{M2I}\ ; \qquad H_{a1}: \sigma_{KSE\ 100} > \sigma_{M2I}$$
$$H_{02}: \sigma_{SBGI} = \sigma_{M2I}\ ; \qquad H_{a2}: \sigma_{SBGI} > \sigma_{M2I}$$

Alternate hypothesis that KSE 100 index and SBGI are more volatile than Money supply index against the null hypotheses of equal volatility are taken. Significance level is taken as 5% and the model was run, which rejected null hypotheses of equal volatility and proved that volatility in stock prices is statistically significantly greater than that of in money supply index. The results are given in table 2:

Table 3: Variance-KSE 100 and M2I

Level of Significance	0.05
Population 1 Sample	
Sample Size	71
Sample Standard Deviation	3587.564
Population 2 Sample	
Sample Size	71
Sample Standard Deviation	45.78

Table 4: F-Test Statistics- KSE 100 and M2I

F-Test Statistic	6141.12
Population 1 Sample Degrees of Freedom	70
Population 2 Sample Degrees of Freedom	70

Table 5: Probability- KSE 100 and M2I

Upper-Tail Test	
Upper Critical Value	1.485688
p-Value	1.4E-113
Reject the null hypothesis	

Table 6: Variance-SBGI and M2I

Level of Significance	0.05
Population 1 Sample	
Sample Size	71
Sample Standard Deviation	142.8099
Population 2 Sample	
Sample Size	71
Sample Standard Deviation	45.78

Table 7: F-Test Statistics- SBGI and M2I

F-Test Statistic	9.73117
Population 1 Sample Degrees of Freedom	70
Population 2 Sample Degrees of Freedom	70

Table 8: Probability- SBGI and M2I

Upper-Tail Test	
Upper Critical Value	1.485688
p-Value	1.89E-18
Reject the null hypothesis	

Alternate hypothesis that KSE 100 index and SBGI are more volatile than Consumer Price index against the null hypotheses of equal volatility are taken.

$$H_{03}: \sigma_{KSE\ 100} = \sigma_{CPI}\ ; \qquad H_{a3}: \sigma_{KSE\ 100} > \sigma_{CPI}$$
$$H_{04}: \sigma_{SBGI} = \sigma_{CPI}\ ; \qquad H_{a4}: \sigma_{SBGI} > \sigma_{CPI}$$

A 5% significance level, the model was run, which rejected null hypotheses of equal volatility and proved that volatility in stock prices is statistically significantly greater than that of in consumer price index. The results are given below:

Table 9: Variance-KSE 100 and CPI

Level of Significance	0.05
Population 1 Sample	
Sample Size	71
Sample Standard Deviation	3587.564
Population 2 Sample	
Sample Size	71
Sample Standard Deviation	13.7735

Table 10: F-Statistics- KSE 100 and CPI

F-Test Statistic	67843.86
Population 1 Sample Degrees of Freedom	70
Population 2 Sample Degrees of Freedom	70

Table 11: Probability- KSE 100 and CPI

Upper-Tail Test	
Upper Critical Value	1.485688
p-Value	4.4E-150
Reject the null hypothesis	

Table 12: Variance: SBGI and CPI

Level of Significance	0.05
Population 1 Sample	
Sample Size	71
Sample Standard Deviation	142.8099
Population 2 Sample	
Sample Size	71
Sample Standard Deviation	13.7735

Table 13: F-Statistics- SBGI and CPI

F-Test Statistic	107.5048
Population 1 Sample Degrees of Freedom	70
Population 2 Sample Degrees of Freedom	70

Table 14: Probability- SBGI and CPI

Upper-Tail Test	
Upper Critical Value	1.485688
p-Value	2.37E-52
Reject the null hypothesis	

CONCLUSION

The objective of the research paper was an attempt to investigate Asset Price Bubbles (APB) with reference to Pakistan stock market. In this context, monthly data on KSE 100, SBGI, CPI and M_2I from July 2001 to May 2007 and for SBTIS from July 2001 to June 2001 were used. The time series graph showed a linear trend in CPI and M_2I whereas a nonlinear trend in stock prices. Moreover, the graph also showed an unequal spread in both the stock prices, which indicated *Heteroskedasticity.* Then, descriptive statistics test showed high Standard Deviations for stock prices compared with CPI and M_2I, which indicated a higher volatility in stock prices. Finally, hypothesis test for equality of variance concluded the presence of Asset Price Bubbles by rejecting null hypothesis of equal volatility against the alternative hypothesis of greater volatility in stock prices.

Areas of further Research

Further research could take place by incorporating more macroeconomic indicators based on availability of data and time. Further research could be taken place by applying econometric models like VAR, ARIMA, GARCH, etc.

References

Friedman, Milton, (1969), "Money and Business Cycles", The Optimum Quantity of Money and Other Essays, Chicago: Aldine, 189-235

Borio, C. and W. White, 2004, "Whither Monetary and Financial Stability? The Implications of Evolving Policy Regimes," BIS Working Paper No. 147

Jack Selody & Carolyn Wilkins, 2004. "Asset Prices and Monetary Policy: A Canadian Perspective on the Issues," Bank of Canada Review, Bank of Canada, vol. 2004(Autumn), pages 3-14.

Trichet, J.C., 2005, Asset price bubbles and the monetary policy, speech delivered in Monetary Authority of Singapore, Singapore, 8 June 2005.

European Central Bank, 2005, "Asset Price Bubbles and Monetary Policy," ECB Monthly Bulletin, April, pp. 47-60.

Ahmad N, Husain F (2007). The Relation between Stock Prices and Money Supply in Pakistan: An Investigation, J. Indepen. Stud. Res. 5(2): pp. 30-32.

Froot, Kenneth A & Obstfeld, Maurice, 1991. "Intrinsic Bubbles: The Case of Stock Prices," American Economic Review, American Economic Association, vol. 81(5), pages 1189-214, December.

Meltzer, A. H., 2003, Rational and Nonrational bubbles. Chapter 3, pp. 23-33, in Asset Price Bubbles. The Implications for Monetary, Regulatory and International Policies, edited by Hunter, W., Kaufman, G., and M. Pomerleano. MIT Press, Cambridge, Massachussetts.

Kindleberger, Charles, P., 1995, "Asset inflation and monetary policy", BNL Quarterly Review, no 192, pp. 17-37.

Minsky, H., 1982, Can 'It' Happen Again?: Essays on Instability and Finance, Armonk: M.E. Sharpe.

Greenspan, A., 1996, "The challenge of central banking in a democratic society, "Remarks to the annual dinner and Francis Boyer Lecture of the American Enterprise Institute for Public Policy Research, Washington, DC, 5 December.

Shiratsuka, S., 1999, "Asset price fluctuations and price indices", Federal Reserve Bank of Chicago working paper, 99-9, June.

Kindleberger, Charles P., Manias, Panics, and Crashes, 1996, A History of Financial Crises, 3rd edition, New York: Wiley.

Shiller, Robert, 2000, Irrational Exuberance. Princeton, NJ: Princeton University Press.

Filardo, A., 2001, "Should Monetary Policy Respond to Asset Price Bubbles? Some Experimental Results." In Asset Price Bubbles: Implications for Monetary and Regulatory

Policies, 99–123. Vol. 13 of Research in Financial Services: Private and Public Policy. Edited by G. Kaufman. Oxford: Elsevier Science.

Ahmed, Ehsan and Rosser, J.B., Jr, 1995, Nonlinear Speculative. Bubbles in the Pakistani Stock Market. The Pakistan Development Review, 34, 25-41.

Richards, A., 2003. "Introduction." In Asset Prices and Monetary Policy. Proceedings of a conference held at the H.C. Coombs Centre for Financial Studies, Kirribilli, on 18–19 August, 1–7. Edited by A. Richards and T. Robinson. Reserve Bank of Australia.

Wonders are many, but none, None is more wondrous than man. Man mover over the grey sea, Using the wind and the storm, Daring the depths and surges. Even the eldest of all the gods –Earth, inexhaustible Earth – Man masters her With yearly ploughs that turn and return And the steady step of the horse. Language and thought Light and rapid as wind, Man has taught himself these, and has learnt The ways of living in town and city, Shelter from inhospitable frost, Escape from arrows of rain.
Cunning, cunning is man. Wise though his plans are, Artful beyond all dreaming, They carry him both to evil and to good.

GilberHighet

ARTICLE

DETERMINANTS OF CAPITAL STRUCTURE OF SERVICE AND MANUFACTURING SECTORS OF PAKISTANI COMPANIES LISTED IN KARACHI STOCK EXCHANGE

Zahid Ali Channar
Isra University, Hyderabad, Pakistan

Manisha Bai Maheshwari
Isra University, Hyderabad, Pakistan

Piribhat Abbasi
Isra University, Hyderabad. Pakistan

Abstract

Capital structure alludes to how an organization finances its operations whether through shareholders equity, debt or a blending of both. This study was aimed to find out the determinants of capital structure in Manufacturing and Service Sectors of Pakistan and examine which capital structure theory (Trade off theory or Pecking order theory) is relevant in Pakistani context. For study secondary data was collected from financial statements of 30 Companies and then data was analyzed through Correlation and Multi Regression analysis. Results showed that leverage has negative significant relationship with tangibility in both sectors which conformed Pecking order theory is followed by firms in both sectors. Profitability has negative significant relationship with leverage in manufacturing sectors whereas it has positive non-significant relationship with leverage in service sectors. This result revealed that manufacturing sectors follow Pecking order theory whereas service sectors support Trade off theory. Moreover in manufacturing sectors growth and leverage have negative significant relationship whereas in service sectors both variables show positive non-significant relationship. Manufacturing sectors support Trade off theory but service sectors support Pecking order theory. Size and leverage show positive non-significant relationship in manufacturing sectors whereas show positive significant relationship in service sectors. Due to positive sign, they follow Trade off theory. Effective tax rate has positive non-significant relationship with leverage. Positive sign shows firms follow Trade off theory in both sectors but due to non-significant result the effective tax rate not found to be a significant determinant of capital structure. This study will help corporate managers and decision makers to make optimal capital structure decision.

Key words: Capital Structure, Trade Off Theory, Pecking Order Theory, Manufacturing Sectors, Service Sectors

JEL Classification: G3, G32

Introduction

Financing and investment are two major decision areas in a firm. In the financing decision, manager is concerned with determining the best financing mix or capital structure for the firm. Capital structure characterizes the firm financial framework which comprises debt and equity used to finance the firm. Capital structure is one of the most important topics among researchers in finance. The capability of firm to carry out stake holders' requirement is closely linked to capital structure and it also play vital role in maximizing the performance of firm and its value. It tries to explain the mix of securities and financing sources used by companies to finance investments (Myers, 2001). Saad (2010) states that capital structure means the way a firm finances its assets across the mixture of debt, equity or hybrid securities. Brigham (2004) said capital structure is the way in which a firm finance its total assets, current operations and any expected growth through issuing equity, debt and hybrid securities. To cut in short capital structure is mixture of debt which classified into long-term and short-term debt and equity which comes from issuing common stocks, preferred stocks and retained earnings. Beside these sources of finance, firms issue some hybrid securities that possess the characteristics of both equity and debt. It's very difficult to determine the capital structure of an organization. Financial managers are facing problems in accurately determining the optimal capital structure. Whereas optimal capital structure described as smallest weighted average cost of capital so that worth of an organization can be enhanced. The key barrier in capital structure is between debt and equity. The ratio of debt funding is measured by gearing or leverages. There are different factors that affect a firm's capital structure, and a firm should challenge to determine what its best mix of financing. But determining the precise optimal capital structure is not a science, so after examining a number of features, firms establish a target capital structure which it considers is most auspicious (Myers, 2001).

There are different theories which try to explain the capital structure but according to Myers (2001) there was no universal theory on the debt to equity choice. The very first theory of capital structure was given by Modigliani and Miller (1958) which states that capital structure theory works under perfect market condition and the assumption of perfect market are no taxes, no transition cost, no bankruptcy cost, market efficiency, rational investors. Under these assumptions, the weighted average cost of capital (WACC) remains constant by changes in capital structure. According to Trade off theory firms prefer to partially finance with debt and partially with equity. There are advantages of financing with debt such as tax shield benefits, agency cost benefits and there are some disadvantages of financing with debt such as costs of financial distress including bankruptcy costs of debt. Therefore firm can optimize its value at a point where marginal costs of debt and marginal benefits of debt are balanced (Ross et al, 2008). Pecking order theory is another approach to define capital structure of a firm and it explains how company makes financial decisions. First developed by Donaldson in 1961 and letter it modified by Stewart C. Myers and Nicolas Majluf in 1984, the theory seek to explain that the cost of financing increases with asymmetric information. Pecking order theory predicts the hierarchy of preference in which firms prefer internal financing to external financing and prefers debt to equity. Internal financing used first; when that is exhausted, then debt is issued; and when it is no longer practical to issue any additional debt, equity is issued.

Optimal capital structure is the one that strikes a balance between risk and return to accomplish ultimate goal of maximizing the stock prices (Ross et al, 2008). Capital structure is fundamentally permanent long term financing of a firm. Although there has been abundance of research focusing on the most important determinants of capital structure, there is still deviation regarding which factors significantly affect a firm's capital structure.

Literature Review

A.Ajanthan (2013) examined the determinants of Capital Structure of Hotel and Restaurant Companies in Sri Lanka and observed negative relationship between Profitability and debt ratio whereas other independent variables were not significant with debt ratio. Moreover, it concluded that Pecking order theory was more applicable to Sri Lankan perspective.

Samra Kiran (2013) conducted research on Capital Structure Determinants: A Comparative Analysis of Textile, Chemical & Fuel and Energy Sectors of Pakistan. The result reveled that in all sectors there is positive relationship among Leverage, tangibility, non-debt tax shield, growth. On the other hand Size, Profitability, earning volatility showed negative relationship with Leverage. Moreover, only tangibility variable showed significant relationship among all sectors, which confirm Trade Off theory. Other variable predicts similar sign as suggested by Capital structure theories but value was non-significant so they failed to confirm Significantly Capital Structure theories.

Paul et al (2013) conducted research on determinants of capital structure: evidence from Ghanaian firms. The purpose of this study is to examine the determinants of capital structure among 33 listed and non-listed Ghanaian companies from the period of 2003 to 2007. The result revealed that long-term debt is irrelevant determinant of quoted and non-quoted firms in Ghana because they were more relying on equity. Furthermore, the relationship found between profitability, tangibility, size, risk and Leverage was positive but non-significant. Negative significant relationship found between Growth, tax and Leverage.

Oladele & Adebayo (2013) took initiative to determine determinants of capital structure in Nigeria. The findings of study showed that Leverage has positive significant relationship with tangibility. Size has negative significant relationship with Leverage. Profitability and growth showed positive non-significant relationship with Leverage whereas Tax showed negative non-significant relationship with Leverage.

Faiza Saleem et al (2013) examined the determination of capital structure of oil and gas firms listed on Karachi stock exchange in Pakistan. This study concluded that all independent variables have significant impact on balance of Leverage and it also concluded that three out of five independent variables showed positive relationship with Leverage and other two out of five independent variables showed negative relationship with Leverage.

Khalid Alkhatib (2012) investigated the determinants of Leverage of listed companies in Jordan. Research concluded that when both sectors together analyzed, the result was not statistically significant. Moreover, when individual sector was analyzed then the result shown difference, in service 3 out of 5 independent variables shows significant relationship with Leverage whereas in industrial sector 2 out of 5 independent variables shows significant relationship with leverage.

Babalola & Abiodun (2012) examined the effects of optimal capital structure on Firms' Performances in Nigeria. The purpose of this paper was to identify the optimal structure to maximize the performance of selected firms under same systematic risk. Their main objective was to explore the empirical implications that there exists an optimal capital structure under trade-off theory and the optimal capital structure of manufacturing firms. They concluded that target ratio change with firm performance and external environment. They also find out that firm performance is quadratic function of debt ratio. Trade off theory was more reliable for manufacturing industry and the results are constant with the hypothesis that the corporate performance is a nonlinear function of the capital structure.

Shehu (2012) examined the Determinants of Capital Structure in the Nigerian Listed Insurance Firms. The aim of this study was to investigate which theories of capital structure exist in Nigerian listed Insurance firms. Result showed that Probability follow Pecking Order theory, tangibility follow Trade Off theory, Agency theory support Growth independent variable and in the last asymmetry of information theory support Size variable.

Chapra & Asim (2012) have conducted research on Determinants of Capital Structuring: An Empirical Study of Growth and Financing Behavior of Firms of Textile Sector in Pakistan. The aim of this study was to find out the factors of optimal capital structuring that distress growth and financing behavior of textile sector firms in Pakistan by focusing that capital structure has vital role in firm financial management decisions and it creates firm value and increase profitability. The findings showed that there was a negative relationship between independent and dependent variables (Financial Leverage). The study also increases knowledge that how firms take active decisions about capital structure needs.

Mishra & Chandra (2011) investigated the determinants of capital structure in manufacturing firms of India. Result concluded that pecking order hypothesis was relevant in Indian manufacturing companies that the Leverage negatively related to profitability, whereas assets tangibility positively related to Leverage. Moreover Tax rate negatively related to leverage, this result contradict the Trade Off theory.

Wanrapee Banchuenvijit (2011) examined the determinants of capital structure of Thai listed companies. Findings reveal that Profitability showed negative relationship with Leverage which concluded that less debt used by profitable firms. Tangibility also showed negative relationship with Leverage which concluded that companies having high amount of fixed assets used less debt. Furthermore, Leverage showed positive relationship with size which revealed higher level of debt issued by larger companies.

Wafaa & Sbeiti (2010) investigated the Determinants of Capital Structure: Evidence from the GCC Countries. The finding showed that corporate capital structure in these countries can be explained by the determinants suggested in corporate finance models and Stock markets which have become more developed and considered an important tool for corporate financing decisions in these countries.

Khrawish & Khraiwesh (2010) examined the determinants of capital structure of Jordanian Industrial companies. Result revealed that LTD/TD & size as well as LTD/TD & tangibility have significant Positive relationship. Leverage ratio & profitability showed significant negative relationship. Positive relationship observed between Leverage ratio &short-term debt and negative relationship between LTD/TD &short-term debt.

Amarjit Gill et al (2009) examined the determinants of capital structure in service industry of USA. They observed Profitability and Tangibility have negative with Leverage. Other variables such as tax rate, size, and growth opportunities were not significant determinant of capital structure in service industry.

Mahabuba (2009) examined the insight into the capital structure determinants of pharmaceuticals companies in Bangladesh. The result concluded that regression model was fitted properly and 69% variation was described by determinants of the capital structure of pharmaceutical companies. All independent variables were statistically significant determinants of capital structure. Negative relationship was between agency cost of equity and bankruptcy risk whereas positive relationship observed among growth rate, operating leverage, tangibility and debt service capacity. Agency cost theory and static trade-off theory was more applicable in pharmaceutical companies in Bangladesh.

Determinants of Capital Structure

Total Leverage described as the amount used by firms to finance its total assets, current operation and long-term operations. This study studied five independent determinants of capital structure and their influence on Total Leverage (Relationship is shown in table I).

Growth: Growth is an important determinant of capital structure and mostly used in previous research. According to trade off theory, there is negative relationship between debt and growth opportunity because cost of debt rises when highly growing firm invest in risky project even at the cost of creditors. When firm borrow more debt to support growth opportunities; this will increase the cost as well as the probability of financial distress. On the other hand, Pecking order theory predicts positive relationship between growth opportunities and Leverage. According to pecking order theory, firms prefer internal financing to finance their projects (Ross et al, 2008) but additional funds are needed by highly growing firms which leads them to borrow more, they issue securities focus to less asymmetric information (Tong & Green, 2005).

Profitability: Profitability is one of the most important independent determinants of capital structure and clearly explained in theories. Trade off theory proposes positive relationship between profitability and Leverage due to two reasons. First profitable firms have less risk of financial distress therefore having lower bankruptcy cost as well as cost of debt is also lower. Second reason when profitable firm borrow more, leads to pay more interest which ultimately leads to pay less tax because interest payments are tax deductible (Frank and Goyal, 2009). Whereas Pecking order theory predicts negative relationship. Argument of this theory is that profitable firms have more retained earnings which are preferable source of funds, and they borrow less leverage, Therefore there is negative relationship between profitability and leverage (Huang & Song, 2006).

Size: Company size is another important potential determinant and is most often used in empirical research. According to Trade off theory larger firms are more diversified as compared to smaller firms and therefore have low default risk, less volatility in cash flow, lower bankruptcy cost, have market reputation, have bargaining power so can borrow at lower cost. Therefore Trade off theory predicts positive relationship between company size and Leverage. Whereas according to Pecking order theory larger companies have less asymmetric information and related cost as well as larger companies can issue equity at lower cost as compare to debt, having opportunity of retained earnings therefore they use lower leverage in their capital structure. Therefore Pecking order theory predicts negative relationship between Leverage and company size (Frank & Goyal, 2009).

Tangibility: According to trade off theory, there is positive relationship between Debt and tangibility of assets. A firm having more tangible assets can borrow at little cost as compare to firm which have less tangible assets. Assets tangibility provides bargaining power to borrower. Ross et al (2008) described that Firm which have more physical assets can borrow more by pledging their physical assets as collateral and alleviating money lenders risk of bearing such agency cost of debt, low agency cost leads to increase debt it means positive relationship between tangibility of assets and debt. Whereas Pecking order theory predicts negative relationship between tangibility of assets and Debt. According to this theory firms having more physical assets will have less asymmetric information problems and firms can issue more equity as compare to debt.

Effective tax rate: According to trade off theory, there is positive relationship between effective tax rate and Debt. As tax rate increase, firm borrow more because interest payments are tax deductible and companies aim to borrow entire from debt financing to take advantage of tax deduction. Whereas pecking order does not describe any relationship between effective tax rate and debt.

Objectives

1. To investigate the relationship between growth opportunities & Leverage
2. To examine the relationship between firm's profitability and debt ratio
3. To investigate the relationship between firm size and debt ratio
4. To analyze the relationship between asset tangibility & debt ratio
5. To examine the relationship between effective tax rate & debt

Hypotheses

Hypotheses based on the assumptions of Capital Structure Theories i-e (Trade off theory and Pecking Order Theory).

H_1 Higher growth opportunities increases the Leverage of firm

$H_{1(a)}$ Higher growth opportunities increases the leverage of Manufacturing sectors

$H_{1(b)}$ Higher growth opportunities increases the leverage of Service sectors

H_2 Profitability of firm increases the Leverage of firm

$H_{2(a)}$ Profitability of firms increase the leverage of firms of Manufacturing sectors

$H_{2(b)}$ Profitability of firms increase the leverage of firms of Service sectors

H_3 Size of the companies has positive relation with Leverage

$H_{3(a)}$ Size of the companies has positive relation with leverage in Manufacturing sectors

$H_{3(b)}$ Size of the companies has positive relation with leverage in Service sectors

H_4 Asset tangibility of firm increases the debt ratio

$H_{4(a)}$ Asset tangibility of firm increases the debt ratio of Manufacturing sectors

$H_{4(b)}$ Asset tangibility of firm increases the debt ratio of service sectors

H_5 Effective tax rate has positive relation with Leverage

$H_{5(a)}$ Effective tax rate has positive relation with Leverage in Manufacturing sectors

$H_{5(b)}$ Effective tax rate has positive relation with leverage in Service sectors

Scope of Research

Determinants of capital structure were examined in Manufacturing and Service sectors of Pakistan. Therefore companies of manufacturing and service sectors were taken as a sample. Pharma and Biotech, Oil and Gas, Constructions and Materials (Cement), Food

Producers and Textile sectors were taken as manufacturing sectors. Whereas Commercial Banks, Life Insurance, Financial Services, Travel and Leisure and fixed line telecommunication sectors were taken as service sectors.

Methodology

Sample size: Total sample size of this study was thirty companies. From which fifteen companies were taken from manufacturing sectors and fifteen companies were taken from service sectors (shown in table II) from the period of 2010-2012. The five manufacturing sectors were Pharma and Biotech, Oil and Gas, Constructions and Materials (Cement), Food Producers and Textile. Whereas five service sectors include Commercial Banks, Life Insurance, Travel and Leisure, Financial Services and fixed line telecommunication.

Data Source: The present study used secondary data which was extracted from the comprehensive income and financial position statements of the sample trading companies listed in Karachi Stock Exchange. The Financial statements of Companies were available at KSE website and at official websites of companies own.

Mode of Analysis

In the present study, data was analyzed through Spearman's Rho correlation and multiple regressions. SPSS 16.0 Version was used in order to analyze the data. The ratio of Dependent and Independent variable was taken into account (shown in table III). The Multi Regression analysis was performed to analyze the impact of independent variables on dependent variable. LG is outcome of five independent variables. The model of this study was

$$LG = a + \beta1\,(GR) + \beta2\,(PF) + \beta3\,(SZ) + \beta4\,(TG) + \beta5\,(ET) \ldots\ldots\ldots\ldots 1$$

Where,

LG= Leverage

Gr= Growth

SZ= size

TG= Tangibility

ET= Effective Tax Rate

Results and Analysis

Correlation: In hypothesis 1, it was assumed that firms having higher growth opportunities use more leverage for financing their operation. The result in table V indicated negative significant relationship between growth opportunity and leverage in manufacturing sectors whereas result in table VI indicated positive non-significant relationship between leverage and growth in service sectors. Manufacturing support Trade off theory whereas service sectors support Pecking order theory due to correct prediction of sign which states that internally generated funds are not sufficient to meet additional financial needs so they use more debt in their capital structure ratio. Therefore we partially accept alternative hypothesis and partially accept null hypothesis.

In hypothesis 2, it was assumed that profitability of firm and leverage are directly related to each other which mean profitable firm use more leverage. The result in table V indicated that there is negative significant relationship between profitability and leverage in manufacturing sectors. Whereas the result in table VI indicated that there is positive non-significant relationship between profitability and leverage in service sectors. Manufacturing sectors follow Pecking order theory which suggests that profitable firms use a lesser amount of debt, because internal generated funds (retained earnings) are sufficient to meet financial needs which are also an end signal to creditors that firm have low bankruptcy risk. In other case firm can issue debt such as bonds debenture at low rate of interest since they are seen as less risky to creditors. Whereas service sectors confirm Trade off theory due to correct prediction of sign but value was non-significant which showed Profitability is not significant determinant of capital structure in Service sectors. Therefore we partially accept alternative hypothesis and partially accept null hypothesis.

In hypothesis 3, it was assumed that size of the company has positive relation with leverage. The result in table V and VI revealed that size has positive relation with leverage in manufacturing as well as in service sectors and the former was non-significant but later was significant so we partially accept alternative hypothesis and partially accept null hypothesis. In both sectors, result supports Trade off theory which states that large firms are more diversified, they have reputable position in market and they have low transaction cost as well as they can borrow at low rate of interest as they have bargaining power. Large firms also have constant cash flow and have lower risk of bankruptcy.

In hypothesis 4, it was assumed that firms having more tangible assets use more debt in their capital structure ratio. Result in table V and VI show negative significant relationship between tangibility and leverage in manufacturing as well as in service sectors. Result indicated that Pecking order theory is followed by firms which states that firm having more tangible assets lower the information asymmetries, firm issue equity which will be relatively less costly as compare to leverage. The other reason for service sectors is that the service industry generally classified by higher level of current assets and lower level of fixed assets, as current assets can be easily altered into cash and this having more liquid volume than fixed assets. Lending institutions generally give debt to those who keep their fixed assets as collateral so that they can convert company fixed assets in to cash in case of firm bankruptcy or financial distress. The reason for manufacturing sectors is that tangible assets are poor source of collateral in emerging economies as their value fluctuates day to day. Due to significance value, we accept alternative hypothesis and reject null hypothesis.

These findings are similar to the findings of studies conducted by Amarjit Gill et al (2009) in United States and Wanrapee Banchuenvijit (2011) in Thailand. While contrast with the results of studies conducted by Paul et al (2013) in Ghanaian firms, A.Ajanthan (2013) in Sri Lanka, Oladele & Adebayo (2013) in Nigeria, Kiran (2013) in Pakistan, Mishra & Chandra (2011) in India, and Mahabuba (2009) in Bangladesh.

In hypothesis 5, positive relationship between effective tax rate and leverage was assumed. Findings in table V and VI showed that the tax variable in both sectors is positively related with leverage which show firms prefer debt financing when firm face high tax provision because interest amount is tax deductible which is consistent with Trade off theory due to positive relationship. Non-significant relationship established therefore tax rate was not found to be significant determinant of capital structure. Due to this, null hypothesis was accepted and alternative hypothesis was rejected.

Result is consistent with the result of study conducted by Amarjit Gill et al (2009) in USA whereas it is inconsistent with the result of study conducted by Paul et al (2013) in

Ghanaian firms, Oladele & Adebayo (2013) in Nigeria and Mishra and Chandra (2011) in India.

Regression: Moreover multi regression technique was used to know how well the model fits into data. In table VIII manufacturing sectors shows the value of R square is 64.9% and it's significant because p value was 0.001 which is less than 5%. This shows that around 65% deviation in response variable is due to these five predictor variables (Growth, Profitability, Size, Tangibility, Effective tax rate) and other 35% variation is from other variables which were not included in this regression model. Whereas in table X service sectors shows the value of R square is 72.5% and also its significant at 0.000 level, which shows around 72.5%% variation in response variable was due to these five predictor variable other 27.5% variation was due to other variables which were omitted from this model.

Conclusion

This study attempted to find out the determinants of capital structure of manufacturing and service sectors of Pakistani firms from the period of 2010-2012. In manufacturing sectors negative significant relationship was found between growth and leverage whereas in service sectors positive non-significant relationship was found between growth and leverage. Manufacturing sectors support Trade off theory but service sectors support Pecking order theory due to correct prediction of sign. Negative relationship was observed between profitability and leverage in manufacturing sectors and positive relationship was observed in service sectors where it was significant in manufacturing sectors but non-significant in service sectors. This result revealed that manufacturing sectors follow Pecking order theory whereas service sectors follow Trade off theory. Significant negative relationship was found between tangibility and leverage in both sectors which confirmed that Pecking order theory is followed by firms in both sectors. Size and leverage shows non-significant positive relationship in manufacturing sectors whereas positive significant relationship found in service sectors. Due to positive sign, they follow Trade off theory. Effective tax rate has positive relationship with Leverage but the result was non-significant. Positive sign confirmed that firms follow Trade off theory in both sectors which shows those firms having higher tax prefer debt financing. Due to non-significant result, the effective tax rate not found to be a significant determinant of capital structure.

Table I: Summary of Theoretical predictions

(Relationship between determinants and Leverage)

Independent variables	Dependent variable	Expected signs	
		Trade Off Theory	**Pecking Order Theory**
Growth	Leverage	-(ve)	+(ve)
Profitability	Leverage	+(ve)	-(ve)
Size	Leverage	+(ve)	-(ve)
Tangibility	Leverage	+(ve)	-(ve)
Effective Tax rate	Leverage	+(ve)	----

Table II: Sample size

<table>
<tr><th colspan="5">Manufacturing Sectors</th></tr>
<tr><td>Pharma and Biotech</td><td>Oil and Gas</td><td>Constructions and Materials (Cement)</td><td>Food Producers</td><td>Textile</td></tr>
<tr><td>• Searle
• Ferzosns
• Abbott</td><td>• PSO
• OGDC
• Shell</td><td>• Lucky Cement
• Attock Cement
• Fauji cement</td><td>• Nestle Pakistan
• Engro foods
• National foods</td><td>• Gul Ahmad
• Fateh
• Nishat Mills</td></tr>
<tr><th colspan="5">Service Sectors</th></tr>
<tr><td>Commercial Banks</td><td>Life Insurance</td><td>Financial Services</td><td>Travel and Leisure</td><td>Fixed line telecommuni-cation</td></tr>
<tr><td>• MCB
• HBL
• UBL</td><td>• EFU
• Jubilee
• East west Life</td><td>• Arif Habib
• Jahangir Siddique co.
• Capital asset leasing</td><td>• Dream world
• Pakistan hotels developers
• Pakistan services</td><td>• PTCL
• Telecard
• World Call Telecom</td></tr>
</table>

Table III: Calculation of dependent and independent variables

VARIABLES	PROXIES
Leverage	Total Debt/ Total Assets
Growth Opportunity	Annual % change in Total Assets
Profitability	EBIT/ Total Assets
Size	Log Of Total Assets
Tangibility	Total Gross Fixed Assets/ Total Assets
Effective Tax Rate	Total Tax/ Total Taxable Income

Table IV Descriptive Statistics

	MANUFACTURING SECTOR			SERVICE SECTORS		
	N	Mean	Std.dev	N	Mean	Std.dev
Leverage	45	.5591	.23497	45	.4695	.32243
Growth	45	.1941	.15222	45	.1209	.22296
Profitability	45	.1703	.10409	45	.0273	.10939
size	45	7.8692	1.15444	45	8.0486	.1.02316
Tangibility	45	.4472	.23159	45	.4860	.39140
tax	45	-.2084	3.76446	45	.2472	.52811

Table V Correlation of Manufacturing Sectors

Dependent variable	Independent Variable	R	P value
Leverage	Growth	-.356	.017*
	Profitability	-.479	.001**
	Size	.111	.467
	Tangibility	-.432	.003**
	Effective Tax Rate	.199	.189

*Correlation is significant at the 0.01 level (2-tailed).
**Correlation is significant at the 0.05 level (2-tailed).

Table VI Correlation of Service Sectors

Dependent variable	Independent Variable	R	P value
Leverage	Growth	0.183	0.228
	Profitability	.045	.768
	Size	.301	.045*
	Tangibility	-.640	.01**
	Effective Tax Rate	.074	.629

*Correlation is significant at the 0.01 level (2-tailed).
**Correlation is significant at the 0.05 level (2-tailed).

Table: VII Regression Analysis of Manufacturing Sectors

	B	Std Error	T	Sig
(Constant)	1.184	.242	4.885	.000
Growth	-.506	.207	-2.444	.019
Profitability	-.893	.282	-3.167	.003
Size	-.027	.026	-1.028	.310
Tangibility	-.360	.129	-2.789	.008 *
Tax	.010	.008	1.241	.222

*Correlation is significant at the 0.01 level (2-tailed).

VIII Model Summary

R	R square	Adjusted R square	Sig. F Change
0.649	0.421	0.346	0.001

Table: IX Regression Analysis of Service Sectors

	B	Std Error	T	Sig
Constant	.506	.323	1.568	.125
Growth	-.153	.201	-.762	.450
Profitability	-.136	.398	-.342	.734
Size	.034	.038	.879	.385
Tangibility	-.601	.098	-6.123	.000
Tax	-.028	..075	.376	.709

Table: X Model Summary

R	R square	Adjusted R square	Sig. F Change
0.725	0.525	0.464	0.000

References

Adebayo, O., & Oladele, J.A. (2013). Determinants of capital structure in Nigeria. *International Journal of Innovation and Applied Studies*, *Vol. 3*, pp. 999-1005.

Ajanthan, A. (2013). Determinants of Capital Structure: Evidence from Hotel and Restaurant Companies in Sri Lanka. *International Journal of Scientific and Research Publications, Vol. 3*, pp. 1-8.

Amarjit, G., Chenping, P., Nahum, B., & Smita, B. (2009). The Determinants of Capital Structure in the Service Industry: Evidence from United States. *The Open Business Journal*, *Vol. 2*, pp. 48-52.

Andreas, W.H.J. (2013). *Determinants of capital structure: an empirical study of Danish listed companies.* Master Thesis, Aarhus University, Business and Social Sciences, Denmark.

Bisma, R., Faiza, S., Ghazala, A., Qaiser, M., Muhammad, I., Rabia, S., & Sidra, T. (2013). The determination of capital structure of oil and gas firms listed on Karachi stock exchange in Pakistan. *Interdisciplinary journal of contemporary research in business*, *Vol. 4*, pp. 225-233.

Chandra, S., & Mishra. (2011). Determinants of Capital Structure: A Study of Manufacturing Sector PSUs in India. *International Proceedings of Economics Development & Research, Vol. 11*, pp. 247 - 252.

Hasan, A., Norhasniza, M., Shashazrina, R., & Zuraidah, A. (2012). Capital structure effect on firm's performance: focusing on consumers and industrials sectors on Malaysian firms. *International Review of Business Research Papers, Vol. 8*, pp. 137-155.

Husni, A.K. & Husni, H.A.K. (2010). The determinants of the Capital Structure: Evidence from Jordanian Industrial Companies. *JKAU: Econ.& Adm*, *Vol. 24*, pp. 173-196.

Imran, C., & Muhammad, A. (2012). Determinants of Capital Structuring: An Empirical Study of Growth and Financing Behavior of Firms of Textile Sector in Pakistan. *Journal of Management and Social Sciences*, *Vol. 8*, pp. 1-9.

Irfan, A. (2011). *Determinants of capital structure: Empirical evidence from Pakistan.* Master's Thesis, University of Twente Enschede, Netherlands.

James, K.A., Paul, K.O.P., & Kingsley, O.A. (2013). Determinants of Capital Structure: Evidence from Ghanaian Firms. *Research Journal of Finance and Accounting, Vol. 4*, pp. 44 -52.

Jean, J.C. (2004). Determinants of capital structure of Chinese-listed companies. *Journal of Business Research, Vol. 57*, pp. 1341-1351.

Joshua, A. (2007). Industry classification and the capital structure of Ghanaian SMEs. *Studies in Economics and Finance, Vol. 24*, pp. 207 – 219.

Khalid, A. (2012). The determinants of leverage of listed companies. *International Journal of Business and Social science, Vol.3*, pp.78-83.

Kinga, M. (2007). The determinants of capital structure choice: evidence from Polish Companies. *International Atlantic Economic Society, Vol. 13*, pp. 495-514.

Mahabuba, L. (2009). An insight into the capital structure determinants of the pharmaceutical Companies in Bangladesh. *Conference of Global Business and Management Forum (GBMF),* pp.1 – 17.

Mahfuzah, S., & Raj, Y. (2012). Capital structure and firm performance: evidence from Malaysian listed companies. *Procedia - Social and Behavioral Sciences, Vol. 56*, pp. 156-166.

Muhammad, S., Muhammad, T., Saeed, A. U. & Zaighum, (2012). Impact of Capital Structure on Firms' Financial Performance: Evidence from Pakistan. *Research Journal of Finance and Accounting, Vol. 3,* No. 9, pp. 1-7.

Naizuli, R.W. (2011). *Capital structure and financial performance: a case of selected medium sized enterprises in Kampala.* Masters Thesis, Makerere University, Uganda.

Ong, S. & The, H. (2011). Capital structure and corporate performance of Malaysian construction sector. *International Journal of Humanities and Social Science, Vol. 1*, pp. 28-35.

Pinkova, P. (2012). Determinants of capital structure: evidence from the Czech automotive industry. *Acta Universities Agriculture ET Silviculturae Mendelianae Brunensis, Vol. 60*, pp. 217-224.

Samra, K. (2013). Determinants of Capital Structure A Comparative Analysis of Textile, Chemical & Fuel and Energy Sectors of Pakistan. *International Review of Management and Business Research, Vol.2*, pp. 37 - 47.

Schweser. (2013). *CFA Level 1 Book 4: Corporate Finance, Portfolio Management and Equity Investments*. United States of America: Kaplan, Inc. printed in.

Siti, R.U. (2012). *Determinants of capital structure in the manufacturing sector of firms in Indonesia.* Ph.D. Dissertation, Maastricht School of Management, Indonesia.

Wafaa, S. (2010). The determinants of capital structure: Evidence from the GCC Countries. *International Research Journal of Finance and Economics, Vol. 47*, pp. 54-76.

Wanrapee, B. (2011). Capital structure determinants of Thai listed Companies. *The Clute Institute International Academic Conferences,* New Orleans Louisiana, pp. 1-8.

Certainly advertising can link a supply to a demand, probably it can awake a latent demand, but there is no evidence that it can create a demand that is not there.

Antony Jay

ARTICLE

AMO FRAMEWORK AND PSYCHOLOGICAL EMPOWERMENT: CONCEPTUAL MODEL DECODING THE BLACK BOX BETWEEN HRM AND INNOVATIVE WORK BEHAVIOR

Wali ur Rehman
COMSATS Institute of Information Technology, Islamabad

Mansoor Ahmad
COMSATS Institute of Information Technology, Islamabad

Abstract

Firms operate in an environment which is influenced by external forces like, government, professional associations, the competitors and other similar organizations operating in the organizational field (Dimaggio & Powell, 1983); knowledge intensive firms, are no exceptions. Purpose of this article is to devise comprehensive conceptual and statistical models for opening the black-box between high-involvement HR practices and innovative work behavior of employees working in knowledge intensive companies. The article explains the Ability-Motivation-Opportunity framework as the generating mechanism through which HR practices affect innovative work behavior through psychological empowerment and supportive work environment. Propositions are developed for future research endeavors, in order to substantiate and validate the proposed models.

Keywords: *high-involvement HR practices, AMO framework, psychological empowerment, supportive work environment, innovative work behavior*

Introduction

Firms operate in an environment which is influenced by external forces like, government, professional associations, the competitors and other similar organizations operating in the organizational field (Dimaggio & Powell, 1983); knowledge intensive firms, are no exceptions. These forces compel the organization to become similar to each other within an industry through coercive isomorphism, mimetic isomorphism and normative isomorphism (Dimaggio & Powell, 1983). According to Scott (1995), ostensibly these isomorphism are consequences of the pressures stemming from; government (regulatory authorities), radical changes in external environment (resources deficiency, uncertainty), professionalism (pressures from the professional organizations working in the industry). In addition, organization may also have some motives to become similar to each other and being persuaded by these forces. Scott (1995) further argued that the conforming motives against these forces are; legitimacy, survival, and recognition. According to Khilji (2002), organizations in Pakistan tended to be more passive in terms of adopting management practices from other successful organizations. This tendency of the organizations, according to her, is due to their dependence on the other organizations in the same industry. This article aims at developing a conceptual model where the link of Human resource management with the innovative work behavior is elaborated. Organizations adopt their HR practices in conforming to the institutionalized myths i.e., they implement because other successful organizations in the industry adopted these practices. This tendency may be helpful in the aesthetic use but what about the technical use of these human resource practices. This article endeavors to open the black box between the HR practices and one of the important employees' behaviors i.e., the innovative work behavior, which is very important as far as the productivity of the knowledge intensive organizations is concerned.

It is also evident from the two streams of research within Resource Based View (Lowendahl, Revang, & Fosstenlokken, 2001; Spender, 1996; Tsoukas, 1996). One view emphasizes the stock of knowledge as a potential source of competitive advantage; while the other emphasizes knowledge as a potential source of innovation and value creation (e.g., Leonard & Sensiper, 1998; Leonard-Barton, 1995). The former view considers the knowledge as being unique and difficult to imitate, substitute or transfer (e.g., Barney, 1991), and emphasizes the superiority of the forms of knowledge which is superior as compared to the competitors' forms of knowledge. While the latter, which is concern of this study, is not considering the stock of knowledge as source of competitive advantage, rather the way it is innovatively employed in the organization in producing new knowledge (in the form of innovative production of the services / goods). Here, the uniqueness and the innovative processes, which are employed by the employees is important. In this regard, employees' innovative behavior is important in order for the organization to remain competitive viz-a-viz competitors, particularly in cases where the stock of knowledge is not unique (Barney, 1991).

There is consensus among management researchers, that different HR practices are designed and implemented in organizations to achieve the end results i.e. productivity of employees, enhanced performance, employees' commitment and loyalty and innovative work behavior of the employees. This study is taking the latter aspect of the employees' behavior, i.e., innovative work behavior. Knowledge intensive firms consider knowledge as a source of competitive advantage, which makes it a vital resource (Barney, 1991).

According to Barney (1991) knowledge intensive firms are also highly dependent on knowledge both as a stock as well as instrumental of competitive advantage. Knowledge intensive companies rely on the knowledge itself as a source of competitive advantage if it is unique and unable to imitate by competitors; however, if it is not unique, then according to Barney (1991) and Spender, (1996) it is instrumental and its creative and innovative utilization give the firm competitive advantage over its competitors. This study considers the latter view and takes the knowledge as instrumental as critical source for the companies. Companies involved in the high-tech industry are required to optimally and innovatively utilize their human resources in order to create new knowledge in the form of the innovative product and services to remain competitive. Employees are required to be innovative in order to produce new products and services, which requires due diligence and care from the management toward their employees (Isabel & Perez-Santana, 2014). Human resource practices which facilitates, encourage and foster the innovative behavior in employees are inevitable in high-tech companies. Targeted HR practices, which can increase the abilities of the employees, enhance their motivation to become innovative and provide opportunities to apply their knowledge innovatively and produce novel products. The central source of knowledge creation, inter alia, is human resource (Chandler, Keller, & Lyon, 2000). Firms need to ensure productive use of this resource, which can only be ensured through continuous development of their skills and competences as well as provision of sufficient opportunities to innovate (Bartel, 2004; Harney & Jordan, 2008).

Recent studies regarding impact of HRM on the performance and behavioral aspects of the employees argued that there is no agreed upon list of HR practices which are considered universal across the firms and countries (Isabel & Perez-Santana, 2014; Katou &

Budhwar, 2010). However, another stream of debate is about the best fit versus best practices (J Paauwe & Boselie, 2005). Best fit approach demands modification to the practices according to the context of the organization and the environment in which it operates, while best practice approach indicates universalism of the practices, and argue that these practices regardless of the context and environment produce optimal and desired outcomes. According to these researchers a new trend regarding application of AMO framework (Ability-Motivation-Opportunity) to define the HRM is in vogue in the academic researchers. According to Paauwe (2009), AMO framework is indicative of the change mechanism through which the HRM affects performance (e.g., see Bartel, 2004; Harney & Jordan, 2008). This framework (i.e., AMO) is validated through empirical investigation regarding its role in HRM-Performance relationship (Appelbaum et al., 2000; Delaney & Huselid, 1996; Subramony, 2009). They also argued that employees perform efficiently when they are capable of doing their job (i.e., they have the required skills and ability), they are provided incentives to do their jobs (increased their motivation to do the job) and provided sufficient opportunities to do the job for which they have skills. According to Boselie (2010) designated and customized HR practices are required to address the aspects related to ability, motivation and opportunity (AMO) of the employees. Such practices, according to him, are termed as high performance work practices (HPWPs). The conforming HR practices are termed as ability-enhancing, motivation-enhancing and opportunity-enhancing HR practices, respectively.

According to Purcell et al., (2003), there are three types of HR practices which are inculcating new skills and increase the ability of the employees, supplemented by the motivational HR practices to motivate the employees to perform optimally, for which sufficient opportunities are to be provided to the employees. According to Delery & Doty (1996), organizations have two options regarding accumulation of the human resources; one is the buy-orientation, in which organizations induct new skills by carefully selecting employees, implementing rigorous selection and sophisticated recruitment methods (Jiang et al., 2012) to attract and induct employees having desired skills; while the second orientation is the make-orientation, in which the focus is developmental and the desired and requisite skills are imparted in the employees through training and development. Motivation of the employees is increased through provision of incentives as suggested by the social exchange theory (SET) that employees feel accepted by the organization when he is treated fairly (i.e., provided incentives and rewards against his contribution), then they reciprocate towards organization by enhancing their performance and increase their contributions (Blau, 1964). This is due to a psychological bond between the employees and the organizations, which is made stronger through provision of favorable treatment with the employees in terms of the incentives (Haar & Spell, 2004). According to Jiang et al., (2012), provision of opportunity to the employees increases the confidence of the employees, as they use more discretion and autonomy in performing their task, which can be achieved through flexible work assignment, job rotation, team work, empowerment, involvement, and information sharing. This aspect of the high-involvement practices is comparatively less costly to the other two practices as mentioned above.

According to Farr & Ford, (1990) innovative work behavior is the intention of the employees to introduce novel and useful ideas regarding processes, procedures, services and products. It is hard to gauge the intentions of employees but organizations can gather the intentions through either formal or informal means. Such intentions of employees are useful in organizational productivity where such innovative and useful ideas can be operationalized and implemented in the organizations. According to Janssen (2000) employees innovative work behavior is defined as the innovative ideas put forward by the employees, which could be beneficial for the organizations through their innovative outcomes.

Objectives of the Study

Objectives of the study are to:

i. Propose a comprehensive conceptual model by opening the black box between high-involvement HR practices and innovative work behavior of employees working in knowledge intensive firms.

ii. Develop propositions for roles of ability-, motivation-, and opportunity-enhancing HR practices in predicting innovative work behavior as well as explaining the mediating role of psychological empowerment and moderating role of supportive work environment.

iii. Identify the relevant statistical model for the proposed conceptual model and its estimation.

Significance of the Study

According to a study conducted by Colquitt & Zapata-phelan (2007), to assess what constitute theoretical contributions i.e., theory-building research and theory testing research, introduction of a new mediator / moderator of an existing relationship between concepts is also theoretical contribution. They concluded on the basis of sample of 770 articles from Academy of Management Journal. However, according to Pratt (2009), it is important to explain the importance of filling such gap, as mentioned above, which many of the articles published in Academy of Management Journal failed to provide. This shows that researcher's motivation to include the literature to identify the gap is not sufficient; instead justification and importance of filling the identified gap are also required. He further argued that such argument does not intend to undermine the importance of the identification of the research gaps. Such studies, which are conducted to fill the research gap i.e., empirical investigation of the modified relationships also develop existing literature through incremental additions, thereby contributing to the body of knowledge (Pratt, 2009). Such incremental additions to the existing theories constitute theoretical contribution, since the theory is defined by (Bacharach, 1989: p. 496) as:

> '*a statement of relations among concepts within a boundary set of assumptions and constraints. It is no more than a linguistic device used to organize a complex empirical world . . . the purpose of a theoretical statement is twofold: to organize (parsimoniously) and to communicate (clearly)*'.

The first objective of the current study is to explore the factors which influence firms to design and implement HR practices (particularly the high-involvement HR practices). Particularly how institutional isomorphism (coercive, mimetic and normative) persuades the organization to adopt certain management patterns (HR practices in this study). Ascertainment of the institutional factors which affect the HR practices is helpful for firms operating in the software industry to take into account while developing HR policies and practices. The study explores whether the institutional theory intact in these industries in order for the firms to get legitimacy and recognition and ensure their survival (implicit motives), as suggested by the institutional isomorphism.

In addition, the study contributes towards the management research by opening the black-box between the high-involvement HR practices and the innovative work behavior of employees within the firms. As recently, a study conducted on the HR managers put research implications and highlighted the importance of the development of a conceptual model which could consider some intervening variable in the HR practices and innovative behavior relationships particularly for employees involved in the production of the services / goods (Isabel & Perez-Santana, 2014). Drawing from their study, this study proposes a model of opening the black box between high-involvement HR practices and innovative work behavior through mediating role of psychological empowerment. The current study will add to it by explaining the role of AMO framework in explaining the innovative work behavior through psychological empowerment and the moderating role of supportive work environment. The development of this conceptual model merits contribution of knowledge toward the field of management, particularly in the field of human resource management in knowledge intensive companies, where scant attention is given to the effective management of human resources.

Theoretical Discussion

Institutional Isomorphism

Organizational researchers studied and endeavored to explain variation among organizational structures and their behaviors (e.g., Child & Kieser, 1981; Hannan & Freeman, 1977; Woodward, 1965). Their major quest was to explore why organizations differ from each other and how they are heterogeneous viz-a-viz each other. Later on, the trend shifted from heterogeneity to homogeneity of organizations and researchers like Dimaggio & Powell (1983) posed questions of how and why organizations look similar to each other. The deviation from this main stream of research of organizational heterogeneity to organizational homogeneity is appreciated by various researchers. Their point of departure was to seek the explanation for the homogeneity among organizations in terms of their structure, patterns, and practices.

Dimaggio & Powell (1983) further pointed out the relationship between the life cycle and the organizational homogeneity and posited that in the early phases of the organizational life cycle, organizations tend to be heterogeneous from each other and shows diversity, however, as soon as the life cycle matures, they tend to become similar in form and behavior to other firms. For example, Coser, Kadushin, & Powell (1982); Tyack (1974); Katz (1975); Barnouw (966) demonstrated shift from diversity at initial stages of the organizational life cycle to homogeneity of the text book publishing, hospital field, public schools and radio industry. Such homogeneity in the forms and behavior as well as structures results in the development of organizational field, where new entrants may be compelled to become homogenous to other organizations of the field.

According to Suddaby, Hardy, & Nguyen (2011) organizational field constitutes the institutional life where all the actors working in the same industry; and each actor is dependent on other actors in the field. These actors include suppliers, consumers, competitors, other organizations producing similar products, regulatory bodies. This holistic approach towards identification of an industry is useful, since it considers all the actors working within an industry. Organizational field and institutional life, the virtual or physical space the activities carried out therein, either compel or persuade (depending on the nature of the force i.e., pressure or attraction) to follow certain practices in order to become similar to other organizations in the organizational field.

According to Freeman (1982) organizations start dominating the organizational field when they become older and larger (both in time and in size); hence they do not adjust, instead they lead other organizations as role model. Thereby forcing other smaller or newer organizations to become similar to them in terms of the structures and behaviors, this is threshold for the homogenization. The process of homogenization is best referred to as isomorphism, which according to (Hawley, 1968) is a constraining process which forces or persuades an entity in organizational field to become similar to other entities. These entities to follow and to become similar to others should share same environmental forces as those which are benchmarked.

According to Dimaggio & Powell (1983: p.149), institutional isomorphism is the 'constraining process that forces one unit in a population to resemble other units that face the same set of institutional conditions'. Organizations tend to become similar to other organizations operating in the same environment. The same environment here refers to the industry (or Organizational field), which shares the same external environment i.e., resources, employees, suppliers, clients and regulatory bodies etc.). The tendency of one unit of the same industry to look like others is termed as institutional isomorphism Dimaggio & Powell (1983). They further identified three different types of isomorphism with different set of pressures, motives and stakeholders, namely; coercive isomorphism, mimetic isomorphism, and normative isomorphism.

Coercive isomorphism, according to Dimaggio & Powell (1983), is a kind of similarity among the organizations which is a result of political pressures exerted by the government, regulatory bodies, donor agencies and other powerful organizations in the business environment. The formal pressures exerted by these actors result in coercive isomorphism. These pressures force organizations to adopt patterns disseminated by other influential organizations, upon which formers are dependent. The dependence of the subordinating organizations may range from resource dependence (in case of donor organizations) to concerns for legitimacy (in case of regulatory bodies). There may be some other concerns which persuade them to follow the patterns suggested by the influential organizations. The influence of these dominant organizations is across the industry and all the actors in the field are required to follow these patterns, which consequently result in isomorphism among these organizations.

Mimetic isomorphism is the tendency of organizations to look similar to other organizations as a result of benchmarking (in uncertain situations) other successful organizations. Organizations are working in hyper turbulent environment where uncertainties are inevitable. In such situations, relatively new organizations tend to copy the practices implemented by successful organizations. Such imitations by new organizations result in wide spread implementation of similar practices, which result in mimetic isomorphism. The major concern of the organizations in becoming similar to each other is their survival (copying practices in situations of uncertainties).

Normative isomorphism is the similarity between organizations due to the shared norms and values across the similar professionals. The force which pressurizes these organizations to look similar to each other is the professionalization. By professionalization, they define the conditions and methods of their work to ensure their occupational autonomy. Since organizations, rely on professionals who attended the same formal education systems, invariably look similar as the professional diffuse the same norms and values, which they learnt during their affiliation with formal education centers. Another factor which is also important in such isomorphism is the professional networks, with which these professionals are associated. They attend trainings, workshops, learn the norms of the profession and hereby make themselves professionals which increase their chances of readily acceptable for the other similar professional organizations. With their induction in new organizations, these norms and values are penetrated through these new organizations and result in isomorphism. The two driving forces are the legitimation of the cognitive base and the professional associations (Dimaggio & Powell, 1983).

High-Involvement HR Practices and AMO Framework

The HR Practices which are considered important for any organization are categorized as high-involvement HR Practices (Isabel & Perez-Santana, 2014; Lepak, Liao, Chung, & Harden, 2006; Subramony, 2009; Sun, Aryee, & Law, 2007). According to Isabel & Perez-Santana (2014) high-involvement HR practices are increasing the intrinsic motivation of the employees, resultantly increasing the innovative work behavior of the employees, which is driven by the achievement orientation of the employees. These practices are associated with the employee's innovative work behavior. There are three sub-categories of the HR practices namely; ability-enhancing, motivation-enhancing and opportunity enhancing HR practices. This is why AMO framework explains the importance of these HR practices in enhancing the psychological empowerment level of the employees.

According to Isabel & Perez-Santana (2014), *ability enhancing HR practices* are meant for either buying skills or enhancing and developing skills of the employees (Cascio, 1991; Flamholtz & Lacey, 1981). In the former, the staffing is more relevant and organizations develop the system through which they hire highly qualified and skilled employees according to the requirements of the jobs. By doing so, they buy the skills required to perform the requisite tasks. In alternate, training programs are designed to enhance the skills of the existing employees or new incumbents. Sophisticated HR practices are designed and developed for the employees by carefully assessing the training needs of employees and followed by carefully designed training programs to be implemented. At the end of each training program the outcomes are evaluated on the basis of its objectives, whether requisite skills are sufficiently inculcated or need further improvement (Delery & Doty, 1996; Jiang et al., 2012).

Motivation enhancing HR Practices include compensation and performance appraisals systems of the organization (Isabel & Perez-Santana, 2014; Jiang et al., 2012). Employees are rewarded for their contribution towards the organizations, which increase their satisfaction and motivation level (Blau, 1964). Performance appraisal also serves as feedback for employees, which give them confidence, if the feedback is in their favor (as results of previous researches suggest that proper and just performance appraisal increases the motivational level of employees) (e.g., Buchner, 2007; Esposito et al., 2013; Meadows & Pike, 2010).

Opportunity enhancing HR Practices include job design and participation (Isabel & Perez-Santana, 2014; Jiang et al., 2012; Lepak et al., 2006; Sun et al., 2007). Job design includes all the arrangements by the organization which enhances the experience of the employees. By effective job designs, employees get more opportunities when assigned to different tasks and levels of the jobs. Job design also includes rotation of employees to different tasks and provision of flexible work environment to increase learning and collaboration among employees (Jiang et al., 2012). Employees' participation is involvement of employees in decision making process and encouraging their feedback in organizational decisions. Through this practice employees' feedback and suggestions are sought on different organizational issues and are also rewarded for winning suggestions. Besides, employees are kept informed about important decisions, policies and regulations of the organizations, which is also an opportunity-enhancing HR practice.

AMO-Enhancing HR practices and Psychological Empowerment

Conger & Kanungo (1988) defined empowerment as motivational aspect of an individual's confidence in his competence. According to Thomas & Velthouse (1990) this behavioral concept cannot be defined one-dimensionally, rather it is a multi-dimensional concept. They captured this concept by four cognitive dimensions, which an individual perceives about his work. These dimensions are meaning, competence, self-determination and impact. How these dimensions of the psychological empowerment can be affected by ability enhancing, motivation enhancing and opportunity enhancing HR practices is elaborated in the following sections.

Competence is individual's feeling about and confidence in his capabilities and acquired skills to perform his tasks effectively and efficiently. According to Isabel & Perez-Santana (2014), *ability enhancing HR practices* are meant for either buying skills or enhancing and developing skills of the employees (Cascio, 1991; Flamholtz & Lacey, 1981). In the former, the staffing is more relevant and organizations develop the system through which they hire highly qualified and skilled employees according to the requirements of the jobs. By doing so, they buy the skills required to perform the requisite tasks. In alternate, training programs are designed to enhance the skills of the existing employees or new incumbents. Sophisticated HR practices are designed and developed for the employees by carefully assessing the training needs of employees and followed by carefully designed training programs to be implemented. At the end of each training program the outcomes are evaluated on the basis of its objectives, whether requisite skills are sufficiently inculcated or need further improvement (Delery & Doty, 1996; Jiang et al., 2012). This signifies the link between the ability-enhancing HR practices and competence of the employees.

P1: Ability enhancing HR practices increases the confidence of employees' in their competence while performing tasks assigned in an organizations:

P1a: The sophisticated and careful selection of employees enhances the confidence of the employees inducted through competition.

P1b: The sophisticated and purposeful training programs enhances the competencies of employees.

Meaning is defined as the value of the role, task and job, which an individual judges in comparison with his own standards and ideals (Thomas & Velthouse, 1990). *Motivation enhancing HR Practices* include compensation and performance appraisals systems of the organization (Isabel & Perez-Santana, 2014; Jiang et al., 2012). Employees are rewarded for their contribution towards the organizations, which increase their satisfaction and motivation level (Blau, 1964). Performance appraisal also serves as feedback for employees, which give them confidence, if the feedback is in their favor (as results of previous researches suggest that proper and just performance appraisal increases the motivational level of employees) (e.g., Buchner, 2007; Esposito et al., 2013; Meadows & Pike, 2010). This suggests propositions that motivation enhancing HR practices increase the meaning an employee places on his job.

P2: Motivation enhancing HR practices increase the value of the role and job employees place on their job in comparison to his own standards and ideals:

P2a: The performance based compensation system enhances the value an employee perceives about his role, task and job.

P1b: The feedback oriented performance appraisal system enhances the employees' satisfaction on the value he assigns to his roe, task and job performance.

Impact refers to influencing various organizational outcomes in terms of strategic and operational decisions of the organization, through his input. The more an employee is influential in the organizational processes and procedure, more he is empowered. ***Self-determination*** is the autonomy and discretion an individual enjoys over his work, i.e., sense of having choice in deciding, initiating and regulating the way he performs his work (Deci, Connell, & Ryan, 1989).. *Opportunity enhancing HR Practices* include job design and participation (Isabel & Perez-Santana, 2014; Jiang et al., 2012; Lepak et al., 2006; Sun et al., 2007). Job design includes all the arrangements by the organization which enhances the experience of the employees. By effective job designs, employees get more opportunities when assigned to different tasks and levels of the jobs. Job design also includes rotation of employees to different tasks and provision of flexible work environment to increase learning and collaboration among employees (Jiang et al., 2012). Employees' participation is involvement of employees in decision making process and encouraging their feedback in organizational decisions. Through this practice employees' feedback and suggestions are sought on different organizational issues and are also rewarded for winning suggestions. Besides, employees are kept informed about important decisions, policies and regulations of the organizations, which is also an opportunity-enhancing HR practice. This suggests that opportunities enhancing HR practices increases the feeling of an employee regarding his impact on various organizational outcomes in terms of strategic and operational decision of the organization.

P3: Opportunity enhancing HR practices increase the feeling of an employees' influence on various organizational decision as well as the autonomy he enjoys in deciding his job performance.

P3a: The increased employees' participation opportunity provided by organization enhances the feeling of an employee regarding his impact on various organizational outcomes.

P3b: The flexible job design enhances the feeling of employee in enjoying autonomy over the way his work is being done by him.

Psychological empowerment increases individual's active participation rather than passive orientation about the way his work is done in an organization. Active orientation means sense of autonomy and competence through which an employee can define and shape his work (Spreitzer, 1995; Thomas & Velthouse, 1990). According to Spreitzer (1995), psychological empowerment cannot be measured on as a dichotomous variables (i.e., empowered or not empowered), rather it should be measured as a continuous variable from less-empowered to more-empowered. The three groups of the HR practices additively enhances the psychological empowerment of the employees, there we posit next proposition as

P4: High-involvement HR practices increases the psychological empowerment level of an employee.

Psychological Empowerment and Innovative Work Behavior

According to Isabel & Perez-Santana, (2014), employees' innovative behavior is attributed to personal as well as contextual characteristics. The contextual factors include human resource practices implemented by organizations, which are devised for developing employees' innovative work behavior. According to Chandler et al., (2000), incentives and rewards systems are effective tools to develop employees' innovative behavior. This assertion is also supported by Hornsby et al., (2002) and Kuratko et al., (2005). Isabel & Perez-Santana (2014) empirically demonstrated that competence based incentive systems increase the innovative behavior of employees, and identified them as important antecedents of the IWB. According to Shalley et al., (2004), human resource practices focusing on evaluation systems and job design are also important antecedents of the employees innovative work behavior. Through evaluation systems, according to Shalley et al., (2004), employees are apprised about their current standing in the organizations viz-a-viz their contributions. Employees receive feedback about their skills, performance and contributions toward the organizations, which gives them confidence and become more productive. According to Isabel & Perez-Santana, (2014) job design is an effective tool, through which employees learn skills and knowledge about different functions of the organizations. Job rotation, one of the aspects of the job design, serves as on the job training when employees are allocated to different departments and tasks within an organization.

According to Farr & Ford (1990), innovative work behavior is the intention of the employees to introduce novel and useful ideas regarding processes, procedures, services and products. It is hard to gauge the intentions of employees but organizations can gather the intentions through either formal or informal means. Such intentions of employees are useful in organizational productivity where such innovative and useful ideas can be operationalized and implemented in the organizations. According to Janssen (2000) employees innovative work behavior is defined as the innovative ideas put forward by the employees, which could be beneficial for the organizations through their innovative outcomes.

According to Jiang et al. (2012), employees are guided, trained and influenced to perform innovatively and increase their creativity. High-involvement HR practices are implemented in organizations to enhance employees' skills, increase their participation in decision making, and motivate them to create value for the organization to achieve competitive advantage. Consequently, employees put discretionary efforts in achieving the targets of the organizations and get rewarded accordingly. According to Kennedy (1995) and Siegall & Gardner (2000), employee empowerment serves as an effective tool for management to make their employees both productive and effective. They studied public and private service sector organizations, respectively. Service sector organizations benefited more from the employee empowerment as they frequently interact with the customers and positively affect service quality and customer satisfaction (Berman, 1995; Lashley, 1999).

Psychological empowerment is a very important predictor of the employee's innovative work behavior. This is attributed to the competence, meaning, autonomy and impact an employee have on his role and job performance. Competent employees are more confident about their skills and creative initiatives and this when augmented by the self-determination, this employee provide novel and useful ideas to the management for implementation and production. According to Isabel & Perez-Santana (2014), if an employee feels that he has a radical impact on the organizational outcomes through his input and decision making participation, he volunteers in putting forth the innovative ideas for implementation. Meaning is also important in predicting innovative work behavior as understanding and considering one's job meaningful and of value, one may prefer to make it more valuable and meaningful by contributing towards the organization in its productivity and performance. This is done through provision of novel and innovative but useful ideas for the organization.

P5: Psychological empowerment increases the innovative work behavior of the employees in an organization.

P5a: An employee's feeling of his impact in an organization increases the chances he increases his impact by providing innovative ideas to the organization.

P5b: An employee's positive feeling about the value he puts on his job increases the chances that he makes it more valuable by providing innovative ideas to the organization.

P5c: An employee's confidence on his competence increases his innovative work behavior.

P5b: An employee's increased self-determination increases his productivity by increasing his innovative work behavior.

P6: High-involvement HR practices increases the psychological empowerment of the employees, which ultimately increases the innovative work behavior of employees.

Moderating Role Supportive Work Environment

According to Isabel & Perez-Santana, (2014), employees perform optimally, when they are provided with the conducive work environment. Previous studies related supportive work environment with the positive behavioral outcomes at individual level i.e., enhanced creativity, productivity, increased organizational commitment, high level satisfaction (Delery & Doty, 1996; Lepak et al., 2006). According to Parker et. al, (2006) supportive work environment constitutes both the coworker support as well as the management support. These two are considered as specific dimensions of the supportive work environment which, according to Isabel & Perez-Santana (2014), positively affect the employee's innovative work behavior. As previous research suggests that for the innovative behavior to be a success for an organization, it should be augmented and supported by the management and the co-workers. The former would give support in the form of owning the ideas so developed by the individual employees, while the latter help in the form of brainstorming and encouragement and accommodation while individual employees conceive some novel ideas for his organization (Farr & Ford, 1990). Therefore, we proposes as:

P7: Supportive work environment moderates the impact of psychological empowerment on the innovative work behavior of the employees:

P7a: Co-worker support moderates the impact of psychological empowerment on the innovative work behavior of the employees.

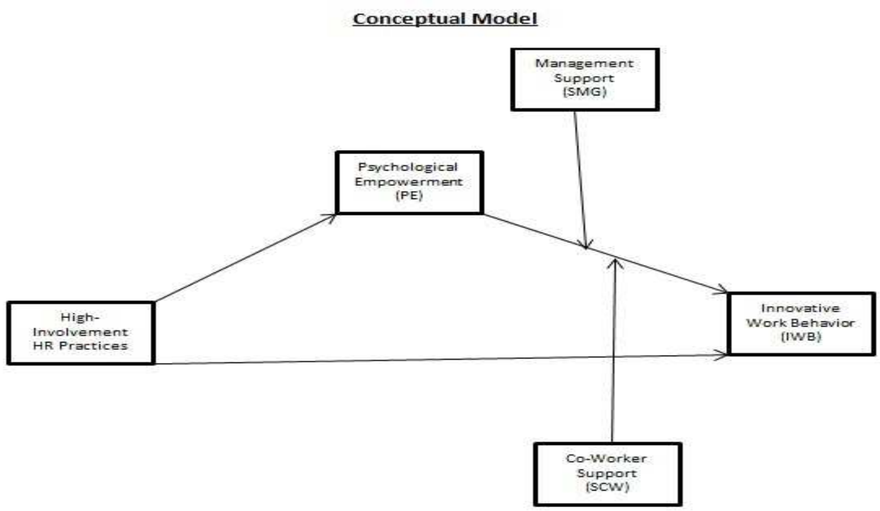
P7b: Management support moderates the impact of psychological empowerment on the innovative work behavior of the employees.

The Conceptual Model / Propositions

The independent variable is the high-involvement HR practices, which are further classified into three sub-categories, i.e, Ability-Enhancing HR practices, Motivation-Enhancing HR practices and Opportunity-Enhancing HR practices. Each of the three types of HR practices includes two HR practices i.e., staffing and training are ability-enhancing HR practices; compensation and performance appraisal are motivation-enhancing HR practices; and job design and participation are opportunity-enhancing HR practices.

The conceptual model according to the objectives of the study is provided in the Figure-1 below.

Figure 1: Schematic Model of the Theoretical Framework



Mathematical representation of the statistical models is as follows:

$PE = a_0 + a_1 * HIRP + + e_{(PE)}$ Eq 1

$IWB = b_0 + b_1 * PE + b_2 * SMG + b_3 * SCW + b_4 * PE * SMG + b_5 * PE * SCW + b_6 \; HIRP \; e_{(IWB)}$ Eq 2

Where in Equation (1), PE represents psychological empowerment, which mediates between the HR practices (HRIP) and the dependent variable (IWB); Eq(2) assesses the moderated impact of HIRP through PE at different values of moderators Management Support (SMG) and Co-Workers Support (SCW). Following Hayes (2013) models for moderation and mediation conceptual model is provided in Figure-1.

Discussion

The objectives of this research article was to develop a conceptual model for the companies operating in the services industries, particularly where knowledge workers are involved. The propositions proposed in this article were based on the institutional theory that the forces operating in the external environment of the organizations force them to adapt their HR practices. These forces are helpful in adoption of the HR practices in these organizations. Merely, adoption of the HR practices as a result of pressures exerted from the external environment, undoubtedly, gives the recognition, legitimacy, but they are useful for their survival or otherwise, should be based on the internal requirements of the firm. These propositions are also based on the performance of the employees working in service industry such as software companies, where employees' knowledge and skills can only be gauged when the product is finished successfully. The HR practices which are considered in this study are High Involvement HR practices, which are focusing on the skills building, performance based incentives, employees' participation and the work design. These HR practices are important as far as they are related to innovative behavior of the employees. The propositions posited in this study may be tested in the service industry to assess the moderating and mediating effects of supportive work environment and psychological empowerment, respectively, on the innovative work behavior of the employees working in the knowledge intisive companies. The AMO framework, which is extensively used and explored by researchers in the field of management sciences, may be trivial as far as the its contribution to the management field is concerned, but it's ability to interpret the relationship between the HR practices and other behavioral aspects of the employees is vital. This study incorporated the psychological empowerment in the model, and their four dimensions correspond to different set of HR practices as proposed in this article. These propositions can be tested through the PROCESS, corresponding model (Hayes, 2013). PROCESS is a syntax which is developed for assessing moderation and mediation models. For different conceptual models, corresponding models' analysis technique is provided in the PROCESS.

References

Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. (2000). *Manufacturing Advantage: Why High-Performance Work Systems Pay Off*. Ithaca, NY: Cornell University Press.

Bacharach, S. B. (1989). Organizational theories: Some criteria for evaluation. *Academy of Management Review*, *14*(1), 496–515.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99–120.

Barnouw, E. (1966). *A History of Broadcasting in United States*. New York: Oxford University Press.

Bartel, A. P. (2004). Human Resource Management and Organizational Performance: Evidence from retail Banking. *Industrial and Labor Relations Review*, *57*(2), 181–203.

Berman, E. M. (1995). Empowering Employees in State Agencies: A Survey of Recent Progress. *International Journal of Public Administration*, *18*(1), 833–850.

Blau, P. M. (1964). *Exchange and Power in Social Life*. New Burnswick NJ: Transaction.

Boselie, P. (2010). High Performance Work Practices in the Health Care Sector: A Dutch case study. *International Journal of Manpower*, *31*(1), 42–58.

Buchner, T. W. (2007). Performance management theory□: A look from the performer ' s perspective with implications for HRD Performance Management Theory□: A Look from the Performer ' s Perspective with Implications for HRD. *Human Resource Development International*, *10*(1), 59–73. doi:10.1080/13678860601170294

Cascio, W. F. (1991). *Costing Human Resource: The Financial Impact of Behavior in Organizations. Boston: PWS-Kent*. Boston: PWS-Kent.

Chandler, G. N., Keller, C., & Lyon, D. W. (2000). Unraveling the determinants and consequences of an innovation-supportive organizational culture. *Entrepreneurship Theory and Practice*, *25*(1), 59–76.

Child, J., & Kieser, A. (1981). Development of Organizations over Time. In C. N. Paul & H. S. William (Eds.), *Handbook of Organizational Design* (pp. 28–64). New York: Oxford University Press.

Colquitt, J. A., & Zapata-phelan, C. P. (2007). Trends in theory building and theory testing: A five-decade study of the Academy of Management Journal. *Academy of Management Journal*, *50*(1), 1261–1303.

Conger, J. A., & Kanungo, N. R. (1988). Empowerment Process□: The Theory and Practice Integrating. *Academy of Management Review*, *13*(3), 471–482.

Coser, L., Kadushin, C., & Powell, W. W. (1982). *Books: The Culture and Commerce of Book Publishing*. New York: Basic Books.

Deci, E. L., Connell, J. E., & Ryan, R. M. (1989). Self-Determination in a Work Organization. *Journal of Applied Psychology*, *74*(4), 580–590.

Delaney, J. T., & Huselid, M. A. (1996). The Impact of Human Resource Management Practices on Performance in for-profit and nonprofit organizations. *Academy of Management Journal*, *39*(4), 949–969.

Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: tests of universalistic, contingency, and configurational performance predictions. *Academy of Management Journal*, *39*(4), 802–835.

Dimaggio, P. J., & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, *48*(2), 147–160.

Esposito, V., Nito, E. De, Giuridiche, S., Sociali, E., Economia, D., & Silvestri, L. (2013). Dealing with knowledge in the Italian public universities The role of performance management systems. *Journal of Intellectual Capital*, *14*(3), 431–450. doi:10.1108/JIC-03-2013-0035

Farr, J., & Ford, C. (1990). Individual Innovation. In M. West & J. Farr (Eds.), *Innovation and Creativity at Work: Psychological and Organizational Strategies* (pp. 63–80). Chichester: Wiley.

Flamholtz, E. G., & Lacey, J. M. (1981). *Flamholtz EG, Lacey JM. Personnel Management, Human Capital Theory, and Human Resource Accounting*. Los Angeles: Inst. Ind. Relat., Univ. Calif.

Freeman, C. (1982). *The Economics of Industrial Innovation* (2nd Editio.). London: Pinter.

Haar, J. M., & Spell, C. S. (2004). Programme Knowledge and Value of Work-Family Practices and Organizational Commitment. *The International Journal of Human Resource Management*, *15*(1), 1040–1054.

Hannan, M. T., & Freeman, H. J. (1977). The Population Ecology of organizations. *American Journal of Sociology*, *82*(1), 929–964.

Harney, B., & Jordan, C. (2008). Unlocking the Black Box: Line Managers and HRM-Performance in a Call Centre Context. *International Journal of Productivity and Performance Management*, *57*(4), 275–296.

Hawley, A. H. (1968). Human Ecology. In L. S. David (Ed.), *International Encyclopedia of Social Sciences* (pp. 328–37). New York: Macmillan.

Hayes, A. F. (2013). Model Templates for PROCESS for SPSS and SAS. Retrieved from http://www.afhayes.com

Hornsby, J. S., Kuratko, D. F., & Zahra, S. (2002). Middle managers' perception of the internal environment for corporate entrepreneurship: assessing a measurement scale. *Journal of Business Venturing*, *17*(3), 253–273.

Isabel, M., & Perez-Santana, M. P. (2014). Managing innovative work behavior□: the role of human resource practices. *Personnel Review*, *43*(2), 184–208. doi:10.1108/PR-11-2012-0199

Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, *73*(3), 287–302.

Jiang, K., Lepak, D., Hu, J., & Baer, J. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanism. *Academy of Management Journal*, *55*(6), 1264–1294.

Katou, A. A., & Budhwar, P. S. (2010). Causal relationship between HRM policies and organisational performance□: Evidence from the Greek manufacturing sector. *European Management Journal*, *28*(1), 25–39. doi:10.1016/j.emj.2009.06.001

Katz, M. B. (1975). *Class, Bureaucracy, and Schools: The Illusion of Educational Change in America*. New York: Praeger.

Kennedy, J. C. (1995). Empowering Employees Through the Performance Appraisal Process. *International Journal of Public Administration*, *18*(1), 793–811.

Khilji, S. E. (2002). Modes of convergence and divergence□: an integrative view of multinational practices in Pakistan. *The International Journal of Human Resource Management*, *13*(2), 232–253. doi:10.1080/09585190110102350

Kuratko, D. F., Ireland, R. D., Covin, J. G., & Hornsby, J. S. (2005). A model of middle level managers' entrepreneurial behavior. *Entrepreneurship Theory and Practice*, *29*(6), 699–716.

Lashley, C. (1999). Employee Empowerment in Services: A Framework For Analysis. *Personnel Review*, *28*(1), 169–191.

Leonard, D., & Sensiper, S. (1998). The role of tacit knowledge in group innovation. *California Management Review*, *40*(1), 112–132.

Leonard-Barton, D. (1995). *Wellsprings of Knowledge: Building and sustaining the sources of innovation*. Cambridge: MA: Harvard Business School Press.

Lepak, D. P., Liao, H., Chung, Y., & Harden, E. E. (2006). A Conceptual review of human resource management systems in strategic human resource management research. In J. J. Martochhio (Ed.), *Research in Personnel and Human Resource Management* (pp. 217–247). Bingley: Emerald Group Publishing Ltd.

Lowendahl, B. R., Revang, O., & Fosstenlokken, S. M. (2001). Knowledge and value creation in professional service firms□: A framework for analysis. *Human Relations*, *54*(7), 911–931.

Meadows, M., & Pike, M. (2010). Performance Management for Social Enterprises. *System Practice Action Research*, *23*(1), 127–141. doi:10.1007/s11213-009-9149-5

Paauwe, J. (2009). HRM and Performance□: Achievements , Methodological Issues and Prospects. *Journal of Management Studies*, *46*(1), 129–142.

Paauwe, J., & Boselie, P. (2005). HRM and Performance: What next? *Human Resource Management Journal*, *15*(4), 68–83.

Parker, S. H., Williams, H. M., & Turner, N. (2006). Modeling the antecedents of proactive behavior at work. *Journal of Applied Psychology*, *91*(3), 636–652.

Pratt, M. (2009). From the editors: The lack of a boilerplate: Tips on writing up (and rewriting) qualitative research. *Academy of Management Journal*, *52*(1), 856–862.

Purcell, J., Kinnie, N., Hutchinson, S., Rayton, B., & Swart, J. (2003). *Understanding the People and Performance Link: Unlocking the Black Box*. London: Open University Press.

Scott, W. R. (1995). *Institutions and organizations. Thousand Oaks*. CA: Sage.

Shalley, C., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: where should we go from here? *Journal of Management*, *30*(6), 933–958.

Siegall, M., & Gardner, S. (2000). Contextual Factors of Psychological Empowerment. *Pesonnel Review*, *29*(1), 703–722.

Spender, J. C. (1996). Making knowledge the basis of a dynamic theory of the firm. *Strategic Management Journal*, *17*(Winter Special Issue), 45–62.

Spreitzer, M. G. (1995). Psychological Empowerment in the Workplace: Dimensions, Measurement, and Validation. *Academy of Management Journal*, *38*(5), 1442–1465.

Subramony, M. (2009). A Meta-analytic investigation of the relationship between HRM bundles and firm Performance. *Human Resource Management*, *48*(5), 745–768.

Suddaby, R., Hardy, C., & Nguyen, H. Q. (2011). Where are the New theories of Organization? *Academy of Management Review*, *36*(2), 236–246.

Sun, L., Aryee, S., & Law, K. S. (2007). High-Performance human resource practices, citizenship behavior and organizational performance: A relational perspective. *Academy of Management Journal*, *50*(3), 558–577.

Thomas, K. W., & Velthouse, B. A. (1990). Cognitive Elements of Empowerment: An "interpretive" model of intrinsic task motivation. *Academy of Management Review*, *15*(4), 666–681.

Tsoukas, H. (1996). The firm as a distributed knowledge system: A constructionist approach. *Strategic Management Journal*, *17*(1), 11–25.

Tyack, D. B. (1974). *The One Best System*. Cambridge Mass: Harvard University Press.

Woodward, J. (1965). *Industrial Organization, Theory and Practice*. London: Oxford University Press.

ARTICLE

IMPACT OF BOARD CHARACTERISTICS AND AUDIT COMMITTEE ON FINANCIAL PERFORMANCE: A STUDY OF MANUFACTURING SECTOR OF PAKISTAN

Arfan Ali
Government College University, Faisalabad, Pakistan.

Saad Bin Nasir
Government College University, Faisalabad, Pakistan.

Abstract

The research will examine the role of corporate governance (CG) practices on firm's financial performance. Population of this research will be manufacture sector of Pakistan. For the purposes of measurement of impact of corporate governance practices such as board size, board independence, CEO/chairman duality and audit committee will take as independent variables and for the measurement of firm's performance return on assets and return on equity will take as dependent variables. Panel data regression model will used to estimate the impact of CG on firm performance.

Key Words: *Board Size, Board Independence, CEO/Chairman Duality, Audit Committee, ROA and ROE*

Introduction

Corporate Governance can be defined in a variety of ways; generally it is a system or mechanism by which organizations are controlled. It includes the set of rules and regulations that affect the decisions of managers and distribution of rights and duties among all stakeholders of the corporation such as boards, managers, shareholders and other stakeholders. Corporate governance is considered as a system by which managers are held responsible for corporate conduct and performance. Corporate governance deals with mechanisms by which stakeholders of a corporation exercise control over corporate insiders and management such that their interests are protected(Dar, Naseem, Niazi, & Rehman, 2011).

According to (López de Silanes, La Porta, & Shleifer, 1999) corporate governance is "a set of mechanisms with the help of which outsiders safeguard themselves against expropriation by the insiders. Insiders include both managers and controlling shareholders".

Numerous studies have investigated the connection between corporate governance and firm performance (Black, Jang, & Kim, 2006; Klapper & Love, 2004; Yermack, 1996) with mixed results. There is little evidence of a systematic relationship between the characteristics of the board(Bhagat & Black, 2001). (Anderson & Reeb, 2003) observed a positive relationship between corporate governance and firm performance but (O'Connell & Cramer, 2010) found a negative relationship between them. A key component in governance mechanisms is the role of the board of directors. The board of directors monitors the management and set the strategic direction for the organization. The board of directors reviews and ratifies proposals given by management, and board is the primary and dominant internal corporate governance mechanism in the organization(Brennan, 2006)

Efficient corporate governance contributes to the sustainable economic advantage by increasing the performance of corporations and increasing their access to outside capital. In new emerging markets corporate governance serves a number of public policy objectives. It reduces vulnerability of the financial crises, reduces transaction cost, capital cost and leads to market development. Corporate governance concerns the relationship among the management, board of directors, controlling shareholders, minority shareholders and other stakeholders(Dar et al., 2011).

Pakistan is one of few countries that had adopted a code of corporate governance. It was issued and finalized by Security Exchange commission of Pakistan (SECP) in March, 2002. After this, it was incorporated in all the listed companies of three stock exchanges of Pakistan i.e. Karachi Stock Exchange, Lahore Stock Exchange and Islamabad Stock Exchange.

In this study board size, board composition and ceo/chairman duality will be taken as the corporate governance mechanisms and on the other hand it is also necessary the selection process of appropriate performance measure is also impartial. Most studies used a variety of financial measures. For this study researcher will consider Return on asset and return on equity as the financial performance measure (Dar et al., 2011; Lam & Lee, 2012; Mollah, Al Farooque, & Karim, 2012; Ujunwa, 2012; Yasser, 2011).

Significance

In this research, performance of the firm will be analyzed through corporate governance because corporate governance in Pakistan is at its initial stage. So, proper application of corporate governance and its practice is not streamlined in Pakistan yet. Therefore, this research will establish an empirical relationship of corporate governance and its effects on the corporate performance. Corporate governance is an indispensable element for firm's performance as well as the growth of the economy of country. This research is going to be conduct in the manufacturing sector of Pakistan. It will helpful for any sector to gain competitive edge by implication of corporate governance practices in the company, also to maximize performance of the firm. Further it will facilitate the policy makers to take appropriate measures to ensure effective implementation of corporate governance practices in Pakistan.

Objectives

To find out the effect of board size on financial performance.

To measure the impact of board composition on financial performance.

To evaluate the effect of CEO/chairman duality on financial performance.

To calculate the effect of audit committee on financial performance

To define the areas of improvement in manufacturing sector regarding corporate governance.

Literature review

According to Paul, Friday, and Godwin (2011)board composition and corporate performance do not have significant relationship with each other and decided that firm performance cannot be enhanced by increasing the number of Non-Executive directors in the board.

Lam and Lee (2012) in their study concluded that ceo/chairman duality has a significant but negative impact on firm performance (ROE and ROA). But the nominated board has a positive and significant impact on ROE.

While conducting a study Brennan (2006) founded that board size and ROA are positively related. At the same time board composition don't have significant relationship with firm performance. They stated that CEO duality and firm performance are negatively related.

Joh (2003), in their study investigated that board composition has a negative relation with firm performance. They suggested that CEO duality should not be there for better firm performance.

Ponnu (2008) found that non-executive directors were positively associated with profitability. Mollah et al. (2012) concluded that "if non-executive directors resulted in effective monitoring, their effectiveness would increase in line with their board representation. Lam and Lee (2012) described that firms with higher numbers of outside directors on the board had a greater return on equity than the board with executive directors.

Heenetigala and Armstrong (2011)concluded that duality of CEO has a negative impact of firm's performance. Their study showed that one person at two positions is not a desirable situation for an organization. 2002 Moore suggests that separating the role of chairman and CEO. This situation often creates conflicts because BOD's is to monitor the CEO. In case of duality there must be misuse of power and chances of corruption may increase. Heenetigala and Armstrong (2011) founded that Ceo/chairman duality is negatively related to firm performance.

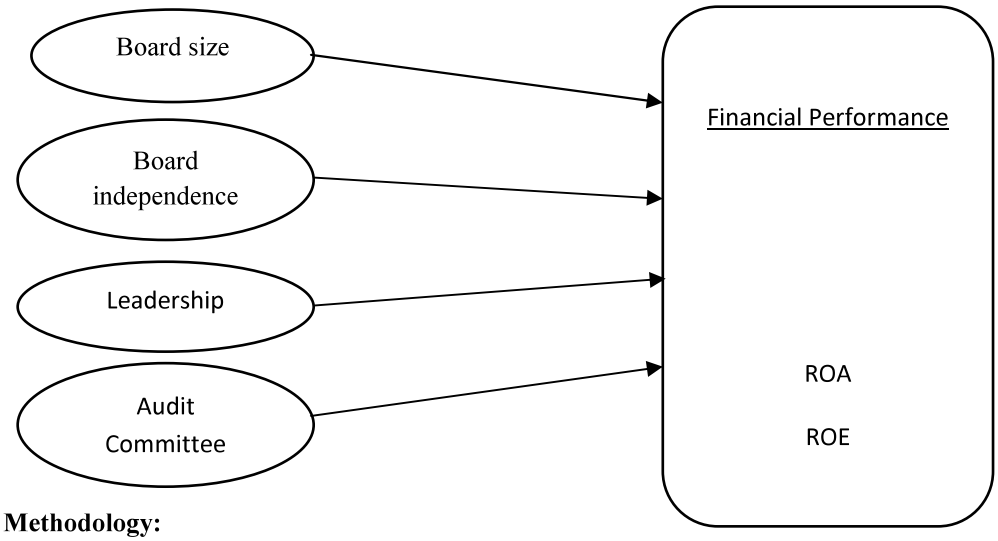
According to Lam and Lee (2012)Board of directors is the most influential aspect of corporate governance as they are responsible to plan and decide for the company. It is the board of directors that prevents the company and stakeholders from the conflict of interest in order to enhance the financial performance of the firm. Decision about board size is a critical area of concern for company as it affects performance a lot. Board effectiveness can be measured by different parameters such as size, structure, duality and part in ownership.

Dar et al. (2011) described that, Board of directors is the central point of corporate governance practices that plays a significant role in the implementation of corporate governance practices in the company. Board size is negatively correlated with firm's financial performance because when the size of board of directors increases the problems of communication and coordination increases No doubt small size increases the efficiency but firms also lose the benefits of diversity in terms of experiences and knowledge.

Ujunwa (2012) described that CEO duality is negatively associated with firm. This finding is consistent with the agency theory which posits that board duality promotes CEO entrenchment by reducing board monitoring effectiveness and impedes firm performance. her is significant negative relationship between board size and performance. This implies that as the size of a firm's board increases, the less the degree of its impact on the financial performance on the firm.

Heenetigala and Armstrong (2011) Concluded that independent board are having greater ROA as compared to companies having dependent board, which as a result is show greater firm's performance. Companies having independent are having greater ROE as compared to companies having dependent board, which as a result is showing greater firm's performance.

Theoretical framework



Methodology:

In this part definition of the variables, model, and all the measures that will use to determine the role of corporate governance on firm's performance. Target population for this research will be manufacturing sector of Pakistan; Sample size for this study will be chemical, pharmaceutical, sugar, cement, leather, paint and steel industries in Pakistan. Data for the corporate governance mechanism and financial performance will collect form annul audited reports of companies over the year of 2007 to 2011. The years 2007 to 2011 selected because this study seeks to examine the post effect of the implementation of Code of Corporate Governance issued in 2002.

Further data will collect from following sources:

- Audited financial reports published by companies and available on the websites of corporate.
- State bank of Pakistan's reviews about the performance manufacturing sector of Pakistan.
- Publications by KSE about firm's performance.
- Publications by Pakistan institute of corporate governance.

Panel data regression model will use for the purpose of data analysis. As our data will be cross sectional and time series data that is why we are using panel data approach to conduct our research and to find out results. T-test will apply to cheek the validity of results obtained from regression model. F-test will apply to cheek the impact of all the independent variables on dependent variable. Weather all independent variables as whole have some impact on dependent variable or not? Coefficient of determination (R2) will tell us how much variation occurs in dependent variable (firm performance) due to change in independent variables (corporate governance mechanisms).

Variables

Variables	*Definition*
Independent variables	
Board size	total number of members in the board of directors
Board independence	% of non-executive director to executive directors
Leadership	Value (0) if no duality and (1) if duality exist.
Audit Committee	Operating committee of the Board of Directors.
Dependent variables	
Return on assets	Net income / book value of total assets
Return on equity	Net income /shareholders equity

Analytical Technique

The characteristics of the sample was cross-sectional and time, the regression model of panel data has been applied to the effects of the characteristics of the board of control of the financial performance of the company. This study used panel data regression for autocorrelation of variables to eliminate time-series heteroskedasticity want to know heterogeneity

Here in this study is time-series and cross-section as the data and the regression model of panel data were used for analysis and to determine the effect of governance mechanisms on firm performance. There are other names for the panel data, such as pooled data (pooling of time series and cross-sectional observations), combination of time series and cross-section data, micro-panel data, and longitudinal data (an extension the study of a variable or a group of subjects (Gujarati, 2003).

In previous studies (Yermack 1996, Villalonga and Amit 2006, Abor and Biekpe 2007, Pucheta ‑ Martínez and De Fuentes 2007, Di Pietra, Grambovas et al. 2008, Ehikioya 2009) regression model of panel data and found that the use of the regression model of panel data to measure a good fit of the relationship between governance mechanisms and strong financial performance of the company.

There are some advantages of panel data. In this study, the panel data concern the company over time, the heterogeneity is related to that information. Regression techniques of panel data, this heterogeneity into account specific individual variables. The combination of cross-sectional and time-series observations, data more informative panel offers more variety, less collinearity among the variables.

Panel data in a better way that just does not minimize the effects in pure or pure time-series cross data. It biasness were caused by separated at the company data are large aggregates (Gujarati) can be used divided are observed can be measured.

In this study, descriptive statistics were used to determine the average value of different variables. The reason for using descriptive statistics to determine whether to make the various listed on the Karachi Stock Exchange, a significant difference in the variable depending on the type of business and a better explanation of the relationship between corporate governance and financial performance.

Companies can t-test was also used for the validity of the audit results of the regression model. F-test of the effect of the independent variable to control the dependent variable. Of all the independent variables as a whole have certain effects on the dependent variable or not?

Statistical Model

The statistical model developed for this study, to investigate. On a sound financial performance, the effect of boards of variables is a statistical model for relations between variables in the form of mathematical equations that shows how a variable to make other variables statistically related.

Overall, two regression models with panel data developed two dependent variables in this study were used, and a model for each variable, two models developed for the sample.

The statistical model for this study is as follow:

$Y = \beta□ + \beta 1G + \varepsilon$ …………………………………………. (1)

Where in equation (1) "Y" is dependent variable representing firm performance; Return on asset, Return on equity and Net profit margin. "β□" is constant "β1" is coefficient of explanatory variable (corporate governance mechanisms) and "G" is explanatory variables; Board Size (BSIZE), Board Independence (BINDPN), and Leadership (LSHIP). "ε" is error term, it is assumed to remain constant and have zero mean over the time.

Model will rewrite separately for both performance measures of firm which is being measure by ROA and ROE.

ROA = α + b1 (BSIZE) + b2 (BINDPEN) + b3 (LISHIP) + b4 (AUDCOM) + e……. (1)

ROE = α + b1 (BSIZE) + b2 (BINDEPN) + b3 (LISHP) + b4 (AUDCOM) + e……. (2)

Where:

ROA = Return on Asset

ROE = Return on Equity

AUDCOM= Audit Committee

BSIZE = Board Size

BINDEPN = Board Independence

LSHIP = CEO/chairman duality

e = error term

Research Hypothesis

Hypothesis of this research are as following:

Board size:

Ho1:b1=0

Board size has no impact on firm performance.

Ha1:b1≠ 0

Board size has some impact on financial performance

Board independence:

Ho2:b2=0

Board independence has not any significant impact at firm's performance.

Ha2: b2≠ 0

Board independence has significant impact at firm's performance.

Leadership :

Ho3: b3=0

Leadership does not affect firm performance

Ha3: b3≠0

Leadership is a causal factor of firm performance

Audit Committee

Ho4: b4=0

AUDC has not any significant impact at firm's performance.

Ha4: b4≠0

AC has some impact on financial performance

Results

Panel data regression analysis:

The multiple regression analysis with the panel data provides the evidence of the effect of corporate governance and firm financial performance.

4.1.1 Rerun on Asset as performance indicator:

Table 4.1

Descriptive Statistics

	MEAN	MINIMUM	MXIMUM
ROA	14.347	-30.54	63.72
BSIZE	8.70	7.00	15.00
DUAL	.625	.00	1.00
BCOMP	.467	.25	.90
AUDTCOM	.73	.50	1

Table 4.2

Pooled OLS Regression

Coefficients

Variables	Coefficients	t-value
(Constant)	-21.557 (7.918)	-2.722
BSIZE	1.985 (.568)	4.782***
DUAL	-.164 (2.353)	-.070
BCOMP	19.643 (5.519)	3.559***
AUDCOM	13.059 (7.651)	1.707*
R Square	.132	
F-statistic	7.424***	

4.2.1 <u>Rerun on Equity as performance indicator</u>

Table 4.3

Descriptive Statistics

	MEAN	MINIMUM	MXIMUM
ROE	30.57	-28.96	72.87
BSIZE	8.70	7.00	15.00
DUAL	.625	.00	1.00
BCOMP	.467	.25	.90
AUDTCOM	.73	.50	1

Table 4.4

Pooled OLS Regression

Coefficients

Variables	Coefficients	t-value
(Constant)	-74.622 (27.065)	-2.722
BSIZE	5.393 (1.940)	2.779***
DUAL	14.272 (8.044)	1.774*
BCOMP	32.221 (18.864)	1.708*
AUDCOM	46.859 (26.151)	1.792*
R Square	.089	
F-statistic	5.860***	

Discussion

Results indicate that on average return on asset of each company in sample is 14.347 %. Return on equity of each firm on average is 30.57%. on average each firm has a board size of 9 board members with a 6.5% non-executive directors on board. It means that on average each board with 9 members contains 4 non-executive directors.

From the descriptive statistics it is being clear that, 62.5% firms in total sample practice separate leadership style in which chair of CEO and Chairman is held separately by two different persons. Similarly on average audit committee of each firm contain 73% non-executive directors committee.

Board Size

Board size has significant positive impact on the performance of firm with both performance indicators or return on asset and return on equity. Value of coefficients for both return on asset and return on equity are 1.985 and 5.393 respectively. This impact is highly significant at 1% level.

Based on these results this study accepts hypothesis H1a for manufacturing firms is accepted and H1o is rejected. From these results it is being clear that board size has significant positive explanatory power to influence the all firm performance measures. The result regarding the relationship between board size and firm performance supports the view of (Cheng, 2008; Dwivedi & Jain, 2005; Georgiou, 2010; Larmou & Vafeas, 2010; Pearce & Zahra, 1992; Rashid, 2009; Sanda et al., 2005; Yasser et al., 2011).

The reasons of positive impact of board size on firm performance may be that,. Boards with large size are expected to have representation of people with diverse backgrounds and they are expected to bring knowledge, wider perspective and intellectuals to the board (Mollah et al., 2012). The large board size is a helpful governance mechanism to control the management. It may provide more effective monitoring of the current activities of the company (Georgiou, 2010; Perry & Shivdasani, 2005)

Large boards have lower variability of financial performance due to the fact that large boards tend to make less extreme decisions through consensus and this leads to less variation in performance (Cheng, 2008).

CEO and Chairman Duality

Separate leadership style has significant positive impact on the performance of firm with both performance indicators. Coefficients for both return on asset and return on equity are -.164 and 14.272 respectively. This impact is significant at 10% level with return on equity only but not statistically significant with return on equity; indicating that separate leadership of firm will increase the performance of firm.

Based on these results this study accepts hypothesis H2a for manufacturing firms is accepted and H2o is rejected. The results of separate leadership are in line with the results of some previous studies of (Braun & Sharma, 2007; Ehikioya, 2009; Kajola, 2008; Ponnu, 2008; Sanda et al., 2005; Yermack, 1996).

The probable reasons of positive impact of separate leadership are that; the separate leadership is the best option for the roles of chairman and CEO. It will help the board to be in a position to monitor the management. The role of board of directors in any firm is to supervise or monitor the work of management. Head of management is chief executive officer or CEO and head of board of director is Chairman. If the seat of CEO and Chairman is held by same individual, then the true essence of monitoring role of board could not be played successfully. That is why separate leadership leads to increase in performance of firm (Georgiou, 2010).

Separate leadership is encouraged in the context of agency theory; implying that Duality leadership gives enormous power and authority to the CEO, which not only weakens the board and such a powerful CEO may affect the activities of board; such as formation of board committees in pursuant to his personal interest; manipulate the meetings of the board by not raising an important agenda It may reduce the board’s ability to exercise the governance function and create a conflict between management and board that may reduce firm performance (Rashid, 2009)

Board Composition

Board composition has significant positive impact on firm performance with both performance indicators of return on asset and return on equity. Beta values indicate that return on asset and return on equity will change with 19.643 and 32.221 respectively. This impact is significant at 1% with return on asset and at 10% with return on equity. Based on these results, we accept alternative hypothesis H3a for manufacturing firms is accepted and H3o is rejected.

Overall the board structure has significant impact on the performance of firm. The results of board structure variable are in consistent with the previous results of (Demb & Neubauer, 1992; T.-y. Lam & S.-k. Lee, 2012; Rashid, 2009; Sanda et al., 2005; Q.R. Yasser, 2011).

Reason of their positve impact on the performance of firm may be that; non-executive directors are competent enough to perform their tasks and they have inside information of the firm (Nicholson & Kiel, 2007).

Non-executive directors are needed on boards to monitor and control the actions of executive directors due to their opportunistic behavior and act as the checks and balances in enhancing boards' effectiveness (Jensen & Meckling, 1976). Additionally, non-executive directors might be considered to be "decision experts" (Fama & Jensen, 1983), independent and not intimidated by theCEO (Weisbach, 1988), able to reduce managerial consumption of perquisites (Brickley & James, 1987) and act as a positive influence over directors' deliberations and decisions (Pearce & Zahra, 1992). According to the Tricker (1984) the presence of non-executive directors on boards provides "additional windows on the world". This is congruent with the resource dependence theory, which proposes that non-executives directors act as middleman between companies and the external environment due to their expertise, prestige and contacts.

Audit Committee

Audit committee has also significant positive impact on the performance of firm. Beta values with both return in asset and return on equity are 13.059 and 46.859 respectively. This impact is significant at 15 levels. Based on these results this study we accept alternative hypothesis $\mathbf{H_4a}$ for manufacturing firms is accepted and $\mathbf{H_4o}$ is rejected.

These results are in line with the previous study of (Jensen, 1993; Vafeas, 1999; Q.R. Yasser, 2011). Audit committees being occupied by majority of nonexecutive directors have positive influence on the firm's performance. This is because this study shows that the strong relationship between the audit committee and the two performance measures is statistically significant. This result is consistent with some previous studies such as Klein (2002) and Mansi and Reeb (2004), they also reported strong positive relation-ship between audit committee and the performance variables they used in their studies.

General Findings

General findings of this study are;

- Board size has positive significant impact on the performance of firm.
- Non-CEO/Chairman Duality has significant positive impact on the performance of firm
- Board composition or non-executive directors on board have also significant impact on the performance of firm.
- Audit committee has also significant positive impact on the performance of firm. More non-executive directors on board have positive impact on the performance of firm.

- All board characteristics have significant positive impact on the performance of firm.

Suggestion

On the base of this study followings are some suggestion:

- Overall corporate governance has significant impact on the performance of firm so regulators should give more importance to governance issues.
- Large board size is recommended for the manufacturing sector of firms listed on Karachi Stock Exchange; it will help to debate the issues in detail and large number of directors with miscellaneous background and knowledge. It will help to increase the financial performance of firm.
- Separate leadership is appropriate in Pakistani context as it will helpful to protect the interest of shareholders and other stakeholders as well. Duality leadership gives vast power and authority to the CEO, which not only deteriorates the board as a proficient board. Such a powerful CEO may disturb the activities of board.
- Non-executive directors on board are required on board and supportive for the observing purposes that is why they are recommended to be on the board.
- Audit committee with more non-executive directors I also recommended for the improved firm performance. More representation of non-executives on the audit committee will lead toward improved check and balance on the activities of firm.

References

Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: evidence from the S&P 500. *The Journal of Finance, 58*(3), 1301-1327.

Bhagat, S., & Black, B. (2001). Non-Correlation between Board Independence and Long-Term Firm Performance, The. *J. CorP. l., 27*, 231.

Black, B. S., Jang, H., & Kim, W. (2006). Does corporate governance predict firms' market values? Evidence from Korea. *Journal of Law, Economics, and Organization, 22*(2), 366-413.

Brennan, N. (2006). Boards of directors and firm performance: is there an expectations gap? *Corporate Governance: An International Review, 14*(6), 577-593.

Dar, L. A., Naseem, M. A., Niazi, G., & Rehman, R. U. (2011). Corporate Governance and Firm Performance: A Case Study of Pakistan Oil and Gas Companies listed In Karachi Stock Exchange. *Global Journal of Management And Business Research, 11*(8).

Heenetigala, K., & Armstrong, A. (2011). The Impact of Corporate Governance on Firm Performance in an Unstable Economic and Political Environment: Evidence from Sri Lanka. *Available at SSRN 1971927*.

Joh, S. W. (2003). Corporate governance and firm profitability: evidence from Korea before the economic crisis. *Journal of Financial Economics, 68*(2), 287-322.

Klapper, L. F., & Love, I. (2004). Corporate governance, investor protection, and performance in emerging markets. *Journal of Corporate Finance, 10*(5), 703-728.

Lam, T. Y., & Lee, S. K. (2012). Family ownership, board committees and firm performance: evidence from Hong Kong. *Corporate Governance, 12*(3), 6-6.

López de Silanes, F., La Porta, R., & Shleifer, A. (1999). Corporate ownership around the world. *Journal of finance, 54*(2), 471-517.

Mollah, S., Al Farooque, O., & Karim, W. (2012). Ownership structure, corporate governance and firm performance: Evidence from an African emerging market. *Studies in Economics and Finance, 29*(4), 301-319.

O'Connell, V., & Cramer, N. (2010). The relationship between firm performance and board characteristics in Ireland. *European Management Journal, 28*(5), 387-399.

Paul, A., Friday, O., & Godwin, O. (2011). Board Composition and Corporate Performance: An Analysis of Evidence from Nigeria. *Research Journal of Finance and Accounting, 2*(4), 64-73.

Ponnu, C. H. (2008). Corporate governance structures and the performance of Malaysian public listed companies. *International Review of Business Research Papers, 4*(2), 217-230.

Ujunwa, A. (2012). Board Characteristics and the Financial Performance of Nigerian Quoted Firms. *Corporate Governance, 12*(5), 5-5.

Yasser, Q. R. (2011). Corporate governance and performance: An Analysis of Pakistani listed firms. *Global Journal of Management And Business Research, 11*(10).

Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of financial economics, 40*(2), 185-211.

They who do not read can have nothing to think and little to say.

Dr. Johnson

ARTICLE

'BUT MATH IS *MY* SUBJECT' - A STUDY OF MOTIVATIONAL BELIEFS AND SELF-REGULATED LEARNING AS A PREDICTOR OF GOAL ORIENTATION IN SECONDARY SCHOOL STUDENTS

Shamila Nabi Khan
Lahore School of Economics, Lahore, Pakistan

Maria Khan
Account Supervisor, Interflow Communications, Pakistan

Abstract

The relations between three goal orientations and students' motivational beliefs and self-regulated learning were examined in a study of 210 students of grade 7-9. Data collected were self-reported questionnaires from several different schools for two major academic subject areas: English, and Math. SEM analyses revealed that generally positive pattern of motivational beliefs including adaptive levels of task value, as well as cognition including higher levels of cognitive strategy use, self- regulation, and academic performance and negative patterns of test anxiety resulted in learning goal orientation. Higher levels of self-efficacy and cognitive strategy use also leads to relative ability goal orientation while higher level of test anxiety and relatively lower intrinsic value led to performance approach goal orientation. Results are discussed in terms of the implications for goal theory.

Introduction

Consider this situation: A student enters his school to receive his result card. English and Math are both major subjects. As he opens the report he jumps with joy to find out that he has achieved an A grade in Math. As his teacher demands an explanation for his average grade in English he responds 'But math is *my* subject'. In an attempt to explore what the student means and how he determined that his subject *is* Math we build on this observation, aiming to understand such actions.

Research has suggested that the students can choose from two different goal orientations i.e. learning goal orientation and a performance ability goal orientation. In the former the student is concerned with understanding and learning the concepts whereas in the latter he is concerned about his relative ability and performance according to his peers.

It is important to know the effect a specific goal orientation has on the student's learning and academic performance. The need to investigate and explore students' motivation for schoolwork and the factors that are leading to low/high academic performance and grades presented a wide gap in the literature for research.

Hence, this research sets forth to find out: Do beliefs alter the goal orientation of students? Do students perform good/bad based on their goals? Does motivation and self-regulation play a role in identifying student goals?

This study is conducted in order to examine the relationship between the three different goal orientations such as learning goal orientation, relative ability goal orientation and performance avoidance goal orientation and their effects on the students' motivational beliefs, self-regulated learning and academic performance.

Identifying factors that influence student achievement and motivation to learn in the classroom continues to be a goal of education researchers (Eggen & Kauchak, 1999). Students who follow learning goal orientation focus on the learning of the material and believe that their effort will lead to the mastery of the material and hence success (Ames, 1992). Students who have positive self-efficacy and follow this orientation should not feel under pressure about succeeding (Pintrich & Schunk, 1996). On the other hand, performance ability goal orientation has been related to value for learning i.e. the intrinsic interest of the students (Ames, 1992). According to the above-mentioned findings, the following relationship has been developed; the learning goal orientation would have a negative relationship to the test anxiety and a positive relationship with the task value and self-efficacy.

Goal orientation examines the behavior of individuals in terms of their approach towards achievement. Diener and Dweck (1980) were interested in finding as to why some students were adaptive while others were maladaptive and showed helplessness when working on certain types of tasks. They defined adaptive behaviours as those that promote the establishment, maintenance and attainment of personally challenging and personally valued goals.

Dweck and Leggett (1988) defined goal orientation as a uni-dimensional construct, where it was assumed that the learning goals and performance goals were mutually exclusive (Butler 1987; Elliot and Dweck, 1988; Muller and Dweck, 1998). Covington (2000) also contributed with an important finding that academic goals initiate gaining knowledge. Thus learning goal leads to deep level learning and academic success, while performance goals results in a shallow processing, influencing negatively.

Achievement goal theory has emerged as another important aspect of motivational research (Dweck & Leggett, 1988; Harackiewicz & Elliot, 1996; Maehr, 1989, Nicholls, 1989; Weiner, 1990). The focus is on how students think about themselves, their tasks, and their performance rather than conceiving of students as possessing or lacking motivation, (Ames, 1987). Goals provide a framework within which individuals interpret and react to events, and result in different patterns of cognition, affect, and behavior (Dweck & Leggett, 1988). There are two types of achievement goals, the goal to develop ability and the goal to demonstrate ability. Similarly, we will examine three types of goal orientations in terms of students' motivational beliefs and performance.

The study sets to research different goal orientations with respect to students' motivational beliefs, self-regulated learning and academic performance. The purpose of this research is to determine the effect of different motivational beliefs and regulation strategies on the goal orientation of the students.

The proposed research is of importance to students and teachers who can recognize the implications of different goal orientations on the academic performance. This study will be useful for the students and will help them to cope with factors like test anxiety, intrinsic value and self-efficacy in order to improve their learning and performance. Teachers will be able to understand the factors that lead to students' academic performance and will help them to adopt strategies in teaching and developing classroom tasks that will increase the student motivation that will in return increase their productivity and achievement.

Research Question

Hence, the research question for this study is as follows:

> What is the relationship between a goal orientation (learning, relative ability and performance avoidance) and students' motivational beliefs and self-regulated strategies?

Theoretical Development

Goal Orientation:

The more optimistic pattern of responding reflects an orientation toward learning goals, characterized by a desire to increase one's competence through mastering new problems and skills. A learning goal orientation is typically accompanied by persistence when faced with obstacles; willingness to try varied problem-solving strategies, and enjoyment of challenges. A performance goal orientation is characterized by a desire to elicit favorable judgments of one's performance and to avoid negative evaluations. This often translates into a preference for easier tasks that ensure success, low persistence and deteriorating performance when faced with obstacles, and heightened performance anxiety and task aversion.

Underlying a learning goal orientation is the belief that effort is a means to success and that effort actually enhances ability. A performance goal orientation, on the other hand, reflects belief in an inverse relationship between effort and ability. Greater effort indicates lower ability; if a task is difficult, one must not have much ability in that area. Students may give up at attempts to achieve because they feel that their efforts are ineffective (Dweck and Reppucci, 1973; Licht and Dweck, 1984). For example, Schraw et al. (1995) found that students with a strong learning goal orientation performed better in an introductory science course than students with a weak learning goal orientation. Consistent with Dweck's model, learning goals facilitated the development of adaptive cognitive skills such as use of varied learning strategies and metacognitive awareness. Contrary to Dweck's model, however, performance goals were unrelated to course achievement.

The relationship between performance goals and achievement is complex. A strong performance goal orientation combined with low confidence tends to impair achievement. In contrast, children with a performance goal orientation can maintain academic success if they have high confidence in their abilities, but they tend to avoid challenges and worry about doing well (Dweck, 1986; Smiley and Dweck, 1994). According to Dweck and Leggett (1988), there needs to be a balance between learning and performance goals in order to have optimal results. Performance goals can serve to provide objective feedback about one's strengths and weaknesses but they can become problematic and can lead to impaired performance in the face of challenges.

Different patterns of motivation have been identified by researchers where a student is either motivated to learn and understand more or is motivated due to some external benefit like grades. Dweck and Elliot (1983) called them learning and performance goals, whereas Nicholls (1984) identified them as task-involved versus ego-involved orientations, and Harter (1981) characterized them as a dichotomy between intrinsic and extrinsic goal orientations. Individuals with a performance goal orientation believe that intelligence is fixed (Dweck and Leggett, 1988), and that it cannot be changed or improved (Leggett, 1985). Those who are learning oriented on the other hand believe that intelligence is incremental (Leggett, 1985), and it can be changed or increased through effort (Dweck and Elliott, 1983). Individuals also have different approaches towards effort and ability. Learning goal oriented individuals see effort as a means of increasing intelligence, whereas performance goal oriented students see it as an evidence of low intelligence (Dweck and Elliott, 1983). Therefore such individuals when faced with a failure situation develop a helpless response, which results in bad performance (Elliott and Dweck, 1988). An individual's implicit beliefs about ability and effort, therefore, may be at the root of adaptive and maladaptive achievement learning patterns (Dweck and Leggett, 1988).

Independent variables:

Self-efficacy:

Academic self-efficacy refers to subjective convictions that one can successfully carry out given academic tasks at designated levels (Schunk, 1991). According to an article on self-efficacy and academic achievement, students with low self-efficacy believe that intelligence is inborn and it cannot be changed whereas students with high self-efficacy believe in learning and mastering the material and out performing others. Generally, self-efficacious students are able to perform better because they believe in effort and perseverance, as they are able to face the challenges. Researchers have consistently demonstrated that perceptions of self-efficacy, or beliefs in one's own abilities to realize desired outcomes, play a critical role in determining people's subsequent functioning, adaptation, and attainments (Bandura, 1995, 1997).

Self-efficacy has received particular attention in educational research (Pajares, 1996; Pintrich & Schunk, 1996) because of its apparent appeal and usefulness in explaining student motivation and behavior. Investigators have found that students with a strong sense of self-efficacy are motivated to engage in challenging academic task, they set higher goals for academic achievement, invest more effort and persist longer in accomplishing those goals and feel less anxious in academic contexts (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Bandura & Schunk, 1981; Lent, Brown, & Larkin, 1984; Pajares & Miller, 1994; Pajares, Miller, & John son, 1999; Pintrich & De Groot, 1990; Schunk & Ertmer, 1999; Schunk & Swartz, 1993; Zimmerman, Bandura, & Martinez-Pons, 1992; Zimmerman & Kitsantas, 1999; Multon, Brown, & Lent, 1991).

Hypothesis 1: There is a relationship between goal orientation and self-efficacy.

Task value:

Task value is defined as an incentive to engage in academic activities, which represent some perceived importance and interest (Wigfield & Eccles, 1992). Educational, vocational and other achievement related choices are most directly related to two sets of beliefs; the individual expectations for success and the importance or the value individual attaches to the various options perceived by the individual as available. Individuals choose from among several options, they do not actively or consciously consider the full range of objectively available choices. Many options are never considered because the individual is unaware of their existence. Furthermore, the choice is often between two or more positive options or two options having both positive and negative components. Individuals will then choose those tasks or behaviours that have relatively high positive value.

Research has majorly focused on off-task behavior as an indicator of students breaking class norms and as deviant behavior with negative consequences for student learning (Doyle 2006; Emmer and Slough, 2001). Conversely Hofer (2007) argued that students do display off-task behavior because they try to reach non-curricular goals aside from their learning goals. They face a conflict between two alternatives that offer positive incentives but cannot be reached at the same time. After having decided for one option, be it on task or off task behavior, students experience motivational interference due to the motivational properties of the non-chosen option interfering with the behavior being performed (Kilian et al., 2010).

Miller and Brickman declared that individuals' future goals may become a "driving force". Studies carried out by researchers (Greene, Miller, Crowson, Duke, & Akey, 2004) have demonstrated that individuals' task value, which they call "perceived instrumentality", would predict the adoption of a mastery goal. Moreover students would only put effort when they perceive the goals to be important to them in future and would not pursue those goals that they perceive are not useful to them in future. Hence, the following hypothesis was developed.

Hypothesis 2: There is a relationship between adoption goal orientation and task value.

Test anxiety:

Identifying factors that influence student achievement and motivation to learn in classroom continues to be a goal of education researchers (Eggen & Kauchak, 1999). Lewin's field theory (1936, 1942) suggests that one's behaviours are a function of their personal characteristics and of their environment. Test anxiety is one learner characteristic that is applicable to educational practice (Printich & Schunk, 1996). Most prominent researchers viewed test anxiety as a trait- a relatively stable personality characteristic that prompts an individual to react to threatening situations with sometimes debilitating psychological, physiological and behavioural responses. There is an extensive amount of empirical evidence of the test anxiety on academic performance. In one study Hembree (1988) found that test anxiety routinely causes poor performance. Hill and Wigfield (1984) reported studies with correlations upto -60 between test anxiety and achievement share significant variance. Also researchers discovered that the impact of test anxiety on student's performance is often influenced by the evaluation practices of the classroom teacher (Maehr & Midgley, 1991; Pintrich & Schrauben, 1992). Zatz and Chassin (1985) found that students with high test anxiety perform more poorly on test than do students with low or medium test anxiety only in classes where the threat of evaluation is high.

According to an article on the causes, effects and treatment of Test anxiety, test anxiety causes poor performance. It is indirectly related to the students' self-esteem and directly related to fear of failure and negative evaluation. Conditions (causes) giving rise to differential test anxiety levels include ability, gender, and school grade level. A variety of treatments are effective in reducing test anxiety.

Hypothesis 3: There is a relationship between goal orientation and text anxiety.

Self-regulation:

Self-regulation refers to self-generated thoughts, feelings, and actions that affect a student's academic motivation and learning. Effective self-regulation depends on students developing a sense of self-efficacy for learning and performing well. Students with high self-efficacy are more likely to engage in activities, work harder, persist longer when they encounter difficulties, use effective learning strategies, and demonstrate higher achievement.

Success in self-regulation depends on self-monitoring. The process of self-monitoring is not simply a mechanical audit of one's performances. Self-observation serves at least two important functions in the process of self-regulation. It provides the information needed for setting realistic goals and for evaluating one's progress toward them.

Hypothesis 4: There is a relationship between goal orientation and self-regulation.

Cognitive strategy use:

Learning strategies defined globally as "mental processes that learners can deliberately recruit to help themselves learn and understand something new" are regarded as essentials of self-regulated learning. The literature presents different taxonomies to define and classify learning strategies (Dansereau et al., 1983; Pintrich & Garcia, 1991; Weinstein & MacDonald, 1986; Weinstein & Mayer, 1986). Most common is dividing them into broad domains: cognitive and metacognitive strategies. Cognitive strategies, basically consisting of rehearsal, elaboration and organization, help students encode, organize and retrieve new information. Metacognitive strategies, basically consisting of planning, monitoring, and regulating, help students control and execute their learning processes (Gall, Jacobson, & Billock, 1990; Pintrich, 1988). Furthermore cognitive strategies are classified into surface cognitive strategies, which help encode new information into short-term memory, and deep cognitive strategies, which facilitate long term retention of the target information (Graham & Golan, 1991; Nolen, 1988; Nolen & Haladyna, 1990; Pintrich & Garcia, 1991).

The finding of Pintrich and Garcia (1991) is that an intrinsic or learning orientation is linked clearly to the use of cognitive strategies, like elaboration and organization, which result in a deeper processing of a course material, as well as self-regulatory strategies and rehearsal strategies are weakly related to both the orientations. According to one study on college students it was seen that mastery goal orientation predicts use of cognitive and metacognitive strategies use and relative ability or ego-social orientation predicts surface cognitive strategy use. Work-avoidant goal orientation relates negatively to deep cognitive and metacognitive strategy use.

Cognitive strategies that a student uses can be used to gauge their commitment level. Such strategies directly affect the learning of the students. In general, cognitive strategies have been divided into two categories, surface strategies and deep strategies (Marton & Saljo, 1976; Marton, Hounsell & Entwistle, 1984; McKeachie, Pintrich, Yi-Guang, & Smith 1986; Pintrich, 1989). Not surprisingly, deep cognitive strategies generally produce better understanding of course material than do surface strategies (Pintrich & Garcia, 1991). Deep cognitive strategies require the students to be deeply involved in the material then surface level strategies. Students who are self-regulated learners are aware of the usage of these strategies and know how to use them and when. Many do such learning without being aware of it.

Many factors affect the use of cognitive strategies, one such factor being motivation, which is taken here from goal orientation perspective (Ames, 1992). It has been shown through research the link between goal orientation and cognitive strategy use (Pintrich and Schrauben, 1992). Students who adopt intrinsic goal orientation use deep level cognitive strategies than those who adopt extrinsic goal orientation (Anderman and Young, 1994; Graham and Golan, 1991; Pintrich, Roeser, and DeGroot, 1994; Vermetten, Lodewijks and Vermunt, 2001). Because of these relations, individuals are divided into two categories, learners and students. Learners are the ones who are more engaged and involved and adopt intrinsic orientation whereas students are the ones who adopt extrinsic orientation and they do what is the demand of the course.

Hypothesis 5: There is a relationship between goal orientation and cognitive strategy use.

Performance:

A student's academic performance is truly the gauge by which people determine a person's intelligence and success. "Academic performance reflects how well an individual performs on various academic-related tasks over a period of time. It is an indicator of learning, but can also be an indicator of motivation, time management, and written communication skills" (Payne et al., 2007). Performance is really the only indicator by which to measure a person's success. Thus, it can be impacted by many different variables.

Student achievement is significantly impacted by student motivation and self-concept (McInerney et al., 2001). Further, the higher a student's academic self-concept, the higher the student's academic achievement (Marsh & Scalas, 2010). Thus, the relationship between self- concept and achievement cannot be ignored. Additionally, students who adopt a learning goal orientation in the classroom show higher levels of achievement (Harris & Harris, 1987).

Hypothesis 6: There is a relationship between goal orientation and performance.

Hence, from the literature presented the theoretical framework (Figure 1) was developed.

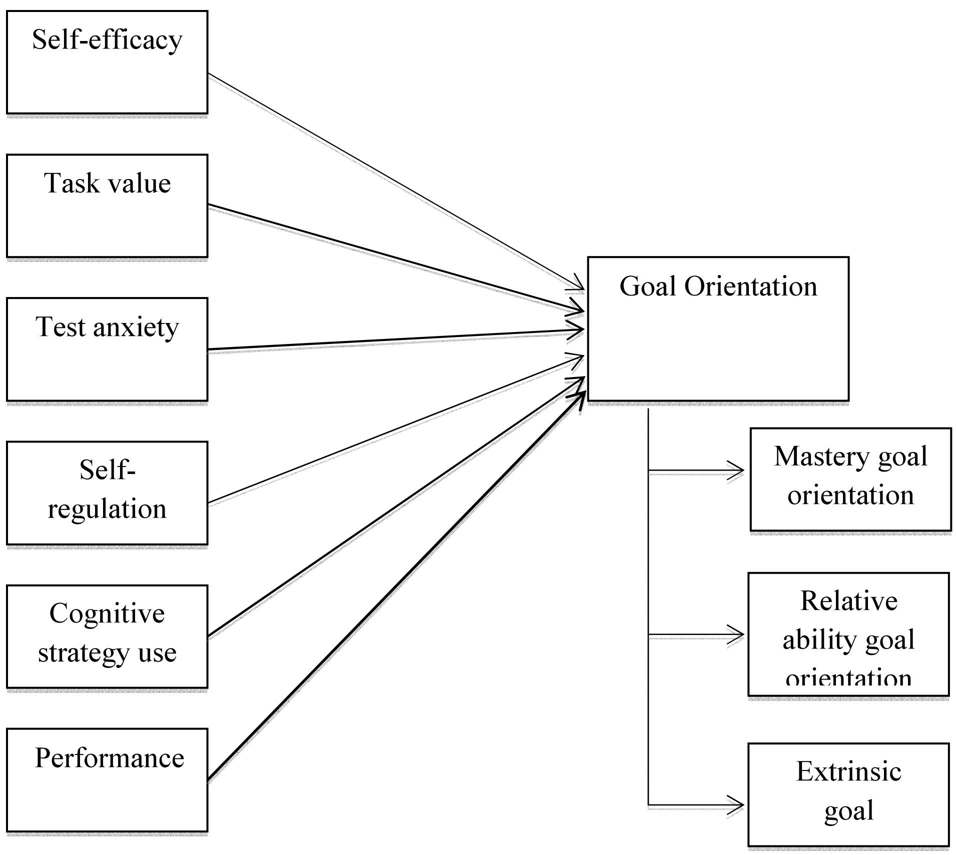


Figure 1: Theoretical

Methodology

Sample:

Participants in this study were the seventh, eighth and ninth grade students from the educational institutes of Lahore city. Sample size of 210 respondents was selected to make the study more representative. The sample consisted of both girls and boys ranging in age from 11 to 15 years. Survey questionnaires were given to the students for the research.

Questionnaire Development and Description

The research for this study was conducted using the survey method where the data was collected from the respondents using Survey questionnaire. Combining the individual questionnaires for each individual dependent and independent variables one comprehensive questionnaire was developed. The questionnaire consists of three sections. The first section is Motivational beliefs, which asked the students to respond on a 7-point likert scale (1= strongly disagree, 7= strongly agree). The second section of the questionnaire consisted of self-regulated learning strategies, which also used a 7-point likert scale. The third section was about goal orientation using the same 7-point likert scale.

There were a total of 22 items in the Motivational beliefs section of the questionnaire and was divided into three subscales self-efficacy, intrinsic value and test anxiety. Self-efficacy had 9 items, intrinsic value had 9 items and test anxiety had 4 items. The self-regulated learning strategies section had 22 items and was divided into two subscales cognitive strategy use and self-regulation. Cognitive strategy use had 13 items and self-regulation had 9 items. The goal orientation consisted of 17 items and was divided into three sub-scales Mastery goal orientation, performance-approach or relative ability goal orientation and performance-avoid goal orientation. The mastery goal orientation had 6 items, performance-approach goal orientation had 5 items and avoid-performance goal orientation had 6 items.

Table 1: Items description

Construct	Authors	Subscales	No. of Items
Motivational beliefs	Pintrich & De Groot (1990)	Self-efficacy Intrinsic value Test anxiety	22
Self- regulation strategies	Pintrich & De Groot (1990)	Cognitive strategy Self-regulation	22
Goal orientation	Midgley, Maehr, Hicks, Roeser, Urdan, Anderman & Kaplan. (2000)	Mastery goal orientation Relative ability goal orientation Avoid-performance goal orientation	17

Motivational beliefs

The motivational beliefs of the students were measured using three motivational factors: self-efficacy, intrinsic value and test anxiety. The self-efficacy scale was constructed using 9 items showing the perceived confidence and competence of the students regarding their performance of class work. The questionnaire has positive statements, which are related to students confidence in their ability e.g. "I expect to do very well in this class", " I think I will receive a good grade in this class", "I know that I will be able to learn the material for this class"; (Eccles, 1983; Schunk, 1981). The intrinsic value was constructed by 9 items using statements like ("I think that what I am learning in this class is useful for me to know") and perceived performance of ("It is important for me to learn what is being taught in this English class"; Eccles, 1983) as well as preference for challenge and mastery goals ("I prefer class work that is challenging so I can learn new things"; Harter, 1981). Four items (e.g., "I am so nervous during a test that I cannot remember facts I have learned," "When I take a test I think about how poorly I am doing" (Liebert & Morris, 1967) were used to show and test the concern and worry of the students when taking the test.

Self-regulation strategies

For regulation strategies two scales were constructed: cognitive strategy use and self-regulation. The Cognitive Strategy Use scale used 13 items regarding rehearsal strategies (e.g., "When I read material for science class, I say the words over and over to myself to help me remember"), elaboration strategies such as summarizing and paraphrasing (e.g., "When I study for this English class, I put important ideas into my own words"), and organizational strategies (e.g., "I outline the chapters in my book to help me study", Weinstein et al., 1987). One scale, labeled Self-Regulation, was constructed using Metacognitive strategies, such as planning, skimming, and comprehension monitoring (e.g., "I ask myself questions to make sure I know the material I have been studying," "I find that when the teacher is talking I think of other things and don't really listen to what is being said," and "I often find that I have been reading for class but don't known what it is all about") were adapted from Weinstein et al. (1987) and Zimmerman and Pons (1986). Effort management strategies were adapted from Zimmerman and Pons (1986) and included students' persistence in the face of difficulty (e.g., "Even when study materials are dull and uninteresting, I keep working until I finish" and "When work is hard I either give up or study only the easy parts").

Goal Orientation

Three types of goal orientation have been used in the questionnaire; mastery goal orientation, performance-approach/relative ability goal orientation, and avoid-performance goal orientation with a total of 17 items. Mastery goal orientation consisted of 6 items pertaining to the understanding and mastery of the task including statements like "I like classwork that I will learn from even if I make a lot of mistakes", "I do my classwork because I am interested in it". Performance-approach goal orientation consisted of 5 items regarding the students demonstration of competence e.g. I want to do better than others in the class", "I'd like to show my teacher that I am better than other students in class". Performance-avoid goal orientation constituted of 6 items and statements like "It's important to me that I don't look stupid in class", "An important reason I do my classwork is so that I don't embarrass myself".

Data Collection and Sample Profile

Administering survey questionnaires collected data for this study. Various schools of Lahore city were listed down and the research was then conducted by distributing questionnaires. The respondents were explained the questionnaires and any confusions or ambiguities regarding the various items were cleared there and then. The questionnaire consisted of total 61 items divided under 3 sections and took around 15-20 minutes to fill out. The questionnaires were self-administered by the researcher and confidentiality of the respondents was maintained. It was made sure the questionnaires were filled out completely.

Among gender, 49% were boys and 51% were girls while 3% of the respondents were of age 10, 19% were of 11 years old, 25.5% and 24.5% were aged 12 and 13 years, and 6% of the students were of 15 years old. The highest percentage was accounted for age 12 while the lowest percentage of 3% for respondents was accounted for the youngest age i.e. 10 years. Thirty- one percent of the respondents belonged to class 7 and 8 each whereas 38% of the students were of class 9. Thirty-two percent of the students had grade B in English whereas in Math 45% of the students secured grade A.

Measures for Data analysis

The hypotheses for this research were analyzed by structural equation modeling (SEM). SEM allows for the testing of the questionnaire as well as the hypotheses. The first part of SEM is measurement analysis and second part is structural analysis. The measurement analysis is carried out by Confirmatory factor analysis (CFA), which tests for reliability and validity of each item with regards to other variables in the analysis. Shah and Goldstein (2006) suggested the analysis of validity and reliability to test for the questionnaire. Structural analysis was tested by regression. Two models were developed for each subject: English and Math. SEM was analyzed in AMOS.

Results

Measurement Analysis

The analysis was carried out for all variables. The analysis began with the loading of all sixty-one items. Items with loading of more than 0.50 were retained for the analysis (Hair et al., 2006). Construct reliability was calculated. Hult et al. (2004) suggested a cut-off of 0.60 for reliability. All variables had reliability within the acceptable level. For validity, two types were analyzed; convergent and discriminant validity. Convergent validity was measure by AVE being greater than 0.5 (Hair et al 2006). Discriminant validity was measure when AVE was greater than covariance squared (Fornell and Larcher, 1981). Both convergent and discriminant validity was found to be acceptable. The measurement analysis is shown in Table 2.

Table 2: Factor loading, CR, AVE & DV

	Factor Loading	CR	AVE	DV
Self-efficacy	0.60 - 0.73	0.631	0.413	0.326
Intrinsic Value	0.52 - 0.79	0.809	0.621	0.406
Test anxiety	0.69 - 0.83	0.660	0.521	0.397
Cognitive Strategy use	0.53 - 0.64	0.905	0.612	0.411
Regulatory strategy use	0.50 - 0.64	0.674	0.580	0.541
Learning goal Orientation	0.57 - 0.68	0.747	0.568	0.537
Relative ability goal orientation	0.61 - 0.73	0.789	0.402	0.399

Performance avoidance goal orientation	0.69 - 0.81	0.674	0.580	0.541

Structural Analysis

The regression results to test for the hypothesis are presented in Table 3. The results for English and math were calculated. The results show different results for both subjects.

For English, the regression for English shows that intrinsic value was positively significant at p <0.01 with learning goal orientation. Cognitive strategy, self-regulation, performance and self-efficacy were also found to be significantly and positively related to learning goal orientation while test anxiety was negatively related to learning goal orientation. Cognitive strategy was positively significant with relative ability goal orientation while test anxiety was positively significant with performance avoidance.

For Math, self-efficacy, intrinsic value, cognitive strategy was positively significant with learning goal orientation while text anxiety was negatively significant with learning goal orientation. Self-efficacy and cognitive strategy was also found to be positively significant with relative ability goal orientation. Test anxiety and cognitive strategy was found to be positively significant with performance avoidance goal orientation. These results are suggestive that anxiety for test enables students to cognitively develop strategies in trying to avoid performing.

Students felt anxiety more for Math than for English but only developed cognitive strategies for Math order to avoid performance. Test anxiety was negatively for both Meth and English in relation to learning goal orientation. Self-regulation was also higher for English in relation to learning goal orientation.

The model fit for the analysis shows a good model. A combination of model fit was suggested by Kline (2005) and Hu and Bentler (1999) as each one has its strengths and weaknesses. Segars and Grover (1998), Carmines and Mclver, (1981) and Papke- Shields et al. (2002) suggest normed Chi-square (CMIN/DF) to be between 1-3. Joreskog and Sorbom (1986) suggest a good model fit if CFI, NFI, IFI and TFI is greater than 0.90. For RMSEA, Hair et al. (2006) suggests a score of less than 0.10. Keeping these model fits in consideration we find that the model fit for both English and Math was within the acceptable range.

Table 3: Regression analysis results

			β (English)	**P-value**	**β (Math)**	**P- value**
Learning Goal Orientation	←	Self-Efficacy	.188	.997	.167	.000
Learning Goal Orientation	←	Intrinsic Value	.258	.000	.241	.000
Learning Goal Orientation	←	Test Anxiety	-.172	.000	-.129	.024
Learning Goal Orientation	←	Cognitive Strategy	.136	.000	.093	.026
Learning Goal	←	Self-Regulation	.115	.003	.047	.374

			β (English)	P- value	β (Math)	P- value
Orientation						
Learning Goal Orientation	←	Performance (Grade)	.650	.000	.042	.791
Relative Ability Goal Orientation	←	Self-Efficacy	.234	.000	.116	.015
Relative Ability Goal Orientation	←	Intrinsic Value	.001	.985	.176	.002
Relative Ability Goal Orientation	←	Test Anxiety	-.015	.736	.129	.020
Relative Ability Goal Orientation	←	Cognitive Strategy	.179	.000	.134	.000
Relative Ability Goal Orientation	←	Self-Regulation	.020	.640	.018	.725
Relative Ability Goal Orientation	←	Performance (Grade)	.036	.862	.111	.467
Performance Avoidance Goal Orientation	←	Self-Efficacy	-.048	.575	.088	.329
Performance Avoidance Goal Orientation	←	Intrinsic Value	.179	.074	.067	.542
Performance Avoidance Goal Orientation	←	Test Anxiety	.403	.000	.599	.000
Performance Avoidance Goal Orientation	←	Cognitive Strategy	.005	.948	.219	.004
Performance Avoidance Goal Orientation	←	Self-Regulation	-.001	.994	-.121	.212
Performance Avoidance Goal Orientation	←	Performance (Grade)	-.362	.387	.510	.077
Model fit:						
CMIN/DF			2.13		2.42	
NFI			0.976		0.979	
IFI			0.981		0.982	

	β (English)	P- value	β (Math)	P- value
TLI	0.954		0.979	
CFI	0.979		0.982	
RMSEA	0.044		0.049	

Discussion

The purpose of the current study was to examine the role of motivational, cognitive and performance outcomes in predicting the three different goal orientations among the junior high school students of schools operating in Lahore. The findings of the study clear our understanding of the effects of the various factors that lead to different types of goal orientations in actual classroom settings and across different disciplines.

Goal orientation and its relationship with different variables has been studied in different cultures by other researchers and they have reported different results, hence it was important to study the goal orientations' relationship with students' motivational beliefs and self-regulated learning and its effect on their academic performance in Pakistan.

Learning goal orientation was negatively related to test anxiety while it was positively related to intrinsic value, cognitive strategy use, regulatory strategy use and academic performance. Relative ability goal orientation was found positively related to intrinsic value and cognitive strategy use and performance avoidance goal orientation was also positively related to test anxiety and intrinsic value.

Results show that the motivational beliefs, self-regulation and classroom performance have important effects on the goal orientation students adopt in the classroom. The most important and strongest relationship between the variables and outcomes was found in learning goal orientation. As apparent form previous studies (Ames, 1992; Meece et al., 1988; Meece & Holt, 1993; Pintrich & Garcia, 1991), students with a learning goal orientation have more motivation and cognition. Specifically, task value, and both cognitive and self-regulatory strategy use and academic performance were positive predictors of learning goals in all subjects and showed negative relationship between the test anxiety. In summary, and according to the research done before students who focus on understanding and learning the material, have high intrinsic value and deeper cognitive engagement and self-regulation.

The results revealed that relative ability goal orientation has a positive relationship with self-efficacy and cognitive strategy use. Self-efficacy was also an important predictor of relative ability goal orientation across each subject, with a greater relative ability orientation predicting higher levels of self-efficacy as hypothesized. The results were similar to approach performance orientation in the work by Elliot and Harackiewicz (1996) where students are focused on trying to perform well compared to others and are not scared of failure. Our results indicated that students having higher levels of intrinsic value and cognitive strategy use tended to have relative ability goal orientation. This finding helps to clarify the confusion in the literature regarding the positive or negative role of relative ability goal orientation (Ames 1992; Dweck & Leggett 1998; Elliot & Harackiewicz, 1996; Meece & Holt 1993; Pintrich & Garcia, 1991). Performance avoidance goal orientation was also positively related to test anxiety. Students who adopted performance avoidance goals tended to report higher level of test anxiety.

However, some results did not support the theory. The results from our first hypothesis indicated that there is no statistically significant relationship between learning goal orientation and self-efficacy. Where as in previous research studies it was shown that students with higher levels of self-efficacy tended to have learning goals. In contrast, a learning goal orientation in this study failed to predict students' level of self-efficacy at any subject area, suggesting that self-efficacy is not related to a learning goal orientation.

According to previous research studies, students reporting a greater focus on relative ability goal tended to report higher levels of task value, self-regulation and performance however there was no significant relationship found between relative ability goal orientation and these variables for this study.

On the other hand, students with a greater performance avoidance goal focus tended to report higher task values and high levels of test anxiety unlike the studies conducted before and there was no significant relationship between self-efficacy, cognitive strategy use, regulatory strategy use and performance. Goal orientation theory reports that students with low self-efficacy, cognition and motivation tended to have performance avoidance goals.

Implications for educators/teachers

Students are the main focus of the teachers and the coordinators when setting a particular target or when setting a paper or quiz for them. Educators want to know the goals that the students set for themselves when accomplishing or performing a particular task. Identifying factors that influence student achievement and motivation to learn in the classroom continues to be a goal of education researchers (Eggen & Kauchak, 1999). Goal orientation examines the behavior of individuals in terms of their approach towards achievement. Diener and Dweck (1980) were interested in finding as to why some students were adaptive and others were maladaptive and showed helplessness when working on certain types of tasks. They defined adaptive behaviours as those that promote the establishment, maintenance and attainment of personally challenging and personally valued goals.

Conclusions

On the bases of the findings of the study, the following conclusions were drawn.

Learning goal orientation was found significantly related to intrinsic value, test anxiety, cognitive strategy, regulatory strategy use and performance however it was insignificantly related to self-efficacy. Self-efficacy and cognitive strategy use; sub-variables of motivational beliefs and self-regulatory strategies; were found significantly related to relative ability goal orientation while intrinsic value, test anxiety, regulatory strategy use and performance were insignificantly related to relative ability goal orientation. Performance avoidance goal orientation was found significantly related to intrinsic value and test anxiety where as it was insignificantly related to self-efficacy, cognitive strategy, regulatory strategy use and performance.

This study came up with mixed results; some predictions were supported by the theory while others were not. However future research in the area is recommended.

References

Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of educational psychology*, *84*(3), 261.

Ames, C., & Archer, J. (1988). Achievement goals in the classroom: Students' learning strategies and motivation processes. *Journal of educational psychology*, *80*(3), 260.

Atkinson, J. W. (1957). Motivational determinants of risk-taking behavior. *Psychological review*, *64*(6p1), 359.

Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational behavior and human decision processes*, *50*(2), 248-287.

Bong, M. (2002). Predictive utility of subject-, task-, and problem-specific self-efficacy judgments for immediate and delayed academic performances. *The Journal of Experimental Education*, *70*(2), 133-162.

Bong, M. (2004). Academic motivation in self-efficacy, task value, achievement goal orientations, and attributional beliefs. *The Journal of Educational Research*, *97*(6), 287-298.

Brokenshire, D., & Kumar, V. (2009). Discovering Causal Models of Self-Regulated Learning. In *AIED* (pp. 257-264).

Carmines, E. G., McIver, J. P. (1981). Analyzing models with unobserved variables. In: Bohrnstedt, G.W., Borgatta, E.F. (Eds.), Social Measurement: Current Issues. Sage,Beverly Hills, CA.

Creed, P., Buys, N., Tilbury, C., & Crawford, M. (2013). The relationship between goal orientation and career striving in young adolescents. *Journal of Applied Social Psychology*, *43*(7), 1480-1490.

Creed, P., Patton, W., & Prideaux, L. A. (2006). Causal Relationship Between Career Indecision and Career Decision-Making Self-Efficacy A Longitudinal Cross-Lagged Analysis. *Journal of career development*, *33*(1), 47-65.

Dweck, C. S. (1991, January). Self-theories and goals: Their role in motivation, personality, and development. In *Nebraska symposium on motivation* (Vol. 38, pp. 199-235). Lincoln, NE: University of Nebraska Press.

Eppler, M. A., & Harju, B. L. (1997). Achievement motivation goals in relation to academic performance in traditional and nontraditional college students. *Research in Higher Education*, *38*(5), 557-573.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research,* 18 (1), 39–50.

Garcia, P. R. J. M., Restubog, S. L. D., Toledano, L. S., Tolentino, L. R., & Rafferty, A. E. (2012). Differential moderating effects of student-and parent-rated support in the relationship between learning goal orientation and career decision-making self-efficacy. *Journal of Career Assessment*, *20*(1), 22-33.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R.L. (2006). Multivariate Data Analysis, 6th ed. Prentice-Hall, Inc., New Jersey.

Hancock, D. R. (2001). Effects of test anxiety and evaluative threat on students' achievement and motivation. *The Journal of Educational Research*, *94*(5), 284-290.

Hu, L., Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal,* 6 (1), 1–55.

Hult, G. T., Ketchen, D. J., & Slater, S. F. (2004). Information processing, knowledge development, and strategic supply chain performance. *Academy of Management Journal,* 47(2), 241–253.

Joreskog, K. G., & Sorbom, D. (1986). LISREL VI: Analysis of Linear Structural Relationships by Maximum Likelihood, Instrumental Variables, and Least Squares Methods. Scientific Software, Inc., Moorsville, IN.

Kline, R. B. (2005). Principles and Practices of Structural Equation Modeling. Guilford Press, New York.

Lyke, J. A., & Young, A. J. K. (2006). Cognition in context: Students' perceptions of classroom goal structures and reported cognitive strategy use in the college classroom. *Research in Higher Education*, *47*(4), 477-490.

Midgley, C., Maehr, M. L., Hruda, L. Z., Anderman, E., Anderman, L., Freeman, K. E., ... & Urdan, T. (2000). Manual for the patterns of adaptive learning scales. *Ann Arbor*, *1001*, 48109-1259.

Ng, E., & Bereiter, C. (1991). Three levels of goal orientation in learning. *Journal of the Learning Sciences*, *1*(3-4), 243-271.

Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of educational research*, *66*(4), 543-578.

Parker, K. R. (2013). Student-Teacher Relationships and Impacts of Goal Orientation, Personality, Socio-Economic Status, and Performance: An Examination of Those Served by Project GRAD Knoxville.

Papke-Shields, K. E., Malhotra, M. J., & Grover, V. (2002). Strategic manufacturing planning systems and their linkage to planning system success. *Decision Sciences,* 33(1), 1–30.

Pintrich, P. R. (1999). The role of motivation in promoting and sustaining self-regulated learning. *International journal of educational research*, *31*(6), 459-470.

Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of educational psychology*, *82*(1), 33.

Pintrich, P. R., & Garcia, T. (1991). Student goal orientation and self-regulation in the college classroom. *Advances in motivation and achievement: Goals and self-regulatory processes*, *7*(371-402).

Somuncuoglu, Y., & Yildirim, A. (1999). Relationship between achievement goal orientations and use of learning strategies. *The Journal of Educational Research*, *92*(5), 267-277.

Segars, A. H., & Grover, V. (1998). Strategic information systems planning success: an investigation of the construct and its measurement. *MIS Quarterly,* 22 (2), 139–163.

Self-Brown, S. R., & Mathews, S. (2003). Effects of classroom structure on student achievement goal orientation. *The Journal of Educational Research*, *97*(2), 106-112.

Shah, R., & Goldstein, S. M. (2006). Use of structural equation modeling in operations management research: looking back and forward. *Journal of Operations Management,* 24 (2), 148–169.

Shim, S., & Ryan, A. (2005). Changes in self-efficacy, challenge avoidance, and intrinsic value in response to grades: The role of achievement goals. *The Journal of Experimental Education*, *73*(4), 333-349.

Tuckman, H. P. (1975). Teacher effectiveness and student performance. *Journal of Economic Education*, 34-39.

Valle, A., Cabanach, R. G., Núnez, J. C., González-Pienda, J., Rodríguez, S., & Pineiro, I. (2003). Cognitive, motivational, and volitional dimensions of learning: An empirical test of a hypothetical model. *Research in Higher Education*, *44*(5), 557-580.

Zajacova, A., Lynch, S. M., & Espenshade, T. J. (2005). Self-efficacy, stress, and academic success in college. *Research in higher education*, *46*(6), 677-706.

ARTICLE

Evaluation Method, Task Outcomes and Group Structure as counteracting strategies of Social Loafing in Manufacturing Industries of Pakistan

Khurshid Alam
Management Studies University of Malakand, Pakistan
Arshad Ali
Management Studies University of Malakand, Pakistan
Fazli Subhan
Management Studies University of Malakand, Pakistan

Abstract

The study examines task evaluation techniques; task outcomes and group structure composition in counteracting social loafing. The approach espoused in this paper is to assess the conventional literature that provides strong support for existence of social loafing phenomenon in groups and to predict counteracting from aforementioned variables.Based on latest literature innovative ways for combating social loafing are discussed. Results provide conclusive support that enhancing evaluation method, task outcomes and group structure were associated with reduced occurrence of social loafing. At group level increased conjunctive task and reward interdependence, heterogeneity and peer evaluation increase social loafing while increase in task meaningfulness, content, intensity, homogeneity, disjunctive and self evaluation reduce social loafing. The paper provides practical implications that enhancing task evaluation techniques, outcomes and group structure reduce social loafing and ultimately increase organizational performance.The study is unique as no one has focused the phenomenon of social loafing in Pakistan, thus it also contribute knowledge to literature.

***Keywords*:** Social Loafing, Evaluation Method, Task Outcome, Group Structure and Manufacturing Industry

Introduction

Complex and dynamic operations have made organizations and industries unable to carry out their work through individualistic approach and thus create a need for group work. Numerous studies have focused the significance of collective work. Besideshuge benefits it has many shortcomings; as in many cases the sum individual work in group is inferior to the sum of individual work alone which is attributed to individual efforts reduction in collective work. This tendency of individuals refers to social loafing. In social loafing each individual try to get maximum benefits from collective work while exerting little efforts. Consequently most of individuals consider collective work as unsatisfactory experience and have less motivation towards collective goals of the organization. Hoon and Tan (2008) argue that for understanding collective work; studying social loafing, its roots and corollaries are indispensable.

In nineteenth century 1913 Max Ringelmann observed decreased individual performance in thegroup experiment of “Rope Pulling” and “Swimming in Conveys”. According to Kravitz and Martin (1986), Ringelmann always found less magnitude of group performance than individual performance for the same number of individuals. Soon after this reduced performance phenomenon was confirmed in experiments of “Clapping and Shouting” (Latane, Williams, & Harkins, 1979). This phenomenon was named social loafing (Liden, Wayne, Jaworski, & Bennett, 2004). Chidambaram and Tung (2005) argue that social loafing decrease actual performance of individuals and organizations and is treacherous phenomenon for organizations and should be properly researched. It has received massive concentration from social scientists in last many years (Bastiaans & Nauta, 2003).

Different authors haveemphasized significant causes of social loafing at work places, these include incompetency of group members (Latane et al., 1979), poor social coordination (Steiner, 2007), communalappraisal(Karau & Williams, 1993), collective incentives (Jackson & Harkins, 1985) andtrust on appraiser(Latane et al., 1979). Other drivers include group performance techniques (Kidwell & Bennett, 1993) effort results(Harkins & Jackson, 1985) and group structure(Hardy & Crace, 1991).To the best of our knowledge these methods (evaluation method, task outcomes and group structure) have never been addressed in Pakistani context, this study is therefore of unique nature. To fill this void and to increase human efficiency this study is designed to explore certain aspects of increasing individual and group performance. The central objective of the study is to examine the relationship of evaluation methods, task outcomes and group structure with social loafing, because all rewards depend upon task outcomes and evaluation techniques while group structure determine individual contribution towards collective goals. It may add different strategies for reduction of loafing and consequently it may contribute to individual life standards, national and international economy due to enhanced individual and group productivity, efficiency and effectiveness.

Literature Review

Social Loafing

The tendency of exerting less effort in collective work as compared to individual work refers to social loafing (Latane et al., 1979). It is also called Free Rider Effect, because in social loafing the loafer reap collective benefits and don’t contribute fair share in inputs (Aggarwal & O'Brien, 2008). Davies (2009) argue that social loafing direct individual towards free riding and thus individuals don’t exert full efforts in collective work.

Evaluation Method

Evaluation is the organized analysis of expected and actual results and it looks for expected and actual objectives and its way of accomplishment (Russ-Eft, 2009). It is a logical, precise and thorough application of scientific methods to evaluate objectives designing, its execution and enhancement in outcomes. It require appraisalproficiency, effort, time and substantial budget(Lipsey, Freeman, & Rossi, 2004).

Szymanski and Harkins (1987) argue that social loafing is caused by lack of justified evaluation and weak internal and external assessment potential. According to Thompson (2004) loafing can be reduced by providing performance feedback to individuals on their individual outcomes by apparent performance standards. Individuals are less motivated when they perceive that their rewards are not justified with their inputs (Kidwell & Bennett, 1993) whileBrewer (1995) argue that an individual concern on evaluation of performance affect the overall performance. Worchel, Rothgerber, Day, Hart, and Butemeyer (1998) argue high productivity of group members while working for group based rewards than for an individual incentive in social situation. This assumption support social identity that an individual who consider group efforts more important will work for achieving collective outcomes. Worchel et al. (1998) further argue increased productivity in group setting than alone in an experiment when evaluator group was physically presentand less productivity than individual productivity when evaluator group was not present for evaluation. Williams, Nida, Baca, and Latané (1989) also argue significant positive relationship among swimmers in relays under high efforts identifiability than low identifiability. Worchel et al. (1998) concluded that highest productivity is associated with greater tendency of categorizing individuals as a group, evaluative group, identifiability in a group, impact of group behavior on individual, interest of group part and thinking about group.

Comer (1995) found that individual supremacy to co-worker on conjunctive task or inferiority on disjunctive task increase loafing by amplifying the perception of being one superfluous to do the work of group because individuals compare their abilities and performance with group members (Goethals & Darley, 1987). Worchel et al. (1998) argue that conjunctive and disjunctive rewards should create less loafing than additive condition because conjunctive and disjunctive rewards have strong link between individual performance and group performance. That is if an individual work hard in disjunctive task, the probability ofgroup performance will increase and vice versa. Veigal (1991) describe another aspect that the perception of coworker about highly qualified colleagueand better performance curb individuals efforts, ability and perception of own competency and productivity than others in a group. It will enhance his/her proclivity to loafing due to lack of influence over task outcomes (Comer, 1995). Szymanski and Harkins (1987) argues that social loafing was eliminated when individual performance was evaluated rather than collective evaluation. According to Gerhart and Rynes (2003) individuals can be motivated by aligning individual goals with group and organizational goals; and with individual rewards. Based on the above literature review, authors hypothesize that:

H1: Social loafing will be high if there are conjunctive task and rewards.

H2: Social loafing will be low if there are disjunctive task and rewards.

Social loafing may be reduced through self and peer evaluation systems. Suleiman and Watson (2008)argue reducedsocial loafing in self feedback system. Individuals who engage in self enhancing loafing give the impression to group members that they are just lazy rather than incompetent (Comer, 1995).While some authors argue peer evaluation as a best tool for individual accountability and efficiency(Brooks & Ammons, 2003). But its use may encourage and create undesirable situation in organizations. Strong and Anderson (1990)argue that peer evaluations are the least effective tools for group performance improvement. This perception have made the use of peer evaluation very rare (Falchikov & Goldfinch, 2000). Peer rating can change group cohesiveness, group harmony and group performance (DeNisi, Randolph, & Blencoe, 1983). Price (1987) conducted an experiment in which one group was supposed to give opinion about the business and other is supposed to make a decision. In decision making there was no evaluation potential so group members loafed greater than another group who are supposed to give an opinion about business, because the output of opinion makers was to be evaluated. On the other side Griffith, Fichman, and Moreland (1989) found that evaluation showed no effect on task performance in more complicated tasks like solving maze problems. Harkins and Szymanski (1989) argues that social loafing can be reduced by implementing individual and group evaluation system. Social loafing is more likely to occur when no standards exists for individual evaluation with group evaluation (Comer, 1995). Based on above literature authors conclude following hypothesis:

H3: Social loafing can be reduced through self feedback mechanism than peer evaluation.

Task Outcomes

Task outcomes are the products and services that an individual produce at work place. Group members can be motivated enoughif their outcomes are evaluated individuallyinstead of collective outcome (Harkins & Jackson, 1985). Individuals can be motivated either by significanceand uniqueness of task outcome for organization and individuals, this refers to task meaningfulness or by prettytangible and intangible rewards of a certain task(George, 1992).Locke, Cartledge, and Koeppel (1968)argue that goals are immediate regulators of human behavior and action. According to Gerhart and Rynes (2003) individuals can be motivated by aligning individual goals with group and organizational goals; and with individual rewards.Rand (1990) found that content and intensity are the two major attributes of individual effort. Content refers to what is expected from an individual, these are clarity, precision and difficulty (Locke, Shaw, Saari, & Latham, 1981)while intensity refers to the process of goal setting, it include degree of effort, scope of task and importance of goal (Locke et al., 1981). Karau and Williams (1993) concluded that social loafing occur because of the perception of intense individual effort and dividing valued outcome among group members.

Locke et al. (1981)argue that specific, clear and challenging goals lead to higher performance than easy goals and directing concentration, increasing persistence, mobilizing efforts and motivating strategy development affect an individual goals and performance. Locke et al. (1981) further describe that assigned goals, feedback on performance, financial rewards and supportive management increase performance and providing feedback on the evaluation of individual performance lead to higher performance. Incentive in the form of money is a powerful motivator of performance (Locke, Feren, McCaleb, Shaw, & Denny, 1980). Locke et al. (1981) argue that the degree of commitment depends upon the financial incentive offered while goal setting theory argues that goal commitment influence performance (Locke & Latham, 1990). Klehe and Anderson (2007) argue that loafing may be reduced when an individual is given high valence task (high task meaningfulness) and more personal involvement. Discussing above literature authors arrives at hypothesizing that:

H4: Social loafing will be low if task meaningfulness is high.

H5: Social loafing will be low if content and intensity are high.

Group Structure

According to Payne and Pugh (1976)group structure is viewed as stable arrangement of people, having division of labor and job specialization, control and coordination. Working in collective structure, utilizing individual efforts and dividing rewards equally among group member create social dilemma (Glance & Huberman, 1994).Pfeffer (1995) argues that collective norms, shared values and colleague pressure can overcome this social dilemma. Becker and Baloff (1969) argue that group structure influence group effectiveness. While Hardy and Crace (1991) found that group structure has minimal effect on social loafing. Group effectiveness can be achieved indirectly through group process by grouping and arranging group structures and groups having clear goal communicated openly (Kiesler, 1978). Individuals belonging to different group structure will behave in different ways.Researchers Pugh, Hickson, Hinings, and Turner (1968)argue different constructs of group structure like group size, group goals clarity, group roles clarity, group norms, controlling task and group leadership. So goal, role and norm structure different activities.

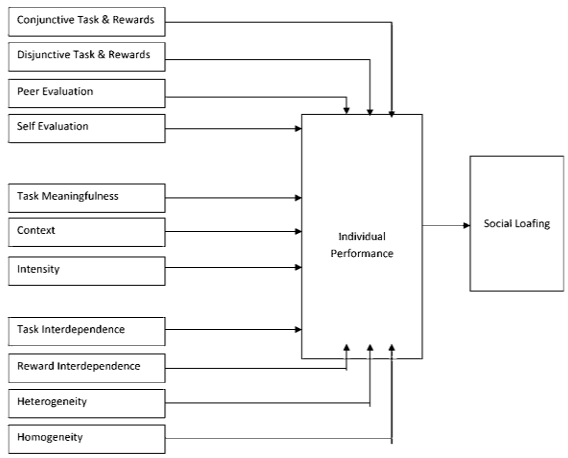
Kiesler (1978)argue that group having clear vision and clear goals communicate openly than groups having unclear vision and goals. Gladstein (1984) found that open communications, supportiveness, training, active leadership and practical experience in organizations has positive impact on employee's satisfaction and organizational performance. Loch, Huberman, and Stout (2000) argue that status competition can drive team members to use maximum efforts. But if this status can be achieved through political manipulation then it leads to decrease overall performance. Loch et al. (2000)arguesthat group performance will be stable if shared ranks are allowed in the group. The performance of heterogeneous groups is less effective than homogenous groups during early establishment of group (Watson, Kumar, & Michaelsen, 1993).Shea and Guzzo (1987)argue task outcome and task interdependence as keys to group effectiveness.Outcome interdependence is the degree in which an individual receive his/her rewards depend upon the performance of others while in non interdependence an individual receive rewards only for his/her own performance (Wageman, 1995). High interdependent teams utilize collective knowledge and skills of their own group members. They demonstrate extensive shared learning, high class social processes and wisdom of collective responsibility for collective performance (Wageman, 1995). Wageman and Baker (1997) define task interdependence as the degree to which the task performance of one individual depend upon the efforts and skills of other individual while reward interdependence is the degree to which the reward of an individual depend upon the efforts of others. Rees, Zax, and Herries (2003) argue that significant interdependencies exist that could arise from group based compensation, peer pressure, common supervisor or exchanging information. Wageman and Baker (1997) argue that the failure in adequately designing group task and group rewards create much confusions. The confusion may arise how to divide work among group members and how the rewards should be given on individual performance or group performance or combination of both.Wageman and Baker (1997) found no significant difference in performance between highly interdependent and less interdependent tasks designs.

Trust (Edmondson, 1999), pay structure (Lawler, 2000), training and coordination (Marks, Sabella, Burke, & Zaccaro, 2002), group member composition (Barrick, Stewart, Neubert, & Mount, 1998) differentiate effective groups from non effective groups. Comer (1995) suggested that the group structure should be built in such a method to bring unique set of skills, having comparable levels at their respective areas of expertise. This will increase each member perceived indispensability and perceived influence over task outcomes. Worchel et al. (1998)argue thatunfamiliar colleagues reduce their productivity in collective work and Individuals don't increase efforts in social setting when group works for collective rewards. Profit sharing is an important determinant of success in group work (Belman, Drago, & Wooden, 1992). Based on above literature authors hypothesize that:

H7: Social loafing will be high if there is high task interdependence and reward interdependence.

H8: Social loafing in homogenous group structure is low than heterogeneous group structure.

Research Model



Methodology

This portion of the paper examines different statistical tools used for data analysis.

Designing of Questionnaire

Survey questionnaire was developed with study of previous literature and with due conference of senior research associates. It was pre-tested on a cluster of senior professional experts in the field for enhancing the understandability and comprehension of the instrument prepared.

Survey questionnaires are considered the best data collection tool due to the reason of enhanced external validity. In survey questionnaire data is collected form specific and identified group of people about their ideas, information and behavioral observations regarding some phenomenon, thiscreate greater generalizability of the study (Brownell, 1995). Other reasons for selection of survey questionnaire are simple, economical and rapid data collection. It is more consistent and objective for collecting and analysis of large amount of information in less time (Bachmann, Elfrink, & Vazzana, 1996; Wright, 2005). Besides advantages it has demerits as well,

for example difficult to understand, tick box policy and untrustworthy answers(Goodman, 1997). For eliminating any complication and distortion semi structured interviews were conducted (Pallant, 2010). This further enhanced generalizability of the study.

Pilot Survey

Pilot study and test retest upon 27 respondents were conducted to enhance the external validity and reliability of the instrument prepared. Pilot study is most significant phase of survey development(Rubin & Babbie, 2013). Various explanations, recommendations and suggestions of these respondents were included in the next version of the survey. This increased the generalizability of the instrument(Brownell, 1995). Coefficients of internal consistency for all variables show a good measure of alpha.

Data Collection

Survey questionnaires with reference consultation and face to face semi structured interviews were used for data collection. Total 300 questionnaires were administered and 181 responses were received, this shows 60% return rate. 55 questionnaires were disposed off due to incomplete information.

Sample Selection

Respondents from departments of production, sales and marketing of manufacturing industries in Pakistan were selected through stratified random sampling. This technique has advantages of statistical efficiency, accurate representation and enough data collection (Cooper & Schindler, 2003).

Univariate Analysis

Analysis of Variance (ANOVA) was performed for comparison of mean score of different sectors and insignificant results were found except content and intensity, i.e. task outcomes. Marketing and sales departments differ from manufacturing department in task outcomes, Table No 2. The respondents were from three sectors, including sales (n=56), marketing (n=20) and manufacturing (n=50). It is concluded that there is no difference among different sectors and results of the study can be generalized to all sectors.Levene test and Kolmogorov tests were performed to check homoskedasticity and normality of data and insignificant results were found showinghomoskedasticity and normality of the data.The analysis of White test statistic also shows insignificant result which indicates the presence of homoskedasticity in data.

Multicollinearity

Multicollinearity shows relationship among different independent variables. Multicollinearity was calculated through variance inflation factors (VIF) and tolerance statistics. Tolerance statistic shows variability that is not explained by other independent variables. The result of variance inflation factors and tolerance statistics Table No 3 shows the absence of Multicollinearity in the data; this was also supported by tolerance values.

Standard Multiple Regressions

Standard multiple regression allows the forecast of one dependent variable from many independent variables. It also describes projecting power of each individual variable in the prediction of dependent variable. It is more sophisticated investigation of interrelationship among a set of independent and dependent variables. It also helps in investigation of more complicated association. In this study we included all constructs of independent variables including task meaningfulness, conjunctive evaluation, disjunctive evaluation, Content, reward interdependency, peer evaluation, homogeneity and heterogeneity.

Data fulfill all assumptions of multiple regressions including sample size and no outliers were found as defined by (Tabachnick & Fidell, 2001) with residual values greater than 3.3 or less than -3.3. A significant regression value of 28.5 was found and it is concluded that above mentioned variables are accounted for 28.5% (Table No 4) of reduction of social loafing. Hence it is argued that there are some other factors as well in reduction of social loafing phenomenon. Values of beta (Table No 3) show the individual prediction of each variable in collective prediction. In independent variables task evaluation method account much more for social loafing. Thus it can be interpreted that organizations may reduce social loafing by enhancing task evaluation methods. Authors studied task evaluation methods from two angles and it was found that conjunctive task evaluation method create more loafing with increase of this type evaluation while disjunctive task and reward has negative relationship with social loafing. It was also identified in interviews that individuals can be motivated and their performance can be increased enough through disjunctive tasks and rewards and they prefer individual task and rewards.

Table No 4: Standard Multiple Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.534[a]	.285	.216	.44607

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	9.058	11	.823	4.138	.000[a]
	Residual	22.683	114	.199		
	Total	31.741	125			

a. Predictors: (Constant), Hmgnty, Rwrd_intrdpnd, Peer_Evlutn, Cntnt, Evl_Conjnctve, Evl_Disjnctve, Intnsty, Tsk_Mngflns, Hetrgnty, Self_Evlutn, Tsk_intrdp

b. Dependent Variable: SL

Interpretation and Discussion

The central theme of the study is to determine the relationship and prediction of social loafing elimination from evaluation methods including conjunctive and disjunctive task and rewards, self and peer evaluation systems, task outcomes including task meaningfulness, content, intensity, task and rewards interdependence, heterogeneity and homogeneity of group structure.

Data fulfill all assumptions of linear correlation and standard multiple regression and support all null hypotheses under consideration and it is concluded that social loafing is observed more in conjunctive task and rewards allocation mechanism as compared to disjunctive task and rewards. Conjunctive task and rewards have significant direct relationship while disjunctive task and rewards have significant inverse relationship with social loafing. It can be interpreted that a task having high interdependence upon group members face huge dilemmas of social loafing as compared to task having low dependence upon group members. It may be argued that in conjunctive task and rewards there is reduction in group process efficiency and effectiveness. This inclination towards loafing may be due to variety of huge interpersonal processes and either motivation or coordination losses. On the other side disjunctive task and rewards reduce loafing and people are more committed towards individual performance and organizational goals, because Thompson (2004) argue that individuals like individual feedback on individual performance than collective feedback on collective performance and any concern on evaluation affects overall performance. Comer (1995)describe the reason behind loafing is individual supremacy on conjunctive task or inferiority on disjunctive task and because individuals compare their abilities and efforts with others. The findings of these hypotheses are consistent with Szymanski and Harkins (1987), while inconsistent with Worchel et al. (1998), they were of opinion that incompetent individual exert more efforts in proficient group and this phenomenon refers to Kohler effect. Further peer evaluation has direct while self evaluation has inverse relationship with social loafing showing consistency withSuleiman and Watson (2008).

A significant inverse relationship was found between task meaningfulness and social loafing. Thus it is concluded that if task is of high value, unique and significant then there will be low tendency towards loafing and corroborating(George, 1992). Content and intensity both have significant inverse relationship with social loafing. Content refers to clarity, efficiency, and precision expected from individuals while intensity refers to process of objectives and goal setting. The study shows inverse relationship indicating that increase in goals clarity; efficiency, effectiveness and enhancement of goal setting process will decrease social loafing showing consistency with (Kremer & McGuinness, 1998; Ness & Patton, 1979).

Further it was found that both task and rewards interdependence lead towards social loafing. However task interdependence has significant direct relationship with social loafing and is responsible for creation of more loafing than reward interdependence showing consistency with (Wageman, 1995).

It was found that group heterogeneity has direct relationship while group homogeneity has inverse relationship with social loafing. heterogenic group structure face more challenges and dilemmas due to diverse mix of people while homogeneous group structure face lesschallenges due to homogeneous group of people. Homogenous people feel easy to work with known colleague while in heterogeneous group each member is reluctant to use efforts showing inconsistency with (Worchel et al., 1998) while consistency with (Watson et al., 1993).

Table No 1: Correlation Matrix

		SL	Evl_Conjnctve	Evl_Disjnctve	Peer_Evlutn	Self_Evlutn	Tsk_Mngflns	Rwds	Cntnt	Intnsty	Tsk_intrdp	Rwrd_intrdpnd	Hetrgnty	Hmgnty
SL	Pearson Correlation	1												
	Sig. (2-tailed)													
Evl_Conjnctve	Pearson Correlation	.228*	1											
	Sig. (2-tailed)	.010												
Evl_Disjnctve	Pearson Correlation	-.384**	-.058	1										
	Sig. (2-tailed)	.000	.521											
Peer_Evlutn	Pearson Correlation	.180*	-.013	-.101	1									
	Sig. (2-tailed)	.043	.884	.261										
Self_Evlutn	Pearson Correlation	-.311**	.162	.516**	-.069	1								
	Sig. (2-tailed)	.000	.070	.000	.440									
Tsk_Mngflns	Pearson Correlation	-.296**	.102	.628**	-.015	.766**	1							
	Sig. (2-tailed)	.001	.254	.000	.869	.000								
Cntnt	Pearson Correlation	-.210*	-.001	-.054	-.244**	.132	.005	.927**	1					
	Sig. (2-tailed)	.018	.987	.547	.006	.141	.960	.000						
Intnsty	Pearson Correlation	-.215*	-.006	.085	-.275**	.220*	.149	.850**	.766**	1				
	Sig. (2-tailed)	.016	.944	.346	.002	.013	.097	.000	.000					
Tsk_intrdp	Pearson Correlation	.252**	.934**	-.118	.063	.155	.100	-.029	-.007	-.029	1			
	Sig. (2-tailed)	.004	.000	.187	.487	.083	.264	.744	.938	.749				
Rwrd_intrdpnd	Pearson Correlation	.174	.216*	-.105	.003	.059	.049	-.021	.007	-.035	.400**	1		
	Sig. (2-tailed)	.052	.015	.240	.970	.510	.589	.818	.940	.694	.000			
Hetrgnty	Pearson Correlation	.154	.354**	.022	-.002	.089	.149	-.064	-.060	-.048	.546**	.859**	1	
	Sig. (2-tailed)	.085	.000	.811	.986	.320	.095	.477	.502	.595	.000	.000		
Nty	Pearson Correlation	-.302**	.164	.543**	-.083	.965**	.763**	.176*	.101	.191*	.140	.058	.080	1
	Sig. (2-tailed)	.001	.066	.000	.357	.000	.000	.048	.261	.032	.117	.520	.371	

Conclusion

In conjunctive task and rewards the performance and rewards of each individual depend upon others and whole group contribute to the end product. Thus it may be argued that group performance is the consequence and sum of individual tasks and efforts. A conjunctive task can't be completed until each individual complete his/her own fair share and its efficiency and effectiveness depends upon each individual performance, velocity and quality. Conversely if any one of group members doesn't utilize full efforts then group will suffer from losses.

Based on above discussion and conclusion it is suggested that organizations may avoid social loafing by assigning tasks in disjunction approach rather in conjunction, because in conjunctive task and rewards each individual will be tied with others. Thus overall performance may be affected while in disjunctive task and rewards each individual is responsible for own task and rewards and there is no dependency on collective work. Thus there is low inclination towards social loafing in disjunctive task and rewards. Further it was identified in interviews of senior professionals in Pharma industries that conjunctive or disjunctive task allocation is not a concern but rewards needs to be disjunctive always, each individual like collective work but prefer individual rewards for own contributions.

From the results of the study it was also found that peer evaluation face more loafing than self evaluation. It was identified in interviews that at work place politics and conflicts peers evaluation lead to biased ratings. So peer evaluation may be avoided for reduction of future problems and 360 degree feedback mechanism[1] was suggested.

Task significance and uniqueness attracts individuals to work hard and they feel inner satisfaction and stimulus for being producing unique goods and service. It was also identified in interviews that individuals try to create name and fame through creation of unique and distinctive goods and services; they are more willing to serve organizations which have no alternate person for a specific task. So organizations may make each task more attractive and unique so that people become attracted towards it and thus social loafing can be minimized. Other strategies for reduction of social loafing are: organizations may focus on goal setting process, goal clarity and efficiency and precision for reducing social loafing. If goals are clear and distinctive in nature then individuals are more motivated towards achievement of goals efficiently and effectively.

Increasing task and rewards interdependence increase loafing tendency among individuals. It is due to the fact that individuals in task interdependency individual's performance depends upon others performance and due to loafing of one individual all group member's performance is affected. As has been discussed earlier, individuals like to receive rewards for own performance and prefer disjunctive task and rewards.

Homogeneous group provide more conducive environment for performance and people feel more satisfied. Authors are talking in the context of Pakistan, people want to work in homogeneous group having huge interaction and relationship among each other's and don't

[1] 360-degree feedback include direct feedback from subordinates, peers, supervisors as well as self evaluation

like to exert full efforts in group having unknown group members. In Pakistani culture people feel more satisfied if they work and perform with friends and relatives.

Suggestions

In the light of above for and against arguments it is concluded that organizations may practice disjunctive task and rewards system because individual like separate goals and rewards and thus overall performance may not be affected by individual tasks because of untied distribution of tasks and rewards. Further it is argued that if an organization can't distribute tasks then at least organization may manage individual rewards distribution, because each individual prefer individual rewards. Social loafing may be reduced by the establishmentof self evaluation system rather than other systems, because it is most suitable method for reduction of social loafing.

Each task might be made unique, distinctive and attractive, it has many benefits while its dark side was also identified in interviews that if an individual produce goods and services of unique nature then they demand distinctive perks and privileges from organizations and if organization don't provide those rewards then their motivation becomes low and they exert less effort, thus social loafing dilemma is produced, so organization may focus on creating task uniqueness and keep individuals motivated and satisfied enough through attractive rewards and returns.

It is suggested that organization may practice homogeneous group composition rather than heterogeneous because in Pakistani culture people like to work with known colleague and thus their performance can be increased and social loafing can be reduced.

Implications:

Current study explored diverse aspects for reduction of social loafing from organizations. These are group evaluation techniques, task outcome evaluation and group structure composition. The study will add literature for academic researchers for further exploration and will enhance understanding of social loafing dilemma in the context of Pakistan. The beneficiaries of the study are different stakeholders of local and global economy including manufacturing industries, student groups, advertisement and marketing teams, military conveys and all service sector organizations. Implyingthese strategies will counteract social loafing and willincrease individual performance, group performance and ultimately organizational performance. Consequently it will contribute to individual life standards, local economy and global economy in the form of enhanced productivity, efficiency and effectiveness and will built capability of managers to cope up with loafing in 21^{st} century.

Future Research Directions

Future researchers are directed to investigate a more comprehensive study of other constructs of evaluation method, group structure and task outcomes. Other dimensions of evaluation method are qualitative and quantitative evaluation andgroup structure hierarchy includes functional specialization, relationship, while task outcome constructs include task complexity, process and uniqueness.It is also suggested that its impact should be determined moderatingby gender that is there any difference among males and females perceptions and some other industries and organizations of Pakistan.

Appendices - Table No 2: ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
SL	Between Groups	.547	2	.273	1.078	.343
	Within Groups	31.194	123	.254		
	Total	31.741	125			
Evl_Conjnctve	Between Groups	1.555	2	.777	2.172	.118
	Within Groups	44.025	123	.358		
	Total	45.580	125			
Evl_Disjnctve	Between Groups	.171	2	.086	.234	.792
	Within Groups	45.088	123	.367		
	Total	45.260	125			
Peer_Evlutn	Between Groups	4.355	2	2.177	.690	.504
	Within Groups	388.280	123	3.157		
	Total	392.635	125			
Self_Evlutn	Between Groups	1.001	2	.500	2.227	.112
	Within Groups	27.634	123	.225		
	Total	28.635	125			
Tsk_Mngflns	Between Groups	.091	2	.046	.178	.837
	Within Groups	31.401	123	.255		
	Total	31.492	125			
Cntnt	Between Groups	22.152	2	11.076	6.726	.002
	Within Groups	202.562	123	1.647		
	Total	224.714	125			
Intnsty	Between Groups	6.168	2	3.084	5.951	.003
	Within Groups	63.744	123	.518		
	Total	69.912	125			
Tsk_intrdp	Between Groups	.845	2	.422	1.137	.324
	Within Groups	45.687	123	.371		
	Total	46.532	125			
Rwrd_intrdpnd	Between Groups	1.068	2	.534	.461	.631
	Within Groups	142.424	123	1.158		
	Total	143.492	125			
Hetrgnty	Between Groups	1.764	2	.882	.794	.454
	Within Groups	136.664	123	1.111		
	Total	138.429	125			
Hmgnty	Between Groups	.966	2	.483	2.197	.115
	Within Groups	27.034	123	.220		
	Total	28.000	125			

Table No 3: Multicollinearity Statistics

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	2.568	.444		5.779	.000		
	Evl_Disjnctve	-.178	.092	-.213	-1.945	.054	.515	1.941
	Evl_Conjnctve	.158	.077	.190	2.045	.043	.719	1.390
	Peer_Evlutn	.035	.024	.123	1.466	.145	.876	1.141
	Tsk_Mngflns	-.080	.140	-.079	-.569	.571	.318	3.149
	Cntnt	-.046	.053	-.122	-.873	.384	.315	3.176
	Intnsty	.005	.088	.007	.052	.959	.358	2.792
	Grp_strctr	.091	.104	.080	.869	.387	.724	1.381
	Rwrd_intrdpnd	.062	.082	.132	.759	.449	.205	4.872
	Hetrgnty	.002	.085	.004	.021	.983	.195	5.126
	Hmgnty	-.183	.142	-.172	-1.285	.201	.346	2.891

Coefficients[a]

a. Dependent Variable: SL

References

Aggarwal, P., & O'Brien, C. L. (2008). Social loafing on group projects structural antecedents and effect on student satisfaction. *Journal of Marketing Education, 30*(3), 255-264.

Bachmann, D., Elfrink, J., & Vazzana, G. (1996). Tracking the progress of e-mail vs. snail-mail. *Marketing Research, 8*, 31-35.

Barrick, M. R., Stewart, G. L., Neubert, M. J., & Mount, M. K. (1998). Relating member ability and personality to work-team processes and team effectiveness. *Journal of Applied Psychology, 83*(3), 377.

Bastiaans, N., & Nauta, A. (2003). Free-riding and team performance in project education: University of Groningen, Research Institute SOM (Systems, Organisations and Management).

Becker, S. W., & Baloff, N. (1969). Organization structure and complex problem solving. *Administrative Science Quarterly*, 260-271.

Belman, D., Drago, R., & Wooden, M. (1992). Workgroups, efficiency wages and work effort. *Journal of Post Keynesian Economics, 14*(4), 497-521.

Brewer, N. (1995). The Effects of Monitoring Individual and Group Performance on the Distribution of Effort Across Tasks1. *Journal of Applied Social Psychology, 25*(9), 760-777.

Brooks, C. M., & Ammons, J. L. (2003). Free riding in group projects and the effects of timing, frequency, and specificity of criteria in peer assessments. *The Journal of Education for Business, 78*(5), 268-272.

Brownell, P. (1995). *Research methods in management accounting*: Coopers and Lybrand and Accounting Association of Australia and New Zealand.

Chidambaram, L., & Tung, L. L. (2005). Is out of sight, out of mind? An empirical study of social loafing in technology-supported groups. *Information Systems Research, 16*(2), 149-168.

Comer, D. R. (1995). A model of social loafing in real work groups. *Human Relations, 48*(6), 647-667.

Cooper, D. R., & Schindler, P. S. (2003). Business research methods.

Davies, W. M. (2009). Groupwork as a form of assessment: common problems and recommended solutions. *Higher Education, 58*(4), 563-584.

DeNisi, A. S., Randolph, W. A., & Blencoe, A. G. (1983). Potential problems with peer ratings. *Academy of Management Journal, 26*(3), 457-464.

Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly, 44*(2), 350-383.

Falchikov, N., & Goldfinch, J. (2000). Student peer assessment in higher education: A meta-analysis comparing peer and teacher marks. *Review of educational research, 70*(3), 287-322.

George, J. M. (1992). Extrinsic and intrinsic origins of perceived social loafing in organizations. *Academy of Management Journal, 35*(1), 191-202.

Gerhart, B., & Rynes, S. (2003). *Compensation: Theory, evidence, and strategic implications*: SAGE Publications, Incorporated.

Gladstein, D. L. (1984). Groups in context: A model of task group effectiveness. *Administrative Science Quarterly*, 499-517.

Glance, N. S., & Huberman, B. A. (1994). The dynamics of social dilemmas. *Scientific American, 270*(3), 76-81.

Goethals, G. R., & Darley, J. M. (1987). Social comparison theory: Self-evaluation and group life *Theories of group behavior* (pp. 21-47): Springer.

Goodman, R. (1997). The Strengths and Difficulties Questionnaire: a research note. *Journal of child psychology and psychiatry, 38*(5), 581-586.

Griffith, T. L., Fichman, M., & Moreland, R. L. (1989). Social loafing and social facilitation: An empirical test of the cognitive-motivational model of performance. *Basic and applied social psychology, 10*(3), 253-271.

Hardy, C. J., & Crace, R. K. (1991). The effects of task structure and teammate competence on social loafing. *Journal of Sport & Exercise Psychology*.

Harkins, S. G., & Jackson, J. M. (1985). The role of evaluation in eliminating social loafing. *Personality and Social Psychology Bulletin, 11*(4), 457-465.

Harkins, S. G., & Szymanski, K. (1989). Social loafing and group evaluation. *Journal of Personality and Social Psychology, 56*(6), 934.

Hoon, H., & Tan, T. M. L. (2008). Organizational citizenship behavior and social loafing: The role of personality, motives, and contextual factors. *The Journal of psychology, 142*(1), 89-108.

Jackson, J. M., & Harkins, S. G. (1985). Equity in effort: An explanation of the social loafing effect. *Journal of Personality and Social Psychology, 49*(5), 1199.

Karau, S. J., & Williams, K. D. (1993). Social loafing: A meta-analytic review and theoretical integration. *Journal of Personality and Social Psychology, 65*(4), 681.

Kidwell, R. E., & Bennett, N. (1993). Employee propensity to withhold effort: A conceptual model to intersect three avenues of research. *Academy of Management Review, 18*(3), 429-456.

Kiesler, S. B. (1978). *Interpersonal processes in groups and organizations*: AHM Publishing Corporation.

Klehe, U. C., & Anderson, N. (2007). The moderating influence of personality and culture on social loafing in typical versus maximum performance situations. *International Journal of Selection and Assessment, 15*(2), 250-262.

Kravitz, D. A., & Martin, B. (1986). Ringelmann rediscovered: The original article.

Kremer, J., & McGuinness, C. (1998). Cutting the cord: Student-led discussion groups in higher education. *Education+ Training, 40*(2), 44-49.

Latane, B., Williams, K., & Harkins, S. (1979). Many hands make light the work: The causes and consequences of social loafing. *Key Readings in Social Psychology, 1*, 297.

Lawler, E. E. (2000). *Rewarding excellence* (Vol. 13): Jossey-Bass San Francisco.

Liden, R. C., Wayne, S. J., Jaworski, R. A., & Bennett, N. (2004). Social loafing: A field investigation. *Journal of Management, 30*(2), 285-304.

Lipsey, M. W., Freeman, H., & Rossi, P. (2004). Evaluation: a systematic approach. *Thousand Oaks, CA, Sage*.

Loch, C. H., Huberman, B. A., & Stout, S. (2000). Status competition and performance in work groups. *Journal of Economic Behavior & Organization, 43*(1), 35-55.

Locke, E. A., Cartledge, N., & Koeppel, J. (1968). Motivational effects of knowledge of results: A goal-setting phenomenon? *Psychological bulletin, 70*(6p1), 474.

Locke, E. A., Feren, D. B., McCaleb, V. M., Shaw, K. N., & Denny, A. T. (1980). The relative effectiveness of four methods of motivating employee performance. *Changes in working life, 363*, 388.

Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting & task performance*: Prentice-Hall, Inc.

Locke, E. A., Shaw, K. N., Saari, L. M., & Latham, G. P. (1981). Goal setting and task performance: 1969–1980. *Psychological bulletin, 90*(1), 125.

Marks, M. A., Sabella, M. J., Burke, C. S., & Zaccaro, S. J. (2002). The impact of cross-training on team effectiveness. *Journal of Applied Psychology, 87*(1), 3.

Ness, R. G., & Patton, R. W. (1979). The effect of beliefs on maximum weight-lifting performance. *Cognitive Therapy and Research, 3*(2), 205-211.

Pallant, J. (2010). *SPSS survival manual: A step by step guide to data analysis using SPSS*: McGraw-Hill International.

Payne, R., & Pugh, D. S. (1976). Organizational structure and climate. *Handbook of industrial and organizational psychology, 1125*, 1173.

Pfeffer, J. (1995). *Competitive advantage through people: Unleashing the power of the work force*: Harvard Business Press.

Price, K. H. (1987). Decision responsibility, task responsibility, identifiability, and social loafing. *Organizational behavior and human decision processes, 40*(3), 330-345.

Pugh, D. S., Hickson, D. J., Hinings, C. R., & Turner, C. (1968). Dimensions of organization structure. *Administrative Science Quarterly*, 65-105.

Rand, A. (1990). *Introduction to Objectivist Epistemology: Expanded Second Edition*: Penguin. com.

Rees, D. I., Zax, J. S., & Herries, J. (2003). Interdependence in worker productivity. *Journal of Applied Econometrics, 18*(5), 585-604.

Rubin, A., & Babbie, E. (2013). *Brooks/Cole Empowerment Series: Research Methods for Social Work*: Cengage Learning.

Russ-Eft, D. F. (2009). *Evaluation in organizations: A systematic approach to enhancing learning, performance, and change*: Basic Books.

Shea, G. P., & Guzzo, R. A. (1987). Group effectiveness: What really matters. *Sloan Management Review, 28*(3), 25-31.

Steiner, L. (2007). Group Process and Productivity (Social Psychological Monograph).

Strong, J. T., & Anderson, R. E. (1990). Free-riding in group projects: Control mechanisms and preliminary data. *Journal of Marketing Education, 12*(2), 61-67.

Suleiman, J., & Watson, R. T. (2008). Social loafing in technology-supported teams. *Computer Supported Cooperative Work (CSCW), 17*(4), 291-309.

Szymanski, K., & Harkins, S. G. (1987). Social loafing and self-evaluation with a social standard. *Journal of Personality and Social Psychology, 53*(5), 891.

Tabachnick, B. G., & Fidell, L. S. (2001). Using multivariate statistics.

Thompson, L. L. (2004). *Making the team: A guide for managers*: Pearson Education India.

Veigal, J. F. (1991). The frequency of self-limiting behavior in groups: A measure and an explanation. *Human Relations, 44*(8), 877-895.

Wageman, R. (1995). Interdependence and group effectiveness. *Administrative Science Quarterly*, 145-180.

Wageman, R., & Baker, G. (1997). Incentives and cooperation: The joint effects of task and reward interdependence on group performance. *Journal of organizational behavior, 18*(2), 139-158.

Watson, W. E., Kumar, K., & Michaelsen, L. K. (1993). Cultural diversity's impact on interaction process and performance: Comparing homogeneous and diverse task groups. *Academy of Management Journal, 36*(3), 590-602.

Williams, K. D., Nida, S. A., Baca, L. D., & Latané, B. (1989). Social loafing and swimming: Effects of identifiability on individual and relay performance of intercollegiate swimmers. *Basic and applied social psychology, 10*(1), 73-81.

Worchel, S., Rothgerber, H., Day, E. A., Hart, D., & Butemeyer, J. (1998). Social identity and individual productivity within groups. *British Journal of Social Psychology, 37*(4), 389-413.

Wright, K. B. (2005). Researching Internet-based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services. *Journal of Computer-Mediated Communication, 10*(3), 00-00.

CASE STUDY

EASYPAISA: SEIZING THE WHITE SPACE AND BUSINESS MODEL INNOVATION

Nasir Afghan
Institute of Business Administration, Karachi, Pakistan

Abstract

Easypaisa is a diversification case study written about two very different organizations, a Telco and Microfinance Bank, and howthey merged to create a new business. This new business was providing MobileFinancial Services. Both Telenor (a Telco) and Tameer Bank (Microfinance bank) saw a business opportunity in branchless banking (business white space). They were committed to make this acquisitionsuccessful, where Telenor bought over 51%sharesof Tameer Bank. However, as per regulations, the branchless banking model is to be governed under a bank-led model. Therefore, the face of Easypaisa has always been Tameer Bank which is expected to manage all the regulatory issues and compliance issues and back end processes while Telenor uses its vast distribution network and marketing skills to create a winning business model.

The case provides opportunities for students to explore Easypaisa business model generation and how they capture the white space beyond existing market and business model. Case also looks future challenges from Telenor and for Tameer Bank point of views. The success of Easypaisa brings new opportunities and complexities for Telenor and for Tameer Bank top management.

Key words: *Easypaisa, Business Model Innovation, Business White Space, Mobile Money, Branchless Banking and Business Leadership.*

Introduction

It was Friday, 15^{th} February, 2013 Mr. Nadeem Hussain was gazing out at the skylines of Shahrah-e-Faisal, Karachi from his office glass window. He was reflecting on his Micro Finance bank known as Tameer Micro Finance Bank. He founded the bank in 2004 from his ($ 6 million) life savings of around $6 million collected from a job at Citi Bank. In 2008 he became a pioneer part of the kick-start of branchless banking in Pakistan through a branchless banking service called Easypaisa. However, through his decision he received a lot of speculation as many thought that he was gambling with his life savings. On the other hand Mr. Omer, Head of Strategy Easypaisa at the Telenor head office in Islamabad, was thinking how sustainable the current business model of Easypaisa actually is? The question that concerned him the most pertained to the new regulations imposed on Mobile Banking in Pakistan. What if the new regulations imposed by the State Bank change the playing field from One-to-One Model to Many to Many Model? What then should be the strategy and action plan in taking Easypaisa forward?

Despite all the negativity and doubt in October 2009 Easypaisa was launched with its first product of enabling Utility Bill Payments followed by a Money Transfer service. This service went on to winning several awards including the award for the best product in 2010 and 2012. In 2010 Easypaisa won the award for 'Best Mobile Money Transfer Entrant of the Year' at the world's first Mobile Money Transfer (MMT) Awards held in Dubai. The very next year the service was pitted against some of the world's leading mobile financial service providers, and it was also the only service nominated by the jury in three of the six categories. In 2012 Easypaisa was yet again nominated for two awards: "Most Inventive Marketing Campaign" and "Achievement in Financial Inclusion".

Mr. Nadeem was more than satisfied with the Easypaisa's achievements but as he thought about the future of Tameer Bank, his face became serious. The question that was worrying Mr. Nadeem was that what Tameer Bank's future strategy for the next two years should be? Which avenues should be focused upon to guarantee success for the bank and how? How should he manage the perception of the bank as microfinance bank and not merely as a commercial money transfer bank?

Since the Easypaisa launch in October 2009 there had been nearly 130 million transactions worth more than USD 2.9 Billion till June 2013. Also June 2013 experienced almost 200,000 transactions daily through the Easypaisa system. Every month almost 4 million new consumers started to use Easypaisa services because of the trust, convenience, accessibility, reliability, and security of transaction it provided. At present, the Easypaisa team stood at a moderate size of 200 employees from both the Tameer (Karachi) and the Telenor Group (Islamabad).

Global and Local Context of Mobile Money Business

According to the statistics provided by the International Telecommunications Union in the table below, the total number of cellular subscribers in the world had approximately reached six billion in 2011.

Table 1: details of Mobile cellular subscriptions by International Telecommunications Union[1]

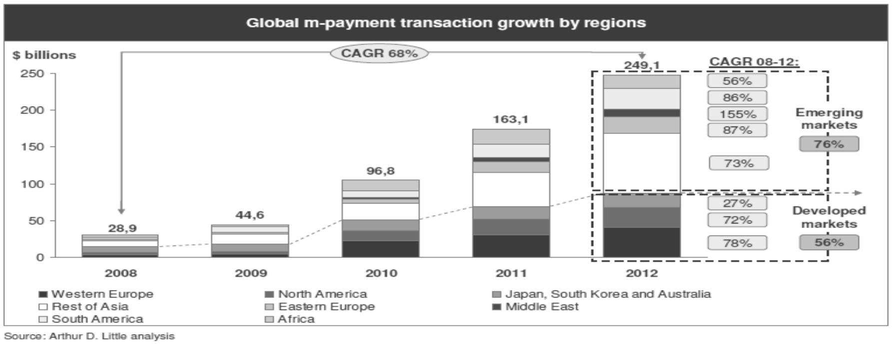
Mobile-cellular subscriptions (millions)							
	2005	2006	2007	2008	2009	2010	2011
Developed	992	1'127	1'243	1'325	1'384	1'413	1'514
Developing	1'215	1'619	2'126	2'706	3'263	3'898	4'457
World	2'207	2'747	3'369	4'031	4'647	5'311	5'972

Given that the world population is slightly above seven billion, the table depicts that there is very little room for further growth in cellular subscriptions. Another important fact to note, after studying this table, is that almost 97% of the global population growth in 2012 came from developing countries[2]. Hence, given the already high penetration of cellular services in these regions and the high growth rate of both the cellular market and the regions' population, there rose a need to develop cellular services in such developing economies.

As shown in the figure 1, the global growth rate of payment transactions of mobiles mobile payment has increased by an average of 68% annually till 2012. Where the total market for mobile payments was transacting at$28.9 billion back in 2008, by 2012 this amount shot up to $ 249.1 billion. As depicted in the figure, this growth rate, in 2012, was at 56% in developed markets while being 20% higher in emerging markets.

1. http://www.itu.int/ITU-D/ict/statistics/at_glance/KeyTelecom.html
2. http://www.prb.org/Publications/Datasheets/2012/world-population-data-sheet/fact-sheet-world-population.aspx

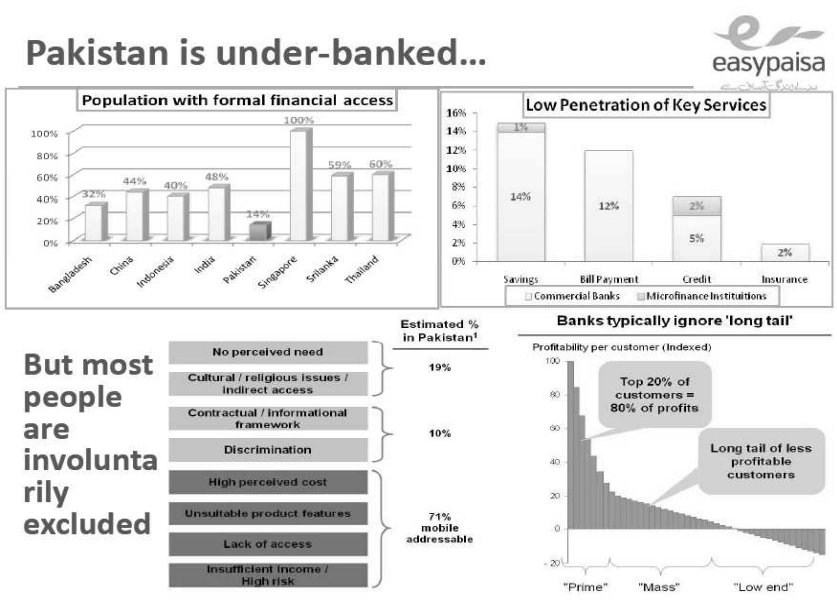
Figure 1: Arthur D. Little analysis[3] of Mobile Industry Growth.



Mobile Banking Scenario in Pakistan

Keeping in mind that Pakistan has a population of about 180+ million, with around 15-20 million bank accounts, Mr. Habib Ali at Tameer Micro Finance Bank Limited said, "In Pakistan, there are currently an estimated 30 million economically active people who have no access to basic transactional services, let alone savings and other financial safety net solutions. Now, with Easypaisa, these people can have a bank account without a physical bank branch and can conduct financial transactions from the comfort of the home by using just a basic cell phone." He further said, "The World Bank estimates a domestic (i.e. within Pakistan) transfer volume at close to $7 billion a year. Through Easypaisa, we aim to target current users of domestic remittance services. Also, we aim to help bring a portion of the $2 billion to $4 billion transacted through informal channels into the mainstream."

Figure 2: Details on unbanked Pakistan (source: http://www.telenor.com.pk)



---

3. http://www.telecomcircle.com/2011/01/the-mobile-payment-conundrum/

As depicted in figure 2 above, Pakistan is clearly lagging in financial out reach. The graph depicts a low penetration of key services shows that only 15% of the entire Pakistani population has access to formalized saving channels, 12% have access to utility bill payment services and only 5% and 2% have availability of credit and insurance respectively. Since there are around 11,000 bank branches therefore there is limited access to banking services.

Since 2004, the number of mobile service providers has been increasing hence showing that the outreach of mobile services is far more than that of financial services. Table 2 below shows some numbers for cellular subscribers from 2003 to 2012 that depict this scenario:

Table 2: Annual Cellular Subscribers from 2004 to 2012 (Source: http://www.pta.gov.pk)

Annual Cellular Subscribers							
	Mobilink	Ufone	Zong	Insta phone	Telenor	Warid	Total
2003-04	3,215,989	801,160	470,021	535,738			5,022,908
2004-05	7,469,085	2,579,103	924,486	454,147	835,727	508,655	12,771,203
2005-06	17,205,555	7,487,005	1,040,503	336,696	3,573,660	4,863,138	34,506,557
2006-07	26,466,451	14,014,044	1,024,563	333,081	10,701,332	10,620,386	63,159,857
2007-08	32,032,363	18,100,440	3,950,758	351,135	18,125,189	15,489,858	88,019,812
2008-09	29,136,839	20,004,707	6,386,571	34,048	20,893,129	17,886,736	94,342,030
2009-10	32,202,548	19,549,100	6,704,288	0	23,798,221	16,931,687	99,185,844
2010-11	33,378,161	20,533,787	10,927,693	0	26,667,079	17,387,798	108,894,518
Dec-11	34,213,552	21,368,744	13,874,709	0	28,130,720	15,287,861	112,875,586
Mar-12	35,787,527	23,120,657	15,663,398	0	29,348,228	14,397,106	118,316,916
May-12	36,048,127	23,550,270	16,566,768	0	29,896,660	13,798,974	119,860,799

In Table 2 it is evident that numbers of cellular subscribers are reaching an optimum with very slow growth rate.

However, in Table 3 below it is evident that the incremental growth in the mobile popularity in terms of Teledensity has increased by over 20 times in a period of 7 years or so.

Table 3: Annual Teledensity from 2004 to 2010 (Source: http://www.pta.gov.pk).

Annual Cellular Mobile Teledensity (%)	
Year	Mobile Density
2003-04	3.29
2004-05	8.30
2005-06	22.21
2006-07	39.94
2007-08	54.60
2008-09	58.20
2009-10	60.4

According to one consultant in the telecom industry, "The future challenge for telecommunication operators in Pakistan will be how to provide financial services to the unbanked population." In an interview (DAWN, February 20, 2013) Mr. Roar Bjaerum said, "Our challenge is how to have 100,000 distribution points and bring 50 million people into banking services by 2020. If we succeed in doing so, we will increase new jobs in Pakistan by 1 million and will increase the GDP growth rate of the country by 3 %." He further said, "The challenge is how to convert people from using risky, insecure and fraudulent informal channels (like Hundi / Hawala) systems and, in doing so, bringing cash into formal banking sector thereby helping the government in minimizing the risk of illegal activities that help finance terrorists and also promote money laundering."

What are the causes of financial exclusion?

According to a report by Telenor, "Financial exclusion predominates in the world's emerging economies often as a result of lack of credit history, overly complicated financial products, limited access to banking branches and little trust in the existing financial institutions. The 2.5 billion unbanked people manage to work around the system by, for example, borrowing or loaning between friends and family, obtaining short-term credit from employers, forming illegal savings clubs or seeking out illegal moneylenders. These options are often risky, costly and with indeterminate results".(source: http://www.telenor.com.pk)

"The mobile phone is emerging as a key tool for bringing financial services to unbanked populations. It allows users to complete basic payments and remittances via the mobile phone, and gives easier access to savings, credit and insurance products," said Jon Fredrik Baksaas, President and CEO of Telenor Group. He continues, "We as a telecom company have a unique advantage in being able to provide mobile financial services to the unbanked population. We have a pre-established relationship with the customers, who already have mobile devices in their hands and we are a trusted and established brand in the regions we operate, with a large and secure distribution network". (Source: http://www.telenor.com)

While it is widely agreed that mobile financial services are positively affecting emerging economies already, Telenor and BCG[4] explored what the picture will look by the year 2020. According to BCG report estimates, mobile financial services may result in a 5–20 percent reduction of financial exclusion by 2020. In Pakistan alone, the reduction may be as much as 20 percent.BCG report estimates that mobile financial services have the power to increase gross domestic product (GDP) by up to five percent by 2020. This GDP growth may be stimulated by increased access to credit, which prompts new business creation, as well the benefits of formal remittances and increased savings (Source: http://www.telenor.com).

A tool for societal change

With mobile financial services reaching a potential of 341 million people in the study conducted by BCG for Telenor, the report further says, "By 2020 there is bound to be some significant social impact which will lead to increasing access to healthcare and insurance, better opportunities for women through access and control funds and the encouragement of transparency through fewer cash."

---

4. The Socio-Economic Impact of Mobil Financial Services: Analysis of Pakistan, Bangladesh, India, Serbia and Malaysia, April, 2012, the Boston Consulting Group, USA.

The BCG report specifically explored the financial burdens experienced by families during times of disaster, looking into how mobile financial services could provide some relief. They found that mobile financial services serve as an important tool for responding and preparing for natural disasters. A solution such as Telenor and Tameer Bank's Easypaisa can be used as a means to solicit and distribute donations for example. According to Mr Baksaas President and CEO, Telenor Group, "While BCG's perspective on mobile financial services seems to be promising, we must also be ready to face a few hurdles along our way to a financially inclusive 2020. The consumers must be educated, a distribution network and business model must be in place and the approval of the regulators must be gained. These steps are vital for the successful spread of financial services, and Telenor will continue to face these challenges in creating more services that improve the quality of life for our customers." He further added, "We are just scratching the surface. There is a long road ahead and the possibilities are endless like offering international money transfers, B2B and B2C transactions, micro-insurance and many more. Our product development team is constantly exploring new services and solutions to meet all the needs of Easypaisa users." (Source: http://www.telenor.com)

Business White Space for Telenor and Tameer Bank

Telenor believes that ARPU (Average Revenue Per User) in the GSM (Global System for Mobile Communication) is decreasing day by day. Initially all the GSM players when entering the market were of the thought that the GSM business has huge potential. However after having 6 different players enter the market, price wars were initiated which resulted in price cuts making the average ARPU which used to be \$ 18-20, at the emergence of the GSM market, to be less than \$ 2 or \$3 a month now thereby depicting a very low figure.

In early 2008 the idea of using cell phone for payments and to transfer money was unbelievable and it was unconvincing that Telenor group could be able to develop this concept into a new revenue stream. However, people had started to spend a greater part of the day with their cell phones. This societal and behavioral change caught the telco managers' attention and this observation lead them to start thinking on how to avail this new opportunity and introduce a service that could help the consumer to pay bills and also transfer funds.

The chief idea behind Easypaisa was to enable transactions through mobile in a country like Pakistan where 15-16% people have access to banking channels and around 84-85% people have no formal access to banking channels. The main objective of State Bank for allowing branchless banking was to introduce financial inclusion and provide access to these people. According to the State Bank, in Pakistan, there were around 15 million active bank accounts whereas Telcos had 120 million subscribers which depicted there was a huge gap between financial services and Telcos. This means that at that time, Telcos had enough reach to provide for financial inclusion in this market. Although there were still 3 players in the market, there was huge potential and a lot of capacity available to provide for financial inclusion.

According to the State Bank of Pakistan, the idea of branchless banking through using mobile phones can enable the unbanked population to become a part of the banking system. Of the 100 million adult population in Pakistan, 15 million are banked which leaves behind 85 million people as a part of the target market for such a service. If these 85 million save only 2 thousand rupees, then on annual basis they save around 3 trillion rupees and these are still those people who are already in the subscriber base. There are still people in rural areas that are outside of the coverage area of Telcos. The biggest advantage we had was that when we got the license back in 2004-05 we found out that there are already very big players in the urban market, so we started from rural and we expanded equally in rural and urban regions. Mobilink and Ufone did not have a high presence in the rural areas because they only focused on the major cities. We had the largest footprint in Pakistan in rural areas, whereas Mobilink had not made that much of an impact in these regions."

For this futuristic idea several studies were conducted to study the money transfer and payment trends. After sufficient observation and data had been collected, Telenor decided to enter into financial business. However, the forming of Easypaisa was not smooth-sailing. The State Bank of Pakistan did not allow any Telco to have their own bank or to conduct any financial transactions and hence had created regulations that stated that in order to establish a branchless banking model the proposed structure should be a bank led model.

According to Mr. Nadeem, these regulations resulted in the acquisition of 51% shares Tameer Microfinance Bank. The Telenor Management had been involved in the planning behind this move for a whole year and in the process they had meetings with various banks. They found out that to acquire a big bank they had to either do a joint venture with them or had to purchase some stake in them. However, the product they planned to bring to the market required them to have a say or control in such alliances. However, this business management mind-set of Telenor conflicted with that of most banks. Another reason why the Telenor Management's mind-set conflicted with other banks was because Telenor's subscriber base is huge whereas in banking the subscriber base was low but with high revenue streams. This difference could neither be understood by GSM companies nor banks as the mind frames and cultures of both types of businesses are so different. Hence, their alliance is very difficult primarily because of a difference in focus; banks traditionally focus on deposits (corporate clients and few big customers) while Telcos focus on all customer be they small or big.

Telenor decided that instead of signing MoU and having separate managements, they should stick to acquiring majority shares in a bank. Hence, Tameer was the best available option because of two reasons: firstly because bigger banks like, Habib Bank Limited, Muslim Commercial Bank had unjustifiably very high share prices while Tameer was a new and innovative bank and thus, had low share prices. Secondly, Tameer's vision matched with that of Telenor because their President, Nadeem Hussain, was a very dynamic person. Though having started his career from CITI Bank, he had a very different vision from other bankers. Although the first microfinance bank was Khushhali bank, Tameer bank surpassed it in 2006 by becoming the first branchless micro-financing bank. Tameer bank pushed this idea and somehow managed to convince SBP. In conclusion, Telenor went to Nadeem and told him that we will buy stakes in his bank and the alliance between Tameer and Telenor was hence formed.

Mr Nadeem remembers that he was a bit apprehensive about this deal. He says, "The deal was not easy for us, they wanted to buy the bank and SBP (State Bank of Pakistan) was not allowing more than 51% shares to be sold. In order to convince them, I invited the both Governor of State bank and CEO Telenor for a meeting and after a lengthy discussion it was agreed upon that Telenor will buy 51 % shares of the Tameer bank, a CEO of Tameer bank will be appointed and the alliance will have three directors and a chairman of the bank board." The Telenor manager explained, "If we had purchased all of the shares, it would have become a Telco-led model."

The Easypaisa and Tameer alliance is a representation of the "1-to-1" model. Initially the State Bank had only allowed a"1-to-1" model i.e. only one Telco can join hands with one bank. The other models that State Bank has now started to introduce include the "1-to-many" which means that 1 Telco can join hands with many banks and vice versa, and "many-to-many" model i.e. all the operators can join hands with all the banks. From the model that Telenor had formed with Tameer, there are around 20 ,000 agents for Easypaisa which is more than the number of total branches (estimated 11,000) of all banks together in Pakistan and four times the total number of ATM machines in the country.

According to Mr. Omer Moeen, the Head of Strategy at Easypaisa, "When we launched Easypaisa we focused primarily on the bill payment product and consequently domestic remittances. Customers previously used to go the post office to make payments for these two financial services and thus these two primary sources of ours got the best response as they provided convenience and a hassle-free system. Our service made this process very instantaneous. Through the system we introduced, a customer submits cash at the shop, communicates the pass-code, and in a matter of hardly 3-4 minutes the transaction is processed." He further said, "To understand our customers we spent months studying customer daily routine and life style concentrating on what are their day to day issues were and how we can try to resolve them? We had our sleeping bags with us and we would spend nights and days with our customers. We had our ears to the ground to understand and to know what and how we have to do to solve our customers' financial problems. Hence, we were able to design the ideal product, agent channel, distribution and retail network and the front end marketing for Easypaisa."

Telenor's mainly focusing on a target market of people who worked in urban areas but had to send money to rural areas for e.g. people like drivers who work in the city while their families live in rural areas. Previously, such workers used to rely on a completely unreliable and informal system of money transfer by going to the inter-city Bus Station, giving their salaries to bus drivers and then helplessly relying on the bus drivers to reach their villages and give the money to their families. Apart from the risk associated with this kind of money transfer, there were also leakage issues which delayed this money transfer. Furthermore, extra money had to be paid to the bus drivers for conducting this service. With Easypaisa, Telenor also charges money, but the process is instant because the money gets delivered instantly through their network. Easypaisa now has 3-4 million transactions every month where these transactions primarily belong to the same laborers sending back money to their families in rural areas or making bill payments.

Easypaisa has basically two money transfer / payment models: one is the M wallet through which a consumer can open up a bank account in his/her mobile and the other is the OTC i.e. Over-the-Counter model. In the OTC model, it is not necessary to be a Telenor subscriber. One can simply transfer money by providing a copy of their NIC without opening an account. The charges on the M wallet are less than those on the OTC service to encourage people to become more self-reliant. Through the M wallet service though, the customer has been given the liberty to perform money transaction on his/her own rather than going to a shopkeeper/retailer. Hence, the Easypaisa service has been made available to everyone, be they Telenor subscribers or not.

Talking more on these services, Mr. Roar explained in an interview with DAWN (20th Feb. 2013) why the Easypaisa team had put more focus on the OTC service at first. He said, “We made a deliberate choice to focus on OTC transactions at the time of launch because in a country, like Pakistan, where financial inclusion is very limited, it was more prudent for us was to start with the lower hanging fruit, that is why we started with the OTC model and later on moved to promoting the mobile account (M-Wallet)”.

Before the team at Telenor decided upon the target customer they had to conduct an extensive research. To identify the target consumer, Telenor researched very thoroughly. They hired some consulting companies and companies associated with mobile money like CGAP (Source: http:/www.CGAP.com) which had done similar related studies which helped Telenor immensely. Telenor also took assistance from Boston Consulting on the existence and identification of mobile financial services opportunity within Pakistan and their benefits and impact on the Pakistani population. The report done by BCG concluded there are two basic financial transactions here which everyone wants to carry out: bill payment and money transfer.

Bill payment is the primary transaction as there is a deadline for their payment every month. Hence the consumer is always short on time and in a hurry to pay his bills on time. The secondary transaction is that of money transfer where heads of families transfer funds to their families residing in rural areas for their monthly expenditure. These two core potential products were highlighted in the research studies through which we could strengthen our brand instead of presenting an entire bouquet of services and then assuming that people would pick and choose from them according to their own needs. Initially Easypaisa faced a lot of problems because people thought that when the management talked about banks and providing a means for financial transactions it would involve stamps and receipts because the concept of branchless banking was unknown. However, the Easypaisa team eventually had to include a stamp in order to gain customer confidence although the electronic confirmation is enough in this model as it contains the customer’s transaction ID, amount, the name of the agent who did it and other authentication details. Due to the lack of trust shown by this consumer segment, a stamp and receipt system had to be included. However, at the same time Easypaisa started slowly exploring and strengthening its brand identity in order to gain their trust. Now that the brand is established, the Easypaisa team has decided to offer more products.

The objective of Tameer microfinance was to give small loans to business persons. Easypaisa achieved this objective of Tameer by offering a loan repayment option. Tameer’s microfinance business was separate but Telenor is still supporting them in it. Through Easypaisa, two saving variants have recently been introduced: Beema and Munafa. KhushaalBeema offers a hybrid product with a free life and accidental insurance if an individual keeps a minimum of Rs. 2000. This insurance package starts from 50 thousand and goes up to 500 thousand with no charges. KhushaalMunafa offers a premium interest against various minimum slabs.

Mr. Kabeer said, “We essentially focus on small entrepreneurs. Our loans are for people who do small businesses. We don’t give loans to very poor people because they can’t repay them. However, we don’t give loans to rich people either. Our biggest category of borrowers to whom lenders are apprehensive to give loans to is made up of the small businessmen e.g. shopkeepers. Small general stores that stock commodities like tea, milk packs and cigarettes would also be able to stock bread and eggs if given 50, 60 or 70 thousand rupees. This is where we come in.”

As depicted in the Tameer Bank Balance Sheet that has a footing of Rs 11 billion, Rs 10 billion throughputs are from the Easypaisa channel alone and hence one can imagine the important role the Easy Paisa channel plays.

In an interview Mr. Roar said, "We faced many challenges in generating the awareness of financial services. For this, we have consistently invested, from the start, in trainings for our Easypaisa shops and for our customers through marketing campaigns and specially designed communication. Hence, the Easypaisa service has continued to evolve and grow in light of such challenges and will continue to provide customized solutions for all its customers". (DAWN, 20 Feb, 2013).

According to Mr. Omar Moeen, the Easypaisa Strategy head, "The implementation of strategy was not so easy and there were many challenges for us. The most important challenge to tackle was the development of the Easypaisa team. Initially, the Easypaisa team was divided in two with the Telenor team in Islamabad looking after the business model, and the Tameer bank team in Karachi looking after the risk and banking side. In the initial phase, the teams had very serious issues with each other and there was time when they even stopped talking to each other. It was a complete disaster! However, the CEO of Telenor intervened and he came to the decision that the Telenor team will spend two weeks in Karachi at the Tameer office and the Tameer Bank team will spend two weeks in Islamabad with the Telenor team. These two weeks rotations were conducted for 8 months and coordination between the two teams improved significantly. The second team building strategy that the CEO of Telenor adopted was to send all of us together to a tea plantation in Sri Lanka for three days. We were there together for three days sleeping in tents and cooking and eating together as one group. After that team building experience our team became one: the Easypaisa team. Now both teams welcome problems and assist each other by resolving one another's issues."

Tameer Bank's Motivation for Branchless Banking

Initially Tameer Bank faced high costs: the huge salaries to be paid and infrastructure and technology costs. Unfortunately, micro finance is a business of small margins due to small loans and receiving no discounts on any of their cost base. This squeezed the profits even further. To address this concern and making themselves easily accessible to target market, they opened various branches in areas such as Landhi and Baldia town versus more expensive areas such as Shahra-e-Faisal. In the first year, Tameer opened up 13 branches in Karachi in a market which stood at 18 million at that time. They employed 20,000 people and reported zero delinquencies. Hence the first year was concluded with a false sense of hope that being Citi bankers they understood the business and it were able to easily operate it.

However, in 2005 the delinquency ratio started to increase (Exhibit A for Tameer bank financial data). Bad loans were made in the aggressiveness to drive the business growth. Branch managers were approving loans to their maximum limits and any overflow was authorized by the head office to increase sales volume. No attention was being given to secondary checks and balances. Also, debtors were being sanctioned loans through intermediaries whereas the bank, at times, did not even meet the customer. As the delinquencies increased, Tameer started breaching the capital adequacy limit. According to Nadeem, "The results from Tameer, in the second year, taught them that this business was not as simple as it seemed. The business needed the volume but not at the stake of such delinquencies. The controls needed to be strengthened in order for Easy paisa to grow otherwise the business would not breakeven in even 10 years."

With this lesson Tameer stepped into "Tameer Bank 2.0." The objectives of the Tameer 2.0 were:

- Geographical diversification: To move out of Karachi and diversify the portfolio in Punjab.
- Strengthen upfront processes even if it meant increasing expenses and reduced backend flow.
- Strengthening front end corporate controls which meant starting up on independent customer evaluation and verification process by Relationship Managers
- Set up of a regional credit management committee
- Initiating a courtesy call back process to the customer

With these new control systems in place towards the end of the 2nd year, the bad debts started clearing up and the delinquencies came down from 25% to 5% i.e. from Rs 140m to Rs.80m. Nevertheless, 2006 ended with a breach of minimum capital requirement for the bank. To cover the breach that, Nadeem had to put up an additional million of his personal funds.

By the first half of third year though, it was very clear that the bank needed capital injection. They had successfully maintained geographical diversification, product diversification and implemented safety controls, but in order to survive more cash injection was needed urgently. Given that Mr. Nadeem the entrepreneur had exhausted most of his personal resources and had much at stake, it was time to look at serious cost cutting measures because a significant portion of cost was constituted in maintaining and running branches.

Mr. Nadeem (CEO Tameer Bank) said, "We recognized that we will only be able to reach a significant proportion of our target market only if we find innovative ways of reaching customers outside the expensive and geographically constrained traditional branch infrastructure." He further said, "In 2007, we were requesting State Bank to develop branch less banking regulations and we were the first to embark on it. We then even obtained capacity building grant from Bill and Melinda Gates Foundation (in 2011) to improve our marketing capabilities, enhance agent network and performance via agent training and improving cash management for agents, and to improve business delivery capabilities to serve rural and urban areas through alternative delivery channels."

Telenor's Motivation for Branchless Banking

Similarly in 2007 and 2008 Mr. Jon Eddy Abdullah, the CEO of Telenor, Pakistan was able to see the declining trends in the industry and decided to develop mobile financial products to capture the gaps between the two industries and aim at meeting some unmet demands.

Following are the gaps that provided incentives for mobile money banking:

- *Rural areas as well as lower class people in Pakistan are primarily unbanked – thus untapped market:* According to a State Bank Report, only 16 percent of the people in Pakistan have access to a formal financial institution.
- *Banking is too costly an activity to do in rural areas 'in its current form':* Here current format means using traditional branch structure, where a branch would

consist of minimum 3 employees, 1 guard and one office boy. With minimal accessories, according to rough estimates, a traditional branch would require monthly cost of approx. PKR 1 Million.

- *Branches are costly to be built in rural areas:* In banking sector, opening more than 4 new branches a year is usually considered as an expansion project owing to the huge amount of investment it involves. Moreover, with the currently depressed economy, banks cannot afford to wait for 3-4 years for a rural branch to breakeven. According to an employee of Bank, "one major bank despite posting second or third highest profits in banking sector for years only 400 out of 1400 branches of this bank are profitable at branch level".
- *Telecom sector has reached a saturation point in its traditional format:* Telecom sector has reached a point where all competitors have lowered the prices to a level where there is no road downwards. According to some estimates, in 2009, Pakistan generated second largest SMS traffic for approx. 700 million. With per capita income far lower than many other nations, use of SMS at such large level indicates intensity of price war. Now, voice quality and signal strength are no more distinguishing factors, these are the basic requirements. Value added factors introduced so far may become a good fad but their utility is very low and thus revenue generation from them is not sustainable.
- *Revenue volatility from value added services:* With the intense competition and price war in telecom sector, venturing into a different business model that may give them sustainable stream of revenue.
- *Regulatory Requirements:* Since 9/11, there has been intense pressure on banks to ensure that they know who their customers are. There has been a complete section dedicated on Know Your Customer (KYC) and Money Laundering. Now the banks require a host of documents to open an account to reduce reputational risk that may happen in case a terrorist financing scam surfaces. (source: Telenor official reports and Interviews)

Designing the Products for Target Audience: After conducting a gap analysis, Telenor decided to design the product in order to deliver the financial services to the unbanked population i.e. mostly for the people at the bottom of the pyramid. Persons from such a background would least likely to go into a bank's branch but rather go more often to the local pan shop or convenience store i.e. he would trust a neighborhood retailer more than a banker in fine suiting. The person at the bottom of the pyramid might have never used internet in his life, but would have at least a basic phone and could at least read numbers. While helplessly preoccupied with earning his daily wages, he might not be able go to a fancy branch of a 9 to 5 bank and wait in line wasting the time he could have used to earn his bread for the day. He would rather go to a local, trusted retailer and pay him for the bill.

Telenor also found out through research that a significant part of this class of people, particularly those living in metropolitan areas, have entire or at least a part of their immediate or extended family in some village who are dependent on their monthly earnings. However, the total value of money that these people have to send to their relatives in villages is too small for to get into the hassle of submitting countless documents in the bank. Moreover, an ordinary person from this class is also not educated enough to provide proper signatures for the authentication process and may face issues from getting his own money back from bank.

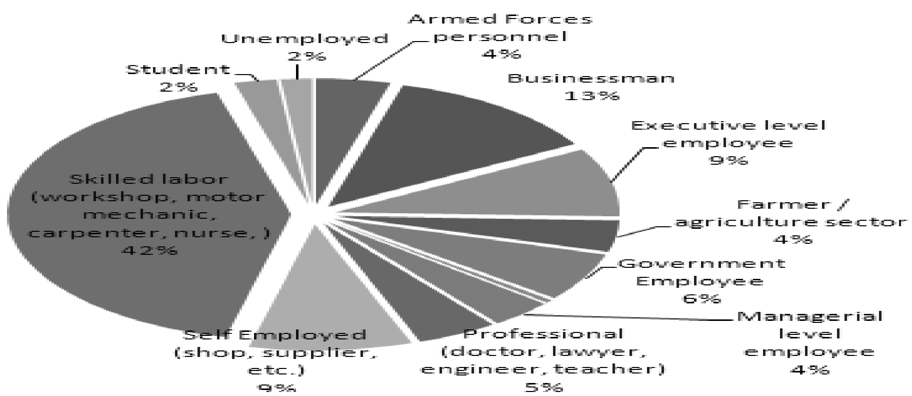
Hence, with this target market profile in mind, Easypaisa was launched itself with a positioning as a as a *convenient, accessible,* and *secure* financial solution with *no hassles* attached to it.

The complete profile for the target audience for Easypaisa included the following:

- Typically males
- Aged between 18 and 50
- Belonging to lower-lower or lower-middle class
- Usually blue collar job-holders or small-scale self-employed individuals
- Little access to formal banks and lack of willingness to do so
- Very busy
- Acquainted to use SMS at basic levels

The following figure provides the profiles of Easypaisa users:

Figure 3: Easypaisa user profile



What Easypaisa Offered:

Easypaisa Mobile Account: Easypaisa Mobile Accounts were actual bank accounts and work like a normal bank account except through the mobile phone. This service, however, was only available for existing and new Telenor subscribers. The Easypaisa Mobile Account could be opened from any Telenor Sales and Service Centers, Telenor Franchise or Tameer Bank branch. Using Easypaisa Mobile Account, Telenor subscribers were now able to pay bills, transfer money and use many more services from their own mobile phones, anytime, anywhere.

Donations through Easypaisa Shop: Through the Easypaisa donation service, one could contribute to the society by supporting various causes. Easypaisa took an initiative in this regard by offering donation services that ensured the transfer of donation amounts to different organizations in a secure and reliable manner. Using this service, donation amounts could now be transferred to respective organizations.

Easy.Pay Solution for Companies: Easy.Pay solutions catered specifically to corporate organizations that wanted a convenient and reliable mode of payment collection from customers. In availing this service by Easypaisa, organizations were to be provided with a Corporate Easypaisa mobile account number, which they could communicate to their customers. Customers in turn could then make payments to the corporation from thousands of Easypaisa shops all over Pakistan or from their own Easypaisa mobile account. Out of these products, the most commonly Easy.Pay solution used was that of Money Transfer. (Source: Interview at Telenor).

Over the counter services *through Easypaisa Shop:* Using the OTC channel Easypaisa customers can only use four products: Money Transfer service and Utility Bill payments, consumers could send and receive money to and from family, friends, etc from any Easypaisa shop in the most efficient, secure and convenient way. They did not have to own a Telenor connection, nor did they need to have a mobile phone. The best thing about the service was that any person in Pakistan could use this product and that no registration was required!

Bill payment: The Easypaisa bill payment service provided a person with a hassle free system and a secure way to pay electricity, gas, telephone, and water and internet bills. A person could easily pay utility bills from the nearest Easypaisa shop, Telenor franchise, Telenor Sales & Service Center or Tameer Microfinance Bank branch.

International Home Transfer: Easypaisa International Home Transfer allowed individuals to receive money from over 80 countries through any sending partner. A Telenor connection was not required for this service and it was absolutely free!

Easyload: Now with Easypaisa Mobile Account one could purchase prepaid balance and pay postpaid bills any time anywhere from own mobile phone. This was an alternate recharge channel for the customers and one of its kind in the industry. This service was made available to all Telenor customers possessing Easypaisa Mobile Accounts.

The Easypaisa Marketing Mix

Pricing: The pricing of money transfer was based on slabs of amounts to be transferred. Moreover, to counter terrorist financing issues, there were two restrictions in the system:

- CNIC was required to transfer money
- Restriction on maximum number of transactions and amount of transaction: Sending & Receiving Transactional Limits were Rs.10,000 per month on a CNIC and a maximum of 3 transactions per CNIC in a month.

Table 4: Rates of Easypaisa

Slab Start	Slab End	Charges	FED*	Total Charges
1	1000	51.72	8.28	Rs. 60
1001	2500	103.45	16.55	Rs. 120
2501	4000	155.17	24.83	Rs. 180
4001	6000	206.90	33.10	Rs. 240
6001	8000	258.62	41.38	Rs. 300
8001	10000	310.34	49.66	Rs. 360
10001	13000	362.07	57.93	Rs. 420
13001	15000	413.79	66.21	Rs. 480

Sources: Telenor Website: All charges are subject to 16% FED

The figure above shows the charges for CNIC to CNIC transfer. Other variants may have different charges.

Promotion: Since its introduction, Easypaisa had aggressively marketed its products. It was this aggressive marketing that enabled such a quick penetration of Easypaisa. The add-on factors that were promoted as a part of this service were that it was:

- Instant, Easy, Secure, and Simple.

The ads for Easypaisa focused not on the features or attributes, rather on the benefits that were to be gained from it. These factors were attractive for the target audience.

Placement: The placement of Easypaisa is what made it unique from its traditional counterpart banks. After 60 years of strong growth in Pakistan, Habib Bank Limited had 1400 branches in Pakistan whereas within less than 5 years, there were 20,000 retail outlets that offered Easypaisa services in Pakistan. Franchising, however, was not an easy option. Banks had never ventured into this territory due to reputational risk. However the distribution expertise of Telenor in managing agents played an important role and hence Easypaisa quickly developed in to an agent development model. Moreover, the potential target audience was more comfortable dealing with retailers whom they interacted with on a daily basis. Thus, this element of placement also distinguished Easypaisa from other banks.

Easypaisa Customer Value Proposition (CVP)

Easypaisa's CVP mainly focused on those gaps that existed between banking and financial sectors. Here is a comparison of gaps that existed in the traditional financial and telecom sector and how Easypaisa either responded to it or used it as its differentiating factor.

Table 5: Gap Analysis

<table>
<tr><th>GAPS</th><th>RESOLUTION</th></tr>
<tr><td>Rural areas as well as lower class people in Pakistan are primarily unbanked – thus untapped market. The existing money transfer system not efficient and not reliable</td><td>Their basic level of their banking need is money deposit, making utility payments and money transfer. Easy Paisa offers all this through their local retailers/agent</td></tr>
<tr><td>Banking is too costly an activity to do in rural areas 'in its current form'</td><td rowspan="2">Use of franchising model that includes commission based compensation for retailers. These retailers also have their other businesses being run on same location, so fixed overhead is zero</td></tr>
<tr><td>Branches are costly to be built in rural areas</td></tr>
<tr><td>Telecom sector has reached a saturation point in its traditional format</td><td>Easy Paisa is great value addition for Telenor customers that has real utility. Though, it allows non-Telenor users to do the transactions too, but Telenor subscribers have some additional facilities.</td></tr>
</table>

Revenue volatility from value added services	The value addition that Easy Paisa gives is an eternal need for its target audience. Thus, if successful, revenues are sustainable. This is not fancy thing that will fade away. It's a need.
Regulatory Requirements – money laundering and know your customer requirement	Easy Paisa handled regulatory issues related to money transfer by putting restriction on number of transactions per CNIC per month and amount of transaction per CNIC per month

Source: Interviews within Tameer Bank and Telenor

Easypaisa made it feasible to reach the target audience and was portrayed to the lower class and working class as a product particularly tailored for their needs. All of its communications focused on what was most important for its target audience. It made people believe that Easypaisa was: instant, easy, secure, and simple.

Profit Formula: Since banks were not profitable in rural areas, Easypaisa had to develop a different model i.e. a model where it had to be creative in generating revenue and simultaneously reduce the cost so that it does not hamper their ability to meet the needs of its customers.

Revenue Model: Easypaisa along with its channel partners made money through the following modes:

- Account Registration Fee and Commission
- Cash Deposit Fees
- Money Transfer Fees

Regardless of the details, following are pricing features:

- Sharing revenue with retail outlets
- Special emphasis on retention commission to retail outlets
- Slabs for pricing
- Lesser prices from/ to mobile transfer account – a cross selling tactics

Cost Structure: The cost structure of Easypaisa was completely different from a bank. The major impediment for rural penetration was fixed overheads. Easy Paisa had virtually no or very little fixed overheads with respect to its distribution set up. When it was able to lower its fixed overhead, the profitability became a reality. Moreover, using a commission system also lowered the direct fixed cost i.e. that is the cost of salaries to bank staff. The money saved due to Easypaisa's distribution set up and the commission based system, was spent on advertisements and soon Easypaisa became a brand in itself.

Target Unit Margin: Though it operated on very low margins, Easypaisa's cost structure was so efficient that it was able to be profitable at lower margins. However even though analysts were, at the time, of the view that these margins may go down further in future it was certain that Easypaisa would be able to do continue operating successfully as the transaction velocity increases because it was a volume driven business.

Key Processes: Though the process varied from product to product, the key to successful process management in this business was to keep it simple. To depict this, the process for money transfer which was Easypaisa's key product is shown in the following table:

To Send Money: The Sender needs to bring and provide the following for a Money Transfer: • Their original and valid Nadra CNIC along with 1 Photocopy of the CNIC (Mandatory) • Receiving person's valid Nadra CNIC Number (Mandatory) • Their own mobile phone number (optional) and the receiver's mobile phone number (Optional) • During sending, the Sender will be asked to enter a 5-digit secret pass-code on the Retailer's mobile phone. This pass-code should not be told to the Retailer, and only communicated to the Receiver • If the Sender and Receiver mobile phone numbers are provided, both the Sender and Receiver will receive confirmation SMS messages containing the transaction information

Key Resources: The Key Resources for Easypaisa were none other than having well trained channel partners i.e. the retailers. Secondly, the banking knowledge and license and the most important is the GSM infrastructure which is the key for delivering the CVP.

Future challenges

At the Telenor head office Mr. Omar, the Head of Easypaisa Strategy, and his team were worried about the new players entering the mobile money market. The questions that arose were that how will these new entrants influence the competition in the market? Will the new players help the overall market to grow or not thereby benefitting Easypaisa as well? Or will they simply free ride on the hard work that Easypaisa had laid down including setting up agents? What will happen if the new players entering the market change the playing field from a one-to-one model to many-to-many model? What are the opportunities and risks that Easypaisa will have to encounter? What steps should they take to maintain their position as the market leader in what was now a very dynamic business sector? Omar wanted to develop his strategy before the Easypaisa strategy review meeting in April 2013.

At the Tameer Bank head office in Karachi, Mr. Nadeem and his team members were thinking about the future challenges and opportunities that will be available for Tameer Bank because of the success of Easypaisa. The following chief question that came to their minds was: how should Tameer Bank continue to take advantage from the Easypaisa business model? On the other hand, the microfinance industry experts were concerned about Tameer Bank's mission drift. They were apprehensive that in the near future, Tameer Bank will lose its vision and identity as a microfinance bank and will become a commercial bank due to the success of Easypaisa. This pressurized Mr. Nadeem into thinking on how he should respond to these rising concerns and position Tameer bank to manage and maintain its image as a microfinance bank. He wanted to present a clear 2014 – 2015 strategy and action plan at the Tameer bank board meeting in Karachi in April 2013.

Exhibit A: Tameer Bank Financial Data and Analysis (2006 to 2011)

Balance sheet data (Rs 1000)	Dec-06	Dec-07	Dec-08	Dec-09	Dec-10	Dec-11
	Amount	Amount	Amount	Amount	Amount	Amount
ASSETS	1,229,863	1,256,551	2,256,611	2,766,123	5,299,934	8,297,384
Cash and balances with SBP & NBP	45,956	58,730	77,733	158,751	310,485	516,668
Balances with other banks/NBFIs/MFBs	50,325	607,547	990,129	667,418	926,107	1,258,898
Money at call & short notice	459,000		0	0	0	0
Investments - Net of provision	30,000	48,907	41,812	56,460	177,724	328,236
Gross Advances	526,292	426,899	908,221	1,539,841	3,096,044	5,070,422
Specific provisions		(43,058)	(5,002)	(3,550)	(4,128)	(5,978)
General provisions	(7,895)	(5,022)	(13,443)	(23,043)	(46,379)	(10,147)
Operating fixed assets	78,106	94,994	120,004	156,463	188,609	252,810
Other assets	48,079	67,554	137,157	213,783	651,472	886,475
LIABILITIES	716,991	892,975	1,015,465	1,636,157	3,948,538	6,821,545
Borrowings	222,998	222,998	339,923	309,939	661,608	1,801,725
Current account	78,671	91,034	158,227	570,682	1,150,329	1,564,290
Savings Deposits	5,258	10,650	16,381	45,483	131,800	730,479
Term Deposits	389,822	547,186	467,058	651,665	1,672,524	2,217,760
Sub-ordinated loans				0	0	0
Other Liabilities	20,242	58,147	71,022	96,388	332,277	507,291
Deferred tax liabilities		(37,040)	(37,145)	(38,000)	0	0
CAPITAL	512,871	363,577	1,241,147	1,129,966	1,351,396	1,475,839
Paid-up capital	600,000	600,000	1,690,408	1,346,939	1,346,939	1,346,939
Reserves				343,469	343,469	439,431
Unappropriated/ Unremitted profit	(108,445)	(269,931)	(501,471)	(610,563)	(366,510)	(328,144)
Surplus/ (Deficit) on revaluation of assets	21,316	33,508	52,210	(1,121)	(288)	(18)
Deffered Grants/Subsidies				51,242	27,786	17,631
Off balance sheet liabilities				0	0	0
	-1	2	1			
Quarterly DATA P&L data (Rs 1000)						

Mark-up/Return/Interest Earned on advances	35,542	23,100	64,413	104,710	223,274	358,208
Mark-up/Return/Interest Earned on investments in Government Securities	261	1,043	1,193	2,610	6,311	14,872
Mark-up/Return/Interest Earned on placement with other banks	6,355	15,677	10,606	17,825	12,622	14,183
Mark-up/Return/Interest Earned on others				0	0	0
Mark-up/Return/Interest Expensed on Savings Deposits	9,270	13,815		929	1,720	10,931
Mark-up/Return/Interest Expensed on Term Deposits			17,254	24,771	52,622	73,811
Mark-up/Return/Interest Expensed on Borrowings			15,984	0	18,481	58,363
Mark-up/Return/Interest Expensed on others	0	7,756		8,955	0	0
Net Mark-up/ Interest Income	32,888	18,249	42,973	90,490	169,384	244,158
Provision against non-performing loans and advances	2,970	3,491	(1,244)	3,073	5,022	1,968
Provision for diminution in the value of investments				0	0	0
Provision Against Other Assets				0	0	0
Bad debts written off directly		22,747	(1,019)	1,568	(453)	3,091
Total provisioning and write-offs	2,970	26,238	(2,263)	4,641	4,569	5,059
Fees & Commission	6,754	6,009	5,702	16,633	48,313	98,841
Dividend Income				0	0	0
Other Income (To be specified)	7,152	12,914	26,533	33,346	11,091	20,226
Total non-markup/interest Income	13,907	18,923	32,235	49,979	59,404	119,067
Administrative expenses (without personnel)	34,831	46,748	64,456	96,577	110,831	184,765
Administrative Expensed with Personal Expenses	24,018	31,143	67,734	74,409	109,348	107,158
Other provisions/write offs (to be specified)						0

Other charges (to be specified, if material)				**24,246**	**(247,505)**	**(267)**
Total operating expenses	**58,849**	**77,891**	**132,190**	**195,232**	**(27,326)**	**291,656**
PROFIT/(LOSS) BEFORE TAXATION AND BEFORE EXTR ORDINARY ITEMS	**(15,025)**	**(66,957)**	**(54,719)**	**(36,958)**	**254,468**	**66,243**
Extra ordinary/unusual items (to be specified)				**0**	**0**	**0**
Subsidies received				**22,446**	**2,923**	**(267)**
Taxation - Current			**1,263**	**0**	**0**	**5,470**
- Deferred				**0**	**0**	**75,173**
PROFIT/(LOSS) AFTER TAXATION	**(15,025)**	**(66,957)**	**(55,982)**	**(36,958)**	**254,468**	**(14,400)**

References

http://www.itu.int/ITU-D/ict/statistics/at_glance/KeyTelecom.html

http://www.prb.org/Publications/Datasheets/2012/world-population-data-sheet/fact-sheet-world-population.aspx

http://www.telecomcircle.com/2011/01/the-mobile-payment-conundrum/

http://www.telenor.com.pk

http://www.pta.gov.pk

The Socio-Economic Impact of Mobil Financial Services: Analysis of Pakistan, Bangladesh, India, Serbia and Malaysia, April, 2012, the Boston Consulting Group, USA.

DAWN, 20 Feb, 2013

Interviews within Tameer Bank and Telenor

Telenor Official Reports and Interviews

Consider the world, apart from mankind. It is either static, or else changing in a gradual and apparently automatic rhythm… But man, in his brief, has transformed both the world and himself. His specific quality is purposeful change through thought. He is most truly alive when he thinks.

GilberHighet

CASE STUDY

GLOBAL ALLIANCE APPROACH FOR EFFECTIVENESS OF HIGHER EDUCATION IN BUSINESS STUDIES - A CASE APPROACH

Arup Barman
Assam University, Silchar, India

Abstract

This paper covers the issue of foreign collaboration in the Indian Business Education and its implications on professionalism and development of competence among the budding managers. The issue of foreign collaboration in Indian Business Education is considerably significant issue in the light of India as an emerging economic power and business. Already there is considerable flow of foreign collaboration in Indian business education witnessed by the institutional partnership. The existing institutional partnership and the future intension of foreign players are entering in business educations have been impacting in the new professional development as well as to develop professional competence in the arena of management education in India. Impacts on the new array of professionalism and competence in the country due to foreign collaboration need a fresh re-look and assessment.

This paper has three sections. Section -1 deals the historical snapshot of global alliances of business education, modes of alliances; section-II deals on the quotients analysis for spread of global alliances, and in final the section the section-III analyses perceptions of stakeholders on the global alliances.

***Keywords*:** ICT; Globalization, Alliances, Management Education, India

Introduction

Global alliance in education especially higher education is a relatively new concept on 'adaptation to global skills development' (*Barman. and Konwar. 2013*) in the developing countries of world. Prior to global alliance, more popular term was alliance for international education. Alliance for international education brings together all those who are committed to advancing international and intercultural understanding through education (IIE, 2012). It promotes collaborative ventures that enhance the learning of relevant concepts, skills and values. Global alliance or global coalition in education is an approach stands for association of institution(s) of one country with an institution or a group of institutions of other country or countries of the world with the help of an agreement or a set of agreements or a pact(s) to promote mutual deals. Alliances ensure mutual support in the process of innovation and development in imparting training, skills, knowledge, research, and professionalism. The global alliance is not a standalone mode of knowledge acquisition through partnership arrangement at individual level which was in earlier times adopted by individual scholars. There are many alliances are multilateral networks involving members across several continents. These alliances provide the framework and channels that make internationalization a reality for both academic faculty and the student cohort. Alliances represent a valuable resource for ambitious university leaders. Accession to an alliance can provide an ‘off the peg’ and ready-made international strategy. Global alliances provide access to the educational agreements, projects and exchanges through an organization that others have already put considerable time and money into developing (Gunn, 2013). In the whirlpool of global competition on education, global alliances represent an inquisitive form of cooperation. Global alliances in the educational in arena mostly appear as disciplinary alliances. The most common types such disciplinary alliances are Global Alliance for Medical Education, Global Alliance for Justice Education, Global Alliance for Leadership Education; Global Alliances for Management Education; Global alliances for Nursing Education, Global Alliance for Pharmacy Education etc. etc..

The Global Alliance of Management Education in a organized way came in appearance was with of helm of activities of formerly the Community of European Management Schools and International Companies (CEMS) in the 1988 i.e. in early beginning of liberalization. CEMS as global alliance network of management education has presently been spread to 28 countries across 4 continents (Bieger. T. 2013) of the world with its spreading students cohorts of 1000+ (2013-2014). The new emergence in the post globalization period is that the management educational institutions have been creating alliances and network at institutional level as a part of cross country collaboration drive for competency. The Indian scene of global alliances in higher education has caught its trail by following the European and American Models. In the similar way the management education in India is faster than any other disciplines in the stride of global alliances. Now, the students of elite business schools demand exposure to global opportunities by acquiring global competencies through management education, and institutions in turn are seeking to develop strategic global alliance or partnership with an institution or a group of institutions of the globe. It is realized, that often the majority of management institutions have to undertake many initiatives for global competence development among the managers *(Konwar. and Barman. 2011).* Study on global alliance in respect to management education is rare.

Objectives of study

Based on the available examples of global partnership for management education in India, this paper depicts existing global alliance approach in the context of business education in India. Through this study an attempt has been made to get an answer to an enquiry into the spreads and intensities of institutional alliances through the quotient analysis. It aims to examine critically the effectiveness of existing global alliance approach and attempts to delve on the future approach of strategic global alliance.

Methodology

This study adopts the quotients based analysis for alliances. The quotients are- Global Alliance quotients, alliance to America to Globe, alliance to Europe to Globe, alliance to Asia-Pacific to Globe, alliance to Africa to Globe. The study is presented in three sections – section-I deals review of literature and historical snapshot of management education and their alliances also covers the review of literature on global alliances practices. Section-II deals on the alliance indices, comparison and analysis. This section also aims to delineate the modes, areas of competence where foreign collaboration has been increasing or been impacting to understand the approach and models of collaboration. Section -III examines the stakeholders’ perceptions of B-schools collaboration.

Review of Literature

To establish theoretically on global alliance, the study on global curriculum is not a new issue. In this regard, Tench, R. and Deflagbe, D. (2008) summarized the literature concerning public relations education, professionalism and globalisation. The another report prepared by Wong and Unwin (2003) of titled global education initiative: retrospective on partnerships for education development 2003-2011, made by the World Economic Forum highlighted on the global education initiative, genesis and achievements, delivering educational partnerships, solutions and challenges and on multi-stakeholder partnerships for education. This global network of analysts and facilitators, it works to help organizations turn sustainability risks into strategic opportunities. Barman (2012) raised a debate on responsiveness of management education and commented that management institute may be on any standard if their ties are not in response of economic and global development, and if the alliance efforts do not capture all corner then that type institutions cannot be said as the global one. Barman (2013) developed an analysis method on the alliances of Indian management education with the different countries of the world with the help of ratio or quotients. Through a set of self developed alliance quotients barman examined the spread of alliance options which also appreciated on a few Indian management institutes operating under the triangular and quadrangular alliance options. Mariot and Goyder (2009) in their work on referred the Helical Group, a consultancy specializing in sustainability strategy and implementation. This group is a UK and South Africa based organization works with government agencies, companies and not-for-profit organizations to develop collaborative approaches to sustainable development challenges at local, national and international levels. Thus, the literatures on partnerships approaches are either prepared by big agencies on general educational issues and alliances. There are rare studies on the alliances of management education in the context of India which indicates the requirement of the study on educational alliances.

Historical Snapshot of Business & Management Studies

Indian management education has crossed almost one century by the year 2013. The first college level business school in the country was founded in 1913 in Mumbai and was soon followed by another in Delhi in 1920[i]. These business colleges imparted basic skills about the principles of trade and commerce to clerks and supervisors from fields as diverse as banking, transport, and accounting. The first modern format of Business School in India was Indian Institute of Social Welfare and Business Management, Kolkata, which was established in 1953. A number of universities set up their MBA programme in 1960s (*Des. Navinchandra*). On the recommendation of Dean Robbins of the University of California, which was invited by the planning commission, the Indian Institute of Management (IIM) was patterned. The first IIM was set up in 1961 at Kolkata followed by IIMs at Ahmadabad in 1961, Bangalore in 1971 and Lucknow in 1974 and in the late 1990s at Indore and Calicut and Shillong. By the year 2013, the number of such IIMs reaches to 13 numbers.

Table-1

Indian Institute of Managements (in order of establishment)

Name	Short name	Year of Establishment	Location
Indian Institute of Management, Calcutta	IIM-C	1961	Kolkata West Bengal
Indian Institute of Management, Ahmedabad	IIM-A	1961	Ahmadabad, Gujrat
Indian Institute of Management, Bangalore	IIM-B	1973	Bangalore, Karnataka
Indian Institute of Management, Lucknow	IIM-L	1984	Lucknow, Uttar Pradesh
Indian Institute of Management, Kozhikode	IIM-K	1996	Kozhikode, Kerala
Indian Institute of Management, Indore	IIM-I	1996	Indore, Madhya Pradesh
Indian Institute of Management Shillong	IIM-S	2007	Shillong, Meghalya
Indian Institute of Management Rohtak	IIM-Rohtak	2010	Rohtak, Haryana
Indian Institute of Management Ranchi	IIM-R	2010	Ranchi, Jharkhand
Indian Institute of Management Raipur	IIM-Raipur	2010	Raipur, Chhattisgarh
Indian Institute of Management Tiruchirappalli	IIM-T	2011	Tiruchirappalli, Tamil Nadu
Indian Institute of Management Udaipur	IIM-U	2011	Udaipur, Rajasthan
Indian Institute of Management Kashipur	IIM-Kashipur	2011	Kashipur, Uttarkhand

The flagship management education program, MBA, is widely popular as it offers quick gateway to the riches and to the top echelon of corporate world. The early 90's saw the boom of founding new management schools, most of them in private sector. In the last three years, from 2009 to early 2013 alone 400 Business Schools came into existence. A few business schools have also established collaboration with some western Universities. India management institutions produce over 30,000 full-time MBAs and 10,000 part-time MBAs every year (*Chaitanya.V*). Many business schools are also running MBA equivalent program such as distance Post Graduate Diploma in Management (PGDM), Masters in International business (MIB) etc. Even some of the leading business houses are establishing their own business schools like Infosys, Birlas etc.

International collaboration

B-schools of India are intensifying their internationalization process by collaborating with other B-schools from across the globe. The nature and number of collaboration vary widely within the Indian B-schools. While some collaborations are limited to MOUs in terms of academic collaboration only reaching up to the faculty / intellectual level, some collaborations incorporate student exchange, joint projects etc to directly involve the students. Again a thorough investigation of the information available in the institutional websites (information taken up to 2010) of the various B-schools of India shows that the number of partner institutes vary from single digit to eighty plus. To have a better idea of the situation information has been collected from the website of selected top 20 (twenty) B-schools of India and the partner institutes were clubbed into four geographical clusters, i.e. i) USA and Canada, ii) Europe and Australia, iii) Asia and iv) Africa and Middle East. Among these top twenty B-schools, 17 numbers holds their highest number of partner institutes from Europe and Australia region. The remaining three have their highest number of partners from USA and Canada. In case of collaborations with Asian institutes 13 B-schools have partnership with Asian institutes but the number is much less compared to USA and Canada cluster and

Europe and Australia cluster. Here among the top 20 B-schools, Indian School of Business (ISB) having highest (13 partner institutes) collaborations from the Asian region. Again the data revels that the top Indian B-Schools has very limited access to the African and Middle East region. Among the twenty B-schools only eight have explored the region for international collaborations and five of them have collaboration with only single institute. Among the six IIMs only IIM-Ahmadabad has single collaboration in South Africa according to the information available in the institutes' website.

International Students Exchange Program

The cross-border mobility of student exchange programs is aimed at making students come to terms with the cultural aspects of studying in a foreign country and adapt to different personal, social and economic living conditions (Muthukumar, 2009). The Indian Management institutes like IIMs and other top level schools like Institute of Management Technology have engaged into collaborations with the world's leading business schools and universities for student exchange programs. To have a better idea of the student exchange scenario of Indian B-schools information published in the institutional websites of top 20 B – schools were been analysed. It is found that although 18 out of selected 20 top Indian B-schools have mentioned on having student exchange programme in their respective websites and out of these 20 only 10 numbers of B- schools have declared certain details about the exchange. The students exchange programs generally has two aspects *incoming students* i.e. students from foreign B-schools coming to Indian B-schools to pursue one or more terms and *outgoing students* i.e. students from Indian B-schools going to international partner institutes for pursuing one or more quarters. The information collected about the students exchange program revealed that in most of these top Indian B-schools exchange terms for outgoing and incoming students are not same or not even for same duration. The institutional websites have more information regarding the terms open for exchange students and facilities etc. only for incoming students. So, it may be safely inferred that it targets to attract the foreign students to Indian B-schools. Whereas, one may not be able to find sufficient information in terms of terms available or options available to outgoing students in the institutional websites.

An interesting fact about the students exchange program is that each and every student doesn't get the scope for opting for exchange program in most of B-schools. In MDI, the International Student Exchange Programme ensures that one out of every five students enrolled for PGPM gets an opportunity to study aboard. Depending upon the nature of tie-ups with the partner institute a student can spend one or two terms in the foreign institute in lieu of his/her study terms at MDI.

The table below gives a brief idea about the variations of offering among the different B-schools and the variations in terms available for exchange in case of incoming and outgoing students.

Table-2 The Student Exchange Programme		
B Schools	**Incoming students**	**Outgoing students**
IIM K	Terms IV, V or VI	Term V.
IIM A	Not specified	Term V
IIM-B	Term V	Term V
IIM-C	Term IV, V, VI	N/A
IIM-I	Not specified	N/A
IIM-L	Term IV, V, VI	N/A
IIFT	3 trimester; Spring trimester I & IV Winter trimester II & V Fall trimester III & VI	3 trimester; Spring trimester I & IV Winter trimester II & V Fall trimester III & VI
ISB	2 Terms; Not Specified	2 terms; Not specified
MDI	Term III, IV, V and Term VI(for dual degree)	1 or 2 terms; Not specified
XIMB	Term IV, V, VI	Not specified
Note: N/A= No Information available on website		

International Internship

International Internship provides a student global exposure which is very much essential part of Global Competency development process. When analyzed the information available on institutional websites of top Indian B-schools it was observed that although many B-schools have mentioned about the need for developing global mind set in students through necessary international exposure, only a few have given some distinct information about any kind of initiative taken in terms of International Internship. It was observed that out of twenty top Indian B-schools only three i.e. IIM-Bangalore, IIM-Kozhikode and Welingkar has clearly mentioned about having International Internship programmes as a part of Global exposure. In 2008, as many as 85 interns from IIMB joined the international offices - London, New York, Tokyo, Singapore, Honk Kong to name a few - of various firms. Apart from this, IIM-B has a curricular course called “Course on International Business in Practice”. As part of this curricular course offered in the fifth term of the program, students get an opportunity to visit various companies in South-East Asia - Singapore, Thailand and Malaysia. They work with them, understand global workplace dynamics and return with valuable insights on international business practices. As mentioned in Business Standard (September, 2010) The Institute of Management Technology (IMT), Ghaziabad as a signatory to the European Union’s educational programme Erasmus Mundus, is in the process of negotiations for providing international internships and placements to students.

Faculty exchange program

To create change and build international skill sets, enriching faculty knowledge is important (Kedia & Englis, 2011). O’Hara (2009) has well commented that faculty who have experienced first-hand the enriching and enlightening impact of a teaching or research experience abroad can be far more effective in communicating to their students the importance of studying abroad and being exposed to international perspectives. Faculty who have international experience can best ease students’ lack of international exposure by bringing broader international perspectives to the classroom from firsthand experience. As cited by O'Hara (2009), Martin Finkelstein and colleagues at Seton Hall University that any faculty who spent one to two years abroad are almost twice as likely to incorporate international themes in their courses than those who spent no time abroad; and faculty who spent time abroad were also three to five times more likely to have a research agenda that is international in scope. Therefore, faculty exchange programme comprises an important part of management graduates Global Competency development process.

It is observed that the most of the B-schools among the selected top 20 have mentioned faculty exchange as being a part of collaboration agenda with international partners but not much information is available regarding the faculty exchange programs on websites of majority of these B-schools. Among the few who have appreciated the need, IIM Kozhikode has given attention and due importance to faculty exchange programme as a part of its International Exchange Programme. In the faculty exchanges, faculty members from IIMK may spend an academic term at the partner institution, which may in turn send their academic staff to IIMK, under mutually agreed terms. IIM- K also mentions that the goal of such faculty exchange is not basically to exchange course instructors; rather, it is to develop research linkages of a continuing nature, facilitating access to information and data on a scale and of a qualitative nature not possible otherwise. Again, as mentioned by Sahay and Thakur (2008) IMT has a policy for maximum global exposure to its faculty through exchange programmes, joint research and attending international conferences, it also ensures, that similar environment is created within campus so that faculty from abroad come here and contribute. Jayanthi Ranjan, chairperson, international relations, IMT Ghaziabad has mentioned recently that four faculty members of IMT have been awarded scholarships to pursue post-doctoral research at various partner universities. Four more faculty members were also selected for Academic Staff Exchange (Business Standard, September, 2010).

Dual degree programs

The analysis of information about the selected top twenty Indian B-Schools shows that only some are taking the benefit of dual degree programmes from their international collaborations. Among the six top IIMs selected only IIM-Ahmadabad has mentioned about Double degree programme agreement with ESSEC, France and University of Bocconi, Italy. . MDI has dual degree programmes with ESCP Europe, EDHEC Business School, IAE Aix-en-Provence, France and HHL Leipzig Graduate School of Management, Leipzig, Germany. Meanwhile, in tune with its vision of developing an 'International Centre of Excellence in Management education,' the Indian Institute of Management Calcutta (IIM-C) is in a process of introducing a two-year dual degree programme with the Ecole Superieure de Commerce de Paris (ESCP) - a premier B-School in Europe from the coming academic session. Accordingly IIM-C signed the memorandum of understanding (Sify News, Nov 2010). IMT along with its partners also started joint-degree programmes at the post-graduate and post-doctoral levels (Business Standard, September, 2010).

Campuses Abroad/ Multisite Programme

"A truly global school is one with complementary and interconnected campuses, located in the three major economic regions of the world (the Americas, Asia and Europe).Within such a structure, the knowledge and learning gathered in each location circulates freely between the campuses to the benefit the entire system..... With that structure, the school not only offers different programs in each location but, more importantly, single programs that require spending time in each one of the school's campuses to learn from the local settings and compare the experience in a structured way."- (Hawawin, 2005)

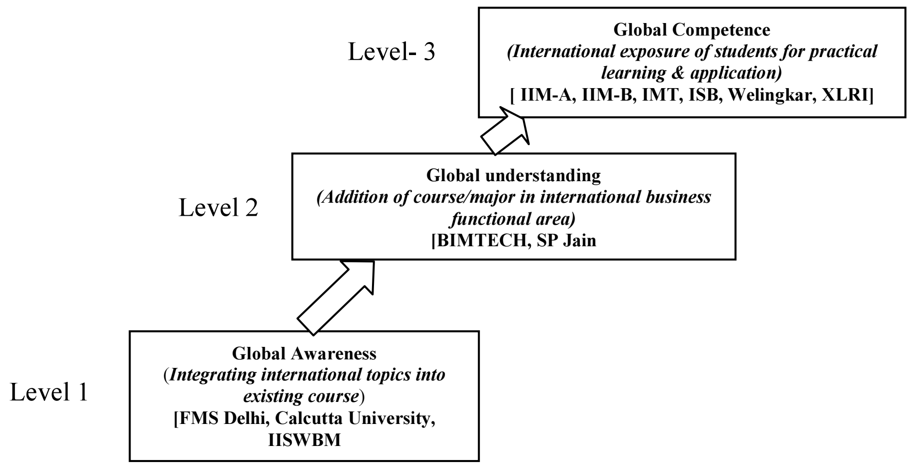
In case of campus abroad or multisite programme, that is management programmes operating in India as well as campuses aboard, very few out of the twenty selected B-schools are take advantage of international campuses for developing global competencies among the students. The IMT Ghaziabad is operating its international campus at Dubai and the students of PGDM (Two country) programme complete the first half of their course (1st year) in the state-of-the-art Dubai facility of IMT-Ghaziabad and the final half (2nd year) in IMT Ghaziabad, India. The S P Jain Centre of Management has three international campuses- Dubai campus, Singapore campus and Sydney campus. The one year Global MBA programme of S P Jain Centre of Management works on unique "Three City" model. This rigorous one-year full-time residential program is designed for mature group of participants with minimum two years of work experience, and average batch experience being over four years and they have to study at S P Jain's campuses in Dubai and Singapore with an option to study a term at S P Jain's partner schools in Toronto or Sydney. Again, the IBS has its IBS, Adelaide campus in Australia and the MBA students of IBS have an opportunity to pursue their one semester in Australia under the "Study Abroad" programme. On the other hand, although the XLRI has two campuses in Dubai and Singapore, no programme has been found which utilizes these international campuses for the students' global exposure.

All these practices adopted by Indian B-schools are commendable representation of pioneering efforts by Indian Business and Management curriculum. However, almost all of the B-schools are having differential focus in terms of adopting and materializing the practices. Given that the practices vary among the Indian B-schools so the obvious question arises that whether the level of global competencies developed also vary from one school to another. Therefore, level analysis was conducted to assess the Global competencies among the Indian B-schools in the present study.

Global Alliances and Competency Driven Curriculum

Creating globally competent mangers is a much greater challenge. As it is not enough to internationalize the business curriculum by just offering some international materials in core functional business courses (Shreman, 1999; Beck et al, 1996); similarly mere internationalization of business management curriculum does not ensure creation of globally competent manager. A truly internationalized business management curriculum where theory and practice go hand in hand to develop most of the competencies required by a global manager can only ensure global competency development through management education. For same purpose, Kedia and Cornwell (1994) recommend that business schools that want to internationalize their curriculum can adopt three different levels of commitment in developing global perspective among business students: (1) global awareness, (2) global understanding and (3) global competence. These three levels of internationalization of curriculum proposed by Kedia and Cornwell (1994), can be applied to present status of Indian management education for an understanding of where our B-schools stand in terms of internationalizing their curriculum.

Fig-1: Levels of Internationalization in Indian Management Education (Adopted from Kedia and Cornwell (1994) model)



***Source**: Juthika Konwar, Global Competency Development in Indian B-Schools (with permission from an unpublished thesis)*

The first level of commitment Business schools can adopt in the process of internationalization of their curriculum is Global Awareness level (Kedia and Cornwell (1994). According to Toyne (1992) the goal of awareness is "to ensure that all business students are at least aware (1) of the world beyond our shores and boarders, (2) that their world- their standard of living and quality of their life-is inextricably connected to, and impacted by, their 'other' world" (p. 24). Kedia, Harveston, and Bhagat (2001) defined "international awareness as having a worldview incorporated into the decision making process" (p. 14). Most business schools can use this approach quite easily (Kedia & Englis, 2011). It is pursued by integrating international topics into existing courses (Sherman, 1999). Most of the Indian B-schools have incorporated few courses addressing international issues in some area of business in the flagship program of business administration. The most common courses in this addition are International Business, International Financial Management, and International Marketing. Most interestingly many B-schools are not offering international courses in all the functional areas of business.

The second level is global understanding. Understanding is having the knowledge to comprehend the reasons as to why things happen and their implications for conducting business domestically and internationally (Toyne, 1992). Here, the students not only develop a world-view but are able to begin to make decisions that incorporate knowledge and understanding of global markets (Sherman, 1999). Such an educational program helps students develop a more rigorous understanding of the global marketplace by exposing them to dissimilar cultures and differing socio-political contexts (Kedia, Harveston, and Bhagat, 2001). Kedia and Cornwell (1994) contend that schools that adopt this as their international mission will create a major or concentration in international business by adding courses in international business functional areas. In this level business schools create specialization on International business. Add-on courses can help students obtain knowledge concerning the global economy, but they do little to help students develop the special personal characteristics and skills which are needed to effectively conduct international business (Beck et al., 1996; in

Sherman, 1999). Some of the Indian B-schools have incorporated International Courses in almost all the functional areas of business even in the functional areas like Operations management. But most of the Indian B-schools including top rankers have not found offering major or specialization in International business within the flagship program. A very few B-schools separately offers exclusive programs in International or global management. For example, BIMTECH has a program on Post Graduate Diploma in Management (PGDM) in International Business apart from its regular flagship PGDM program. On the other hand S. P. Jain Institute of Management and Research is offering under its Global Program a certificate program called Post Graduate Certificate in International Management (PGCIM). Kedia and Cornwell (1994) argued that to produce business graduates with Knowledge, skills and abilities to perform in the globalized world business schools must strive towards achieving the third level i.e. global competence. By using an experiential approach that focuses on students' development of attitudes conducive to integrating and applying international experience and learning, business education programs facilitate the development of global competence (Kedia & Englis, 2011). Competence requires the functional use of acquired knowledge, skills, and experience within the context of the business world (Kedia & Cornwell, 1994). To achieve true progress toward global competence students must be exposed to different cultures and experience real differences in things like problem solving, negotiations, and response to authority (Sherman, 1999). This will help them to determine what types of leadership styles, organizational structures and reward systems are appropriate for different cultures (Kedia and Cornwell, 1994). In addition to international content, activities such as internship, foreign exchange, and study aboard opportunities for faculty and students offer a rich experiential learning environment (Walton & Basciano, 2006). This rich experiential learning environment driven by the business school's mission facilitates the development of students' global competence, knowledge base, and skills at a high competency level (Kedia & Englis, 2011). Only handful of top notched Indian B-schools can be considered as reaching the global competency level. These B-schools are comparatively active in introducing experiential learning among students via International internship, student exchange program, faculty exchange, multisite program etc. IIM-A, IIM-B, IIM-C, ISB, XLRI, Welingkar are a few B-schools that are leading this level in globalizing the management curriculum.

Section-II

Quotients for Alliance Analysis

Institutions alliances can be measured through quotients prepared on the basis of ratios of partnerships to world, continents, countries etc. The global alliance of institutions score is the quotient of total number of alliances of an institution to total numbers of countries of the globe i.e. total numbers of alliances countries (say, for IIM-A) = 59 divided by total numbers of countries of the globe (196). So, the IIM-A's global alliances score would be 59÷196= 0.30102 (in the Table-2, Column-3). The second quotient analysis is Alliance to America to Globe Quotient (AAGQ) is calculated by counting the alliances of institutes of Continent-America to the Total Numbers of Countries of the Globe. There are 18 numbers of partner institutes of America out of total numbers of alliance institutes (59) in reference to the countries of the globe (196). The AAGQ = 18÷ 59÷196= 0.00156 (in the Table-2, Column-4). Thus, Alliances to Europe to Globe Quotient (AEGQ)= 30÷59÷196= 0.00259 (in Table-2, Column-5). The Alliance to African Institute to Globe (AAfGQ) is total numbers of partner institute of total number of alliance to total numbers of countries of the globe. Thus AAfGQ= 2÷105÷196= 0.00010 (in the Table -2, Column-6, Cell-2).

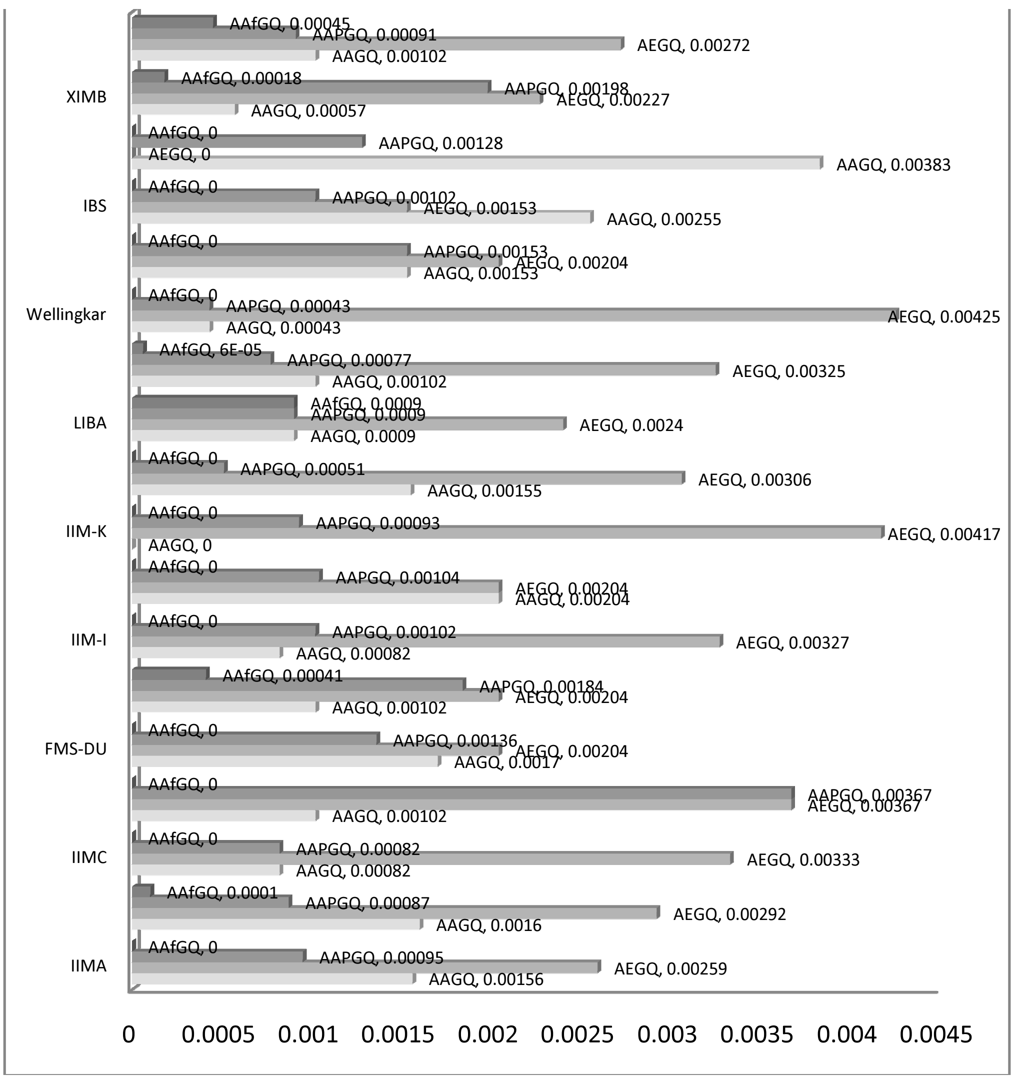
Table-3

Institute	Alliance	Global Alliance Score	Alliance to America to Globe	Alliance to Europe to Globe	Alliance to Asia Pacific to Globe	Alliance to Africa to Globe
(1)	(2)	(3)	(4)	(5)	(6)	(7)
IIM-A	59	0.30102	0.00156	0.00259	0.00095	0
IIM-B	105	0.53571	0.00160	0.00292	0.00087	0.00010
IIM-C	75	0.38265	0.00082	0.00333	0.00082	0
IIM-L	25	0.12755	0.00102	0.00367	0.00041	0
FMS-DU	15	0.07653	0.00170	0.00204	0.00136	0
IIFT	25	0.12755	0.00102	0.00204	0.00184	0.00041
IIM-I	25	0.12755	0.00082	0.00327	0.00102	0
TISS	30	0.15306	0.00204	0.00204	0.00104	0
IIM-K	22	0.11224	0	0.00417	0.00093	0
NMIMS	10	0.05102	0.00155	0.00306	0.00051	0
LIBA-Che	17	0.08673	0.00090	0.00240	0.00090	0.00090
IMT-G	80	0.40816	0.00102	0.00325	0.00077	0.00006
Welingkar	12	0.06122	0.00043	0.00425	0.00043	0
MICA	10	0.05102	0.00153	0.00204	0.00153	0
IBS	10	0.05102	0.00255	0.00153	0.00102	0
NIRMA-U	8	0.04082	0.00383	0	0.00128	0
XIMB	18	0.09184	0.00057	0.00227	0.00198	0.00018
BIMTEC	45	0.22959	0.00102	0.00272	0.00091	0.00045

In table-2, partnership alliance quotients of selected institutes of India with America, Europe, Asia-Pacific, and with Africa are arranged for portraying the spreads of global alliances.

The Spreads of Alliances

Figure 2



The figure-1 indicates the alliance to European institutes in reference to the total numbers of globe denoted by AEGQ bar. AEGQ bar showing more spread of alliances of Indian-Schools with European institutions concluded as more influential alliance option to Indian B-Schools. The alliance to America in reference to the globe (AAGQ) is the commonest alliance options for Indian B-Schools as reflected by the alliance spread bar in this figure (Fig-1). The other alliance spread bar for alliance to the institutes of Asia Pacific Region (denoted by the AAPGQ) indicates as another option for alliances showing common but lesser spread compared AEGQ, AAGQ. The alliance spread representing the alliance to African institutes (AAfGQ) is visible as alliance option for 6 numbers of select groups of Indian B-Schools showing least visible influences on alliance portrait among all B-Schools of India.

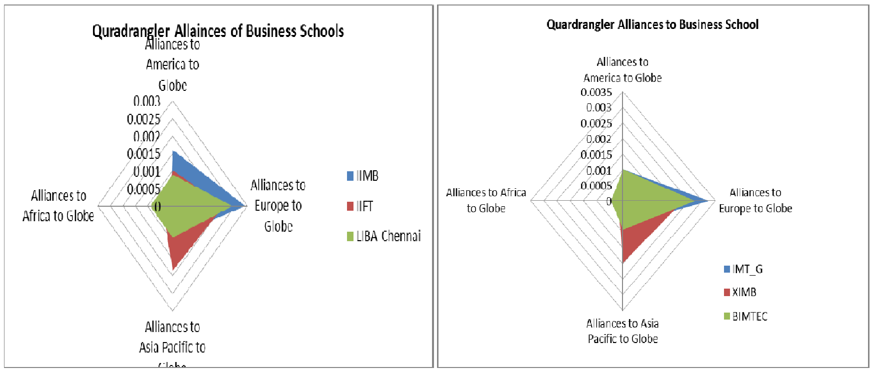
The Alliance Quadrangles

Considering the presence of adoption of alliance mix options to America, Europe, Asia-Pacific, and African continents we find the six numbers of institutes, they are Indian Institute of Management, Bangalore (IIM-B), Indian Institute of Foreign Trade, Delhi (IIFT-D), Loyala Institute of Business Administration-Chennai (LIBA-C), Institute of Management Technology, Ghaziabad (IMT-G), Xavier Institute of Management-Bhubaneswar (XIM-B), Birla Institute of Management and Technology (BIMTEC) are in the separate group of institutes. These six numbers of institutes are having alliances with the institutes form the four continents East, West, South, North side of the globe. In the Table-3, the alliance spread matrix with four continents are separated and data future applied for drawing a portrait (fig.-2) how the alliance options portraying quadrangular of alliance options.

Table-3

Institute	Alliance	Global Alliance Score	Alliance to America to Globe	Alliance to Europe to Globe	Alliance to Asia Pacific to Globe	Alliance to Africa to Globe
(1)	(2)	(3)	(4)	(5)	(6)	(7)
IIM-A	59	0.30102	0.00156	0.00259	0.00095	0
IIM-B	105	0.53571	0.00160	0.00292	0.00087	0.00010
IIM-C	75	0.38265	0.00082	0.00333	0.00082	0
IIM-L	25	0.12755	0.00102	0.00367	0.00041	0
FMS-DU	15	0.07653	0.00170	0.00204	0.00136	0
IIFT	25	0.12755	0.00102	0.00204	0.00184	0.00041
IIM-I	25	0.12755	0.00082	0.00327	0.00102	0
TISS	30	0.15306	0.00204	0.00204	0.00104	0
IIM-K	22	0.11224	0	0.00417	0.00093	0
NMIMS	10	0.05102	0.00155	0.00306	0.00051	0
LIBA-Che	17	0.08673	0.00090	0.00240	0.00090	0.00090
IMT-G	80	0.40816	0.00102	0.00325	0.00077	0.00006
Welingkar	12	0.06122	0.00043	0.00425	0.00043	0
MICA	10	0.05102	0.00153	0.00204	0.00153	0
IBS	10	0.05102	0.00255	0.00153	0.00102	0
NIRMA-U	8	0.04082	0.00383	0	0.00128	0
XIMB	18	0.09184	0.00057	0.00227	0.00198	0.00018
BIMTEC	45	0.22959	0.00102	0.00272	0.00091	0.00045

Figure-3

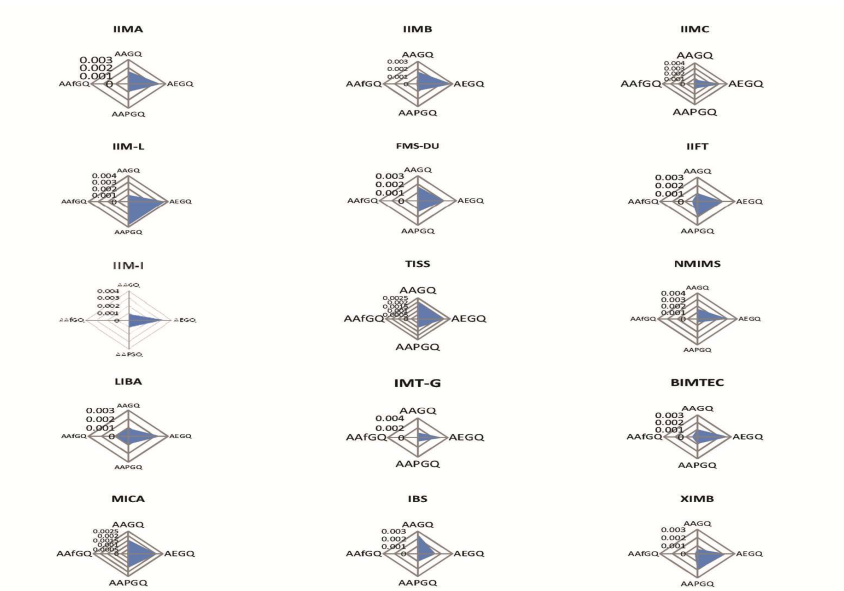


In the quadrangular alliance options, the angle created for Alliance to Africa in reference to globe are appearing blunt compared to the Indian B-School's alliance spreads to Europe, alliance to America, and alliance to Asia Pacific Zone.

The Triangular Alliances

An another set of captivating portraits emerge from adopted alliance options with the institutes of Alliances to American B-Schools, European B-Schools, and with the B-Schools located in the Asia Pacific regions in reference to globe. The alliance data are portraying triangles for alliances of single Indian management institute.

Figure-4



The visible triangular alliances portrayed by Indian Institute of Management, Ahmadabad (IIM-A), Indian Institute of Management-Bangalore (IIM-B), Indian Institute of Management, Calcutta (IIM-C), Indian Institute of Management, Lucknow (IIM-L), Faculty of Management Studies, Delhi University (FMS-DU), Indian Institute of Management, Indore (IIM-I), Tata Institute of Social Sceince (TISS), Narsee Monji Institute of Management Studies (NMIMS), Institute of Management Studies, Ghaziabad (IMT-G), Mudra Institute of Communication and Administration (MICA), and Institute of Business Studies, ICFAI (IBS) are portraying triangles of alliance mostly for options adopted with European Institutes, American, and with Asia Pacific.

Excellences under Triangles and Quadrangles

To re-cast the performances and the direction of alliances I checked the National Human Resource Development Network (NHRDN) assessment and ranking-2013 of B-Schools in India (*NHRDN, People Matter*). The B-schools were rated on the basis of nine parameters: Student profile, faculty profile, academic excellence, infrastructure, placements, corporate connectedness, leadership & governance, accreditation & linkages and campus life. The ranks of selects students are captured in the table-4.

Table-5

Under Triangular Alliances		Under Quadrangular Alliances	
Name of Institute	**Rank(s)**	**Name of Institute**	**Rank(S)**
IIM-A	R-1 (2013)	IIM-B	R-2 (2013)
IIM-C	R-3 (2013)	IMT-G	R-11 (2013)
IIM-L	R-5 (2013)	IIFT-D	R-13 (2013)
IIM-K	R-8 (2013)	BIMTEC	R-17 (2013)
IIM-I	R-9 (2013)	XIM-B	R-20 (2013
NMIMS	R-10 (2013)	IBS	No data
FMS-DU	R-12 (2013		
TISS	R-14 (2013)		

The table-4 reveals the fact that institutes exposed under the alliance adoption under quadrangles, they are IIM-B, IMT-G, IIFT-D, BIMTEC, XIM-B and IBS are more globalised than those are adopting the alliance under triangular contour. The institutes under the triangular contours are revealing excellence but they are not globalised purely. Thus, the IIM-A, IIM-C, IIM-L, IIM-K, IIM-I, NMIMS, FMS-DU, TISS are exposing the excellence under triangular alliance in reference to globe are not purely globalised.

Section-III
Measurement of Alliance Effectiveness

Measuring alliance effectiveness does not mean only spread of alliances to the globe. Major issues to examine whether outputs of alliances i.e. qualifications recognized at home country. The geographical proximity, ability to commute or travel easily to the alliances, value of degree in economic market, know someone who studied there, intention to migrate to other state after degree completion, favourable image of higher education in the country with alliance, common language, prior connection or historical ties to country etc. are factors that influences on alliances effectiveness. Another set of issue is that the students and employers expectation with regards to business internship at the institution of alliances and ease of visa formalities. MaCarthy, Sen. and Garrity (2012) assessed why the Canadian students choices higher education and United States examined the factors that influence on the selecting at

United States by Canadian students' to complete their part of curricula. Today, the management education is far more ahead in competence building and need to be adopted global competency by the management graduates. Thus, the alliances satisfies geographical proximity, ability to commute, value of degree and internship, visa formalities, value of assignment in economic market, prior connections and historical ties, employers and students expectations, global competency development are the prime criterion for assessing alliances.

Methodology of Assessing Stakeholders Perception on Alliances

Stakeholders of business education are students, parents, administrators, teachers, researchers, educators, industrialist and employers, government, and accreditation bodies. Their perception of the stakeholders on the alliances of the institutes encourages the education to go ahead with alliance strategies. Many a time alliances profile and directions of alliances attract the students to the institutes. Therefore perception towards existing alliances of B-Schools were assessed by contacting selecting representative numbers of students, teachers or academia or researcher, selected few employers for each institutes, some representative of personnel of government and accreditation bodies contacted and administered schedule questions. This survey indicated the stakeholders' perception on the alliance practices revealed an interesting picture. The analysis of data reveals that different stakeholders' group perceives on alliance effectiveness of selected and single institutions differently. The result of this assessment indicated there are different levels of perception among the representative students groups, teachers, administrators, researchers, employers. This posits a further enquiry into agreement and disagreement of perception and opinion analysis for the different groups of stakeholders.

Stakeholders Perception on Alliance Effectiveness among Indian B-Schools

To examine the level of agreement or disagreement of opinions on the whole gamut of global alliances the Kendall's *W* test was conducted. Kendall's coefficient of concordance is a measure which allows a researcher to evaluate the degree of agreement between *m* sets of ranks for *n* subjects/objects *(which is often referred to as interjudge reliability)* (Sheskin, 2004, pg. 1093). Here the population parameter estimated by the correlation coefficient is represented by the notation *W*. the range of possible values within which Kendall's coefficient of concordance may fall if $0<W<1$. When there is complete agreement among all *m* set of ranks, the value of *W* will equal 1 and when there is no pattern of agreement among the *m* set of ranks, *W* will equal 0 (Sheskin, 2004, pg. 1093).

The values of Kendall's W is near to 1 (one) with 99 percent significance indicating significant disagreement of opinions on the global competency practices among the students of same region and among the students of different regions of the institute of India. Again, to examine whether there is agreement or disagreement of opinion about global alliances effectiveness among the respondents of various B-schools Kendall's *W* was calculated for each sample B-school.

As presented in the Table-5, the test results for opinions of students of the University of Pondicherry exposed Kendall's W= 0.951 with significance P=0.000 (99 percent). The other B-schools which also have Kendall's *W* very near to 1with significance P=0.000 (99 percent) are IIM-C (0.932), IIM-B (0.924) and MDI Gurgaon (0.902). On the other hand, ISB revealed exposed Kendall's W= 0.898 with significance P=0.000 (99 percent). The values of Kendall's *W* of B-schools which followed ISB closely are IIM-A (0.887), University of

Hyderabad (0.885), Asia Pacific Institute of Management (0.860) and NITIE Mumbai (0.804) at a significance level P=0.000 (99 percent). The remaining B-schools i.e. Calcutta University (0.792), IISWBM (0.783), CRM Bangalore (0.763), Acharya Institute (0.758) and IFIM Bangalore (0.773) also exposed Kendall's *W* values nearing to 1 with significance level P=0.000 (99 percent).

Table-5, Test of Concordance of Effectiveness of Alliances Practices

B-schools	N	Kendall's W	Chi-Square	Asymptotic Sig.	Monte Carlo Sig.	Results (KW Value Indicates)
Calcutta University	21	.792	216.182	.000	.000	Significant Disagreement
IISWBM	17	.783	173.006	.000	.000	Significant Disagreement
IIM-C	14	.932	169.613	.000	.000	Significant Disagreement
IIM-B	18	.924	216.183	.000	.000	Significant Disagreement
CRM, Bangalore	22	.763	218.308	.000	.000	Significant Disagreement
Acharya Institute	21	.758	206.860	.000	.000	Significant Disagreement
IFIM, Bangalore	19	.773	191.028	.000	.000	Significant Disagreement
IIM-A	20	.887	230.516	.000	.000	Significant Disagreement
ISB	14	.898	163.484	.000	.000	Significant Disagreement
University of Hyderabad	16	.885	184.131	.000	.000	Significant Disagreement
University of Pondicherry	7	.951	86.536	.000	.000	Significant Disagreement
MDI, Gurgaon	12	.902	140.740	.000	.000	Significant Disagreement
Asia Pacific Institute of Mgmt	11	.860	122.994	.000	.000	Significant Disagreement
NITIE, Mumbai	10	.804	104.567	.000	.000	Significant Disagreement

The values of Kendall's W near to 1 (one) with 99 percent significance indicates that there is a disagreement of opinions on alliances development and global competency practices for among the students of an individual B-schools and among the students of various B-schools belonging to different levels i.e. top level (IIMA, IIM-B,IIM-C ISB), middle level (MDI Gurgaon, IISWBM, IFIM Bangalore, NITIE Mumbai) and others (Calcutta University, University of Pondicherry, University of Hyderabad, Asia Pacific Institute of management, CRM Bangalore).

Major Findings

Majority of Indian B-Schools/institutes are under triangular shapes of alliances and most of them are allied to the American and European management institutes. Thus, the top B-Schools educations are fully influenced by the B-Schools of west of the globe which substantiate the statement of import of management education by IIM-Ahmadabad, IIM – Calcutta during the 1960 -1970 *(Bhattacharya. A, 2010)*.

1. The Top Indian B-Schools adopting Triangular Alliance has weak alliance arrangement with Asia pacific region. Very small numbers of Indian management institutes having connection with Chinese and Australian B-Schools.
2. All Indian B-Schools operating under the Triangular Alliances are not purely globalised as spread of globalization indicates.
3. The institutes having alliance arrangements under quadrangular shape portrays a weak relation with the Institutes of African continent and theses Indian institutes do not have any exchange partnership with African institutes.

4. Stakeholder's perception on effectiveness of the alliance practice among the business schools is different among the different business schools. It was found that there are significant disagreements on the perceptions on the effectiveness of alliances among the different groups of stakeholders. This is true at individual level, institution level, within groups, among the groups of stakeholders.

Since, the major institutes showing excellent in Indian management education are under the triangular alliance, indicating that excellence assessment bodies are not yet considering quadrangular alliance options as a criterion. This bodies need to be considered for ranking of b-schools. It substantiate that alliance options for Indian management education are yet to capture the issues of globalization in practice and for expanding management revolution in the vortex of globalization. Thus, the Indian management education is yet to show its responsiveness to globalization through alliances establishment practices (*Ghosh and Barman, 2013*) in its truest sense of the conception.

Recommendations and Conclusion

It is very interesting to observe that the adopted alliance options by the Indian B-Schools are not according to the vision and ongoing Asian economic resurgence. The Asian economic revolution has not yet attracted the attentions of Indian B-Schools for alliance options. Specially, the propagation of intensity of crosses national HRD collaboration with South East Asian nations (*Barman. A.* 2011), at this moment there is lack of uniformity of alliances of Indian management education with South East Asian nations. Another issues in regard to alliance is that India is losing confidence of western oriented globalization has an impact those are degrading the India's growth. Considering the typology of *Ortenblad and et.al*,(2013) – the Replacer, the Effectiveness Increaser, the World Improver and the Reflectionists, the author visualizing that the ongoing alliance options adopted by Indian management institutes would not be able to produce any impact, if these alliance establishment options are not strategized properly**.** At this juncture, more emphasis on the European and American alliances by Indian institutions may not be able create any impact further for continuation of the same. The Indian may not be able to produce any reflections those are needed by an Indian business more at this point. It is the time needs to think about the shift and re-shift of ongoing redirections of alliance plan of Indian management institutes toward more strengthening Asian alliances further. The section III of this chapter suggest that in strategizing the alliance options institute also need to consider the factors such geographical proximity, economic relevance of assignment and papers, value of degree, skills, options and facilities for acquiring global competences.

Another weakness of Indian alliance option selection is that the Indian B-schools are with weak alliances to African institutions, as an indication of non influential status of global strategy of south-south cooperation. The assessment agencies of b-education should consider the aspect of global alliances according to the spread of alliances in all continents. The Indian assessment agencies should take an utmost care in revealing excellent institutes by their assessment results. Thus, the top Indian B-schools are still in economic and traditional ties ushering European and American business educational hegemony in management education need further rejuvenation and reintegration with new options for alliances to Southern part of the globe in the near future. To make Indian education really global, the top or excellent b-schools should focus on the alliance options also with the Africa and Asian institutes.

References

Barman, A. (2013), Alliances of Indian Management Education in the Vortex of Globalization Excellence under Triangles and Quadrangles; The Journal of Global Business Issues,Vol.7, issue -2, Fall 2013; PP. 27-38

Barman. A. and Konwar. J (2013), Validating Global Competency Scale for Indian Business and Management Education, *Revista Romaneasca Pentru Educatie Multidisciplinara,* Volume 5, Issue 1, June, Year 2013, PP. 199-215; Hard ISSN: 2066 – 7329; ISSN ONLINE: 2067 – 9270.

Barman, A.. (2011), Intensity of Cross National HRD Collaboration -An assessment on India's Partnership with South East Asia; *International Journal of Social Science and Management Research; SPEAK Foundation*, Delhi (Dec-2011, Issue).

Barman, A. (2012), Whither Indian Management Institutions are Globally Responsive? (February 8, 2012). Available at SSRN: http://ssrn.com/abstract=2001359 or http://dx.doi.org/10.2139/ssrn.2001359

Beck, J., Whiteley, A. & McFerridge, P (1996). "Internationalizing the business student". *Journal of Teaching in International Business,* Vol. 4: pp.91-105, 1996.

Bhattacharya. A. (2010), Mismanagement of Indian Management Education, *Economic and Political Weekly*, Vol - XLV No. 24, June 12, 2010

Bieger. T, (2013), CEMS - The Global Alliance in Management Education, at url http://en.wikipedia.org/wiki/Global_Alliance_in_Management_Education

Chaitanya V. K.,(2013) Critical Issues of Indian Management Education, Faculty Column, at Url: http://www.indianmba.com/Faculty_Column/FC59/fc59.html viewed on 22nd July 2013.

Des's N, Mehta Institute of Technology Development at URL: http://www.nmitd.net.in/mms.aspx; viewed on 24th July 2013.

Ghosh. S. and Barman. A. (2013), Responsiveness of Management Education- An appraisal on directional alignment, *Global Research Analysis* : *A Multidisciplinary Journal*, May 2013, ISSN No. 2277-8160 (print)

Gunn. A. (2013), Accounting for global university alliances, University World News; 06 December 2013, Issue No:299.

Hall, M., Stiles, G., Kuzma, J., & Elliot, K. (1995), "A Comparison of Student and Employer Expectations with Regard to Business Internships," *Marketing Education Review*, 5 (No. 3, 1995), 41-49

Hawawin G., (2005), "The future of Business Schools", *Journal of Management Development*, Vol. 24 No. 9, Emerald Group Publishing Limited, 2005, pp. 770-782

Kedia L. B. & Englis D. P. (2011) Internationalizing Business Education for Globally Competent Managers, *Journal of Teaching in International Business*, 22:1, 13-28.

Kedia L. Ben & Englis D. Paula (2011) Internationalizing Business Education for Globally Competent Managers, *Journal of Teaching in International Business*, 22:1, 13-28.

Kedia, B. & Cornwell, **T.** (1994). Mission-based strategies for internationalizing U.S. business schools. *Journal* of *Teaching in International Business,* 5 (3):11-29.

Kedia, B.L., Harveston, P.D., & Bhagat, R.S. (2001). Orienting Curricula and Teaching to Produce International Managers for Global Competition. *Journal of Teaching in International Business*, 13(1), pp. 1-22.

Kedia, B.L., Harveston, P.D., & Bhagat, R.S. (2001). Orienting Curricula and Teaching to Produce International Managers for Global Competition. *Journal of Teaching in International Business*, 13(1), pp. 1-22.

Konwar. J and Barman. A. (2011); Nourishing Global Competency in the Age of Global Consciousness- How do the India B-School responding to it?; *The Education Charter*; Vol; 2, Issue-1, April-June 2011; pp. 31-48 7-21; ISSN- 2231-0037.

Marriott.. N. and Goyder. H. (2009), *Manual for Monitoring and Evaluating Education Partnerships, Partnership for Education; available at url http://www.iiep.unesco.org/fileadmin/user_upload/Info_Services_Publications/pdf/2009/Mariott-Goyder_Partnership.pdf, browsed on 21st June 2013*

McCarthy E. E, Sen. Arup K. Garrity, Bonnie. F (2012), Factors that Influence Canadian Students' Choice of Higher Education Institutions in the United States; Business Education & Accreditation, Volume 4 , Number 2, Year. 2012, PP. 85-95.

Muthukumar R., (2009), "Case Studies on Higher Education – Vol. I", ISBN: 978-81-314-2198-7, ICFAI University Press.

NHRDN - *People Matters* B-school Rankings 2013, at Url. http://www.peoplematters.in/articles/cover-story/the-nhrdn-people-matters-b-school-rankings-2013 viewed on 21st August 2013.

O'Hara, S. (2009), "Internationalizing the Academy: The Impact of Scholar Mobility, in Higher Education on the Move: New Developments in Global Mobility", *Global Education Research Reports No. 2.* New York: IIE retrieved from http://www.cies.org/download/scholar_mobility.pdf.

Örtenblad, A, Koris. R, and et.al.(2013), Business school output: A conceptualisation of business school graduates; *International of Management Education*; Volume 11, Issue 2, July 2013, Pages 85–92 available at URL: http://www.sciencedirect.com/science/journal/14728117 viewed on 1st August 2013.

Sahay, B. S. And Thakur, Rajiv R.(2008), Making Indian Management Education Globally Competitive , Proceedings of ASBBS, Volume 15 Number 1, February 2008, retrieved from http://asbbs.org/files/2008/PDF/S/Sahay, browsed on 18th August 2010.

Sherman, H. D.(1999) 'Pursuing Global Competence In Undergraduate Business Education', *Journal Of Teaching In International Business*, Vol.10, No.3, pp. 29-41, 1999.

Sheskin J. D. (2004), *Handbook of Parametric and Nonparametric statistical Procedures*, 3rd Edition, Chapman & Hall/CRC, USA

Sinha P. M and Changkakoti A (2009), "Management Education in The 2st Century: The Road Ahead" , *Competition Success Review MBA*, November 2009, http://ghrdc.org/articles/Management%20Education%20in%20the%2021st%20Century%20The%20Road%20Ahead%20nov09.pdf.

Alliance for International Education (2012, ; available at url http://www.intedalliance.org/ , date of browsing- 20.Dec,.2013.

Tench, R. and Deflagbe, D. (2008), 'Towards a Global Curriculum: A summary of literature concerning public relations education, professionalism and globalisation'. *Report for the GlobalAlliance of Public Relations and Communication Management*, Leeds Metropolitan University, UK

Toyne, B. (1992). Internationalizing Business Education. Business and Economy Review, *B&E Review*, pp. 23-27.

Walton, J.. and Peter. B. (2006), The internationalization of the American business education: Are US students less ethnocentric?", *The Business Review* 5 (1), 282–287.

Wong. A.. And Unwin. T. (2003) Global Education Initiative Retrospective on Partnerships for Education Development 2003-2011, available at http://www3.weforum.org/docs/WEF_GEI_PartnershipsEducationDevelopment_Report_2012.pdf, viewed on 27th May 2013.

Websites Visited:

BIMTEC: http://www.bimtech.ac.in/national-international-partners.html

FMS-DU; http://www.du.ac.in/index.php?id=674

IBS-Hyderabad: http://www.ibspartners.com/

IIM-Ahmadabad, http://www.iimahd.ernet.in/institute/about/partner-institutions.html

IIM-Bangalore: http://www.iimb.ernet.in/student-exchange/partner-schools

IIM-Calcutta:http://collaboratelive.iimcal.ac.in/international-office/partnering-with-iimc/why-iimc

IIM-Indore; http://www.iimidr.ac.in/iimi/pages/intrel/partner-network.php

IIM-Kozhikode; http://www.iimk.ac.in/academics/fdp/fdp.php

IIFT-Delhi, http://cc.iift.ac.in/docs/iift/EP_3.asp

IMT-Ghaziabad; http://www.imt.edu/aboutimt/Alliances.aspx

www.bestesolution.com/isb-hyderabad.html

NMIMS: http://nmims.edu/international/nmims-around-the-globe/

XIMB: http://w3.ximb.ac.in/international-exchange-program/partner-institute

COMMENTARY

MEASURING WORK STRESS OF MARKETING PROFESSIONALS

Nauman Abdullah
University of the Punjab, Pakistan.

Shaukat Ali Raza
University of the Punjab. Pakistan

Mahr Mohammad Saeed Akhtar
University of the Punjab, Pakistan

Abstract

The study investigated the work stress of marketing professionals in terms of organizational factors, environmental factors and personal factors. Marketing professionals of 51 corporations from twelve sectors of industry listed with Lahore Stock Exchange constituted the sample. An adapted questionnaire having 34 items was used to collect the data. Mean scores were calculated for measuring the significance analysis. Frequencies, standard deviation, one-sample t-test, independent samples t-test, and one-way ANOVA were used to measure and compare the level of stress of the marketing professionals. The study concluded that there was an inconsiderable level of stress among marketing professionals. However, personal factors were found as the major contributors of stress, environmental factors were in the middle, and the organizational factors were causing the least stress among the marketing professionals. There was no substantial difference of opinion regarding stress among marketing professionals in terms of their gender; sector; experience; qualification; and salary. The study recommends marketing professionals seek possible ways for eradicating their work stress. The companies should also launch training and development initiatives for their employees to cope with the work stress to enhance their efficiency and effectiveness.

Key terms: *Work stress, Marketing professionals, Organizational factors, Environmental factors, Personal factors.*

Introduction

Stress is a common phenomenon these days as the increased work load in the professional life is causing every individual experience stress in one way or the other. Stress is the response persons have to extreme pressures or added sorts of loads engaged on them(United Kingdom Health and Safety Commission, 1999) whereas job stress is a condition that arises due to interaction of the people and their job and categorized by changes within people that make them to depart from their regular working (Beehr & Newman, 1978). Stress is affecting lives and one of the easiest places to catch it is the workplace (Thoits, 1995).

Stress, though usually taken as a negative, is reported (Akhtar, 2011) to have two types of namely Eustress and Distress. Eustress is taken as a positive stress and Distress comprises of negative stress. Marketing is a dynamic field and professionals engaged in marketing face many trials in their job surroundings, considered by intensified struggle, lack of time, lack of space, nonstop technical advancements, dynamic demands from organizational patrons and benefiters (Hall & Savery, 1986), enlarged practice of sharing and learning management and advanced technology resulting in the increased work stress (Murray &Forbes, 1986). Akhtar (2010), Robbins (2011), and Chaudhary (2012) explained three factors of work stress: the organizational factors, the environmental factors and the personal factors. Organizational factors include technological, peer interaction, and hierarchy of the organization; environmental factors cover micro and macro level interventions of the government; whereas personal factors are related to the life events and social life of employees working in the organization. Although most of the analysis of job stress overlooks the importance of outside factors and proceedings, it is becoming progressively evident that these have a huge impact (Kanungo, 1981). There have been numerous studies on work stress (Kuan, 1994; Bat, 1995; Aun, 1998; Yahya, 1998; Rana, Akhtar, Rafi, Shahzadi& Iqbal 2007; Akhtar, 2011; Chaudhry, 2012) highlighting the same sort of impact. Short-lived stress poses minute risk, but if stressful situation remains unsettled it increases the degree of wear and tear of natural system. As a consequence the risk of damage or ailment worsens (Matteson & Ivancevich, 1999;Cook & Hunsaker, 2001). High level of work stress hampers the performance (Cook & Hunsaker, 2000; Jonge, Dormann, & Vegchel, 2004; Houtman, Andries, & Hupkens, 2004) and organizations lay especial emphasis on the stress management of their employees (Cook & Hunsaker, 2000; Houtman, Andries, & Hupkens, 2004). The current study was aimed at measuring work stress of marketing professionals in terms of environmental factors, organizational factors and personal factors as sub-scales. More specifically, this study answered these questions:(i) Is there any significant level of work stress among marketing professionals in terms of environmental factors, organizational factors and personal factors as sub-scales? (ii) Is there any significant difference of work stress of marketing professionals in terms of environmental, organizational and personal factors as sub-scales? (iii) Is there any significant difference of work stress of marketing professionals in terms of gender; sector; experience; qualification; and salary as independent variables?

Methodology

This questionnaire survey investigated the work stress of marketing professionals in terms of environmental factors, organizational factors and personal factors. An industry sampling technique used by Raza & Naqvi (2011) was followed. Lahore Stock Exchange (2011) had 37 sectors of industry out of which 12 (1/3) were randomly selected which included 154 companies. Out of these 154 companies 51 (1//3) were randomly selected. In this way 51 marketing professionals (i.e. marketing managers) were taken in the sample for the purpose of data collection.

A 34 item closed-ended questionnaire was adapted from Rai (2008), Devi (2007),and a universal stress measuring tool of ISMA organization (NSAD) Questionnaire (2005). Response of items of the scale meant to investigate the work stress of marketing professionals, divided in three sub-scales namely environmental factors (10 items), organizational factors (12 items), and personal factors (11 items),against the options on the Likert scale were calculated as 05 for strongly agree; 04 for agree; 03 for somewhat agree; 02 for disagree; and 01 for strongly disagree. The responses for last item were quantified as 01 for yes and 02 for no. Mean score was used to measure the work stress of marketing professionals. Mean score 03 was taken as cut-point (Raza, Zia, Naqvi, & Ali, 2012; Raza &

Khawaja, 2013). Mean score above 03 was taken as demonstrating considerable level of work stress among marketing professionals and mean scores03 and under were taken as demonstrating in considerable level of work stress among marketing professionals. Means, frequencies, percentages, standard deviations and *t*-values were calculated to measure the work stress. One sample *t*-test, independent samples *t*-test and one-way ANOVA were used for significance and variance analysis (Raza & Khawaja, 2013).

Findings

The scale used in the current study was found reliable at 0.912 Cranach's alpha. Among the 51 marketing professionals, 50 were male and 01 was female. The sector split of marketing professionals was found as chemical, 4; banking, 7; food, 3; cement, 3; automobile, 6; fertilizers, 5; glass, 4; oil & gas, 2; paper & board, 2; tobacco, 4; insurance, 5; and textile, 6. In experience category 49 (96%) had above 10 years' experience and rest of the 02 were between 5 to 10 years. Of the total 51, 48 (94%) were master degree holders, 03 were M. Phil and none of them was PhD. The salary analysis revealed that 75% of the marketing professionals were enjoying a salary up to PRS100,000.

Combined mean score for all the three sub-scales is 02.007, which is significantly below 03. The mean scores for all the 33 individual Likert scales items were also below 03.Analysis of the sub-scales of work stress, however, categorized personal factors (2.118), environmental factors (2.078), and organizational factors (1.824) in order of level of stress as indicated by the marketing professionals.

All the 51 marketing professionals opted to "yes" when asked whether they want to continue their current job? Analysis of the independent variables in terms of sector; experience; and qualification showed no difference of opinion among the respondents.

Discussion

The results indicated that among the 51 marketing professionals, 50 were male and 01 was female. This tendency reflects the prevailing male dominance in the marketing profession. However, the female are also penetrating in the profession especially in the banking sector (Raza, Zia, Naqvi, & Ali, 2012) which was contributing just 14% in that study.

The current study strived to answer three basic questions. The First research question was,Is there any significant level of work stress among marketing professionals in terms of environmental factors, organizational factors and personal factors as sub-scales? The combined mean score for all the three sub-scales is 2.007, which is significantly below 03. The mean scores for all the 33 individual Likert scales items were also below 03.Contrary to studies like (Cook & Hunsaker, 2000; Jonge, Dormann, & Vegchel, 2004; Houtman, Andries, & Hupkens, 2004), the situation reflects an inconsiderable level of stress among the marketing professionals. One possible reason for the results could be the 75% of the marketing professionals enjoying salary up to PRS100,000 whom were mostly master degree holders. In an economy like Pakistan where finding such a lucrative job is a dream of most graduates, could be the major source of satisfaction for the marketing professionals. This was may be the reason, and an encouraging aspect of the respondent profile, that highly qualified people are entering in this profession as 03 of them were M. Phil. This is a limitation of the sample, otherwise PhD holder marketing professionals are also known to the researchers. These argument gets strengthen from the results of the last item of the questionnaire where all of the respondents wished to continue their current jobs. Had there been a considerable level of work stress, the marketing professionals would have preferred to leave their current organizations. Here the first research question is answered.

The second research question was, Is there any significant difference of work stress of marketing professionals in terms of environmental, organizational and personal factors as sub-scales? Analysis of the sub-scales of work stress categorized personal factors (2.118), environmental factors (2.078), and organizational factors (1.824) in order of level of stress as indicated by the marketing professionals. It means that, though at an inconsiderable level, personal factors which included their personal lives, their family problems and issues, their commitments and engagements are the major potential source of work stress (Semmer, 2003). The respondent profile indicates that majority of the respondents are young people who are establishing themselves in different spheres of their life and hence are feeling stress out of these activities. Environmental (i.e. including social, political and economic)factors were in the middle position and organizational factors such as organizational culture and climate were the lowest contributor to the work stress of the sample marketing professionals. One possible cause of this tendency could be the same demographic aspect of the respondent as they are not in basic decision making positions in their organizations and are relatively less concerned about environmental and organizational factors which are mainly survival issues in business organizations (Robbins, 2011). The second research question is thus answered.

The third research question for the study was, Is there any significant difference of work stress of marketing professionals in terms of gender; sector; experience; qualification; and salary as independent variables? The results of background variables discovered no substantial difference of opinion among the marketing professionals regarding the work stress in terms of gender, sector of the industry, experience on the job, qualification, and salary. It means that both male and female marketing professionals, from all sample sectors of the industry, with all categories of experience, qualification, and salary are of the same opinion regarding work stress in terms of personal, environmental, and organizational factors. One possible reason could be situations where all of them were facing the same level of problems that gives answer to the third research question of this study.

In this way, all the research questions are answered and the objectives of the current study are achieved.

Conclusions and recommendations

The study was aimed at investigating the work stress of marketing professionals. The scale used in the current study was found reliable at 0.912 Cronbach’s alpha. Out of 12 sectors of the industry, banking, automobile, fertilizers, insurance, and textile sectors were the major contributors in the sample.

An overall in considerable level of stress was found among the marketing professionals. In this state of affairs, however, personal factors were the major contributors towards stress, environmental factors found in the middle, and organizational factors occupied the lowest position as indicated by the marketing professionals regarding their work stress. All the51 marketing professionals having male dominance; 10 years’ experience; master degree; and a salary up to PRS100,000 as their major demographic characteristics, expressed the similar feelings regarding their work stress and wished to continue their current jobs.

The study recommends marketing professionals seek possible ways to fulfill their personal needs for eradicating the work stress. The companies should also give fair space to the employees for their personal lives and priorities and launch training and development initiatives for their employees to cope with the work stress to enhance their efficiency and effectiveness.

References

Akhtar, M.S. (2011). The nature and sources of organizational stress: some coping strategies. *Journal of Elementary Education,21*(2), 1-14.

Aun, O.E. (1998). *Perceived Organizational Climate, Teachers' Locus of Control and Burnout*. Unpublished MBA Thesis, Penang: University Sains Malaysia.

Bat, S.T. (1995).*Effect of Organizational Environment and Personal Factors on Work Stress and Organizational Commitment*. Unpublished MBA Thesis, Penang: University Sains Malaysia.

Beehr, T.A., and Newman, J.E. (1978). Job Stress, Employee Health and Organizational Effectiveness: A Facet Analysis, Model and Literature Review. *Personnel Psychology*, *31*(3), 665-699.

Chaudhary, A. Q., (2012). An analysis of relationship between occupational stress and demographics in universities: the case of Pakistan. *Bulletin of Education & Research*, *34*(2), 1-17.

Cook, C.W., and Hunsaker, P.L. (2001). *Management and Organizational Behavior.*3rd Ed. New York : McGraw Hill.

Devi, J (2007). A comparative study of stress level among leading consultancies, Retrieved from: http://www.citehr.com/323977-research-project-assessing-stress-level employees-consultancies.html, on October 01, 2011

Hall, K., and Savery, L. K. (1986). Tight Rein, More Stress. *Harvard Business Review*, *23*(10), 1162-1164.

ISMA, NSAD Questionnaire, (2005) *Universal stress measurement tool*, Retrieved from: stress@isma.org.uk, www.isma.org.uk, on October 2, 2011.

Kanungo, R.N. (1981). Work alienation and Involvement: Problems and Prospects. *International Review of Applied Psychology*, *30*, 1-15.

Kuan, O.W. (1994). *The Effect of Marital Status of Working Women on Organizational Commitment and Work Stress*. Unpublished MBA Thesis, Penang: University Sains Malaysia.

Lahore Stock Exchange (2011) Sector Wise OHLC. Retrieved on October 12, 2011 from http://www.lahorestock.com/MarketInformation/SectorWise.aspx

Matteson, M. T., and Ivancevich, J. M. (1999).*Organizational Behavior and Management.* 5th Ed. New York: McGraw Hill.

Murray, T. J., and Forbes, D. (1986). Where Have All the Middle Managers Gone? *Dun's Business Month*, 31-34.

Rai, M. (2008) *Measuring work stress of corporate women.* Retrieved from: http://www.citehr.com/243303-stress-management-questionnaire.html, on October 2, 2011.

Rana, R. A., Akhtar, M. S., Rafi, A., Shahzadi, M., Iqbal, N., (2007) Effect of stress on student self-esteem.*PUTAJ Humanities and social sciences*, *14*, 105-124.

Raza, S. A. & Khawaja, F. N. (2013).Faculty Development Needs as Perceived by Departmental Heads, Teachers, and Students of Pakistani Universities. *Literacy Information and Computer Education Journal* (LICEJ), *4*(1): 2013

Raza, S. A. & Naqvi, S. A. (2011).Quality of Pakistani University Graduates as Perceived by Employers: Implications for Faculty Development. *Journal of Quality and Technology Management, VII*(I), 57- 72.

Raza, S. A., Zia, S. A., Naqvi, A. H., & Ali, A. (2012).Investigating Service Quality Initiatives of Pakistani Commercial Banks. *International Business Research, 5*(3): 107-113.

Robbins, S.P. (2011). *Organizational Behavior*.14th Ed. New Jersey: Prentice-Hall, Inc.

Semmer, N.K. (2003). ‘Job stress interventions and organisation of work’, in Quick, J.C. and Tetrick,L.E. (eds.), *Handbook of occupational health psychology* , American Psychological Association, Washington.

Thoits, P. (1995). Stress, Coping, and Social Support Processes: Where are We? What Next? *Journal of Health and Social Behavior*, *36*(1), 53-79.

United Kingdom Health and Safety Commission (1999) *Managing Stress at Work*: Discussion Document, London

Yahya, R. (1998). *Organizational Factors that Contribute to Teachers’ Stress.* Unpublished MBA Thesis, Penang: UniversitiSains Malaysia.

> Change is not a sideline in the business of leadership; it is integral to the whole idea; to describe a man who left things exactly as he found them as a “great leader” would be a contradiction in terms.
>
> Antony Jay

BOOK REVIEW

WHY NATIONS FAIL: A REVIEW ARTICLE

Ashutosh Mani Dixit

Daron, A & Robinson, J 2012, *Why Nations Fails: The Origins of Power, Prosperity, and Poverty*. 1 st ed. New York: Crown.

From the time of eighteen century economist Adam Smith to contemporary researchers, the question 'What enables countries for economic success?' is still an open issue. Policy makers and economic scholars have spent years on research and dedicated themselves into developing path breaking theories and equations, but the question still remains unanswered. Theories started with classical economist claiming 'capital formation' as key for economic growth, than Neo classical economist emphasized on technology and production function, than evolved new growth theory claiming the notion of endogenous growth models (Perkins et al. 2012, p.101-103). As theories on economic and development growth evolved, M.I.T. economists Daron Acemoglu and the Harvard political scientist James A. Robinson, published book 'Why Nations Fail' in 2012 after ten years of extensive research. In the book, the authors vehemently advocate that the key determinant for economic success and failure of a nation is political and economic 'institutions'. Authors argue that nations flourish in 'inclusive' political and economic institutions, and they fail under 'extractive' institutions with power concentrated in the hands of few.

The purpose of this article is to assess the contribution of *Why Nations Fail* about its forefront claim that institution is exclusive determinant of nation's economic outcome. This paper will examine its findings and put forward arguments and claims of prominent studies about economic development. The paper has been organized in two more section. Immediate section presents chapter wise summary of the book highlighting strengths and key outcomes.

While the third section, which is the purpose of the article, offers a critique, than sums up in final section providing some concluding comments

The Book

Why Nations Fail is structured in fifteen chapters. Chapter 1 starts with the example of two cities Nogales United States (US)/Mexico, explaining how difference in nature of institutions divergently affects performance of two demographically similar states. Authors traces historical conquest of Spanish and English on South and North America to elaborate the difference, and claims that historical contingencies had significant role in shaping the political landscape and had prolonged effect even centuries later on two nations (Acemoglu and Robinson 2012, p.21). Further they illustrate that sound institutional platform has brought economic progress in the United States, whereas colonial legacy and its authoritarian politics has restricted entrepreneurship; weaken property rights and discouraged ideas in Mexico (Acemoglu and Robinson 2012, p.53). In pursuit of further explaining the role of institutions and governance, authors put forward different theories that exemplifies geography, cultural and ignorance as decisive factor in outcome of nation. Progressively each of these hypothesis is refuted by the authors (Acemoglu and Robinson 2012, p.62-82). They advocate that the difference in economic trajectory of Koreas, Nogales, or East and West Germany can only be explained by quality of political institutions at work. Further Acemoglu and Robinson argues that political hegemony vested on the hands of few lead identical regions to unproductive economic activity, and ultimately as failed nation. Overall chapter 2 advocates that decentralization of powers in political system are imperative to have an affluent nation; and argues that theories on geography, cultural and ignorance are weak in explaining the difference in economic growth between countries.

Chapter 3 begins with history of political institutions operating in North and South Korea, and claims that economic prosperity in South Korea unlike North is complemented by inclusive economic institutions. However authors acknowledge that some nations prospered under extractive institutions by allocating resources into short lived productive ventures, but render limited social benefits (Acemoglu & Robinson 2012, p.88-98). They argue that economic growth under extractive political institutions are temporary, and are prone to collapse from consequence of infighting generated between themselves. Soviet Russia (USSR), a nation built upon extractive political institution and its collapse is a country case authors put forward to support the argument.

Chapter 4 unfolds key historical events (coined as critical junctures) that shape the path of economic development. It builds up analysis on the critical juncture like Bubonic plague catastrophe (1346 A.D) originated from China, and illustrates political and institutional change that ascended from shortage of labour due to spread of the catastrophe (Acemoglu and Robinson 2012, p.111-12). As a whole, chapter underscores that small institutional change in the historical juncture magnifies over the time, and as a result nation grosses diverse path of development.

Chapter 5 highlights the evolution of USSR under Stalin and Gosplan's Five Year Plans, and advocates that demise of USSR was result of extractive institutions and inefficient allocation of resources (Acemoglu and Robinson 2012, p.141-147). Aligned to the case they make a bold statement that China is on the same trajectory and its fate is no different from USSR. Authors also examines the evolution of tribes Bushongs and Leles (separated by a river), and explains that institutionally weak Lele were poor and disputed whereas the Bushong were rich and had advanced technologies. Overall chapter reiterates the notion of economic growth and extractive institutions, and advocates that economic growth under extractive institution is not sustainable.

Chapter 6 outlines homogenous characteristics that Venice and Ancient Rome, Ethiopia and Mayan city-states shared in their evolution pattern and explains how extractive nature of political institutions led them to failure. However authors acknowledge that there were time when those states had some degree of inclusive institutions that provided incentives for growth. But when authoritarianism shadowed the system and elites illicitly used the power conflicts emerged and the downfall of the societies began (Acemoglu and Robinson 2012, p.168-171). Chapter 7 begins with case projecting regressive thought of ruling elites in England who feared creative destructions. It than highlights the history of England from signing of Magna Carta to failed absolutism of Stuart king. Overall chapter underscores inflection point of England from extractive institution to more inclusive institutions with vivid illustration of glorious and industrial revolution.

Not all nations learned from the industrial revolution of England neither they followed the path of rapid development till distant future. In Chapter 8 authors explain that it is due to the critical juncture in the history which lead minions of Ottoman Empire to be relatively poor for centuries and abstained them from growth. Revolt against influential never grew so strong in the Ottoman Empire and neither there was environment for inclusive institutions. Ottoman Empire feared the possible uprising from technological adaptation, so instead of embracing the change they restricted it, and same was case with countries akin China, Spain, Russia and Hungary (Acemoglu and Robinson 2012, p.230-236).

Beginning of chapter 9 emphasize exploitation and underdevelopment of the Southeast Asia in seventeenth century, it talks about genocide of Spice Islands, and East India Company's contract of Ambon. Later most part of chapter draws attention on one of the important theory in economics 'Dual economy model' by Sir Arthur Lewis. Authors argue that dual economy is moulded by colonization and it is a channel through which extractive institutions sustains (Acemoglu and Robinson 2012, p.299). Chapter 10 describes variegated evolutions of different countries, from establishment of institutions and political system in Australia, revolution and introduction of inclusive institution in France to westernization of institution in Japan. Authors connect similitude in evolutions of these countries to conclude that they embraced inclusive institutions, progressively invited industrialization and enabled development (Acemoglu and Robinson 2012, p.316). Conversely, author advocates that some countries confined themselves to absolutism and monopoly and suffered repercussion of social inequality and regressive growth for long time.

Chapter 11 is about virtuous circles- chains of events that strengthens itself through feedback loop. Authors advocates that presence of inclusive institutions enables virtuous circle to initiate positive feedback and restrain elites from overpowering. Chapter cites an example of Black Act of 1772 in England (Acemoglu and Robinson 2012, p.345), the case that created a wave of positive cycle forming mechanism for right to vote and warranted level playing ground for prosperity. Similarly author briefs about the negative feedback loop and iron law of oligarchy in chapter 12, with multitude of cases from Sierra Leone, United States, Ethiopia, Guatemala and southern part of United States. Authors claims that these countries had no power checks and thus ruling elite had incentive for larceny. Author advocates that even in the case revolution dethroned the ruling elites, it is implicit from prevailed 'iron law of oligarchy' that a new elite would just replace the ousted and continue the appropriation. This is one of the reason why author doubts on possibility of move towards inclusive institutions even after Arab Spring.

Chapter 13 starts with case of extractivism in Zimbawe under Robert Mugabe and his cronies, and elaborates the consequence of similar extractive interventions in Steven's Sierra Leone, Karimov's Uzbekistan and Kim Jong's North Korea. In one interesting case of Colombia authors describes that failure of Colombia was due to consequence of failing to set up inclusive institutions, albeit it had democratic elections. Addition to brief country case of US breaking the vicious circle (cited in chapter 12), another example authors cites about 'breaking the mould' is Botswana in Chapter 14. Endowment of natural resources (diamonds) did not create tussle over access of resource extraction and rent appropriation in Botswana. Authors claims that after colonial independence in Botswana, traditional elites and political party did not perform an extractive interventions at the cost of society because there was a perfect 'interplay between a critical juncture and existing institution' (Acemoglu and Robison 2012, p.454).

Initial part of chapter 15 comes back to the changing reforms in China and its probable future analogues to USSR under continued restrictive regime. Authors than focuses on foreign aid and advocates that international institutions cannot engineer prosperity with structural loan and conditional grants, but growth has to come by reforming towards inclusive institutions and empowerment of people. Chapter cites numerous examples on failure of foreign aid; from funds channelled towards absolute regime in Africa to UN project of shelter restructuring in Afghanistan that unproductively smoked millions of dollars. Overall chapter highlights that nation's success lies in market liberalization, inclusive institutions and understanding of real problem, not in foreign aid and extractive regimes (Acemoglu and Robinson 2012, p.493).

Review

The stated objective of the book is to advocate that 'Countries differ in their economic success because of their different institutions' (p. 88). Why Nations Fail is derived and extended version of Acemoglu and Robison's academic paper 'The Colonial Origins of Comparative Development' that was co-authored with Professor Simon Johnson of MIT in 2000. Although authors put on ambitious statement with deep facts supporting chronological events that shaped the institutions and trajectory of nation, but it is hard to agree on all of them. However there are some important central themes that are interesting and convinces reader. Foremost, authors advocate that there are critical incidents in history of nation that lead to establishment of inclusive or extractive institutions -or to be specific success or failure. Deep illustration of evolution pattern has enabled this book to make valuable contribution in evolutionary theory and economics. It is interesting to read those small steps towards democracy; when Western Europe landlord competed for services of surviving peasants after Bubonic plague and land lord in Easter Europe cloistered themselves against contagious effect of labour shortage. In similar fashion it is informative to go through the post-journey after discovery of Americas and read how parliament prevented Elizabeth I and royal elites from monopolizing Atlantic trade. While in other side of the map Spanish elites monopolized the trade and ignored the citizen's demand, leading to different institution. Readers go through overwhelming facts to understand the history and diversity of economic growth and comprehend how government's reaction to momentous event can have lasting effect on nation's outcome at longer run. Another important view authors put forward is that passive institution and vested interest of governments is a road block for development. They highlight that government's interest on benefit of few is detrimental for growth of nation, so existence of sound pluralistic political institution is imperative to ensure level playing ground and accountability of government.

The arguments authors put on this book are based on research into hundred years of economic evolution. They have related each circumstances with role of institutions in economic outcome. But the breadth of the facts readers have to go through book is very rigorous and makes it challenging to validate each of them. The scope of coverage can be inferred from MacLeod (2013, p.121) graph which showed that each 100 pages of book takes leap of one century on an average. However there are some studies that are contrary to the claim put forward by book. Authors frequently claim that institutional drift and critical junctures has long run effect even centuries, but conversely study by Shleifer (2004, p.8-10) claims that 'institutions are highly volatile' and there is discontinuity on freedom pattern of the world after 19^{th} century. Further there are reports from leading institutions highlighting that freedom in world has been increased by 40 percent in just 18 years and countries are becoming more liberalized despite ethos of the archaic institutions (Freedom House 2013).

However there some shortcomings in the book which deserves more attention , for one authors have ambiguously and repeatedly used inclusive and exclusive addressing economic and political institutions which is hard to comprehend and accept them to be exclusively imperative for economic development of nation. Further authors have confined the scope of institutions and arguably marginalized weight of culture, informal institution and social characteristics as determinant for economic development by refuting cultural hypothesis. It is apparent from studies (Jutting, p.14) that there are different types of institutions, on basis of formality (formal and Traditional/Indigenous), hierarchy (Levels1-3) and area (Economic, political, law and social), which have a significant role to play in economic system. Jutting (2013) underscores that 'development outcomes need to take into account the differences between exogenous and endogenous institutions, the local setting, the actor perspective and the existence of different levels of institutions with different time horizons of change' (Jutting 2013, p.8). Similarly an article from Fukuyama (2006) in *The American Interest* highlights that beliefs, traditions, values and habits are imperative for function of formal institutions; centring formal institutions and failing to account cultural factors to analyse the development outcome is a not exclusively convincing, he claims formal institutions are shaped by informal institutions.

Next, authors bold argument 'History illustrates that there is no simple or enduring connection between climate or geography and economic success' is not convincing (p.63). Readers find it hard to comprehend that economic development is insulated from effect of geography and topographical characteristic of nation and challenges it exerts to technological diffusion. Studies have revealed that nation facing of escalating production cost and vicinity to global market (due to geographical constraints) have slow technological diffusion (Veiseh, 2010). Additionally if we look from the perspective of climate change and future development, developing economy which are most vulnerable to climate change (geography factor) has high probability of facing adverse situtations on the road towards economic prosperity. In near future developing countries are the first which will face adverse effect of climate change and hit by hard environmental externality such as coastal erosion, floods and droughts (Warner and Gest 2013, p.373). So in the light of this fact it is naïve to ignore the role of climate change and geography in the trajectory of economic development.

Further to support the above argument this paper takes evidence from the work of one of the pioneer advocate of institutions and economic growth Douglas North and relate it to significance of geography theory. Douglas North's in his paper 'Ocean Freight Rates and Economic Development 1730-1913' claims that decline in per unit cost of marine transport was significant factor for reviving interdependence of the world, opening up venue for developing countries and enabling migration and settlement (1958, p.2) . As per North (1958) global interdependence reduced ocean cost efficiently and channelled the raw materials from developing countries towards industrialized ones. If we relate this fact to claim put forward by Levinson (2006) that low freight rates and commercial use of ship containers further reduced the expense of international trade providing greater mileage for global partnership, we will get a picture that land lock countries were isolate from this opportunity. Further it is estimated that cost of containerization is three time less than cost of road transport; this pushed landlocked countries at even more cost disadvantage position (Levinson, 2006). This helps to understand why landlocked Nepal and semi landlocked Paraguay are among the poorest countries of Asia and America respectively, and why they have low volume of international trade. It is also makes vivid why Vietnam (ranking lower in freedom index- not only limited to geography) instead of landlocked Bolivia is preferred place to assembly line for Japanese and South Korean companies. In the light of this fact we can infer that those countries which were in proximity to ocean routes must have clear geography advantage, so Acemoglu and Robinson (2012) claim on direct causal relationship between institution and economic development is not solely convincing.

Acemoglu and Robinson (2012) analysis is based on history, critical junctures, institutional drift and past economic trajectory but it fails to answers what's next after inclusive institution. It is well articulated book on evolutionary economics and history, but the theory cannot provide satisfactory analysis on post revolution stage of movement like Arab Spring. It is well accepted that politics matters, and bad governments can indeed restrict development and bring forward 'Iron law of oligarchy'. But having said that it is equally important to account technological process, cultural, geography, innovations and technological diffusion, and the myriad ways through which these factors flow around the world and module the future events.

Authors pithily advocate that international donor organizations are trying to 'engineer prosperity' by structured aid and unproductive rehabilitation projects, rather than investigating and reforming the institution. But importance of foreign aid has been matter of debate from seemingly conflicting opinions and contours (Perkins 2012, p.499). While scholars like Sachs has been advocating the significance of aid and serially disregarding institutions importance, Easterly hails idea of strengthening institution and provokes notion of discouraging the aid dependency, but both agree on the point that geography position and countries endowment affect the economy through institutions (Easterly & Levin 2003; Sachs 2003). So author's brief introduction on malfunction of foreign aid is informative but not convincing to support the theme of book and refusal of other hypothesis.

Although there are different theories which are for and against the dominant role of institutions in economic development there claims are not yet fully justified. Perkins (2012) convincingly highlights that effective government and institutions along with favourable geography and trade (along with other indicators), are characteristics that shape the economy, and claims that understanding how these factors exclusively affect the economic outcome is far from complete.

Concluding comments

This is rigorously researched and well written book on current area of academic and policy interest. Thorough exploration of economic history and industrial revolution in the book projects ambitious statement that good quality institutions in every aspect are imperative for virtuous performance of nation. Since the book has confined itself within inclusive and exclusive institutions ignoring role of geography, trade and technological factor in determining outcome of nation, readers may not agree with its strict institutional rim. Furthermore it is important to note that geography and other myriad of factors like culture, technology and trade has significant role to play in economic outcome of countries, and if geography is conducive to integrate technology and conduct commerce it will enable economy for higher growth. Overall we can say that this book is full of extensive evolutionary proof and highlights significance of institutions, readers will enjoy the simple read. Authors have tabled a heavy analysis underscoring importance of institution in front of policy architects, which I believe will unquestionably stimulate policy debate about 'sound institutions as determinant for economic development'.

References

Daron, A & Robinson, J 2012, *Why Nations Fails: The Origins of Power, Prosperity, and Poverty*. 1 st ed. New York: Crown.

Daron, A, Johnson, S & Robinson, J 2001, 'The Colonial Origins of Comparative

Development: An Empirical Investigation', *American Economic Review,* vol.91, no.5, pp.1369–1401.

David, L, Dwight, P & Steven, B 2012, *Economics of Development*, W.W Norton & Company, Harvard University Press.

Easterly, W & Levine, R 2003, 'Tropics, germs, and crops: how endowments influence economic development', *Journal of Monetary Economics*, vol.50, no.1, pp. 3-39.

American Interest, Policy Politics & Culture, USA, viewed 16 May 2014, <http://www.the-american-interest.com/articles/2006/11/01/do-defective-institutions-explain-the-gap-between-the-united-states-and-latin-america>

Geest, K & Warner, K 2013, 'Loss and damage from climate change: local level evidence from nine vulnerable countries', *International Journal of Global Warming,* vol.5, no.4, pp. 367-386.

Freedom House, Freedom in the World 2013, Washington, United States. <http://www.freedomhouse.org/sites/default/files/FIW%202013%20Booklet.pdf>

MacLeod, WB 2013, 'On Economics: a review of why nations fail by D. Acemoglu and J. Robinson and pillars of prosperity by T. Besley and T. Persson', *Journal of Economic Literature,* vol.51, no.1, pp. 116-143.

North, D 1958, 'Ocean freights rates and economic development', *The Journal of Economic History*, vol.18, no.4, pp.537-555.

Sachs, 2003, 'Institutions don't rule: Direct effects of geography on per capita income',

NBER Working Paper, no.9490, viewed 20 May 2014,
< http://www.nber.org/papers/w9490.pdf?new_window=1>

Glaeser, E, Porta, R, Silanes, F, Shleifer, A 2004, *Do institutions cause growth?,* viewed 20 May 2014,
<http://www.nber.org/papers/w10568.pdf>

Veiseh, N 2010, 'Reconciling Acemoglu and Sachs: geography, institutions and technology',

Journal of International Affairs, vol.64, no.1, pp. 205-220.

The life of every teacher is partly dedicated to discovering and encouraging those few powerful minds that will influence our future, and the secret of education is never to forget the possibility of greatness.

GilberHighet

BUSINESS REVIEW

Research Journal
of
The Institute of Business Administration
Karachi, Pakistan

Guidelines for Contributors

Business Review is a biannual publication of the Institute of Business Administration, Karachi, Pakistan. It is a multidisciplinary journal covering a wide range of issues in the areas of business, social and management sciences, administration and governance, mathematics and computer studies, finance, economics, psychology, business ethics, logic, history of ideas, and philosophy of comparative religion.

Guidelines for Authors

1. *Business Review* invites the following types of contributions:

- Research papers
- Case studies and discussion papers
- Articles / Book Reviews
- Brief reports and comments

2. Manuscript should be submitted to the Editor, *Business Review*, Institute of Business Administration, University Road, Karachi, Pakistan.
3. Three copies of the manuscript should be submitted.
4. The text should be double spaced, on one side of the quarto paper allowing wide margins for referee's comments.
5. All illustrations, tables, etc., should be placed on separate sheets, included with each copy. Their placement should be indicated in the text.
6. Footnotes should be numbered consecutively through the text.
7. The first page of the manuscript should contain the following information. (i) title of the paper; (ii) the names(s) and institute affiliation(s) of the author(s); (iii) a footnote should give the name, postal address,telephone and fax number, and an email address of the authors.
8. The second page must contain the title, and abstract not exceeding 300 words, a maximum of 5 key words or phrases and appropriate JEL codes to be used for indexing purpose. The text will start on page number 3.
9. Acknowledgements of all sorts should be included on the first page.
10. All mathematical derivations should be presented on a separate sheet, (not to be published) to help the referees.
11. Manuscript should include only those references that are cited in the text. Authors are advised to follow American Psychological Association (APA) style of referencing.
12. All literary material, including books, journals and manuscripts for review should be submitted in triplicate to the Editor, *Business Review*, Institute of Business Administration, University Road, Karachi, Pakistan.
13. It is assumed that the paper submitted is an original unpublished work and it has not already been published or submitted for publication elsewhere.
14. The opinions, ideas and evaluations expressed in the articles printed in the *Business Review* do not necessarily represent the views or policies of The Institute of Business Administration or the Editorial Board. They should be considered as representative example of opinions and analysis now current in the academic field on various subjects of intellectual, educational and cultural interest.
15. After internal evaluation, the Editor will send the selected articles to the external referees or the consulting foreign editors for their evaluation. Selection of the referees will be the discretion of the Editor.
16. The articles will be evaluated through anonymous peer reviews. Papers will normally be scrutinized and commented on by at least two independent expert referees in addition to the Editor.The referees will not be made aware of the identity of the author. All information about authorship will be removed from the papers.
17. The text of this publication or any part thereof may not be reproduced in any form or manner whatsoever without the permission in writing from the Editor.

For advance electronic submission of the material:
Main Campus: University Road, Karachi. Tel: (92-21) 38104700 Fax: (92-21) 99261508
City Campus: Garden/Kiyani Shaheed Road, Karachi.
Website: www.lba.edu.pk Email: tqureshi@iba.edu.pk

All enquiries should be addressed to the Editor, *Business Review,* Research Journal of The Institute of Business Administration, Karachi, Pakistan.

Institute of
Business Administration
Karachi-Pakistan

The Yogi and the Commissar

The essence of the creative leader is that he is, in Koestler's phrase, both yogi and commissar. Perhaps the phrase need explaining, since the concepts it embodies are important to big organizations, which badly need both. Nobody, or virtually nobody, is pure yogi or pure commissar, but most people polarize around one or the other.

The yogi is the contemplative man, the thinker… The commissar, on the other hand, is the man of action. He has never had an idea in his life, and is incapable of questioning the assumption on which his department or the company is running…

Good commissars do not need to be chased or prodded: They have the drive inside them, they enjoy pushing things along, they find satisfaction and fulfillment in rushing around getting things done – and it is the actual doing, not the contemplation of the thing done, which is the source of their pleasure.

Good yogis and good commissars are not all that common. Obviously, therefore, the man who is a combination of both is rarer still. Nevertheless it is still vital to understand him, because although the spectacular conjunction of the brilliant original thinker with the vigorous and decisive man of action may not crop up more than once in a generation. And these are the people who can lead the creative groups, by virtue of the dual insight which the combination of these qualities gives them. In his creative group there will be some who are more yogi than commissar, some who are more commissar than yogi; clearly it is excellent if he is better than all of them in both areas, but it is not essential. So long as he is good enough to be respected by the yogis as a yogi and by the commissars as a commissar, so long as he is much more of a yogi than any of the commissars and much more of a commissar than any of the yogis, that is what matters, because he will have the one thing that none of the rest possess, namely, an understanding of the whole operation, and not merely sections or aspects of it.

Antony Jay, Management and Machiavelli, pp.115-118