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## BUSINESS REVIEW

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# **BUSINESS REVIEW**



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### Editorial Perspective

#### The Case for Corporate Man: Who is he?

If you see a man walking down the corridor and you do not know him, you ask: *Who is he?*

If you see a strange object sitting in the corner of the corridor, which you have never seen before, you ask: *What is that?*

There is a familiar difference between the two questions and it makes all the difference in the world. A man is a *who* and not a *what*. He is a *subject* and not a *thing*. He has a face and he can ask: *Who am I?*

So, who is he; the Corporate Man?

We do not know. Or, do we?

We are familiar, as much as we are, with as many faces of man as we have met on the vast landscape of human typology. Each one of them represents a worldview and carries a heavy burden of the present tense meaning of life, the realities of the modern world and the future he has so unwisely made uncertain for himself.

We have committed sins living in denial and bad faith and we have missed our watershed moments. Ideas are our scarcity but we are not short on dreams and hopes. We do not know how and when to invest ourselves in our future. But, our yearning for the miraculous is unbounded. In a place like Corporate Pakistan, it is so easy to live with diminishing resolve not to desire the undesirable. But so we live- obstinate, obdurate, and stubborn. Happy and contented with *what is*, unwilling and hesitant to imagine what can be and therefore *ought to be*. How quick we are to default on the promise of *yet to be*; how dithering in search of the *world to be*! Why?

Let us ask the Corporate Man: some haphazard questions: Who has extricated the human face from the narrative of your context and discourse? From your being-in-the-world? Who has omitted the human and moral order from the many faces of corporate reality? Who has curbed your creative restlessness killing softly your hope for what the future can be? Your creative will to will the truth, your creative imagination; to generate ideas for tomorrow, your inclination to assume the role of leadership? Your passion to understand the power that lies buried deep down in your *being able to be*? Have you not lost so much? How much more can you afford to lose? Think. Is this the present you were longing for yesterday, prolonging your agony for the future that will be yours and to which you will belong tomorrow? Are you still longing for what could have been? Nostalgic for the world to be?

Let us say to him this, and much more than this. Don't be afraid to love truth more than the thing you love. Dare to think dangerously. Dare to be wise. Speak so that we may see you. Let us see who you are. Remember the saintly Abraham Lincoln and his words of wisdom "whoever you are, be a good one." These are challenging words. They cover the vast spectrum of ethico-moral and existential landscape of our quest for *being*. Show us your face. Develop your voice. Sing your life in your song. Think of us in your thoughts. Come out of your hiding. Announce yourself. You have nothing to lose but your anonymity. You have but one obligation; to become who you are capable of becoming.

A typical Corporate Man can be described in several ways. The thought here is not about profiling him as one of them. The thought, not a very comforting and easy one, is to

demonstrate to ourselves an understanding of what it means and what it takes to make the case for him. To name some of the thematic profiles of man on whom so much wisdom has been invested and a great many ideas have been spent to examine the meaning of his being a human being, an educated human being, an ethical and moral human being, not from a single, an exclusive and one dimensional view but from several perspectives. Each one of these ways of his being gives rise to mighty questions which are bound to lead to intense disquietude, involved conversations, huge discourses pertaining to critical narratives on the agonizing reflections on decision making and the place of value in doing what he ought to be doing, as best as he can.

Many learned men, thinkers and research scholars, have spent so much of themselves to deepen and enlarge our understanding of man, his thoughts and ideas, hopes and fears, frailties and valor, creative rage and the will to truth; each as an extension of his being a human being. Each one of these profiles, alone in its own way, and in coalition, is a summing up conclusion about human metaphor. It is part of a process, as it has unfolded itself, not just like that, but as a manifestation of socio-cultural, political and economic development and, above all, the principle of movement and change towards the ‘yet to be’? In retrospect, it cannot be stripped of the history of its recent past.

Each society projects its own image of man into its arts and literature, philosophy and culture, its worldview and ethico-moral dispensations eschewing the burden of petrifying world, wanting to escape into a *world to be*, sadly disappointed and unhappy with the *world as it is* eager to live in a *world as it ought to be*.

We live in times when “the world” as an amorphous and vacuous concept has ceased to exist. In times like ours, only the worlds exist; materialistic or idealistic, just or cruel, human or brutish, yours and mine, ours and theirs. Corporate world is one of those many worlds. It is the world of Corporate Man. Modern man has many faces, wearing well-crafted masks. Corporate man is an anonymous incognito man without a face, without a name, happy and secure in his knowledge that nothing is permanent, nothing abides, nothing is ever the same. An anecdote from Heraclitus, the ancient Greek philosopher.

But, does the corporate man understand the power of corporate reality and his own creative will to shape his future by constructing and reconstructing it according to the vision and his heart’s desire, by generating new ideas and, in his creative resolve, transcending the petrifying exclusiveness of *thus it is and it cannot be other than what it is*? Is he the man who is willing to grow older gracefully to test the limits of what he is capable of doing and therefore by doing it, to become what he ought to be. In life a great deal, if not everything, depends upon his *creative vision*.

“What do we mean by vision? Essentially, *vision is mental Journey from the known to the unknown, creating the future from a montage of current facts, hopes, dreams, dangers, and opportunities. . . .* Such a journey can dictate the success of business; and just as nations must adapt their original visions to changing conditions, so must corporate leaders mould their visions to keep pace with a rapidly evolving world.”

Hickman, C.R. and Silva, M.A., *Creating Excellence*, p.151

So, the Corporate Man is a journeying self. He is a creature whose journey, towards self-realization and self-fulfillment, is fraught with the possibilities of his being and not being. That is his existential situation. He cannot *be* without *being*; and the logic of it is that *being without being is not being at all*. That is his human predicament. There is a moral and ethical side attached to his being a human being but it is not confined to ethics and morality. There is also an epistemological side to it and, equally importantly, his ontogenetic evolution. That means that *he cannot be without becoming what he knows*. If he knows what the truth is, he must then become truthful. Otherwise he lives in denial and bad faith. In life our greatest *problem* is to give expression to feelings and moods, value judgments, affirmations and negations, which we all have to face and live with in our lifetime.

Moreover, man, whoever he may be, is an autobiographical consciousness. He is who he is because he decided and chose to be *this* rather than *that*. It is not a small matter; although it looks apparently so simple to make a choice, to say ‘yes’ or ‘no’, ‘to be’ or ‘not to be’. In fact it is not only our authenticity and veracity that is at stake, more so, it is what we alone can do as best as we can: *to be* and *to become* what we are capable of becoming. All else is innocuous and naïve if our fate and destiny does not flow from our choices and decisions. We cannot relegate this task to anyone nor can we hold someone responsible for our misfortunes and suffering. Whatever happens to us, we make ourselves a candidate for it. Let us not forget that not to choose for ourselves is in itself a choice and not to decide for or against is itself a decision. Our foes are many and most of them within. Our friends are few and often hard to recognize.

In the corporate world, except for solitary voices, there is no alternative discourse to counter the narrative that the corporate system is flawed and tardy. The foundations of corporate culture have been severely undermined by insistence of the corporate executive upon mutually exclusive categories, the either/or dichotomies, artificially created conflict; e.g., between ethics and economics, a *laissez faire* attitude towards profit and material aggrandizement, blatant and exploitative disregard for corporate social responsibility and ethico-moral imperatives. Thus it is and, thanks to our acquiescence to the glorious *status quo*, so it must remain, as a *fait accompli*.

*Corporate Pakistan* is a unique and peculiar phenomenon because the very thought of it arouses emotions of pity and contempt. But beside the painful assortment of the features typifying the way it has become, mercifully there are many a redeeming possibilities which, if they are not consigned to risk averse indifference and apathy as wasted and lost opportunities, we can still hope to make some amendments for the collateral damage we have already done to our socio-cultural fabric.

We are living in “interesting times.” These are the times when honest and sincere people dare to think creatively - reimagining, re-constructing and reviewing their lives and their worldview. These are the times when honorable men ask painful questions and fear not the painful answers. In times such as these, men of good faith and creative will decide how to live and when to die. They are the men of vision, in tune with the markings of times. During these times men of vision and destiny do not weep or cry, nor do they wax indignance. They do not slumber. But, while their companions sleep they are toiling upward in the night; true to earth and the realities on the ground.

They hate to stay just the same; they are not afraid to change. All great minds and all great societies change. They glorify the principle of becoming. They want *to be*. Transcending the propensity for acquiescence they celebrate the *principle of movement* in life. We are on our way towards the *yet to be* and it is a long way from here to the *world to be*. Our hearts are filled with hope and we can hear the “distant drums”.

How long shall we wait for iconoclasm? Have we not waited long enough for radical thinkers, invincible and unconquerable minds, especially in the field of teaching and leadership to enhance the desired level of excellence to facilitate the demolition of idolatrous beliefs and ideas lodged in our hearts and minds?

In the Qur’anic parlance, there is a sickness in man’s heart which does not let him be. It is due to his subservience to the unusable past that has lost its creative and dynamic relevance for the present and also his slavish attachment to the unexamined beliefs and ideas whose knowledge claims are unquestioningly accepted and taken for granted. These are the idols we must ruthlessly demolish, destroy and shatter into bits, *to be free* –free from “fear and trembling” and inner doubt whether *to be free* or *not to be free*. Both, societies and individuals, function on the same principle when they are confronted with a choice to provide perspective to their narrative of the world *as it is*; in search of the world *as it ought to be*. It is the creative rage, the will to truth and the vision of the *world to be*. Is the corporate man brave enough to demolish the Baconian

- *Idols of the Tribe*. The dogmas and the erroneous assumptions which give legitimacy to the unexamined norms and taken for granted traditional beliefs? Idols, the taboos and totems?
- *Idols of the Cave*. The flawed narratives that make man worship petrifying traditions, customs, loves and hates, hopes and fears, prejudices and biases?
- *Idols of Market Place*. The symbols, metaphors, allegories and the themes on which variations are constructed to be played out on the stage of market governed economy and corporate values?
- *Idols of the Theatre*. Eulogizing ideologies, attitudes, mannerism, axioms, tastes and new but vulgar and arrogant patterns of thought and narratives?

These idols thrive and feed upon our heart’s desire; they are lodged in the inwardness of our being. That is where they must be destroyed to liberate our hearts and minds from venomous hatred and greed, dishonesty and deceit, lust for power and authority, fear of death, impulse rather than intuition, reaction rather than reason.

Abandoning such an essential component of teaching and learning in our institutions of higher education we have abdicated our responsibility to the harmonious intellectual, moral and socio-cultural development of our students. It is tantamount to pedagogical sin and we who have made teaching our calling are guilty of such crimes. Year after year, as the events unfold on the landscape of *Corporate Pakistan*, we find it even more difficult to forget our past and, if we are honest to God, unwilling to forgive ourselves. Such a mindset is the breeding place of pity and contempt, grief and sorrow. Our collective memory works only in spurts. We are incapable of making promises to ourselves, reneging on those we had committed ourselves to keep. We are cloistered people, undecided about honor without honesty and glory without moral grace. Apart from fear and cowardice and also greed and lust for pleasure – no other emotions keep our thinking – feeling –willing unity harmoniously



integrated. Otherwise, we go to pieces, shattered into bits, scattered all over the domain of vulnerability. Living in such a context, it is not an easy task to make *The Case for Corporate Man* or to make and remake him to construct and reconstruct the Corporate World.

In the following sparsely stated ideas, together and in juxtaposition, we have designed a multifaceted sphinx to make *The Case for Corporate Man*. It is a naïve analogy with a striking difference, indeed. But naïve only if we adhere to a one dimensional description, as opposed to a broad interdisciplinary profile of the corporate executive. So, the analogy serves the purpose of saving the corporate man from becoming the dupe of an insulated description that is based on disregard for the unity in diversity of inter-disciplinary narrative with the focus on common denominators, in different contexts and from several perspectives.

Each man lives more than one life but each man does not die; not even a little death. In the Corporate World, as in the Beaucratic World, our functionary lives under the surge of glass managery, ready to wear the well-crafted mask, to suit the impulse, betraying his real identity in the unguarded moments or under the spur of fleeting moment, forgetful of wearing the wrong mask. How silently and skillfully he then melts away into someone reincarnate.

In the following nuanced profiles of modern man, which cut across the vast spectrum of the corporate landscape, let us see if we can recognize the lurking shadow of the *Corporate Man*. Besides, we offer a review of quotations from random selection of books, not the suggested or recommended course books, to cover a small number of thematic narratives.

#### ***Irrational Man***

“To be rational is not the same as to be reasonable. In my time I have heard the most hair-raising and crazy things from very rational men . . . Nowadays, we accept in our public and political life the most humanly unreasonable behavior, provided it wears a rational mask and speak in officialese, which is the rhetoric of rationality itself.”

William Barrett, p.270

#### ***Technological Man***

“Modern man is far from slaying the beast within; why assume that the man of the future will be a completely new creature?”

Victor C. Ferkiss, p.25

#### ***One Dimensional Man***

“The transcendent project must be in accordance with the real possibilities open at the attained level of the material and intellectual culture.”

Herbert Marcuse, p.22

#### ***Man Alone***

“The past few hundred years have seen major scientific and technological revolutions in half the world, while the other half still plows the earth with dull sticks. Unparalleled economic growth has occurred side by side with the profoundest human misery; and

struggles for freedom and enlightenment side by side with continuing social injustice.”

Eric and Mary Josephson, *Introduction*

***Between Man and Man***

“Education worthy of the name is essentially education of character. For the genuine educator does not merely consider individual functions of his pupil, as one intending to teach him only to know or be capable of certain definite things; but his concern is always the person as a whole, both in the actuality in which he lives before you and in his possibilities what he can become.”

Martin Buber, p.104

***Know Thyself***

“I am the center of my world and consequently I imply the world. On the other hand, my world implies me, as the center of it.”

Bernardino Varisco, P.38

***Man, The Unknown***

“Man, as known to the specialists, is far from being the concrete man, the real man. He is nothing but a schema, consisting of other schemata built up by the techniques of each science. . . . But he is also the poet, the hero, and the saint. . . . our conceptions of him are imbued with metaphysics. They are founded on so many and such imprecise data that the temptation is great to choose among them those which please us. Therefore, our idea of man varies according to our feelings and our belief. A materialist and a spiritualist accept the same definition of a crystal of sodium chloride. But they do not agree with one another upon that of the human being.”

Alexis Carrel, p.3

***An Essay on Man***

“It follows from the very nature and character of ethical thought that it can never condescend to accept “the given”. The ethical world is never given; it is forever in the making. “To live in the ideal world”, said Goethe, “is to treat the impossible as if it were possible.”

Ernst Cassirer, p.61

***Man’s Search for Himself***

“The hallmark of courage in our age of conformity is the capacity to stand on one’s own convictions – not obstinately or defiantly (these are expressions of defensiveness not courage) nor as a gesture of retaliation, but simply those does one believe. It is as though one were saying through one’s actions, “This is I, my being”. Courage is the affirmative choice, not a choice because I can do no other; for if one can do no other, what courage is involved?”

Rollo May, pp201-202

***The Folklore of Management***

“The businessman needs the skills of the politician, and the politician needs the skills of businessman. Neither can afford to call the other bad names. It is not true that all politicians lack principle, and not true that the businessman responds only to self-interest. Dishonesty and selfishness are human defects that are attributes of a particular human being, not symbols of calling.”

Clarence B. Randall, p.131

***Good to Great***

“We were surprised, shocked really to discover the type of leadership required for turning a good company into a great one. Compared to high-profile leaders with big personalities who make headlines and become celebrities, the good-to-great leaders seem to have come from Mars. Self-effacing, quiet, reserved, even shy - these leaders are paradoxical blend of personal humility and professional will. They are more like Lincoln and Socrates than Patton or Ceaser.”

Jim Collins, p.12-13

***World According to Drucker***

“Drucker discusses economic life in terms of values, integrity, character, knowledge, vision, responsibility, self-control, teamwork, community, competence, social responsibility, the quality of life, self-fulfillment, leadership, duty, purpose, dignity, meaning- but rarely money. He defends profit, but as if it were broccoli; a distasteful obligation of managers who would rather be reading Kierkegaard.”

Jack Beatty, P.176

***The 7 Habits of Highly Effective People***

We focus “on what could be called the *Character Ethics* as the foundation of success – things like integrity, humility, fidelity, temperance, courage, justice, patience, industry, simplicity, modesty and the Golden Rule . . . is, basically, the story of man’s effort to integrate certain principles and habits deep within his nature.

The *Character Ethic* taught that there are basic principles of effective living, and that people can only experience true success and enduring happiness as they learn and integrate these principles into their basic character.

But the basic view of success shifted from the *Character Ethic* to what we might call the *Personality Ethic*. Success became more a function of personality, of public image, of attitudes and behaviors, skills and techniques that lubricate the process of human interaction.”

Covey, Stephan R. pp18-19

***Violent Man***

In the *phenomenology of the world of violent men*, Toch offers an interesting insight into the typology of violent man. His observations on the ‘Violence in Perspective’ begin with these words:

“Few categories of conduct evoke more concern than the subject of this book. Social critics equate violence with decay, statesman deplore its prevalence, and unprecedented resources are marshaled to combat it . . . We are told that violence lurks within us, that we dole on it, wallow on it, and that we must exert enormous effort to suppress it.”

Hans Toch, P.1

***The Humanization of Man***

In discussing “Our Present Culture and Its Ills,” Ryan observes, and his observations spread over the vast landscape of corporate society.

“In any systematic attempt to humanize our society, it is obvious we must begin by taking four diagnostic steps. We must observe the difference between what we are and what we might be. We must examine the philosophy that is largely responsible for bringing us to our present state, and then that which should guide us in achieving a better state. And, finally the method which the implementation of this latter philosophy dictates. . . .

Beyond this, a truly humane society would also be one in which the members would be relatively happy because normally skillful in all their noneconomic activities as well. Thus, they would be trained to move easily and gracefully, without apparent effort. They would speak resonantly and clearly. They would sing freely, melodiously, spontaneously. They would dance unselfconsciously, without any forced bacchanalian gaiety. They would write a hand that was pleasantly calligraphic. The casual maps or diagrams they had to sketch, in explaining something to a friend, would please both mind and eye. They would design and choose clothing which, while comfortably functional, would be expressively personal. They would build homes and shops that both in structure and appearance would foster a warmly human way of life. They would serve nutritious meals which would also be symphonies of tastes. They would converse or compose letters pointedly, wittily or compassionately, as occasion demanded. In these and the many other activities of daily living, therefore, they would continuously experience the delights both of performing things well themselves, and of enjoying the similarly skillful performances of others.”

Ryan, John Julian, pp3-7

To understand the context to which we belong, to understand the world in which we live, we need to understand the *world* we share with others, the *lived-world* that belong to us and to which we belong. To know where we are going, it is necessary to remember where we

are coming from. To reach the goal we are seeking, we need to know the right path and also the right direction. It is not uncommon for the seekers, the travellers, the journeying selves, to be on the right path and yet moving in the wrong direction. Such is the futility of human endeavors and the tragedy of human societies. They never arrive anywhere near the goal they are seeking.

To inherit the future they desire for themselves, they do not always desire the desirable, nor do they always preserve what is worthy of preservation. To live in a “brave new world”, the *world to be*, they lack creative vision and imagination, above all the will to truth. They never understand that in life the only *way* to go is the way forward and onward, towards the yet to be. Life teaches us that to live means to outlive, to grow means to outgrow and to be means to become. Living is a creative venture and existential discontent. It is an act of surpassing the world that has grown old and weary of new ideas and new thoughts, new possibilities, new ways of seeing and new ways of being in the world.

The habit of critical thinking, historical criticism, creative judgment, ethico-moral reevaluations, all of which are quintessential of liberal and progressive education are also the essential features of the world that is yet to be. The concept of a constantly changing and dynamic reality of the world demands a pedagogical strategy to evolve new methodologies to reflect inclusion rather than exclusion of new ideas and concept, struggling for their relevance in the Corporate Worldview.

Abandoning such an essential component of teaching and learning in our institutions of higher education we have abdicated our responsibility to the harmonious intellectual, moral and socio-cultural development of our students. It is tantamount to pedagogical sin and we who have made teaching our calling are guilty of such crimes. Year after year, as the events unfold on the landscape of *Corporate Pakistan*, we find it even more difficult to forget our past and, if we are honest to God, unwilling to forgive ourselves. Such a mindset is the breeding place of pity and contempt, grief and sorrow. Our collective memory works only in spurts. We are incapable of making promises to ourselves, reneging on those we had committed ourselves to keep. We are cloistered people, undecided about honor without honesty and glory without moral grace. Apart from fear and cowardice and also greed and lust for pleasure – no other emotions keep our thinking – feeling –willing unity harmoniously integrated. Otherwise, we go to pieces, shattered into bits, scattered all over the domain of vulnerability. Living in such a context, it is not an easy task to make *The Case for Corporate Man* or to make and remake him to construct and reconstruct the Corporate World.

When we cease to imagine more than the petrifying “thus it is and it cannot be other than what it is,” our creative will wills nothing. We sacrifice hope at the altar of necessity and condemn ourselves to a fixed immutable reality and a world bereft of creative possibility. But, to creatively reimagine the world, *corporate man* has to strive for a dialectical synthesis of *thus it is* and *thus it ought to be*, resulting in the emergence of the *world to be*.

This is an arduous task and a neglected theme in our institutions of higher education. As teachers, if we wish to be true to our calling to make the case for Corporate Man, we must strive for a synthesis of liberal arts and humanities, ethics and economics, philosophy and religion. It may sound a superfluous idea. But the lure of specialization and our fascination for departmental training should make us weary of the kind of skill and training which has indeed the economic and pragmatic value and is also a sign of the time. But the assumed boundaries and demarcations between various disciplines are artificially drawn; they do not

serve us well in our complex, interdependent and rapidly changing world, including the Corporate World.

Being trained into a given field of academic discipline and specialization, with no emphasis on wisdom and virtue, ethical behavior and moral character should not deserve the name of *education*. Such education and training too means little and fails to do much as an educational *ethos* and a *world-view* unless it also teaches us how to live a good life and be a good man. An educated man, beside all else, is essentially a good man. Good life and ethical behavior is not an act but, as Aristotle believed, it is the result of cultivating good moral habits.

Reality, including corporate reality, has many faces; beautiful and ugly, alluring and repulsive. This is another anecdote from the early Greeks but relevant still. Therefore, Protagoras believed, man is the measure of all things. But who is this mysterious man whose judgments and evaluations are the measure of truth and reality? You, me or the ***Corporate Man?***

To be continued....

Tufail A. Qureshi

“Social life is beset with disparities between others’ perceptions of us and our reality. We are accused of stupidity when we are being cautious. Our shyness is taken for arrogance and our desire to please for sycophancy. We struggle to clear up a misunderstanding, but our throat goes dry and the words found are not the ones meant. Bitter enemies are appointed to positions of power over us, and denounce us to others. In the hatred unfairly directed towards and innocent philosopher we recognize an echo of the hurt we ourselves encounter at the hands of those who are either unable or unwilling to do us justice.”

Alian de Botton, *The Consolations of Philosophy*, p.40-41



**ARTICLE**

**TRACK II AS A METHOD TO BREAK BARRIERS:  
PAKISTAN-INDIA RELATIONS SINCE 1980**

Dr. Talat A. Wizarat

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**Abstract**

*Track-II diplomacy made major contribution in reducing tension between the US and Soviet Union during late 1950's and 1960's. Attempts have been made in the past to apply the concepts developed particularly during 1960's to other regions of the world. South Asia at one time had more than a hundred channels, only a few have survived. Some of these ventures have been one time exercise while others have survived for several years.*

*Socialization process has been more successful than the other three stages. Filtration and transmission also hold great significance but several factors have retarded their growth. Implementation can only take place when the earlier three stages have been successful. However, it needs to be recognized that several ideas developed under Track-II initiatives have been implemented e.g. the establishment of hotline connecting the leadership of land forces of Pakistan and India. Some CBMs can also be traced back to Neemrana and other Track-II initiatives.*

*Mindsets of common people and decision-makers need to be changed, in that lies the real success of Track-II initiatives.*

**Keywords:** Track-II Diplomacy, Initiatives, Socialization, Filtrations, Transmission, Implementation

**Introduction:**

Track II has gradually emerged as a dependable mechanism for reducing tensions in regions where conflicts are rampant. Since many years scholars have been focusing attention on Track II as a way of promoting peace. Some of these studies have made significant contribution towards promoting an understanding of Track II as a method of tension reduction and conflict management.

Practitioners of diplomacy particularly professional teams running the foreign offices in South Asian countries had certain reservations about Track II. Members of civil society interacting with members representing the adversary were seen as lacking in expertise. They were also considered to be naïve and ill informed. Some professionals looked upon the efforts of Track II practitioners as 'meddling'. Even though some of these misperceptions still persist but on the whole there seems to be better appreciation of the aspirations and potential of Track II even among professional diplomats.

Harold Saunders, a well-known US diplomat spent a life-time practicing Track I. Saunders was involved in negotiations leading to Camp David agreement between Egypt and Israel in 1978. After his exit from regular diplomatic role he got involved in Track II dialogue between Russia and the US generally known as Dartmouth Conference Series. He has also

been involved in the Track II initiative for the objective of promoting democracy in Tajikistan.(Montville, 2006) His book “The Other Wall” is considered to be significant contribution to the field. According to Saunders, Track II diplomacy is based on members of civil society engaging in ‘policy related problem solving dialogue’. The dialogue centres on ‘elements of the overall political relationship, solutions to arms control problems, resolution of regional conflicts, issues of trade policy, or other areas of competition’. Saunders clearly distinguishes between Track II and other initiatives involving people to people contacts the purpose of which is simply to get to know the other side.<sup>1</sup>

The ‘hard’ Track II dialogue as pointed out aims to resolve disputes between governments but a lot of Track II initiatives do not fall in this category. The ‘soft’ Track II is designed to promote an understanding of the perceptions and viewpoint of the adversaries but even in such cases the ultimate objective is to help in the resolution of issues dividing the two sides. (Kaye 2007)

Louise Diamond and John McDonald define Track II as ‘non-governmental, informal and unofficial contacts and activities between private citizens or groups of individuals sometimes called non-state actors’. (Jones 2008)

From the above discussion it is obvious that the definitions of Track II vary from general to specific. At the simplest level one can consider any contact across borders which does not involve government officials to belong to Track II category. Under this frame-work one can include any interaction between women groups or scholars. Even exploratory contacts between groups of people providing they are not government officials fall within this category.

It is quite common in certain cases to include serving government officials or even military officers in Track II initiatives. However, in majority of cases ex-government officials, retired civil and military officials, serving academics and media representatives are preferred. Quite often politicians and other members of the civil society end up joining governments which enables them to put their ideas into action. These examples suggest that the wall between Track II participants and government circles is not insurmountable. The linkages between Track I and Track II exist at many levels, this situation is often referred to as ‘Track one and a half’. (Kaye 7)

Quite contrary to public expectation in the age of media most practitioners of Track II do not desire media coverage and prefer a low profile. They do not seek publicity for several reasons. Firstly, publicity creates hype and public expectations rise beyond all realistic measures. The results often do not measure up to public expectations leading to failure. Secondly, the fear of premature exposure of ideas can serve as a deterrent forcing people to be more circumspect when it comes to expressing themselves freely. Thirdly, less flexibility is possible under the glare of media. In other words Track II participants might adopt an inflexible approach for the same reason that Track I participants do.

The desire to shun publicity sometimes gives rise to a situation whereby Track II is regarded as a secret venture. This impression is incorrect and needs to be rectified. There is a difference between not seeking publicity and being secretive. For some the line between the two might be thin but it is important to remember that the line does exist.

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<sup>1</sup> *Ibid*

**Historical Background:**

Although Track II has become more popular since the end of Cold War but it should not be forgotten that the method was used to reduce tension during the Cold War years. The best known example the Dartmouth Dialogue between Soviet and US citizens began in 1959. It continued for twenty nine years contributing significantly towards tension reduction and conflict management. Its major contribution was to improve the political environment between the two super powers. As the environment became conducive to conflict management and conflict resolution both the camps were beneficiaries of the process.

Dartmouth initiative was viewed as a successful exercise. Attempts were made to replicate the process in other parts of the world. Track II initiatives were also used in times of actual crises. When the US discovered the presence of Soviet missile sites on Cuban soil instead of approaching formal diplomatic channels, the US opted for a Soviet journalist who happened to be in the US at the time of the crisis.

Track II and Track I and a half have been used to ease tension in the Middle East. A group of Palestinian and Israeli citizens participated in the back channel negotiations in Oslo. These people lived together, ate their meals on the same table while negotiating. Israel had deliberately created hurdles (in the form of laws) in order to prevent negotiations between the two sides. These laws had to be changed before Israeli citizens could participate in the Oslo process. Members of both teams enjoyed tremendous influence in their societies. This was the first organized effort to break the ice.

Finally, the process resulted in a breakthrough but the process came to a standstill a couple of years after its initiation mainly due to Israeli intransigence. Failure to achieve results also led to disappointment on the Palestinian side. The loss of support for the peace process among common people has made compromises difficult.

After Oslo many other Track II channels were opened bringing Palestinians and other Arabs face to face with Israelis. Some of the members participating in these channels had direct access to government officials but others e.g. students and academics even when lacking access to their governments played a role in reducing tension.

Non-official and informal contacts have been used in Central Asia to promote democracy and to help build suitable environment for conflict resolution. Multiple initiatives in the Track II framework were launched among Azeris, Armenians and Georgians which succeeded in reducing tension but did not resolve any major conflict. (Rieg 2001)

**South Asia and Track II Diplomacy:**

Before embarking on an analysis of relevance of Track II to South Asia it will be fruitful to survey regional politics. The South Asian region enjoys rich history. When British imperial set up withdrew from the region all states in South Asia gained independence. India was the largest and most heterogeneous. Pakistan composed of two separate wings divided by a thousand miles of hostile Indian Territory was the only country with clear Muslim majority. Sri Lanka, Nepal, Maldives and Burma (now known as Myanmar) were also part of South Asia. All South Asian states are multi-ethnic, multi-cultural and multi-racial in composition. As far as religion is concerned there is great diversity. Each religion is further sub-divided into sects and sub-sects.

South Asian states suffer from three issues which have made economic progress

difficult. There is a dearth of educational facilities in rural areas and small towns. Government run schools and colleges offer educational facilities which do not compare with facilities provided by private schools in big cities. Even in large cosmopolitan cities standard of education varies greatly. The majority is therefore unable to break out of grinding poverty.

Second major problem is lack of resources when compared to rising population. In some cases even in the presence of natural resources the nation is unable to benefit due to a combination of economic and political factors.<sup>2</sup> The problem of political instability also plagues most states in the South Asian region<sup>3</sup>

Third factor which cannot be ignored is the increasing number of interstate disputes in the region. The longest standing dispute is the Kashmir dispute between Pakistan and India. It has already resulted in off shoots like Kargil dispute and Siachen conflict. Apart from these the water dispute which emerged soon after independence when India decided to stop the flow of water into Pakistan. After injecting tension in the Pakistan-India relations for more than two decades the matter was resolved in 1960 with the help of World Bank. This conflict has resurfaced with new vigour due to India's policy of diverting water from rivers allocated to Pakistan under the Indus Water Basin Agreement to meet its own growing need for water. This is a serious violation of Indus Water Basin Agreement; needless to say it has soured Pakistan-India relations. There are a host of other conflicts between the two nations e.g. Pakistan's charge that India is training and infiltrating terrorist groups into Baluchistan and Khyber Pukhtoonkhwa provinces of Pakistan. The growing instances of terrorism in Pakistan are causing loss of lives, property and business opportunities further aggravating the problem of poverty. India has also accused Pakistan of similar actions in the past. Track I has not been very successful as hardliners on both sides do not support the idea of promoting social, economic and political ties unless the other party succumbs to the hardliners point of view. India's support to Tamil Tigers fighting against the Sri Lankan government was a major irritant in relations between the two countries. Many years later, however, India realized that fomenting trouble in Sri Lanka was counterproductive as it could worsen India's own Tamil problem. Now with the defeat of Tamils in recent military operations launched by the Sri Lankan armed forces, there are expectations of positive change in the form of growing tourism and trade opportunities giving a boost to Sri Lankan economy.

Bangladesh-India relations have also suffered due to Indian allegations that economic migrants from Bangladesh are creating problems in Assam and West Bengal province of India. Bangladesh denies the charges of infiltration and terrorism leveled by India. Water dispute between the two countries was resolved and generally both governments made efforts to negotiate their differences. Some issues have still not been resolved and the two governments are very much divided on what steps to take. Bangladesh accuses India of imposing non-tariff restrictions against goods from Bangladesh. There have been border skirmishes between the two sides leading to loss of life on both sides.

Two additional factors regarding South Asia need to be taken into account. There are two regional nuclear powers that also happen to be rival powers. In the Middle East Israel is the only nuclear power, therefore, it is able to dominate the region even at the expense of regional peace. In South Asia although Pakistan is much smaller in military terms and its

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<sup>2</sup>There are often problems between different provinces concerning resource mobilization, lack of technology and lack of finances can further complicate the situation

<sup>3</sup>Even in democratic states acts of violence and subversion do occur.

population is less than one-fifth of the Indian population, nuclear capability of Pakistan is a great equalizer. In view of this Pakistan's smaller economic sector and other disparities do not lead to the same type of vulnerabilities which are found in other regions.

South Asia has SAARC which includes all regional states. The dominant position of India due to its large population, size of territory and economic capabilities has aroused apprehensions in the region. One more factor which has somewhat handicapped SAARC is the fact that no contentious issues can be discussed at this forum. It has, therefore, failed to play a major role in promoting peace through conflict resolution. The region will gain immensely if reforms are introduced making it possible for regional states to resolve their disputes through this forum.

#### **The Role of Track II In South Asian Politics:**

As already pointed out there are no regional platforms available to states at a time when interstate and intra-state conflicts are rampant in the region. Track II is more concerned with interstate disputes although it has not achieved much success in this either. It does not directly deal with intra-state conflicts but it can play a role in preventing third parties from getting involved in these domestic conflicts. Very often in South Asia, regional states get involved in internal problems of their neighbours thus adding yet another source of tension and conflict.<sup>4</sup> Because of this indirect role in strengthening regional peace sometimes, Track II is unable to get credit for its contribution to regional peace.

As mentioned earlier, due to a legacy of regional conflicts, governments have developed sensitivities which often do not allow them to take peace initiatives particularly, where they are most needed. Following a contrary policy might be viewed by the populations as a sellout. Politicians have been swept out of power for taking 'softer' position on issues regarded as important by the people. By the same token politicians could increase their electoral appeal by adopting a 'harder' line on issues considered by majority of people as important. (Riegg4) As politicians are sensitive to electoral requirements while they are also interested in keeping non-official diplomatic channels open they have no option but to keep such contacts out of the purview of general public.

Track II provides that much needed privacy to members of civil society to participate in dialogue with adversaries in order to develop win-win situations, from which both sides can benefit. Most of the people taking part in these dialogues are retired diplomats, retired armed forces people and bureaucrats who have time to spare after their retirement. Academics participating in these seminars are not required to resign from their jobs. At times they may face problems which are difficult to handle but on the whole they are encouraged to participate in the process.<sup>5</sup>

The governments are not directly involved although sometimes indirect involvement may be present. Governments do not stand to lose either way. If the process breaks down and there is no positive outcome, the governments can claim ignorance. If, however, the process

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<sup>4</sup>India interfered in the East Pakistan crisis resulting in the breakup of Pakistan. India accused Pakistan in 1980s of trying to do the same in East Punjab which was denied by Pakistan. India is widely suspected of using Afghan soil to subvert peace in two provinces of Pakistan, however, India has been denying this

<sup>5</sup>Some South Asian countries require public sector university employees to seek NOC for travelling. Getting Visa can also be a hassle.

leads to some mutually advantages ideas they can step in and take over from there.

Another dimension which adds flexibility is that Track II does not seek to replace Track I, it can consolidate it. Many initiatives which were implemented e.g. the establishment of hotline between the military leaderships of Pakistan and India was first debated in the Neemrana Dialogue. After its initial discussion at Track II level when all contentious issues were taken care of the idea blossomed into the establishment of the hotline. This hotline has been extremely useful particularly in view of the fact that the two nuclear armed nations can diffuse military tensions before they can grow into something more serious.

### **Track II: Some of The Challenges In South Asia**

At one stage there were almost a hundred Track II initiatives in South Asia. Most of these were financed by Western countries. They focused on issues which were important from their perspectives. These developed countries often want to convey the impression that they stand by certain values, even if they are not very serious about the implementation of these values in the third world. Most of the initiatives revolved around security issues particularly after the nuclear tests by Pakistan and India in 1998. Other initiatives dealt with issues like democracy, gender issues, child labour etc. Due to historical experiences of all South Asian states there are some reservations against political and economic initiative undertaken by foreign donor agencies. Not only do common people but intelligentsia, bureaucrats, intelligence communities and other members of civil society view foreign sponsored peace initiatives with some misgivings.

A number of these initiatives, as already pointed out revolve around security issues including arms control. Since western countries are major arms suppliers to the region and they are earning billions of dollars as a result of this trade, it appears to be no less than an enigma when western nations profess faith in arms control. However, these arms control measures normally deal with nuclear arms and not conventional weapons which partly explains the dilemma. The thrust is also against biological and chemical weapons, as western countries believe that non-conventional weapons proliferation in South Asia, or anywhere else could increase the risk of these weapons, falling into the hands of undesirable elements. Another issue faced by regional civil societies is the selection of academics and other participants. There is no set procedure for selection but one thing is clear, the governments do not play a direct role in the process. Normally a retired diplomat or a retired member of the armed forces is approached by the funding agency which has a free hand in deciding whom to approach. There is no set criterion of selection except that these people are considered to be prominent in their fields and are known to have done some research on issues at hand. All the people selected are not equally interested in the subjects to be discussed. At times these participants are quite inflexible in their approach to regional conflicts and their positions could be a replication of their government's stand on the issue.

The elite participating in these initiatives serve as a bridge between their region and the west as far as ideas behind the initiative are concerned. 'Socialization' is a major stage in most Track II initiatives. At this stage the participants are exposed to ideas already developed in the west. Most of these ideas have already been used in East-West Track II dialogue with mixed results. The purpose behind this exercise is to benefit from the work already done by experts in the West in order to preclude the possibility of reinventing the wheel. However, this approach can also create some problems. The concepts communicated may not be relevant for a particular region. To fill this gap 'filtering' is necessary. At this stage the local



participants try to absorb these ideas and to transform the ones which are more relevant to their conditions. In the South Asian brands of Track II the filtering part was not as effective as it should have been.

Transmission (Kaye21-25) is a logical extension of socialization and filtering. Ideas learnt and transformed have to be communicated to the governments who are then expected to put them into practice through Track I if they are found to be relevant. Here, too, the experiences of South Asian Track II participants appear to be diverse. The whole process depends on person to person relationships. Some participants of Track II particularly the leaders have access to government officials at the highest level particularly if they happened to be part of the administration before their retirement. These individuals are better able to achieve success in 'transmission' function. Some of the proposals have been translated into concrete reality e.g. the hotline between military officials of Pakistan and India which has already been mentioned.

Although dependence on foreign sources of funding does not go too well with the people in general, there is a paucity of funds from the region itself. If regional states are able to raise funds under a mutually acceptable quota, it would enhance the credibility of the exercise but, the problem is that most of the Track II initiatives in recent times (particularly after the nuclear tests) are restricted to Pakistan and India. The worst thing that can happen to the series of dialogue is for either Pakistan or India to bear much of the expenses. This would raise doubts in the minds of people in the other country.

#### **Some Major Track II Initiatives In South Asia:**

As already mentioned there have been nearly hundred Track II initiatives in South Asia. While some of these are still on, quite a large number gradually fizzled out. Some of these were one time affair like the Tripartite Initiative between Italy, Pakistan and India which took place in November 1998.<sup>6</sup> The venue of the conference was Rome. Delegates from the three countries mostly included academics although there were some retired government officials from India.

Academics, experts from various think-tanks, members of media, retired diplomats and retired armed forces personnel gathered together in the US in April 1999.<sup>7</sup> Serving US diplomats took active part in the exercise which explored ways and means of reducing tension between the two parties. Averting nuclear confrontation in South Asia dominated the agenda of this conference. Socialization was the main purpose of this exercise, the State Department and people from various US think-tanks tried to suggest ideas which they believed to have been useful in the case of US-Soviet meetings.

Soon after the Indians called off their military buildup on the Pakistan-India borders a onetime Track II conference was called in Nepal. Some experts from Nepal and the US also participated but the majority of participants were from Pakistan and India.<sup>8</sup> It will not be an exaggeration to state that, a very large number of retired senior defense forces personnel from Pakistan and India and also retired diplomats, dominated the proceedings. The idea behind the

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<sup>6</sup>Participation in one time or regular variety has led members to believe that both have their advantages and disadvantages, a great deal depends on the issues.

<sup>7</sup>The purpose was socialization.

<sup>8</sup>Provided a much needed opportunity to break the deadlock and revive security related dialogue.

initiative was to ensure that policies leading to this kind of situation i.e. military buildup would not be repeated. The economists in the group were of the view that if Pakistan and India were to develop trade and other economic ties it would promote peace between them. Among interactions spread over months or even years, Balusa Group stands out, ShireenTahirkheli and her brother Taufiq Siddiqui established the group in 1995 to improve India-Pakistan relations. (Kaye 80\_82) The funding for the programme came from UN Development Programme and Rockefeller Foundation. One major idea to emerge from the Balusa Group was the Iran-Pakistan-India natural gas pipeline. It was implied that interdependence between Pakistan and India will grow as a result of IPI gas pipeline. In Europe interdependence between states led to consolidation of peace. It was believed that relations between Pakistan and India will also improve as a result of this venture. Balusa group also concentrated on the resolution of the core issue between Pakistan and India i.e. the Kashmir dispute. The group, despite the fact, that most of its members enjoyed considerable influence in their countries, was unable to leave an impact on national policy.

Shanghai Process began in 1994.<sup>9</sup> It included a number of high ranking participants from China, Pakistan and India. Pakistan and India sent academics, media representatives and retired diplomats while the Chinese and US delegations included government officials in informal capacity. The first few meetings did not go well as the participants tended to be nationalistic. Some delegates leaked out news to the media despite the fact that the group was averse to publicity. The main thrust of the peace process in this case was to resolve strategic issues including nuclear issue. Pakistan had not tested a nuclear device till that point in time but it was widely believed to be nuclear capable while India had already conducted a nuclear test in 1974. No first use and placing limits on the production of fissile material were among the priorities of the group. Through this process the US probably wanted to impose limitations on China which it was not ready to reciprocate itself.

Neemrana initiative was launched in 1991 and is considered to be the longest surviving Pakistan-India peace initiative. It is named after a village in Rajasthan where the first conference took place. It is patterned after Dartmouth Dialogue between the Soviet Union and the US. The dialogue takes place at least once every six months alternatively between Pakistan and India. Ten members each from Pakistan and India participate regularly. Since the dialogue has been going on for twenty years some members have changed over the years.<sup>10</sup> Initially Ambassador Paul Kriesberg presided over the meetings. Gradually, he disassociated himself from the initiative<sup>11</sup> and the heads of the two sides accepted joint responsibilities.

Neemrana was funded by Ford Foundation. Chatham House principle of non-attribution has been followed which all participants adhere to.<sup>12</sup> Although not a secret dialogue media coverage is avoided. It is probably due to this reason that the initiative has survived so long.

The purpose of this initiative has been to reduce tension, promote conflict resolution and create better understanding between Pakistan and India. At one stage the two sides

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<sup>9</sup>Ibid.

<sup>10</sup><http://baithak.blogspots.com/2009/09/neemrana-initiative-javed-jabbar.html>.

<sup>11</sup>Indians were of the view that there should be no third party involvement, only delegates from the two countries should meet

<sup>12</sup>Baithak, <http://baithak.blogspots.com/2009/09/neemrana-initiative-javed-jabbar.html>.

brought teams of businessmen from the two countries to discuss issues related to trade. The purpose of this exercise was to promote trade between the two countries. Neemrana Dialogue also brought women groups from both countries to discuss issues related to them. At one of the meetings in Delhi, Pakistan delegates were able to meet leaders from Indian occupied Kashmir. To reciprocate, Pakistani delegates invited leaders from Pakistani side of Kashmir to meet the Indians in Islamabad meeting.

To what extent has this initiative resulted in conflict resolution and peace in South Asia? Although this question cannot be answered in limited space as there are many reasons why the initiative has not been successful, suffice it to say that the dialogue did contribute towards tension reduction. Some initiatives recommended by the Neemrana participants for the purpose of confidence building have actually been adopted by the two governments. At one stage the two sides were led by diplomats who enjoyed respect in their countries and had access to their governments. Both of them conveyed to their governments major ideas emerging from each session. The transmission function of Track II was thus achieved to some extent in the case of Neemrana dialogue.

Pakistan and India Peoples Forum for Peace and Democracy began in late 1993.<sup>13</sup> The first joint declaration was made on 4<sup>th</sup> September 1994 at Lahore. The 8<sup>th</sup> session took place in Allahabad on 14<sup>th</sup> to 16<sup>th</sup> October 2011. The themes of the conference were Demilitarization and Peace Dividends, Kashmir Dispute, Religious Tolerance, Democratic Governance and Globalization and Regional Cooperation. The forum enjoys a bigger membership and its meetings arouse media interest. Many members of the forum are prominent personalities from the two countries.

Among the institutions which have been playing a prominent role in promoting Track II in South Asia is Stimson Centre. The centre started a process of dialogue between India and Pakistan but their main contribution has been the training of Pakistani, Chinese and Indian officials, journalists and academics in arms control and confidence building. The Stimson Centre located in Washington DC, has been providing ideas and training to officials from the three neighboring states i.e. Pakistan, India and China. The objective is to reduce the danger of nuclear conflict, promotion of nuclear non-proliferation, creation of understanding on the Kashmir issue, normalization of relations between India and Pakistan and particularly stabilization of politics in the South Asian sub-continent.

The idea of non-first use of nuclear weapons is not acceptable to Pakistan as it is militarily much weaker than India. There is also a feeling in Pakistan which is substantiated by its historical experiences that India is ready to take advantage of Pakistan's predicaments. Some analysts believe that Pakistan could change its stance only if it could somehow be convinced that India has ceased to have hostile intentions towards Pakistan. It is here that confidence building measures require special significance and resolution of long standing conflicts between the two neighbours could create that environment.

Stimson Centre has also tried to bridge the gap in the thinking of Pakistani and Indian strategists on establishing control over production of fissile material. Like many other areas the differences on this issue also reflect the trust deficit that exists between the two South Asian neighbours. This once again highlights the importance of CBMs in South Asia.

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<sup>13</sup>[www.pipfd.org](http://www.pipfd.org)

Among the CBMs currently being followed in South Asia, some important ones are attributed to the efforts of Stimson Centre. One such initiative includes ballistic missile flight test notification agreement, others include military exercise notification and constraint agreements. The centre has also tried to focus world attention on the issue of nuclear terrorism since 9/11.

Centre for Strategic and International Studies (CSIS) another Washington DC based think-tank organized three workshops in UK from December 2003 to May 2004. Their main focus was also nuclear threat to stability and peace in South Asia. Pakistani, Indian and US experts not employed with the government have been working towards threat reduction, introduction of better technology for improving bilateral communication mechanism etc with some degree of success. The group has recommended special measures for bringing about improvement in communication system in order to preclude the possibility of miscalculation. CBMs recommended by CSIS have also received positive response from the governments of Pakistan and India.

Cooperative Monitoring Centre at Sandia National Laboratories, New Mexico has also played a prominent role in reducing risk of nuclear war in South Asia. Accidental nuclear wars and other issues concerning nuclear weapons have received special attention of researchers at CMC. (Kaye, p86) The focus of all these endeavours is also introduction of better communication technology which would naturally benefit the US economy as well. The best way to reduce the possibility of nuclear conflict in South Asia is to reduce tension in the region; therefore, apart from technical issues the CMC has also promoted CBMs and other political mechanisms for reducing political temperature in the region. Kashmir issue being the core conflict between Pakistan and India could have hardly been ignored by CMC. The issue has been taken up on several occasions under CMC initiatives. CMC has produced many reports and left some impact on the thinking of influential decision-makers in South Asia, however, this impact has not been decisive on the issue of Kashmir and control of fissile material.

Several universities in the region are also involved in Track II initiatives. Institute of Strategic Studies Islamabad (ISSI) was actively involved in Neemrana Dialogue. Almost all the talks held in Pakistan were at ISSI. They also provided many other facilities (including secretarial services) to the Neemrana team. It made it easier because at that time the head of Pakistani team of Neemrana was also DG of ISSI.

#### **Assessment of The Role Played by Track II:**

At all the Track II meetings, the atmosphere was generally friendly. Even while divisive issues were discussed, members of the two groups were able to maintain cordiality. This was despite the fact that at some of the gatherings the Indians would begin by denying that there were any really serious contentious issues dividing Pakistan and India. It took the two teams several hours even a whole day to establish that serious disputes were present and they needed to be tackled. India's primary interest was in opening new avenues for its trade while Pakistanis believed that conflict resolution and trade should proceed simultaneously. Despite good personal relationships there was no real meeting of minds on divisive issues like Kashmir. The fact that CBMs were jointly undertaken by the two neighbouring states shows that Track II was a useful exercise, but it never reached that required level of success which would create the will, to adopt a new way of thinking more conducive to conflict resolution. Adopting cosmetic measures without real progress towards conflict resolution will not lead to

lasting tension reduction.

Another area where Track II has not been very effective is changing the mindset of administrators and general public. Politicians in democratic countries (Pakistan and India fall in that category) have to take public opinion into account. Public opinion at times seems to be averse to political compromises and tends to view things in black and white. Changing mindsets of officials and general public is the most difficult task. Media has played a mixed role in developing public mindset. After the Kargil crisis broke out between Pakistan and India in 1999, Indian media adopted a highly nationalistic posture. The hype created by Indian media did not subside with the end of the crisis. More recently, however, one newspaper from Pakistan and one from India got together to launch “Amnki Asha”<sup>14</sup> which aims to improve relations between the two South Asian neighbouring states. The idea is to improve the image of people living on both sides of the border. The main focus of this endeavour is younger generation as they represent the future of South Asia.

It is also imperative for the governments to step in at a certain stage. We have noticed that so far Track II has achieved limited success, but even if through some out-of-box thinking Track II could be made successful, it would still require decisive government role in order to succeed. Where Track II leaves off, Track I is required to take over. Track I depends on the success of Track II but Track II is incomplete without Track I.

Socialization, filtration and transmission have been mentioned as important stages in the Track-II process. Socialization has been proceeding in a more or less satisfactory manner. Various western countries particularly the US assume that what was found to be useful in their case can be applied as gainfully in other cultural environments. One can consider this approach to be ethnocentric but it cannot be denied that US think-tanks, universities and even the State Department are successful in communicating their ideas to Pakistanis, Indians, Chinese and other Track II participants from Asia, Africa and Latin America. One cannot assume the same about filtration and transmission due to several factors.

Absorbing concepts from other sources and producing a synthesis is not an easy task. When people from two different cultural and political environments try to absorb and synthesize the same concept, sometimes the result may be entirely different from each other.

It is the ‘filtered’ matter which has to be ‘transmitted’ to decision-makers. What they gather from it depends on the lenses of ‘national interest’ which cannot be overlooked. Implementation needs to be considered the final stage in this multiple stage model of Track II. There have been some notable examples of implementation but they are few. In most cases Track II ideas were either considered to be unrealistic, unpractical and undesirable. Sometimes foreign offices consider the work of civil society unacceptable meddling in serious issues. According to professionals, it can be tolerated if it remains confined to its own track.

#### **Making Track II More Useful:**

If Asian countries are serious in their pursuit of peace and wish to use Track II to achieve their peace objectives, they will have to evolve a mechanism for reforming the

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<sup>14</sup> ‘Amnki Asha’ or ‘Hope for Peace’ a process launched by Jung (Pakistan) and Times of India has been quite successful.

process.


The first thing that needs to be changed is the approach. Track II should not be viewed only as a way of reducing tensions and managing conflicts. Conflict resolution should be the final objective. The whole process is derailed when either due to prolonged deadlock in Track II or because of bottlenecks in transmission and implementation little progress is made towards conflict resolution. Frustration impedes further progress and erosion of faith in the process is the natural result.

For this change to take place development of a new mindset is imperative. Participants of Track II and decision-makers need to look at disputes as common problems to be settled mutually. Currently, the ‘we’ and ‘they’ frame-work is very much in evidence. Changing the image of the ‘adversary’ is also essential. To put it simply the other side in a dispute should not be viewed as an enemy but as a party which is facing the same problem as we do. However, it is easier said than done. When India uses disproportionate force in Kashmir to suppress demonstrations it becomes difficult for people in Pakistan not to view India as an adversary. Similarly, when India blames Pakistan for supporting the movement against Indian occupation, the people of India see Pakistan as an adversary.

It is also necessary to select the right people who know about issues to be debated and have an interest in promoting cordial relations with the other party. Track II can deliver positive results only when it is seen as a platform to deal with common problems and not as yet another battle ground to confront the enemy.

The media cannot change reality. They can only report what is happening on ground. It puts a heavier responsibility on members of Track II and Track I. If conflicts are actually resolved then the media may be expected to focus on this positive development. If there is no progress in conflict resolution then the media cannot be expected to generate favourable evaluation. The media should, however, play a positive role by not reporting ‘rumours’ or exaggerating things for the sake of increasing circulation or viewership.

### Conclusion:

Track II, which emerged after WWII played an important role in defusing tensions between the two super powers. In a globalized world Track II carries greater potential for bringing adversaries together for two reasons. Firstly, media’s role has expanded; it shapes opinions and determines priorities. Secondly, the civil society occupies a central place in calculations of peace and harmony. The paper acknowledges that Track II has been relatively less successful in the case of South Asia. The lack of success can be explained by several factors which have been discussed. Many of these factors are equally applicable to other regions like Central Asia, Middle East and Africa. South Asian states need to learn from the experiences of other states. But these lessons have to be transformed keeping regional realities in view. The need for coordination between Track I and Track II is vital and the interdependence between the two tracks can hardly be denied. 

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Rousseau held a similar view. The more a country asks of its citizens, the greater their devotion to it. “In a well-ordered city every man flies to the assemblies.” Under a bad government, no one participates in public life “because no one is interested in what happens there” and “domestic cares are all-absorbing.” Civic virtue is build up, not spent down, by strenuous citizenship. Use it or lose it, Rousseau says, in effect. “As soon as public service ceases to be the chief business of the citizens, and they would rather serve with their money than with their persons, the state is not far from its fall.”

Michael J. Sandel, *What Money Can't Buy*, p.128-129

**ARTICLE****WEALTH EFFECT OF MERGERS & ACQUISITIONS IN EMERGING MARKET: A CASE OF PAKISTAN'S BANKING SECTOR**

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**Abstract**

*This study investigates the short-term market response associated with the announcement of seven merger and acquisition deals in the banking sector of Pakistan during the period 2003 to 2008 using the event study methodology. The results indicate statistically significant investor reactions around the merger announcements. For individual target and bidder banks, the cumulative abnormal returns (CARs) range from significant positive to significant negative. The combined mean CAR for the bidder group is significant positive and for target group, the mean CAR is significant negative. The mean CAR for the combined banks in the domestic mergers is also positive but is largely impacted by the substantial positive CAR of one bidder bank.*

**Field of Research:** Merger & Acquisition, emerging market, banking**JEL:** G34, G21**Introduction**

In the face of technological advancement, globalization, and increased competition, the firms all over the world are trying to maintain their competitive position. There is a growing trend towards consolidation to reap the benefits through synergies, thereby, enhancing efficiency and performance. The same trend has been observed in Pakistan. After the year 1998, a large number of mergers and acquisitions (M&A) have taken place every year in Pakistan and more than 50 percent of these M&A have taken place in the financial sector. This paper attempts to measure the short-term wealth effect of M&A for the target and bidder banks in Pakistan.

**Literature Review**

A lot of empirical research has been done to explore the wealth effect of merger activity in the developed economies, especially US, UK, and Europe. The studies conducted to analyze the wealth creation through mergers use different measures. One set of studies uses the event study methodology, looking at the short to medium run stock performance of the bidder, target and the merged entity. This methodology is based on the assumption of efficient market where the stock prices react in a timely and unbiased manner to new information (Fama, 1970; Roberts, 1967). The other set of studies looks at the accounting performance indicators, like return on equity and various cash flow measures, to compare the pre- and post-merger performance. Such studies believe that the gains or losses resulting

from a merger eventually appear in the firm's accounting records (Tuch and Sullivan, 2007). Both sets of studies have ended in variable results.

Short-run event studies including the US takeovers during 1960s (Asquith, 1983) and UK takeovers during 1950s (Franks and Harris, 1989) reported significant positive returns to the acquirers. However, the remaining event studies, both short run and long run, conducted on US and UK takeovers provide either no significant change or report significant negative returns for the acquirers (Tuch and Sullivan, 2007). On the other hand, the target firms' announcement returns in US and Europe are found to be large and significantly positive (Kiymaz and Baker, 2008). According to these researches, the mergers merely transfer the wealth from the acquiring firms to the target shareholders and no wealth is created in process. A study covering 54 mergers including 13 European banking markets of European Union and the Swiss market for the period 1988 to 1997 has reported positive and significant increase in the shareholder wealth of bidder and target banks (Cybo-Ottone and Murgia, 2000). Campa and Hernando (2004) found a negative return around the bid announcement for the regulated European Union acquirers and reported no significant return for the bidders from unregulated industries. In Canada, the acquiring firms are reported to have positive returns (Ben-Amar and Andre, 2006).

The evidence from the research using accounting information is also mixed. Moreover, the researches using the accounting information are difficult to compare since they use different measures to capture the change in performance. The studies examining the post-bid accounting performance of the acquirers for the period between 1948-1977 in UK reported either a decline in the profitability following the merger (Meeks, 1977; Ravenscroft and Scherer, 1987) or significantly lower returns for the acquirers compared to the non-acquirers (Dickerson, 1997). The study by Healy (1992) reports an improvement in the asset productivity, measured through operating Cash flow return on market value of assets, of the acquiring firms in US. Andrade (2001) also finds an improvement in the post-merger performance, measured through ratio of cash flow to sales, for the US mergers. The study conducted by Altunbas and Marques (2004) on mergers taking place during the period 1992-2001 in Europe reported superior post-merger performance; however, the performance improvement following the cross-border mergers is reported to be more compared to the performance improvement of banks entering into domestic mergers.

The mixed evidence on the returns from mergers encouraged the researchers to examine the different bid characteristics to identify the drivers of differential performance. These studies report that for strategically closer institutions the performance improves more than for dissimilar institutions, thereby supporting the synergy hypotheses (Altunbas and Marques, 2004; Tuch and Sullivan, 2007). Moreover, in both the domestic and cross-border mergers the institutions performing very well prior to mergers are not able to improve their performance as much as the firms which are low performers before merger transactions. The studies also report that the hostile takeovers, where the takeover activity takes place despite of the target management's opposition, are associated with better performance if excessive takeover premiums are not paid. This can be taken as an indication that the hostile takeovers play a governance role and they target the firms where managers are under performing (Tuch and Sullivan, 2007).

Although there is extensive evidence available for developed countries on the issue, little research exists for the emerging and less developed economies. In a study of cross-border mergers and acquisitions by the Chinese firms positive and significant wealth gains

were found for the acquiring firms (Boateng, Qian and Tianle, 2008). Mishra and Goel (2005) in their study of a merger deal in Indian energy and petrochemical sector found that despite the deal appearing favorable to the shareholders of bidder company, the announcement returns for bidder were found to be negative. However, the returns for the target firm were positive. The combined firm was reported to have negative excess returns which were linked to the managerialism hypothesis, indicating that the acquirer's management is motivated by its own self-interest and is not pursuing the merger deal for their shareholders' benefit. In the Indian banking Industry, merger announcements were found to have a positive and significant wealth effect both for the bidder and the target banks (Anand and Singh, 2008). In Pakistan, a large number of mergers and acquisitions have taken place after the year 1998 and more than 50 percent of these transactions took place in the financial sector, including banks, leasing companies, modarabas, and mutual funds. This resulted mainly due to the State Bank of Pakistan's regulatory policies, which focused on consolidating the weak financial institutions by strengthening their capital base. The trend towards consolidation in financial sector is still continuing and therefore there is a need to study the wealth creation for the shareholders of targets and bidders in this sector. Building on the earlier studies done on the topic in developed and other less developed countries, we attempt to examine the wealth impact of bank merger deals in Pakistan.

### Data and Research Design

Our research uses the standard event study methodology to measure the impact of merger announcements on the wealth of the merging firms' shareholders. To conduct the study, we consider the following seven mergers/acquisitions that took place in the banking sector of Pakistan during the period 2003 to 2008. Exhibit 1 illustrates the sample mergers with the respective announcement dates and the effective merger dates. We classify the sample mergers into three broad categories:

- I. ***Acquisitions of Pakistani banks by the foreign investors*** include the acquisition of Saudi Pak Bank (renamed as Silkbank) by a Consortium comprising of IFC, Bank Muscat, Nomura International and Sinthos Capital and the acquisition of Crescent Bank by SAMBA Financial group.
- II. ***Mergers of Pakistani banks with the other domestic banks*** include the merger of NIB and PICIC, the amalgamation of Trust Investment Bank Limited (TIBL) and Fidelity Investment Bank Limited (FIBL) together with the Doha Bank Pakistan Branches which created Trust Commercial Bank Limited and the acquisition of Platinum Commercial Bank Limited by KASB.
- III. ***Mergers of Pakistani banks with the foreign banks operating in Pakistan*** include the acquisition of Union Bank by the Standard Chartered Bank and the amalgamation of Prime Bank with ABN Amro.

The study tests the following hypothesis:

***“The merger announcements in the banking sector of Pakistan do not create shareholders' wealth for the merging banks”***

In order to test the hypothesis, the study requires the announcement dates for each of the seven mergers, the window period and the clean period data for each merger deal. ***Announcement date ( $t=0$ )*** is the date on which the information about the merger deal was

first made public. These dates are obtained from the news clipping available on the websites of Daily Business Recorder (www.brecorder.com.pk) and Daily Dawn (www.dawn.com.pk).

The event window has been taken from  $t=-30$  to  $t=+30$ , where  $t=-30$  represents 30 days before the merger announcement date ( $t=0$ ) and  $t=+30$  represents 30 days after the merger announcement is made. We employ the single-factor market model to compute the abnormal return for each bank stock in the 61-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 30 days prior to the announcement date is not included in this clean period to prevent the event's influence on the parameter estimates.

**Exhibit 1: Announcement dates and the bidder and target banks of sample merger deals**

Serial Number	Bidder Bank	Target Bank/s	Announcement Date	Merger/ Acquisition Date
1	Consortium including Bank Muscat and Japan's Nomura	Saudi Pak Bank	January 07, 2008	March 31, 2008
2	Samba Financial Group	Crescent Commercial Bank	Nov 17, 2006	March 31, 2007
3	NIB	PICIC Commercial Bank	June 29, 2007	Dec 31, 2007
4	Trust Commercial Bank (new entity)	Trust Inv.Bank Ltd, Fidelity Inv.Bank Ltd., and Doha Bank	August 06, 2003	May 05, 2004
5	KASB	Platinum Commercial Bank	February 25, 2003	May 08, 2003
6	Standard Chartered Bank (Pakistan),	Union Bank Limited	August 09, 2006	Dec 30, 2006
7	ABN Amro (Pakistan) Limited	Prime Commercial Bank	Mar 05, 2007	Sept 01, 2007

The following market model is employed for the parameter estimations:

$$AR_{it} = R_{it} - E(R_{it})$$

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

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

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

$\alpha$  = Ordinary least squares estimate of the intercept of the market model regression.

$\beta$  = Ordinary least squares estimate of the coefficient in the market model regression.

Cumulative abnormal returns are used to explore whether the share holders of the each bidder and target bank gained or lost from the respective merger deal. These CARs are computed for the period surrounding the merger announcement ( $-30$  to  $+30$ ), i.e., from 30 days before the merger announcement to 30 days after the merger announcement, using the following equation:

$$CAR = \sum_{t=-30}^{t=+30} AR_t$$

To examine the wealth effect for the shareholders of the bidder banks group and target banks group, the daily average abnormal returns in a 60-day window is computed for the bidder block and the target block by using the following equation for arithmetic average:

$$\text{AVG AR}_t = \sum \text{AR}_{it} / n$$

Where,  $n$  = Number of banks in the bidder and target groups.

The cumulative average abnormal returns for the days surrounding the merger announcement (-30 to +30) is estimated for each group (bidder and target). The cumulative average abnormal returns for the event window is also computed for the target group in each category. Abnormal returns of the combined banks (for category 2<sup>1</sup>) are calculated to assess the market expectations and reactions to the merger deals. The market values (i.e. market capitalization) of the bidder and target banks for the day before the merger announcement ( $t=-1$ ) are used to compute the market value weights.<sup>2</sup> The weighted average cumulative abnormal returns are then estimated for each merger announcement.

The average AR (abnormal return) for each target and bidder bank, the average CAR (cumulative abnormal return) for each target and bidder, the average CAR for the target banks group and bidder group, the average CAR for the targets in each of the three M&A categories, and the CARs of combined entities are then tested for statistical significance using t-statistic.

#### Exhibit 2: Equity market value for bidder and target banks

S. No.	Bidder Bank	Target Bank/s	Market Capitalisation			Market Value Weights	
			Date (value as on)	Bidder Bank	Target Bank		
1	NIB	PICIC Commercial Bank	June 28, 2007	7,126,426,640	12,088,147,500	37.089%	62.911%
2	Trust Commercial Bank (new entity)	Fidelity Inv.Bank Ltd., and Doha Bank	August 05, 2003	422,476,200	357,075,000	54.195%	45.805%
3	KASB	Platinum Commercial Bank	February 24, 2003	575,446,500	492,800,000	53.868%	46.132%

#### Empirical Results

Exhibit 3A provides the details of the regression results for all target and bidder banks. These coefficients were used to estimate the expected returns for the respective bank during the event window. Exhibit 3B gives the mean residual return for each bank and the t-statistic. From the target group, Saudi Pak Bank and Prime Commercial Bank reported significant negative mean AR. For each of the other target banks, the mean AR is statistically insignificant. Exhibit 3C summarizes the mean CAR over the 61-day event window for each bank. From the target group, six banks out of seven are found to have significant and substantial positive or negative CAR. Saudi Pak Bank, Fidelity Investment, Union Bank and Prime Commercial Bank have shown significant negative mean CAR. Crescent Commercial and PICIC have earned significant positive mean CAR. In the bidder banks group, NIB has earned a substantial and statistically significant positive mean CAR, where as the other two banks, Trust Investment and KASB have earned significant negative mean CARs.

<sup>1</sup>The required data is not available for the other two categories.

<sup>2</sup> Exhibit 2 illustrates the market value of equity as on the previous day of the merger announcement ( $t=-1$ )



**Target and Bidder Groups:**

Exhibit 4 presents the daily abnormal return and daily cumulative abnormal return for the target and bidder groups. Over the event window, the target group accumulated a CAR of -2.23%. A mixed trend in CAR can be observed from exhibit 4 for the target group during the 61 day event window. The CAR improved during the period of 20 days before the merger announcement by 4.65%. The CAR increased by 5.91% for the period (-1 to +1), i.e., from one day prior to announcement to one day after the merger announcement. CAR declined by 11.45% during the period (+2 to +30), i.e., from 2 days after the merger announcement to 30 days after the merger announcement. The mean CAR for the group is negative and significant. Exhibit 5 shows the announcement effects of bidder and target groups into various sub-periods within the event window. The period from 10 days prior to merger announcement till the date of merger announcement captures the highest increases in the share prices of target banks, following which the share prices have observed a sudden drop.

For the bidder group, the CAR is positive (21.07%) and statistically significant. This combined CAR is propped up due to a substantial positive CAR earned by PICIC. In relative terms, the CAR increased by 25.88% during the 24 days prior to the merger announcement (-24 to -1) and then declined by 4.6% during the 30 days following the merger announcement (+1 to +30). On the day of announcement ( $t=0$ ), the bidder group earned a positive return of 0.63%.

**Exhibit 3A****Summary Statistics-Bidder and Target Banks**

	<b>A</b>	<b><math>\beta</math></b>
<b>Target Banks</b>		
Saudi Pak Bank	0.295	0.688
Crescent Commercial Bank	-0.147	0.993
PICIC	-0.017	1.160
Fidelity Investment Bank	0.480	-0.141
Platinum Commercial Bank	0.102	0.999
Union Bank	0.357	0.808
Prime Commercial Bank	0.484	0.645
<b>Bidder Banks</b>		
NIB	0.044	0.844
Trust Investment Bank	0.591	0.018
KASB	0.139	0.240

## Exhibit 3B

## Abnormal Returns-Bidder and Target Banks

	Mean AR	Standard Error	t-statistic
<b>Target Banks</b>			
Saudi Pak Bank	-0.387	0.188	-2.061*
Crescent Commercial Bank	0.617	0.396	1.559
PICIC	0.298	0.262	1.136
Fidelity Investment Bank	-0.514	0.543	-0.947
Platinum Commercial Bank	-0.082	0.442	-0.187
Union Bank	0.199	0.249	0.800
Prime Commercial Bank	-0.534	0.175	-3.051*
<b>Bidder Banks</b>			
NIB	1.596	0.416	3.838*
Trust Investment Bank	-0.452	0.503	-0.899
KASB	-0.107	0.354	-0.303

\* significant at 5% level.

## Exhibit 3C

## Cumulative Abnormal Returns-Bidder and Target Banks

	Mean CAR	Standard Error	t-statistic
<b>Target Banks</b>			
Saudi Pak Bank	-14.075	0.537	-26.230*
Crescent Commercial Bank	31.860	1.355	23.513*
PICIC	12.501	1.041	12.009*
Fidelity Investment Bank	-5.650	1.533	-3.686*
Platinum Commercial Bank	0.129	0.829	0.155
Union Bank	-2.007	0.675	-2.973*
Prime Commercial Bank	-15.736	1.087	-14.483*
<b>Bidder Banks</b>			
NIB	65.582	3.674	17.851*
Trust Investment Bank	-2.460	1.163	-2.116*
KASB	-8.122	0.803	-10.109*

\*significant at 5% level.

Exhibit 4: Daily and Cumulative Average Excess Returns for Target and Bidder Groups

Event Day	Average Excess Returns		Cumulative Average Excess Returns	
	Target Group	Bidder Group	Target Group	Bidder Group
30	0.330	1.483	-2.226	21.074
29	0.781	1.580	-2.557	19.591
28	0.928	-1.489	-3.338	18.011
27	-1.144	-1.250	-4.266	19.500
26	-0.125	0.056	-3.122	20.750
25	0.390	-0.374	-2.997	20.694
24	-1.389	0.726	-3.387	21.068
23	-1.572	4.695	-1.999	20.342
22	1.997	-0.110	-0.427	15.647
21	-0.987	-1.055	-2.424	15.757
20	-2.627	-1.626	-1.436	16.812
19	-0.191	-0.359	1.190	18.438
18	0.111	0.638	1.381	18.796
17	0.218	-0.579	1.269	18.158
16	-0.915	1.210	1.052	18.737
15	-1.417	-2.726	1.966	17.527
14	-0.503	-0.183	3.384	20.253
13	0.069	-3.705	3.886	20.436
12	-1.873	0.030	3.817	24.141
11	-0.344	-0.110	5.690	24.111
10	-0.182	-0.998	6.034	24.221
9	-0.387	0.660	6.215	25.219
8	0.375	1.528	6.603	24.558
7	0.289	0.818	6.228	23.030
6	-1.431	-2.941	5.938	22.212
5	-0.429	0.250	7.369	25.154
4	-1.036	-2.427	7.798	24.904
3	-0.133	-2.036	8.835	27.331
2	-0.252	-0.948	8.968	29.367
1	2.374	4.645	9.220	30.315
0	2.345	0.630	6.846	25.670
-1	1.193	-0.941	4.501	25.040

-2	-1.345	-0.688	3.308	25.982
-3	0.451	3.494	4.653	26.670
-4	2.272	-3.615	4.202	23.176
-5	-0.125	-0.723	1.931	26.791
-6	0.676	-0.504	2.055	27.514
-7	-0.839	1.474	1.379	28.018
-8	-0.323	1.869	2.218	26.545
-9	0.083	0.631	2.542	24.676
-10	0.749	0.931	2.458	24.044
-11	-0.677	-1.870	1.709	23.114
-12	2.070	2.978	2.386	24.984
-13	0.532	3.363	0.315	22.006
-14	-0.427	2.877	-0.217	18.644
-15	1.777	3.293	0.210	15.766
-16	-2.304	-1.514	-1.567	12.474
-17	-0.165	0.174	0.737	13.987
-18	2.780	1.447	0.902	13.813
-19	-2.084	0.962	-1.878	12.366
-20	0.359	1.140	0.206	11.405
-21	0.806	1.210	-0.152	10.264
-22	-0.280	2.362	-0.958	9.054
-23	0.329	4.415	-0.678	6.692
-24	-0.005	3.125	-1.007	2.277
-25	-1.282	1.238	-1.002	-0.847
-26	1.159	2.691	0.281	-2.085
-27	0.005	-1.783	-0.878	-4.776
-28	-0.578	-2.843	-0.883	-2.994
-29	0.514	-2.216	-0.305	-0.150
-30	-0.819	2.065	-0.819	2.065
Mean	-0.036	0.345	1.658	18.333

Exhibit 5 shows that the increase in CAR during the 20 days through 11 days prior to the announcement accounted for the highest proportion of the total increase in the event window. The positive trend in CAR continued till the announcement date. During the 20 days following the merger announcement (+1 to +20) the CAR declined which was followed by an increase in the CAR for the last 10 days in the event window (+21 to 30) and this increase accounted for 20.22% of the total increase.

The mean CARs for both the target and bidder groups, thus, are positive and significant at 5%. Anand and Singh (2008) found the same trend in their study for the bidders and targets of the Indian private sector banks.

**Exhibit5: Announcement Effect of merger deals on target and bidder groups' returns**

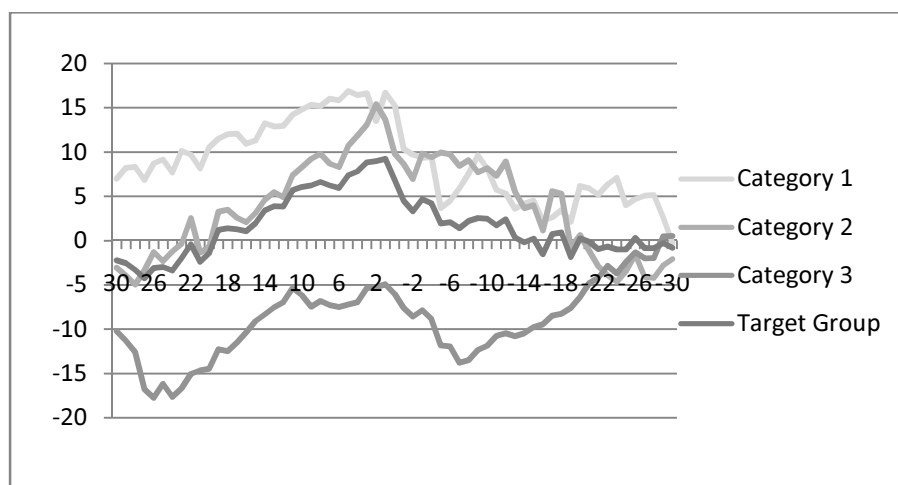
CAR-Announcement Effect for Target and Bidder groups										
Sub-period	-30 to -21	-20 to -11	-10 to -1	0	+1 to +10	+11 to +20	+21 to +30	-30 to 0	0 to +30	-30 to +30
<b>Target Group</b>										
CAR	-0.15	1.86	2.79	2.35	-0.81	-7.47	-0.79	6.85	-9.07	-2.23
Announcement Effect (-30 to 0)	-2.22%	27.19%	40.78%	34.26%						
Announcement Effect (0 to +30)					-8.95%	-82.34%	-8.71%			
Announcement Effect (-30 to +30)	-10.35%	46.93%	73.39%	66.10%	-29.10%	-218.46%	-28.5%			
<b>Bidder Group</b>										
CAR	10.26	12.85	1.93	0.63	-1.45	-7.41	4.26	25.67	-4.60	21.07
Announcement Effect (-30 to 0)	39.98%	50.05%	7.51%	2.45%						
Announcement					-31.52	-161.1	92.71%			

Effect (0 to +30)					%	7%				
Announcement Effect (-30 to +30)	48.7%	60.97%	9.14%	2.99%	-6.88%	-35.16%	20.22%			

#### 4.2. Targets in different categories:

Exhibit 6 gives the graph of the CARs for the three target bank categories and for the total target group. The table showing the ARs and the CARs for these three target bank categories is attached in the appendix. The CARs for the targets of foreign acquirers (category 1) are positive over the entire event window except for the 30<sup>th</sup> day prior to the merger announcement. The announcement effects for various sub-periods of the event window are given in exhibit 5B. For the targets of foreign acquiring banks, the group CAR increased during the period of 30 days prior to the merger announcement till the announcement day (-30 to 0), and for the period between the 1<sup>st</sup> day of announcement till 30 days (+1 to +30), it decreased. On the announcement day, the shareholders of these targets earned an abnormal return of 4.91%. The total CAR accumulated over the event window for the targets in foreign acquisitions is 7.01%.

#### Exhibit 6A: CARs for category-wise target groups and combined target group



**Exhibit 6B: Announcement effects of merger deals on returns of category-wise target banks**

CAR-Announcement Effect for Category-wise Targets										
Sub-period	-30 to -21	-20 to -11	-10 to -1	0	+1 to +10	+11 to +20	+21 to +30	-30 to 0	0 to +30	-30 to +30
Targets in Category 1										
CAR	5.92	-0.20	4.62	4.91	-0.46	-4.27	-3.52	15.25	-8.24	7.01
Announcement Effect (-30 to 0)	38.78%	-1.28%	30.29%	32.21%						
Announcement Effect (0 to +30)					-13.71%	-128.11%	-105.67%			
Targets in Category 2										
CAR	-1.07	8.41	1.33	1.09	-1.49	-9.03	-2.35	9.76	-12.87	-3.06
Announcement Effect (-30 to 0)	-10.98%	86.20%	13.67%	11.12%						
Announcement Effect (0 to +30)					-11.59%	-70.18%	-18.23%			
Targets in Category 3										
CAR	-4.84	-5.91	3.15	1.59	-0.15	-8.33	4.27	-6.01	-4.20	-10.22
Announcement Effect (-30 to 0)	-80.53%	-98.35%	52.38%	26.51%						
Announcement Effect (0 to +30)					-3.52%	-198.12%	101.64%			

In the domestic merger deals (category 2), the CAR accumulated over the event window is -3.06%. During the period of 30 days prior to the merger announcement till the announcement day (-30 to 0), the CAR increased by 9.76% and in the period between the 1<sup>st</sup> day of announcement till 30 days (+1 to +30), it decreased by 12.87%.

In the merger of domestic banks with the foreign banks operating in Pakistan (category 3), the targets earned a significant negative mean CAR (-10.22%). For the post event window, the CARs for these targets are negative. On the day of announcement, however, these targets earned an average abnormal return of 1.59%.

#### **Combined banks:**

The mean ARs and CARs for the three combined banks in domestic mergers are given in exhibit7. The mean CAR for the combined banks is positive and substantial. However, the combined CAR has been increased largely due to a very high CAR earned by the merger deal of NIB and PICIC. In the NIB-PICIC merger, the shareholders of both banks have accumulated substantial positive CARs, with a mean CAR of 32.2%. The returns earned by the bidder (PICIC), however, are much higher compared to those earned by the target shareholders. The other two merger deals have reported negative mean CARs showing that the merger deals accumulated losses for the combined entities. For these two merger deals, both bidders and targets reported negative CARs.

#### **Exhibit7: Mean abnormal and cumulative abnormal returns of combined banks in domestic mergers**

	<b>NIB-PICIC</b>	<b>TRUST-FIDELITY</b>	<b>KASB-PLATINUM</b>	<b>Combined Group</b>
Mean AR	0.779	-0.413	-0.096	0.090
Standard Error	0.237	0.474	0.277	0.2101
t-statistic	3.288*	-0.870	-0.347	0.4295
Mean CAR	32.188	-1.820	-4.316	8.684
Standard Error	1.919	1.195	0.481	0.745
t-statistic	16.772*	-1.523	-8.980*	11.657*


\*significant at 5%

#### **Summary and Concluding Remarks**

The paper investigates the short-term value creation associated with the mergers and acquisitions in the banking sector of Pakistan from 2003 to 2008. The wealth for the shareholders of target and bidder banks is examined by estimating the abnormal returns and cumulative abnormal returns for a 61-day period surrounding the merger announcement. The study finds that the targets and bidders of the bank mergers in Pakistan accumulate significant returns associated with merger deals. For the individual target or bidder bank, these abnormal



returns range from significant positive to significant negative. For the combined target group, the study documents negative excess returns, where as for the combined bidder group, it reports positive mean cumulative return.

This is the first study of value creation surrounding the merger deals in the context of Pakistan's banking sector. However, the study includes a small sample of seven merger deals and examines the short term wealth effects. Future researches can be conducted on larger set of merger deals. The studies can also be conducted for the merger deals in other sectors of the market. Moreover, medium to long-term effects can also be examined either through the event study methodology or through examining the firms' accounting performance indicators before and after the merger deals. 

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#### APPENDIX 1: ARs and CARs of category-wise target banks

Event Day	Category 1		Category 2		Category 3	
	AR	CAR	AR	CAR	AR	CAR
30	-1.218	7.009	0.872	-3.058	1.065	-10.214
29	-0.106	8.227	1.025	-3.930	1.301	-11.280
28	1.469	8.332	-1.626	-4.955	4.218	-12.581
27	-1.877	6.863	-2.060	-3.330	0.963	-16.799
26	-0.408	8.740	1.042	-1.270	-1.593	-17.762
25	1.462	9.147	-1.062	-2.312	1.498	-16.169
24	-2.465	7.686	-0.931	-1.250	-1.000	-17.667
23	0.446	10.151	-2.888	-0.319	-1.617	-16.667
22	1.538	9.705	3.899	2.568	-0.397	-15.050
21	-2.363	8.167	-0.618	-1.331	-0.166	-14.653
20	-0.993	10.529	-3.987	-0.713	-2.220	-14.487
19	-0.508	11.523	-0.242	3.274	0.204	-12.268
18	-0.049	12.031	0.923	3.516	-0.945	-12.472
17	1.137	12.080	0.521	2.593	-1.155	-11.527
16	-0.362	10.943	-1.048	2.073	-1.268	-10.371
15	-1.932	11.305	-1.499	3.121	-0.780	-9.104
14	0.344	13.237	-0.877	4.620	-0.788	-8.324
13	-0.048	12.893	0.570	5.497	-0.566	-7.536
12	-1.279	12.941	-2.459	4.926	-1.587	-6.970

11	-0.577	14.221	-0.934	7.385	0.775	-5.382
10	-0.560	14.797	-0.933	8.319	1.324	-6.158
9	0.179	15.358	-0.578	9.252	-0.667	-7.482
8	-0.849	15.179	1.128	9.830	0.469	-6.815
7	0.199	16.028	0.406	8.702	0.206	-7.284
6	-1.065	15.829	-2.447	8.297	-0.275	-7.490
5	0.486	16.894	-1.154	10.743	-0.256	-7.216
4	-0.238	16.408	-1.213	11.897	-1.570	-6.959
3	3.148	16.645	-2.313	13.110	-0.143	-5.390
2	-3.209	13.497	1.763	15.424	-0.317	-5.246
1	1.452	16.706	3.850	13.661	1.081	-4.929
0	4.913	15.254	1.134	9.811	1.593	-6.010
-1	0.637	10.340	1.709	8.676	0.974	-7.603
-2	0.354	9.703	-2.891	6.968	-0.726	-8.577
-3	-0.122	9.349	0.440	9.858	1.040	-7.851
-4	5.811	9.471	-0.541	9.419	2.952	-8.892
-5	-0.863	3.661	0.225	9.960	0.090	-11.843
-6	-1.400	4.523	1.269	9.735	1.862	-11.933
-7	-1.651	5.923	-0.649	8.466	-0.311	-13.795
-8	-2.053	7.575	1.383	9.115	-1.153	-13.484
-9	1.459	9.628	-0.465	7.733	-0.470	-12.332
-10	2.450	8.169	0.855	8.198	-1.110	-11.861
-11	0.378	5.720	-1.630	7.342	-0.301	-10.752
-12	1.738	5.342	3.454	8.973	0.327	-10.451
-13	-0.583	3.604	1.846	5.519	-0.323	-10.778
-14	-0.310	4.187	-0.338	3.673	-0.677	-10.455
-15	2.276	4.497	2.853	4.011	-0.336	-9.778
-16	-0.415	2.221	-4.447	1.158	-0.979	-9.442
-17	-0.833	2.636	0.298	5.604	-0.191	-8.463
-18	1.350	3.469	6.032	5.306	-0.669	-8.271
-19	-4.043	2.119	-1.355	-0.726	-1.219	-7.602
-20	0.247	6.162	1.701	0.629	-1.542	-6.383
-21	0.724	5.915	1.806	-1.072	-0.612	-4.841
-22	-1.169	5.192	1.043	-2.878	-1.376	-4.228
-23	-0.740	6.361	0.700	-3.921	0.842	-2.852
-24	3.094	7.101	-1.213	-4.621	-1.293	-3.694
-25	-0.665	4.007	-1.837	-3.408	-1.066	-2.401
-26	-0.394	4.672	2.510	-1.571	0.684	-1.334
-27	-0.088	5.066	0.098	-4.080	-0.043	-2.018
-28	2.523	5.154	-1.399	-4.179	-2.449	-1.975
-29	2.893	2.631	-0.701	-2.780	-0.042	0.473
-30	-0.262	-0.262	-2.079	-2.079	0.515	0.515
<b>Mean</b>	0.115	8.893	-0.050	3.855	-0.167	-8.871

**ARTICLE**

**INCORPORATING EMOTIONS AS ANTECEDENTS AND MEDIATORS IN  
THEORY OF REASONED ACTION (TRA) MODEL**

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**Abstract**

*Theory of Reasoned Action (TRA) is widely used in different decision making situations. The TRA model measures behavioral intentions and predicts a certain behavior on the basis of these behavioral intentions. Literature has questioned the predictive ability of TRA model in terms of behavior prediction in a decision making situation as there are number of factors which may influence the decision making process. One of these factors is identified as “emotions” experienced during the decision making process. The paper makes an attempt to improve the TRA model by incorporating the emotions at two different points in the model i.e. emotions as antecedents and emotions as mediators between attitude and behavioral intention. It is proposed that this inclusion of emotions in the TRA model will improve the overall predictability power of the model.*

**Keywords:** TRA, Emotions, Behavioral Intentions, Decision Making

**Introduction**

Theory of Reasoned Action (TRA) is proposed to explicate the process through which human behavior is developed or performed. It posits that behavior of a person is dependent upon the attitudes, beliefs, and intentions. It assumes that intention is the most important determinant of the behavior. This intention is formed after considering attitude of self and others regarding the behavior. It also assumes that all other exogenous factors operate through the model.

TRA has been widely used in various settings including health, education, consumer behavior, brand choice etc. Various researchers have attempted to improve both the measurement of intentions and forecasting ability of the model into actual behavior. The concept has also been extended and modified to understand specific behaviors related to health and education. Models like protection motivation theory, prevention motivation theory, and health belief model are rooted in the concepts proposed by TRA.

Although the power of the model to measure intentions has been good but its ability to predict behavior based on the measured intentions has been questioned on a number of occasions. It has been accepted in literature that external factors like time, resources, promotional campaigns etc. may influence consumer decision at the time of purchase which

can cause variation in the predictive ability of the model whereby behavioral intention is converted into actual behavior. These limitation of the model is also accepted by Ajzen (1991) and he consequently introduced an improved version of the model i.e. Theory of Planned Behavior (TPB).

The proposed paper is an attempt to improve the TRA model by incorporating various dimensions of emotions at different points of the model consequently improving both the measurement of behavior intention and predictability of the behavior. Although affect has been incorporated in the original model of TRA in the form of evaluation of beliefs, but the authors interchangeably used the terms of evaluation and affect, hence, masking the discriminant effect of human emotions in predicting the actual behavior. This fact, probably, has reduced the power of the model and has created an error in the measurement of behavioral intentions. It is hypothesized that the addition of these components will help both the academicians and the practitioners in better understanding of how human behaviors are formed. This will consequently improve their ability to predict the behavior. These changes will also help in determining the effective strategies of creating interventions for required changes in the human behavior. The paper is organized in the following manner. First part of the paper gives brief overview of literature of TRA and emotions. Second section then provides the theoretical discussion on improved model of TRA.

### **Literature Review**

Recent developments in the field of emotions clearly demonstrate that emotions have different forms and intensity and that these emotions can be discriminated quantitatively. This is suggested based on the multiple reasons. Firstly, it is argued that affect, emotions, and moods are distinct categories and need individual treatment while predicting human behaviours Ekman and Davidson (1994). Secondly, emotions have four distinct dimensions (conceptual breadth, possibility versus probability, dynamic appraisal versus static and temporal focus) that can help researchers in truly predicting human behavior (Henning, Thureau, & Feiereisen, 2012). Thirdly, emotions have significant role in consumer decision making process that make it imperative for market researchers to use consider set of emotions while designing and implementing studies (Gardner, 1985). Hence it can be said that affect has different facets, it can appear in different forms like enjoyment of performing a behavior, attachment with a product, guilt, anger, association with referents, and putting in efforts to gather information. Hence, the interplay of affect dimension on human behavior can be captured at various points within the existing model of TRA.

### **Theory of Reasoned Action**

The Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1977) explores the relationship between volitional behaviors attitudes, and subjective norms through the creation of behavior intentions. The theory posits that individual's intentions are the best determinants of behavior in question. Behavioral Intention (BI) measures the motivation of an individual to perform a given behavior, hence higher the BI higher will be the probability of performing that behavior. BI is function of person's attitude towards performing that behavior and his consideration of approval or disapproval of other people (subjective norm). The theory assumes that all exogenous factors operate through the model's constructs and have no independent effect on the behavior

In TRA attitude is defined as person's overall evaluation about the subject behavior. The model suggests that attitude is comprised of two factors: salient beliefs about the

behavior ( $B_i$ ) and the positive or negative evaluation of the outcome of the behavior ( $E_i$ ). This evaluation is the affective component of the model. The product of belief and evaluation is then summated to calculate overall attitude of the person towards that behavior i.e.

$$\text{Attitude} = \sum B_i \times E_i$$

Subjective norm reflects the social pressure that an individual takes into consideration that is exerted from his important referents while considering to perform the subject behavior. Like attitude it is also a summation of product of the perceptions about the beliefs of others ( $BO_i$ ) and the motivation to comply ( $MC_i$ ) with the important others i.e.

$$\text{Subjective Norms} = \sum BO_i \times MC_i$$

TRA has been applied in many settings to measure various behaviors like coupon usage (Shimp & Kavas, 1984) and moral behaviors (Vallerand, Deshaies, Cuerrier, Pelletier, & Mongeau, 1992). There have been quite a few meta analyses conducted so far to understand TRA (Cooke & French, 2008; Hausenblas, Carron, & Mack, 1997; Sheppard, Hartwick, & Warshaw, 1988). The model appears to predict consumer intentions quite well and it also provides a relatively simple basis for strategizing behavioral change attempts. The simplicity of the model has been well accepted and the model has been found to be robust under various conditions. The model was improved by (Ajzen & Fishbein, 1980) when he incorporated the self efficacy concept to improve the overall predictability of the model. That model came to be known as Theory of Planned Behavior or TPB. However, recently various researchers have begun to question the simplicity of the TRA model. Few researchers have challenged the separation of subjective norms and attitude constructs (Oliver & Bearden, 1985). They argue that there exists crossover effect between the two constructs, hence SN construct should not be measured separately rather it should be made part of the attitude construct. Another emerging area is the way emotions are measured in the traditional TRA model. It is argued that affective component is not being measured effectively and its effects are being masked by the current methods of measurement (Allen, Machleit, & Kleine, 1992; Henning et al., 2012).

Theory of Reasoned Action is widely accepted to predict human behavior but like all other theories, it is also not free from criticism. Firstly, Ajzen and fellow researchers favored the idea that human behavior is dependent upon attitudes, beliefs, and intentions. This assumptive definition of human behavior was criticized mainly on limiting the predictive ability of TRA model such that human behavior is modeled by factors like time, resources, and promotional campaigns as well. Secondly, another development in the field of understanding human behavior is the inclusion of emotions that was not properly included in the initial modeling of TRA. Likewise, it is believed that affect has different set of facets such as; attachment with a product, guilt, anger, association, and putting in some efforts to gather information. It is concluded through philosophical assumptions that researchers use BI to predict behavior through TRA, resulting in high degree of errors in predicting human behavior. This calls for an improvement in TRA, specifically in terms of predicting human behavior by incorporating emotional aspect in the model.

### **Emotional Aspect of TRA**

As mentioned earlier, TRA measures attitudes as a product of beliefs and evaluations. According to Fishbein and Ajzen (1975) evaluations tell the directionality or the valence of the attitude (like/dislike, positive or negative aspects) or it displays the importance

of the behavior when measured on important/not important scales. They posit that the terms “evaluation” and “affect” are synonym. They based their argument on the premise that it is difficult to empirically distinguish between the emotion and evaluation. However recent advances in consumer research has shown that the two constructs are empirically different (Henning et al., 2012).

According to Ekman and Davidson (1994) affect, emotions and moods are three distinct categories. Affect is a broader term encompassing all types of emotions whereas emotions are directional always associated with an object and are associated with actions and are of short duration while moods have longer duration, less intense and are not typically associated with action and are not under the control or non-intentional in nature. The experiential view of consumer behavior (Hirschman & Holbrook, 1982) suggests that the traditional information processing view is useful for studying utilitarian products and situations while the affective responses are required when studying hedonic consumptions situations.

Henning et al. (2012) presented four aspects of emotions that makes them distinct from evaluations: conceptual breadth, possibility versus probability, dynamic appraisals versus static predispositions, and temporal focus. Conceptual breadth refers to the wide variety of human emotions that a person can experience; Probability vs. possibility highlights that attitudes are measured in terms of probability whereas emotions are highly sensitive and can be felt even when there is slight probability of an outcome.

TRA assumes attitudes as predisposition and static in nature; on the contrary emotions are dynamic in nature and change according to the context. Emotions exist at pre, during and post stages of decision making. This reflects the temporal aspect of emotions.

Literature also highlights the impact of emotions on consumer decision making (Gardner, 1985). Goldberg and Gorn (1987) found that positive mood increases therecall and information processing ability of the consumer. Batra and Stayman (1990) analyzed impact of consumer emotions and attitudes on advertisement. Their findings supported the concept that mood had a direct effect on brand attitude. Positive mood not only reduces the level of negativity about the brand by reducing negative thoughts but also reduces cognitive elaboration. According to them happy mood makes processing 'more heuristic than systematic'. In their article Allen et al. (1992) posit that emotion extends beyond attitude and encompasses a richer and more diverse domain of phenomenological experience. According to (Batra & Ahtola, 1991) consumer purchase of goods can be attributed to either affective or instrumental reasons, while Allen et al. (1992) found that emotions explain behaviors over and above attitudes. Emotions appear to have evolved as drivers of behavior because of their approach/avoidance function hence they also have the ability mobilize energy (Zeelenberg, Nelissen, Breugelmans, & Pieters, 2008). In the similar vein Allen et al. (1992) research showed that emotions have a direct effect on behavior which is over and above the effect of attitudes. Similar types of results were also obtained by Perugini and Bagozzi (2001) who find that inclusion of emotions increase variance explanation of behavior significantly.

In the conclusion of above discussion it can be said that use of BI to predict behavior through TRA is devoid of emotional contents and it may result in high degree of errors in predicting human behavior. This calls for improvement in TRA. Since the focus of TRA is on creation of behavior intention not the after effects of behavior, the proposed model will also focus on only two impacts of emotion which are critical during the process of decision

making: emotions as antecedents; and emotions as mediator of attitude and behavior intention.

### **Emotions as Antecedents**

Antecedent is any event, circumstance, cause or happening that occurs before the event under study. When we argue that emotions are an antecedent to attitude or behavior it implies that emotions exist before the attitudes or behaviors are formed. Specifically in the case of TRA it implies that emotions exist before the consumer starts the process of evaluation. As mentioned earlier, the literature highlights that emotions may exist even before the process of decision making starts (Henning et al., 2012).

Literature on emotions proposes that emotion can be treated as an antecedent to attitude (Allen et al., 1992). According to Kempf (1999) emotions are antecedents of attitude for hedonic based products, similar arguments were also presented by Batra and Stayman (1990) who, while using theory of ELM, highlighted that affect is an antecedent of attitude. This aspect also gets support from the stream of literature that argues that emotions are drivers of behaviors by virtue of their approach avoidance behavior (Henning et al., 2012).

According to the literature mood could be one of the antecedents to the process of evaluation (Gardner, 1985). According to her the term mood is used in literature in a very broad term and encompasses all preconceived thinking before making a decision. Since, TRA assumes that all the information exist at the start of the process of evaluation, hence when we consider emotions as an antecedent mean it has an effect on the information processing ability of the consumer. Research has highlighted that mood has following effects: it improves information recall and processing ability (Goldberg & Gorn, 1987), it has an impact on brand attitudes and brand elaboration (Batra & Stayman, 1990), and it reduces size of evoked set (Zeelenberg et al., 2008). It was also found that in situation of increased time pressures and high demanding tasks people may tend to rely more on their moods (Pham, Cohen, Pracejus, & Hughes, 2001).

The concept of “feeling is for doing” argues that people may take decisions without considering detailed information. It shows that decision makers sometimes follow their gut feeling when deciding. While the literature on “How do I feel about it?” heuristic (Schwarz & Clore, 1988) argues that people may choose their decision based on their feelings towards the target. They choose their preference based on the intensity of these feelings (G. J. Gorn, Goldberg, & Basu, 1993; Levine, Wyer Jr, & Schwarz, 1994). People may additionally infer the strength of their preferences by monitoring the intensity of these feelings; that is, the level of arousal elicited by the target (Gorn, Pham, & Sin, 2001). According to the affect-as-information framework (Schwarz & Clore, 1996), people rely on their feelings because they perceive these feelings to contain valuable judgmental information. Using the concept of affect as information, Pham et al. (2001) argued that feelings contain important information and people tend to listen to these while making decisions. Moreover, according to Maddux, Gosselin, Leary, and Tangney (2002) our emotional state, that is either we are calm or distressed, effects our self efficacy beliefs and hence our decision making. Summarizing the above discussion it can be clearly seen that emotions are an antecedent to evaluation in TRA. Proposition 1: Emotions are an antecedent to evaluation in TRA.



### **Emotions as Mediators**

The Cognitive Appraisal Theory (Watson & Spence, 2007) posits that it is the cognitive appraisal of a situation that generates our emotions which in turn affects our behaviors. The theory tries to explain how various emotions are created and how these lead to different behavioral responses. Appraisal theory also argues that emotions are the results of comparison and evaluation of actual and desired states of a person (Davidson et al., 1994). Personal stakes are a necessary condition for generating an emotional response in that the event either helps or hinders in performing the desired behavior. Watson and Spence (2007) has highlighted the following issues that appraisal theory addresses regarding situation and emotion:

1. To understand the characteristics of the events that is being appraised
2. To identify which emotions, if any, are being experienced
3. To identify behavioral responses given to the emotions elicited.

They also showed that situation when appraised in terms of fairness or certainty people feel different types of emotions in each case. For example happiness and satisfaction may be experienced in situations of certainty and anger or outrage if situation is perceived as unfair. Hence various appraisals of situation will give rise to different emotions which in turn will create different behaviors. Regarding relationship between an event and emotions Bagozzi, Gopinath, and Nyer (1999) wrote in their paper: “a necessary condition for an emotional response to an event or happening is that a person has a personal stake in it and at the same time judges the event or happening to facilitate or thwart this stake (p. 185)”.


Hence, based upon the above arguments it can be said that emotions mediate between evaluation of a situation and behavior formed consequently.

Proposition 2: Emotions will mediate between attitude and behavioral intention

### **Conclusion**

Emotions play a critical role in creating behaviors in our everyday life. Emotions exist as an antecedent and as a mediator of human behavior. Understanding antecedent emotional states are critical for the marketing manager in order to connect the value of the product or services with the customer. Moods are a typical case of emotions as antecedents. In the case of service based business like retail stores, customer care centers, hotels environment could be made in such a way that has positive impact on customer's mood. Mood states are known to create or hinder shopping behavior, advertising effect, recall of the brand. Understanding of these mood states will help the brand manager. In case of products the antecedent emotional states to consumption refers to need arousal and emotional cues. Understanding such cues and emotional states may lead to better understanding of consumer decision making process along with purchase and consumption behavior. In certain situation, like a highly ethnocentric behavior or a highly religious behavior, antecedent emotions may be so strong that they will directly create behavior and no formal cognitive appraisal will take place. This could also be observed in mob or group behavior. In situations where emotions run high cognitive decision making stops.

Similarly if customer is involved in the situation of decision making or consumption various emotional factors come into play. For example in a high involvement decision situation where risk of wrong purchase will be high and confidence in the decision is low emotions of fear will guide the behavior, whereas in high involvement situation where

outcome expectations are positive and related to happiness the decision will be guided by the feeling of love or positive emotion set. Hence, reflection of a situation after analysis will generate either a single or a set of emotions that will impact the behavior. Therefore, for the marketing manager understanding of various generic emotions or set of emotions will help us in managing the response of the customer, creation of the advertising message and in creating strong relationship of the customer with the brand. 

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**ARTICLE****CORPORATE GOVERNANCE AND CASH HOLDINGS IN LISTED  
NON-FINANCIAL FIRMS IN PAKISTAN**

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*In this study, the relationship between corporate cash holdings and corporate governance variables is tested in Pakistan. The sample consists of 309 non-financial firms listed on the Karachi Stock Exchange (KSE) over the time span of 2002 to 2010. The study uses several proxies for corporate governance mechanisms such as percentage ownership held by directors, institutional investors, and five largest shareholders, the existence of audit committees and a measure of concentration of ownership. To avoid omitted variable bias, the study also controls for all well-known determinants of corporate cash holdings (market to-book ratio, growth, size, leverage, R&D investments, cash flow volatility and cash flows). The two main findings of the study are (i) director's ownership and board size are negatively related with corporate cash holdings. The institutional shareholdings, concentration of shares and the ownership percentage of 5 big shareholders are directly related to cash holdings. (ii) Among the control variables, growth and size are insignificant while dividend and cash flows are positively associated with cash holdings and leverage, capital expenditure and net-working capital are negatively related to cash holdings. The findings imply that managers of the firms do not misuse the cash when more monitoring and control is involved by the shareholders. The results also indicate that cash holdings by the firms are maintained for the dividend payments. Finally, debt and working capital act as a cash substitute for firms which lead to less cash holdings.*

**Keywords:** Cash Holdings, Corporate Governance, Non-financial firms, Karachi Stock Exchange

**Introduction**

There is a considerable amount of literature that has thrown light on the relationship of corporate governance and cash holdings of firms. There are studies that emphasize the significance and the determinants of the corporate governance and cash holdings separately while on the other extreme there are studies that emphasize the relationship between the two variables together. The meta analysis that have focused on the corporate governance mechanism of the firm's include Estrin (1999), Xu and Wang (1999), La Porta, Lopez-de-Silanes, Shleifer and Vishny (2000), Johnson (2000), Bertrand, Marianne and Mullainathan (2003), Bebchuk, Cohen and Ferrell (2004) and Isshaq et al. (2009).

Firms around the world have a system that controls the ways in which stakeholders interact with each other. This system is known as corporate governance. The objectives of firms are set, achieved and monitored under this system. La Porta, Lopez-de-Silanes, Shleifer and Vishny (2000) defined corporate governance as, “Corporate governance is a set of mechanisms through which outside investors protect themselves against expropriation by the insiders”. They further defined “the insiders” as both managers and dominating shareholders of firms.

Recently, a number of studies have looked into the impact of corporate governance on the cash holdings at firms’ and countries’ level. These studies include Dittmar et al. (2003), Kusnadi (2006), Harford et al., (2006), Kalcheva and Lins (2007), Chen (2008), Pinkowitz et al. (2004) Kuan et al., (2009) and Ammann et al. (2010). Generally, it is a known fact that cash and cash equivalents are an important part of the current assets of the firms (Kusnadi, 2005). Studies by Keynes (1936), Jensen and Meckling (1976), Myers (1984), Jensen (1986), Myers and Majluf (1986) have discussed the costs and benefits of cash holdings by firms. On the empirical front, studies by Opler, Pinkowitz, Stulz and Williamson (1999) and Kim, Mauer and Sherman (1998) examined the effects of various financial variables on the amount of the cash held by firms. More recently Saddour (2006), Kalcheva and Lins (2003) studied the determinants and the value of cash holdings. The study by Opler et al. (1997) suggests that determining the optimal level is difficult but an important financial decision.

Firms hold cash with themselves for many reasons or motives. Foremost is to meet the day to day requirements, secondly as a precautionary measure that is for the safety of firms (Keynes, 1936). Holding of cash is a double edged sword for firms (Ammann, Oesch and Schmid, 2010). This means that there are many costs and benefits that are associated with it. The costs include agency costs, i.e. more cash holdings by a firm create conflict of interest between the managers and the shareholders. If the rights of outside shareholders are not protected, then managers might use the cash in their own interest, resultantly potential investors will not invest in such firms (La Porta et al., 2000 and Dittmar et al., 2003). This raises the question of whether a firm needs to hold more or less cash. Holding cash is important for the firm but it should not be in excess reserves because cash is a least productive asset in terms of generating economic returns coupled with its role in exacerbating agency problems. According to the Wall Street Journal, cash holdings by firms have increased from 10.5% in 1980 to 23.2% in 2006 (Bates et al., 2009). As witnessed, by the end of 2004, the cash holdings of some of the well-known firms like Microsoft, General Motors Ford, General Electric, Exxon Mobile and Pfizer were \$60.6 billion, \$36.0 billion, \$33.4 billion, \$23.2 billion, \$23.1 billion, and \$19.9 billion, respectively (Foley et al., 2007). Similarly in Pakistan Oil and Gas Development Company (OGDC) and the Fauji Fertilizers Company (FFC) hold large amount of cash with them. The cash reserve of OGDC and FFC in the year 2003 was Rs.19 billion and Rs.3.1 billion respectively. This amount increased to Rs.25 billion and Rs.4.1 billion in the year 2004 respectively (Shah, 2011). As literature shows, greater holdings requires good governance, otherwise extra cash holdings might give incentives to managers to use the cash in a less than optimal manner. Thus, in firms where governance is not up to the mark excess cash is mismanaged and can destroy the firm value. So, firms should maintain an optimal level of cash for themselves (Kim et al., 1998).

There are a negligible number of studies in Asian countries especially in Pakistan on the given topic. More recently the areas of corporate governance and cash holdings

individually have received attention of researchers. In the area of corporate cash holdings and its determinants in Pakistan, the work by Afza and Adnan (2007), Azmat (2011) and Shah (2011) are noteworthy as they took a larger sample of firms listed on the Karachi Stock Exchange (KSE). The corporate governance and its effect on other financial variables is documented in the work by Mir and Nishat (2004), Naqvi and Ikram (2004), Javid and Iqbal (2008, 2010). All the studies in Pakistan are either in the areas of governance mechanism or the cash holdings separately. The present study is a step toward studying the two factors together in Pakistan. Thus, the present study makes its contribution to the extant literature by examining the effect of the corporate governance on the cash holding decisions of the non-financial listed firms listed on the Karachi Stock Exchange (KSE) over the time span of 2002 to 2010.

## **1. Literature Review**

This section provides a review of the literature on the topic under investigation. It has been divided into three parts. The first part reviews the dominant theories of the cash holdings proposed by different researchers in their studies. The second part reviews the conceptual and empirical findings on the link between cash holdings and the corporate governance. The third part focuses on the literature of corporate governance and cash holdings in Pakistan.

### **2.1 Cash Holding Theories**

Companies need cash for a variety of motives. However, holding cash is not extremely important for the companies because when they need cash for financing the profitable projects, they have the option of obtaining it from the capital market (Saddour, 2006). There are many theories that explain the reasons for holding cash by firms.

#### **2.1.1 Motives to Hold Cash**

The most important study by Keynes (1936) is the “The General Theory of Employment, Interest and Money”, in which he described three motives to hold cash. Firms hold cash for the motive of transaction i.e. due to meet the day to day operational cash requirements to purchase goods and services. Secondly due to precautionary motive i.e. investing in cash is much safer besides this cash does not lose its value. Third, the speculative motive i.e. investments in cash provides a return to their holders.

#### **2.1.2 Trade off Theory and Pecking Order Theory**

Literature shows that these two theories have some implications in the cash holdings decisions by firms. In the trade off theory the optimal level of the cash is determined after analyzing the benefits and the costs of holding the cash with the firms. Some of the benefits are that cash enables firms to take and continue the projects without raising external funds that are at high transaction costs, to pay dividends and not to reduce it when they face cash shortages. The costs associated to hoarding cash by the firm involves whether managers boost shareholders wealth or not. If their decisions are in the interest of shareholders then the only cost of holding cash is its lower return as compared to other investments that are equally risky (Saddour, 2006). The cash holdings will be more costly and include the agency cost. This increases the power of the managers. If managers do not increase shareholders wealth then they will increase their cash holdings, so as to increase assets under their control. This in turn increases the power of the managers (Saddour, 2006 and Jensen, 1986). The majority of the studies such as Opler et al. (1999) and Kim et al. (1998) in the USA confirmed that the

tradeoff theory exists and researchers have found evidence that firms in countries with greater investor protection and better capital markets hold less cash. This is because when companies need cash for financing the projects that are profitable they usually go to the capital market for it. In the pecking order theory by Myers (1984) new equities are very costly to issue due to informational asymmetry. Thus initially firms finance their investments with internal funds then with debt and finally come towards the equity financing (Myers, 1984; Myers and Majluf, 1984). Similarly Kalcheva and Lins (2003) confirmed the pecking order theory. These two theories play a significant role in explaining the determinants of cash holdings in the 297 French firms in the year 1998 to 2002 (Saddour, 2006). The growing firms hold higher levels of cash than mature firms and this is because different investment opportunities have to be accepted by them without external financing that is costly (Saddour, 2006).

Similarly in Pakistan, Shah (2011) confirmed that the growing, large and dividend paying firms along with firms with more cash inflows have more cash than other firms. While the firms with longer debt maturity hold less cash. He suggested the motives of cash holdings given by Keynes were applicable to the Pakistani firms.

### **2.1.3 Free Cash Flow Theory**

In free cash flow theory by Jensen (1986) managers want to hold more cash so as to exercise more power in decisions regarding investments. With high cash levels by firms the need to take external finance decreases and thus managers could invest in non-profitable projects like acquisitions which decreases wealth of the shareholder (Lang et al., 1991; Blanchard et al., 1994; and Harford et al., 1999). Increase in free cash flow is associated with increase in agency conflicts that is between management and shareholders. In particular, managers are involved in overinvestment, consumption of private benefits, or simply holding of the cash for their own interests documented by Jensen (1986).

### **2.2 Cash Holding and Corporate Governance**

The cash holdings and its determinants have been discussed, the study will explicate the literature analyzing the relationship regarding the question of whether corporate governance has an impact on the cash holdings of the firms. Through governance mechanisms minority outside investors are protected from the powerful managers and dominant shareholders inside the firm (La Porta et al., 2000). It is the definition of the shareholders interest (Jean Triole, 2001). Studies have shown that the cash holdings decisions of the firms are dependent on their governance mechanisms.

Chen (2008) suggested that the impact of the governance on the cash holdings of the firms that face different opportunities for investment by analyzing 1,500 American firms from 2000 to 2004. He took two types of firms, the old economy and the new economy firm. The firms in the software, internet, and telecommunication industries are considered to be new firms and have more opportunities of investment. They also need a larger amount of capital for investment purposes. These firms hold more cash as they require it and use it for the research and the development purposes. In contrast, firms in the manufacturing industries such as manufacturers of durable and non-durable products do not have good opportunities of investment. Chen (2008) found that new economy firms have more opportunities as compared to the older firms and need more cash to hold. This is the reason that the governance mechanisms in the new economy firms are protecting the shareholders and in turn the investors are willing for the increase amount of cash to hold. The impact of the governance and cash holdings also create the agency problems between the managers and the

shareholders for the optimal level of cash. The governance mechanism is different in the two firms. Chen (2008) further found that the two different firms have different characteristics and that results in different governance. This in turn affects the policy that the firm develops and that includes the decision of cash holdings of the firms. Furthermore the board of directors is an important internal governance system. Its role is to monitor and to confirm the accuracy of information that is released to shareholders. An independent board reduces managerial control, increase monitoring thus the agency conflicts decreases. In addition to this, it also increases the board efficiency in directing the business operations. In the study by Chen (2008) the evidence showed that higher managerial ownership will reduce cash holdings in old economy firms and higher board independence increases cash holdings in listed new economy firms. According to Chen (2008) the new economy firms are taking more risky projects and have high opportunities of investment and volatile cash flows, while they have difficulty in obtaining the external financing. The independence of the board gave a surety that the company has invested its cash appropriately. The holding of the cash by the firms (in both old economy and new economy firms) will be affected by the governance. However when the shareholders are not protected by the country and have less legal protection then it results in the agency problem and more power to the managers. Where managers had the control and the shareholders are less protected then the firm value is decreased and the managers have more control leading to them holding more cash (Kalcheva and Lins, 2007). In addition to this when the firms hold more cash as the rights of the shareholders are less protected, the amount of the holdings is twice as large as compared to those countries that protect the shareholders rights. When the shareholders are not protected then managers enjoy more power and use the excess cash for their own interests. This results in weak governance and in turn policies of the firms like the cash holdings are affected (Jensen and Meckling, 1976). There is strong evidence that corporate governance effects the firms' decision to have cash holdings and the levels that are maintained. So, when the corporate governance is poor then firms hold more cash (Dittmar et al., 2003). Although in the US firms when managers are not monitored they are engaged in the activities that will not be for the shareholders wealth maximization. In addition to this the firms having less managerial ownership, affects the behavior of the firms, as managers have no incentives to work for the shareholders benefits, this results in weaker governance (Bertrand and Mullainathan, 2003). While in the following year Pinkowitz et al. (2004) found that countries where there is less protection of investors' rights, less cash is held and managers could use the resources of the firms for their own interest. Likewise Couderc (2005) documented the determinants and consequences of the corporate cash holdings using 4515 firms. The countries that were taken for the analysis were Canada, France, Germany, UK and USA. The firms having volatile cash flows had more cash holdings than other firms. This shows that when more cash is held by the firms it results in bad performance. Thus Couderc (2005) suggested that bad corporate governance results when larger amount of cash is hoarded. Thus cash is misused by managers and is not utilized in the profitable projects. On the other hand if these firms utilize their cash holdings in the profitable projects they will have to give higher dividends to its investors to protect them. In contrast to the findings of most of the studies Harford et al. (2006) documented positive relationship between the two variables in 1872 American firms. The firms that have weak corporate governance system have fewer amounts of cash with them as reserves. In contrast of the well governed firms these firms disperse their cash reserves quickly. Along with this they do not utilize cash internally, they spend more on acquisition. The firms having weak governance have low insider ownership, less shareholders rights and independent boards, their value and profitability in future decreases when they invest internally or externally.



### 2.3 Corporate Governance and Cash Holding Relationship in the Asian Countries

After analyzing the relationship in developed nations the study evidences this relationship in the Asian context. The review of literature shows that the Asian firms hold more cash. An influential study by Kusnadi (2003) on 230 Singapore firms publically listed on the stock exchange of the country documented that the board size and the cash holdings are positively related with one another. While an inverse relation is displayed between of the cash holdings and the non-management block shareholders ownership, who are the non-executive directors of the companies and hold more than 5% stake of the companies. This showed that the poorly governed firms have high board size and less non-management block ownership. He further documented that this is discouraging for the shareholders and makes them powerless to force the managers for the distribution of the surplus cash. The inverse relationship between the board size and the non-management ownership means that there is lack of the monitoring in Singapore firms. In short, poor governance leads to poor management policies one of which is the cash holdings. In addition to this Kusnadi (2006) extended the work and took 455 firms listed in Singapore and Malaysia. The firms having weak corporate governance and powerful managers have more cash holdings. According to Kusnadi (2006) managers of the poorly governed firms are more powerful for making cash policies. This is because they have fewer incentives to distribute the excess cash back to the minority shareholders. Further more Kusnadi (2011) found the positive effect of governance and holding variables on the firm performance. The reason for this relationship is that good governance leads to good performance of the firms. In another important study by Kuan et al. (2009) who found that the publically listed firms in Taiwan have higher agency problems, which means that the governance in Taiwan is weak and thus firms hold more cash with them. Soltani and Ravanmehr (2011) analyzed 75 listed companies on the Tehran stock exchange over a period of 2002 to 2009 and documented that shareholders in Tehran believe large cash holdings by firms leads them to utilize the cash in profitable projects and R&D expenditures. Furthermore the study emphasizes the fact that the outside directors results in more monitoring and control to the firms. While the inside directors enjoy less control and thus the share prices increases in turn the value of the firm increase. While in the following year Tsai (2012) examine the topic under investigation in Tehran using companies listed on stock exchange over the period 2005 to 2009. The study found that the business group affiliated firms means that the company related to other company in the business group, have good governance have high opportunities for growth, have more cash with them and their size is small. This means that the firms that have good governance will have a small size, as managing on a smaller scale is better than on a larger level and thus will go towards the profitable investment in the business group. They will then hold more cash so as to take the projects that are generating more return. Ping et al. (2011) emphasized the relationship between corporate governance and cash holding variables along with the firm performance in China. The noteworthy point is that the researchers are of the view that corporate governance in China is not perfect and that is the reason that more cash is held by the Chinese firms. It is due to lack of monitoring and control on the managers' activities and thus the interests of the managers and the shareholders are not in line with one another. They further showed that the independent directors do not play their role in Chinese firms and are more involved towards cash reserving. Lee and Lee (2009) who explored the relationship between the cash holdings and one of the proxies for corporate governance from the year 2001 to 2005 in the firms of Malaysia, Singapore, Thailand, Philippines and Indonesia. They found that the relationship between the cash holdings and the board structure i.e. the board size, its independence and the

managerial ownership, is negatively related to one another in the Asian countries. Thus when corporate governance is low more cash is held by the firms in the five big Asian countries. The reason is that larger and independent board leads to more the monitoring and thus stronger decision making power is with the board. So, the managers of these firms will not use the cash for their personal benefits or in non-profitable projects. This results in fewer amounts of cash held by them. Lee and Lee (2009) further documented that the managerial entrenchment and their ownership will decrease.

The researchers made comparisons between the relationships of corporate governance and cash holdings of different Asian countries in many studies. One such study is by Paskelian et al. (2010) in India and China. These two important Asian countries are the emerging markets of the world. The study analyzes 1164 Chinese and 334 Indian firms over 14 year and 5 year period respectively. The outcome of the study showed that the Chinese firms had higher government ownership and higher cash holdings. This means that the board is not independent in making decisions regarding the firm's policies. The cash reserves are used for the personal benefits in the firms. Indian firms were mostly owned by families with lesser cash holdings than Chinese firms. This means that the conflicts between the shareholders and the managers are not arising and agency problems are low. Thus there is no extraction of the personal benefits, as the firms are owned by families.

Until now the literature showed the relationship of the two variables in the Asian and the international context. Now the present study discusses the comparison of the relationship between the corporate governance and cash holding decisions in the developed and the developing countries. The literature shows that there are differences in the relationship between cash holdings and the corporate governance in the developed and the developing countries the extremes of the world. These differences are due to the situations that prevail in these two extremes. Like in one of the developing countries Iran Valipour et al. (2012) examined 79 firms from the year 2001 to 2009 and documented that the cash held by the firms in the Iran are not affected by the board structure and its independence. The reason is that cash holding policies in Asian countries specifically are mostly influenced by the government and the political situations of the country. Same is the case in Iran. The decision of the holding cash varies according to the firms characteristics. A general point that is observed is that governance is not good in the firms of developing countries which in turn affects the significant policies and the decisions of the firms and one such important decision and policy is the amount of cash hoard by firms. The problems prevailing in the developing countries that affect the relationship are corruption, the political situations, and law and order situations of country. The study by Chakrabarti et al. (2008) documented some of these differences by explaining the corporate governance of one of the developing country India and compared it to the governance of developed countries US and UK. They found that governance in firms is not good due to all the problems that are discussed previously. The minority shareholders are not well protected in the environment where the legal system is not strong enough and there is judicial inefficiency. Thus investors are not encouraged to invest in firms. In another study by Sarkar and Sarkar (2000) found that large shareholdings influence corporate governance in both the developed and the developing nations equally. The main differences that occur are the less develop capital markets in the emerging countries, more dependence on the external resources for the financing and there are no managerial markets in these countries. Similarly in India Hothi et al. (2011) found that firms in India and their governance are different than those of the developed countries of the world. It is due to the fact that there are differences; the conflict is between the dominant shareholders

and the minority shareholders. The minority shareholders rights are not well protected in the developing countries due to weak legal system (Pinkowitz et al., 2006 and Kalcheva and Lins, 2007). The corporate governance is responsible for the internal organization as well as to fulfill the external social and the economic needs of the country. Furthermore, mostly the Asian firms are controlled by a single and large shareholder (Claessens et al., 2000) and this might reduce the monitoring by external large shareholders. In a study by Ginglinger and Sadaoui (2007) using French firms as a sample over time span of 1998 to 2000 found that governance mechanism and the cash holding of the financially constrained firms are positively related. They documented that low governance leads to low cash holdings by firms. The firms in less developed countries where governance is low are financially constrained, and therefore hold more cash (Khurana et al., 2006). EhiokoyaYuanjian (2007) for analyzing the relationship between the two variables under investigation took the Nigerian listed firms from 2001 to 2005. The findings of study suggest that corporate governance has the same effect and the influence on the cash holding policies on Nigerian firms like the other Asian countries. They further describe that poorly governed firms in Nigeria hold more cash as compared to the good governed firms. The rationale for this is that the managers have more power and dominance in the Nigerian firms and hold more cash. The cash creates the managerial opportunism. Besides this, there is lack of monitoring on activities of managers. The reason is that there are no incentives given for monitoring, so managers are free and have the decision making powers about the significant policies of the firms. The same relation is found by Schauten et al., (2011) in the European countries. The impact of the corporate governance on the cash holdings of the larger firms in European firms is the same like the other developed countries. The good governance protects the minority shareholders from the management and the majority shareholders and this in turn increases the value of the firms. Varma (1997) made the comparison of the relationship between the two variables under investigation in India and found that there are differences in the developing country and the developed countries like US and UK. He documented that in US or UK firms a conflict arises between management and firm owners, when the management is not working satisfactory and is not providing answers to the owners. This problem could be solved when the board of directors takes interests in decisions and policies regarding firm. He further explains that contrary to this in India the problem is there between the dominant and the minority shareholders rights. This could be resolved by the power that is external to the firms like the regulatory bodies. Consistent with the findings of previous studies Zhang (2005) took 3000 listed companies from 21 countries, both Asian and European countries and found that more inside directors have the power, the more they will hold the cash and poor governance will follow. The reason is that the managers use the cash for their personal benefits. The important policies like the cash held by the firms are mostly influenced by the legal environment in which the firms are operating. Johnson et al. (1999) conducted a study in to explain the Asian crises 1997-1998. The researchers argued that corporate governance is a much better measure of the stock market decline and the depreciation in Asian crises rather than the macro economic variables. The reason behind this is that the Asian countries have less judicial efficiency, the shareholders rights are also not protected well, political instability and corruption which leads investors to lose confidence. When the investors are not confident about their investments they will be reluctant to invest in such an environment where the legal system is not strong enough to support them. The governance in the companies of Asian countries is also dependent on these factors and hence cannot make their own strong decisions. The developing countries which are considered as the emerging markets do not have perfect corporate governance documented by Gibson (2002). However he further argued

that CEO of the firm is fired out of the job if the firm performance is low and on the other hand firms in which there is domestic ownership the CEO is not fired so the balance of the effective and ineffective governance is maintained in the Asian firms. Most of their decisions and most importantly their governance are influenced by the government.

These studies shows that the relationship between cash holdings and corporate governance of the firms in developed and the developing countries are the same however the situations and the conditions that are affecting this relationship are different in the two parts of world. In the developing countries there are problems like corruption, political influences, less protection for the minority shareholders, more dominant family owned businesses, etc.

#### **2.4 Evidence from Pakistan**

This section of the study focuses on discussing cash holdings particularly in the Pakistani context. Azmat (2011) examined the cash holding determinants in Pakistani firms. Two groups of firms were taken in order to know whether growing firms or the matured firms hold more cash. For the whole sample, higher cash holdings results when firms have high cash flows, capital expenditures, cash flow volatility and decrease their cash levels when they have liquid assets, substitutes of cash, leverage and larger amount of fix assets. Growing firms hold more cash as they find external financing more costly and because they want to avail potential projects (Shah, 2011). Contrary to these findings another study found that the cash held by mature firms are due to the fact that they want to increase the resources and also to utilize the amount in projects that are not so profitable. So, the cash holdings of growing firms are almost double than that of mature firms (Azmat, 2011). Similarly Afza and Adnan (2007) argued that firms have to maintain certain amount of cash with them for the purpose of reinvestment, or to give to the shareholders as dividend payments. They found that size, cash flow, cash flow uncertainty of non-financial firms in Pakistan affect cash holdings positively while investment opportunities, leverage, dividend payments and liquid assets are negatively related. These findings indicate that the firms in Pakistan hold more cash for financing and investment that result in agency problems in firms. In addition Shah (2011) documented a positive relation between the cash holdings and the size of firms, leverage and cash flows. He further documented that Profitable firms in Pakistan that are paying dividend by following a pattern and have high cash inflows hold more cash with them.

In the present section the review of different studies is discussed. At first theories of cash holdings (free cash flow, pecking order and trade off theory) that explained reasons for cash held by firms is discussed followed by the relationship between the corporate governance and cash holdings in different researches internationally and in Asian countries is discussed. The review of literature showed that the corporate governance and cash holdings are directly related while in other researchers an inverse relation is observed. Finally researches of cash holdings in Pakistan are discussed. In the following section the present study by taking a sample of firms in Pakistan will find a relationship between the corporate governance and cash holdings.

#### **2. Methodology**

This section discusses the data, its sources and sample size that is taken for analyzing the relationship of the variables of present study. Followed by definitions of independent and dependent variables and their measurement criteria are discussed. Finally the statistical model selected for the study is discussed.

### 3.1 Sample and Sources of Data

The sample of study consists of the non-financial firms listed on the KSE over the time span of 2002 to 2010. The sample period starts from 2002 as in this year the code of corporate governance was formed in Pakistan and required firms to report corporate governance data in their annual reports from 2002 onwards. Consistent with the literature, the study excludes the financial firms listed on the KSE (Shah, 2011; Kuan et al., 2009 and Kusnadi, 2011). The reason is that their capital structure and profits are different.

The sources of the data used in the study are the annual reports of the listed firms. In Pakistan, existing studies such as Cheema et al. (2003), Javid and Iqbal (2008, 2010), Azmat (2011) and Shah (2011) have used different variables from the annual reports for the proxies of corporate governance and the other financial variables. Some of the variables in these researches are concentration of ownership, growth opportunities, dividend payments, leverage, cash flow volatility, cash flow, investment, size, capital expenditure, and net working capital.

### 3.2 Definition of Variables

Following the earlier literature (Kim et al., 1998; Opler et al., 1999; Dittmar et al., 2003; Drobetz et al., 2004; Saddour, 2006; Harford et al., 2006; Kusnadi, 2006) variables are defined as follows.

#### 3.2.1 The Dependent Variable

Like the prior studies by Dittmar et al. (2003), Harford et al. (2006), Pinkowitz et al. (2006), Kusnadi (2006), Chen (2008), Ammann et al. (2010) and Kuan et al. (2011) the dependent variable that is used in this study is the cash holdings (*CASH*) of the firms. This is measured as a ratio of cash and cash equivalents to net assets. Net assets are computed as total assets less cash and cash equivalents.

#### 3.2.2 The Independent Variables

The independent variables include different proxies for corporate governance and a set of control variables. The proxies of the corporate governance in the study are the ownership structure and board structure (Kuan et al., 2009; Chen, 2008; Harford et al., 2006).

##### Ownership Structure

The ownership variables consistent with previous literature are the institutional ownership (*INST*), director ownership (*DIRC*), and a measure of ownership concentration (*CON*). The institutional shareholding (*INST*) is the shares held by the institutional investors divided by total shares. These institutions are the financial institutions and non-financial corporations. Another proxy is the director's ownership (*DIRC*) which is measured as the shares held by the directors divided by the total number of shares. The variable concentration (*CON*) is the log of the number of shareholders. The firms that have more shares held by the directors and having concentrated ownership will have better alignment of interest and monitoring which in turn will result in less agency problems. (La Porta et al., 2000; Kusnadi, 2006; Kalcheva & Lins, 2007; Chen, 2008).

##### Board structure

Broad structure includes the variables board size and board independence. The board size variable is defined as the number of directors on the board (*BOARD*). Likewise the shares

held by the 5 largest shareholders of the firm (*BIG*) is included as the independent variable to proxy for corporate governance in line with the study by Lee and Lee (2009), Chen (2008) and Kusnadi (2006).

### 3.2.3 Control variables

The control variables included in the study which explain variation in the cash holdings of firms are consistent with Kusnadi (2006), Harford et al. (2008), Opler et al. (1999), Chen (2008), Kuan et al. (2009), Ammann et al. (2011). These variables include growth that is the geometric mean of the percentage increase in the total assets (*GROWTH*). The control variable, dividend is a dummy variable i.e. firms that pay dividend = 1 and those not paying dividend = 0 (*DIVDUM*). Firms cannot pay dividends when they are in need of cash. It acts as a substitute of cash for the firms. The log of total assets is the size of firm (*LOGSIZE*). Literature shows that the smaller the firm size the larger the problem of information asymmetries as well as more financial constraints and thus they are more likely to suffer from financial distress (Kuan et al., 2010 and Kusnadi, 2004). The variable leverage is for the financial health of the firms and represents the financial risk that firms face. It is measured as the ratio of total liabilities to total assets (*LEVE*). For controlling the potential investment opportunities the variable capital expenditure is the percentage increase in the gross fixed assets (*CAPEX*). For the liquidity of the firms consistent with the studies of Kim et al. (1998), Harford (1999), Opler et al. (1999) and Dittmar et al. (2003), the ratio of current assets minus cash minus current liabilities to total assets is the networking capital (*NW\_CASH*). Cash is deducted from this ratio because variable cash is dependent (cash holdings) and at the same time is included in the independent variables (working capital). This variable captures and controls for the additional liquid assets that are held by the firm. It is equal to or a substitute for cash and equivalents. In order to control for the profitability of the firms the variable cash flows (*CASHFLOWS*) is the ratio of addition net income and depreciation to the total assets.

Table 3.1 presents the list and measurement of the dependent, independent variables and control variables that are used in the present study in light of the discussion in the literature review section.

### 3.3 The Model

The empirical model estimated in light of the theoretical framework of the study is

$$\text{Cash holdings}_{i,t} = \alpha + \beta_1 (\text{ownership structure})_{i,t} + \beta_2 (\text{board structure})_{i,t} + \beta (\text{control variables})_{i,t} + \varepsilon_{i,t} \quad (\text{eq1})$$

In the above model the cash holdings of the firm *i* at time *t* is the dependent variable and the independent variables are the ownership structure, the board structure and a set of control variables.  $\varepsilon$  is the error term.

The relationship between corporate governance and cash holdings is tested using regression technique. Panel data analysis is used in this study because the data has time series as well cross-sectional properties. The most important motivation for using panel data is that it allows controlling for unobserved heterogeneity. Furthermore this technique has more variability, less collinearity, more degrees of freedom and estimates are more efficient. Panel data increases the sample size and assists in studying more complicated models. For the purpose of analysis the panel regression models that are pooled regression, fixed effects and the random effects model are discussed in the following part (Cameron, 2007). The

techniques mostly used for panel data analysis are fixed effect and random effects models which are discussed below (Gujarati, 2003).

### **3.3.1 Pooled Regression**

Pooled regression is usually carried out on time-series cross-sectional data. It is a part of the panel family of regression models. This technique is mostly used when the data is homogeneous (Joseph, 2010). While in the present study the groups are heterogeneous and therefore more complex and advance models that are random and fixed effects are used for the analysis of data (Joseph, 2010).

### **3.3.2 The Fixed Effect Regression Model**

Fixed effects models measure differences in intercepts for each groups calculated using a separate dummy variable for each group. This is basically an OLS model with dummy variables to control for group differences, assuming constant slopes (coefficients) for independent variables and constant variance across groups. It increases the degrees of freedom (Greene, 2006). In the present study the fixed effects regression model is used. This model is given by Mundlak (1961). The rationale for using the fixed effect model in the present study is that firms have some unique characteristics that are known to the firm but no other individuals. These unobservable factors need to be taken into account. These characteristics affect the relationship of the dependent and independent variables. For this purpose this study included firm dummies. A similar model is used by Shah (2011) for the cash holding determinants and Kuan et al. (2009) used a similar model for testing the relationship that poorly governed firms have more cash and experience agency problems.

### **3.3.3 The Random Effects Regression Model**

The rationale for random effects regression model is that the variation across groups is assumed to be random and uncorrelated with the independent variables included in the study. This approach controls the differences in the variance of the error term to model groups together, assuming constant intercept and slopes. Some problems with this model are that some variables may not be available in the study that can lead to omitted variable bias. In addition this model involves inconsistent estimates that arise from the correlation between individual effects and other independent variables (Greene, 2006).

### **3.3.4 Hausman Test**

Hausman test is used to a model that gives the best result and best fits the data. It was developed by Hausman (1978). The Hausman test has a null hypothesis that fixed effects and random effects estimators do not differ systematically. If the null hypothesis is rejected, then the fixed effects model is the best model. If the P-value is less than the significance level at 1%, 5%, or 10%, then null hypothesis is rejected (Greene, 2006).

This section considers the sample selection of data and its sources. Along with it a detailed discussion on the variables used in the study is provided. Similarly the statistical model that will be used in the following section is discussed.

## **3. Data Analysis & Findings**

The section discusses various tests that are used for analyzing the data of study. The results of the model that fits the data are also discussed along with the effect of independent variables on dependent variable and the rationale for each of the relationship among variables.

#### 4.1 Summary Statistics of Data

The analysis begins with the summary statistics of the variables used in the study. Table 4.1 reports the summary statistics of data. It presents the names of the variables in its first column, their mean, standard deviations, minimum and the maximum values in the second, third, fourth and fifth columns, respectively. The summary statistics helps to give the reader a feel of the data and highlights the existence of outliers. At first when the summary statistics were obtained, values above 99 percentile and below 1 percentile were removed. Also unreasonably higher values were removed for a couple of variables. For example, those firms that have cash of more than 98% were excluded from the study, and the reason being that cash is not the only asset that the firm should hold. So such values were excluded from data to make generalization of the results possible. Similarly for the other variables such as cash flows, the study dropped the observations if the cash flows were less than -1 and greater than +1. Similarly, for the leverage 195 observations were dropped where the leverage value was greater than 1. Theoretically, leverage must be less than 1 in order to remain solvent.

Table 4.1 shows the summary statistics after removal of outliers. On an average, firms in Pakistan hold 4.9% cash (*CASH*) with them. The directors (*DIRC*) have 29.45% of the total shares of the firms. Institutional shareholdings (*INST*) are 34.13% on an average. The concentration of shares (*CON*) and the number of board of directors (*BOARD*) is 7.06 and 7.87, respectively. The ownership percentage of 5 big shareholders (*BIG*) of the firms in Pakistan is on average 29%. The increase in the total assets (*GROWTH*) of firms is on average 35%. Pakistani firms have 59% of the debt (*LEVE*) with them on an average. Other variables such as capital expenditure, net- working cash and the cash flows are 71%, -.014% and 98% respectively.

One of the most important assumptions before estimating regression is that the independent variables do not have high collinearity (Gujarati, 2003). Table 4.2 presents the correlation matrix of the variables. It reveals that independent variables do not have multicollinearity.

Similarly Table 4.3 reports the variance inflation factor (VIF). The mean value of VIF in the study is 1.44 so this means that the data has no problem of multicollinearity among its variables. When the  $VIF > 10$  then the data has multicollinearity.

#### 4.2 Regression Results

##### 4.2.1 Simple OLS Regression

The empirical findings of the simple OLS regression are reported in Table 4.4. The first column of the table represents the independent variable of the study. In the second column the coefficients of independent variables are given and the standard errors are given within the parenthesis. The significance levels of 1%, 5% and 10% are denoted by \*, \*\*, and \*\*\* respectively. The overall validity of the model is good as shown by the F statistic of 50.06, with p-value of 0.000 and the  $R^2$  value is 0.2266. This  $R^2$  shows the ratio of variation in the dependent variable explained by variation in the independent variables. The table shows that the variables growth (*GROWTH*) and the log size (*LOGSIZE*) are insignificant. The directors' ownership and board size are the only independent variables that are negatively related to the cash holdings of the Pakistani firms. Leverage, capital expenditure, and net working capital to cash are the control variables that inversely relate to the dependent variable of the study. Therefore the relationships are discussed in more detail in the fixed effects dummy regression.



#### 4.2.2 Hausman Test for Fixed and Random Effects

In this study both the fixed and random effects model were tested for the data. However to select form the two models Hausman test is used. It checks a more efficient model against a less efficient but consistent model to make sure that the more efficient model also gives consistent results.

Since p-value of the Hausman test in the study is less than 0.05 ( $\text{Prob} > \chi^2 = 0.0000$ ), it suggests that the estimates of fixed and random effects models have systematic differences (Greene, 2006 and Cameron, 2007). So the null hypothesis is rejected that is the random effects model is good. Contrary to this, the alternative hypothesis is accepted. Therefore fixed effects model is used in this study as shown by the results of this test.

#### 4.2.3 Fixed Effects Dummy Variable Regression

Table 4.6 shows the result of fixed effects regression. This model takes the dummy variables for all the 309 firms in the sample to obtain the results of the regression. In table 4.6 independent variables and their signs are shown. The dummies for each firm are not shown as there were 309 dummy variables for each firm. The first column of the table represents the independent variables of the study. In the second column the coefficients of independent variables are given and the standard errors are given within the parenthesis. The significance levels of 1%, 5% and 10% are denoted by \*, \*\*, and \*\*\*, respectively. The total numbers of observations included are 2063. The value of F statistic is 15.13 that indicate that model fits the data. As the value of  $R^2$  shows the ratio of variation in the dependent variable explained by variation in the independent variables, it suggests that there is 70% variations in the dependent variable (*CASH*) is due to independent variables in the study.

The result of the fixed effects dummy regression shows that the coefficient of directors' ownership (*DIRC*) is -0.01715. This shows that the ratio of cash decreases by -0.01715 units when there is one unit increase in the directors' ownership (Table 4.6). The results of this study are consistent with the literature which suggests that if managerial ownership increases the cash holdings of the firm will decrease. According to Jensen (1986), a high level of managerial ownership reduces the agency problems where managerial incentives to expropriate wealth away from shareholders through building of cash reserves decreases. Results of this study are also consistent with evidence from UK firms as reported by Ozkan and Ozkan (2004). Similar results were reported by Ehikioya and Yuanjian (2009) for a sample of Nigerian firms.

The institutional shareholding (*INST*) is another proxy for governance mechanism used in study. An increase of this variable by one unit increases the cash held by a firm by 0.0521 units (Table 4.6). In Pakistan mostly the firms are owned by families or by the institutions (Cheema et al., 2003). This decreases the agency problems as the interest of managers and shareholders are aligned but this results in the conflict between the insider and the outsider shareholders. Maintaining a large amount of cash by the insiders is done by reducing the dividend payments (Jensen and Meckling, 1976). Literature shows that the shareholders rights are not protected by law of the country like Pakistan. Thus the insider large shareholders who are also managing the firms (Ibrahim, 2005) cannot be forced by the minority outside shareholders to pay the dividend as they have fewer rights and less protection. The majority shareholders expropriate the minority shareholders and will pay fewer dividends. According to the investor power hypothesis, in the country where the legal system is not powerful, the factor that determines dividends payments is the powerful outside

investors who can force firms to pay the dividends (Abdullah et al. 2011). But in Pakistan the outside shareholders have less power compared to the majority inside shareholders. In addition to this the minority investors are reluctant to invest in the firms where there is more control of the majority inside shareholders. The present study findings show that more institutional shareholdings results in more cash holdings by the firms is consistent with the findings of the Harford et al. (2006) who found a positive association between the insider ownership and the cash holdings in US firms. In addition to this because of the liability structures of the institutional shareholdings they may be required to hoard more cash so as to have stable dividend payments. Thus these dividend paying firms hold cash to pay the dividends and high institutional shareholdings.

The results show that one unit increase in the concentration of shares (*CON*) brings about 0.0046 units increase in the dependent variable (Table 4.6). In other words, if the number of shareholders increases the cash holdings would increase and thus the concentration of ownership decreases. According to La Porta et al. (1998, 1999 and 2000), countries with weak legal environment, as in Pakistan the founders tries to maintain large positions in their firms which results in concentration of ownership in these firms and thus they also maintain high cash reserves with them to avail the profitable opportunities. These founders use the firm resources cash reserves for extracting their private benefits as they have control over the firm and the cash held by it. The minority shareholders are not protected as the insider majority shareholders enjoy their full power over the firm. In addition they monitor and control the activities of the managers in a better way (Demsetz, 1983; Shleifer and Vishny, 1986).

The coefficient of (*BOARD*) is negative and statistically significant (Table 4.6). The results indicate that one unit increase in size of the board (*BOARD*) brings -0.0091 unit decrease in the cash holdings of a firm. This finding is consistent with that of Harford et al. (2006) who found an inverse relationship between the board size and the cash holdings of the firm. The board of directors is an important part of a firm's monitoring mechanism. Members of the board are responsible for monitoring and evaluation of senior management of a firm. When the number of directors on the board in firm increases it leads to more monitoring and control over the management and the policies made by the directors. Consequently the cash held by the firms' decreases. The finding of present study is inconsistent with the results of Lee and Lee (2010) who found that the larger board proves to be more inefficient and also possess the problems of coordination. In another study by Yermack (1996) finds that smaller boards are more efficient as they provide better and effective decision making.

The variable (*BIG*) has positive and significant relationship with cash holdings of the sampled firms (Table 4.6). The results indicate that one unit increase in percentage of shareholdings by 5 big shareholders (*BIG*) increase the cash by 0.0374 units. As the previous results of the study indicate that when concentration of shares increase consequently percentage of shares held by 5 largest shareholders increases, therefore they will have more power and will hoard more cash with them. In a country like Pakistan with weak shareholders protection, it is difficult and costly to raise external financing. Due to high interest charged on the amount borrowed and also failure to repay the previous debt increases the risk related to the business therefore minority investors are also reluctant to invest. If the firm is unable to return its debt back it will go bankrupt and thus by law no such regulations are made for the protection of the minority shareholders. Thus they are not willing to pay more equity and debt due to lack of protection (La Porta et al., 1999). Therefore the ownership percentage of 5 largest shareholders of Pakistani firms hold more cash so as they can avail any profitable

opportunities (Dittmar et al., 2003). These results are inconsistent with Kusnadi (2006) findings who reported a negative relationship between the non-executive larger shareholders of the firms and cash in the Singapore and the Malaysian firms. The variable growth (*GROWTH*) has a positive insignificant relationship with the cash holdings (Table 4.6). This indicates that growing firms in Pakistan do not hold excess cash with them. Consistent with the literature the control variable size (*LOGSIZE*) is found to be inversely and insignificantly related to cash holdings of the firms (Kim et al., 1998 and Opler et al., 1999). This means that the larger firms hold less cash (Dittmar et al., 2003), they have economies of scale to manage cash (Miller and Orr, 1966) and are diversified therefore they have less chance of going bankrupt (Rajan and Zingales, 1995). However the findings are inconsistent with the studies in Pakistan by Afza (2009) and Shah (2011), who found that the firm size is related directly and significantly to the cash holdings of the firms. There is a positive relationship between cash holdings and cash flows (*CASHFLOWS*) (Table 4.6). This is similar to the findings of Dittmar et al. (2003), Kalcheva and Lins (2007) and Kim et al. (1998). The result of this study shows that high cash flows are more likely to result in the dividends payments. This is because the dividends and the cash holdings are related directly so the present study can conclude that the increase cash flows can be for the dividend payments. As Opler et al. (1999) found that large firms are more profitable and can accumulate cash and thus will hold high levels of dividends that act as a substitute for cash for firms. In addition to this high cash flows resulting in high cash holdings by firms might also be to avail the profitable opportunities, to avoid bankruptcy, to provide a cushion for smooth operations of firms and to finance their investments. The result is consistent with findings of the studies in Pakistan by Shah (2011), Azmat (2011) and Afza (2009). Furthermore inconsistent with findings of Opler et al. (1999) and Harford et al. (2003) but consistent with findings of Ammann et al. (2011), the study concludes that the dividend (*DIVIDUM*) is related positively to cash holdings of the firms in Pakistan (Table 4.6). The dividend payments reduces the possibility for managers to waste cash for projects that have negative net present value (Ammann et al., 2011). The dividend theories suggest that firms pay dividends according to certain pattern. Thus the dividend paying firms have to maintain larger cash balances for paying dividends. The findings of the present study are in line with the study in Pakistan by Shah (2011) and are contrary to findings of Afza (2009), from this it can be concluded that the dividends can be used as a substitute for cash if they are not paid by the firms.

The relationship between leverage (*LEVE*) and cash holdings is negative (Table 4.6). This is consistent with Ozkan and Ozkan (2004), Afza (2009) and Azmat (2010) but is different from the findings of Opler et al. (1999) who find a positive relationship. This suggests that firms that have high debt will in turn have less liquid assets. Debt is as a substitute of cash for the firms, when firms need the cash they can borrow it but only if the firm has the ability to borrow. This relationship is also consistent with pecking order and free cash flow theories. As according to the pecking order theory, when firms' investments are in excess of retained earnings the negative relationship occurs between the leverage and cash holdings. Similar relationship is supported by free cash flow theory that firms are monitored by capital markets and prevent higher managerial control (Kalcheva and Lins, 2003).

The results indicate that one unit increase in capital expenditure (*CAPEX*) brings -0.0192 units decrease in the cash holdings (Table 4.6). This means that the more liquid assets there are, the more cash is held by the Pakistani firms and the less they will invest in the long term assets like the fixed assets. The ratio of cash net working capital (current assets minus current liabilities minus cash) to total assets (*NW\_CASH*) is -0.1469. The inverse relation

between the cash holdings and net-working suggests that the cash holdings and the net working capital are the close substitutes of cash for firms (Dittmar et al., 2003). This relationship is contrary to the tradeoff theory and to the studies by Opler et al. (1999) and Ozkan and Ozkan (2002). The reason for this inconsistency with the tradeoff theory and the other studies can be high cost of external debt in Pakistan (Kalcheva and Lins, 2003). Consistent with the study of Afza and Adnan (2009) the result of the study is in support of the pecking order theory. This theory suggests that firms for the financing of the investments first use the retained earnings and then use debt.

#### 4.2.3 Random Effects GLS Regression

To strengthen the selection of fixed effects model used in the present study, results of the random effects model are also observed. Random effects model is another technique used for the panel data analysis. In Table 4.7 the  $\text{corr}(u_i, X) = 0$  means that in the random effects model the differences across entities are uncorrelated with the independent variable. The value of Rho is 55% that means that 55% of the variance is due to differences across panels. The omitted variables effects are also observed in this model. Both the models of the panel regression that are fixed and random effects model suit the data well. However the Hausman test assist in selection of the model fixed effects for the dummy variable. Therefore fixed effects model is used and preferred in present study for the analysis of the data.

#### 4.2.4 Cross Sectional Regression

Finally for further supporting fixed effects model the cross sectional regression Table 4.8 on the data checks that either it gives the significant results. In this model the dependent and independent variables are associated with one period or point in time. For all the firms in the study the average values of the variables are found instead of the time series values. The observations are independent, thus the estimates of the OLS regression will be unbiased, consistent and efficient. One drawback of this model is that it does not take into account the changes in variables over a period of time.

Table 4.8 shows the results of the cross regression and thus it leads towards using the fixed effects model, a panel data technique that takes into consideration the dependent and independent variables of 309 firms over a time span of 2002 to 2010. The model that best fits the data set of the present study is the fixed effects model.

#### Conclusion

The main objective of the present study was to test the impact of several corporate governance proxies and control variables on the decision to hold cash in non-financial listed firms on KSE in Pakistan. Consistent with the previous studies, the present study used proxies for the corporate governance that include institutional share holdings, director's ownership, ownership concentration, board size and ownership percentage of 5 big shareholders. The results and discussion in the preceding section reveal two main findings (i) director's ownership and board size are negatively related with corporate cash holdings while (ii) the institutional shareholdings, concentration of shares and the ownership percentage of 5 big shareholders are directly related to cash holdings.


The findings of the present study suggest that increase in directors' ownership would decrease cash holdings. This implies that agency problems can be reduced if managers are given more stakes in the firm. As managerial ownership increases, managers will not misuse the firm resources and will try to put each asset to best economic use. Since cash is the least

productive asset, owner-managers will try to hold less and less cash, keeping other things constant. According to the literature, firms that hold less cash have good governance. Thus this implies that as managerial control increase, Pakistani firms hold less cash that is the least productive asset and therefore they might in turn have good governance mechanisms. Similarly as the board size increases, cash holdings decrease. This implies that larger boards are effective in controlling managers from hoarding unnecessary cash. Thus, the results indicate that larger boards are better at monitoring the manager's activities. Collectively the two findings of the study imply higher managerial ownership or larger boards can be alternate ways of corporate governance in Pakistan. In addition to the above findings there is positive association between institutional shareholdings and cash holdings. One reason might be that institutional shareholders desire steady flow of dividends due to their liability structures, which is why firms with higher institutional shareholdings pay regular dividends and maintain more cash wherefrom the dividend can be paid. Similarly there is positive association between cash holdings with both the concentration of shares and ownership percentage of 5 big share holders. The control variable growth has a positive but insignificant relationship with the cash holdings. This implies that the growing firms in Pakistan do not hold more cash with them. Similarly the variable size is negatively but insignificantly related to cash holdings of the firms. The advantage for why larger firms hold less cash might include economies of scale to manage cash and that large firms are diversified thus they need less cash to avoid bankruptcy. Results also indicated a positive relationship of cash flow cash holdings with and dividends. These results imply that high cash flows are more likely to result in the dividend payments by the firms to shareholders. Dividends act as a substitute of cash for firms. The dividend payments reduce the chance for managers to waste cash for unnecessary projects. Cash flows also enable firms to avail the profitable opportunities, to avoid bankruptcy, to provide support for smooth operations of firms and to finance investments. While the relationship between the leverage and cash holdings are negative. This suggests that firms that have high debt will in turn have less liquid assets. Debt is as a substitute of cash for the firms. When firms need the cash they can borrow it but only if the firm has the ability to borrow. Similarly there is negative association between net-working and capital expenditure with cash holdings of firms. This implies cash and net working capital are the close substitutes of each other and that firms hold more liquid assets and invest less in fixed assets.

### **Limitations of the Study**

The limitation of the study is that only the firms listed on the KSE are included in the analysis. Financial firms are excluded due to the differences in capital structures. After excluding the outliers from the data, the study includes 309 non- financial listed firms on the KSE from all the sectors. The firms that have negative cash holdings and firms that have not given their corporate governance data are not included in the study. In addition to this, the data covers the time period ranging from 2002 to 2010. The data from 2002 is included in this study as the code of corporate governance was implemented on the firms in Pakistan from this year and the governance data is available from 2002 onwards. Moreover the firms in Pakistan do not show the data for some of the important variables of corporate governance like the family ownership variable, so all such variables are excluded from the study. Some firms have also not given their annual reports from which the required data can be extracted. They are also excluded from the data set. Likewise the study did not use the qualitative data i.e. the interviews could also be used for analyzing this data.

### Future Research

The present study has studied the relationship between the cash holdings and the corporate governance in firms in Pakistan. So the researchers are encouraged to further analyze different aspects of this relationship in Pakistani firms. There is a need to consider this relationship and its impact on the performance of the firms in Pakistan. Moreover, to extend the work to cross country analysis especially analyzing the impact of corporate governance on cash holdings and comparing it among the developing countries and other developed countries of world is also a prospect worthy of research. It is expected that more research will be conducted in this potential area in future in Pakistan that will strengthen the findings and results of the present study. 

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**Table 3.1: Names and Measurements of the Variables**

Names of Variables	Symbols	Measured by
Cash holdings	<i>CASH</i>	A ratio of cash and cash equivalents to net assets. Net assets are computed as total assets less cash and cash equivalents.
Institutional Shareholders	<i>INST</i>	It is the shares held by the institutional investors.
Directors Ownership	<i>DIRC</i>	It is the shares held by the directors divided by the total number of shares.
Concentration	<i>CON</i>	It is the log of the number of shareholders.
Board Size	<i>BOARD</i>	The number of directors on the board.
Large Shareholders	<i>BIG</i>	The shares held by the 5 largest shareholders of the firm.
Growth	<i>GROWTH</i>	It is the geometric mean of the percentage increase in the total assets.
Dividend	<i>DIVDUM</i>	Dividend is a dummy variable. The firms that pay dividend =1 and those not paying dividend=0
Size of Firm	<i>LOGSIZE</i>	The log of total assets.
Leverage	<i>LEVE</i>	It is the ratio of total liabilities to total assets.
Capital Expenditure	<i>CAPEX</i>	It is the percentage increase in the gross fixed assets.
Net Working Capital	<i>NW_CASH</i>	The ratio of Current assets minus cash minus current liabilities to total assets is the networking capital.
Cash Flows	<i>CASHFLOWS</i>	It is the ratio of addition net income and depreciation to total assets.



Table 4.1: Summary Statistics

Variables	Mean	Std.Dev	Minimum	Maximum
<i>CASH</i>	0.0493	0.0887	0.0000	0.6901
<i>DIRC</i>	0.2959	0.2828	0.0000	0.9774
<i>INST</i>	0.3413	0.2656	0.0000	0.9817
<i>CON</i>	7.0601	1.5255	0.0000	11.3217
<i>BOARD</i>	7.8742	1.4514	7.0000	15.0000
<i>BIG</i>	0.2990	0.3382	0.0000	0.9924
<i>GROWTH</i>	0.3542	3.6720	-0.1446	88.2150
<i>DIVDUM</i>	0.4876	0.4999	0.0000	1.0000
<i>LOGSIZE</i>	7.5032	1.6055	2.7508	12.3409
<i>LEVE</i>	0.5908	0.2066	0.0138	0.9987
<i>CAPEX</i>	0.0713	0.1600	-0.9356	1.5408
<i>NW_CASH</i>	-0.0014	0.2215	-0.9213	0.8064
<i>CASHFLOWS</i>	0.0986	0.1460	-0.9457	1.9521

Table 4.1 presents summary statistics of the data after removal of outliers. The sample included 309 firms listed on the KSE over the period from 2002 to 2010. The total number of observations after removing the outliers are 2063. The dependent variable is cash (*CASH*) which is the ratio of cash and cash equivalents to the net assets (total assets less the cash and cash equivalents). The independent variables include directors ownership (*DIRC*), calculated as the shares held by the directors divided by the total number of shares. The institutional shareholder (*INST*) is the shares held by the institutional investors. The ownership concentration (*CON*) is the log of the number of share holders. The number of directors on the board (*BOARD*) refers to the shares held by the 5 largest shareholders of the firm (*BIG*) divided by total shares of the firm. The variable growth is the geometric mean of the percentage increase in the total assets (*GROWTH*). Dividend is a dummy variable. In firms that pay dividend, the *DIVDUM*=1 and elsewhere it is 0. The (*LOGSIZE*) is log of total assets. Leverage is the ratio of total liabilities to total assets (*LEVE*). Capital expenditure is the percentage increase in the gross fixed assets (*CAPEX*). The ratio of current assets minus cash minus current liabilities to total assets is the networking capital (*NW\_CASH*). The variable cash flows (*CASHFLOWS*) is the ratio of addition net income and depreciation to the total assets.

Table 4.2: Correlation Matrix

	<i>CASH</i>	<i>CASH FLOWS</i>	<i>DIRC</i>	<i>CON</i>	<i>INS</i>	<i>BOARD</i>	<i>BIG</i>	<i>LOGSIZE</i>	<i>LEVE</i>	<i>CAPEX</i>	<i>DIVDUM</i>	<i>GROWTH</i>	<i>NW_CASH</i>
<i>CASH</i>	1												
<i>CASH FLOWS</i>	0.2656	1											
<i>DIRC</i>	-0.222	-0.162	1										
<i>CON</i>	0.158	0.045	-0.255	1									
<i>INS</i>	0.225	0.115	-0.597	0.300	1								
<i>BOARD</i>	0.089	0.135	-0.198	0.316	0.187	1							
<i>BIG</i>	0.105	0.008	-0.146	0.133	-0.089	0.123	1						
<i>LOGSIZE</i>	0.1353	0.086	-0.286	0.544	0.311	0.371	0.1950	1					
<i>LEVE</i>	-0.216	-0.289	0.179	0.048	-0.189	-0.040	0.020	-0.0188	1				
<i>CAPEX</i>	-0.052	0.014	0.037	-0.006	-0.023	0.020	0.003	0.0716	-0.007	1			
<i>DIVDUM</i>	0.246	0.369	-0.170	0.053	0.188	0.200	0.050	0.2499	-0.271	0.023	1		
<i>GROWTH</i>	-0.016	-0.031	0.063	0.007	-0.037	0.036	-0.028	0.0697	0.041	0.042	-0.020	1	
<i>NW_CASH</i>	0.005	0.197	-0.193	-0.131	0.142	-0.029	-0.019	-0.0249	-0.618	-0.107	0.284	-0.024	1

Table 4.3: Variance Inflation Factor

Variables	VIF	1/VIF
<i>DIRC</i>	1.74	0.5760
<i>INST</i>	1.79	0.5573
<i>CON</i>	1.56	0.6395
<i>BOARD</i>	1.23	0.8127
<i>BIG</i>	1.13	0.8812
<i>GROWTH</i>	1.02	0.9815
<i>DIVDUM</i>	1.35	0.7430
<i>LOGSIZE</i>	1.71	0.5830
<i>LEVE</i>	1.76	0.5685
<i>CAPEX</i>	1.04	0.9658
<i>NW_CASH</i>	1.77	0.5634
<i>CASHFLOWS</i>	1.23	0.8132
<b>Mean VIF</b>	<b>1.44</b>	

Table 4.4: Simple OLS regression

Dependent Variable <i>CASH</i>	Independent Variable
	<b>Coefficients</b>
<i>DIRC</i>	-0.0290 (0.00792) ***
<i>INST</i>	0.0361(0.00857)**
<i>CON</i>	0.0046(0.00139)*
<i>BOARD</i>	-0.0036(0.00129)**
<i>BIG</i>	0.0241(0.00533)**
<i>GROWTH</i>	0.0004(0.00043)
<i>DIVDUM</i>	0.0212 (0.00402)**
<i>LOGSIZE</i>	-0.0019(0.00138)
<i>LEVE</i>	-0.0982(0.01099)**
<i>CAPEX</i>	-0.0475(0.01076)**
<i>NW_CASH</i>	-0.1151(0.01031)**
<i>CASHFLOWS</i>	0.1806 (0.01647)**

Table 4.4 describes the fixed effects dummy variable regression. The study contains 309 listed firms on KSE covering a time span of 2002 to 2010. The standard errors are in the parenthesis and \*, \*\*, \*\*\* represents the 1%, 5% and 10% significance level respectively. The variables *GROWTH* and *LOGSIZE* are insignificant variables. The dependent variable cash (*CASH*) is the ratio of cash and cash equivalents to the net assets (total assets less the cash and cash equivalents). The independent variables are directors ownership (*DIRC*) is the shares held by the directors divided by the total number of shares. The institutional shareholder (*INST*) is the shares held by the institutional investors. The ownership concentration (*CON*) is the log of the number of share holders. The number of directors on the board is another independent variable (*BOARD*). The shares held by the 5 largest shareholders of the firm (*BIG*). The variable growth is the geometric mean of the percentage increase in the total

assets (*GROWTH*). First calculate the total assets yearly increase and then calculate its geometric mean of this. The control variable dividend is a dummy variable. The firms that pay dividend =1 and those not paying dividend=0(*DIVDUM*). The log of total assets is the size of firm (*LOGSIZE*). Leverage is the ratio of total liabilities to total assets (*LEVE*). Capital expenditure is the percentage increase in the gross fixed assets (*CAPEX*). The ratio of current assets minus cash minus current liabilities to total assets is the networking capital (*NW\_CASH*). The variable cash flows (*CASHFLOWS*) is the ratio of addition net income and depreciation to the total assets.

Table 4.5: Hausman Test for Fixed and Random Effects

Variables	Fixed	Random	Difference	Std. Err
<i>DIVDUM</i>	0.0021	0.0066	-0.0045	0.0007
<i>LOGSIZE</i>	-0.0159	-0.0071	-0.0088	0.0019
<i>LEVE</i>	-0.0699	-0.0817	0.0118	0.0054
<i>CAPEX</i>	-0.0192	-0.0232	0.0040	-
<i>NW_CASH</i>	-0.1469	-0.1366	-0.0102	0.0031
<i>CASHFLOWS</i>	0.1198	0.1382	-0.0184	0.0039

Table 4.6: Fixed Effects Regression

Independent variable	Coefficients
<i>DIRC</i>	-0.1715 (0.1005) **
<i>INST</i>	0.0521(0.0542)**
<i>CON</i>	0.0046(0.0062) *
<i>BOARD</i>	-0.0091(0.0068)***
<i>BIG</i>	0.0374(0.00377)**
<i>GROWTH</i>	0.0007(0.0007)
<i>DIVDUM</i>	0.0021 (0.0033)**
<i>LOGSIZE</i>	-0.0015(0.0028)
<i>LEVE</i>	-0.0699(0.0128)**
<i>CAPEX</i>	-0.0192(0.073)**
<i>NW_CASH</i>	-0.1469(0.0100)**
<i>CASHFLOWS</i>	0.1198 (0.0143)**

Table 4.6 describes the regression of the dependent and the independent variables along with the control variables. The standard errors are in the parenthesis and \*, \*\*, \*\*\* represents the 1%, 5% and 10% significance level respectively. The variables growth (*GROWTH*) and size (*LOGSIZE*) are insignificant variables. All the other variables are significant at 5%, 1% and 10% level of significance. The dependent variable cash (*CASH*) is the ratio of cash and cash equivalents to the net assets (total assets less the cash and cash equivalents). The independent variables are directors ownership (*DIRC*) is the shares held by the directors divided by the total number of shares. The institutional shareholder (*INST*) is the shares held by the institutional investors. The ownership concentration (*CON*) is the log of the number of share holders. The number of directors on the board is another independent variable

(*BOARD*) the shares held by the 5 largest shareholders of the firm (*BIG*). The variable growth is the geometric mean of the percentage increase in the total assets (*GROWTH*). We first calculate the total assets yearly increase and then calculate its geometric mean of this. The control variable dividend is a dummy variable. The firms that pay dividend =1 and those not paying dividend=0(*DIVDUM*). The log of total assets is the size of firm (*LOGSIZE*). Leverage is the ratio of total liabilities to total assets (*LEVE*). Capital expenditure is the percentage increase in the gross fixed assets (*CAPEX*). The ratio of current assets minus cash minus current liabilities to total assets is the networking capital (*NW\_CASH*). The variable cash flows (*CASHFLOWS*) is the ratio of addition net income and depreciation to the total assets.

Table 4.7: Random Effects GLS Regression

Independent variable	Coefficients
<i>DIRC</i>	-0.0428 (0.01602)***
<i>INST</i>	0.0414 (0.01713)*
<i>CON</i>	0.0047 (0.00261)***
<i>BOARD</i>	-0.0005 (0.00261)
<i>BIG</i>	0.0237 (0.01076)**
<i>GROWTH</i>	0.0004 (0.0007)
<i>DIVDUM</i>	0.0066 (0.00323)**
<i>LOGSIZE</i>	-0.0071 (0.00202)**
<i>LEVE</i>	-0.0817 (0.01159)**
<i>CAPEX</i>	-0.0232 (0.00737)**
<i>NW_CASH</i>	-0.1366 (0.00955)**
<i>CASHFLOWS</i>	0.1382 (0.01381)**

Table 4.8: Cross Sectional Regression

Independent Variables	Coefficients.
<i>DIRC</i>	-0.0266 (0.01623)***
<i>INST</i>	0.0264 (0.01711)***
<i>CON</i>	0.0043 (0.00283)***
<i>BOARD</i>	-0.0036 (0.00269)
<i>BIG</i>	0.0223 (0.01076)**
<i>GROWTH</i>	0.0005 (0.00068)
<i>DIVDUM</i>	0.0333 (0.01263)***
<i>LOGSIZE</i>	-0.0020 (0.00299)
<i>LEVE</i>	-0.0774 (0.02696)**
<i>CAPEX</i>	-0.1483 (0.05832)*
<i>NW_CASH</i>	-0.0932 (0.02806)*
<i>CASHFLOWS</i>	0.2016 (0.04960)**

Table 4.8 presents results for the cross sectional regression. The study contains 309 listed firms on KSE covering a time span of 2002 to 2010. The standard errors are in the parenthesis and \*, \*\*, \*\*\* represents the 1%, 5% and 10% significance level respectively. The variables board (*BOARD*), size (*LOGSIZE*) and growth (*GROWTH*) are insignificant. The dependent variable cash (*CASH*) is the ratio of cash and cash equivalents to the net assets (total assets less the cash and cash equivalents). The independent variables are directors ownership (*DIRC*) is the shares held by the directors divided by the total number of shares.

The institutional shareholder (*INST*) is the shares held by the institutional investors. The ownership concentration (*CON*) is the log of the number of share holders. The number of directors on the board is another independent variable (*BOARD*), the shares held by the 5 largest shareholders of the firm (*BIG*). The variable growth is the geometric mean of the percentage increase in the total assets (*GROWTH*). We first calculate the total assets yearly increase and then calculate its geometric mean of this. The control variable dividend is a dummy variable. The firms that pay dividend =1 and those not paying dividend =0 (*DIVDUM*). The log of total assets is the size of firm (*LOGSIZE*). Leverage is the ratio of total liabilities to total assets (*LEVE*). Capital expenditure is the percentage increase in the gross fixed assets (*CAPEX*). The ratio of current assets minus cash minus current liabilities to total assets is the networking capital (*NW\_CASH*). The variable cash flows (*CASHFLOWS*) is the ratio of addition net income and depreciation to the total assets.

“In sum, I think that we have freedom of will and that it comes out of our uniqueness as individuals, perhaps wholly determined, yet to some degree unpredictable. However limited in scope, 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.”

George Wald, *New Views of the Nature of Man*, p. 46

**ARTICLE****COMPONENTS OF THE BRAND EQUITY OF INTERNET SERVICE PROVIDERS (ISPs) IN PAKISTAN**

Kashif Farhat

*IQRA University, Karachi, Pakistan.***Abstract**

*This study assesses the determinants of customer-based-brand equity of Internet Service Providing brands in Pakistan. A Likert scale questionnaire was served to 251 respondents, selected through convenience sampling, to assess correlational relationship between the dependent variable: brand equity and independent variables: brand loyalty, brand awareness, perceived quality and brand association. Brand loyalty, brand awareness and perceived quality were found to have a positive significant impact on building brand equity. It's recommended that marketers and brand managers allocate maximum resources to brand loyalty and brand awareness to gain higher brand equity of ISPs brands.*

**Keywords:** Brand Equity, Brand Loyalty, Brand Awareness, Internet Service Providers, Pakistan

**1. Introduction**

Branding is a centuries old practice to differentiate products of one producer from other producers.<sup>1</sup> American Marketing Association (AMA) defines a brand as a "name, term, design, symbol, or any other feature that identifies a seller's good or service as distinct from those of other sellers."<sup>2</sup> Thus a brand is a set of elements that identifies a product or service and a seller or manufacturer in the marketplace. Historically, branding has served products for differentiating, identifying and protecting from copying. A brand wields its exclusive rights in the marketplace over the features, resources and symbols attached to it, which in turn, builds its image that consumers store in their minds and use when a need arises. In essence, a brand is an indication and promise to consumers about the product or service that adds credibility and mitigates product experience related problems for consumers.<sup>3</sup> The power of branding has coiled out of the consumer products and is dramatically changing dynamics of services businesses. In recent years, branding has been the key to differentiating and creating a Unique Selling Proposition (USP) for firms. In the absence of branding, firms enter a 'gray zone' where customers struggle to distinguish a product or service from its competitors.<sup>4</sup>

**1.1 Background**

Brand equity is one of the most extensively discussed and researched concepts of contemporary marketing practices. The reason of its importance is that brand equity plays a strategic role and is a basis of competitive advantage for businesses.<sup>5</sup> Brand equity is primarily

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<sup>1</sup> Keller (2008)

<sup>2</sup> American Marketing Association Dictionary (2012)

<sup>3</sup> De Chernatony and McDonald (1998)

<sup>4</sup> Barlow (2010)

<sup>5</sup> Atilgan *et al.* (2005)

branched out in two types: customer-based brand equity(CBBE) and financial brand equity. The CBBE is encoded in the head of buyers while financial brand equity is as an asset on financial statements which can be realized when a brand changes its ownership. In the sphere of marketing, brand equity pertains to CBBE, and academics and managers have often emphasized the strategic role of brand equity in a marketing mix. When marketing managers refers to brand equity, they distinguish it from a brand's financial value and focus specifically on the customer-based brand equity. Businesses around the world, in the past decades, have experienced the application of brand equity practices to effectively gain competitive advantage over rivals and bolster profits in a short span of time. Brand equity is the differential effect stemming from marketing efforts between a branded product and unbranded product.<sup>6</sup>A succinct and complete definition of brand equity can be cited "The value premium that a company realizes from a product with a recognizable name as compared to its generic equivalent" (Investopedia.com, 2013). It refers to the value of a brand that customers have in their minds which induces them to buy, prefer or opt out a brand when making frequent or infrequent buying decisions.

Largely two CBBE models have been used by researchers to measure brand equity. The most popular model applied by academics and researchers is the David A. Aaker's model of brand equity. Aaker considers it "a set of brand assets and liabilities linked to a brand, its name and symbol that add to or subtract from the value provided by a product or service to a firm/or to that firm's customers".<sup>7</sup> He groups them into five dimensions: brand awareness, brand association, perceived brand quality, brand loyalty and other proprietary brand assets. Aaker asserts that brand equity creates value for customers by helping them interpret information about a brand and makes customers confident and comfortable when making buying decisions. He calls businesses' attention to creating brand equity which consequently creates value for firms by raising customer satisfaction, efficiency, and effectiveness of marketing programs in addition to garnering greater profits. Brand equity leverages brand extension and distribution channels and poses a mental barrier for customer to switch to a competing product.

Another widely practiced brand equity model is of Kevin L. Keller who views brand equity as "the differential effect of brand knowledge on consumer response to the marketing of the brand".<sup>8</sup> The three elements that Keller's model is based on are: the differential effect, the brand knowledge and how consumers respond to marketing. He outlines a forming structure of brand equity with variables contributing to brand knowledge. Keller bases brand knowledge on two major elements: brand image and brand awareness. Brand awareness stems from brand recognition and brand recall. Brand image has a main underlying element, brand associations, which is further divided between types and features of associations.<sup>9</sup>Keller also finds brand equity leading businesses to higher revenues and lower costs.

Various research studies, fully or partially, have corroborated to the significance of brand equity in products and services based industries. Atilgan *et al.*, verified the dimensions of Aaker's model in a study and showed a strong positive impact of brand loyalty on brand

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<sup>6</sup> Keller (2008)

<sup>7</sup> Aaker (1991)

<sup>8</sup> Keller (1998)

<sup>9</sup> Keller (2008)

equity in the beverage industry.<sup>10</sup> The study conducted by Rios and Riquelme(2008) verified the factors of brand equity for the online companies.<sup>11</sup> The results revealed brand loyalty and brand association contributing most to brand equity amongst the online companies. Kayaman and Arasli's (2007) research brought forward empirical evidence of perceived quality rendering a compelling impact on the brand loyalty which consequently affects the brand equity in the hotel industry.<sup>12</sup>Chahal and Bala(2012) revealed in their research that perceived quality and brand loyalty are the main contributors to the brand equity in the health sector.<sup>13</sup>

### **1.2 Problem statement**

In the past several studies have been carried out to assess CBBE of brands offering various types of services.<sup>14</sup> A number of researchers have used the model proposed by Aaker (1991) to measure the impact of perceived quality, brand loyalty, brand awareness, brand association and proprietary brand assets on brand equity.<sup>15</sup> A study comparing global and local banks showed these variables making a very positive impact on the brand equity.<sup>16</sup> Another study showed that the same variables had varied brand equity in two different countries.<sup>17</sup> A study probed brand equity of the online companies based on customer service, fulfillment, functionality, brand loyalty, awareness and association and found that perceived value, trust and brand awareness made most impact on the buyer's decision making.<sup>18</sup> However, no study in the past has evaluated the impact of these variables on the brand equity of Internet Service Providing brands (ISPs) of Pakistan. This study aims to identify the main variables forming brand equity of ISPs and their significance.

### **1.2 Research objective**

To assess if brand awareness, brand association, brand loyalty and perceived quality impact customer-based brand equity of ISPs brands in Pakistan.

### **1.4 Research question**

What are the factors impacting brand equity of ISPs brands in Pakistan?

### **1.5 Scope of the study**

The study is undertaken with a view to assess the bases of CBBE of ISPs brands in Pakistan to help marketing managers gain deeper understanding of the factors affecting the overall business performance in the industry. Marketing professionals in the internet service industry, who are responsible to make direct and indirect strategies to capture bigger market share and higher profits, will find the latent factors discovered in the study immensely useful in guiding their branding decisions. The study will also serve as a manual in assessing the significance of the variables in developing brand equity, as per the Aker's model, in the service industry of Pakistan. The varying impact of the variables on the local broadband

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<sup>10</sup> Atilgan *et al.* (2005)

<sup>11</sup> Rios and Riquelme (2008)

<sup>12</sup> Kayaman and Arasli (2007)

<sup>13</sup> Chahal and Bala (2012)

<sup>14</sup> Chahal and Bala (2012); Martensen and Grønholdt (2010)

<sup>15</sup> Chahal, and Bala (2012)

<sup>16</sup> Pinar *et al.* (2012)

<sup>17</sup> Buil *et al.* (2008)

<sup>18</sup> Rios and Riquelme (2008)



brands equity will also be enormously useful in designing and managing brand equity of other brands in the services industry.

### ***1.6 Limitation of the study***

A narrow time frame is on top amongst the limitations of the study. The study has been conducted as an academic requirement of writing a thesis at the end of the MBA program. It was required to be completed and submitted within the prescribed course time. Another limitation is aggregate sample being drawn from Karachi city compare to collecting it from all over Pakistan. The third hindrance of the study was lack of financial resources to conduct the study. The researcher predominately utilized personal and free resources to design, conduct and infer the research.

## **2. Literature Review**

### ***2.1 Theoretical Background***

Brand equity is a multidimensional phenomenon that consists of two most discussed and researched types: (1) customer-based brand equity and (2) financial brand equity. Both types have been examined by businesses in pursuit of deeper analysis of the value a brand holds in the mind of a customer and on financial statements. The focus of this study is customer-based brand equity which premises that it resides in the mind of the customer who purchases a product or influences the buying decision. CBBE is formed from the personal experiences and learning of the buyer over time. Gaining deeper understanding of CBBE offers several advantages to managers who are responsible to make day-to-day decisions that directly affect marketing strategies of a brand or a product category. It enables them to stand in the customer's shoes and view the brand from their prospective. Viewing products with the customer's eyes guide managers in designing strategies and tactics of marketing programs that attract positive financial returns, as a result. Customer-based brand equity has been investigated by a number of researchers who have mainly unearthed and verified various dimension of CBBE and provided empirical findings for consideration when forming branding decisions in various industries.<sup>19</sup>

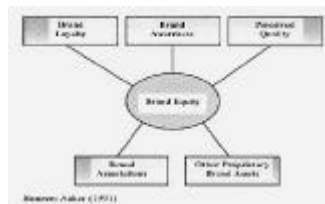
The theoretical prospective emphasizes on positive and negative elements of CBBE, where favorable customers responses to a brand is deemed positive CBBE and unfavorable responses as negative CBBE. Brands with favorable responses from customers have greater chances of being accepted by customers when extended into product lines compare to brands with low or negative brand equity. A brand positively responded by customers may also bring greater customer acceptance to an increase in price due to an upsurge in production and marketing cost. Essentially customer-based brand equity marks its presence when customers are able to recall a brand with a positive association with it. Marketers endeavor to gain a favorable consumer response which results firms achieving greater market share and profits.<sup>20</sup>

Various models have been formed to measure CBBE. This paper has chosen the model created by David A.Aaker (1991). The Aker's model is based on five dimensions namely perceived quality, brand equity, brand loyalty, brand awareness, and brand association. We briefly review these dimensions below to understand how they contribute to building brand equity of a brand.

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<sup>19</sup> Eagle and Kitchen (2000); Kimet *et al.*, (2003).; Faircloth *et al.* (2001); Washburn and Plan (2002)

<sup>20</sup> Aaker (1991)



### ***Brand loyalty***

Brand loyalty is a major component of brand equity. It is a customer's favorable behavior towards a brand which results in the customer making repeated purchase of it over the time. According to Aaker, brand loyalty defines the likelihood of a customer switching to other brands when faced with increased price or differences in features among brands.<sup>21</sup> Keller (2003) probes brand loyalty through the kind of relationship a customer has with a brand and how much they see themselves in sync with the brand. Brand loyalty contributes to lower marketing cost for firms than aiming for customers with low or non-existent brand loyalty. Similarly, the cost of retaining loyal customers is significantly less than the cost of converting new customers. Businesses find it difficult to target loyal customers of competitors who are disinclined to substitutes and alternatives.

### ***Brand Awareness***

The definition of brand awareness is the customer's capability to recognize and recall the category a brand belongs to.<sup>22</sup> It can also be called as 'a strong presence of a brand in the customer's mind'. Brand awareness is a central element of brand equity.<sup>23</sup> Brand recognition makes relatively lower contribution to brand awareness in which customers are able to identify a brand amongst many others in a particular product category. A level higher from it is brand recall which demands customers' ability to bring a brand to mind without being aided through visual elements of a brand. According to Keller, brand awareness develops three advantages for customers: (1) learning advantages, (2) considerations advantages (3) and choice advantages. He argues that brand recognition plays even more important role when buying decisions are made in a store.<sup>24</sup>

### ***Perceived Quality***

Perceived quality is defined as "the customer's perception of overall quality or superiority of product or service with respect to its intended purpose, relative to alternatives".<sup>25</sup> One of the core dimensions of CBBE, perceived quality relates to the basic purpose and effective fulfillment of the need to purchase a brand. A brand not meeting perceived quality at all can barely generate any brand equity for itself. However, the quality of a brand is subjective to the customer's perception of the quality offered. It helps customers make less risky choices when weighing their purchasing options and empowers sellers charge a higher or premium price for a brand with greater perceived quality. Moreover, suppliers, distributors and retailers benefit from perceived quality of a brand and enjoy trust of

<sup>21</sup> Aaker (1991)

<sup>22</sup> Aaker (1991); Keller (1993)

<sup>23</sup> Aaker (1991); Keller (1993)

<sup>24</sup> Keller (1993)

<sup>25</sup> Zeithaml (1988)

customers and channel partners when pursuing various brand related tasks. A brand with high perceived quality by customers enters new product categories and brand extension with a greater probability of success.

### ***Brand Association***

Brand association is another important factor of brand equity.<sup>26</sup> Aaker describes the brand association as “anything linked in the memory to a brand”.<sup>27</sup> Brand associations help buyers perceive a brand in the light of elements attached to it. The same elements carve out the brand position in the mind of customers.<sup>28</sup> A brand offers associations in terms of product characteristics, relative price image, status and life style of users which make ownership of the brand valuable for the consumer.<sup>29</sup> All tangible and intangible characteristics of a product create brand associations for it. A brand’s name, slogan, promise, price and taglines are associations of a brand that customers retain in their mind over the time. Brand attributes, benefits and attitudes also fall within the realm of brand association.<sup>30</sup>

Brand attributes affectively categorize a product in its related product category and create Point-of-Differentiation (PODs) and Point-of-Parity (POPs) for customers. Brand benefits facilitate customers in perceiving the personal value they derive from the brand. Marketers thoughtfully design communication of brands to position products most favorably amongst competing brands. Brands with strong and unique associations stand unassailable in the face of increasing competition in the market.<sup>31</sup> According to Aaker (1999), brand associations bring about these five benefits: (1) causing positive attitudes and feelings (2) creating a reason to buy (3) aiding to process/retrieve information (4) furnishing a basis for extension and (5) giving the brand a differentiating identity. Brand personality is the result of elements attached to a brand that help customer personify the brand.

The theoretical review elucidates how the four dimensions: brand awareness, brand associations, perceived quality and brand loyalty are deemed as the main components of brand equity. The review shows that the theorists strongly emphasize on high loyalty of a brand, presence of brand awareness, perceived quality of brands and brand association in order to build high brand equity. The same establishes theoretically that these four components play major roles in building brand equity for a brand which subsequently results in customers buying a brand repeatedly.

### ***2.2 Empirical Studies***

Eagle *et al.*, (2003) carried out a study to find evidence of parallel importing and its effects on values and brand equity. For sample data, 15 brand owners were interviewed which revealed the parallel import activity had the potential to impact brand equity negatively. The result of the study remained unclear if the parallel importing had a negative or positive impact on brand equity.

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<sup>26</sup> Creswell (1994)

<sup>27</sup> Aaker (1991)

<sup>28</sup> Aaker (1991)

<sup>29</sup> Aaker (1991)

<sup>30</sup> Dickson (1994); Keller (1993); Keller (1998)

<sup>31</sup> Keller (2008)

Pappu *et al.*, (2005) conducted a research to enhance the measurement of consumer based brand equity. The sample size for the study was 539 complete questionnaires on six brands which were acquired to run statistical analysis. Structure Equation Model and confirmatory factor analysis were used to draw conclusion on the variables: brand loyalty, brand association, perceived quality, and brand awareness. The results of factor analysis confirmed the fourth dimensional model of brand equity. It provided empirical evidence of various elements of customer based brand equity. The study suggests including to further assess brand awareness and use continuous scale to measure brand equity to gain more unbiased data.

Ballester and Aleman (2005) took up a research study to analyze the contribution level of brand trust in the formation of brand equity. Through the use of phone calls, 271 questionnaires were filled out on two product categories, shampoo and beer. Structure Equation Model was used to measure variables: Consumer satisfaction, trust and brand loyalty. The statistical results show brand equity has great dependence on brand loyalty which is driven from brand trust. Implication of the study includes companies building brand trust through consistent positive experience of customers with products. The study's implications are to build trust in brand through fulfilling the promise it can deliver. Also, companies should work on making customers' experience satisfactory and pleasant to aim at building trust thus brand equity.

Na and Marhsall (2005) conducted a research study to explore the cyber brand equity. The data sample was collected from 200 students. The collected data was put through reliability and validity tests before applying regression analysis. The variables used in the study were overall design and layout, familiarity, interactivity and availability, ease of navigation, web interface, information comprehensiveness, privacy protection, sociability, user friendliness, enjoyment, richness of information, strategic alliance with other sources (URL links), availability, organization of site, convenience and website character. The results confirm the offline brand equity being effective in assessing online brand equity. The study finds out that the same model of brand equity, instrumental for off-line products, is applicable and effective for online products.

Gil *et al.*, (2007) examined the role family plays along with the firm in building brand equity. Sample test consisted of 360 questionnaires filled out by young adults in Spain aged between 18 and 35. The study included variables: family, brand awareness, perceived quality, brand equity and brand association, which were tested through the collected samples using structure equation model. The results prove a strong influence of family on the brand equity of person compare to a customer developing perception about a brand through price, advertising and promotion. The managerial implication of the study suggests companies to pay attention to the family influence on buying decisions and emphasizing on family experience with the brand when communicating to the target market.

Bravo *et al.*, (2007), set out to examine various effects of family influences on young customer based brand equity. To get insights, 30 structured interviews were conducted of adults aged between 18 and 35. The data collected from interviewees was transcribed into codes according to the brand equity properties: brand awareness, brand associations, perceived quality and brand loyalty. The gathered data showed that young buyers have a higher tendency to gather information of brands when stop living with their parents. Brand associations of young buyers developed with certain attributes remembered by the family. Perceived quality appears to be the result of family recommendations and personal experience

for young buyers. Brand loyalty in young buyers was observed for avoiding risk and due to some positive associations developed while living with the family. The study gives deeper insights on the intergenerational forces that build brand equity thus places managers on higher grounds to exploit the forces in building strong brand equity.

Yasin *et al.*, (2007) carried out a study to unearth the influences of a brand's country-of-origin image on the development of brand equity. The study was conducted using 501 mail questionnaires filled out by home appliance users. Exploratory factor analysis and regression analysis were used to group items under each variable accordingly and explore the influence of variables on brand equity respectively. Brand awareness, Brand distinctiveness and brand loyalty were tested against the image of the country a brand was based out. All three variables were statistically significant on measuring impact of the country of origin on them. The study suggested that producers of household electrical appliances should devote more efforts towards brand loyalty than any other dimension of brand equity. It also suggested the producers must promote good image of the country of the origin of the product to build good brand image of their products.

Kayaman and Arasli (2007) conducted a research to assess the interrelations of four customer-based brand equity elements: perceived quality, brand image, brand awareness and brand loyalty in the hotel industry. The study sample was derived from 345 questionnaires filled out by the customers who stayed in five-star hotels in north Cyprus. Exploratory factor analysis, Correlation and Structure Equation Model were applied to test 45 variables of the main factors of brand equity: brand awareness, brand image, perceived quality and brand loyalty. The results consisted with the previous findings, brand awareness not having major impact on brand equity in the hotel industry. The other three dimensions were found to have direct and indirect major contribution to brand equity. The implications of the study include managers to work on brand loyalty to encourage repeat business from customers, besides applying this study's model to build brand equity without incurring prohibitive cost.

Anselmsson *et al.*, (2007) probed to develop a model that defines drivers for price premium for grocery items and customer-based brand equity. The sample size was derived through 150 interviews on the phone. The collected data showed a significant impact of uniqueness of a product for receiving premium price for it. The results confirmed the importance of uniqueness along with the four traditional variables of brand equity: Brand Loyalty, Brand Awareness, Perceived Quality and Brand Association for grocery products. The managerial implication of the study is to strike a balance between the five variables of brand equity and the price of brand to gain profit and prominence on a long term basis.

Rios and Riquelme (2008) researched to find out if conventional approach to brand equity was applicable to web-based companies. The data was collected through 795 cases of self-administered questionnaires from the university students. Structural Equation Model was used to ascertain influence of perceived value, trust, brand loyalty and brand value on brand equity of online companies and positive relationships amongst the variables. The statistical results show that brand awareness, trust do not contribute to brand equity of online companies. However, perceived value, brand association and brand loyalty proved to be the drivers of online brand equity. The implications of the study includes creating value for your customers in comparison with online competitors and building trust to again brand loyalty thus brand equity. The study also indicates that loyalty and perceived value rank highest amongst the factors of brand equity for online companies.

Kolyesnikova *et al.*, (2008) carried out a research to explore how brand equity plays a part in brand surviving in the wine industry. It mainly investigated the impact of two critical contributors: perceived quality and brand awareness on brand survival. The sample data of 928 responses was collected through a survey for perceived quality, brand image and through a longitudinal study for brand survival. Regression analysis was run to test the variables along with 27 brands. The results showed a statistically significant effect of perceived quality and brand recognition on brand equity. The study concludes that branding being a central aspect of wine industry and brand awareness being a bigger contributing factor than perceived quality for a wine brand to survive.

Pappu and Quester (2008) carried out a research to determine the difference in brand equity between department stores and specialty clothing stores. A data sample of 422 surveys was collected from a reasonably crowded shopping mall in Australia. MANOVA test was used to explore brand equity differences using variables: retailer perceived quality, retailer loyalty, retailer awareness and retailer associations. The results indicate a significant difference in the brand equity of department stores and specialty clothing stores. The study suggests marketing managers to invest in elements attributed to brand building for long term brand equity of retail stores. It also verifies for them the advertising results in building brand equity for department and clothing stores.

Wang *et al.*, (2008) researched the structural relationship between Corporate Ability Association (CAA) and customer-based brand equity and market outcomes of its products. The sample data was obtained through 735 surveys from consumers on seven brands of different companies. The variables included in the study were CAA, quality perception, repurchase intention, brand resonance, price flexibility and brand extensibility. Factor analysis and structure equation model tests were used to explore the statistical results. The results showed that customer-based brand equity is based on CAA, brand perception, brand awareness and brand resonance. The study suggests managers to endeavor to manage all associations of the brand to ensure stable brand loyalty and profit.

Martensen and Grønholdt (2010) conducted a research to furnish an empirical evidence of the brand equity model and to demonstrate how model is applicable to a bank based out of Denmark. The research data was collected through 350 internet interviews and 300 telephone interviews consisting of four brands: DanskeBank, RealkreditDanmark, Nokia and Sony. The paper carried out analysis on 351 internet interviews of retail customers of Danske Bank. Structural Equation Modeling was used to draw the statistical analysis from the researched data. The study included variables: price, fulfillment of promise, service quality, differentiation, product quality, and trust. The estimated model shows emotional and rational relationship with customer brand equity. The results indicate the choice of a bank is dominant by rational thinking compare to other services and products. The managerial implications of the study include measuring brand performance with the applied model and using similar questions to measure brand equity of brands in the same or in other industries.

Sinapuelas and Sisodiya (2010) undertook a research to learn the effects of introducing line extension on the brand equity of parent brands. The sample data included 30 categories of supermarket packaged goods. Regression analysis was used to test four variables: number of line extension introductions, innovations and solo advertising. The results showed that these three variables had a positive significant impact on parents brand equity. High quality brands benefit more from product line innovations and low quality brands benefit more from solo advertising of the brand. The study suggests brand managers to

leverage business through innovative brand extension for the brand that has high brand equity. It also recommends managers to gain higher brand equity by advertising for the whole brand family than a solo product.

Pike *et al.*, (2010) scrutinized if the model of consumer-based brand equity was useful for a country destination. The sample size was 3000 students and faculty members from Chile's Adolpho Ibanez University School of Business. First confirmatory factor analysis and then regression analysis were run on the collected data on the four variables: brand equity, brand salience, brand image and brand loyalty. The factor analysis validated fitness of the data. The statistical results showed strong contribution of brand salience and brand image on the brand equity of Australia while brand loyalty showed a weak relationship with the brand equity. The study reveals a high scale of brand awareness and suggests NTO to use "call of action" than image building in the advertisement of Australia as a tourist destination.

Thiripurasundari and Natarajan (2011) undertook a research to describe a model to determine brand equity in Indian car industry. Total of 200 respondents, 144 of them male and 56 females, were administered questionnaires. Correlation test was used to determine relationships within the variables: brand knowledge, brand application, brand relationship, brand preference and brand loyalty. It showed a significant relationship. Regression test was used to ascertain the variation of brand equity by the variables used in the study. The results drawn from the research indicate a strong dependence of brand equity on brand loyalty and preference. It suggests companies to assess the degree of customer brand dependence and the factors that help in building brand equity through brand loyalty and customer satisfaction.

Mouradet *et al.*, (2011) carried out a research studies to raise academic comprehension of brand equity in education. A sample data of 420 responses was collected from school and university students in Egypt. For statistical analysis, Regression analysis model was applied to gauge the impact of price, staff image, perceived service quality, international relation, word of mouth, promotion, social image, history, and location on brand equity. The collected data showed a high degree of reliability, and statistically proved that image of brand is the main driver of brand equity in education. The study guides marketing managers to check elements like meeting customers' demands, reliability, consistency, price, position to understand prevalent perception of the product in the market. Managers must realize how brand equity insulates businesses from risks and how brand image is more important than mere brand awareness.

Chahal and Bala (2012) carried out a study to examine main components of service brand equity. It was aimed to determine relationship among the components and their relationship with the service brand equity. Around 300 questionnaires were served to respondents. The collected data was run through reliability and validity tests. Correlation analysis revealed insignificant relationship of brand image with brand equity while perceived quality and brand loyalty significantly related to each other. Next, three step regression model was used to further assess the impact of these variables on brand equity. Independently, brand image had significant influence on brand equity. However, brand image showed a significant impact on brand loyalty. The step three of the model indicated a strong collective influence of brand loyalty and brand image on brand equity. The study concludes a positive impact of brand loyalty and perceived quality on service brand equity. Implication of the research is enhancement of brand loyalty leads to building brand image of the service provides which results in building brand equity.

Moradi and Zarei (2012) examined to determine the impact of country of brand (COB) and the country of manufacture (COM) on the brand equity. The sample size was drawn from 700 university students who had laptops and mobile phones. The collected data was tested for reliability and validity. The two main variables: COB and COM were tested by Structure Equation Modeling to evaluate their effect on overall brand equity and the properties, perceived quality, brand loyalty and brand association/awareness. The statistical results show positive influence of these three dimensions on brand equity and positive and significant influence of brand country's image on perceived quality and brand awareness. Consumers showed greater preference of products produced in the brand country with positive image than countries where brands is only produced.

Sanyal and Datta, (2012) undertook a study to probe how the image of country of origin (COO) affect brand equity of branded generic products. A questionnaire consisting of 21 statements was used to collect sample data from 200 respondents. Factor analysis was applied separately on each of the three variables: brand equity, brand equity components and country of origin image. The variable, image of country of origin and the components of brand equity were regressed against brand equity. The statistical results of the study prove that brand awareness and the image of country of origin have the major contribution to brand equity of branded generic drugs. The implication of the study is having a positive impact of the COO on the brand equity of drugs. Brand awareness and the COO positively relate with each other.

Pinar *et al.*, (2012) conducted a research to determine consumer based brand equity dimensions between local private, government and global banks. A sample size of 607 was derived from interviews of banks' customers. After verifying the reliability of the data, Anova F-Test was used to explore impact of brand association, perceived quality and organizational association on the brand equity of banks. The statistical results showed overall brand equity being higher for private banks than state and foreign banks. Similarly, private banks appeared higher on the three brand equity variables than state and foreign banks. The research recommends state owned banks to probe reasons for groups aware of the banks not converting into customers. The foreign banks were suggested to create first "top of the mind" (TOM) awareness before aiming to convert aware group to users.

Ahmad and Butt (2012) performed a research study to test brand equity based on a new dimension, after sales service. The sample data was collected through 250 questionnaires for the three most sold car brands, Honda, Toyota and Suzuki, in Pakistan. Five variables: brand awareness, brand loyalty, perceived quality, after sales service and brand association were tested using AMOS. The statistical results further proved that the five mentioned variables play an important role in the car industry in Pakistan. The study identifies after sales service as an important variable for brand equity of manufacturing industries. The managers at hybrid firms must pay due attention to this factor in pursuing brand equity.

Cuneo *et al.*, (2012) carried out a study to determine if Private Label Brands (PLB) show brand equity while they are developing. The sample data of 128939 purchases was obtained from consumer panel purchases of four yoghurts brands in Spain. Multi Logit Model was applied on four independent variables: component of brand equity for brand, unit price paid for the brand by the consumer at the time, brand loyalty, gross rating point invested by brand in moment and utility delivered by brand to consumer to evaluate brand equity of the private label brand (PBL). The results showed high variability of brand equity in different PBLs across various product lines. The study calls attention of manufactures and retailers to



the findings that PBL brands have brand equity and the importance of building and managing each brand individually than considering all PBLs as one single category.

Das *et al.*, (2012) investigated to determine how brand personality affect the consumer based retailer brand equity. The sample data was gathered with the help of 355 questionnaires administered in Kolkata, India. Factor analysis, regression analysis and structure equation modeling were used to test four driving variables: retailer loyalty, and retailer perceived quality, retailer association and retailer awareness against retailer personality dimensions: sophistication, empathy, dependability, authenticity and vibrancy. The results showed three personality dimensions: sophistication, empathy and authenticity impacting negatively all variables of consumer based equity. All other influences appear non-significant. The research suggests stores to measure brand equity of their stores by assessing its brand personality.

### **3. Methodology**

#### **3.1 Research Approach**

The quantitative research approach has been used in this study. Researchers explain it as "the collection of numerical data in order to explain, predict and/or control phenomena of interest."<sup>32</sup> Alternatively, it is "an inquiry into a social or human problem based on testing a theory composed of variables, measured with numbers, and analyzed with statistical procedures, in order to determine whether the predictive generalizations of the theory hold true."<sup>33</sup> A quantitative research is based on surveys that are used to conduct cross sectional and longitudinal studies to collect data from a sample population. Quantitative research method offers researchers to test a social phenomenon by acquiring data in a mathematical form and then applying statistical tools to draw conclusions in favor of or against the phenomenon.

#### **3.2 Research Purpose**

The intent of the research is explanatory in nature. The purpose of this survey-based study is to test brand equity theory from the customer's prospective and determine the most important factors. An explanatory research is conducted to gain useful insights of a problem or phenomenon by identifying the cause and effect relationship between variables and their scope. The explanatory research is a research style that attempts to comprehend the underlying mechanism and nature of relationship between two or more variables.<sup>34</sup>

#### **3.3 Research Design**

The research design of the study is correlational to ascertain the relationship between dependent and independent variables and the intensity and direction of the relationship.

#### **3.4 Data Source**

The data used for the research is primary in nature. The respondents were contacted through by email and in person and served questionnaires.

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<sup>32</sup>Gay (1999)

<sup>33</sup>Creswell (1994)

<sup>34</sup>Kumar (2005)

### ***3.5 Target Population***

The target population of this research is confined to Karachi, Pakistan. It includes males and females aged 20 and above.

### ***3.6 Sample Size***

A total of 280 questionnaires were served to students and professionals. Out of those, 267 filled out questionnaires were collected back from the respondents. After a close scrutiny of filled out questionnaires for completion and accuracy of responses, 251 questionnaires were selected as the final sample size for further analyses.

### ***3.7 Data Collection***

The research being quantitative, a structured data collection instrument, a questionnaire based on Likert scale was used to collect the data sample. Likert scale is a type of surveys to gather responses in ranking Likert scale measures the strength and direction of responses.<sup>35</sup> Respondents record their responses in a degree of best to worst or highest to lowest, or inversely, by selecting given intensity levels for each statement on the survey.<sup>36</sup> It is a useful technique to collect and infer responses for satisfaction, experience and preference of certain offering. The data collection instrument used in this study was adapted to the Aaker's model from the past empirical studies; brand equity(Sanyal and Datta, 2011), brand loyalty(Yasin at et.,2007), brand awareness(Yoo et al., 2000), perceived quality(Buil, 2008) and brand association(Yasin at et.,2007). The Likert scale questionnaire comprised of 25 questions and rankings corresponding to: 1=Strongly agree, 2=Agree, 3= Neutral, 4=Disagree, 5=Strongly disagree.

### ***3.8 Sample Technique***

The non-probability or convenience sampling technique is applied for the study. According to businessdictionary.com, convenience sampling is a sample collection method to draw responses based on volunteering responses or convenience of selecting units for researchers.<sup>37</sup> It enables researchers to select respondents based on the ease of the collecting data compare to selecting most suitable subjects or collecting data from all segments of the population evenly in other sampling techniques.

### ***3.9 Statistical Technique***

This study has primarily used two statistical techniques: Factor analysis and Regression analysis. Factor analysis is a statistical technique to discover latent relationships amongst the observed variables.<sup>38</sup> This statistical technique helps simplifying a data set containing various factors by reducing them to a smaller number of underlying or unobserved factors<sup>39</sup>. Underlying factors are not visible; rather they exist latently and contribute to behaviors of variables being investigated. A simpler explanation of Factor Analysis is: it helps to determine immeasurable factors that influence measurable factors.<sup>40</sup>

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<sup>35</sup> Donald H (2009)

<sup>36</sup> Donald H (2009)

<sup>37</sup> Gravetter (2011)

<sup>38</sup> Tucker and McCallum (1993)

<sup>39</sup> GORSUCH (1983)

<sup>40</sup> Hair (2007)

Regression analysis primarily helps to develop a predictive or explanatory model between dependent and independent variables<sup>41</sup>. In regression analysis a mathematical model is developed describing behavior of a variable being influenced by one or multiple variables. Often dependent variables are denoted with Y and independent variables are denoted with X.<sup>42</sup> The most common modeling quantifies the strength of linear relationship between dependent and independent variables in a model. An essential assumption of regression analysis is the variance of dependent variables is being unaffected by a change in a dependent variable.<sup>43</sup> This statistical technique is widely used for quantitative studies and helps determine influencing factors called regressor and their intensity on the dependent variable, subject of a research.

### 3.10 Research Model Hypothesis

H01: Brand loyalty has an insignificant impact on brand equity.

H02: Perceived quality has an insignificant impact on brand equity.

H03: Brand awareness has an insignificant impact on brand equity.

H04: Brand association has an insignificant impact on brand equity.

### 3.11 Research Model

$$BE = a_0 + \beta_1 (BL) + \beta_2 (BA) + \beta_3 (PQ) + \beta_4 (BS) + e$$

Where BE denotes Brand Equity, BL represents Brand Loyalty, BA stands for Brand Awareness, PQ indicates Perceived Quality and BS refers to Brand Associations.

### 3.12 Variable Description

**3.12.1:** Brand Equity is the value customers place on a brand compare to its equivalent.

**3.12.2:** Brand Loyalty is customers' preference for a brand which results in repeated purchase.

**3.12.3:** Perceived Quality is the perceived value from a product that fulfills customers' expectations.

**3.12.4:** Brand Awareness is customers' ability to recall and recognize a brand.

**3.12.5:** Brand Associations are the attributes and benefits attached to a brand known to customers.

## 4. Data Analysis

This section outlines data analysis over the sample size of variables mentioned above. For all statistical analysis and results SPSS, a data analyses package, was used. The data collected from the respondents were sorted out, aligned and tabulated for further analysis.

### 4.1 Demographics

The sample of 251 respondents consisted of 82% and 18% (approx.) males and females respectively. The largest segment was of aged 20-30 and the smallest was of aged 41-50. The most prevalent last academic credential amongst the respondents was master's degree followed by the bachelor's degree. The respondents who held a bachelor's and master's degree constituted 82.4% of the sample population. The respondents were qualified by inquiring about the internet service they had subscribed and if they aged 20 and above.

<sup>41</sup>Lavineet *et al.*, (2006)

<sup>42</sup> Rawlings *et al.* (1998)

<sup>43</sup> Rawlings *et al.* (1998)

Table 4.1

Demographic Profiles of Respondents			
Demographic Profile	Description	No. of Respondents	%
Gender	Male	207	82.47%
	Female	44	17.53%
Education	Matriculation	3	1.20%
	High School	1	0.40%
	ACCA	1	0.40%
	Diploma	1	0.40%
	Intermediate	31	12.35%
	Bachelors	92	36.65%
	Masters	114	45.42%
	M.Phil.	6	2.39%
Age	Ph.D.	2	0.80%
	20-30	212	84.46%
	31-40	30	11.95%
	41-50	9	3.59%

#### 4.2 Reliability

The reliability test determines the internal consistency of the data collected through a questionnaire. The questionnaire of the study consisted of 25 questions, including dependent and independent variables. The test applied in SPSS, table 4.2.1, shows Alpha 0.856, which satisfies the prescribed criteria Alpha 0.50.<sup>44</sup> The obtained Alpha 0.856, translates to 85.6%, qualifies the reliability of the data for further statistical analyses.

Table 4.2.1

Reliability Statistics	
Cronbach's Alpha	N of Items
.856	20

Table 4.2.2

Reliability Statistics		
Variables	N of Items	Cronbach's Alpha
Brand Equity	4	.763
Brand Loyalty	4	.576
Brand Awareness	5	.816
Perceived Quality	4	.866
Brand Association	3	.776
Overall	20	0.856

<sup>44</sup>Beardon *et al.*, (1991).

The table 4.2.2 outlines the number of items in each variable and its Alpha value. Brand awareness and perceived quality have the highest alpha values, .816 and .866 respectively. Brand association and brand equity have approximately same Alpha values, .776 and .763 respectively. Brand loyalty shows lowest Alpha value, .576 amongst all variables.

#### 4.3 Factor Analysis

The requirements of Kaiser-Meyer-Olkin(KMO) and Bartlett's tests for factor analysis were matched by acquiring satisfactory statistical results. The KMO test indicates the adequacy of the data. The KMO variance is 0.77 i.e. 77.1% which is well above the minimum recommendation, 0.50 i.e. 50%. The Bartlett's test assesses if the variables are related to establish availability of a structure between variables. The significance of the Bartlett, 0.00 is < 0.05, which indicates the data being suitable for factor analysis.

Initially five factors, questions, were included for the dependent variables and for each independent variable. The factors loadings representing weak loadings, Brand Equity 3, Brand Loyalty 3, Perceived Quality 5, Brand Association 4 and 5 were subsequently removed from the final factor loadings. Factors loadings in the table 4.3.2 are reordered after the exclusion.

**Table 4.3.1**  
**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.771
Bartlett's Test of Sphericity    Approx. Chi-Square	866.675
df	190
Sig.	.000

**Table 4.3.2**

Rotated Component Matrix					
	Component				
	Brand Equity	Brand Loyalty	Brand Association	Perceived Quality	Brand Awareness
Brand Awareness1	0.748				
Brand Awareness2	0.605				
Brand Awareness3	0.756				
Brand Awareness4	0.748				
Brand Awareness5	0.755				

Perceived Quality1		0.9			
Perceived Quality2		0.809			
Perceived Quality3		0.82			
Perceived Quality4		0.82			
Brand Equity1			0.701		
Brand Equity2			0.74		
Brand Equity4			0.72		
Brand Equity4			0.812		
Brand Loyalty1				0.717	
Brand Loyalty2				0.56	
Brand Loyalty3				0.7	
Brand Loyalty4				0.656	
Brand Association1					0.632
Brand Association2					0.821
Brand Association3					0.574

The rotated component matrix table presents the factors loading of a dependent variable and four independent variables. First, an independent variable, brand awareness has five items and the factor loadings between .60 and .75. Second, an independent variable, perceived quality, has four items and show factor loadings between .80 and .90. Third, the dependent variable, brand equity has four items and the factor loadings between .70 and .81. Fourth, an independent variable, brand loyalty has four items with factor loadings between .56 and .71. Last one, an independent variable, brand association, has three items and has factor loadings between .574 and .821.

**4.3 Regression Analysis**  
**Regression Coefficient (Brand Equity)**  
**Table 4.3.1**

Model	B	t	P	VIF
(Constant)	.903	3.893	.000	
Brand Loyalty	.252	3.618	.000	1.133
Brand Awareness	.170	1.962	.051	1.535
Perceived Quality	.152	2.095	.037	1.355
Brand Association	.031	.411	.681	1.420
<b>Adjusted R Square = 0.144</b>		<b>Sig. = 0.000</b>	<b>F-Statistics = 11.504</b>	

The table 4.3.1 hosts Beta, T-Statistics, P and VIF values from the regression analysis applied. The Beta,  $\beta$  values determine the strength and the nature of the relationship between independent and dependent variables. A positive relationship is assumed from a positive beta value and a negative value establishes a negative impact of independent variables on dependent variables. The t values in the table correspond to variables in the model and show their importance while the P values indicate the significance level of the contribution of the variables to the model. The VIF values help determine multi collinearity among independent variables. A VIF value 10 and above of a variable shows too high collinearity and suggests consolidating them with the corresponding high value VIF variables. The F-Statistics evaluates the overall significance of the model compare to P value of 't' that explains the significance of each variable. Adjusted R Square explains the variation of a dependent variable explained by independent variables.

The regression values in table 4.3.1 above show the independent variables Brand Loyalty, Brand Awareness, Perceived Quality and Brand Association making a positive contribution to the model. The  $\beta$  values determine the regression equation: Brand Equity =  $.252(\text{Brand Loyalty}) + .170(\text{Brand Awareness}) + .152(\text{Perceived Quality}) + 0.031(\text{Brand Association})$ . The largest  $\beta$  value of Brand Loyalty in the model demonstrates its highest contribution towards building Brand Equity. Brand Loyalty is followed by Brand Awareness,  $\beta$  value, .170 and Perceived Quality,  $\beta$  value, .152 showing the significance level of influence they have on Brand Equity.

The P values of three independent variables: Brand Loyalty, Brand Awareness and Perceived Quality significant,  $< 0.05$ , establish their significant impact on building Brand Equity. However, Brand Association remains insignificant with the P value,  $> 0.05$ . The VIF

of all four variables is  $< 10$ , which constitutes grounds for the variables being independent of each other, and in case of a change in a variable, will not cause any change in the other variables. The F-Statistics value of the model is significant. The  $R^2 = 0.144$  is the percent of variation i.e. 14.4% explained by the model. The model explains only 14.4% of variation in Brand Equity by the independent variables. However a low R Square value is common in cross sectional studies as in this study.

## 5. Conclusion

The purpose of this study was to determine the components that form brand equity amongst ISP subscribers in Pakistan. For this, the Aaker's brand equity model was selected and a set of questions was adapted from previous empirical studies to design a Likert scale questionnaire and collect responses from a sample size of 251 from Karachi, Pakistan. The study model consisted of five variables: Customer-Based Brand Equity as the dependent variable and Brand Loyalty, Brand Awareness, Perceived Quality, Brand Association as the independent variables.

The collected sample size was then run through relevant statistical analyses. First, the reliability test was applied to measure the consistency of the responses. Next, factor analysis was run on the data. The KMO value was satisfactory for the adequacy of the sample size. The Rotated Components Matrix showed substantially high loadings of correlation among items in each factor to form factors. Finally, the multiple linear regression analysis was applied to assess the influencing impact of independent variables on the dependent variables. The statistical results show that brand loyalty has a significant positive impact on brand equity as previously established by Chahal and Bala (2012). Brand awareness also emerges positively significant factor on the brand equity of ISPs brands validating findings of Sanyal and Datta, (2012). Perceived quality, with a low significance level, stands statistically significant in the results, which is consistent with the findings of Anselmsson *et al.*, of perceived quality (2007).

The insignificant statistical impact of brand association highlights the poor image, benefits and attributes of brands that directly add to negative insignificant Brand Association.<sup>45</sup> However, the insignificant brand association is in line with the results obtained by Atilgan *et al.*, (2005). The overall variation of the model explained by the R Square is relatively lower which indicates that other variables, not included in this study, may explain a higher level of variation.

From the results above, it's concluded that brand loyalty, brand awareness and perceived quality play a significant and brand association a negligible role in building the brand equity for ISPs brands in Pakistan. The statistical results infer brand loyalty being the main determinant of brand equity followed by the brand awareness in the internet service providers market in Pakistan. Weighing heavily on the brand equity model, these two factors provide a much needed prospective to marketers invariably seeking the triggers that add a value to a brand for customers thus for the service providers.

### 5.1 Recommendations

After exploring the determining factors of the Brand Equity in the internet service providers industry of Pakistan, a number of recommendations are deemed actionable for the

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<sup>45</sup> Ferrell and Hartline (2010)




decision makers in the industry. As brand loyalty and brand awareness weighed significantly in building the brand equity, it's strongly recommended that the ISPs in the country formulate services and marketing strategies that add value to these two factors specifically. Kayaman and Arasli (2007); Yasin *et al.*, (2007) recommended focusing on Brand Loyalty to encourage repeat purchase and as the main factor to building brand equity. The recommendations to build and increase the brand equity also include:

- ? Initiate and make the brand loyalty programs essential to marketing programs Chahal and Bala (2012).
- ? Increase brand awareness in the market to gain higher brand equity.
- ? Allocate most part of advertisements to Brand Loyalty and Brand Awareness programs as Pappu and Quester (2008) found advertising plays a significant role in building brand equity.
- ? Establish more face-to-face contacts with the subscribers to win their unwavering patronage.
- ? Create differentiation elements of ISPs brands to leverage higher brand loyalty, as
- ? Wang *et al.*, (2008) recommended managing Brand Associations to build Brand Loyalty.

While the main focus of marketing managers should remain on building brand loyalty and brand awareness, they should not exclude perceived quality from their measures to building brand equity as Anselmsson *et al.*, (2007) recommended for a balanced approach towards brand equity variables.

## 5.2 Future Recommendations

Taking into account the results explained above, a number of areas have been identified that need attention from researchers before setting out for future studies.

- ? As the results of regression analysis of this study show low variation of brand equity defined by the independent variables, it's recommended that future researchers include other variables in the model to gain higher total variation and determine which other factors may play a significant role in building brand equity of ISPs and other service industries of Pakistan.
- ? This study was carried out on the sample size collected from Karachi only. Future researchers should aim for a more balanced data sampling techniques such as Quota Sampling from all major cities of Pakistan.
- ? Future studies should also carry out cross-industry studies to find other factors that play a significant role in building brand equity in the overall services industry of Pakistan.
- ? While the qualification criterion for the respondents of this study was 'having an internet connection' and being 'minimum 20 years old', future researchers may collect samples from younger respondents as the rampant use of internet on mobile phones and in educational institutes makes the internet subscribers below 20 years suitable respondents in determining the brand equity components of ISPs. 

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Table 4.1			
Demographic Profile	Description	No. of Respondents	%
<b>Gender</b>	Male	207	82.47%
	Female	44	17.53%
<b>Education</b>	Metriculation	3	1.20%
	Metriculation	1	0.40%
	ACCA	1	0.40%
	Diploma	1	0.40%
	Intermediate	31	12.35%
	Bachelors	92	36.65%
	Masters	114	45.42%
	Mphil.	6	2.39%
	Ph.D	2	0.80%
<b>Age</b>	20-30	212	84.46%
	31-40	30	11.95%
	41-50	9	3.59%
		251	

Table 4.2.1	
Reliability Statistics	
Cronbach's Alpha	N of Items
0.856	20

Table 4.2.2		
Reliability Statistics		
Variables	N of Items	Cronbach's Alpha
Brand Equity	4	0.763
Brand Loyalty	4	0.576
Brand Awareness	5	0.816
Perceived Quality	4	0.866
Brand Association	3	0.776
Overall	20	0.856

Table 4.3.1		
KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		<b>0.771</b>
Bartlett's Test of Sphericity	Approx. Chi-Square	866.675
	df	190
	Sig.	0.000

Regression Coefficient (Brand Equity)				
Table 4.3.1				
Model	B	t	P	VIF
(Constant)	0.903	3.893	0	
Brand Loyalty	0.252	3.618	0	1.133
Brand Awareness	0.17	1.962	0.051	1.535
Perceived Quality	0.152	2.095	0.037	1.355
Brand Association	0.031	0.411	0.681	1.42
Adjusted R Square = 0.144		Sig. = 0.000	F-Statistics = 11.504	

**ARTICLE****STRATEGIC MANAGEMENT RESEARCH: THE MISSING LINCHPIN IN DEVELOPING ECONOMY'S CONTEXT**

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Université de Bordeaux, France***Abstract**

*Research is conducted to identify impact of adopting Strategic HRM on HR outcomes (i.e. job satisfaction and organizational commitment) and performance measures (i.e. organizational and, individual performance) in order to fill empirical gap in developing economy's context. Cased based survey approach has been adopted to retrieve the evidence from companies. Three organizations are studied in depth to identify the evidence about strategic role of HRM. Objectivism has been adopted to test ontological assumption whereas positivism has been incorporated to test the epistemological assumption to prove the nature of reality about Strategic HRM. Results depict that effective Strategic HRM adoption can help companies to enhance the work attitudes' of staff along with company's performance. Study has extended universal perspective of Strategic HRM. Study accepts that HR paradigm is shifting in to prove HR as strategic business partner in developing economies. Results reveal that Strategic HRM is positively associated with HR outcomes and performance measures and varies between companies of different sizes. Practitioners are encouraged to adopt Strategic HRM with the trust that company's performance will be improved by addressing the HR outcomes. Thus companies that align HR function and practices perform better and produce satisfied and committed employees for enhanced individual and organizational performance in developing economies like Pakistan.*

**Keywords:** Strategic human resource management, job satisfaction, organizational commitment, individual performance and organizational performance

**Introduction**

Dramatic transform in the field of human resource management (HRM) in last few decades (Delery and Doty, 1996), has also shifted the trend of HRM research in developing economies like Pakistan to rethink about HR theories and models (Khilji & Wang, 2006). However the recent HR studies (Saleem & Khurshid, 2014; Saleem & Saleem, 2014) in these economies tried to present that the same HR trends are being adopted without contextualization. This dilemma needed to be solved. This is because in reality it will not be possible for local organizations to adopt universal HR trends in local settings without contextualization (Khilji, 2003). Many studies have shown that Strategic HRM has a positive & direct impact on organization performance. Recently, researchers have begun to scrutinize

the effect of SHRM on HR effectiveness and found that there exists negative bonding between Strategic HRM and HR (Delery, & Doty, 1996; Wright, & McMahan, 1992). In 2006, Khilji & Wang claim that performance of the organization, depends on individual performance & if individual performance is improved then it subsequently bring a positive effect on the performance of the organization, that is linked with the individual attitude at work place. Therefore it is indeed a great need to underpin paradigm shift in the field of HR while keeping in view the contextual significance of mostly undocumented economies like Pakistan to explore missing linchpin. One of such research based initiative has been taken by emerging researcher like Khilji (2003). In her article Khilji addresses the research question i.e. Do Pakistani organizations need to adopt all trends in HR of developed economies? This highlights the research gap in developing economy's context. It is also focused by scholars to reconsider national culture, nature of political and socioeconomic realities of Pakistan at macro level, while also focusing on organizational structures and employee's attitude as significant variables of research (Saini, 2006). It is also concluded in that research to fill gap between stated policies and real practices of HRM is causing employee's frustration in developing economies because HRM Model of developed economies are tested in developed economies may not be imported because of align nature of such models.

This study is prepared to address research questions including, what role SHRM plays in HR outcomes and Performance measures at individual and organizational level? More specifically SHRM relations with job satisfaction and organizational commitment (i.e. HR outcomes) and organizational and, individual performance (i.e. performance measures) using resource based view along universal perspective of SHRM has been theorized and tested.

## **2.0 Literature Review**

Roots of Strategic HRM in early nineties at US companies (Lengnick-Hall et. al, 2009). The scholars classify HRM in three categories i.e. international/universal, micro/functional and strategic/macro. The roots of this concept also emerge from labour economics (Snell, 1992). Although SHRM is considered to be emerging yet without pragmatic preview of Personal management and Human Resource Management (HRM) cannot be ignored while conceptualizing about SHRM. HRM as research field is also an outcome of human relations movement and Industrial and Labor Relations concept evolved during early twenties after emergence of scientific management by Management's father Taylor (Becker & Gerhart, 1996). Researchers further states that Initial efforts were made to recognize the Human rights in the organization by defining working hours, salary for employees instead of forced, role of unions etc. Eventually in late twenties personal management field evolved and a paradigm shifted towards HRM. Becker & Gerhart defend the concept of HR Champions, role of HR managers to replace the union leaders. This was the time, when the Organizational Behavior researchers started thinking about micro level issues of staff by discussing employee's issues related to Job satisfaction, motivation, retention etc with the integration of applied psychology and sociology in the organizational context (Wright, & McMahan, 1992). Eventually in modern economies like USA, Europe and UK, HRM established as emerging field to retain complete employees to be market leaders (Wright & Snell, 1998). Subsequently the companies with routes at developed economies extended the business in developing economies and applied HRM models in emerging markets like China, India and Pakistan (Khilji, 2003; Saini, 2006; Saleem, 2012). Khilji (2003) the most cited author in Pakistani context says that, there is a need to explore concept



of HRM reality and relevance in Pakistani context. Khilji (2003) observed that recent trends in business environment of governmental initiatives towards privatization have changed the scenario of employment trends. More recently emergence of service sector is creating big change in Pakistani business work environment. The well groomed financial institution after reforms by state bank and Government of Pakistan (Saleem & Khurshid, 2014), the growth and maturity of telecommunication business (Saleem & Saleem, 2014) in less than a decade time of early twenty first century, establishment of road infrastructure to facilitate local traveling businesses after introduction of word class services like Dawoo Pakistan are few examples that have shifted HRM trends and has challenged local status quo of 'SHAITH' Culture (Local owner like any Landlord). This new softer look of HRM has created challenges as well as opportunities for organization to develop and sustain the business in Pakistani economy not only by giving employees fundamental right to live, but also forced local organizations to give staff respect and motivation to achieve competitive advantage by adopting convergence towards latest HR trends (Shahzad et. al, 2008).

Lengnick-Hall et al. (2009) claim that organizations can find high level significance of HRM, if strategic choice is well integrated with functional choices of HRM e.g. cost leadership/reduction, quality improvement/analyser, and innovation/prospector. For example the company having innovative strategy may choose to invest in training the executives while the cost leader may hire already trained executives to focus on its primary business. Similarly a defender may hire the senior management from market leader instead of training them. Thus matching strategic choice of running business in industry with HR strategy can be called strategic HRM. Scholars have diverse views regarding SHRM. Accordingly SHRM is the strategic management of human resources at macro-level while HRM is mainly concentrated on the departmental and functional issues within organization (Becker & Gerhart, 1996). Thus main objective of SHRM can be to integrate with business strategy for better organizational performance by taking care of soft HRM issues like turnover, motivating employees and job stratification.

### 3.0 Contextualized Strategic HRM Model

Classically Strategic HRM is defined as integration between organizational strategy and human resource management practices (Snell, 1992; Wright & Snell, 1998). Alternatively theoretical foundation of Strategic HRM embarks upon the significance of human resource as significant firm's capital as financial capital (Lengnick-Hall et. al, 2009). This theoretical assumption of Strategic HRM is built upon the foundation of resource based view. This study has adopted resource based view as foundation to build the theoretical base to develop the model. Once we are agreed that the human is critical resource then it can be further assumed that critical resource can add value for enhanced firm's performance through satisfied employees. According to HRM scholars, Strategic HRM foundation can enhance HR and performance indicators of company (Wright, & McMahan, 1992; Saleem & Saleem, 2014). The theoretical framework also shows that Strategic HRM has a positive and direct impact on performance (i.e. organizational and individual performance) and HR outcome (organization commitment, job satisfaction) variables (Green, et. al, 2006; Wright & Snell, 1998). It means that SHRM is the key independent measure that ultimately helps the firm in achieving its goals strategically (Green, et al., 2001).

**Performance measures** are direct indicators of the firm's continuous survival. These performance indicators have been used classically by scholars to link HRM with firm's performance to study the causal relationship (Delery & Doty, 1996; Huselid, 1995). Firm's

performance can be measured in terms of individual and company's performance (Wright, & McMahan, 1992). Green et. al (2006) state that to compute the performance of the organization one can use actual as well as perceived measures e.g. return on asset can be used as actual measure. As for as perceived measures are concerned Performance can include factors such as efficiency, customer service, productivity of employees & their work quality (Huselid & Becker, 1996). These things are taken as essential to achieve organization performance in the sense that the higher degree of satisfaction, better customer service, high productivity & the better quality. In business world, company's performance analyzed at three levels that are their financial performance, their market performance & the performance of the shareholders (Huselid, 1995). Organization performance in this study is taken as dependent variable and one of component of performance measure. Second measure of performance measure is Individual performance (IP). IP plays influencing role in all the organizations. An important assumption is the individuals are responsible and accountable for how things are done in their respective organizations. Researchers say that organizational performance can be increased by drastic enhancement of individual performance (Snell, 1992; Green et al, 2006).

**HR Outcomes** can be measured in terms of job satisfaction and organizational commitment (Green et al, 2006; Saleem & Saleem, 2014). The idea behind measuring this performance indicator is that usually satisfied workforce is committed with firm to add real value which intern enhance the firm's performance. Organizational commitment is defined as a degree to which employee is willing to stay with company. In 1990 Allen & Meyer classified commitment into three subtypes i.e. continuance, normative and affective. Nonetheless OC it is accepted that greater the OC more will be because of SHRM. Allen & Meyer (1990) also claim that measurement of OC can be done through identifying emotional attachment of employees, commitment with assistant employees that the cost of employee leaving the organization and an employee obligation to remain in the organization. Second HR outcome used for this study is job satisfaction, which is defined as extent to which employee is happy with job as well as work context. Job satisfaction can be greater, if policies of promotion for employees is supportive in the organization. Interaction with co-workers also lead to higher job satisfaction in a way that how extremely employees are giving importance to their relationship with each other (Locke, 1969). Therefore follow research hypotheses have been developed.

HR: Adopting Strategic HRM in company affects the HR outcomes (Job Satisfaction and Organizational Commitment) and Performances Measures (individual and Organizational).

HR1: Adopting Strategic HRM in company enhances the HR outcomes

HR1a: Strategic HRM enhances organizational performance

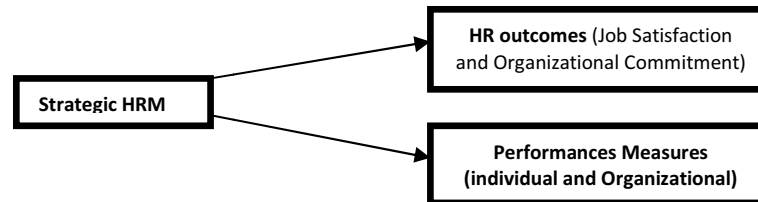
HR1b: strategic HRM motivates individual for better performance

HR2: Adopting Strategic HRM in company enhances Performances Measures in company

HR2a: Strategic HRM enhances Organizational Commitment among employees

HR2b: strategic HRM increases Job Satisfaction among employees

Figure 1: Research Model



#### 4.0 Research Strategy

The objectivism has been inducted for ontological assumption whereas positivism (i.e. statistical techniques of correlation and regression) has been adapted to test the epistemological assumption of research philosophy to prove the nature of reality about SHRM in local context. The population of the research study include two organizations. Initially five organizations were identified shown willingness and claiming to adopt SHRM. However three organizations finally participated. For this study only two organizations are chosen based on statistically significant result one organization is dropped because of statistically insignificant results.

First case study is a large company consisting of 450 management level employees is manufacturing company and deals in packing services. Individual manager, responding to the questionnaire is the subject element of the study. The sample size of 125 employees is chosen randomly from the target population to whom questionnaires were given and 91 employees filled the questionnaire which shows the response rate of 73%. Second case study is a medium company deals in textile products locally and internationally. Company has more than 800 employees and has approximately 100 managerial level employees. The sample size of all 100 employees is chosen randomly from the target population to whom questionnaires are given and 70 employees filled the questionnaire which shows the response rate of 70%.

#### 5.0 Measurement of concepts

Six-item Strategic HRM scale and Seven-item scale organizational performance is adopted from by Green et al (2001, 2006). Five-item individual performance scale is developed for this study. Nine item scale of organizational commitment scale is adopted from Mowday et al. (1979) and nineteen-item scale of job satisfaction scale is adopted from Brayfield and Rothke (1951) were incorporated in the survey. Refer to table 1, items have been revalidated. Dependent variable organizational performance (OP) seven-item scale is used and Cronbach's alpha ( $\alpha$ ) for all seven items 0.761 for case study 1 and 0.872 for case study 2, whereas Green et al. (2006) has reported 0.94 reliability for OP. Individual performance (IP) is also dependent variable.  $\alpha$  for five-item scale is 0.546 for first case and 0.815 for case study2, which is quite low for case study 1 while better for send study. However Green et al (2006) reported 0.79 for IP, thus same items are used for data analysis. For Organizational Commitment (OC), nine-item scale is used.  $\alpha$  is 0.802 and 0.815 for study 1 and 2 respectively, which is closer in values reported by Green et al, (2006) i.e. 0.88 for OC. Job satisfaction (JS) is also dependent variable.  $\alpha$  for Nineteen-item scale which for this study is 0.623 and 0.767 for two studies. Green et al (2006) reported 0.87 for JS. Thus all items are used for analysis of two studies. The only independent variable of the study is Strategic

HRM. Six-item scale  $\alpha$  value is 0.764 and 0.703, which is closer to value reported by Green et al, 2006 i.e. 0.81. Thus based on reliability analysis and all five concepts are found reliable for further analysis.

Table 1: Reliability Analysis

Concept Name	Case Study 1(n=125)	Case Study 2 (n=70)
1. Organizational Performance	(0.761,7,0)	(0.872,7,0)
2. Individual Performance	(0.546,5,0)	(0.815,5,0)
3. Organizational Commitment	(0.802,9,0)	(0.851,9,0)
4. Job Satisfaction	(0.623,19,)	(0.767,19,0)
5. Strategic HRM	(0.764,6,1)	(0.703,6,0)

Notes: (Cranach's alpha, Number of Items, Number of items removed)

### 5.0 Research Findings

On the epistemological assumption, positivism has been adopted for analysis of this study. Statistical techniques of correlation and regression and been incorporated for testing the hypotheses at two companies using SPSS 17. The data is collected from three companies. However one case study is dropped consisting of 30 managerial response of a small manufacturing company of 457 employees because none of hypothesized relationship among variables was proven to be statistically significant. However based on remaining two case studies, study scholarship implies that effective Strategic HRM adoption can help company to enhance the work attitudes' of staff along with the overall performance of the organization. Subsequent section presents quantitative evidence from selected companies. The study has extended universal perspective of Strategic HRM and thus accepts that HR paradigm is shifting to prove HR as strategic business partner.

Table 2: Correlation Analysis

Variable Name	Case Study 1 (n=125)	Case Study2 (n=70)
1. Organizational Performance	0.212*	0.371**
2. Individual Performance	0.168	0.477**
3. Organizational Commitment	0.330*	0.092
4. Job Satisfaction	0.160	0.199
5. Strategic HRM	1	1

Notes: Strategic HRM (Independent Variable)

1-4 on all four dependent variables (regressed); \*\* $p < 0.01$  \*  $p < 0.05$ ; (p-values);

**Case Study 1:** Refer to table 2, correlation matrix give answers about statistical relationship between variables under case1. A positive relationship between Strategic HRM and Organizational Performance i.e. 0.212 ( $p < 0.05$ ), Strategic HRM and Individual Performance i.e. 0.285 ( $p < 0.01$ ), Strategic HRM and Organizational Commitment i.e. 0.382 ( $p < 0.01$ ) are statistically significant. According to regression result (table 3) 4.5% significant variation in organizational performance through strategic HRM with R-square value of 0.045 ( $p < 0.05$ ). 14.6% variation in organizational commitment is explained through strategic HRM ( $p < 0.05$ ). 8.1% variation in individual performance is explained through strategic HRM ( $p < 0.05$ ). Finally variation explained in strategic HRM through Job Satisfaction is statistically insignificant

**Case Study 2:** Refer to table 2, correlation matrix give answers about statistical relationship between variables under case 2. A positive correlations between Strategic HRM with Organizational Performance i.e. 0.371 ( $p < 0.01$ ) and Individual Performance i.e. 0.477 ( $p < 0.01$ ) are statistically significant. However for case study 2, Strategic HRM relation with and JS and OC are positive but statistically insignificant for study2. According to regression result presented in table 3, 13.8% significant variation in organizational performance through strategic HRM with R-square value of 0.138 ( $p < 0.05$ ). 22.7% variation in IP is explained through strategic HRM ( $p < 0.05$ ).

Table 3: Regression Analysis


Variables	Case Study 1 (n=125)			
	Constants	Beta	S.E.	R <sup>2</sup> (p-value)
1. Organizational Performance	2.945	0.212	.099	.045 *(.043)
2. Individual Performance	3.102	0.285	.076	.081 *(.006)
3. Organizational Commitment	2.376	0.382	.090	.146 **(.000)
4. Job Satisfaction	3.167	0.044	.062	.002 (.679)
Variables	Case Study 2 (n=70)			
	Constants	Beta	S.E.	R <sup>2</sup> (p-value)
1. Organizational Performance	2.489	0.371	0.129	0.138**(.002)
2. Individual Performance	2.581	0.106	0.477	0.227**(.000)
3. Organizational Commitment	3.839	0.092	0.103	0.092 (.448)
4. Job Satisfaction	2.769	0.199	0.092	.040(.099)

Notes: Strategic HRM (Repressor ); Four dependent variables (regressed);

\*\* $p < 0.01$  \*  $p < 0.05$ ; (p-values);

## 6.0 Conclusion

Research has extended universal Strategic HRM trends through implication of recourse based HRM view as one of theoretical implication. Second the study has collected data from developing economy which is useful to attract foreign investors for financial decision about involvement in developing economies acquiring international HR trends for sustainable competitive advantage. Research was designed to identify effect of Strategic HRM on HR outcomes and performance measures of organization. The study has explored Strategic HRM effect on selected organizations. Results have theoretical and practical implications. Theoretical implications of study emphasize the significance of Strategic HRM. Research has extended universal Strategic HRM trend through implication of recourse based HRM view as one of theoretical implication. The companies that align HR function and practices perform better and produce satisfied and committed employees for enhanced individual and organizational performance. These results are relatively consistent with the findings of Green et al (2006) because study also presented positive relationship between strategic HRM and organizational performance, job satisfaction, individual performance and organizational commitment. Nonetheless job satisfaction shows statistically insignificant relation with Strategic HRM which is inconsistent with Green et al (2006). Study also extends older study of Khilji (2003) conducted in Pakistani setting in the area of HRM. Study has accepted that paradigm has also started shifting in developing economies as role of HR is shifting from operational utility to strategic business partner. Practical implication of study

highlights that HR should strategic business partner like any other department because strategic HR role is equally critical for organizational success as marketing, finance, operations etc. Practitioners are encouraged to adopt Strategic HRM with the trust that company's performance will be improved. Further, practitioners can expect improvements in HR outcomes and job-related attitudes including employee's satisfaction, commitment and performance at individual level. Limitations of study is that data is collected from manufacturing companies shown willingness for participation based on self assessment as active actor of Strategic HRM. Sample size chosen for the study is also consists of willing employees. Secondly, Macro level variable of Strategic HRM is insufficient to predict the true picture of relationship between Strategic HRM and HR outcomes and performance measures. Thus comprehensive future research can be conducted by including more variables for classifying Strategic HRM into horizontal and vertical fit. Increased sample size for data collection from various manufacturing firms for getting more precise results. Scholarship of study implies that effective Strategic HRM can help to enhance the work attitudes' of staff along with the overall performance of the organization. The organizations at developing economies need to adopt Strategic HRM for enhanced HR outcomes and better performance measures. Performing organizations thus can always take part for economic growth of society by producing conclusive work environment, employment opportunities and addressing societal needs of goods and services at large. 

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“ . . . In the world a man must behave as other people behave, and hat if he allows his conduct to be guided by the thought of what men *ought* to do, this will conduce rather to his ruin than to his advantage or preservation.”

Herbert Butterfield, *The Statecraft of Machiavelli*, p.84

**ARTICLE**

**THE PUZZLE OF MAINSTREAM AND DEVIANT GLOBALIZATION**

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**Abstract**

*This probe examines the puzzles or challenges of globalization to developing as well as developed countries. Indeed this study is undertaken in nexus with another enquiry of the authors about the challenges confronted and strategically tackled to globally operating and expanding companies based in Pakistan. Globalization offers both opportunities and threats and embodies merits and demerits for people of the world. Mainstream globalization is recognized as acceptable or idealistic part of it, whereas deviant globalization is recognized as unacceptable or dark part of it.*

*The investigation is qualitative in type and nature. From the extant literature, it extracts various theories and gains insights about various areas of globalization in a bid to comprehend its context and consequences in a better way. Therefore, the mode of data analysis is also literature assessment. The key findings reveal that globalization leads to both progress as well as retrogression; there are incidences when many countries have benefitted from it, whereas others have not. Ultimately, it rests on the individual countries' governments that how wisely and effectively they react and manage the un-stoppable waves/changes in the world economy due to globalization. The bottom line is, the solution to the dilemma lies in gloco-localization, whereas the forces and institutions promoting globalization (like United Nations, World Trade Organization, World Bank, and International Monetary Fund) devise the policies to derive global economy by keeping in view the local values and concerns of independent states.*

*Key words: Globalization; Mainstream and Deviant Globalization; Globalization and Pakistan*

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**Introduction**

Globalization is the integration and interdependence of the economies, and offers the leverages of free flow of trade, investment, finance, technology, and people around the world (International

Monetary Fund, 2014; Qureshi, 2014; Anjum, 2011; European Commission, 2005; Jeffus, 2003). Globalization advocates the international relations among countries while



treating the world as a single market fostering global business and commerce, global finance and markets, and global community and village. Naturally it nurtures global culture, peace, friendship, and cooperation among countries. It facilitates transfer of technology, skills, and expertise among companies and countries by covering all domains, from education and health to business, and science and technology. If companies intend to go global, they acquire a level playing field in the regime of globalization, backed by privatization, free market economy, substantial success of World Trade Organization (WTO) era, treaties regarding free trade, and ententes among nations. Globalization has been fostered by corporate globalization or the ever-escalating role of global businesses and companies in the world trade, and the inclination of the world leaders, and global institutions like WTO, United Nations (UN), World Bank (WB), World Banking Group (WBG), International Monetary Fund (IMF), and others to entertain the world as a global village having global community with global culture, global consumers, and global marketplace. They advocate uniform international laws, standards, and certifications to foster global business. From dynamite bomb to globalization, everything has merits and demerits resting on its usage (International Monetary Fund, 2014; Qureshi, 2014; United Nations, 2014; World Bank, 2014; World Banking Group, 2014; World Trade Organization, 2014; European Commission, 2005).

On the other hand, there are think tanks and organizations like World Social Forum (WSF), Washington Consensus (WC), and People's Global Action (PGA), which resist against globalization and highlight its negative consequences like dominance by global businesses, closure of sick industries in developing countries, massive job cuts, declining incomes and savings, escalating debts, surge in crimes, rise of transnational criminal gangs engaged in a variety of crimes including smuggling, trade of weapons, drugs, and illegitimate items, infringement of intellectual property rights, selling counterfeit products, selling fake and sub-standard products into grey markets, doing infiltration of global brands, and the like (Qureshi, 2014; Gilman et al., 2011).

### **1.1 Research Problem**

Globalization is considered as the socio-economic integration among countries of the world spurring free trade, investment, finance, technology, and even easy mobility of people around the global village. But there exist many critics that treat it as a lethal weapon of mass destruction applied against the developing countries by developed ones and the elite cum dominant class. The terms globalization incorporates two key perspectives: one, mainstream, or fashionable, or acceptable globalization; and two, deviant, or illusive, or unacceptable globalization. This probe attempts to uncover the causes and consequences of various dynamics of globalization in order to reach at specific solutions.

### **1.2 Research Objectives**

The research objectives comprise enhancing familiarity toward various dynamics of globalization like trade liberalization, international regulations emerging from World Trade Organization (WTO), and especially mainstream and deviant globalization to determine whether it is constructive or destructive for developed, developing and least developed countries.

### **1.3 Research Questions**

The queries under the investigation are answered through literature review. They include:

- What are the different meanings of globalization in various contexts (like trade liberalization and international regulations)?
- Is it equally beneficial for developed and developing countries?
- What are the positive and negative aspects of globalization (so-called mainstream and deviant globalization)?
- What are ways out to subside or eradicate the problems associated with globalization?

#### 1.4 Research Design and Data Collection

The probe involves qualitative research paradigm to deliberate various crucial dynamics of globalization and to look at individual cases of many countries. It involves literature survey and examination of qualitative as well as quantitative investigations undertaken in this matrix.

#### 1.5 Justification and Significance of the Study

This study endeavors to analyze various perspectives of globalization like its positive and negative aspects in an attempt to reach at workable solutions for the developed as well as developing countries, which may aid toward reducing the worries toward this realm and exploiting full potential of an integrated global economy.

### 2. Literature Review (Globalization, Development, and Trade Liberalization)

Globalization embodies many facets inclusive of development and trade liberalization among developed and developing nations; however it also incorporates negative development. Globalization is the integration of economic activities across borders for value addition (Gilman et al., 2011). The essential ingredients of economic transactions consist of goods, services, ideas, people, and money or capital, all of which get integrated. Indeed, globalization is the integration of socio-economic activities across borders, because when men civilized and socialized, they traveled around the globe; they sometimes fought with each other, or made friendships. The economic interests of men in terms of trade, investment, or will to capturing others' resources coupled with social interests of making companionship, love, and marriages dominated, and led the way to globalization. Another author, Sklair (2000 as cited by Jeffus, 2003) defined the term globalization from three dimensions. The first is that internationalization and globalization are used interchangeably. The second is the integration of global economy through various forces and institutions, which spurs congenial relations among nations for trade, finance, development, mobility of people, and cultural exchanges. The third is the state-less (or border-less) global community. This is also termed as *hyper-globalization*.

The act of **globalization** evolved when human beings descended from one region to another region of the world in search of food, water, and to discover the world. In this way, civilizations, culture, languages, knowledge, and skills were also transformed. With respect to business, historically, when the business of many firms grew substantially in domestic markets, they strived to extend their outreach in overseas markets. In the 1<sup>st</sup> century BC, Indian merchants traded and exchanged spices and other goods with Roman Empire and Babylon (Larsen, 1983; Young, 2001). In this way, trade across borders took place. The chief mode of transport was vessels carried in oceans. People of different countries started communicating and socializing with each others. In this way cultural exchange took place. The industrial revolution evolved in Europe and America in 18 and 19<sup>th</sup> centuries, which upheld mass production and in order to ensure sales, the philosophy of the then managers was

to produce goods in bulk quantity and then, make them widely available through an extensive distribution network. Later on, the marketing doctrine kept changing, but this way the cross-border trade flourished. Further advancement came when there occurred transfer of technology. Some firms made foreign direct investment (FDI) in other countries and build manufacturing or service facilities abroad. Somewhere joint ventures took place between two or more foreign and domestic partners. With the advent of modernization in means of communication such as the inventions of postal services, telephone, telegram, fax, computer, and internet, and developments in transportation services, from trains, trucks, ferries, vessels, to jet airlines, the globalization and cross-border trade further nourished. The bottom line is, the crucial factors that led to globalization comprise of mass migration, international trade, industrialization, outsourcing, trade liberalization, and significant inventions in means of communication, technology, and transportation. Moreover, World Trade Organization (WTO) further nourished the tenet of globalization. WTO is discussed later in this study.

Another essential aspect of globalization is *corporate globalization*, which is rise of globally operating and expanding companies in all parts of the world. Many perceive it as corporatization and global dominance by global or intercontinental companies (Jeffus, 2003). However, corporate globalization is not that much simple, it exposes a firm to concealed risks, uncertainties, volatile markets, strange foreign laws and regulations, and stern rivalry among domestic cum global businesses (Qureshi, 2014; Li, Qiu, and Wan, 2011). On the other hand, many successful intercontinental companies are conglomerates and bigger and stronger than even many individual states. According to Trivett (2011), if Walmart were a company, it would have been bigger than 157 countries of the world. It was ranked as the number one company in the world at one time having revenue worth US\$421.89. The number second company, Exxon Mobil was also bigger than many countries and enjoyed annual revenue for US\$354.67. Indeed they are states within the states (Qureshi, 2014). The extant literature contains many cases of corporate mis-governance and ethical challenges by such intercontinental companies. However, many of them responsibly perform their operations (Ibid, 2014).

Along with globalization, there emerged *development*. All of the sectors of an economy were gradually developed. Education, health, infrastructure, industries, trade, media and so forth, these all the sectors kept advancing in terms of modern technology and wide spread knowledge. People around the globe became more aware of the natural phenomenon and developments around the planet. People from small or poor countries to big or rich countries enjoyed the opportunities to obtain the highest level of education. Health facilities were enhanced. Inventions in healthcare enlarged human life and cushioned against many detrimental and even fatal diseases. Simultaneous development in all spheres of life took people out of dark ages. With the advent of television, freedom of media, and later on internet compressed the world into a small village. Through TV, people learn about developments around the globe, and through internet, they come into contact with friends, relatives, academia, business counterparts, and even strangers some times. Some typical examples regarding development of various sectors particularly in the third world countries can be witnessed from the facts that development in the education domain has resulted in international syllabus, actually many education institutions refer curriculum of advanced countries. From primary and secondary school education, special people to adult literacy programs, trade/diploma institutions to higher education, and research at universities level, all comply with national or international standards during designing curricula. The books referred in universities are taught around the world. The renowned pedagogies or methods of

teaching are adopted particularly in universities, like books, case studies, video cases, multimedia aid, computers aid, simulation techniques, role playing, group discussions, projects, research, presentations, and so forth. Thanks to America, England, and developed nations, as many of the renowned books, research articles, slides of particular subjects or even books, and a lot of reading stuff is available on the internet for free, but not all such stuff is free. The similar trends are found around the planet. Another example of development and modernization is in the domain of health, as highly advanced and contemporary medicaments are available all around the world, which not only subside or remove various ailments but enhance human life. Likewise, health equipments and instruments in hospitals, and state-of-the-art technology based pharmaceutical and healthcare plants and machinery are found in all corners of the world. *Some examples of the bright side of development* consist of inventions like X-Rays to MRI technologies, developments in cardiac surgeries to HIV/AIDS drugs, inventions like the internet that revolutionized the world, etc.

Over the last century, **trade liberalization** has been nurtured many folds and chiefly upheld by World Trade Organization (WTO). It has made it mandatory for its member states or signatories to abolish import quotas, tariff and non-tariff barriers, entry barriers, and other obstructions in the way of global business. WTO offers many agreements, few of the most significant ones include these covenants (World Trade Organization, 2014; Dasanayaka, 2011): the *most favorite nation (MFN) status clause* stipulates member countries to provide a non-discriminatory status to all the members of WTO, which means there should be no quotas or quantitative restrictions of import of goods and services, tariffs brought down to certain limits, no discriminatory policies for grant of licenses for business to overseas companies, offering subsidies to local producers, and discouraging dumping of goods and services. *National treatment stipulation/clause* implies equal treatment to domestically produced/manufactured goods and services, and the imported ones. It means there should be no protective measures for domestic products in terms of bar on entry of foreign firms, their licensing, bar on establishing subsidies, and so forth. WTO assists in internationalization of production facilities, marketing, and distribution networks through various agreements, such as *Trade Related Intellectual Property Rights (TRIPS)* to protect the trademarks of goods and services, or company names, copy rights on artistic products like designs of products, designs on packing and labeling of products, any published work, or audio and video works, and patents on inventions or innovative products; *Trade Related Investment Measures (TRIMS)* to protect investment of companies in the global arena that safeguards them from any anti foreign investment policy of a country; and *Agreement on Technical Barriers to Trade (TBT)*, which ensures that technical standards, such as testing and certification procedures for various products do not create any redundant obstacles in multilateral trade. One perfect example of this is, when Pakistani cement manufacturers export their cement to India, at the Indian border, the customs authorities delay in getting the goods cleared as they demand testing and quality certifications issued by Indian authorities (Federation of Pakistan Chambers of Commerce and Industry, 2014). The ultimate aim of WTO is to encourage firms from all continents to go global to unleash their potential and tap the unending opportunities, which are up for grabs for everyone, and especially the developing countries should come ahead to hold them, avoid trade restrictions, quotas, and business barriers, and capitalize their low-cost offerings. A great majority of countries of the world have become members of WTO and their political systems or **global political economy** has also endorsed the agenda of globalization. They have turned to market economies or mixed economies, deregulations, and privatization. The most of goods and services is produced and distributed either by the private sector only

(as in market economies), or by the both sectors, public and private (as in mixed economies), while governments impose almost no obstructions on production, pricing, and distribution of goods and services.

### 2.1 The Bright and Dark Sides of Globalization

Many institutions and members of the civil society foresee globalization (and pertinent domains like trade liberalization and international laws) as an assault on their native languages, values, traditions, overall culture, religious rituals and values, and ultimately loss of their national identification. English has become an international language. Chinese foods and fast food like burgers and sandwiches have become multi-local foods. Jeans pants and shirts have become global dressing. Songs in pop music, sung in any language attract the music fans. A variety of dances are merged together in free dancing. A famous physical game, 'Kabadi' played in India and Pakistan became an international game. Due to rise in popularity of Indian films, Indian language Hindi (that resembles with Urdu language in speaking form), and Indian culture is getting famous. One can cite hundreds of examples like that. Some other serious concerns of globalization include dominance by multinational and intercontinental companies (in every country) resulting in weakening local industries, loss of income and jobs i.e. unemployment, (Jeffus, 2003), closure of sick units surge in crimes to remove hunger and other reasons, exploitation of the poor (Gilman et al., 2011), increment in pollution, menace to ecological system, overall crippling socio-economic systems, and losing national identification. Many institutions and people belonging to various forums entertain these trends quite negatively, however the others defend that the merits of globalization outweighs these costs.

Globalization and international trade don't take place with altogether fair trade practices, but it also involves unfair trade practices. Some examples include smuggling i.e. illicit import, export; infringement of intellectual property rights including trademarks, copyrights, and patents; corruption and mal-practices in awarding tenders and international contracts; dumping of goods i.e. selling them below the cost in order to degenerate competition and dispose of the surplus goods; monopolies and cartels to dominate the market or for profiteering through over-pricing; hoarding of commodities and goods; unethical competition, counterfeit and substandard or poor quality products, use of marketing gimmicks, inclusive of hidden terms and conditions about promotional schemes, un-entertained warranty and guaranty claims; and misleading advertisements; infiltration i.e. selling products into unauthorized territories by distributors, dealers, or sales-force; selling smuggled or duty-stolen products into grey markets; exploitation of consumers and violation of consumer rights and laws; e-frauds and cyber crimes; corporate espionage and mal-practices; creation of trade barriers by some countries for others i.e. committing discrimination against others by generating tariff and non-tariff hurdles, such as cumbersome requirements for quality testing and other certifications; and so forth. Eventually the big sufferers from all such unfair international trade practices are less developed countries and transition economies. Another essential but negative dimension of globalization is about the developed countries' (DCs) priority to *regionalism* or *internationalism* (i.e. offering favorable treatment to their friendly countries and discriminating others) instead of multilateral trade with every country under the doctrine of globalization. This is labeled as paradigm shift. The incidences of unfair trade practices and the criminal activities for money led to the birth of a new term called criminal (black or underground) global economy. *Unfortunately, the*

*members of criminal international or global economy leverage the same global supply chain and free trade facilities that proponents of mainstream globalization do.*

Along with the positive aspects of globalization, the globalization has also expedited the nurture of a giant **international criminal economy**, leveraged by technology and illicit finances. The global supply chain of the black economy is estimated to be around \$2 to \$3 trillion, growing at the rate of seven times than the legitimate trade (Gilman et al., 2011). But eventually, we all enjoy and celebrate the extra ordinary developments and accomplishments of globalization, like offering tribute to Google entrepreneurs, Sergey Brin and Larry Page, and inventors of Twitter, Face-book, flying cars, smart phones, cardio surgeries, MRI, HIV/AIDS drugs, and so forth, which tend to globally accessible.

There are countless debates and discourses on the realm of globalization. Many authors have used taxonomies of the term globalization. Gilman et al. (2011) specify mainstream globalization and deviant globalization. Anjum (2011) uses the terminology as glamorous cum fashionable globalization and illusive cum regressive globalization. The following table 2.1 on the next page juxtaposes these terms through positive and negative aspects of globalization. It exhibits the shiny picture of mainstream and glamorous globalization, which tends to be true in many but not all cases, but its other part on deviant cum illusive and regressive globalization unmasks its cruel face, or exhibits that it can be devastating as well.

**Table 2.1 Positive and Negative Aspects of Globalization**

<b>Mainstream Globalization</b> <b>(Glamorous cum Fashionable Globalization)</b>	<b>Deviant Globalization</b> <b>(Illusive cum Regressive Globalization)</b>
<ul style="list-style-type: none"> <li>• Integrated global economy, interdependence of countries for trade, investment, finance, human resources, &amp; technology, global prosperity, peace, and friendship among global community, &amp; drive to end wars</li> <li>• Market economy or mixed economy, deregulation &amp; privatization</li> <li>• Industrialization, prosperity, jobs, income, savings, higher standard of living, healthy competition, inventions &amp; innovations, low prices of many products, standardization, good business practices, &amp; promoting formal economy</li> <li>• Globalization of: markets, financial systems, technologies, industries/sectors, companies,</li> </ul>	<ul style="list-style-type: none"> <li>• Global dominance by largest intercontinental companies, elites, &amp; developed countries</li> <li>• Weakening and liquidating industries in poor countries due to flooding cheap products' imports &amp; global competition, increasing cost &amp; investment in technology due to compliance on global standards, lay-offs &amp; job losses, decreasing incomes &amp; savings, increasing debts, brain drain, sick socio-economic units, bio-degradation due to incremental pollution, social inequality (widening gap among social classes), surge in crimes, loss of culture &amp; religions values, debt cancer &amp; accumulated international debt syndrome (AIDS) in poor nations by International Monetary Fund (IMF) &amp; World Bank (WB),</li> </ul>

[production, marketing, supply chains, value chains, & brands], customers, culture, & community (i.e. global community)	& loss of sovereignty cum national identity <ul style="list-style-type: none"> <li>• Relocation of industries from developed to developing countries, cut in their jobs, income, &amp; savings, &amp; all other troubles mentioned above pose menace to developed countries as well</li> <li>• Surge in global crimes, rise of transnational criminal gangs, counterfeit products, infringement of intellectual property rights, sub-standard products, misleading advertisements &amp; claims, violation of consumer rights, infiltration of products, selling them into grey markets, dumping, cyber crimes, corporate espionage, tax evasions, corporate malpractices, smuggling, trade of contraband items, bio-degradation, breaching laws for toxic waste management, international sex traffic, illicit trade of human organs, illicit immigration, stolen forests, drugs &amp; weapons trade cum barter trades, money laundering, '<i>everything for sale</i>,' etc., while using the same channels of global supply chain &amp; technology</li> </ul>
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Note the sources of the table 2.1 include the following authors:

Sources: (Qureshi, 2014; United Nations, 2014; World Banking Group, 2014; World Bank, 2014; International Monetary Fund, 2014; Anjum, 2011; Anjum, 2006a; Anjum, 2005c; Gilman et al., 2011; Li, Qiu, and Wan, 2011; Vargas-Hernandez & Noruzi, 2009; Hill, 2005; 2006; European Commission, 2005; Jeffus, 2003; Stiglitz, 2002 as cited by Zaidi, 2005; Gupta & Govindarajan, 2004; [Rugman & Moore, 2001; Henry, 2000; International Monetary Fund, 2000; Rugman, 2000; Sklair 2000; Solnik, 2000; Rosamond, 1999; Either, 1998; Hirst & Thompson, 1997; Lovelock and Yip, 1996; Korten, 1995; Ohmae, 1995; Goodman & Pauly, 1993; Strange, 1992; Yip, 1989; Yip et al., 1988 as cited by Jeffus, 2003])

There are unending discourses on the domain of globalization. Various authors have posited their views in favor of or against globalization. *Its positive aspects include:* foundation of an integrated global economy, interdependence of countries for trade, investment, finance, and technology. It supports the free flow of many products, standardization, good business practices, and promoting formal economy. Eventually, it leads

to globalization of: markets, financial systems, technologies, companies, [production, marketing, supply chains, value chains, and brands], customers, culture, and community (i.e. global community). The wave of globalization is hard to stop because there is fast growth in global marketplace, global customers and consumers, global culture, global media, and global community. People of the world are coming closer through this and are integrating in all aspects of development. With the advent of the internet, the distances among countries have been dramatically shrunk. Indeed globalization is the product or result of corporate globalization. When large companies extended their businesses beyond borders, they wished to have a trade or other barriers' free global market. Renowned economists like Adam Smith also advocated the benefits of free trade among countries in 18<sup>th</sup> century; it all paved the way to the foundation of movement for globalization – the integrated global economy (Hill, 2005; 2006). *Its negative aspects include:* developing countries have been facing the problem of assault of cheap imports by developed countries (Anjum, 2011; Anjum, 2006a; Anjum, 2005c), while the developed countries think the opposite (European Commission, 2005). Either (1998, as cited by Anjum, 2011) noticed the rise of '*regionalism*,' which exhibits deviation from multilateral trade under globalization, since the champions of globalization were themselves focused toward regionalism. It led to the notions of internationalization to regionalization, and to globalization. Former vice president cum chief economist of World Bank and the noble prize laureate, Joseph Stiglitz documented in his book about west-driven agenda of globalization that advanced industrial countries declined to allow free market access to developing countries, kept subsidizing their agricultural produce to avoid cheap import from them, and even keep insisting them to eliminate any trade barriers and subsidies on capital goods (Anjum, 2011; Stiglitz, 2002 as cited by Zaidi, 2005). Stiglitz (2002 as cited by Zaidi, 2005) conceived globalization as a '*predatory globalization*' or a system designed in favor of advanced high-tech countries in a bid to exploit the poor countries. They are caught in the vicious debt circle of IMF and WB, their economies can be under the tutelage of them, and will lose their sovereignty. For instance, Pakistan has been receiving dictations from IMF and WB to bring reforms by adding up more taxes, raising electricity charges and prices of various goods and services. Instead of working together to bring institutional reforms, good governance, and transparency, only focusing on the means to escalate tax revenues to assure prompt repayment of debt installment is an abuse of an already crippling economy. Anjum (2011) terms it as a *capitalists' debt trap* and *strategic slavery of the poor countries*. He further adds that it's like debt cancer and Accumulated International Debt Syndrome (AIDS). That's why he posits that 'globalization is a global campaign to establish capitalists' regime to trap the poor for temptation of free trade and debt from global lending entities, imposing rules, standardization, and compliance, and dominating them altogether. The authors Vargas-Hernandez and Noruzi (2009) assess globalization as the dark spot spreading fast in the global economy, creating wide-spread inequalities among countries and social classes, and is posing the challenges of losing national identity and security. They posit that it was discovered in the year 2002 that 500 largest corporations of the world drive the global economy, which belong to G-7 group (the group of world's most affluent countries), and then thirty seven thousand largest intercontinental companies do, which again belong to G-7. They cite a survey of Forbes in the year 2000 that the share of the world's largest intercontinental companies is in favor of USA, Europe, and Japan, as they hold approximately 50%, 30% and 10% respectively. However, the individual annual revenue of many of these companies is greater than the individual GDP of many smaller states. The authors Gilman et al. (2011) perfectly elaborated multi-faceted dimensions/aspects of mainstream and deviant globalization. Along with the obvious and well-accepted benefits of mainstream



globalization, there is a dark or deviant side of it as well, which is unacceptable, as there is an emergence of criminal global economy, which employs the same channels of globalization. For instance, global criminal rackets trade in illegal products and through illicit means and ways (like smuggling i.e. illegal imports, exports); do money laundering for investing and financing in criminal activities (while corrupt politician and bureaucrats also do money laundering); and use state-of-the-art technology in their crimes. Such technology includes hacking computers' databases, surveillance tools, latest weapons, skilled manpower, and so forth.

The issues related with deviant globalization seem unending. They require intervention of public-private sectors (including social sector), international institutions, and particularly laws-making institutions to resolve them. National and intercontinental companies on the other hand can enhance endeavors to gather more market intelligence to get acquaintance on their products' counterfeit versions, infringement of their intellectual property rights, infiltration of their products, selling them in grey markets, unfair competition, and so on. Such intelligence could be used to seek legitimate solutions/remedies. Another solution to the challenges of globalization lies in '*glocalization*' or integration of global and local values and concerns. European Commission (2005) has applied the terms 'micro and macro localization,' which means globalization or globally adopting a local value and localization or locally adopting a global value. This is the only way out since it encourages global economic integration for the sake of free trade, investment flows, finance, technology sharing, and overall development, while it also respects the indigenous civilizations, cultures (values, norms, rites, rituals, etc.), languages, religions, history, and other concerns. When foreign companies enter a country for business, they not only earn profit, which they can repatriate back to their countries of origin, but they generate jobs and income for their employees, as well as goods and service-providing intermediary industries, generate tax revenues for the host government, and bring their technology and skills to polish the local staff. Indeed, they generate income from their own resources, expertise, and experience; otherwise nothing would have been changed in the host country. The rich and poor countries, but especially the poor ones should take initiatives to energize and develop their micro, small and medium-size enterprises (SMEs) and large-scale industries and companies on sustainable basis. In addition, they have to monitor and control any irregularities, mal-practices, and crimes by domestic cum foreign-based business entities, which calls for transparent and good-governance systems by their watch dogs. World Trade Organization (WTO), the leading global body to nourish free trade and globalization safeguards the interests of countries through international dispute settlement mechanism for trade and investment disputes, and providing the right to member countries that they can safeguard their developing industries by imposing restrictions on import of certain products up to a specified time frame. The bottom line is, in practice, even exercising globalization isn't easy, because the powerful has always been dominating the weak. Global institutions like UN, IMF, WB, and WTO have always remained under the influence and directives of the rich and developed countries. With the true spirit of *glocalization*, the fear of *Westernization and Americanization* can be ended.

Another argument about globalization, trade liberalization, and international regulations is that it is the global dominance of powerful elite class and corporate global dominance or worldwide dominance by intercontinental companies. The forces of WTO and affiliated entities that flourish globalization have been devising stringent laws and practices like standardization and certification for quality enhancement, process improvement, hygiene, and environmental protection related technical barriers to trade, so that *the role of majority of*

*developing countries remains limited to export of cheap primary goods and cheap labor supplier only.* They cannot compete with the advanced/developed countries in resources and technology, value addition, advertising, and branding. This is true in case they cannot cope up with such barricades that have positive aspects too, such as assuring quality and safety of products, environment, and consumers. But the counter argument is that the many developing countries have encountered such menaces very well. The examples include Asian and European countries like China, Hong Kong, Taiwan, South Korea, Malaysia, India, Turkey, Holland, Sweden, Finland, Norway, and Denmark. They just need to pay attention to education, good governance, value addition and branding, research and development (R&D), and patent registration, which can enable them to seek financiers, angel investors, and venture capital companies to commercialize their products and turn them as loyal brands. These people can study even in the domestic or international best schools and universities by winning scholarships. They can serve outside their country which is termed as brain drain, but they can serve their countries by staying in or out of them. There is a well-known example of Baidu, the Chinese Google. Two Chinese students studied in United States and came across with a superb idea of launching Chinese Google search engine, since a vast majority of people in China have lack of awareness or fluency of English, and they would prefer to do internet searching in Chinese language. Their idea clicked and their business grew many folds and escalated its range of products. Then they determined to go global by floating their shares i.e. initial public offering (IPO) from US. The present worth of their company stands US\$50 billion (Google, 2014).

### **3. Conclusion and Recommendations**

This section concludes the research work and offers recommendations for the policy makers, global community and especially developing countries.

#### **3.1 Conclusion**

The waves of globalization tend to be unstoppable. In addition to its merits of socio-economic integration for the sake of enhancing free and fair trade, investment, finances, inflows of human resources, and easy mobility of people around the world, its demerits include exploitation of the poor and under-developed to developing countries and emergence of global criminal economy. The transnational criminal gangs (engaged in sell of contraband, counterfeit, sub-standard, and grey market products for example) also employ the same channels of supply chain that global companies and businesses do. Even then, there are incidences of prosperity and development through globalization and trade liberalization among many countries such as, China, Hong Kong, Taiwan, South Korea, Malaysia, Indonesia, Thailand, India, Turkey, and many others. Pakistan is also gradually tapping the underlying opportunities in the era of globalization. But this is not the case with all the countries.


Globalization, trade liberalization, and international regulations are also perceived as global dominance of powerful elite class and corporate global dominance. World has witnessed emergence of many intercontinental companies that dominate the world and tend to be bigger and stronger than many individual states. The forces of WTO and affiliated entities advocating globalization have been preparing and enforcing stern legitimate conditions like standardization and certification for quality and safety assurance. These practices pertain to technical barriers to trade with the purpose to limit the role of majority of developing countries to export of cheap primary goods and cheap labor supplier only. But the counter

argument is that many developing countries in Asia and Europe have encountered such menaces very well. They require improvements in their educational system and overall good governance, and support inventions, innovations, and patent registration, which can enable them to seek financiers around the world to commercialize their products and develop their brands.

Along with globalization, *trends of regionalism* are also observed among friendly countries such as many countries of Europe, North America, and Asia.

The solution of the puzzle regarding mainstream and deviant globalization lies in *gloco-localization*, where global forces, institutions, and developed countries execute policies at macro-economic level but do entertain the issues of individual countries at micro-level. For instance, they have the right to limit or restrain import of many goods and services up to a determinate period in order to safeguard their domestic industries. Their governments can seek financial and technical assistance of the national and international agencies to uphold standardization and certification of their products and processes. They can learn from the worldwide sources about value addition and branding to enjoy high value for their products. They can obtain technology from different companies and countries, and can spur their domestic industries, technologists, and scientist to invent, innovate, and patent their products and processes.

### 3.2 Recommendations

- In an attempt to wisely tackle the challenges of globalization, especially the resource-less or poor countries have to formulate and execute effective policies. For instance, they ought to design the contracts to work with international companies to explore minerals from their country along with processing facilities. Otherwise, it tends to be difficult about the right valuation of the minerals extracted. Like India and many Arab countries, they should enter into agreements with them that they must have to offer some stake or share in the venture to some domestic player, who can monitor the process and eventually learn the technology, skills, and expertise.
- All the states particularly the poor countries should endeavor to cope up with the hardcore troubles of transnational criminal rackets running the global black/under-ground economy. This task seems utmost cumbersome but can be done by seeking technological assistance from their trade partnering countries, especially the advanced ones.
- Under-developed and developing countries need to enforce a mechanism of good governance cum transparency and prioritize education, inventions, innovations, strategic partnerships/collaborations for technological development, patent registration, value addition and branding.
- Global forces, institutions, and developed countries should concentrate toward *gloco-localization* and execute policies at macro-economic level but do entertain the issues of individual countries at micro-level. They should enforce a mechanism to protect intellectual property rights, but make sure that elite class of the world does not exploit the poor through patents by pricing their products twenty to hundred times costlier than their actual cost. They should investigate the factual cost of their research and development (R&D), as many of them can exaggerate their cost and outgoings. 

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**ARTICLE****GROUNDING ONTOLOGY – A PROPOSED METHODOLOGY FOR  
EMERGENT ONTOLOGY ENGINEERING**

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*This research posits that a domain ontology developed using text-coding technique contributes in conceptualizing and representing state-of-the-art as given by published research in a particular domain. The motivation behind this research is to provide means for creating a better understanding among the researchers through ontology that would present a clearer picture of any domain of interest. However, a general observation on ontology engineering methods is the domination of personal perspective of ontology developer and/or expert in the resultant ontology. Current ontology engineering methods bestow a primary role to ontology developer. Ontology thus developed is heavily biased towards the domain expert's personal understanding of the domain. However, ontology stands a better chance of being unbiased if it is derived from established research such that it is closely linked to the text of the published research, i.e. entities and their relationships are obtained directly from data through coding. Therefore, this new methodology has been proposed (Grounded Ontology - GO) for deriving an ontology directly from published research texts. An ontology developed using this method can enhance visibility of what others have already done and ensure that research efforts in a domain are directed to new vistas instead of being wasted in duplicating the efforts.*

**Introduction**

An Ontology is a conceptual representation of a domain of interest showing entities and their relationships in the universe of discourse according to Hepp(2007). This research posits that a domain ontology developed using text-coding technique contributes in conceptualizing and representing published research in a particular domain. The term **Conceptualize** is used as a “simplified view of the world that we wish to represent for some purpose” (Thomas R. Gruber, 1995), provided by “an abstraction over domain of interest in terms of its conceptual entities and their relationships”(Hepp, 2007). To build such ontology a modified ontology engineering approach has been Proposed. In this approach the ontology is derived from the text such that all the entities and relationships can be traced back to the original text. It is based on text coding techniques taken from Grounded Theory Method (GTM) of qualitative research and has been named **Grounded Ontology (GO)**.

It is maintained in literature that one of the possible ways of combining and consolidating domain knowledge is through domain ontology (Chandrasekaran, Josephson, & Benjamins, 1999; A. Gómez-Pérez & Benjamins, 1999; T. R. Gruber, 1991, 1993; N.

Guarino, 1995; Noy & McGuinness, 2001). An agreed-upon ontology may lead to a better understanding by providing a common lexicon (Basile, 2011; Chandrasekaran et al., 1999; Ćosić, Ćosić, & Bača, 2011; Harter & Moon, 2011). Thus, ontology can provide a basis for consolidation of knowledge and shared understanding. However, current ontology engineering methods bestow a primary role to ontology developer. A general observation on ontology engineering methods is the domination of personal perspective of ontology developer and/or expert in the resultant ontology. The resultant ontology is heavily biased towards the domain expert's personal understanding of the domain.

However, an ontology stands a better chance of being unbiased if it is derived from established research such that it is closely linked to the text of the published research, i.e. entities and their relationships are obtained directly from data through coding (Charmaz, 2006; Strauss, 1987). **In-vivo** coding is a type of text coding method where exact terms from the text are taken as codes to be used subsequently as entities. Through this coding process the coder's perspective is reduced (Saldana, 2009, p. 76). In other words, with the use of **in-vivo** coding, the resultant categorization of entities more closely represents the researchers' (i.e. authors of the research papers used as corpus) findings. It has been demonstrated in literature that coding data to find entities and their relationships is similar to ontology engineering (Kuziemsky, Downing, Black, & Lau, 2007; Urban, 2009).

The objective of this research is to propose a solution to the criticism of current ontology engineering methodologies. In particular we seek to reduce the personal perspective of the expert getting introduced in the resultant ontology. Simultaneously, it would help in enhancing researcher's point of view through text coding.

The rest of the paper is organized as follows. The next section discusses lexicon and the notion of mutual understanding among people. In Section 3, domain ontology is discussed, starting with fundamental concept of ontology and concluding at the domain ontology as means of consolidating domain knowledge. The subsequent section is about ontology engineering. It discusses existing methodologies and their limitations. The next section discusses possible solution to overcome these limitations by proposing Grounded Ontology (GO) methodology and describing its main features. The paper concludes with limitations of the proposed solution and future research directions.

## 1. Lexicon, Conceptualization and Mutual Understanding

While trying to create a better understanding through common lexicon it is noteworthy that conceptualization is very important. "A conceptualization is an abstract, simplified view of the world that we wish to represent for some purpose. Every knowledge base, knowledge-based system, or knowledge-level agent is committed to some conceptualization, explicitly or implicitly" (Thomas R. Gruber, 1995). However, it is imperative to remember that "even if two systems [including ontologies and frameworks] adopt the same vocabulary, there is no guarantee that they can agree on a certain information unless they commit to the same conceptualization" (N. Guarino, 1998).

It needs to be noted that mutual understanding, sometimes referred to as common understanding, does not equate to 'same' way of thinking, or agreeing to the other's view point (Nicola Guarino, 2012). It relates to '**knowing**' the others' points of views and their understanding of the domain. Once the interacting entities know others' understanding, it is easy to find areas of agreement as well as disagreement as shown in

Figure 1, where overlapping circles represent the known information about the domain of interest. The overlapped area represents the area of agreement of understanding while the non-overlapping areas represent the areas of disagreement. Thus, it would lead to a better understanding among the interacting people.

The above analysis leads to the conclusion that domain ontology may provide common understanding and language along with consolidation of the domain knowledge as well.

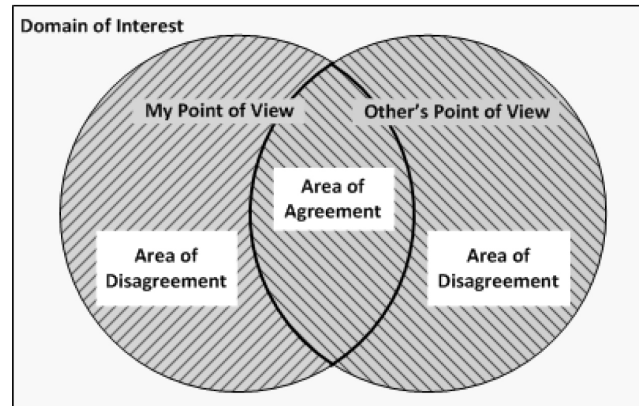


Figure 1: Areas of agreement, disagreement and common understanding

## 2. Domain Ontology

### *Ontology*

Ontology is a “specific artifact expressing the *intended meaning* of a *vocabulary* in terms of *primitive* categories and relations describing the *nature* and *structure* of a *domain of discourse*” Guarino(2012). Information scientists use “ontology” to express a shared taxonomy of entities that has been reduced to its simplest and most significant form possible without the loss of generality (Smith, 2003). “An ontology is in this context a dictionary of terms formulated in a canonical syntax and with commonly accepted definitions designed to yield a lexical or taxonomical framework for knowledge-representation which can be shared by different information systems communities” (Smith, 2003).

From the above statements it can be concluded that ontology is a conceptual system of the domain of interest representing entities and their relationships in the universe of discourse.

Researchers from different domains have their own peculiar concepts and terms they use for information representation (Smith, 2003). This leads to exclusiveness and inconsistency when they try combining their efforts. Ontology was introduced as means of resolving such terminological and conceptual incompatibilities (Smith, 2003). Excluding philosophical aspects, ontologies were initially developed to assist knowledge sharing and reuse by Artificial Intelligence community (Fensel, 2001). One of the major challenges that ontology addresses is achieving interoperability between multiple representations of reality (Hepp, 2007). Despite the fact that there is a difference on what exactly ontology is, especially at the intersection of computer science and information systems research (Hepp,

2007), the basic use of ontologies is to enhance “communications between either humans or computers” (Jasper & Uschold, 1999).

### **Purpose of Ontology**

The primary purpose of an ontology is a mutual understanding of each other and improved communication among people (Nicola Guarino, 2002; Jasper & Uschold, 1999; Sowa, 2013). The focus of ontologies is on the content, i.e. on the meaning being conveyed by the entities as well as on the structure of the domain they represent (Fensel, 2001; Nicola Guarino, 2002). “The content [that ontologies represent] must be studied, understood, [and] analyzed”, however, it must be remembered that understanding of content is not contingent upon its representation (Nicola Guarino, 2012).

On the other hand for the purpose of human communications an unambiguous but informal specification of ontology would suffice, rather preferred (Jasper & Uschold, 1999; Uschold, 1998). Domain elements (entities and their relationships) specified by well thought out vocabulary with carefully chosen terminology and human readable documentation (or synonym set), can perform better by increasing the user involvement, as this participation does not require knowledge of formal logic (Hepp, 2007).

Information systems perspective of ontologies is focused on meaning and understanding conceptual elements and their relationships. In this context “ a collection of named conceptual entities with a natural language definition would count as an ontology” (Hepp, 2007).

Based on the above discussion it can be argued that ontologies are fundamentally for sharing understanding among humans. Formal logic may not be the best way of representation if the purpose is only human-human interaction. Use of informal but unambiguous specification through various other means can achieve better results.

### **Use of Ontology**

Ontology has been used for many purposes. Researchers in computer science and information systems have found that ontology is very useful in capturing commonly agreed (Chandrasekaran et al., 1999) relevant information (N. Guarino, 1995). Segregated into domain knowledge and separate from operational knowledge (Noy & McGuinness, 2001) it is available for sharing and reuse (T. R. Gruber, 1993).

Having discussed ontology, let us look at domain ontology.

### ***What is a Domain Ontology?***

Domain ontology is a type of ontology that has been identified as one of the solutions for an effective and efficient consolidation of domain knowledge and for creating better understanding about it (Ćosić et al., 2011; Harter & Moon, 2011, pp. 132–133).

### ***Domain Ontology – An Efficient Means to Consolidate Domain Knowledge***

Domain ontologies define particular concepts and relationships that form the essential structure of a domain for a specific universe of discourse (Roussey, 2005). This basic structure “describe[s] the concepts in their domain, the relationships between those concepts, and the instances or individuals that are the actual things that populate that structure” (“Lightweight, Domain Ontologies Development Methodology,” 2010). Based on Corcho, Fernández-López, and Gómez-Pérez (2003) it has been stated that domain



ontology provides an accurate picture of the language as well as the entities and their relationships in a particular domain, for the users that work in that domain (“Lightweight, Domain Ontologies Development Methodology” 2010).

From the literature presented it can be ascertained that domain ontologies can provide means for effectively consolidating knowledge. Ontology for a dynamic domain, like information security, needs the ability to remain current for it to be practically usable over an extended period of time. This has not been addressed in those ontologies. Thus, a framework is required to keep current an ontology for such a domain. Further, as stated by Smith and Ceusters(2010), “the most effective way to ensure mutual consistency of ontologies over time and to ensure that ontologies are maintained in such a way as to keep pace with advances in empirical research is to view ontologies as *representations of the reality that is described by science*”. Assuming that published research represents “*reality described by science*”, we can base our ontology on concepts and relations extracted directly from published research papers. This can lend an inherent capability of perpetual evolution of such an ontology.

Moreover, these ontologies are highly dependent on experts who select entities required to describe a domain and establish relationships between them. Hence, it is highly desirable to modify current methodologies to make the resultant ontology more closely linked to and firmly grounded in published literature. It will also help in continued evolution of ontology as discussed in the previous paragraph.

### **3. Ontology Engineering – Existing methodologies and their limitations**

At present there are no commonly agreed methods and guidelines for ontology development, which is a problem (A. Gómez-Pérez & Benjamins, 1999). Furthermore, subject to the size of resultant ontology, the development process can be very permissive in the actual implementation of methods and guidelines (A. Gómez-Pérez & Benjamins, 1999).

#### **3.1. Ontology Engineering**

Consolidating ontology engineering methods, Casellas (2011) has stated that ontology development could be classified as top-down, bottom-up, and middle-out approach based on where the process begins. It could also be organized on the level of automation: manual, semi-automatic, and fully-automatic. There could be other ways of classification as well. Casellas(2011) further states that generally top-down approach is done manually and bottom-up is automatic, at least initially. He goes on to mention that middle-out approach is typically semi-automatic and is concerned with finding the most important concept, and then completing the hierarchy by specialization and generalization. Choosing a particular methodology is an important decision since among others, one of the ways to characterize an ontology is the methodology used to develop it (Casellas, 2011).

#### **3.2. Selected Current Ontology Engineering Methodologies**

Some of the current ontology engineering methods are discussed below. According to Noy& McGuinness (2001), ontology in technological (non-philosophical) sense is derived primarily (or initially) from structured and unstructured text sources. They go on to state that this is predominantly done by employing text mining techniques. Expert opinions are used to define classes and sub-classes, and their properties along with restrictions for a particular domain (Noy & McGuinness, 2001).

Lenat&Guha(1989) gave a multistep process for developing its Cyc ontology and knowledgebase comprising of: (1) Manual extraction of knowledge, (2) Computer aided extraction of knowledge, and (3) Computer managed extraction of knowledge, based on knowledge already extracted in previous steps. Thus, initiating the ontology manually, then augmenting and evolving it automatically. Visser provided a four step methodology, CommonKADS for Legal Knowledge-base Systems (LKBS), that may be used for ontology development, as well (Pepijn R. S. Visser, Kralingen, & Bench-Capon, 1997; P R S Visser, 1998). It includes analysis, conceptual modeling, formal modeling and implementation. CommonKADS has since then become a complete Knowledge Engineering (KE) methodology (Casellas, 2011).

Corcho, Fernández-lópez, Gómez-pérez, &López(2005) has described a semi-automatic methodology consisting of specification, conceptualization, formalization, implementation, and maintenance, for the development of legal ontology. It is based on Methontology that was proposed by Gómez-Pérez and Fernández-López, in their various works (Fernández-Lopez & Gómez-Pérez, 2002; Fernández-lópez, Gómez-Pérez, & Juristo, 1997; Asunción Gómez-Pérez, Fernández-López, & Corcho, 2007) as cited by Casellas(2011). Jarrar and Meersman(2009) proposed DOGMA approach that has three stages; preparatory, domain conceptualization, and application specification.

Milton (2007) came up with ‘47-step guide to knowledge acquisition’ that has many similarities with Common KADS but its ‘generality’ puts it apart from others according to Milton. It is primarily based on manual effort requiring expert input in the form of interviews from initial modeling all the way to final validation. Suárez-Figueroa *et al.* (2007) created network of ontologies (NeOn); a methodology for developing ontology networks that is a ‘collection of ontologies related together via a variety of different relationships’ (Haase et al., 2006).

### 3.3. Limitations of Current Ontology Engineering Methodologies

Current ontology engineering methodologies have certain limitations. From common characteristics of the methods described in previous section it may be concluded that almost all the existing ontology engineering efforts are geared towards semantic interoperability of systems. Moreover, meaningful category/concepts are generated by developer/expert based on their personal understanding of the domain. This introduces bias in the ontology.

Another way of deriving entities is using statistical and syntactical techniques coupled with Artificial Intelligence. This requires human expert to filter out the meaningful and relevant entities. As there is no fully-automatic methodology for ontology development that can yield a valid ontology, manual processes have to be used. It increases the development duration. Mostly a semi-automatic/manual methodology is used to incorporate expert opinion, at least to validate the concepts and their relationships, for example SIMOnt by Abulaish et al.(2011). Moreover, the evolution of ontology has not been a major focus.

It may be concluded that the ontologies developed by these methods pertain to a particular point in time, apply in a certain context and are limited to a specific group of people. Sooner or later they are either outdated or require considerable effort to keep them current.

Following characteristics of existing ontology engineering methodologies can be considered as their limitations:

1. Focused primarily on systems interoperability and computer-computer interaction. Essentially required for semantic interoperability of systems, but not aimed at either human-human interaction or common understanding.
2. Reflect ontology engineers'/experts' personal understanding of the domain.
3. Require human interventions to make the resultant ontology meaningful and useful.
4. Evolution of ontology for dynamic domains remains a challenge.

#### 4. Possible Choice of Overcoming These Limitations

Limitations in the existing ontology engineering methodologies have been described above. A possible approach that can help overcome these limitations lies in text coding which is discussed in this section.

##### 4.1. Text Coding

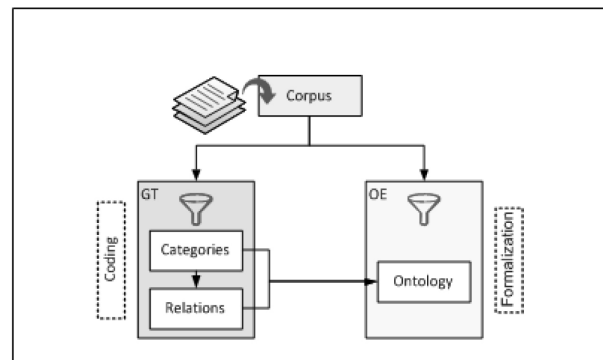
According to Strauss and Corbin (1998), textual data can be coded and analyzed to find concrete description of abstract categories. Among other sources, historical data is used to establish relationships between categories and their descriptions. This technique is based on 1967 work of Glaser and Strauss (1967). It is a “discovery methodology that allows the researcher to develop a theoretical account of the general features of a topic while simultaneously grounding the account in empirical observations or data” (Martin & Turner, 1986). Constant comparison is an important rigorous “tool” for scrutiny of the codes and gathering of analytical insights (Urquhart, Lehmann, & Myers, 2010). It is about discovering concepts, categories and relationships among them (Bryant & Charmaz, 2007). This methodology has clearly defined data analysis procedure, which results in elaborate and novel findings that are substantiated by data (Orlikowski, 1993). Thus, one of the outputs is a list of emergent concepts, categories and sub-categories, and their properties derived directly from the text.

Two important characteristics of this coding methodology as given by Urquhart *et al.* (2010) are:

1. Joint data collection and constant comparison for analysis and conceptualization. Data collection, coding and analysis are performed simultaneously.
2. Theoretical sampling to collect all kinds of “slices of data” based on already established categories, concepts and constructs.

The possibility of blending text coding and ontology engineering was initially suggested by Star (1998). It was used by Kuziemsky *et al.* (2007) to provide richness to “domain relevant model”.

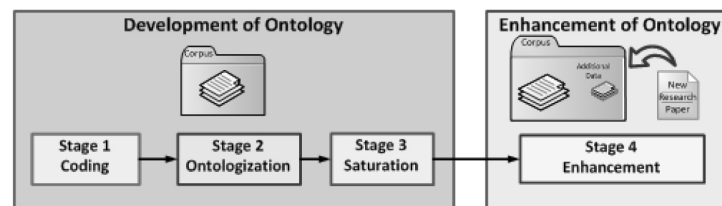
Therefore, based on the above discussion and analysis it seems that ontology development can follow text coding approach. Using research papers from top peer-reviewed journals as corpus for text coding can help in making it more acceptable as well as taking care of ontology evolution. Not only can this approach help in reducing ontology engineer's bias but it can also help in consolidating domain knowledge. Based on this we have designed an ontology development methodology which is called **Grounded Ontology(GO)**.



**Figure 2: Use of Grounded Theory Method and ontology engineering for creating an emergent ontology.**

### 5. Proposed GO Methodology

In essence it is proposed that GO be a multi-stage multi-step knowledge summarization and representation process to organize and exhibit knowledge in a simple and concise manner through discovery involving codifying existing knowledge thereby cleanly conceptualizing the emergent core concepts and relationships among them, and building an ontology such that it becomes easy to review the existing knowledge and come to a common understanding.



**Figure 3: Stages of ontology development and enhancement**

It is proposed to have four stages shown in Figure 3. Stage 1 is coding of the text in the corpus. Stage 2 is giving a structure to the categories and relationships emergent from the codes and creating seed ontology. Stage 3 is finding other categories and relationship and incorporating them in the seed ontology to form a saturated ontology. Stage 4 is the ongoing enhancement to the saturated ontology. It is done by adding more data (research papers in this case) to the corpus and processing the additional data through Stage 1 coding and merging the additional categories and their relationships to form an enhanced version of the ontology. This stage 4 can be run as and when more data becomes available.

Text coding is a time intensive work that puts high demand on ontologist. Therefore, to make the ontology development manageable and the resultant ontology useful, it is proposed that **GO** methodology rely on coding most significant portions of the text. This is done to generate the seed ontology through **in-vivo** coding technique. Subsequently, this seed ontology is enhanced to make core ontology through **selective** coding of the relatively less significant sections of the text. Identification of segments in the text with most significant original contributions is not an easy task in unstructured data. Therefore, to use relatively structured text it is suggested that the corpus be composed of published research papers of reputable journals. Research papers have very well defined standard structure i.e. sections

containing particular type of specific information. The general structure of a research paper has following sections: abstract, introduction, literature review, methodology, results, discussions, limitations and conclusions. Here, the original contribution of the paper is primarily mentioned in the abstract in a concise manner. Other significant sections include conclusions, discussions, and results. Therefore, for seed ontology the abstracts are coded using **in-vivo** technique. Conclusions are coded using **selective** coding technique. Discussions and results may also be coded subsequently through **selective** coding technique if deemed necessary.

### 5.1. Comparison of GO with other methodologies using GTM

This approach is different from both Kuziemskey *et al.*'s (2007) and Urban's (2009) that have used GTM, as it is a multi-step multi-stage methodology. There is a difference in application of GT method as well, as given in Table 1.

**Table 1. Comparison of GT methodology applied by Kuziemskey *et al.* [15] and GO**

S No.	Characteristics	Kuziemskey <i>et al.</i> 's (2007)	GO
1	Coding Technique	Open, Axial and Selective	In-vivo and Selective
2	Purpose	Better understanding of domain	Presenting state-of-the-art in domain.
3	Information Sources	Practice experience of health care professional, patients' health management charts, and research literature	Research papers from journals

Kuziemskey *et al.* (2007) have used open, axial and selective coding techniques. They used the grounded theory methodology as a means of analyzing relevant information sources for better understanding of the domain of interest. Similarly Urban (2009) has suggested the use of blended approach for understanding the unstructured information. **GO** is different. It uses **in-vivo** and **selective** coding techniques aiming to present state-of-the-art in domain of interest. **Selective** coding is a second cycle text coding technique to 'compare, reorganize and "focus" codes into categories, prioritize them ... and synthesize them to formulate a central or core category that becomes the foundation' (Saldana, 2009, pp. 51–51).

### 5.2. GO Approach to Overcome Limitations of Existing Ontology Engineering Methodologies

The proposed **GO** approach is designed to address four limitations of current approaches mentioned in Section 4.3.

#### Overcoming the Limitation of Computer-Computer Interaction

As opposed to computer-computer interaction, **GO** approach is aimed at developing and representing ontology not only for better understanding but also for communicating that understanding among humans. Considering that domain experts are not necessarily also experts in philosophical and mathematical logic, simple notation with natural language

expressions is used in this ontology. The purpose is to convey the intended meaning while balancing precision with ease of understanding.

### **Overcoming the Limitation of Personal Understanding**

The use of **in-vivo** text-coding technique would ensure that entities are taken from the text and capable of being traced back to the original text. This would help to convey the intended meaning of the author of the research paper while reducing personal opinion of the ontologist.

### **Overcoming the Limitation of Human Intervention**

Human intervention is required for any ontology to be meaningful and this requirement cannot be eliminated. However to reduce the human effort in development of ontology using **GO** method, **in-vivo** coding is restricted to most significant section of a research paper that specifically describes the contribution of that particular research. For the other sections **selective** coding with constant comparison is employed. The background to research, presented as literature review, is not to be coded.

### **Overcoming the Limitation of Evolution of Ontology**

As the ontology developed using **GO** method is based on published research therefore, it can be taken as reality presented by science. This in itself would effectively ensure continued evolution of the ontology. Further, for a constant evolution and maintenance of ontology in dynamic domains, the **FocalPoint** framework has been proposed by Nabi et al (Nabi, Asif, Iradat, Arain, & Ghani, 2013) can be implemented in future.

The **GO** methodology has following advantages:

1. State-of-the-art of the domain will be readily known as it has the advantage of using published research as the basis of ontology development. Also a mechanism of continual evolution (**FocalPoint**) shall account for the dynamism of the domain(Nabi et al., 2013).
2. Non-replication of research would help reduce the chances of re-inventing of wheel. The efforts thus saved can be directed to extending the frontiers of research.
3. It would ensure resolution of any confusion that might exist within research community as it would provide not only common understanding but also common lexicon for better understanding..

## **6. Limitations and Future Research**

One of the limitations of this methodology is the possibility of development of various codes leading to different ontologies. To overcome this it is recommended that the principle of mutual understanding be enforced i.e. different understanding of the same text can exist and the author of the research paper may be consulted to find the intended meaning. Also, a group of leading professionals of the domain can debate and decide upon any category or a relationship in the ontology. This would also cater for the legitimacy and evolution of the ontology as well.

Another limitation of this methodology is the use of structured text in corpus. This is an inherent limitation of **GO** methodology. Perhaps in future this limitation can be relaxed by applying Artificial Intelligence text classification algorithms that use naïve Bayes classifier.

As is the case with any new methodology, the impact of GO can only be ascertained if the methodology is made widely available to researchers and practitioners for use. The use and acceptability of the resultant ontologies can then form the basis to assess the efficacy of this proposed methodology. As of now it presents a potentially valuable addition to the many other available ontology engineering methodologies.

For future research, this methodology may be applied to generate an ontology for a specific domain.

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“The question now is how truly individual – as in bold, original, unique - you can be if you never step back from the crowd. When we think and write from within our busyness, surrounded by countless other voices, too often the result is reactive, derivative, short-shelf-life stuff.

The greatest gifts one can give to the outward world lie within. To reach them, you have to go there.”

William Powers, *Hamlet's BlackBerry*. P135-136

**ARTICLE****PERCEIVED SERVICE QUALITY OF ELECTRICITY SUPPLY IN NIGERIA:  
A Survey Of Manufacturers In Kakuri Industrial Estate, Kaduna**

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*Ibrahim Badamasi Babangida University, Nigeria***Abstract**

*Manufacturing firms require adequate business support facilities in order to operate optimally and contribute to the economic growth of nations. The quality of the business support services is as important as their availability or provision. While it has been established that the existing business support services in Nigeria are inadequate, the quality of the existing business support facilities is unknown. Based on the contention that quality is determined by the user or customer, this study evaluates the service quality of electricity services in Nigeria from manufacturers' perception. The entire population of the study constituting the general managers and assistant managers of the thirteen (13) functioning manufacturing firms in the Kakuri Industrial Estate of Kaduna were surveyed cross-sectionally. A modified SERVQUAL scale with six (6) dimensions and twenty-seven (27)-items was adopted in measuring the service quality of electricity supply to the industries. In the course of data analysis, descriptive statistics showed that the service quality of electricity services is poor for tangibility, reliability, responsiveness, assurance, empathy and recovery dimensions. Pearson correlation statistical tool applied to test hypothesis one revealed a significant negative association between expected and perceived service quality of electricity supplies ( $r = -.458$ ;  $\alpha = .032$ ), while Paired T-test used to test the hypothesis two indicated that there is significant negative difference between the industrialists' expected and perceived electricity services quality ( $t = -9.720$ ;  $\alpha = .000$ ). The study, therefore, recommends that the Nigerian government as well as stakeholders should ensure that the quality of electricity supplies in Nigeria is upgraded alongside the quantity (or megawatts) upsurge in the on-going power reforms in the country.*

**Key Words:** Service Quality, Business Support, Electricity.

**Introduction**

Manufacturing firms are the economic nerve of every country. Their optimal operations depend on the quality of business support facilities such as electricity, water, and telecommunication among others. Though all business support facilities are essential for efficient operation of manufacturing firms, certain business support facilities are fundamental to their survival. It has been established that manufacturing sectors in Nigeria depend more on

electricity than other infrastructures such as water, road, telephone and communication in order to operate efficiently (Adepoju and Abubakar, 2010). This tends to suggest that adequate provision of electricity on consistent basis in Nigeria will enhance industrialization and its attendant benefits.

However, the quality of the electricity services is as important as their availability. While it has been established that the quantity (in terms of megawatts) of electricity supply in Nigeria is grossly inadequate (see for example AFDB/OECD 2004; and Ajanaku, 2007), the service quality of the electricity services in the country or any of its parts is, to the best of our knowledge, unknown. There is a general consensus among marketing scholars that the quality of intangible products like public utilities can best be determined by the users or customers (Parasuraman *et al.*, 1985 and 1988; Cronin and Taylor, 1992; Tea, 1993). Based on this consensus that quality is determined by the users or customers, the service quality of public utilities like education, health, and telecommunications have been evaluated from customers perspectives in foreign countries like Japan, UK, Malaysia, and India, etc. (see: Nimsombood and Nagata, 2003; Pillay, 2004; Talib and Ali, 2007; Satish, 2009; Padhy *et al.*, 2009). In Nigeria, research on service quality is rather concentrated in the private sector of the economy, especially banking and telecommunication sectors (see: Mawoli, 2011; Oyeniyi, 2009; Abdullahi, 2009). Alabede *et al* (2011) affirm that the issue of service quality was initially thought to be concept related only to the private sector but with systematic extension of the principles of marketing to public sector, it is now realized by organizations operating within the public sector that customer service and quality are strategic issue that desire attention. In the current study, therefore, focus is shifted to the investigation of the perceived service quality of electricity supply where a significant vacuum in knowledge still exists.

The study therefore seeks to achieve the following objectives:

- i. To determine manufacturers' *expectation* of each of tangibility, responsiveness, reliability, assurance, empathy, and recovery dimensions of electricity services provided by PHCN.
- ii. To determine manufacturers' *perception* of each of tangibility, responsiveness, reliability, assurance, empathy, and recovery dimensions of electricity services provided by PHCN.
- iii. To ascertain the service quality of electricity supply available to manufacturing firms.
- iv. To determine the relationship between the service quality expectations and perceptions of electricity supply.
- v. To investigate whether or not there is any significant difference between perceived and expected service quality of electricity supply.

The paper is organized in five sections namely: introduction; literature review; methodology; analysis and interpretations; and conclusions and recommendations.

### Literature Review

Service quality refers to customers' attitude towards the service (Cronin and Taylor, 1992), which suggests that customers or service users are the best determinant and evaluators of the quality of a firm's service. Thus, Gronroos (1984, P.25) defines service quality as the "outcome of an evaluation process, where the customers compare their expectations with the service they have received." In the same manner, Parasuraman *et al.* (1985, P.48) define

service quality as “a function of the difference between expectation and performance along the quality dimensions.”

Service quality, in the context of electricity supply, is concerned with the availability of electricity when needed and on a safe and satisfactory operation of all connected electrical devices such as productive machinery and electronics (Sersen and Vorsic, 2009). The service quality of electricity supply constitutes the technical and commercial quality. The former relates to the continuity and/or reliability of the energy supply as well as the voltage quality. The latter is concerned with the services provided by the service provider (PHCN) to the consumers in terms of information on billing method, disconnection criteria, planned and unplanned power interruption, time for restoration of power, time for reconnection after debt repayment, time to respond to complaints, appearance of physical facilities, and appearance of staff, etc.

Out of several models developed for measuring consumer perception of service qualities, the most widely adopted model is SERVQUAL followed by SERVPERF. Parasuraman *et al.* 1985 and 1988) developed SERVQUAL model, while Cronin and Taylor (1992) developed SERVPERF model. Service quality is not viewed in literature as a separate construct, but rather as an aggregate of several dimensions or components (Suuroja, 2003). In literature, these dimensions are broadly categorized into five (5): tangibility, reliability, responsiveness, assurance and empathy – tagged as SERVQUAL. SERVQUAL instrument consists of a 22-item instrument for assessing service quality based on customer's perceptions, which is, by its turn, the difference between the customer perceived quality and his/her expectations [e.g. Expectation – Perception = Service Quality] (Miguel *et al.*, 2007). However, Cronin and Taylor (1992) adopted SERVQUAL 22-item and 7-points Likert Scale instrument to propose a perception-based service quality model called SERVPERF. The perceived quality model postulates that an individual's perception of the quality is only a function of the actual service performance and not service expectation.

Though research directed at investigating the state of service quality of private firms arguably outnumbered those of public or government enterprises, studies committed to assessment of service quality of the public enterprises are handy. Nimsomboon and Nagata (2003) revealed in their study that all the attributes of service quality did not meet the users' expectation of a public university in Japan. Similarly, Pillay (2004) empirically evaluated the service quality of an educational institution and found high expectations among students as against moderate perceptions, suggesting absence of service quality in the College. Satish (2009) measured the service quality of a public library in United Kingdom (UK) using SERVQUAL model and discovered that the library failed to match customers' experience with their anticipation and expectation in all dimensions, which portrays that service quality is severely lacking in the library. An attempt to evaluate the service quality of public banks in Indian by Padhy *et al.* (2009) revealed that the customers judge the reliability and responsiveness dimensions of service quality as poor. The study further revealed that both the rural and urban customers perceived the 'courtesy' dimension of the banks' service quality as poor, while the urban customers adjudged the 'tangibility' aspects of the public banks' service quality as superior. Jannadi *et al.* (2000) measured the service quality of electricity supply company (SCECO-EAST) in Saudi Arabia by means of SERVQUAL and found that customers are pleased and satisfied with the overall service quality of the public utility. Cohen (n.d) adopted SERVQUAL to measure the service quality of electricity utility in Israel which was found to range from medium to high service quality.

Service quality research is growing in large number because according to Zeithaml *et al.* (1996), superior service quality often leads to retention, which leads to on-going revenue, increased spending, payment of price premiums, and generation of referred customers. However, studies that use service quality as the causal or independent variables have found missed results. Talib and Ali (2007) established that the existence of service quality in the public sector is responsible for overall positive performance of local authorities in Malaysia. A study by Buzell and Gale (1987) has shown a high correlation between relative product quality and company profitability. Cronin and Taylor (1992) found that service quality has significant effect on repurchase intentions. Oyeniyi and Joachim (2008) found a strong relationship between customers' perceived service quality level and customer satisfaction in the mobile phone industry in Nigeria. Alabede *et al.* (2011) investigated the relationships between tax service quality and tax payers' compliance behavior in Nigeria and established that tax service quality has significant positive association with tax payers' compliance behavior.

### Methodology

Primary data was obtained from a survey of managers of manufacturing firms in Kakuri industrial estate, Kaduna. The managers (e.g. the general manager and assistant manager) of each of the 13 functioning manufacturing firms in the industrial estate constitute the population of the study. Hence, the entire 26 managers were considered for the study. The companies' managers are arguably in the right position to describe the electricity service quality available to their firms.

The research variables were measured by means of modified SERVQUAL scale made up of 6 dimensions (i.e. tangibility, reliability, responsiveness, assurance, empathy, recovery) and 27 items. The scale is a 5-point Likert type, and ranges from Strongly Agreed (5) to Strongly Disagreed (1). Items under tangibility dimension are 'PHCN operates with latest technology', 'the physical facilities of PHCN are visually appealing', 'employees of PHCN are smartly and professionally dressed', and 'PHCN operational manuals are visually appealing'. Reliability items are 'PHCN provides uninterrupted electricity supply to customers at all time', 'PHCN provide electricity services right to the first time business users', 'PHCN restore all power failures within a short period', 'the voltage level of electricity supply by PHCN is high enough to power all factory and office machineries accordingly', 'the voltage level of electricity supply by PHCN is consistently normal and harmless to electrical appliances', 'PHCN provides electricity services to customers at the time it promises to do so', and 'PHCN insists on error-free billing records'. Statement items contained in responsiveness dimension are 'PHCN adequately inform customers about when electricity services will be provided or not', 'PHCN employees provide services to customers promptly', 'PHCN employees are ever ready and willing to help customers solve their problems', and 'PHCN employees are never to be too busy to attend to customers' problems'. The assurance dimension items are 'the behaviour of the PHCN employees instills confidence in customers', 'customers feel safe when transacting with the PHCN employees', 'PHCN employees are consistently polite to customers', and 'PHCN employees demonstrate adequate knowledge in providing answers to customers' questions'. For the empathy dimension, the items used are 'PHCN employees give customers individual attention', 'PHCN employees keep customers information confidential', 'PHCN employees have customers' interest at heart', and 'PHCN employees understand customers' specific needs'. Finally, the recovery dimension contains items such as 'PHCN employees quickly apologize to customer when

mistakes are made’, ‘the company employees to care about customer’s complaints’, ‘PHCN employees have the skills and ability to deal with complaints’, and ‘PHCN compensate customers who suffer damages from poor electricity services’.

The statistical instruments employed for data analysis are mean, standard deviation, Pearson correlation and paired t-test. In particular, Pearson correlation statistical tool was used to test hypothesis one, while paired t-test was employed to test hypothesis two. The paired-sample t-test procedure compares the means of 2 variables for a single group. The procedure computes the differences between values of the two variables for each case and test whether the average differs from ‘0’. All statistical analyses are done by means of Social Science Statistical Package (SPSS) version 20 and at 95 percent confidence interval.

The following null hypotheses are tested in this study:

**H<sub>01</sub>:** There is no statistically significant relationship between the expected service quality and perceived service quality of electricity.

**H<sub>02</sub>:** There is no statistically significant negative difference between the expected and perceived service quality of electricity.

### Analysis and Interpretation

#### *Response Rate and Reliability Test*

A total of 26 copies of the questionnaire were distributed to the managers of 13 manufacturing firms in Kakuri industrial estate of Kaduna, Nigeria. However, only 22 copies of questionnaire equivalent to 84.6% were retrieved from 11 firms. Four copies of questionnaire equivalent to 15.4% were not returned.

The ‘reliability’ of the adopted SERVQUAL scales was determined using Cronbach’s alpha method. Analysis revealed that electricity service quality’s expectation scale is reliable by 90%, and its perception scale by 68%. (see table 1). Cronbach’s alpha measures the average of measurable items and its correlation, and if the result is generally above 0.5 (or 50%), it is considered to be reliable (see Peighambari, 2007). Hence, the data collected by means of the identified two scales are strongly reliable.

#### *Expectation and Perception of Electricity Service Quality*

From the outset of the study, it was considered essential to ascertain industrialists’ expectation of electricity service quality. Data analysis revealed that the industrialists have a higher service quality expectation for reliability dimension (mean = 4.221 or 84.4%), followed by assurance dimension (mean = 4.205 or 84.1%), empathy (mean = 4.068 or 81.4%), recovery dimension (mean = 3.955 or 79.10%), responsiveness dimension (mean = 3.783 or 75.7%), and tangibility dimension (mean = 3.438 or 68.8%), in the ascribed descending order. Overall, the expected service quality of electricity is relatively higher among the industrialists (e.g. grand mean = 3.942 or 78.8%).

On the contrary, the industrialists perceived the quality of electricity services rendered to them as *poor* (grand mean = 1.867 or 37.3%). Precisely, they rated the tangibility aspects of electricity services as better off (e.g. mean = 2.113 or 42.3% out of total maximum score of 5). This is closely followed by responsiveness and empathy dimensions with mean value of 2.068 (or 41.4%) and 2.000 (or 40%) respectively out of a total mean score of 5 or 100%. Other dimensions {reliability, assurance, and recovery} are scored below 40%. (Table 2 about here)

### *Service Quality of Electricity Supply*

The service quality of electricity supplies to the manufacturing industries was also investigated. Data analyses as contained in table 3 reveals a negative mean difference for all the 6 dimensions of service quality, which is an indication of poor electricity service quality in all the dimensions. Comparatively, the assurance dimension recorded poorest service quality (Mean difference [MD] = -2.605), followed by reliability dimension (MD=-2.391), then recovery dimension (MD= -2.326), empathy dimension (MD = -2.068), responsiveness dimension (MD = -1.715), and tangibility dimension (MD = -1.325) in the given descending order. Generally, the electricity service quality is poor (MD = -2.078). (See Table 3)

### *Test of Hypotheses*

The null hypothesis one which states: “There is no statistically significant relationship between perceived and expected service quality of electricity” was tested using ‘Pearson correlation’. The summary of the correlation analysis is contained in table 4, while the original computer generated output is the Correction Table in the appendix.

Table 4 shows that the paired variables (e.g. perception and expectation) are negatively correlated by as much as 46% (e.g. correlation = -0.458), and significant at  $P = .032$  ( $<P = .05$ ). This suggests a moderate negative correlation, which further implies that, though the industrialists’ expectation of electricity service quality is increasing, the actual service quality of electricity is decreasing instead. Therefore, the null hypothesis is not supported (there is statistically significant negative relationship between perceived and expected service quality of electricity).

The null hypothesis two which states that there is no statistically significant negative difference between the perceived and expected service quality of electricity was tested using ‘paired sample t-test’. The summary of the t-test analysis is presented in table 4, while the original computer generated output is the Paired Sample test Table in the appendix. The table revealed a mean difference of -62.636 (e.g. Perception minus Expectation), t-value of -9.720 which is significant at  $P = .000$  (or  $P < 0.01$  or 1%). Thus, the null hypothesis which states that there is no statistically significant difference between industrialists’ expectation and perception of electricity service quality is rejected, while the alternative hypothesis is supported. That is, there is statistically significant difference between perceived and expected service quality of electricity supply.

### *Discussion of Findings*

The study evaluated the service quality of electricity supplies to the manufacturing industries in Kakuri industrial estate of Kaduna, Nigeria. The study found that the electricity service quality is poor along all the six service quality dimensions. This finding is consistent with prior studies on the service quality of public enterprises. For example, Nathan (2011) found that industrial and organization customers rated electricity services in India as poor, while domestic customers regarded it as satisfactory. In a related study, Satish (2009) established that the service quality of the examined public library in United Kingdom (UK) is poor.

Furthermore, the study established a significant negative correlation between expected and perceived service quality of electricity supplies. This implies that while the industrialists expected improvements in the service quality of electricity supplies, the perceived or actual service quality of electricity supplies is getting poorer. The perceived poor



service quality of electricity is likely to affect the operational activities of the companies – programmed productions could be interrupted, materials undergoing productions could be destroyed, factory machines could run bad, the chances of electricity-caused fire outbreaks within the factory could increase, production of substandard products, and increasing cost of production becomes inevitable. In the end, these manufacturing companies would be unable to compete favourably in the Nigerian market that is awashed with cheaply made and sold foreign goods and forced to adopt survival strategies (e.g. structural downsizing, staff retrenchment, leasing out facilities, and renting out plant factories) in the short run, and perhaps reverse to the growth strategies in the long-run when the electricity and other economic situations improve.

### Conclusions and Recommendations

The study examined the service quality of electricity supplies to the manufacturers in Kakuri industrial estate of Kaduna State, Nigeria. It found that the manufacturers' expectations (needs) for electricity services from PHCN exceeded their perception or performance of the services for tangibility, reliability, responsiveness, assurance, empathy and recovery dimensions. The study also established that the service quality of electricity supply to the manufacturers in Kaduna State is poor. The study, therefore, concludes that there is poor service quality from PHCN as there is expectation and performance of service gap from the perspective of managers of these firms.

Furthermore, the study investigated the relationship between electricity-service-quality expectation and electricity-service-quality perception. The study established a negative correlation between electricity-service-quality expectation and electricity-service-quality perception. The study, therefore, concludes that as the manufacturing industries' needs for quality electricity supply rise, the actual quality of its supply diminishes in Kaduna, Nigeria.

Arising from the study findings and conclusions, the study recommends that the quality of electricity supplies should be improved in order to meet or exceed the needs of the manufacturing companies. Quality of electricity supplies is not restricted to increment of mega-watts of electricity as claimed by the Nigerian government and PHCN, but transcends to electricity distribution, billing, customer care, customer relationships, and compensations aspects.

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## APPENDIX

**Table 1: Reliability Coefficients of the Measurement Scales**

Scale	Number of items	Cronbach's Alpha
Expectation	27	.901
Perception	27	.682

Source: Researchers' Computation, 2012

**Table 2: Perceived and Expected Service Quality of Electricity Supply**

Dimension	Perception			Expectation		
	Mean	Std. Deviation	Ranking (based on mean score)	Mean	Std. Deviation	Ranking (based on mean score)
Tangibility	2.113	.462	1	3.438	.874	6
Reliability	1.830	.760	4	4.221	.665	1
Responsiveness	2.068	.971	2	3.783	.960	5
Empathy	2.000	.670	3	4.068	.342	3
Assurance	1.600	.433	5	4.205	.616	2
Recovery	1.593	.424	6	3.955	.557	4
<b>Grand mean</b>	<b>1.867</b>			<b>3.945</b>		

Source: Field Survey, 2012

**Table 3: Service Quality of Electricity Supply**

Dimension	Perception	Expectation	Service quality (Mean difference)	Ranking of Service quality
Tangibility	2.113	3.438	-1.325	1
Reliability	1.830	4.221	-2.391	5
Responsiveness	2.068	3.783	-1.715	2
Empathy	2.000	4.068	-2.068	3
Assurance	1.600	4.205	-2.605	6
Recovery	1.593	3.955	-2.326	4
<b>Grand mean</b>	<b>1.867</b>	<b>3.945</b>	<b>-2.078</b>	

Source: Field Survey, 2012

**Table 4: Summary of Correlation and Paired t-test Analysis**

Statistics	Results
Correlation (r)	-.458 (P<0.05)
Significance level of 'r'	.032*
Mean difference	-62.636
t-test	-9.720
Significance level of 't-test'	.000** (P<.01)

\*Significant

\*\*Highly significant

Source: Field Survey, 2012

**Correlations**

		PERCEPTION	EXPECTATN
PERCEPTION	Pearson Correlation	1	-.458*
	Sig. (2-tailed)		.032
	N	22	22
EXPECTATN	Pearson Correlation	-.458*	1
	Sig. (2-tailed)	.032	
	N	22	22

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

**Paired Samples Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PERCEPTION	55.45	22	16.437	3.504
	EXPECTATN	118.09	22	18.926	4.035

**Paired Samples Correlations**

		N	Correlation	Sig.
Pair 1	PERCEPTION & EXPECTATN	22	-.458	.032

**Paired Samples Test**

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PERCEPTION EXPECTATN	-62.636	30.225	6.444	-76.038	-49.235	-9.720	21	.000

**CASE STUDY****IMPACT OF EFFECTUATION BASED INTERVENTIONS ON THE INTENTIONS TO START A BUSINESS**

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**Abstract**

*Intention plays a very important role to measure one's willingness to pursue entrepreneurship as a career. Previous researchers have differed about various antecedents that impact the entrepreneurial intention to start a business. Entrepreneurship education (EE) assumes to play an important role in shaping traits and attitudes of an entrepreneur, contrary to the "entrepreneurs are born" school of thought. We use the Individual entrepreneurship orientation (IEO) construct as developed by Boltan and Lane (2011) to measure its impact on the intention levels of students. The use of Effectuation (Sarasvathy, 2001) as a pedagogical tool is used as a mediating variable between IEO and intentions. In a leading business school, a group of 63 business graduates were taught entrepreneurship based on effectual principles as proposed by Sarasvathy(2001). The empirical findings suggest an insignificant impact of IEO on student's intention levels; however the impact is significant when effectuation is used as a mediating variable between IEO and entrepreneurial intentions.*

*The paper discusses the theoretical foundations of individual entrepreneurial orientation, effectuation and intention, and then empirically tests the proposed model, followed by findings and recommendations. The findings of this research empirically established that the elements of IEO (i.e. risk taking, pro activeness, and innovation) independently do not increase students intentions to start a business, however when mediated by effectuation approach the intention levels of students were positively affected.*

**Keywords:** Entrepreneurship, Education, Effectuation, Entrepreneurial Intentions, Individual entrepreneurial orientation

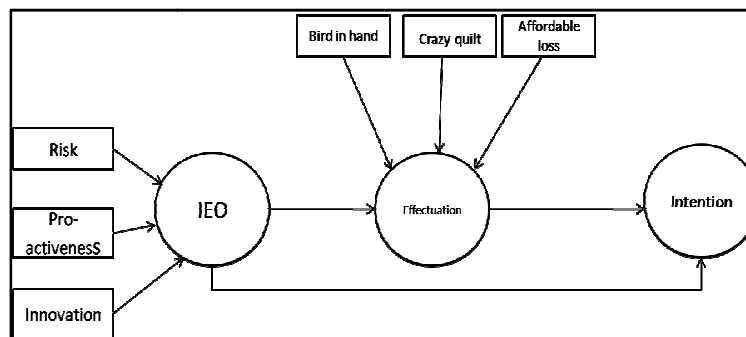
**Introduction**

Entrepreneurship has been considered as a very important tool in bringing an economy out of poverty and increasing employment levels. Countries which have experienced higher entrepreneurial activities have shown greater chances of economic activity (Audretsch, 2002). Nonetheless the challenge remains to make people aware of the importance of entrepreneurship especially in a developing country where countless opportunities exist for business startups. The part played by entrepreneurship education in promoting entrepreneurship is considered to be the key element in changing attitudes of the people (Potter, 2008). Thus in an economy like Pakistan, where unemployment levels are high and the job market saturated, the need for promoting entrepreneurship education at a university or college level assumes a central role. This would make students more aware of the opportunities that exist around them and would increase the supply of potential

entrepreneurs in the market. Therefore universities are now being called upon to play their part in helping students choose a career avenue (Gasse & Tremblay, 2011). However, a number of challenges remain for the universities. In an ever changing and dynamic business environment it is very difficult for a young business graduate having no hands-on experience to predict the future based on earlier experiences (S. D. Sarasvathy, 2001). Thus students tend to prefer the job market which offers them more comfort and peace of mind rather than embarking on an unexplored entrepreneurial journey. This again calls into question the curriculum design and pedagogy used by universities to teach entrepreneurship to students.

Most pedagogical techniques teach entrepreneurship as a linear phenomenon which can be described by causality (S. D. Sarasvathy, 2001), which is unable to relate theory with practice. Thus students find themselves distanced from the ground realities of starting a new venture and instead choose to distance themselves from entrepreneurship education. This paper argues that causality approach of entrepreneurship is not the ideal pedagogical approach to teach entrepreneurship. Regardless of the nature of context, entrepreneurship is about creating and realizing opportunities as they come (Shane & Venkataraman, 2000). Similarly, one cannot define pre-determined goals when the initial markets conditions are unknown and opaque, it is an event which is constructed and unfolded during the entrepreneurial process (S. D. Sarasvathy, 2001; Steyaert, 2007). Figure 1 explains our model whereby we measure IEO's direct impact on intentions as well as through effectuation. We use the structural equation modeling approach to test our model through the use of Smart PLS.

**Figure 1: Proposed Model**



### Causation and Effectuation Process

A lot of research has been done to lay out the differences between the two contrasting set of pedagogical techniques used to teach entrepreneurship. As per Sarasvathy (2001:245), "Causation process takes a particular effect as given and focuses on selecting between means to create that effect". Thus the pedagogy focuses more on creating a business plan, setting forth sales targets, segmenting markets (positioning), laying out a strategy for market penetration and raising the required capital to achieve the end.

The necessary requirement for such a large amount of information means that the entrepreneur will need to spend most of his time trying to acquire the resources necessary to carry out this analysis. In the process, the entrepreneur seeks to minimize his/her risks whilst maximizing expected returns. Thus the entrepreneur envisions the end and directs all his/her efforts to rationally achieve that pre-determined end state (Chandler, DeTienne, McKelvie, &

Mumford, 2011). During this causation process, the entrepreneur avoids surprises and prepares contingency plans, trying his best not to sway from the rationale into uncertain decisions or partnerships. This is the way majority of the entrepreneurship education is taught to business students. In the end, students end up making hefty business plans requiring millions as their startup cost. Thus few actually end up on the entrepreneurial journey. Those who do end up pursuing entrepreneurship are soon faced with realities which sway them away from their rational predispositions.

In contrast, in the effectuation approach, Sarasvathy (2001:245) argues that entrepreneurs “*take the set of means as given and focus on selecting between possible effects that can be created with that set of means*”. Thus when focus is on means, skills and current networks the end remains unknown. What can be controlled is what you already have with you and decisions are taken quickly (Mäkimurto-Koivumaa & Puhakka, 2013) and partnerships become inevitable as a means of reducing uncertainty and leveraging new markets (S. D. Sarasvathy, 2001). Thus entrepreneurs tend to act in an effectual rather than the causal way.

While the classical economic theory suggests that markets are predictable, in reality this is not the case. Sometimes entrepreneurs end up creating a market for a product which was non-existent before (Read & Sarasvathy, 2005), thus in all certainty, prediction based on past experience and occurrences becomes unimportant. In her book *Effectual Entrepreneurship*, Read et. al (2010) also mentions the fact that entrepreneurship by its very nature is a risk taking activity for which the compensation to the entrepreneur is in the form of profits. However, what distinguishes an entrepreneur from the rest is their ability to manage a comfortable level of risk while adjusting returns. This is in contrast to many theories of management and business where the focus remains on maximizing returns while trying to totally eliminate risk and reducing uncertainties. The whole process of gathering market information, segmentation and using statistical tools are a means to reduce uncertainty and the associated risk of entering the market, and it is often thought that this is the way for an entrepreneur to seize the opportunity (Mäkimurto-Koivumaa & Puhakka, 2013). Sarasvathy (2004) argues that true entrepreneurial opportunities emerge where the initial and final outcome remain largely unknown.

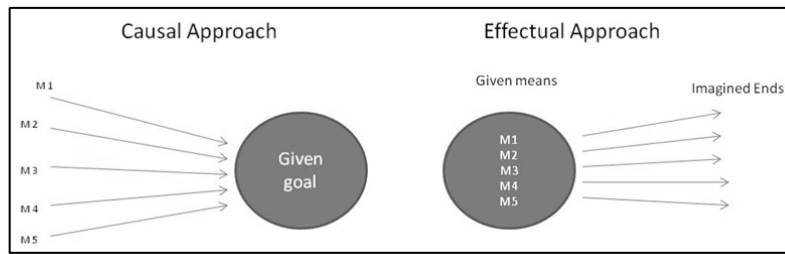
The very nature of the word “entreprendre” reflects this reasoning (Hjorth, 2003), where there is a need for a particular type of business but the exact nature of the business remains unknown (Koivumaa and Puhakka, 2013). Thus entrepreneurship is about solving problems having no definite reasoning (Knight, 1921). If one notices the teaching methodology in universities, the focus is on attaining means to achieve an end. The emergence of opportunities which arise out of our everyday problems is largely ignored simply because solutions to those problems do not exist. Thus in causality approach non-existence of historical data hampers opportunity recognition and realization as the entrepreneur do not have the necessary “tools” to predict the market size, customer segments etc. Once the data is unavailable, market perception turns out to be too risky and ambiguous. Therefore the teaching pedagogy of business plan preparations part of the entrepreneurship course needs to be reviewed. Empirical studies by scholars (Dew, Read, Sarasvathy, & Wiltbank, 2009; D. Sarasvathy, Simon, & Lave, 1998; S. D. Sarasvathy, 2001) have stated that entrepreneurs are less likely to focus on the end (e.g. how much sales will the firm be making in 3 years, how many product line will the firm have etc) and more likely to focus on what they have and change their vision accordingly (Chandler et al., 2011). Our approach to

measuring effectuation knowledge from students stems from the book of *Effectual Entrepreneurship* (Read, Sarasvathy, Dew, Wiltbank, & Ohlsson, 2010). There are five principles of effectuation that an entrepreneur exercises during his entrepreneurial journey (Sarasvathy 2001) namely the Bird in hand principle, the affordable loss principle, the lemonade principle and crazy quilt principle.

### Effectuation in Teaching Pedagogy

The bird in hand principle stresses that an entrepreneur starts with resources already available to him. This can be in the form of knowledge, skills, traits, attributes, savings, networks etc. Sarasvathy (2001) classifies this into three categories of the self: who I am, what I know and who I know. When the focus is on the available set of means the entrepreneur's actions are evaluated in terms of potential loss which is within an entrepreneur's affordability. These set of actions encourage short term experimentation and risk taking (Chandler et al., 2011) which takes us to the second principle namely; affordable loss

Figure 2 *Effectual Entrepreneurship* (Read et al., 2010)



Focusing on affordable loss rather than expected returns is also a very important characteristic of entrepreneurs. Affordable loss thus assumes a central position on which the start up venture is based upon (Chandler et al., 2011). The entrepreneur because of limited risk can afford to experiment various strategies and in the meanwhile fail cheaply (Sarasvathy 2001). Additional capital injection in the new firm is only justified if the venture bear better financial results. Thus managing risk within the affordability domain encourages the entrepreneur to be more innovative and pro-active. He is able to act boldly during the process since the downside risk is hedged by his affordable loss.

The third principle is about making partnerships and reducing risks. By entering into a collaborative setting, the entrepreneur remains *flexible* since predicting and depending solely on the opportunities previously realized is uncontrollable. Thus the “need for prediction is greatly reduced” (S. D. Sarasvathy, 2001). Chandler (2011) argues that an important advantage startups have over established and large firms is their ability to remain flexible and take advantage of opportunities as they arise. Therefore the teaching pedagogy of entrepreneurship from the effectual lens is considerably different from the causal approach.

During the program/course, students are taught various case studies and shown videos on effectuation where practical application of each individual principle is applied. Individual & group exercises are also held whereby students are encouraged to come up with a product with their available set of means.

Although case studies and lectures are traditional teaching tools in entrepreneurship education (Gibb, 2002; Heinonen & Poikkijoki, 2006), however ensuring that the right cases



are taught from the effectuation perspective is something very important. The focus generally is not on ensuring that student learn the theories and apply the management tools on it (Mäkimurto-Koivumaa & Puhakka, 2013) rather they are able to absorb, retain and be able to relate the concepts of effectuation to real successful stories. The cases taught were selected carefully to offer students diversity in terms of geography and scale. The case of Roxanne Quimby is the highlight of the all, where students actively engage and are able to relate the principles of effectuation to the growth of the firm. Successful entrepreneurs are also invited to share their entrepreneurial experiences in class. This activity provides students with an interactive tool of learning entrepreneurship, where they are again able to relate theory to practice, specifically the theory of effectuation to its application. As stated by researchers (Honig, 2004; Kyrö & Tapani, 2007), business plans are not very effective in developing entrepreneurial skills or starting a new venture. It only states the processes, operations and planning strategies as required in a causal approach (Mäkimurto-Koivumaa & Puhakka, 2013). The effectuation process on the other hand negates these principles and suggests that although future cannot be predicted, the present can be controlled. Thus in light of the effectuation theory, a one page business model canvas was developed. This activity gave students a pictorial representation of the effectuation process and helped them identify their respective areas of strength and skills along with the business proposition which they would like to pursue. Building a vision for the startup is also a very critical factor which is taught to students. Based on the characteristics of being timeless, noble and correct, each startup must develop a vision for his startup company. In the whole process emphasis is laid on developing an entrepreneurial mindset, particularly of making partnerships, which is the core process through which the entrepreneur is able to reduce risk (S. D. Sarasvathy, 2001).

Learning the effectual behavior is a process which requires the use of innovative teaching pedagogies (Kirby, 2007; Kyrö & Carrier, 2005; Politis, 2005). Role plays and enactments are tools (Johannisson, 2002; S. D. Sarasvathy, 2001) which can be used in class whereby a student has to model an entrepreneurial character. This activity helps students understand the importance of making partnerships and accepting surprises in an entrepreneurial venture, as by entering into the shoes of the entrepreneur the student is able to naturally act and think in an effectual way. This also positively impacts the thinking capability of the students and they are able to come up with innovative strategies. Thus entrepreneurship education when taught effectively leads to an entrepreneurial mindset (Mäkimurto-Koivumaa & Puhakka, 2013).

### **IEO & Entrepreneurial Intentions**

Different researchers have indicated different factors which impact a person's entrepreneurial intentions. McClelland initially suggested that the need for entrepreneurial or personal achievement is associated with intention (McClelland, 1967). Later works suggested that gender, age, religion, education etc also impacts the intention to start a business (Reynolds, Storey, & Westhead, 1994; Storey, 1994). However, with the follow up research and critical analysis of the above factors, many authors have raised a question as to the explanatory capacity of these factors, not to mention the arguments they have raised as to their inherent limitations (Ajzen, 1991; Gartner, 1988; Santos-Cumplido & Liñán, 2007; Shapero & Sokol, 1982).

Although (Gartner, 1985) argued that an entrepreneur cannot be defined by an average common personality traits simply because each entrepreneur is unique in their entrepreneurial approach, (Rauch & Frese, 2007) suggests otherwise. One perspective argues

that since entrepreneurship is a career path which is chosen by an individual himself, either driven by necessity or opportunity, the entrepreneur will possess certain common traits (Krueger Jr, Reilly, & Carsrud, 2000). The predictive capacity however is still very limited (Reynolds et al., 1994). Even though intent remains the most important construct in the field of entrepreneurship (Bird, 1988; Krueger Jr et al., 2000) it still lacks complete clarity, as can be observed from the above arguments raised by various researchers. Some consider the word to mean career orientation (Francis & Banning, 2001), new startups (Korunka, Frank, Lueger, & Mugler, 2003), perception on self employment (Singh & DeNoble, 2003) and wanting to have an own business (Crant, 1996).

Seeing all the different interpretations of intention, it is not difficult to see that there is great obstruction in research and lack of consensus with respect to agreeing on a set of personality traits, circumstances and exogenous factors associated with entrepreneurship. Yet it remains as one the most important proxy and construct in the field of entrepreneurship (Thompson, 2009). This is because any new setup or business is set up with a planned cognitive reasoning (Krueger Jr et al., 2000; Shook, Priem, & McGee, 2003). It is also interesting observation by (Krueger, 2007) where he argues that not all business opportunities which an individual “stumbles” upon is converted into venture creation. This is because when an individual lacks entrepreneurial intentions the opportunity recognition is exhausted, as the entrepreneur never “intended” to do the business initially. It is worthy to note that many individuals merely consider intent as their desire or willingness to start a business and that they would prefer to be entrepreneurs one day. However, some never manage to get their hands dirty and start the entrepreneurial journey (Thompson, 2009). This is because the degree of intent varies among individuals and even the ones with high intent usually fail to start a business (Aldrich, 1999). One solution which Carsrud et al. (1986) suggest is that intentions can be moderated and mediated by educational level using various pedagogies (Carsrud, Gaglio, & Olm, 1986). Thus it again comes to an argument among scholars of whether entrepreneurial intention is a necessary condition to start a business? Thompson (2009) claims that it's a necessary but not a sufficient condition. Since intentions can be shaped by cognitions (Mitchell, Smith, Seawright, & Morse, 2000) and through educational training, we use the mode of effectuation model developed by Sarasvathy, whereby intentions were shaped by one's ability to control what they could afford to lose.

Entrepreneurial orientation is also a very important variable which is used in entrepreneurship research influencing the intentions levels and a very important construct to faculty in entrepreneurship pedagogy (Bolton & Lane, 2012). EO has been considered a set of traits and characteristics which defines every entrepreneur. However, question remained as to what those factors are. (Lumpkin & Dess, 1996) defined five traits as having those characteristics, namely pro activeness, competition, innovativeness, aggressiveness and autonomy. Some researchers suggested that these traits when coupled with a suitable environment along with social influences allows individuals to increase their chances of entering into an entrepreneurial activity (Levenburg & Schwarz, 2008). Similarly, remaining exposed to businesses also increases one's attitude towards entrepreneurship (Domke-Damonte & Faultstich, 2008; Raposo, do Paço, & Ferreira, 2008). Even though much of the research in IEO stemmed from the theory of trait being the defining feature of entrepreneurs, this was soon rejected by research undertaken by (Zhao, Seibert, & Lumpkin, 2010) who concluded that in over 60 studies conducted only two traits were found to have an impact on intentions. In this study we use three factors of IEO developed by (Bolton & Lane, 2012) which impacts intentions significantly, namely, pro activeness, innovation and risk taking.

Attitudes are used in the study as they are better suited to measuring intentions. Attitudes also tend to change over time, and influencing them either through education or experience can have a positive impact on one's intention to start a business (Harris, Gibson, & Taylor, 2007); (Packham, Jones, Miller, Pickernell, & Thomas, 2010). Bolton and Lane (2012) on the other hand proposes that a higher IEO score would indicate that an individual positively intends to become an entrepreneur. Thus, we will test two hypothesis in our paper based on these two theories. One hypothesis proposes that IEO will significantly impact intentions **through effectual knowledge**. Thus attitudes have to be aligned with specific effectual pedagogy (effectuation) to produce the desired results (intention to start). Second we will test the hypothesis of Bolton & Lane to see the impact of IEO on Intentions. Thus our hypotheses are as follows:

*H1: IEO has a significant impact on the intentions to start a business*

*H2: IEO along with Effectuation significantly impacts the intentions to start a business.*

### Measures

To collect our data, students were asked to complete a questionnaire which was based on a Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

### Intentions

Thompson's Individual Entrepreneurial intent scale was to measure student intentions, with the degree of intentions varying among individuals (Thompson 2009). Thus those who measure higher on the intention scale will have a higher probability and chances of actually starting their own business in the future. Table 1 shows the reflective questions of Intentions construct.

**Table 1: Intentions measurement scale used**

#### Individual Entrepreneurial Intent Scale

1. Intend to set up a company in the future
2. Never Search for business opportunity (R )
3. Saving money to start a business
4. Have no plans to start a company ( R )
5. Spend time learning about starting a firm

#### Individual Entrepreneurial Orientation (IEO)

We use the Bolton and Lane (2011) measure of assessing IEO in students. As per the scale, Risk taking, pro-activeness and innovativeness variables explain an individual's entrepreneurial orientation. Each variable had particular questions which the student had to answer in order to measure their IEO. Table 2 lists the questions which were asked.

**Table 2: IEO Scale**

#### Individual Entrepreneurial orientation scale

Items:

Risk:

1. I tend to take calculated risk before proceeding on a idea/task
2. I would like to do small experiments to understand and minimize my risk
3. I tend to act very boldly when the amount of risk is within my affordable loss

**Innovation:**

1. In general, I prefer a strong emphasis in projects on unique, one-of-a-kind approaches rather than revisiting tried and true approaches used before
2. I prefer to try my own unique way when learning new things rather than doing it like everyone else does
3. I often like to try new and unusual activities that are not typical but not necessarily risky
4. I favor experimentation and original approaches to problem solving rather than using methods others generally use for solving their problems

**Pro-activeness:**

1. I usually act in anticipation of future problems, needs or changes
2. I tend to plan ahead on projects
3. I prefer to “step-up” and get things going on projects rather than sit and wait for someone else to do it

**Effectuation knowledge:**

Building on Sarasvathy’s(2001)model of effectuation we examine four main principles, namely,

- The bird in hand principle where an entrepreneur looks at the available means and asses his internal strengths to leap forward on the entrepreneurial journey.
- The crazy quilt principle, which suggests that the entrepreneur tends to enter into networks and partnerships which makes the journey relatively easy.
- The lemonade principle whereby the entrepreneur remains flexible and is open to surprises in their daily lives and where they adopt themselves to changing dynamics of the market.
- The affordable loss principle, which encourages experimentation in the business knowing that the downside to the expected return is minimal (Chandler et al. 2011)

Table 3 lists the items measured by effectuation in our survey

***Table 3: Effectuation items***

1. To start a company available set of means are more important to me
2. My networks, contacts and classmates and alumni will be important for my business
3. Passion, hobbies and interest are key ingredients to start a business
4. I will not make agreements with customers, suppliers and other organizations to reduce the amount of uncertainty
5. I would like to interact with people I know to discuss my business idea
6. I am open to make partnership with other people interested in my business idea
7. I feel very uncomfortable to surprises in my daily life
8. I take surprises positively and try to take benefit from them
9. I am open to adapt myself to upcoming surprises
10. I would be careful not to commit more resources than I could afford to loose
11. Instead of expected returns I look at the downside risk of the opportunity

**Results**

The total sample size used in the research was 63 of which 41% students were male and 59% females. All of them hailed from urban background. 66% did not have any family business

background, while 34% said that they did. We used the PLS path modeling to measure the construct rather than co-variance based methodology. We treated IEO and Intentions latent variables on a reflective scale and propose effectuation is a formative construct having multiple dimensions (Chandler et. al. 2011). In the first two latent variables causality flows from the latent variables to the constructs while for effectuation it is the other way round. Prior to factor analysis, we tested the model for reliability by using the Cronbach's Alpha, Kaiser-Meyer-Olkin (KMO) measure of adequacy and Bartlett's test of significance. The following table illustrates the values for the model:

	<b>Effectuation</b>	<b>IEO</b>	<b>Intentions</b>
<i>Chronbach's Alpha(<math>\alpha</math>)</i>	0.678	0.775	0.765
<i>KMO Value</i>	0.655	0.729	0.720
<i>Bartlett's Test</i>			
Chi Square	141.627	155.57	82.644
df	66	56	10
Sig	p<.000	p<.000	p<.000
R Square	0.447		0.288

As the table suggest Chronbach's Alpha and KMO values for all constructs are greater than 0.5 and we have a significant value for Bartlett's test indicating an appropriate factor analysis. It is also interesting to note that the total variance explained by these factors complies with our expectations. The construct of effectuation has four factors explaining 58% of all the total variance, IEO variance was explained by 3 factors accounting for 62% and finally intentions where we have one factor explaining 51.8% of the total variance. The factor loadings for all latent variables are provided in table 4 below. The factors loaded pretty well and as per expectation. This shows the reliability of the factors and that they measure the latent variable as explained by these factors. However, some of the variables had cross loadings and were thus removed from our final analysis (namely Questions 15, 16, 18 and 20). Excluding them produced a substantially clean loading pattern. We use guidelines laid out by (Hair, Tatham, Anderson, & Black, 2006) which termed factor loadings above 0.4 as having ample statistical power.

Structural equation modeling was used to assess the causal relationships between the latent variables.

*Table 4: Factor loadings for the model*

	Effectuation	IEO	Intention
RiskQ1		0.458	
RiskQ2		0.603	
RiskQ3		0.623	
InnoQ4		0.632	
InnoQ5		0.644	
InnoQ6		0.628	
InnoQ7		0.660	
ProQ8		0.463	
ProQ9		0.416	
ProQ10		0.580	
IntentQ11			0.759
IntentQ12			0.846
IntentQ13			0.615
IntentQ14			0.807
BHandQ17	0.646		
BHandQ19	0.404		
LnadeQQ21	0.126		
LnadeQ25	0.774		
ALossQ26	0.342		
ALossQ27	0.412		

The composite reliability of IEO and Intention was 0.830 and 0.845 respectively, much higher than the cutoff point of 0.7. Similarly R square for effectuation was 0.447 and for intentions 0.288. Figure 3 depicts our SEM results. The path coefficients and statistical values of the model are as follows

**Mean, STDEV, T-Values, P-Values**

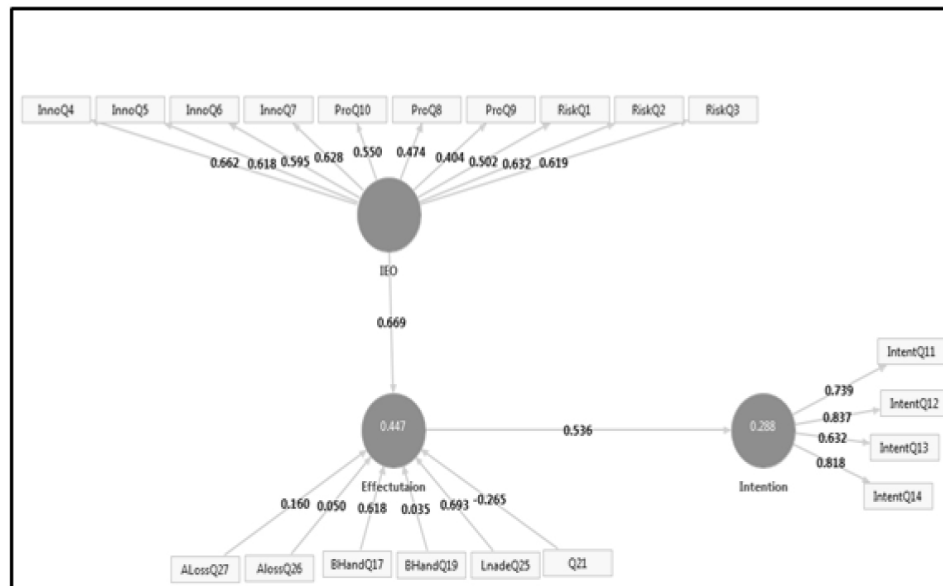
	Original Sample (O)	Sample Mean (M)	Standard Error (STERR)	T Statistics ( O/STERR )	P Values
<b>Effectuation -&gt; Intention (H2)</b>	0.449	0.481	0.204	2.203	0.028
<b>IEO -&gt; Effectuation (H2)</b>	0.653	0.685	0.089	7.374	0
<b>IEO -&gt; Intention (H1)</b>	0.127	0.152	0.212	0.598	0.55

To test discriminant validity factor correlation matrix was used to test distinction of factors. Table 5 shows the cross loadings for our model. As can be seen from the table no factor had a cross correlation above 0.7 and all factors correlated very well with their own factors. The VIF values were measured at 1.74 which were well below the defined limit.

Table 5: Correlation Matrix

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q17	Q19	Q21	Q25	Q26	Q27
Q1	1	0.323	0.051	0.36	0.117	0.14	0.085	0.365	0.253	0.188	0.003	0.022	0.079	0.105	0.177	0.106	0.153	0.377	0.495	0.078
Q2	0.323	1	0.226	0.448	0.217	0.175	0.284	0.284	0.218	0.18	0.168	0.16	0.069	0.202	0.312	0.197	0.128	0.327	0.317	0.306
Q3	0.051	0.226	1	0.345	0.336	0.427	0.333	0.183	0.215	0.302	0.224	0.27	0.097	0.082	0.199	0.347	-0.032	0.383	0.041	0.308
Q4	0.36	0.448	0.345	1	0.336	0.235	0.292	0.083	0.133	0.18	0.196	0.196	0.19	0.125	0.315	0.156	0.242	0.465	0.351	0.164
Q5	0.117	0.217	0.336	0.336	1	0.539	0.502	0.105	0.063	0.378	0.299	0.273	0.056	0.158	0.13	0.345	0.101	0.315	0.078	0.17
Q6	0.14	0.175	0.427	0.235	0.539	1	0.541	0.082	0.128	0.263	0.377	0.265	0.066	0.213	0.08	0.167	0.013	0.281	0.026	0.231
Q7	0.085	0.284	0.333	0.292	0.502	0.541	1	0.076	0.039	0.314	0.493	0.342	0.134	0.245	0.178	0.334	0.039	0.403	0.223	0.164
Q8	0.365	0.284	0.183	0.083	0.105	0.082	0.076	1	0.445	0.312	0.158	0.203	0.151	0.162	0.241	0.143	0.004	0.25	0.207	0.27
Q9	0.253	0.218	0.215	0.133	0.063	0.128	0.039	0.445	1	0.485	0.105	0.156	0.152	0.124	0.035	-0.116	-0.059	0.073	0.113	0.169
Q10	0.188	0.18	0.302	0.18	0.378	0.263	0.314	0.312	0.485	1	0.306	0.337	0.117	0.092	0.177	0.273	0.17	0.242	0.08	0.17
Q11	0.003	0.168	0.224	0.196	0.299	0.377	0.493	0.158	0.105	0.306	1	0.611	0.299	0.419	0.201	0.128	0.058	0.292	0.085	0.122
Q12	0.022	0.16	0.27	0.196	0.273	0.265	0.342	0.203	0.156	0.337	0.611	1	0.312	0.595	0.351	0.005	-0.05	0.246	-0.018	0.121
Q13	0.079	0.069	0.097	0.19	0.056	0.066	0.134	0.151	0.152	0.117	0.299	0.312	1	0.359	0.395	0.077	0.047	0.235	-0.019	-0.149
Q14	0.105	0.202	0.082	0.125	0.158	0.213	0.245	0.162	0.124	0.092	0.419	0.595	0.359	1	0.406	0.048	-0.047	0.257	0.078	0.2
Q17	0.177	0.312	0.199	0.315	0.13	0.08	0.178	0.241	0.035	0.177	0.201	0.351	0.395	0.406	1	0.25	0.232	0.118	0.035	0.015
Q19	0.106	0.197	0.347	0.156	0.345	0.167	0.334	0.143	-0.116	0.273	0.128	0.005	0.077	0.048	0.25	1	0.128	0.322	0.098	0.081
Q21	0.153	0.128	-0.032	0.242	0.101	0.013	0.039	0.004	-0.059	0.17	0.058	-0.05	0.047	-0.047	0.232	0.128	1	0.314	0.275	0.11
Q25	0.377	0.327	0.383	0.465	0.315	0.281	0.403	0.25	0.073	0.242	0.292	0.246	0.235	0.257	0.118	0.322	0.314	1	0.447	0.353
Q26	0.495	0.317	0.041	0.351	0.078	0.026	0.223	0.207	0.113	0.08	0.085	-0.018	-0.019	0.078	0.035	0.098	0.275	0.447	1	0.31
Q27	0.078	0.306	0.308	0.164	0.17	0.231	0.164	0.27	0.169	0.17	0.122	0.121	-0.149	0.2	0.015	0.081	0.11	0.353	0.31	1


Figure 3: First order SEM Model



## Conclusion

As the empirical tests reveals, IEO does not have a significant direct impact on the student's intention to start a business. It is only significant if we teach them the effectuation principles. This intuitively makes sense as well. Attitudes such as pro-activeness, innovativeness and risk taking are innate characteristics which make up a behavior of an individual, such behaviors can subside over a period of time. Entering into a corporate job will to a certain extent diminish that quality unless he/she is guided on the path of entrepreneurship. Effectuation seeks to lay out the most viable solution for shaping these

attitudes to be channelized into startups. Small steps which can even be taken during the course of studies will give these students enough confidence to embark on the journey once they graduate. Although one limitation of this study is the sample size, but this gives a new perspective and domain in entrepreneurship education and seeks to establish that teaching effectuation to students positively impacts intentions to start a business. Business schools place a lot of emphasis by preaching the traits of entrepreneurs in isolation. This in our case seems to be problematic, as it will not significantly impact the students intention to start a business.

In Pakistan, entrepreneurship is the need of the day. Jobs have almost dried up and most of the graduates have been unable to find jobs. In this scenario, entrepreneurship provides them an opportunity to explore the untapped market within Pakistan and abroad. The Institute of Business Administration, being the oldest business school in South Asia is promoting this cause by reaching out to all the major universities across Pakistan and training their faculty to teach effectuation theory of entrepreneurship to students. We have also revamped the idea of business competition by making it a business startup competition where students have to sell their products to a few customers before they are eligible to apply in the competition. This is done on the basis of effectuation theory where every student is trained to look at the downside risk rather than expected return as taught in the causal model of entrepreneurship. Therefore we suggest that effectuation teaching should be used as a mode of teaching instead of the traditional causal approach. 

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“Vitality, power of life, is correlated to the kind of life to which it gives power. The power of man’s life cannot be seen separately from what the medieval philosophers called “intentionality,” the relation to truth meanings.”

Paul Tillich, *The Courage to Be*, p.81

**CASE STUDY****GROWTH OF BUSINESS SCHOOLS ON SOCIAL MEDIA  
A COMPARATIVE ANALYSIS WITH FOCUS ON IBA KARACHI**

Erum Hafeez Aslam

*Institute of Business Administration, Pakistan***Abstract**

*When the Institute of Business Administration Karachi established a presence on various social media platforms in 2009, its audience and followers grew dramatically. Face book, Twitter, YouTube and LinkedIn all proved to be useful tools to disseminate information for its target audience including prospective and current students, faculty, staff, alumni, parents and industry.*

*By 2012, however, social media activity became somewhat stagnant, as it was observed that content on various interfaces, although informative, lacked engagement and interaction with the audience. After several months of close monitoring, a number of issues were identified; for example, content only consisted of program and event announcements; slow response time to queries; lack of posts that would attract foreign audiences; and immense need to monitor the pages for removal of garbage material. It was then decided that a comprehensive Social Media Strategy should be developed with the primary goal of increasing the visibility of IBA on all its current social media platforms in order to attract more talented students and high caliber faculty.*

*IBA's Social Media Strategy is based on four key design principles viz., Listen, Engage, Interact and Inform its audience, with content being the most important driver for the success of Social Media. IBA's Social media metrics indicate that the strategy has been successful to an extent, with the number of 'Likes' on the Face book page and posted content showing a rise, along with an increase in the number of comments, reviews, queries, Facebook visits, YouTube views, followers on Twitter, re-tweets and Talking About.*

*However, comparison with other leading business schools in Pakistan and overseas indicates that IBA still lags behind. One of the strengths of IBA is its 27 highly active student societies and numerous academic departments, which, if properly engaged, could provide a constant stream of high quality, student generated content.*

**Keywords:** ICT Social Networking, Digital Media, Business Schools, Content, Target Audience, Strategy

**Introduction**

It was early Monday morning when Ashar was sitting in his office at the second floor of IBA's new Center for Entrepreneurial Development (CED) building. He had just

arrived and was sifting through his cluttered email inbox when he noticed an urgent email from the Senior Manager Information Systems. His first inclination was to leave it for later, but as Manager Communications and Public Affairs, he knew that would be irresponsible. Reluctantly, he opened the email and read through the urgent message calling all members of top management and Program Heads for an emergency meeting. He wanted to address the issue of their online social media presence, which although was enjoying a fan-base of an impressive (at the time) 26,000 members, was in all honesty, pretty dormant. Ashar knew he would soon be getting an anxious call from the Dean and Director to look further into the matter. And sure enough, the phone rang within moments with instructions to devise a pragmatic social media strategy and action plan by the next quarter to effectively utilize IBA's social media platforms for student engagement, corporate communication and marketing campaigns. Ashar attended the meeting and soon a Social Media Committee was formed for the purpose.

### **Background**

#### **Institution of Business Administration (IBA) Karachi:**

IBA is one of Pakistan's premier business schools, which has been producing top quality graduates since 1955. IBA is perhaps the single most influential institute in terms of its contribution towards the economic development of Pakistan. The IBA was set up in 1955 in collaboration with the Wharton School of the University of Pennsylvania. The school was initially a graduate school for business studies and the first business school outside of North America. From a business school within the University of Karachi, IBA's status was elevated to that of an independent, degree-granting institution in Pakistan in 1994 when it received a charter from the Sindh government (Program Announcement, 2012-13).

Since its establishment, IBA has been known for its merit, discipline and quality of students. It has a 58-year old heritage that has produced a large network of around 10,000 alumni, now working as top entrepreneurs, key decision-makers, strategic planners and opinion leaders in organizations, both in Pakistan and abroad (IBA Website, Dec. 2013). IBA enjoys a reputation of being innovative and ahead of the game. More recently, IBA has set new strategic directions for itself, and is now progressing rapidly along the dimensions of program, faculty and infrastructure development.

#### **IBA's Marketing History:**

IBA's marketing strategies have undergone significant transformations in recent years. If one only considers the advertisements that used to be published in leading national Urdu and English newspapers, the evolution over the past six years is evident.

Prior to the age of digital media, when IBA relied heavily on print ads alone, it can be seen that traditional ads used to be extremely text heavy, lacked pictorial content and provided readers with all relevant information, such as eligibility criteria for the various programs on offer, the admissions process, financial assistance details, important dates, contact information and other data. However, even as recently as 2009, it can still be observed that IBA followed a very old-fashioned style of one way communication, where IBA was the provider of all relevant details and the audiences were the consumers of information.

This mindset was also prevalent when IBA started to develop a presence on various social networking sites such as Facebook and Twitter. IBA would push out information on a

regular basis, announcing admissions, vacancies, convocations, tender notices and other happenings. However, with competition steadily increasing from other local business schools and digital media – especially social media platforms – gaining a stronger footing in the minds and social lives of the target audience comprising mainly of students, IBA found itself in need of better ways to reach out to its market.

Hence, IBA started to restructure its Communications Department and develop a Communication Strategy. Following the 4R strategy – revise, reform, reinvent and reinvigorate, IBA's Communication and Public Affairs Department started to implement a number of changes. Firstly, in terms of print ads, IBA initiated to revamp its designs, having engaged various ad agencies through a pre-qualification process. On campus photo shoots allowed the incorporation of photos of IBA's facilities and various aspects of students' life across campus, allowing for a more relevant human element and youth-friendly message. Ads started being published with less text and appear more reader-friendly. By directing readers towards the website for more information, students are exposed to a lot more than can be printed in newspaper ads. For example, by visiting the IBA website, prospective students can access a host of information through IBA's online newsletters; learn more about faculty members, read more about the programs on offer, and much more (The Current, 2011).

IBA's social media strategy has also been upgraded to include more than just one-way communication. If students are to visit IBA's Facebook pages now, they will find up-to-date information regarding student activities and achievements, alumni updates, faculty developments, various academic departments, public service announcements, and all other IBA-related information through photos, videos and status updates – all in semi-formal, accessible English for diverse audiences. The Facebook page provides a platform for real-time discussion and students can post queries and expect prompt responses from the concerned.

However, in terms of marketing, IBA still has a long way to go. As the following case study will highlight, in comparison to its regional competitors, IBA has yet to develop a more streamlined communication strategy and develop a stronger, more focused presence on the new media.

### **Social media in Pakistan**

Social Media Technology (SMT), a relatively new phenomenon in Pakistan, has gained immense popularity in a short span of time while transforming the ways in which the youth of Pakistan communicate, interact and socialize. According to Evan (2013), "With an estimated mobile penetration of 70 percent and internet penetration of 16 percent by mid-2013; including more than 125 million mobile subscribers - a figure that ranked Pakistan 5th largest mobile phone market in Asia (Teller, 2013); more than 30 million Pakistani Netizens (Sanou, 2011); and around 8 million Facebook users, seventy percent of whom are below the age of 30 (World Economic Forum, 2012), one can only imagine the potential of this rapidly growing media on the youth and thereby in the social transformation of the country.

Social bakers (2013) estimated, "Face book attracts the majority of native netizens whereas other social media interfaces are also growing gradually. The population of native netizens is growing at a rapid pace because of its fast-paced, time saving, convenient and cost effective nature." Twitter is mostly used for news and updates. Linkedin is a preferred platform for professional linkages and networking. Google is becoming increasingly popular as well. Blogs are also gaining public attention and have a large network of bloggers. Pakistan

has a lot of potential in e-commerce business and travel websites. Currently, online shopping has seen an upward trend and Facebook pages are a main source of inspiration for retail businesses (Social Media Trends in Pakistan, 2013).

### **Literature Review**

A thorough research has been conducted by various researchers to examine the existing findings about the impact of SMT within higher education institutes, especially about different types of SMT being used, extent of its usage, its social implications and its effectiveness in students' and alumni connections.

“Most of the available studies in this area has been based on four- year colleges and universities, where the common trend of using social media as a communication tool for individual entities prevails, with a lack of institutional commitment towards it being integrated into a larger system” (Charles, Davis, 2012).

The huge success of social media in the field of communication is reflected by research findings which reveal that 96% of the millennial population is using at least one social network (National School Board Association, 2011). Moreover, Facebook membership reached 200 million marks within less than a year of its launch. Social media has opened up new avenues for organizations and manufacturers to make their presences felt and communicate with their target market. Social media also allows them to reach out to the niche audience and adapt their messages accordingly. Many companies and service providers are availing this opportunity to strengthen their marketing and promotion efforts.

Colleges and universities are also adopting the same media to extend its reach and impact. There is a great potential for social media with reference to academic institutes; however, very limited research has been conducted on the issue of its real and potential usage and effectiveness. Whether, social media networks prove to be an appropriate channel of communication and marketing for academic institutions in developing countries like Pakistan is yet unclear.

It is of significant importance that we start studying how higher educational institutions incorporate the use of social media technology in various functions like learning, student engagement, marketing and recruiting, and how are they employing it to connect with their students and facilitate them effectively.

The use of blogs, Facebook, Twitter and other social media interfaces like Flickr and YouTube is also recommended by Dr Rachel based on survey results of 148 colleges and universities (Rachel, 2012).

According to a study conducted by the University of Massachusetts for Marketing Research (2012), usage of social media by the admission offices have increased over the years, from sixty-one percent of the respondents, using at least one form of social media in 2007 to ninety-five percent students by 2009.

A survey carried out by National School Boards Association (2011) further confirms the high usage of social media by students and reports that sixty percent of those on social networks talk about topics related to education. Moreover, they express themselves through social media tools, generating and passing online content.

Although the presence of students on social media sites is high, a small percentage of students employ SMT for searching colleges when deciding to apply (Social Media for Higher Education, May 2012).

### **Institute of Business Administration (IBA) Karachi at Social Media**

**Case Problems:** The Institute of Business Administration Karachi (IBA) adopted Social Media by developing its own social hub, and established a presence on social media platforms such as Twitter, LinkedIn, YouTube and Facebook in 2009. “IBA has crossed the learning curve in this area, and needs a Social Media Strategy to formalize existing practices and provide guidelines for the future”(Social Media Strategy Paper, 2012).

IBA had maintained a presence on various social media websites for over three years by 2012. However, it was neither duly active nor as vibrant as required. Most of the IBA social media pages were dormant, centralized and boring.

As a result, IBA had failed to listen, engage, educate and entertain its various audiences. Most of the time, IBA’s social media presence was limited to static notices linked to PDFs and posts on the IBA website. The primary objective seemed to repost web information through another channel mostly irrespective of the feedback from the audience.

#### **Case Problems/Questions**

1. What should be done in terms of an effective strategy and what could be the standard operating procedures for producing and posting relevant content?
2. Who should be involved at which level?
3. How can it be put into practice? Where shall it start and what should be the timeline?
4. How can IBA’s Social Media presence be made more lively, interactive, engaging, entertaining and informative for current and aspired audiences for advertising, marketing and educational purposes?
5. Why is it important to use social media for official and institutional communication and engagement?

#### **Why was there a need for a Social Media Strategy?**

IBA jumped on the Social Media bandwagon in 2009, when it developed its own social hub by establishing its presence on social platforms such as Twitter, LinkedIn, YouTube and Facebook. IBA has now crossed the learning curve in this area, and therefore needs a Social Media Strategy to formalize existing practices and provide guidelines for the future.

IBA’s Social Media Strategy is based on four key design principles. These principles will enable IBA to Listen, Engage, Interact and inform prospective students and other stakeholders such as faculty, staff, current students, alumni and society at large.

IBA’s Social Media Strategy is intended to increase IBA’s visibility on social platforms and thereby attracting more talented students and faculty. Secondary goals include improving internal communications, and use of social media in the classroom for delivering quality education.

#### **Target Audience:**



The primary target audience is the technology-savvy youth and prospective students. Other intended audiences of IBA's Social Media include current students, faculty, staff, alumni, industry and society at large.

**Content:**

Content is perhaps the single most important driver for the success of Social Media. IBA needs to produce a constant stream of high quality content for its social channels. The opportunities for producing content already exist at IBA. There are 27 student societies that conduct various events and activities on a regular basis both at local and national levels. Other important events include the Director's speeches, Guest Speaker visits, Convocations, Conferences and Reunions.

IBA's Social Media Strategy recommends video recording all important public events and activities, especially the Director's speeches at Orientation sessions, Mega Events organized by student societies, Distinguished Guest visits and other such events.

**Channels:**

IBA would focus on Face book, LinkedIn, YouTube and Twitter for information dissemination as well as for both internal and external interactions.

**Methodology****Measurement and Assessment:**

Various Social Media metrics such as number of comments, reviews, queries, clicks, clickthroughs, Facebook visits, YouTube views, re-tweets, Twitter followers, Facebook 'Likes', Talking About, as well as traditional measures such as in-house surveys and focus groups will be used to assess the success of IBA's Social Media Strategy.

**How would Social Media Technology (SMT) be beneficial to enhancing the image of IBA?**

It is estimated that more than 30 million Pakistani NETIZENS are online today and the population is growing at a rapid pace. According to Kemp (2013), "social media is more popular among the local male population (i.e.75%) than female population (i.e. 25%)". These statistics, however, are debatable since many female users create accounts on social media as males in order to hide their identity for privacy reasons. The demographical study of the net users further reveals that around 70% of them are below the age of 24.

Furthermore, an international survey titled Social Media for Education (2012) further reflects that "70% of the students suggest that colleges should have a presence on social networks; 50% want to be contacted directly through a social network and around 81% access the net wirelessly."

Considering IBA's target audience of 18- to 24- year-old college students, the younger high school crowd, alumni, parents of students, potential donors, faculty, staff and other stake holders (which are just a 'tweet' or a 'like' away), there is no choice but to integrate social media platforms into IBA's overall marketing and communications plans.

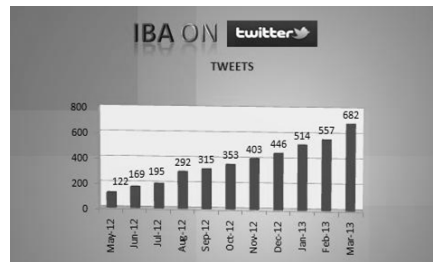
**IBA's status on its various Social Media Platforms**

A baseline study of various Social Media interfaces such as Facebook, Twitter and YouTube from May 2012 to July 2012 and then to March 2013 was conducted to evaluate the

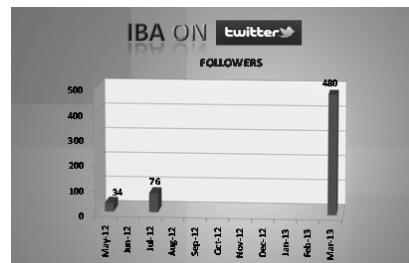
popularity and activity of IBA on these social media websites to gauge its progress over a period 11 months.

### IBA on Twitter

According to the comparative analysis, IBA's activity on Twitter showed a slight increase with the number of tweets increasing from 122 in May 2012 to 195 in July 2012. After the introduction and implementation of the Social Media Strategy, this number more than tripled to 682 tweets by March 2013, indicating progress in IBA's Twitter activity.

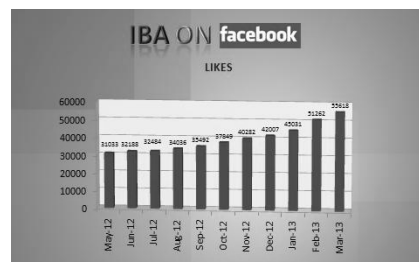


In terms of the number of followers on IBA's Twitter page, the figure more than doubled from 34 in May 2012 to 76 in July 2012. However, after the Social Media Strategy was put into effect, the number of followers reached 480, showing a 600% increase, in March 2013.



### IBA on Facebook

An evaluation of IBA's Social Media activity also included a study of the number of 'likes' and 'talking about' on its Facebook page. According to the baseline study, the number of 'likes' showed a negligible rise from 31,033 to 32,484 between May 2012 and July 2012. However, in March 2013, the figure showed a significant climb to above 55,000 'likes', indicating an average increase of over 2,000 'likes' per month.



Another key measurement metric on Facebook is ‘talking about’, which signifies the number of Facebook users talking about the page or its various content. In 2012, the figure showed a decrease from 610 in May 2012 to 448 in July 2012, however, by March 2013, the number tripled to 1,305 after the Social Media Strategy was put into practice. It was in fact February 2013 that exhibited remarkable increase with 2951 talking about probably because of the content variety and frequency of interaction on IBA FB page.



### IBA on YouTube

YouTube, an important social media video website, was evaluated for the nature of content and number of videos on the IBA YouTube page from May 2012 to July 2012. It was noted that there was slight improvement in the number, quality and variety of videos uploaded on IBA’s YouTube which increased from 28 official videos in May 2012- mostly comprising of Dr. Ishrat’ s interviews (all recordings of Geo TV interviews) to 35 videos showcasing various events and activities of students such as OmoreAdwar and IMC introductory activities.

It is also worth noting that YouTube has been banned in Pakistan since September, 2012 thus limiting IBA’s activity and presence on YouTube. Also, as a result, pertinent data about the ongoing progress has been difficult to attain after that.

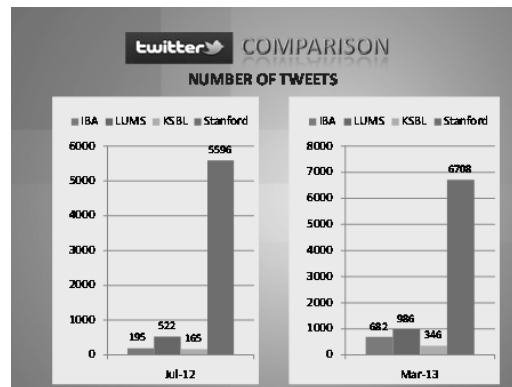
### IBA in comparison to Stanford University, Lahore University of Management Sciences (LUMS) and Karachi School for Business and Leadership (KSBL)

A baseline study of various Social Media interfaces such as Face book, Twitter and YouTube from July 2012 to March 2013 was conducted to compare the popularity and activity of social media pages of various universities, such as that of Stanford University, LUMS and KSBL in comparison to IBA Karachi.

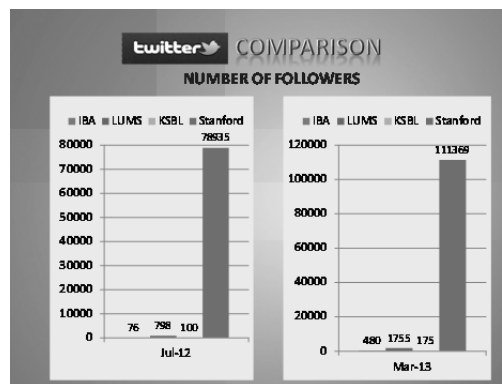
The purpose of comparing IBA Karachi to LUMS is because LUMS is seen as a natural competitor to IBA; much younger than IBA, LUMS has been compared to IBA in numerous aspects and rankings. KSBL is the emerging business school in Karachi. In its short history, KSBL is rapidly gaining great popularity on Social Media websites. Also, KSBL’s Social Media activity is being handled by an IBA graduate. Stanford University is one of the top-ranking business schools in the world and its Social Media activity and achievements are being used as an international benchmark for comparison.

### IBA on Twitter

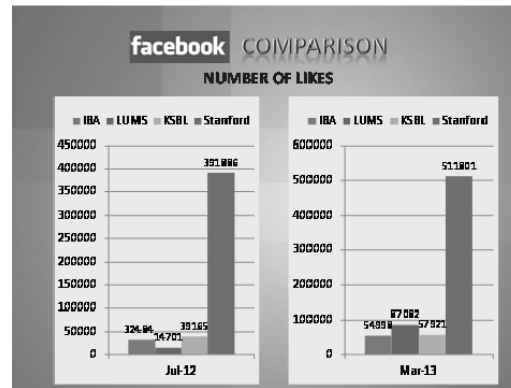
In July 2012, in comparison to IBA's 195 tweets, LUMS had tweeted 522 times and KSBL 165 times, while Stanford University led with a total of 5,596 tweets. In March 2013, however, a shift in scenario shows IBA's Twitter activity to have more than tripled with 682 tweets, LUMS's activity to have less than doubled with just under a total of 1,000 tweets and KSBL's activity doubling to a total of 346 tweets. Stanford University showed only slight but steady growth in its Twitter activity with a total of 6,708 tweets – an increase of just over 1,000 tweets in the same time period.



Another crucial measurement metric is **number of followers**. According to the baseline study, in July 2012, IBA had just 76 followers, while KSBL had 100, LUMS had 798 and Stanford University had 78,935 followers. By March 2013, while the number of followers increased six times for IBA, with a total of 480, growth was comparatively slower for the other universities: though still ahead of IBA, LUMS's followers only doubled in number to 1,755; KSBL's followers only increased by a handful number of 175; and the followers of Stanford University rose to a total of 111,369.

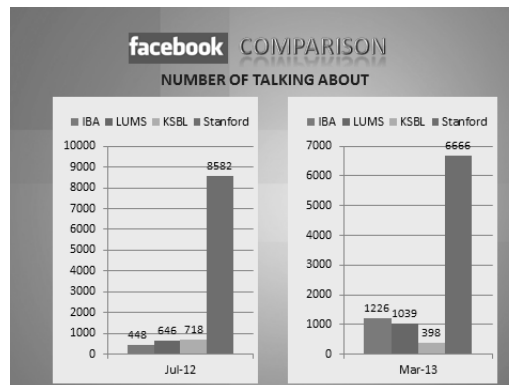


### IBA on Facebook



In July 2012, the number of ‘likes’ on IBA’s Facebook page stood at 32,484 in contrast to that of 14,701 for LUMS, 39,165 for KSBL and 391,886 for Stanford University.

By March 2013, however, IBA’s Facebook page saw a rise in the number of ‘likes’ to 54,998. LUMS witnessed a significant six-fold increase to 87,082 ‘likes’, while KSBL – although still ahead of IBA – showed similar progress to that of IBA, with the total number of ‘likes’ at 57,921. Stanford University stood at 511,801 ‘likes’, which, although the highest in this category, indicates only a steady rise.



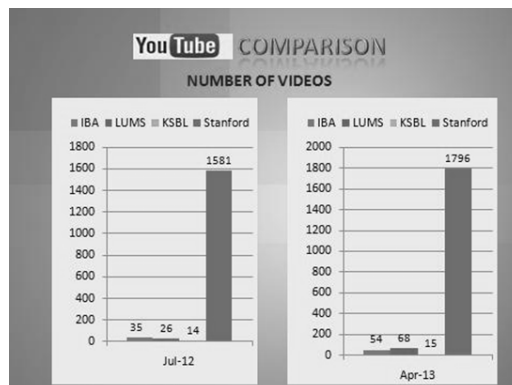
In July 2012, it was observed that most of the time untailored information was being uploaded about events and programs at IBA on Facebook, which is perhaps one of the reasons for its unpopularity among the young audience, indicated by the ‘talking about’ figure standing at 448. By March 2013, IBA’s Facebook page showed a significant three-fold increase, outnumbering the figure for LUMS; while KSBL showed a decline to half of its initial figure in July 2012. Although Stanford University leads this category as well, its figure also shows a decline in March 2013, from its initial figure in July 2012.

### IBA on Youtube

YouTube was evaluated for the nature of content and number of videos in comparison to that of Lahore University of Management Sciences (LUMS) and Karachi

School for Business and Leadership(KSBL) and Stanford University in the months of July 2012 and March-April 2013.

Results showed that IBA had uploaded 28 videos and while LUMS and KSBL had lesser number of videos i.e. 26 and 14 respectively, their content was more targeted and need-based. Stanford University, on the other hand, was measured as a benchmark with around 1,561 videos uploaded of diverse nature ranging from videos of students' activities to faculty lectures on variety of topics.



### Social Media Activities in other native leading Universities in Pakistan

In order to learn how other native leading universities are doing in the area of Social Media Marketing, we did a small survey and talked to the representatives of a couple of universities.

It is discovered that the Lahore University of Management Sciences (LUMS) maintains a separate social media team headed by a Marketing Manager, who looks after the content development and monitoring of its various social media platforms. According to an official in the Marketing Department, "The LUMS team plans to manage a Blogger outreach program and build an active brand ambassador network for the University. The department ensures active entries on various video platforms such as Vimeo, and Youtube as well as Twitter and LinkedIn through which it actively promotes its Alumni achievements.

Karachi School of Business and Leadership (KSBL) likewise seemed to realise the importance of social media much earlier and started using the platform since the very beginning. Digital history reveals that KSBL's Facebook page was launched in 2008 and since then the institute has managed it effectively with regular posts and real time responses to public queries and messages. However, most of the posts and updates on KSBL facebook page are primarily announcements related to seminars and lecture arranged at the university. It is found that the Students' activities are rarely highlighted on the official Facebook page. Besides, KSBL has also maintained an account on Vimeo where videos are frequently uploaded related to students and faculty activities. One can also witness KSBL's presence on LinkedIn with large network and discussion groups.

When we talked to Mr Sibtain Naqvi, the Head of Media & External Relations at the recently established Habib University, he explained the institute's digital marketing initiatives in these words, "Social media is an increasingly critical tool that helps us in reaching out to the younger audience. School students are very much in touch with Facebook and other

online portals and it is the medium of choice for entertainment, information, connectivity and communication. We at Habib University are fully cognizant of this reality and make sure we address the engaged audience in a manner they are comfortable with and through a medium they are used to. Our successful social media campaigns and the increased reach of our message is proof of that.”

### **Factors to consider for reviving IBA’s Social Media Technology**

IBA already has a Facebook page, Twitter account and YouTube existence. What IBA needs is to promote and improve its presence on these platforms. It is believed that **content** is one major and single source that can play a key role in improving the presence of an institution on the social media. Lots of data has been posted on IBA Facebook but it needs to be tailored. Various IBA departments also have lots of information that needs to be tapped into and it is believed that the Faculty of Computer Science, ICT, Communications and Program Offices can play a pivotal role in this regard.

Moreover, there is a need **of Social Media Strategy** to ensure sustained guidance, maintenance of content quality and quantity, introduction of SOPs and Standardized templates as well as sustainability of the initiatives. **Social Media Committee** is also needed to be formed to extend experienced and technical expertise, coordination and ownership and clarity about objectives.

### **Roles and Responsibilities**

The responsibility of producing content for social media will be distributed among the 21 service units, with lead being taken by the Program Offices, and the Communications Department while MIS Department will be responsible for the technical support and content monitoring. It was proposed that each Program Director will spend an hour or two live on Facebook each month answering queries in real time. Update Frequency:

Facebook Page:	Twice Daily
Twitter:	Six times Daily plus as and when required
YouTube:	Weekly
LinkedIn:	Monthly

**Social Media metrics to be used to gauge progress:** number of comments, reviews, queries, clicks, clickthroughs, Facebook visits, YouTube views, re-tweets, Twitter followers, Facebook ‘likes’, Talking About, as well as traditional measures will be used to assess the success of IBA’s Social Media Strategy.

### **Potential Challenges:**

- ✍ Social Media is a time consuming job.
- ✍ Without assigning the job any specific department, it might lack ownership.
- ✍ Employees have multiple tasks thus might be reluctant to take it as their responsibility.
- ✍ Weak in-house communication and coordination are some of the major obstacles.
- ✍ No specialized, technical skills can be considered a handicap in this regard.

**Recommendations:**

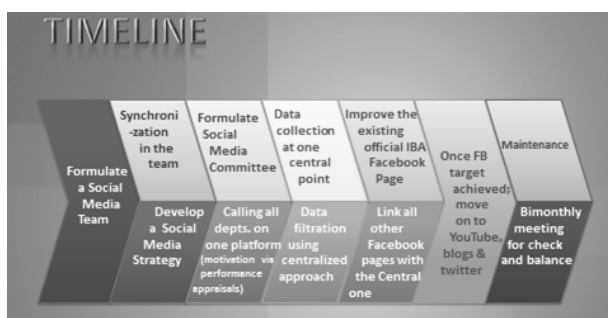
The individual's contributions to IBA's Social Media pages should be considered at the time of performance evaluation.

**SOPs for Social Media Content:**

- ✍ All departments to share content for social media as part of their event report
- ✍ Public events to be taped and aired on social media in real time (Without waiting for official approvals)
- ✍ Academic related pages to be 'liked' through official page to increase traffic
- ✍ Consistent monitoring of competitors and efficient modification of IBA social media pages to be ensured pertaining to changing times
- ✍ Avoid uploading or giving links of PDF files and print ads
- ✍ Code of Conduct and SOPs shall be introduced to ensure effective functioning
- ✍ Legal Protection should be provided for comments on social media to avoid any legal charges
- ✍ Regular Live sessions and Live Tweeting to be promoted by encouraging various support departments, program directors, alumni and society managers to participate actively
- ✍ At least two tweets to go out per day as per policy

**Steps in the experimental launch:**

- ✍ Formulate a Social Media Team/Committee
- ✍ Develop a Social Media Strategy through coordination
- ✍ Coordination with all relevant departments and dissemination of new social media policy
- ✍ Decentralization through designating tasks to representative of various departments while data should be monitored and filtered by the central social media committee
- ✍ Improve and activate the current IBA Facebook page and link it to YouTube, LinkedIn, Twitter and other relevant pages
- ✍ Bimonthly meeting to ensure check and balance and maintain pace of the progress on social media
- ✍ Further maintenance of Weblog is suggested for Program Office and HOD are required to take the responsibility of providing relevant info for social media timely.





### **Conclusion**

The formation of the Social Media Committee and the development of the Social Media Strategy have shown significant improvement. For example, as per the guidelines in the Strategy, the content now includes not just program and event announcements, but also photos and videos of Director's speeches, guest speaker visits, conferences, reunions and other Student Society events. Although currently limited, content also includes interesting newspaper and magazine articles, quotes and interesting status updates.

Considering the yardstick set above, IBA has been partially able to achieve its set goals: Qualitatively, activity shows an evident increase on IBA's Face book and Twitter pages. The quality of queries and posts has also shown marked improvement.

Quantitatively, social media metrics indicate that the strategy has been successful, but only to an extent. IBA's Facebook page shows significant growth in the number of 'likes' (an average of approximately 2,000 'likes' per month) and 'talking about' (which has tripled) since content other than news and program announcements have been uploaded, as per the Social Media Strategy. Statistics also indicate steady progress in the number of comments, reviews, queries, and Facebook visits. Moreover, the number of tweets and followers has also dramatically risen in last seven months: For example, following the strategy, an increase in the number of tweets has shown an increase in the number of followers from just a handful to around 500 followers. Due to the ban on YouTube, activity has been limited; however, statistics for July 2012 show that there were around 35 videos on IBA page. Comparisons with Lahore University of Management Sciences (LUMS) and Karachi School of Business Leadership (KSBL) indicate that IBA still lags behind on Social Media activity even after the introduction and implementation of the Social Media strategy. This could be due to the nature of the content, which still lacks audience interaction and engagement, requires tailoring and guidance regarding quantity and quality of information, and SOPs and standardized templates need to be developed.

Social media is time-consuming and as faculty members are busy with a number of other responsibilities, they may be reluctant to engage. Also, without central control there is a lack of ownership. Furthermore, lack of technical skills would be considered a handicap. Finally, weak in-house communication and coordination is an obstacle.

### **Further Suggestions:**


**Engaging Students and Societies:** One of the strengths of IBA is its 27 highly active student societies, which, if properly engaged, could provide a constant stream of high quality, student generated content, such as photos, videos, Twitter updates and even blogs.

**Decentralization:** The various academic departments of IBA have ample information, are active and organize various activities and events throughout the academic year. Engaging them would provide news and information on latest academic developments occurring at IBA as well. They could be given the authority to post latest updates and other relevant departmental information.

**Response Level and Expert Engagement:** providing prompt, succinct and official replies to queries; introducing interactive activities/competitions and polls to enhance engagement with the audience; and developing a central authority, well-versed in social media regulations, to monitor comments, contribute posts and check for violation of policies.

**Other Suggestions:**

1. Allowing content to be entertaining, engaging even controversial
2. Allowing openness, flexibility, and a Democratic approach
3. Ownership and engagement at higher level
4. Expert engagement
5. Mainstream Paid Marketing & Advertising

In terms of content, include having general content on 'slow' days, such as: posts/questions relevant to the top news stories of the day (current affairs, politics, national sports, educational developments and other relevant topics); Seasonal posts (such as staying safe in the summer) and taking advantage of cultural or religious holidays. Other types of content could include information provided by faculty members who could be encouraged to share interesting aspects of their research or the research of their final year students to help market the academic achievements of the Institute. Interesting facts from the course of history of IBA could also be shared with old photographs to engage alumni. To put this into effect, a group of student volunteers could be briefed and trained to take ownership and responsibility for researching and developing content and filtering through content that is received for posting. For relevant information gathering from student societies, an elected Communications Officer for each society could be held responsible for disseminating event announcements, photos, videos and other content. 

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**CASE STUDY****DEFENSE EXPENDITURES AND ECONOMIC GROWTH IN PAKISTAN  
AND INDIA: AN AUGMENTED FEDER-TYPE MODEL**

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**Abstract**

*To discover defense-growth nexus, this study has used Feder type model to capture the supply-side impacts for Pakistan and India. In Feder-type model, this study has used four sectors to find out total effects of defense spending on growth by using OLS technique. The findings of the study show that there is positive association between the total effect of defense and growth in all the sectors for both the countries. In augmented Feder-type model, the total effects along with externality effects and productivity differential have been re-estimated. The sign of the total effects of defense sector remain the same for both the countries whereas externality effects of defense sector have been observed negative for both the countries except in four-sector for Pakistan. The results of productivity differential of defense sector appear with negative sign throughout the analysis.*

**Key Words:** Defense Expenditures, Economic Growth, Pakistan, India, Feder Model

**JEL Codes:** H56, O40, B23

**Introduction**

The contentious issue of defense expenditures and economic growth is a fundamental issue of defense economics since the pristine study of Benoit (1973,1978). This work has paved the way for researchers to explore unploughed field of defense-growth relationship. There has been a divergence of opinions regarding the effects of defense expenditures on growth. Owing to their persistence confrontation, this issue has gained prominence in the case of Pakistan and India. In order to probe the defense-growth nexus, the several empirical studies<sup>1</sup> have used Feder's model. This study employs Feder-type and augmented Feder-type framework (comprising civilian, defense, non-defense government and export sectors) to examine the defense growth relationship in both the neighboring countries over the period 1972-2010.

A range of authors have used different variants of Feder-type model by introducing a number of sectors and set of externalities in the model. Atesoglu and Mueller (1990) have used two sectors i.e. defense and civilian sectors. Huang and Mintz (1990,1991) bifurcated the economy into three sectors: non-defense sector, defense sector and civilian sector in their studies. Alexander (1990) includes export sector and externalities by making four-sector model.

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<sup>1</sup>See Biswas and Ram,1986; Hartley and Sandler, 1990; Atesoglu and Mueller, 1990; Alexander,1990; Mintz and Huang, 1990; Huang and Mintz, 1991; Ward et al.,1991; Brauer,1991; Mueller and Atesoglu, 1993; Linden,1992.

The three types of effects are analyzed in the model:

- 1) size (overall) effects of each sector on economic growth
- 2) externality effects and
- 3) relative factor productivity differentials

The total effect is decomposed into externality and relative productivity effect.

Although this model has many pitfalls<sup>2</sup> but still it is used to explain the supply-side effects of defense spending on economic growth. None of the previous studies has used the four sector Feder-type model simultaneously for Pakistan and India to figure out the defense growth relationship. It is the contribution of this study to analyze the defense growth relationship by making a cross country analysis of Pakistan and India and including the new sectors in Feder-type model to observe its sensitivity. It estimates the externality effects and productivity differentials of each sector with respect to the civilian sector (base sector).

The rest of the study has been structured as follows: In the next section, we have described the review of previous studies. The subsequent sections present the model specifications, data sources, methodology, description of variables, empirical results and conclusions respectively.

### **Review of Previous Studies**

In order to analyze the impact of defense outlays on growth many empirical studies based on supply-side models have employed the aggregate production function. The export-growth model by Feder (1982) provided the base for investigating the defense-growth relation in supply side framework. Feder (1982) using the production function, investigated the exports-growth relationship with externalities occurring between export and non-export sectors in developing countries. For observing the association between government and non-government sectors, Ram (1986) used the Feder (1982) model. In the realm of cross national studies, Biswas and Ram (1986) were the pioneers who used the Feder model (1982) for the defense sector. The authors scrutinized the link between the defense and non-defense sectors along with the externality effect and relative factor productivity differential between the sectors. The study considered the two time periods 1960-1970 and 1970-1977 for fifty eight less developed countries. The outcomes revealed that defense spending did not affect the economic growth. The defense-civilian externality effect and relative factor productivity between the sectors were found statistically insignificant in their study. After this study, many studies [see for instance, Huang and Mintz, 1990,1991; Ward et al., 1991; Atesoalou and Mueller, 1990; Ward and Davis, 1992; Ward et al.,1993] have used the Feder-type models with different assumptions for developing and developed countries.

Alexander (1990) used a multi-sector Feder-type model with complex forms of externalities for nine industrial countries covering the period 1974-84. The author considered that economy is comprised of four mutually exclusive and exhaustive sectors. Alexander (1990) found the insignificant overall effect of defense expenditures on growth and concluded that defense sector is less productive than the other sectors. Although this study was the major development in Feder-type model but it has been criticized due to the misspecification and complex set of externalities.

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<sup>2</sup> See Alexander and Hansen (2004).

Linden (1992) applied the Feder-type model with two sectors. The study included thirteen countries for the period 1974-1985. The author found negative defense-growth association. Relating to 30 developing countries for the period of 1981-1989, a study by Biswas (1993) noticed a positive correlation between defense and growth. Similar results have been found by Macnair et al. (1995) using the Feder-type model.

Using the augmented Feder-type model for three-sector, Mintz and Stevenson (1995) suggested that non-defense sector influenced the economic growth positively and significantly while defense sector had insignificant effects for many countries. Moreover, no externality effects were observed. Alexander (1995) adopted the four-sector Feder-type model with growth of real non-defense output as dependent variable instead of growth of real defense output. The author inferred that defense sector has no significant effect on growth of real non-defense output for eleven OECD countries.

Murdoch et al. (1997) used the three-sector Feder-type model for two groups of Asian and Latin American economies. The authors conducted cross section and pooled time series estimation for the period 1954-1988. They concluded that in addition to other forms of government spending, defense expenditures promoted the economic growth in the Asian and Latin American countries. Yildirim et al. (2005) analyzed the two-sector Feder model by applying static and dynamic panel data techniques and explored the positive association between defense outlays and economic growth for the countries of the Middle East and Turkey ranging the period 1989-1999.

Turning to the national studies, Huang and Mintz (1990, 1991) employed the ridge regression to avoid the multicollinearity in augmented Feder model. In both studies, they have used the three-sector Feder model for USA for the period 1952-88. In their first study (1990), they estimated only the overall effect in their subsequent study (1991), they considered the externality and productivity effects as well. Owing to the use of ridge regression, multicollinearity reduced in the models. The authors reported both the OLS and ridge regression estimates. The results the first study indicated that the overall, externality and productivity effects of defense spending were insignificant in USA.

Using Feder-type model for three sectors over the period of 1950-87, Ward et al. (1991) revealed a positive link between defense expenditures and economic growth for India whereas effects of the non-defense sector were found negative. The civilian sector appeared with larger marginal productivity than the non-defense sectors. Moreover, the defense sector had no positive externalities for other sectors.

For USA over the period 1948-90, Ward and Davis (1992) used Feder-type model for the three-sector and found negative size effect of defense spending in USA with positive externalities and negative factor productivity. Another study by Ward et al. (1993) found the positive overall effect of defense sector with negative externalities for Taiwan. The authors used the same model for the period 1961-1988. Additionally, Ward et al. (1995) explored a negative size effect of defense for USA but positive for Japan for the period 1889-1991.

In order to assess the defense-growth nexus in Turkey for the period of 1950-1993, Sezgin (1997) used the two-sector Feder-type model. The findings of this study revealed that overall effects of defense are positively significant with negative externalities and defense sector is found to be less prolific than the civilian sector. The author contributed in the Feder model by adding the education expenditure as a proxy of human capital.



Antonakis (1997a) adopted the same model with two sectors and discovered a reciprocal relationship between defense expenditures and growth during 1958-1991. The author found misspecification problems and removed it by introducing the lags in the model. Another study for Greece for the period 1960-1993 by Antonakis (1999) applied the four sector Feder-type model. The study established negative effect of defense on growth by applying the ARDL approach.

Batchelor et al. (2000) applied two-sector Feder type model to observe the defense-growth relationship in South Africa for the period 1964 to 1995. The authors using the discrete equivalents estimated the model by the Autoregressive Distributed Lag (ARDL) method and explored no significant impact of defense sector on growth. Moreover, defense expenditures had negative and significant effect on the growth of manufacturing sector in South Africa.

Reitschuler and Loening (2004) applied the two-sector Feder type model to explore the defense growth relation for Guatemala by using longitudinal data over the period 1951-2001. The study found that defense spending affected the economic growth positively at low threshold level of GDP and negatively at higher threshold level of GDP. Further, the study explored that productivity in the civilian sector is evident than defense sector in Guatemala.

In a nutshell, we can infer that most of the supply-side or Feder-type empirical studies found positive impacts of defense spending but some studies exhibited the negative role of defense outlays as well.

### Model Specifications

The premier approach to investigate the sectoral production function was presented by Feder<sup>3</sup> (1982) to evaluate the role of exports in economic growth. Biswas and Ram (1986) were the first who used the Feder-type model (supply-side model) to investigate role of defense sector for two sectors i.e. military and civilian under the neoclassical framework. A lot of editions of Feder-type model have been evolved enriched with more sectors and externalities. The model specified in this study is Feder-type model to consider defense-growth relation for both the neighboring countries. We have estimated Feder-type model for two, three and four sectors separately to evaluate the sensitivity and validity of the model.

While modeling the sectoral Feder-type approach, it is assumed that all these discrete sectors are mutually exclusive and exhaustive with respect to output. These sectors are:

- Civilian sector (C)
- Defense sector (D)
- Non-defense government sector (G)
- Export sector (X)

Assuming that D, G and X creates externalities for C. There is a difference of marginal productivities of factors of production across the sectors as well. Owing to the assumption of four sector economy model, total output constitutes the civilian output, defense output, non-defense government output and export output i.e.

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<sup>3</sup> Feder divides the economy into export and non-export sectors.

$$Y = C + D + G + X \quad (1)$$

Two factors of production or inputs i.e. labor (L) and capital (K) are employed in all sectors:

$$\begin{aligned} L &= L_c + L_d + L_g + L_x \\ K &= K_c + K_d + K_g + K_x \end{aligned} \quad (2 \text{ a,b})$$

Here subscripts show the respective sectors. The aggregate production functions for the four sectors are:

$$\begin{aligned} D &= f(L_d, K_d) \\ G &= f(L_g, K_g) \\ X &= f(L_x, K_x) \end{aligned} \quad (3 \text{ a,b,c})$$

All three sectors i.e. the defense sector (D), the non-defense government sector (G) and the export sector (X) have assumed an externality effect on the civilian sector (C). So:

$$C = f(L_c, K_c, D, G, X) \quad (3 \text{ d})$$

The ratio of the particular marginal productivity of factors to base sector (civilian) deviates from unity by  $\gamma_i$   $i = d, g, x$ . Therefore:

$$\frac{D_L}{C_L} = \frac{D_K}{C_K} = (1 + \gamma_d) \quad \frac{G_L}{C_L} = \frac{G_K}{C_K} = (1 + \gamma_g) \quad \frac{X_L}{C_L} = \frac{X_K}{C_K} = (1 + \gamma_x) \quad (4 \text{ a,b,c})$$

The subscripts show the partial derivatives of D, G and X with respect to subscribed inputs i.e. labor (L) and capital (K) for example,  $D_L = \frac{\partial D}{\partial L_d}$  and  $D_K = \frac{\partial D}{\partial K_d}$  i.e. marginal productivity of inputs in defense sector.

Identifying the externality effects, we assume that the size of D, G, X have marginal externality effects on the civilian sector (C) so, we will have:

$$\begin{aligned} D_L &= (1 + \gamma_d) C_L \text{ and } D_K = (1 + \gamma_d) C_K \\ G_L &= (1 + \gamma_g) C_L \text{ and } G_K = (1 + \gamma_g) C_K \\ X_L &= (1 + \gamma_x) C_L \text{ and } X_K = (1 + \gamma_x) C_K \end{aligned} \quad (5 \text{ a,b,c})$$

The productivity differential between the base and the rest of sectors is shown by  $\gamma_i$ .

If, for example, the value of relative input productivity index for defense sector  $\gamma_d$  is zero, it means that there is no input productivity difference between defense and civilian sectors. A

positive value<sup>4</sup> of  $\gamma_d$  represents that the productivity of defense sector is more than civilian one and negative value of  $\gamma_d$  suggests the vice versa. The same conclusions can be drawn for relative input productivity index for non-defense government sector ( $\gamma_g$ ) and the relative input productivity index for the export sector ( $\gamma_x$ ).

In view of the fact that the data on sectoral inputs are scarce or unavailable especially in developing countries, so we reformulate the Feder-type model in terms of aggregate inputs. Now differentiating equation (1) w.r.t. time:

$$Y' = D' + G' + X' + C'$$

Taking total derivative

$$Y' = [(D_k K'_d + D_L L'_d) + (G_k K'_g + G_L L'_g) + (X_k K'_x + X_L L'_x) + \{(C_k K'_c + C_L L'_c) + (C_d D' + C_g G' + C_x X')\}]$$

Since  $K' = I_i$

$$Y' = [(D_k I'_d + D_L L'_d) + (G_k I'_g + G_L L'_g) + (X_k I'_x + X_L L'_x) + \{(C_k I'_c + C_L L'_c) + (C_d D' + C_g G' + C_x X')\}] \quad (6)$$

Putting the values of  $D_k, D_L, G_k, G_L, X_k, X_L$  from equation (5 a,b,c) in equation (6) it follows:

$$\begin{aligned} &= (1+\gamma_d)C_k I'_d + (1+\gamma_d)C_L L'_d + (1+\gamma_g)C_k I'_g + (1+\gamma_g)C_L L'_g + (1+\gamma_x)C_k I'_x + (1+\gamma_x)C_L L'_x + C_k I'_c + C_L L'_c \\ &\quad + C_d D' + C_g G' + C_x X' \\ &= C_k I'_d + C_k I'_d \gamma_d + C_L L'_d + C_L L'_d \gamma_d + C_k I'_g + C_k I'_g \gamma_g + C_L L'_g + C_L L'_g \gamma_g + C_k I'_x + C_k I'_x \gamma_x + C_L L'_x + C_L L'_x \gamma_x \\ &\quad + C_k I'_c + C_L L'_c + C_d D' + C_g G' + C_x X' \\ &= C_k (I'_d + I'_g + I'_x + I'_c) + C_L (L'_d + L'_g + L'_x + L'_c) + \gamma_d (C_k I'_d + C_L L'_d) + \gamma_g (C_k I'_g + C_L L'_g) + \gamma_x (C_k I'_x + C_L L'_x) \\ &\quad + C_d D' + C_g G' + C_x X' \end{aligned}$$

Using the fact that  $I = I_d + I_g + I_x + I_c$  and equation (5 a,b,c), we know that

$$D_k = (1+\gamma_d)C_k, \quad C_k = \frac{D_k}{1+\gamma_d}$$

$$\text{Similarly } C_L = \frac{D_L}{1+\gamma_d}$$

So,

$$\frac{Y'}{Y} = \frac{C_k I'_d + C_L L'_d + \frac{\gamma_d}{1+\gamma_d} [D_k I'_d + D_L L'_d] + \frac{\gamma_g}{1+\gamma_g} [G_k I'_g + G_L L'_g] + \frac{\gamma_x}{1+\gamma_x} [X_k I'_x + X_L L'_x] + C_d D' + C_g G' + C_x X'}{Y}$$

<sup>4</sup> It means that if the given inputs i.e. labor and capital are transferred to defense sector where they are more productive, it would enhance the economic growth by boosting total output. The opposite would be true if the value of  $\gamma_d$  is negative.

Using the definition of total derivation

$$Y' = C_k I + C_L L' + \left[ \frac{\gamma_d}{1 + \gamma_d} + C_d \right] D' + \left[ \frac{\gamma_g}{1 + \gamma_g} + C_g \right] G' + \left[ \frac{\gamma_x}{1 + \gamma_x} + C_x \right] X'$$

Dividing by Y

$$\frac{\dot{Y}}{Y} = C_k \left( \frac{\dot{I}}{I} \right) + C_L \left( \frac{\dot{L}}{L} \right) + \left[ \left( \frac{\gamma_d}{1 + \gamma_d} \right) + C_d \right] \left( \frac{\dot{D}}{D} \right) + \left[ \left( \frac{\gamma_g}{1 + \gamma_g} \right) + C_g \right] \left( \frac{\dot{G}}{G} \right) + \left[ \left( \frac{\gamma_x}{1 + \gamma_x} \right) + C_x \right] \left( \frac{\dot{X}}{X} \right) \quad (7)$$

After the inclusion of intercept and stochastic error term in equation (7), the total effect of each sector on growth can be estimated for both the countries.

In order to measure the constant elasticities i.e.  $\psi_d$ ,  $\psi_g$  and  $\psi_x$ , we further assume that D, G and X affect the of civilian sector production. (see Feder, 1982; Ram 1986 and 1989). Therefore:

$$C = f(L_c, K_c, D, G, X) \\ C = G^{\psi_g} . X^{\psi_x} . D^{\psi_d} f(L_c, K_c)$$

It can be shown that

$$\frac{\partial C}{\partial G} = C_g = \psi_g \left( \frac{C}{G} \right) \frac{\partial C}{\partial X} = C_x = \psi_x \left( \frac{C}{X} \right) \frac{\partial C}{\partial D} = C_d = \psi_d \left( \frac{C}{D} \right) \quad (8 \text{ a,b,c})$$

By including intercept and substituting the values of  $C_d$ ,  $C_g$  and  $C_x$  from equation (8 a,b,c) in equation (7), we get equation (9):

$$Y^* = \beta_0 + \beta_1 \left( \frac{I}{Y} \right) + \beta_2 \bar{L} + \left[ \frac{\gamma_d}{1+\gamma_d} + \psi_d \left( \frac{C}{D} \right) \right] D^* \left( \frac{D}{Y} \right) + \left[ \frac{\gamma_g}{1+\gamma_g} + \psi_g \left( \frac{C}{G} \right) \right] G^* \left( \frac{G}{Y} \right) + \left[ \frac{\gamma_x}{1+\gamma_x} + \psi_x \left( \frac{C}{X} \right) \right] X^* \left( \frac{X}{Y} \right)$$

Simplifying the terms

$$Y^* = \beta_0 + \beta_1 \left( \frac{I}{Y} \right) + \beta_2 \bar{L} + \left( \frac{\gamma_d}{1+\gamma_d} \right) D^* \left( \frac{D}{Y} \right) + \psi_d \left( D^* \frac{C}{Y} \right) + \left( \frac{\gamma_g}{1+\gamma_g} \right) G^* \left( \frac{G}{Y} \right) + \psi_g \left( G^* \frac{C}{Y} \right) + \left( \frac{\gamma_x}{1+\gamma_x} \right) X^* \left( \frac{X}{Y} \right) + \psi_x \left( X^* \frac{C}{Y} \right) \quad (9)$$

We can find the separate externality effects of each sector along with productivity differentials from equation (9).

Several weaknesses of Feder-type models have been observed by (Alexander and Hansen, 2004) that are as follows:

- Misspecification biases in the estimated growth equations
- Observational equivalence of the estimated growth equations
- Incorrect methods of statistical inference with respect to productivity differentials
- The questionable legitimacy of aggregate production functions in general
- ‘Factor’ versus ‘material’ inputs to production
- Mistaking misspecified identities for growth equations
- Possible simultaneity bias in the estimated growth equations

Owing to problems of data and measurement, Ram (1995) criticized the Feder-type models are not a good estimate of externality and productivity effects. Further, Dunne (1996) pointed out that these models focus only supply side factors and pay no attention to military and political factors.

Even there are drawbacks in Feder-type models, but these models are the only possible way out available in the literature to evaluate the supply side impacts of defense expenditures on growth. These models have strong footings in economic theory and require relatively less data for estimation as compare to the complete demand and supply models. These models are appropriate for the developing countries dearth of quality data.

Both countries, Pakistan and India are caught in supply-side bottlenecks. Hence, Feder-type model can better explain the supply-side causality of defense and growth.

## Data, Methodology and Description of Variables

### Data and Methodology

The data on the variables used in this study are taken from various sources. Specifically, Table 1 shows the extract of data sources in brief:

**TABLE 1**  
**DATA SOURCES**

Variable	Source (For Pakistan)	Source (For India)
Dollar Exchange rate GDP at constant 2000US\$ GDP at current 2000US\$	World Development Indicators	World Development Indicators
Investment Exports Defense expenditures Non-defense government expenditures	Handbook of Statistics on Pakistan Economy, 2010	Handbook of Statistics on the Indian Economy, 2011
Labor force	Pakistan Economic Survey (various issues)	

All the variables (except labor force) have been converted in USD by the respective country's dollar exchange rate and after that these variables have been adjusted for inflation through the respective GDP deflator.

To measure the variable of 'investment', we have used gross fixed capital formation for both the countries. With respect to the variable 'non-defense government expenditures', defense expenditure are subtracted from the total central government expenditures. To find the value of civilian output or expenditures (C) in different sectors i.e. two, three and four sectors, we have used following formulas:

$C = Y - D$  for two sector model

$C = Y - D - G$  for three sector model and

$C = Y - D - G - X$  for four sector model

In order to test the stationarity of entire variables in equations (7) and (9), Augmented Dickey Fuller (ADF) test is applied. All the variables are found stationary in equations (7) and (9). Table 2 exhibits the results of ADF test.

TABLE 2: AUGMENTED DICKEY FULLER TEST FOR FEDER MODEL

Unit Root Test on Level (For Pakistan)							
Variables	None	Lags	Intercept	Lags	Intercept & Trend	Lags	Conclusion
$Y^* = \frac{\Delta Y}{Y}$	- 19.3681	0	-4.4082	1	-4.8488	1	I(0)
$\frac{I}{Y}$	0.0374	0	-3.8213	0	-3.5106	0	I(0)
$L^* = \frac{\Delta L}{L}$	-0.3942	6	-9.5590	1	-9.6515	1	I(0)
$D^* \left( \frac{D}{Y} \right) = \frac{\Delta D}{D} \left( \frac{D}{Y} \right)$	-4.5102	2	-7.5624	1	-7.3894	1	I(0)
$G^* \left( \frac{G}{Y} \right) = \frac{\Delta G}{G} \left( \frac{G}{Y} \right)$	-6.8702	0	-7.6078	0	-7.7621	0	I(0)
$X^* \left( \frac{X}{Y} \right) = \frac{\Delta X}{X} \left( \frac{X}{Y} \right)$	-5.1305	0	-5.4240	0	-5.2212	0	I(0)
$D^* \left( \frac{C}{Y} \right) = \frac{\Delta D}{D} \left( \frac{C}{Y} \right)$	-9.2759	0	-9.1561	0	-8.8506	0	I(0)
$G^* \left( \frac{C}{Y} \right) = \frac{\Delta G}{G} \left( \frac{C}{Y} \right)$	-5.9917	1	-6.5611	1	-8.6140	0	I(0)
$X^* \left( \frac{C}{Y} \right) = \frac{\Delta X}{X} \left( \frac{C}{Y} \right)$	-8.5359	0	-8.6346	0	-8.0919	0	I(0)
Unit Root Test on Level (For India)							
Variables	None	Lags	Intercept	Lags	Intercept & Trend	Lags	Conclusion
$Y^* = \frac{\Delta Y}{Y}$	-1.8632	1	-6.3705	1	-7.6443	1	I(0)
$\frac{I}{Y}$	-1.5820	0	-4.3278	1	-4.0835	1	I(0)
$L^* = \frac{\Delta L}{L}$	0.2987	1	-8.9981	1	-7.4403	1	I(0)
$D^* \left( \frac{D}{Y} \right) = \frac{\Delta D}{D} \left( \frac{D}{Y} \right)$	-5.1190	1	-6.1256	1	-6.1225	1	I(0)
$G^* \left( \frac{G}{Y} \right) = \frac{\Delta G}{G} \left( \frac{G}{Y} \right)$	-1.2588	3	-13.6847	0	-13.2286	0	I(0)
$X^* \left( \frac{X}{Y} \right) = \frac{\Delta X}{X} \left( \frac{X}{Y} \right)$	-1.6673	1	-2.6372	1	-4.5748	1	I(0)
$D^* \left( \frac{C}{Y} \right) = \frac{\Delta D}{D} \left( \frac{C}{Y} \right)$	- 14.0923	0	-15.4460	0	-14.9765	0	I(0)
$G^* \left( \frac{C}{Y} \right) = \frac{\Delta G}{G} \left( \frac{C}{Y} \right)$	-0.2979	8	-15.8383	0	-15.3057	0	I(0)
$X^* \left( \frac{C}{Y} \right) = \frac{\Delta X}{X} \left( \frac{C}{Y} \right)$	-1.7353	2	-2.7889	2	-2.9851	2	I(0)

Source: Author's Calculations

Therefore, OLS (Ordinary Least Square) technique is applied to estimate the equations (7) and (9).

#### Description of Variables

$$Y^* = \frac{\Delta Y}{Y} = \text{Real GDP growth rate}$$

$$\frac{I}{Y} = \text{Share of Investment in Real GDP}$$

$$L^* = \frac{\Delta L}{L} = \text{Labor force growth rate}$$

$$D^* \left( \frac{D}{Y} \right) = \frac{\Delta D}{D} \left( \frac{D}{Y} \right) = \text{Size or Total effect of defense sector}$$

$$G^* \left( \frac{G}{Y} \right) = \frac{\Delta G}{G} \left( \frac{G}{Y} \right) = \text{Size or Total effect of non-defense government sector}$$

$$X^* \left( \frac{X}{Y} \right) = \frac{\Delta X}{X} \left( \frac{X}{Y} \right) = \text{Size or Total effect of Export sector}$$

$$D^* \left( \frac{C}{Y} \right) = \frac{\Delta D}{D} \left( \frac{C}{Y} \right) = \text{Externality effect of defense sector}$$

$$G^* \left( \frac{C}{Y} \right) = \frac{\Delta G}{G} \left( \frac{C}{Y} \right) = \text{Externality effect of non-defense government sector}$$

$$X^* \left( \frac{C}{Y} \right) = \frac{\Delta X}{X} \left( \frac{C}{Y} \right) = \text{Externality effect of Export sector}$$

$\gamma_d$  = Relative input productivity index for defense sector with respect to civilian sector

$\gamma_g$  = Relative input productivity index for non-defense government sector

$\gamma_x$  = Relative input productivity index for export sector

and Y = GDP at constant 2000 US\$ (in million)

I = Total Investment at constant 2000 US\$ (in million)

L = Labor Force (in million)

D = Defense Expenditures at constant 2000 US\$ (in million)

G = Non-defense Government Expenditures at constant 2000 US\$ (in million)

X = Exports at constant 2000 US\$ (in million)

#### Empirical Results

OLS estimates of Feder-type model (equation 7) for Pakistan and India are displayed in Table 3 which shows the total (size) effects of each sector i.e. civilian, defense, non-defense and exports on economic growth. In Table 4, OLS estimates of Augmented Feder-



type model (equation 9) for both nations are demonstrated that also show the total (size) effects of each sector along with externality effects and relative productivity differential.

In every table, the first, second and third column show the results of two, three and four sectors models respectively.

### Empirical Results for Total Effects of Each Sector

The model specified in equation 7 has six variables. Real GDP growth rate is dependent variable whereas investment, labor force, defense expenditures, non-defense government expenditures and exports are independent variables. The empirical results of equation 7 are shown in Table 3.

**TABLE 3**  
**OLS ESTIMATES OF FEDER-TYPE MODEL FOR PAKISTAN AND INDIA**

	Dependent Variable: Real GDP Growth					
	Pakistan			India		
Regressors	Two Sector	Three Sector	Four Sector	Two Sector	Three Sector	Four Sector
Intercept	0.01 (0.41)	0.017 (0.42)	0.00762 (0.18)	-0.12 (-2.76)**	-0.11 (-2.69)**	-0.088 (-2.00)*
I/Y	0.04 (0.18)	0.05 (0.20)	0.09 (0.36)	0.61 (3.29)***	0.54 (3.04)***	0.36 (1.85)*
$\Delta L/L$	0.74 (14.61)***	0.74 (14.58)***	0.76 (15.28)***	0.625 (6.03)***	0.58 (5.74)***	0.56 (5.80)***
$\Delta D/D$ (D/Y)	3.27 (4.96)***	3.55 (4.81)***	2.59 (3.03)***	13.21 (3.84)***	8.63 (2.15)**	6.53 (1.64)
$\Delta G/G$ (G/Y)	-----	-0.19 (-0.84)	-0.22 (-1.00)	-----	1.42 (2.01)**	1.50 (2.22)**
$\Delta X/X$ (X/Y)	-----	-----	0.76 (1.99)*	-----	-----	2.01 (2.04)**
<b>Diagnostic Tests</b>						
R <sup>2</sup>	0.96	0.96	0.97	0.90	0.91	0.92
DW	1.98	1.95	2.03	1.89	1.79	2.23
BPG test	0.81	0.72	0.81	0.67	0.45	0.47
Jarque Berra	0.85	0.99	0.91	0.04	0.11	0.31
Prob F-statistic	0.00	0.00	0.00	0.00	0.00	0.00

Source: Author's calculations

Level of significance represented: 1% by \*\*\*, 5% by \*\*, 10% by \*.

In Table 3, the values of coefficient of investment ratio (I/Y) in two, three and four sector models for Pakistan are 0.04, 0.05 and 0.09 respectively. Although the investment ratio is insignificant but has the correct sign according to the macro economic theory of investment multiplier which suggest the positive relationship between investment and national income. The reason of insignificant result in the case of Pakistan may be that it is related to civilian sector that is not performing well due to social overhead capital constraints. Our results are compatible with the studies conducted for Pakistan [See Reinhart and Khan, 1989 and Sial and Anwar, 2010]. So far as India is concerned, coefficient of investment ratio (I/Y) in two, three and four sector models is 0.61, 0.54 and 0.36 respectively. This variable has positive sign and highly significant in the case of India because India has constructed effective infrastructure that has added to its economic growth. India may receive benefits from the externalities of industrial infrastructure developed over the past decades. Accordingly,

significantly positive changes in productivity are expected due to investment. Some specific studies especially for India have also discovered a positive correlation between investment and growth [See Ward et al 1991 and Mallick, 2012].

Our results corroborate with the other empirical studies that also recommend the positive relationship between investment share and economic growth [See Huang and Mintz, 1991; Mueller and Atesoglu, 1993 and Alexander, 1995]. Some studies, however, find the negative relationship between investment ratio and economic growth which is counter intuitive or contrary to macro economic theory. [See Alexander, 1990; Fontanel, 1990b; Ward and Davis, 1991].

The second variable specified in the model is labor force growth ( $\Delta L/L$ ) which is positive and strongly significant both for Pakistan and India. The values of regression coefficient of labor force growth in two, three and four sector for Pakistan are 0.74, 0.74 and 0.76 correspondingly. Similarly, for India, the values of regression coefficient of labor force growth in two, three and four sector are 0.62, 0.58 and 0.56 respectively. Various economic theories like Solow-Swan neoclassical growth model, endogenous growth theory, Robert Barro's growth model support the positive association between labor and economic growth. In fact, labor is the principal source for economic growth. It is a base of production and technological progress. The countries by investing in their people can create human capital which ultimately leads to economic growth. Our findings accord well to the theories of economic growth. The positive labor- growth relationship proposes that both the countries are diverting their resources towards education, health and training of human beings. Our results are in accordance with other empirical studies that also recommend the positive labor-growth relationship [Huang and Mintz, 1991; Mueller and Atesoglu, 1993; Alexander, 1990, 1995]. Since the theories on labor-growth nexus are not conclusive as some studies suggest the negative relationship between labor and growth [Ward et al. 1991; Antonakis 1997]. Therefore, the negative labor-growth relationship can not be ignored as well.

Now we turn to the variables that we have included in neo-classical model i.e. defense, non-defense and export sector variables. The major variable of interest in this study is the coefficient of defense sector which shows the size or total effect of defense sector. For both the countries, the parameter of defense outlays is highly significant and positive supporting the arguments of spin- off and modernization effects<sup>5</sup>. We observe that the values of coefficient of defense sector ( $(\Delta D/D)(D/Y)$ ) in two, three and four sector models for Pakistan are 3.27, 3.55 and 2.59 respectively. In the same way for India, the values of coefficient of defense sector in two, three and four sector models are 13.21, 8.63 and 6.53 correspondingly. Defense expenditures can generate higher economic growth through its spin off effects. Deger (1986a) points out these spin-off effects may be realized by two ways. Firstly, defense expenditures as a component of state expenditures that can enhance economic growth via effective demand/multiplier effects provided there is insufficient aggregate demand. So, inefficient aggregate demand relative to the potential aggregate supply can be met by defense spending generating the extra demand through boosting the capital stock

<sup>5</sup> Deger (1986a) has given the concept of spin off and modernization effects of defense on growth. By spin-off and modernization effects, Deger (1986a) means that the effects of defense expenditures on physical and social infrastructure which are helpful in building civil society and stimulating economic growth.

utilization and employment of labor. Thus, the long-run growth can also be attained in addition to short-run multiplier effects. *An increase in demand results in increased capacity utilization, employment and profit rate that leads to enhance investment and growth* (Deger, 1986). Secondly, defense spending can also have the modernization effects. Numerous technological advancements and spin offs take place from the defense sector which is greatly engaged in Research and Development. These technological advancements and spin offs can generate more growth if applied to the civilian or non-military sector. Defense spending provides social infrastructure, training, technical skills and education to army. If these things can later be applied to non-military sector, economic growth would be the outcome in developing countries specifically. Our findings are compatible with the studies [Ram, 1986; Ward et al 1991; Atesoglu and Mueller, 1990; Biswas, 1993; Alexander, 1995; Macnair et al, 1995; Murdoch et al, 1997]. However, it is worth mentioning that certain studies [i.e. Huang & Mintz, 1990, 1991; Ward and Davis, 1992; Ward et al, 1995] discovered a negative size effect of defense on growth rejecting the spin-off and modernization effects.

The regression coefficient of non-defense government expenditures  $(\Delta G/G)(G/Y)$  indicates the size or total effect of non-defense government sector on growth. For Pakistan, the values of coefficient of non-defense government sector in three and four sector models are -0.19 and -0.22 respectively. This variable shows the negative but insignificant effect of non-defense government sector on economic growth. Economic theory is not conclusive regarding the impact of non-defense government sector. Depending upon the circumstances of the country, it can have either positive or negative effects on economic growth. As in the case of Pakistan, negative impacts suggest that non-defense government outlays are misallocated. In fact, non-defense government sector hinders the economic growth due to a variety of cost i.e. displacement cost, extraction cost, negative multiplier cost, market distortion cost, behavioral subsidy and penalty cost, stagnation cost and inefficiency cost. A further possible interpretation of this result may be that in Pakistan it is well known that productivity in the public sector is relatively low not only because of general lack of efficiency in the public sector. In addition, it transfers the goods and services rather than production. Our results for Pakistan corroborates with the studies [See Landau, 1983; Grier and Tullock, 1987; Grossman, 1988; Barro, 1990; Ward et al., 1991, Rehmen et al., 2010 and Rauf et al., 2012].

For India, the values of coefficient of non-defense government sector in three and four sector models are 1.42 and 1.50 respectively. This variable shows the significantly positive effect of non-defense government sector on economic growth. These findings exhibit that besides defense expenditures, non-defense government outlays are also growth promoting in India. The reason of this positive relationship may be that non-defense government sector is performing well and resources are well allocated to stabilize the economy. Another argument may be that government sector provides socially optimum direction by balancing the disagreement between private and social interests. Our results for India support the studies [See Ram, 1986; Alexander, 1990, 1995; Huang and Mintz, 1991; Tulsidharan, 2006 and Sharma, 2008].

Export sector is generally considered a catalyst of economic growth. Export sector is growth stimulating in the sense that due to an increase in exports, the demand and rewards of factors of production increase leading to expansion in output. This would promote the technological advancement and investment efforts. The export led growth based on comparative advantage is multi-pronged in its externalities leading to optimum resource

utilization, foreign exchange earnings and improved total factor productivity. The final regressor in the Feder-type model is export sector  $(\Delta X/X)(X/Y)$  that shows the size or total effect of export sector on growth. For both the nations, positive and highly significant result is found. The values of regression coefficient of export sector for Pakistan and India are 0.76, 2.01 respectively. Our results for both the countries are consistent with the studies [See Emery, 1967; Balassa, 1978, 1985; Feder, 1982; Jung and Marshall, 1985; Chow, 1987; Krueger, 1990; Shirazi and Manap, 2004; Konya and Singh, 2006; Siddiqui et al., 2008 and Rahman & Shahbaz, 2011].

Now we discuss the diagnostic tests of the analysis. So far as the explanatory power of the model for Pakistan is concerned, it is satisfactory as the values of  $R^2$  are 0.96, 0.96, and 0.97 for two, three and four sector models respectively. For India, the values of  $R^2$  are also satisfactory being 0.90, 0.91 and 0.92 for two, three and four sector models correspondingly. There is no evidence of autocorrelation as the values of Durbin Watson (DW) statistic are around 2 for all two, three and four sector models in both the countries. To check the heteroskedasticity for both the nations, we have performed the Breusch-Pagan-Godfrey (BPG) Lagrange multiplier test. Owing to the constant variance of error term, the probability values of BPG imply that we are unable to reject the null hypothesis. The probability values of Jarque Berra are also more than 5 percent except the two sector model for India suggesting that the residuals are normally distributed for both the countries. The overall significance of Feder-type model is also well as recommended by probability values of F-statistic for the two neighboring countries.

### **Empirical Results for Total, Externality and Relative Factor Productivity Effects**

The model specified in equation 9 is Augmented Feder-type model that demonstrates the total effect along with externality and relative productivity effects for two, three and four sector model in Pakistan and India. The dependent variable is again Real GDP growth rate. The empirical results of equation 9 are depicted in Table 4. First, we elucidate the results for the two-sector model (civilian and defense), where the variable related to civilian sector i.e. investment ratio  $(I/Y)$  and labor force growth rate  $(\Delta L/L)$  represents the total effect of civilian sector on economic growth while the variable  $(\Delta D/D)(D/Y)$  related to defense sector shows the total effect of defense sector.

For Pakistan, the sign of the coefficient of investment ratio is positive but insignificant same as observed in Feder-type model. The coefficient of labor force growth rate is found significant and has the same positive sign as before. The size or overall effect of the defense sector is found to be positive and significant as before. The externality effect of the defense sector with respect to the civilian sector  $(\Delta D/D)(C/Y)$  shows the negative but insignificant effect. The relative factor productivity index for defense sector with respect to civilian sector  $(\gamma_d)$  calculated from the coefficient of total effect of defense sector, is negative and demonstrating that the defense sector in Pakistan is less productive than the civilian sector. Since the coefficient of total effect of defense sector is significant, so relative factor productivity index for defense sector has its importance. The two-sector model performs well in terms of explanatory power with  $R^2$  being 0.96. To check autocorrelation in the model, we have applied DW test. The value of DW is exactly 2 that indicate no problem of autocorrelation. The Breusch-Pagan-Godfrey (BPG) Lagrange multiplier test is performed to check the heteroskedasticity and the probability value of BPG found is more than 5 percent i.e. 0.84 implying that the variance of error is constant. The probability value of Jarque Berra is also more than 5 percent i.e. 0.81 suggesting that the residuals are normally distributed. The

overall significance as recommended by probability value F-statistic for two-sector model is also good.

**TABLE 4**  
**OLS ESTIMATES OF AUGMENTED FEDER-TYPE MODEL**  
**FOR PAKISTAN AND INDIA**

Regressors	Dependent Variable: Real GDP Growth					
	Pakistan			India		
	Two Sector	Three Sector	Four Sector	Two Sector	Three Sector	Four Sector
Intercept	0.01 (0.25)	0.01 (0.40)	0.03 (0.80)	-0.13 (-3.01)***	-0.07 (-2.09)**	-0.08 (-2.34)**
I/Y	0.08 (0.31)	0.07 (0.27)	0.013 (0.05)	0.66 (3.67)***	0.45 (3.19)***	0.48 (2.97)***
$\Delta L/L$	0.73 (14.20)***	0.67 (8.87)***	0.55 (6.52)***	0.54 (4.96)***	0.41 (4.75)***	0.35 (4.07)***
$\Delta D/D$ (D/Y)	4.81 (2.59)**	3.96 (1.96)**	1.68 (0.84)	39.99 (2.68)**	22.39 (1.79)**	16.20 (1.33)
$\Delta G/G$ (G/Y)	-----	-1.41 (-1.29)	-0.52 (-0.53)	-----	-11.74 (-4.35)***	-9.59 (-3.50)***
$\Delta X/X$ (X/Y)	-----	-----	-3.02 (-2.36)**	-----	-----	-1.45 (-0.98)
$\Delta D/D$ (C/Y)	-0.09 (-0.88)	-0.05 (-0.52)	0.01 (0.19)	-0.63 (-1.84)	-0.41 (-1.53)	-0.32 (-1.25)
$\Delta G/G$ (C/Y)	-----	0.27 (1.16)	0.06 (0.28)	-----	2.05 (4.88)***	1.69 (3.96)***
$\Delta X/X$ (C/Y)	-----	-----	0.64 (3.04)***	-----	-----	0.30 (1.94)*
$\gamma_d$	-1.26	-1.33	-2.45	-1.02	-1.04	-1.06
$\gamma_g$		-0.58	-0.34		-0.92	-0.90
$\gamma_x$			-0.75			-0.59
<b>Diagnostic Tests</b>						
R <sup>2</sup>	0.96	0.97	0.97	0.91	0.95	0.96
DW	2.00	1.78	1.77	1.94	1.77	2.28
BPG test	0.84	0.84	0.97	0.46	0.43	0.66
Jarque Berra	0.81	0.98	0.85	0.00	0.88	0.82
Prob F-statistic	0.00	0.00	0.00	0.00	0.00	0.00

Source: Author's calculations

Level of significance represented: 1% by \*\*\*, 5% by \*\*, 10% by \*.

For India, the signs of the both coefficients relating to civilian sector i.e. investment ratio and labor force growth rate are positive and strongly significant, same as observed before in Feder-type model. The size effect of defense sector is found positive and significant as observed before. Externality effect of the defense sector shows the negative sign and significant at 10 percent. The relative factor productivity index for defense sector is negative which shows that defense sector in India is less productive than the civilian sector, the same result as found in Pakistan's case. Owing to significant parameter of total effect of defense sector, the importance of relative factor productivity index for defense sector increases. So far as the values of R<sup>2</sup> and probability of F-statistic i.e. 0.91 and 0.00 are concerned, these show

that model is better fit. The probability values of BPG test and Jarque Berra test are 0.46 and 0.00 respectively. As the probability values of BPG test is more than 5 percent, we are unable to reject the null hypothesis of no heteroskedasticity. Some problems regarding the normality are there as the probability value of Jarque Berra test is less than 5 percent and we are unable to accept the null hypothesis. DW statistic is 1.94 which is close to 2 indicating no evidence of autocorrelation.

Turning to the three-sector model (civilian, defense and non defense government) where the variable related to non-defense government sector i.e.  $(\Delta G/G) (G/Y)$  illustrates the size effect of non-defense government sector on economic growth. For Pakistan, there is no change regarding the sign of all variables specified in Feder-type model and Augmented Feder-type model. The significance of non-defense government sector has improved from 0.40 to 0.20 but the other variables have almost the same significance.

The externality effects of the defense and non-defense government sectors are found negative and positive (although insignificant) respectively. The relative productivity indices for defense sector and non-defense sector are negative for Pakistan. The values of diagnostic tests are satisfactory to validate the model.

For India, while comparing the Feder-type model and Augmented Feder-type model, the signs of all variables are same except in non-defense government sector. The sign of coefficient for non-defense government sector turns out from positive to negative. The significance level has altered a little bit for all the variables but remained significant. The variable of defense sector has particularly varied from 5 percent to 10 percent level. Externality effect of the defense sector is found negative and insignificant while for non-defense government sector it is positive and significant. The relative productivity indices for defense and non-defense sectors for India are negative and same as in the case of Pakistan. The values of diagnostic tests are also good to authenticate the three-sector model.


Now, we discuss the results of four-sector model (civilian, defense, non defense government and export sector) where the variable related to export sector i.e.  $(\Delta X/X) (X/Y)$  illustrates the size effect of export sector on growth. For Pakistan, all the variables demonstrate the same signs except the export sector while comparing with Feder-type model. There is a minor change in the significance level of all variables but the significance of defense sector variable is totally changed and this has become insignificant in augmented Feder-type model. The externality effect of all the sectors is positive and insignificant but significant in export sector. The relative productivity indices for all sectors are negative. Diagnostic tests for four-sector model show that there is no violation of OLS again.

For India, while comparing the Feder-type model and Augmented Feder-type model, the signs of all variables are same except for non-defense government sector and export sector. The signs of variables of non-defense government and export sectors changed from positive to negative along with their significance. The variable of defense sector has particularly varied in its significance from 10 percent to 19 percent level. Similarly, the variable of export has changed its significance from 4 percent to 33 percent level. Externality effect of the defense sector is negative but insignificant while it is positive and insignificant for Pakistan. For Pakistan and India, the externality effects of the non-defense and export sectors are similar i.e. positive and significant. The relative productivity indices for all sectors are negative for India and same as in the case of Pakistan. The values of diagnostic tests indicate that four-sector model for India authenticates well.

## CONCLUSIONS

This study provides the empirical evidence on defense-growth nexus for Pakistan and India based on supply side model (Feder-type) for the period of 1972 to 2010. We have included four sectors in Feder-type model along with externalities and the productivity differentials. These results are in accordance with the theoretical underpinning. In two-sector model both for Pakistan and India, total effect of civilian and defense sector is positive on economic growth. There is no change in the sign of civilian and defense sectors' coefficients when either the non-defense government sector alone (three-sector model) or both the non-defense government and export sectors (four-sector model) are introduced. The total effect of non-defense sector is negative but insignificant for Pakistan in both the three and four-sector models while for India, the total effect of non-defense sector is positive and significant in the three and four-sector models. The total effect of export sector is positive and significant for both the countries. Moreover, the overall performance and the explanatory power of all the models have remained the same.

The same process has been replicated with the augmented Feder-type model. This model gives the total effects with externality effects and productivity differential. Again for Pakistan, the variables of civilian, defense and non-defense sectors give the same positive signs except export sector but in case of India the variables of civilian and defense sectors give the same positive signs except non-defense and export sectors. The externality effect of defense sector in Pakistan remains negative in two and three sector models and positive in four-sector model while in India the externality effect of defense sector continues to be negative in all the sectors. The relative productivity index for all variables is found to be negative in both the countries.

In brief, we can conclude from the study is that the Feder-type and Augmented Feder-type model suggests that the total effect of defense sector is positive on growth both for Pakistan and India. The externality effect of defense sector in Pakistan remains negative in two and three sector models and positive in four-sector model while in India the externality effect of defense sector continues to be negative in all the sectors. The relative productivity index for all variables is found to be negative in both the countries. 

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Uncertainty is the very condition to impel man to unfold his powers. If he faces the truth without panic he will recognize that *there is no meaning to life except the meaning man gives his life by the unfolding of his powers, by living productively*; and that only constant vigilance, activity, and effort can keep us from failing in the one task that matters - the full development of our powers within the limitations set by the laws of our existence.

Erich Fromm, *Man for Himself*, p.53-54

**NEWS AND VIEWS****NazIkramullah. Ganga Jumuni:**

Silver and Gold, A Forgotten Culture.  
Bengal Publications, 2013.

Respected artist NazIkramullah comes from a noted pedigree when it comes to writing in general, and writing by women in particular. Her mother, the late Begum Shaista Ikramullah was one of the sub-continent's most revered female political figures. The first South Asian woman to receive a foreign doctoral degree, she served as foreign ambassador to several countries, including Morocco. Mrs. Ikramullah authored two informative books; her autobiography, *From Purdah to Parliament*, and *Behind the Veil*. One of her other daughters, Princess Sarvath of Jordan, wrote the foreword to an edition of Daulat Hidayatullah Haroon's biography of her late father, Abdullah Haroon. At the recent Karachi Literature Festival, while launching her book *Ganga Jamuni*, Ms. Ikramullah noted that being primarily an artist, she never considered herself capable of writing a book until urged to do so by the eminent Bangladeshi jurist, Dr. Kamal Hossain. Her debut literary endeavour examines the confluence of two divergent streams of culture in South Asia, the Hindu and the Muslim—hence the book's title, which indicates a merging of the golden with the silver.

Ms. Ikramullah introduces her text by claiming that syncretic cultures are often enriched by the manner in which their influences shape and formulate each other. This merging influences a variety of aspects including, but not limited to, literature, art, music, poetry and history, not to mention sundry social customs. She draws our attention to the point that, in 2010, the Jang group of Pakistan, and The Times group of India launched a peace initiative titled *Amanki Asha*, that brings musical events and book readings concerning both Hindu and Muslim cultures to the forefront. In her first chapter, the author credits the Mughal emperors (many of whom had wives chosen from amongst the Hindus) as well as the Sufi tradition with this important and historical promotion of syncretic thought and action. Referring to Aurangzeb Alamgir several times over the course of the book, the author notes that although he is often portrayed as a strict, almost fundamentalist Muslim, he was nevertheless deeply influenced by Hindu customs; even to the extent of having his hands dyed with henna at his wedding! Her second chapter examines both Sufi doctrine as well as Hindu Bhakti thought, and displays a sound knowledge of the ways in which Muslims and Hindus alike regarded the interesting and complex god, Krishna. Her next chapter begins by dwelling on the marked influence of the Bengali Bauls on sub-continental music. Moving on to the realm of architecture, she notes how (regardless of the extensive and beautiful use of Arabic calligraphy in mosques) structures such as Delhi's famous QutubMinar display figures from Hindu mythology. Commenting on literature and language, although she notes that Amir Khusrau used the Purbi (or Awadhi) language in the thirteenth century, Urdu (a mixture of Hindi and Persian) itself did not become commonly utilized for literary texts until the eighteenth century. In spite of the general focus of her book being a socio-historical perspective, Ms. Ikramullah does not fail to mention modern contributors to South Asian culture, such as the talented, Pakistani-born artist, ShaziaSikander. Indeed, the cover of her text displays the well-known Pakistani dancer SheemaKirmani wearing a blue *peshwaz* (full skirt, bodice, and pajamas) striking an elegant dance-pose. Finally, the author moves towards the realm of what she regards as cultural fusion, as evidenced by major celebrations and

ceremonies, especially those that are affiliated with marriages and births. For instance, the ancient tradition of applying *sindoor* (red paste) in the parting of a married woman's hair, was adapted by Muslim brides, who have *afshan* (gold dust) placed in their partings at the time of their nuptials. The author even describes, and includes illustrations of, ancient and modern nutcrackers and *paan*-boxes, *rangoli* (coloured chalk) floor patterns and decorative trays that collectively inform the cultural commonalities of sub-continental traditions. The text is well-written, and richly illustrated throughout, and is accompanied by an enjoyable DVD that documents the lives of famous sub-continental women such as the architect, Yasmin Lari, and the lawyer, Asma Jahangir, among others.

At the launching of her book, I asked Naz Ikramullah about her mother's influence over her development as an artist and writer. She responded that one of the most remarkable things about her mother's life was that in spite of being in *purdah* (strictly veiled) until she was eighteen, she became an active voice for women's empowerment over the course of her illustrious career. In a sense this left her daughters with no choice other than to avidly pursue their respective paths to success. For Ms. Ikramullah, this book represents one of her personal journey's most vivid landmarks.

**Nadya Chishty-Mujahid**  
(Institute of Business Administration)

Modern man is threatened by a world created by him. He is faced with conversion of mind of naturalism, a dogmatic secularism and an opposition to a belief in the transcendent. He begins to see, however, that the universe is given not as one existing and one perceived but as the unity of subject and object that the barrier between them cannot be said to have been dissolved as the result of recent experience in the physical sciences, since this barrier has never existed.

Erich Fromm, *The Heart of Man*, p.197-198



## BUSINESS REVIEW

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Institute of  
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“If, as an individual, you really have some concern about the best way to change our present world to a better one, not a bad principle to follow is to identify the enemy. It should not be true, but unfortunately it is, that your immediate enemies remain, as they have always been, your rulers – your government. At all times, it is a wise thing to suspect both their intellectual honesty and their intelligence in economic matters. Nothing can be lost; everything can be gained, by doing so. Make them prove themselves in these respects - and be utterly ruthless in your judgment when they seem most plausible, in your particular interests, it is not a bad course to suspect their economic intelligence the most. They are, in these days the managers of a highly complex world. You have placed them in this management, and you acquiesce in it. But, unfortunately, they give not the slightest indication of being any more capable in handling the affairs of masses of men than rulers have been through all history.

But how can you judge them, as their every act and word should be judged, without fair standards? You must know how the society operates, as well and better than they do, to judge them properly.”

Harry Scherman, *The Promises Men Live By*, p.480

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