# **Business Review**



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# **Business Review**

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# **Editorial Perspective**

Unless the danger is seen in time galloping specialization can bring any company to the brink of chaos. The remedy? Top managers with the breadth of vision only a liberal education can provide.

> Clarence B. Randall The Folklore of Management

The *summum bonum* of a liberal education has always been the cultivation of a sense of right and honour, of duty and commitment. It has always emphasized the importance of the development of character. The philosophy of liberal education aims to provide a lively feeling for values and a vivid sense of the beautiful and of the morally good.

Einstein's observation about technical schools and the cult of specialization has a direct bearing upon the *raison detre* of the institutions of education and more so about the schools of business education. He believed that "the school should always have as its aim that the young man leave it as a harmonious personality, not as a specialist."

More and more, in the modern world, the management of human affairs and large business organizations rests on rectitude and honour, no less than on good judgement, specialized knowledge and a transcendental view of the world. The reality of such a view, including the corporate world-view, is characterized by its perspectival variations and horizontal unfoldment. It is a *gestaltan* view of man's being-in-the-world. Liberal education aims to provide a unified and unifying vision of the *world to be*. Besides, a deep sense of moral orientation has always been the core component of liberal imagination. It has always deepened the humanistic outlook, unfolding new horizons and new perspectives of the given world-view.

The notion of transcendental movement, the vitally dynamic principle as the *élan vital* of liberal education, is antithetical to the petrifying notion of reality as unchanging and unchangeable. Our *lived-world*, including the corporate world, is a reflection of the glory of man's creative will, as much as the failure of his imagination to envision a future qualitatively different from the present. Liberal education derives its creative vitality from the silent intimations of the world as it ought to be. Sadly, the cult of specialization has resulted in our disregard for the transcending vision and humanistic attitude. However, under the force of the experienced reality of the lived facts pertaining to the corporate world, the need to work ethics and moral vision into the executive orientation and evaluative

judgements of our business management has become an overriding imperative of business education. Today, more than ever before, we have come to realize the need to decisively set aside the misleading and dubious belief that in the business society and the corporate world, ethical and moral predilection does not correlate with the executive disposition and propensity for business management. Again, to correct this erroneous belief, we cannot over-stress the need to draw the transcending vision and the moral responsibility, envisioned by liberal education, into the fold of the pedagical concerns of our business schools. We must exert creative will to remove from our business education the stigma that the ideal of moral attitude and ethical persuasion does not harmonize with the values of corporate world and that, from the economic standpoint, such predilections are unpragmatic and unpractical.

# In *The World According to Drucker*, Jack Beatty has so aptly pointed out that:

"Drucker discusses economic life in terms of values, integrity, character, knowledge, vision, responsibility, self-control, social integration, 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."

Discussing *The 7 Habits of Highly Effective People*, Covey makes a compelling distinction between "character ethics" and "personality ethics" and their relative managerial effectiveness in a corporate society. He stresses the importance of good moral judgment, authentic self-hood and the strength of character, making our corporate management almost a moral condition. In contrast, he describes the features of personality oriented ethics as a function of the personality structure, socio-cultural habits and attitudes, presentation of the self in society and its contribution to social, public and human relations.

In his *Good to Great*, a book inspired by the quest for the essence of excellence, Collins offers a profoundly endearing profile of an executive who builds enduring greatness, and lives according to the dictates of character ethics. Ironically, the place of character ethics in the corporate culture is, to our great dismay, a much neglected theme of the business education. In order to respond to the ethical and moral yearnings of human nature, inspired by character ethics and its value orientation, our corporate world-view has yet to whole heartedly address the limitations inherent in its paradigm.

It is said that the corporate world-view suffers from a highly vitiating proclivity to gloss over the creative vitality of the moral vision. This self imposed and consciously cultivated attitude constitutes a major flaw in the corporate worldview. It is also responsible for the attitudinal disposition of the corporate functionary and his apathy for character ethics. Character ethics, it must be emphasized, defines the structure of personality in terms of temperament, a way of thinking rooted in the authentic and self-regarding disposition.

When we think about the corporate world, we realize that not just market forces but nearly all the forces, ethical, religious, moral, social, political, cultural, philosophical, economic etc., define the distinctive features of its worldliness. The plurality of its perspectival variations and their gestaltan unity implies the richest and the most diversified concept of the "world." Therefore, in order to restore our faith in the veracity of truth and to enlarge the domain of our corporate culture, our teaching methodology should take into account the diverse core components and various profiles of the corporate reality to draw them into the fold of a unified vision of the corporate world. Moreover, of special interest to us should be the need to integrate into our research methodology diverse strands of departmentalized learning and specialization. Such a philosophy of education with a pronounced liberal bias is the unique combination of a corporate world-view blended with the depth and breadth of creative and transcending vision. Finally, a combination of corporate outlook and liberal attitude will enable us to creatively respond to the gatherings of human crisis looming at the horizon of the corporate world. What we need most today are men and women deeply entrenched in specialization in the respective fields of their professional orientation but fully endowed with the wisdom, passion and the courage to transform the corporate world into a human situation, responsive to the fulfillment of human ethical and moral aspirations.

We must therefore keep in mind that, in order to be constructive, our critique of the corporate management must spring from within the corporate system. In view of its scope, the intended critique will, of necessity, be partisan and partial. Dialectically, it will be passionate and political but, in relation to its own methodological assumptions and presuppositions, also honest and brutal. Such a radical attitude is more than a critique; it is an experience. As an experience, our critique must be written from the point of view of a transcending vision, i.e., the standpoint which opens up the widest possible horizons of the corporate world-view. Such an experience of perspectival variations resulting in a *gestaltan* view will deepen our appreciation of the inter-disciplinary and inter-departmental research. It will, above all, save a corporate thinker from falling into the lure of the snaring cult of specialization.

There are signs signifying that under the force of circumstance, the corporate thinker's aversion and apathy to ethics, philosophy, humanistic studies and inter-disciplinary research is now beginning to draw into the fold of his world-view methodological approaches from other disciplines which are also profoundly interested in the ramifications of man's hyphenated relationship to the world, i.e., man's being-in-the-world.

In their refreshing book, The Knowledge-Creating Company, Ikujiro Nonaka and Hirotaka Takeuchi have given a dynamic account of the problems related to the creation of knowledge. They have attempted to identify links (relations) between various sources of knowledge - corporate and intangible - to explore how the managers identify these links (relations) in a corporate knowledge creation process. Phenomenologically, it is crucially important to note that in philosophy as well as in life the important thing is not what the given relationship is but how the real or perceived relationship is experienced. Therefore creative intuition and intentional constitution both converge upon the phenomenon of How Japanese Companies Create the Dynamics of Innovation. The book focuses not only on the empowering nature of the 'objective facts' but also embraces "highly subjective insights, intuitions, and hunches" which include "ideals, values, and emotions." It owes its strength to "a shared understanding of what the company stands for, where it is going, what kind of a world it wants to live in, and how to make that world a reality". In order to describe the worldliness of such a world, Nonaka and Takeuchi draw heavily upon the views of Plato and Aristotle, Descartes and Locke, Kant, Hegel and Marx. Of particular interest to a curious reader is their discussion of the views of Husserl, Heidegger, Sartre, Merleu-Ponty, Wittgenstein, James, and Dewy. The authors use phenomenological method to analyze the mode of human "being in the world" (Dasein), as the source and the origin of knowledge obtained through reflection. The study substantiates the existentialist view that: "for human reality to be is to act ... the act must be defined by an *intention* .... since the intention is a choice of the end and since the world reveals itself across our conduct, it is the intentional choice of the end which reveals the world." The thought here is that he who wishes to know, must act toward an end.

The compelling observations by the critics of corporate world-view have made it clear that the cult of exclusively departmentalized training is bound to result in the loss of a unified and unifying vision of knowledge. Such a loss is laden with deep philosophical consequences for the corporate world-view, the *gestaltan* nature of reality and the phenomenon of transcendental movement in the corporate culture.

We cannot perpetually ignore the fact that there is a limit to the ambition of specialization. Fidelity to truth must be the overriding concern of all specialization, genuine research and authentic teaching methodology. Truth loving people cannot stray from truth for very long. But the trouble with us mortals is that we do not outgrow our naïve assumptions and unexamined presuppositions until the threatening complexities of our being-in-the-world begin to gradually move in on us, pushing us to the point of rethinking about our taken for granted attitude. Such a situation calls for an honest review of our belief in the invincibility of the corporate world-view with special reference to specialization. If the undertaking is carried out in good faith, it will deepen our understanding of the impending danger inherent in the "galloping specialization."

Our romance with the invincibility of the corporate world-view was shaken by the stunning collapse of Maxwell, BCCI, Poly Peck and the ENRON. The history of these symbols of corporate glory lying buried in their ruins seems to suffer from an obsessive compulsion to repeat itself. The financial world-crises of our times has deepened our consciousness of the impending danger lurking behind the gloom at the horizon of the corporate world. This is not an unfounded apprehension. It issues from the evidence provided by the indictment of the corporate world-view by the events in the recent past. This colossal failure of management is not an example exaggerated for the purposes of argument. It is an example of the downside of specialization and the fact that it lacks contextual depth and perspective to unfold the creative and dynamic possibilities inherent in our concept of the corporate world. It is an example of the sad demise of the ethical and the moral and our failure to envision the *world as* it ought to be. It is an example of how our cultural aspirations have been betrayed in the past by the lure of scientism and the cult of specialization. It is also an example of the sad loss of transcendence and the disappearance of creative vision resulting in our failure to imagine the "given" world from across the world to be.

In our educational institutions in general and our business schools in particular, it is necessary to emphasize the need to produce good managers, efficient executive officers, skilled and competent corporate functionaries. But it is not enough. In order to be true to our calling we must also teach our students cardinal virtues to make them see that, without being a good human being, it is not enough to be a specialist. We must inculcate in their professional orientation an abiding tendency to see the realities of the corporate world from a socio-cultural standpoint. Such an attitude will result in the refinement of their character and deepen their humanistic outlook. In the politics of corporate experience, such an orientation is based on the belief that in order to know the truth, we must *want* to know the truth. In this regard, it is not true that our corporate functionary is by orientation an ethically inclined person committed to moral imperatives. But it ought to be.

# ARTICLE

# Pakistan's Economy – 1999/2000 – 2007/2008 An Objective Appraisal

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This article is an attempt to present a dispassionate and objective analysis of the economic situation that attempts to try to sift facts from fiction and myths, separate analysis from emotions, present the strengths and weaknesses of the economy and draw conclusions based on evidence and analysis rather than popular rhetoric and half-truths. As there is a great deal of skepticism about the quality of the official data the sources used in this paper draw upon both internationally and nationally verified and authenticated numbers. At the international level, the IMF, World Bank, Asian Development Bank, UNDP, Merrill Lynch, JP Morgan, Goldman Sachs data has been used while that of the State Bank of Pakistan (SBP). Social Policy Development Centre, Institute of Public Policy, ABN Amro Bank, local research analysts in the private sector and other independent research reports have been used from domestic sources. This variety of data sources should offset the biases, if any. The period chosen for the review of the economy covers the entire eight years because until the whole context is taken into account the picture will remain incomplete or blurred. But this period is further sub-divided into three subperiods (i) 1999/2001-02 (ii) 2002-03 - 2006/07 and (iii) 2007/08. The distinctive features of these sub-periods were macro-economic stabilization, growth acceleration and economic regress respectively.

#### **LEGACY OF THE 1990S**

After an impressive record of economic growth and poverty alleviation during the 1980s Pakistan suffered serious setbacks in the 1990s in terms of most economic and social indicators. Economic growth rates decelerated, inflation rose to peak rates, debt burden escalated substantially, macroeconomic imbalances widened and worst of all the incidence of poverty almost doubled. Pakistan's credibility in the international financial community was at its lowest ebb as successive agreements concluded with the International Financial Institutions (IFIs) were not implemented. Confidence of the local investors was eroded when the hard earned foreign currency deposits of resident and non-resident Pakistanis, accumulated over a long period of time, were suddenly frozen. Foreign investors were unhappy as all the power purchase agreements were reopened, re-examined and criminal action was initiated against Hubco.

The annual growth rate during the 1980s was 6.3 per cent, which decelerated to 4.9 per cent during the first half of the 1990s, and further down to 4

per cent during the second half. While the agriculture sector showed remarkably satisfactory performance and recorded higher growth than in the 1980s a major setback occurred due to poor output by the manufacturing sector. As compared to an average record of 8.2 per cent the sectoral growth witnessed a sharp fall to almost 4 per cent in the 1990s. The services sector also could not keep up its historical pace and showed a relatively lower growth rate. Since this sector is a major source of employment generation, particularly in the urban and non-farm rural areas, it can easily be surmised that overall employment rate suffered as well.

Investment ratio moving in a downward direction since 1995 reached a low of 13.9 per cent in 1998-9. This backlog of investment made it even more difficult for the economy to resume a higher growth path. Financing to achieve higher investment rate was also problematic as foreign savings, which used to bridge the gap between national savings and investment dried up in the wake of the May 1998 events.

The persistence of fiscal and external deficits led to accumulation of large domestic and external debt throughout the decade. Total debt consequently rose from \$20 billion in June 1990 to a peak of \$43 billion in May 1998. Pakistan's external debt reached 47.6 per cent of GDP, having grown at an average annual rate of 8.1 per cent throughout the 1990s. The net present value of external debt as a percentage of exports was estimated at 230 per cent in 1998-much higher than the safe limit of 150 per cent. The burden of stock of external debt and foreign currency liabilities rose from 258 per cent of total foreign exchange earnings in 1990 to 364 per cent in May 1998. The ratio of debt service payment due to foreign exchange earnings rose from 23.3 to above 40 per cent in the same period. These ratios clearly suggest that external debt burden had become unsustainable.

Domestic debt growth was more rapid in the 1990s-13.7 per cent per annum, and this was a direct consequence of liberalization of interest rate and the need to finance growing fiscal deficit. Domestic debt accounted for 49.1 per cent of GDP. The structural burden of overall public debt thus became more onerous. Public debt grew from Rs. 802 billion in 1990 to Rs. 2971 billion in June 1999. As a percentage of GDP the increase was 93.7 to 102 per cent, while as a proportion of revenue the burden rose from 470 to 625 per cent. Public debt service claimed as much as 61 per cent of total revenues in mid-1999 compared to 35.7 per cent in 1990 thus leaving very little fiscal space for development expenditure.

The burgeoning burden of debt service was reflected in the. Persistently high level of fiscal deficit, above 7 per cent of GDP, while primary deficit began to slide from 2 per cent of GDP in 1990-5 to 0.3 per cent in 1995-9. The other major contributory factors, besides the increased burden of debt servicing for fiscal imbalances, was lower tax effort. Tax-GDP ratio had moved up to 14.4 per cent by

1994-5 but since then it had consistently eroded and was down to 12.8 per cent by 1999-2000. As a consequence of this twin menace, development expenditure took a major hit and reached a low of 3 per cent of GDP from 8 per cent in the first half of the 1980s. The crowding-in of private investment could not take place as the beneficial effect of complementarily between private and public sector investment was not realized. Current expenditure excluding debt service and defence had to be contained thus squeezing social sector expenditures below the desirable level.

External sector deficit also jumped from 2.6 per cent of GDP in the 1980s to 4 per cent in 1990s. A major factor responsible for this trend was stagnation of exports and the loss of market share in world exports. In the first half of 1990s merchandise exports remained stuck at about \$6.8 billion. Then there was a significant discrete jump to \$8.1 billion in the fiscal year 1995 but this jump proved to be an aberration, and the annual average in subsequent years hovered around \$8.3 billion. This inability to expand exports in a buoyant world trade environment caused a loss of market share and made it more difficult to service external debt obligations. As foreign currency deposits of resident and non-resident Pakistanis were readily available to finance the current account deficit the policy makers were no longer pushed to take hard decisions on restructuring and reforming the economy. Despite the utilization of this ready source 'of financing, it may be recalled, the volume of external debt doubled during this ten year period.

Incidence of poverty also doubled during this decade, from 18 to 34 per cent, primarily due to lower growth, higher inflation and limited access by the poor to basic social services. Although the multi-donor supported Social Action Programme was intended to help Pakistan improve its education, health care, nutrition, water supply and sanitation sectors the actual outcomes have been disappointing. Social indicators lag behind other countries in the region, and are much lower than the countries with similar per capita incomes.

The evidence presented above clearly shows that the 1990s was a lost decade in terms of stunted growth, increase in incidence of poverty, burden of debt, large fiscal and current account imbalances, poor social indicators, higher rate of inflation. But in all fairness the entire blame for this particular outcome cannot be laid on the economic managers and policy makers of that time.

There are at least four main factors, which can be put forward as determinants of the performance in the 1990s. First, political instability and frequent changes in the government followed by reversal of decisions taken by the preceding government created an environment of uncertainty, lack of predictability and discounting of policy implementation of programmes and projects. Second, there was widespread mis-governance by the two major political parties which alternated in ruling the country during this period. Personal, parochial and party loyalty considerations dominated decision making; institutions were bypassed and individual whims and fancies reigned supreme with no checks and balances on discretionary excesses and corruption. Third, there was lack of political will to take timely hard decisions. The cumulative effect of avoiding and postponing such decisions and failure to correct the distortions at the right time proved too costly. Fourth, there were unforeseen exogenous shocks, for example, the nuclear testing in May 1998 which shook investors' confidence, accelerated flight of capital, led to the imposition of economic sanctions and disrupted external economic assistance.

The economic sanctions imposed as a consequence of Pressler amendment and an uneasy relationship with the international financial institutions throughout the 1990s did not allow much room for maneuver to pursue structural reforms that were badly needed for bringing the economy out of morass.

It must, however, be recognized that the decision taken by the PPP Government to open power sector to private producers in 1994 that was widely criticized at that time turned out to be both right as well as timely. The power shortages that have severely hit Pakistan in the last few years would have been even worse if the capacity created by independent power producers was not available. Similarly, the Nawaz Sharif Government was criticized for constructing Lahore-Islamabad Motorway through private-public partnership. Subsequent events have not only vindicated this decision but the successor government initiated and completed several such projects.

#### MACROECONOMIC STABILIZATION PERIOD 1999/2000 - 2001/02

The most difficult challenge faced by the military government in October, 1999 was external liquidity problem, i.e. its ability to meet its current obligations such as imports of goods and service, its debt service obligations and other payments at the same time.

After May 1998, the country had lost an important source of external liquidity i.e. foreign currency deposits. The erosion of confidence arising from the freezing of foreign currency deposits had repercussions on other sources of foreign exchange inflows. Workers remittances through official channels were down to \$ 1 billion. Foreign investment inflows were less than \$ 400 million. At the same time the demand for foreign exchange had risen. Oil import prices had shot up from \$14 - \$15 per barrel to \$28 - \$30 per barrel doubling the oil import bill from \$1.3 billion to \$ 2.6 billion in first year. Despite increase in the volume of textile exports, the unit value of exports were down by 7-10 percent on average and therefore the exports had actually fallen. Fresh sanctions were imposed upon Pakistan due to the installation of the military government in October 1999 and bilateral and multilateral official flows were suspended. Credit rating agencies had already downgraded Sovereign

Credit of Pakistan to Selective Default Category and therefore the question of access to financial markets did not arise.

The country thus faced a gap between external receipts and external payments of about \$ 2.5 billion to \$ 3 billion annually for the next few years. To meet this gap and keep the wheels of the economy moving Pakistan had to get its debt service obligations rescheduled. In order to obtain external debt rescheduling or relief it was necessary to have an agreement with the IMF.

Pakistan therefore had no other choice but to enter into a stand-by arrangement with the IMF in 2000 for nine months period which was heavily front loaded with a number of stringent conditionalities to be met within this limited period of time. For the first time in the history of Pakistan the IMF was able to complete all the reviews successfully and all the tranches were released on time. As a consequence IMF agreed to follow-up with a three year Poverty Reduction and Growth Facility (PRGF). The credibility of Pakistan vis-a-vis international financial institutions was restored setting the stage for the re-profiling of Pakistan's external debt owed to Paris Club. Contrary to popular perceptions, Pakistan had reached an understanding with the IMF before Sept. 11, 2001 on the broad contours of debt stock re-profiling by Paris Club as it had successfully implemented the 09 month stand by program and became eligible for the medium term PRGF.

Out of Pakistan's total external debt and foreign exchange liabilities of \$ 37.8 billion at the end of the fiscal year 2001-01, Pakistan's bilateral debt to Paris Club was \$ 12.5 billion. On December 13, 2001 Pakistan was able to re-profile this stock of bilateral debt by reaching an agreement with Paris Club for repayment of ODA component debt over a thirty eight years period with a grace period of 15 years and non-ODA component of debt over twenty three years with a five year grace period. In addition, the US cancelled its bilateral debt by \$ 1 billion after September 11, 2001. The debt relief provided some fiscal space, allowed the government to reduce its fiscal deficit, and stabilize the economy. In addition, Pakistan started receiving new concessional loans from the IMF, World Bank and Asian Development Bank which helped in financing the current account and fiscal deficits.

During the years 1999/2000 to 2001/02 the economy was able to achieve the following results:-

- Fiscal deficit was reduced from 5.4 to 4.3 percent of GDP.
- Trade gap narrowed from \$ 1.6 billion to \$ 1.2 billion. Current account balance turned surplus to \$ 2.7 billion from a deficit of \$ 1.9 billion.
- Workers' remittances jumped 2.5 times from \$ 1,060 million to about \$ 2,400 million.
- FDI flows averaged \$ 400 million annually.

- Re-profiling of bilateral debt stock resulted in a saving of debt servicing of \$ 1 billion annually.
- Repayment of \$ 4.5 billion private, commercial and short term debt and liabilities reduced the stock of debt and thus extinguished future debt servicing obligations.
- IMF, World Bank, ADB and other donors provided concessional assistance of about \$ 2.5-3 billion annually while their hard term loans were repaid.
- Foreign exchange reserves held by State Bank of Pakistan rose from \$ 991 million FY 1999-2000 to \$ 1.677 billion in FY 2000-01 and \$ 4.333 billion by FY 2001-02.
- New foreign currency deposits of \$ 2.1 billion by resident and non-resident Pakistanis accrued to Pakistani banks.
- Pakistan's exports increased from \$ 7.8 billion to \$ 9.2 billion by June 2001.

**Table – I** summarizes the changes in key macroeconomic indicators that have taken place between 1998/99 and 2001/02.

<u>1999-2000- 2001/02</u>					
	October 1999	October 2002	Change in the Indicator		
GDP growth rate	4.2%	5.1%_/*			
Inflation	5.7%	3.1%	Positive		
Fiscal deficit/GDP	5.1%	-3.8%_/*	Positive		
Current account/ GDP	-2.6%	+4.9%	Positive		
Public Debt /DGP	84.0	76.9_/*	Positive		
Domestic Debt	Rs.1376 billion	Rs.1699 billion	Positive		
External Debt GDP	47.6	40.5	Positive		
Interest Payments /Govt. Revenues	47.0	32.8_/*	Positive		
Remittances	\$88 billion per month	\$200 million per month	Positive		
Exports	\$7.8 billion	\$11.2 billion_/*	Positive		

#### CHANGES IN KEY MACROECONOMIC INDICATORS

TABLE-I

# <u>1999-2000- 2001/02</u>

Tax Revenues	Rs.391 billion	Rs.460 billion	Positive
Rupee-Dollar Parity	Depreciating	Appreciating	Positive
Foreign Direct Investment	\$472 million	\$800 million _/*	Positive
Foreign Exchange Reserves	\$106 billion	\$8.5 billion	Positive
Poverty Incidence	32.6%	34%	Negative
Poverty Related	Rs.133 billion	D. 161 billion	Positive
Expenditure		Rs.161 billion	i ostave
Unemployment	6%	8%	Negative

<u>Note</u>: All indicators in Column 1 pertain to 1998-99 or October 1999. All indicators in Column 2 pertain to 2001-02 or October 2002. Those marked with\_/\* pertain to 2002-03.

#### **GROWTH ACCELERATION PERIOD 2002/03-2006/07**

Pakistan's economic performance in this sub-period has been impressive in terms of income per capita, employment generation and poverty reduction. As a result of reasonably high GDP growth rate of about 6.3 percent a year for five years the per capita income in current dollar terms has risen to about \$ 1000. GDP growth that was 3.1 percent in 2001/02 rose to 7 percent in 2006/07. There is a general consensus that poverty was reduced during this period but the magnitude of reduction varies between 5 to10 percentage points. Unemployment rate also fell from 8.4 percent to 6.5 percent and about 11.8 million new jobs were created in FY99-08 period. Gross and net enrolment at primary level have improved over these five years. Among the health indicators children immunization, incidence of diarrhea and infant mortality have shown favourable changes. The other significant outcomes recorded during 2002/03 to 2006/07 were:

- The stock of External debt and liabilities as percentage of foreign exchange earnings was reduced to 125 percent from 224 percent in 2001/02. As a percentage of GDP it came down to 28 percent from 46 percent. The country's debt servicing capacity improved considerably as debt servicing declined sharply to 9 percent of foreign exchange earnings from 26 percent.
- Foreign exchange reserves rose to US \$ 14 billion covering six months' imports from \$ 6.4 billion in FY02.

- Exports of goods and services went up from \$ 13.6 billion to \$ 21.2 billion recording an increase of 55 percent.
- Revenue growth remained strong. Tax Revenues rose 14 percent annually doubling in five years.
- Fiscal deficit remained below or slightly above 4 percent of GDP, despite the post earthquake relief and reconstruction expenditures.
- Low interest rates that touched as low as 4 to 5 per cent encouraged investment and fuelled growth.
- Manufacturing sector recorded an increase in its share of GDP from 14.7% to 19.1% by FY07.
- Investment rate grew to 23% in FY07 from 16.8 per cent in FY02 reflecting about six percentage point growth in investment/GDP ratio.
- There was a significant growth in foreign capital inflows, cumulatively estimated to be around \$13.5 billion over this period.
- A six fold increase took place in workers remittances through official channels that reached \$ 6.5 billion for FY08. The foreign exchange companies that were brought under the regulatory framework of the State Bank of Pakistan contributed another \$ 3-4 billion of foreign exchange flows.
- Exchange rate remained stable throughout the period.
- Average tariffs have come down quite appreciably. Tariffs on imports average 7.6 percent and tariff on imports of plant, machinery and equipment for industrial sector has been reduced to 5% and for agriculture sector to zero percent.
- Inflationary pressure that remained quite low in FY02-04 began to intensify since FY05 and food inflation touched double digits.
- Current account surplus turned deficit since FY05 and has been on rising curve since then.
- Overall unemployment decreased from 8.3 per cent in 2001-02 to 5.27 per cent in 2006-07 mainly because of a steep decline in

women's unemployment from 13 per cent to 9 per cent (PRSP II, 2008).

- Monetary policy was managed to kick start the economy when it was trapped in low growth – low inflation equilibrium. The policy was subsequently tightened to put inflationary pressures in check by lowering core inflation. However, inflation target slipped due to the upward trend in the global commodity prices as well as inefficiencies of wholesale and retail markets.
- Private sector credit for financing fixed investment as well as working capital grew at an average rate of 25.5% in this sub-period.
- Profitability of banking sector surged reaching \$1.7 billion in FY07. Net NPLs ratio declined to below 2 per cent.
- Capital market capitalization had reached \$65.9 billion by end FY07 from \$7.51 billion. 60 new IPOs were listed on Karachi Stock Exchange.
- Agriculture Credit disbursements by banks multiplied six fold and most of the credit went to small farmers. Similarly, more than 1.2 million borrowers received micro finance loans without any collateral.
- Pakistan's total foreign exchange earnings almost tripled from \$16.8 billion in FY00 to \$46 billion. Excluding foreign loan disbursements and official grants the increase recorded was from \$14.3 billion to \$42 billion.

Table II presents a summary of the changes in key macroeconomic indicators over the period 2001/02 - 2006/07.

# TABLE-II

#### <u>CHANGES IN KEY MACROECONOMIC INDICATORS</u> <u>2001/02-2006/07</u>

			Change in the
	June 2002	June 2007	Indicator
GDP Growth Rate	3.1%	7.0%	Positive
Inflation	3.5%	7.8%	Negative
Fiscal Deficit /GDP	-4.3%	-4.3%	None
Current Account /GDP	3.8%	-4.9%	Negative
Public Debt / GDP	82.91%	55.7%	Positive
External Debt/GDP	46.6%	27.8%	Positive
Interest Payments/ Govt. Revenues	44.7%	28.4%	Positive
Remittances	US\$ 200 million per month	-US\$ 458 million per month	Positive
Exports	US\$ 9.1 billion	US\$ 17.0 billion	Positive
Tax Revenues	Rs.404 billion	Rs. 890 billion	Positive
Rupees- Dollar Parity	Depreciating	Stable	Positive
Foreign Direct Investment		US\$ 5.1 billion	Positive
Foreign Exchange Reserves	US\$ 6.4 billion	US \$ 16.5 billion	Positive
Poverty Incidence	34%	24%	Positive
Unemployment	8.3%	6.5%	Positive

An analysis of the development that affected the economic outcomes during this period should be able to isolate the relative contribution of policy reforms, economic governance and external environment. Was it good policy, good luck or good management that was responsible for the economic performance in this period?

#### **POLICY REFORMS**

The highest priority of the Military Government was a major restructuring of the country's external debt portfolio in a way to bring it in alignment with its debt servicing capacity. By re-profiling the stock of official bilateral debt through Paris Club, substituting concessional loans for non-concessinal loans from international financial institutions, pre-paying expensive loans and liquidating short term external liabilities the government was successful in executing the strategy of external debt management in a two to three year period. This restructuring of debt put Pakistan on a firm footing as the debt and debt servicing ratios have been on a declining path and the capacity to meet the future foreign exchange liabilities and obligations without much difficulty has been enlarged. Pakistan was no longer vulnerable to external shocks as it was in 1998 at the time of the nuclear tests. Although the assistance and conditionalities agreed with the IMF were the pre-requisite for debt restructuring this lowering of debt burden, in fact, made it possible for Pakistan to exit from the IMF program well before the specified time. Pakistan became one of the few emerging market economies that was able to make a successful transition from IMF programme to international financial markets.

It must be clarified that it is not the absolute amount of debt that really matters. In a growing economy this amount will continue to rise in absolute terms. What is important to see is whether the burden of debt and debt servicing is rising, falling or is stagnant in relation to the national income, foreign exchange earnings, exports and government revenues. All indicators of debt and debt servicing have recorded a downward movement between 2002 and 2007. Realizing that debt restructuring would prove short lived if it was not accompanied by macroeconomic stabilization measures, structural reforms to remove microeconomic distortions and improvement in economic governance the government initiated a reform program.

The main thrust of these reforms was to allow greater freedom to the private sector to own, produce, distribute and trade goods and services, while gradually withdrawing the public sector from this arena. The role of the state in Pakistan was redefined as a facilitator, enabler, protector and regulator rather than directly managing and presiding over the commanding heights of the economy. Government intervention was justified for social protection of the poor and the vulnerable, provision of public goods, infrastructure, Human Development, Science and Technology. Although the State has not always adhered to this new role assigned to it and has shown dominance in actual practice, there is a political consensus in the country on the boundaries between public and private sector. It is another matter that the state has neither been effective nor efficient in carrying out the functions assigned to it. The capabilities of the state functionaries and consequentially the capacity of the public sector institutions have gradually eroded.

Significant efforts were made in unilaterally liberalizing the trade regime. The maximum tariff rate has declined to 25 percent; the average tariff rate stands at just 9 percent. The number of duty slabs have also been reduced to four. Quantitative import restrictions have been eliminated except those relating to security, health, public morals, religious and cultural concerns. The statutory orders that exempted certain industries from import duties or provided selective concessions to privileged individual firms were phased out and import duties on 4,000 items were reduced. A number of laws have also been promulgated to bring the trade regime in conformity with World Trade Organization regulations. These include anti-dumping and countervailing measures and protection of intellectual property rights. A stable exchange rate policy helped maintain predictability and competitiveness of Pakistani exports.

Concurrently with the debt restructuring, the country embarked on the fiscal policy reforms and consolidation by raising tax revenues, reducing expenditures, cutting down subsidies of all kinds and containing the losses of public enterprises. Tax reforms were undertaken to widen tax base, remove direct contact between tax payers and tax collectors, introduce value-added tax as the major source of revenue, simplify tax administration and strengthen the capacity of the Central Board of Revenue. Although these reforms are still underway, the adoption of universal self assessment followed by random audit of selected tax returns, automation and reorganization of the tax machinery will help improve tax collection. Tax-GDP ratio in Pakistan is lower in comparison to other developing countries and has to be raised in the next five years to reach the average level of comparator countries.

As one of the sources of fiscal problems was the losses and inefficiencies of public enterprises the Government actively pursued an aggressive privatization plan whose thrust was sale of assets to strategic investors. The sectors where most progress has been made are oil and gas, banking, telecommunications and energy. Foreign investors were encouraged to participate in the privatization process and a large number of them have been successful. The transactions completed in the last five years yielded \$ 3 billion. The privatized banks are now contributing substantial sums to the national exchequer as they have all become profitable.

There has been a major and perceptible liberalization of the foreign exchange regime. Foreign investors can set up their business in Pakistan in any sector of the economy – agriculture, manufacturing real estate, retail trade, services, banking, etc., bring in and take back their capital, remit profits, dividends, royalties and fees, etc., without any prior approvals. Foreign companies are allowed to raise funds from domestic banks and capital markets. In the globalised economy foreign investors not only bring capital but new technology, managerial skills and networking that helps the national economy to compete successfully and capture market share.

Financial sector reforms in Pakistan were accelerated in this period. The Central Bank was granted autonomy and the control of the Ministry of Finance over banking institutions was diluted. Net non-performing loans of the banking system were brought down to less than 3 percent of total advances and loans, minimum capital requirements were raised to \$100 million and the quality of new loans improved. Mergers and consolidation of financial institutions have eliminated a number of weaker players and the range of products and services offered by the banks widened. The privatization of Habib Bank, United Bank and Allied Bank three large nationalized commercial banks of the country has transformed the banking sector into an efficient, privately owned and managed sector but regulated by a strong and vigilant Central Bank. The share of the private sector ownership of the banking assets has risen to 80 percent and the banking sector is facing a healthy but strong competitive environment. The banks are highly profitable and automation, on-line banking and multiple channels of delivery have improved the efficiency of services in response to market competition. The widening of the banking spreads, however, remains an area of concern and shows that there are still inefficiencies in the system.

Banking System has started to meet the financing requirements of sectors such as Agriculture, SME, salaried classes, and the poor who had no access in the past. The borrower base of the banking system has multiplied from over 1 million to 4.5 million households in last five years. The middle and lower middle class consumers are now enjoying car loans, mortgages, credit cards, consumer durables. Small farmers are using bank credits for buying chemical fertilizers, certified seeds, insecticides, small implements and hiring tractor services. Small and medium entrepreneurs are using bank credit to expand their fabrication and manufacturing capacities and upgrading technology. Landless labor and poor women in the rural areas are receiving micro loans for poultry, small livestock, sewing machines, etc. The number of households who have borrowed microfinance loans has gone up from almost zero to about 1.5 million. The out reach for small and medium enterprises, agriculture and microfinance remains limited and has to be expanded particularly in the rural areas and backward districts.

Deregulation of oil and gas, telecommunication, media and civil aviation sectors have also brought about significant positive results. Oil and gas exploration activity was stepped up and constant discovery and production from new gas fields operated by private sector companies has added new capacity to meet the growing energy needs of the country. Telecommunication has witnessed a boom since the private sector companies were allowed licenses to operate cellular phones. One million new cellular phone connections are being added every month and the number of phones has already reached more than 90 million or a penetration rate of almost 50 percent. Long distance international and local loop monopoly of Pakistan Telecommunications Corporation has been broken and new licenses including those

for wireless local loop have been issued. The customers are reaping rich dividends as the prices of phone calls - local, long distance, international - are currently only a fraction of the previous rates. Lower telecommunication costs and increased penetration have a favourable impact on the productivity in the economy.

The success of the policies pursued in this period can be gauged from the fact that Pakistan was able to regain its economic sovereignty from the IMF as early as 2004. The economy was able to stand on its own feet and developed the capacity to withstand external and internal shocks. Investor confidence was restored in Pakistan. Workers living abroad used official channels to remit their earnings. International financial institutions were forthcoming with their assistance because the country had established credibility. International financial markets responded to Pakistan's bond and equity issues with great enthusiasm. Pakistan ranks high among South Asian countries on the index of Ease of doing business although the rising costs, outages and interruptions have added to the difficulties in last year or so.

The veracity of the above analysis can be verified by looking at the research reports and analyses produced by the IMF, World Bank, ADB, J.P. Morgan, Deutsche Bank, Merrill Lynch, Goldman Sachs. The up-gradings that have taken place in Pakistan's credit worthiness by S&P and Moody's between 2000 and 2007, the inclusion of Pakistan in the emerging markets by the Economist in London and other emerging market indices are a testimony to the growing importance of Pakistan's economy.

If the foundations of the economy were built on a slippery slope and on propaganda and fudging of figures and not on sound fundamentals the globally established and well respected institutions, fund managers and multinationals would dare not invest a single penny in Pakistan. Nor Pakistani debt and equity papers would have received such rousing reception in international financial markets. After all, there is so much competition world wide for investors' money. They voted with their dollars to come and invest, lend and do business in Pakistan despite the horrible image that is propagated by the international media everyday of the year.

It was also realized that these structural reforms are unlikely to be sustainable if the economic governance structure is not put right. Although Pakistan has a long way to go in improving governance, some measures have been taken to move in this direction.

#### ECONOMIC GOVERNANCE

The cornerstone of the governance agenda was the devolution plan which transferred powers and responsibilities, including those related to social services from the federal and provincial governments to local levels. Development effort is driven at the local level by priorities set by elected local representatives, as opposed to bureaucrats sitting in provincial and federal capitals. Devolution of power, with passage of time and after overcoming initial teething problems will strengthen governance by increasing decentralization, de-concentration, accountability and people's participation in their local affairs. However, in the meanwhile the transition has created its own set of dislocations and disruptions particularly in law and order and security that needed to be addressed.

Other essential ingredients for improving economic governance are the separation of policy and regulatory functions which were earlier combined within a ministry. Regulatory agencies have been set up for economic activities such as banking, finance, aviation, telecommunications, power, oil, gas, etc. The regulatory structures are now independent of the ministry and enjoy quasi-judicial powers. The Chairman and Board members enjoy security of tenure and cannot be arbitrarily removed. They are not answerable to any executive authority and hold public hearings and consultations with stakeholders. These regulatory authorities are still not fully effective due to inadequate human resource base.

The National Accountability Bureau (NAB) was established under a new legal framework as the main anti-corruption agency. A large number of high government officials, politicians and businessmen were sentenced to prison, subjected to heavy fines and disqualified from holding public office on charges of corruption after conviction in the courts of law. Major loan and tax defaulters were also investigated, prosecuted and forced to repay their overdue loans and taxes. Subsequent actions taken in response to political expediency have tarnished the image of NAB and compromised its integrity.

Some important legislative and institutional developments that have taken in the last few years should also help improve economic governance. The bane of Pakistan's economic problems stemmed from fiscal indiscipline over a decade that plunged Pakistan into a debt trap. This root cause had therefore to be surgically removed so that it does not recur in the future. A Fiscal Responsibility Law has been approved by the Parliament, which keeps a lid on the government's propensity to borrow their way out. Debt / GDP ratio has to be reduced by 2.5 percentage points each year and the Debt/ GDP ratio cannot exceed 60 percent. Any deviation has to be explained to the Parliament and need its approval. If strong enforcement mechanism is put in place and sanctions are imposed upon those not adhering to the limits, this law will hopefully act as a major restraint on fiscal recklessness in the future.

Monetary policy is now operated by an independent central bank keeping the objective of price stability, financial stability and growth in mind. Although it involves a fine balancing act and inflationary pressures have surfaced during the last two years the Central Bank is committed to pursue a monetary policy that keeps inflation under control. Indirect market-based policy instruments have replaced credit ceilings, caps on deposit and lending rates, preferential treatment to government and directed credit to priority sectors. Interest rates and exchange rates are market determined and credit allocation decisions are made by the individual banks based on objective criteria but guided by prudential regulations. The institutional capacity of the Central Bank has been strengthened although the law has to be revised to put mandatory ceiling on government borrowings from the SBP. The Federal Board of Revenue, Securities and Exchange Commission and Auditor General's Organization are being revamped and strengthened. A new Competition Commission has been established to deal with monopolies, cartels and collusive business practices. New regulatory agencies for telecom, oil and gas, power, electronic media have been set up with quasi-judicial powers but they are still at early stage.

The agenda of reforms in Economic Governance lost its steam in 2007 as the government got preoccupied with electoral politics and economic management was relegated to back burner.

#### EXTERNAL ENVIRONMENT

In this period Pakistan had to suffer several external shocks in this eight year period. A prolonged drought resulted in shortage of irrigation water for agriculture, the tensions with India led to mobilization of troops on the border, the terrorist attacks on foreign nationals in Karachi, the Sept. 11 attacks on the World Trade Centre and the subsequent participation of Pakistan in the war against terror had serious consequences for the economy.

A favorable external environment following September 11, 2001 played a highly supportive role in the sub period 2002/03 – 2006/07. Economic sanctions were removed, increased bilateral and multilateral assistance flowed in, bilateral external debt was restructured and re-profiled, workers' remittances multiplied several fold, foreign direct investment poured in large volumes and access to international capital markets was established. The most controversial issue is that of impact of September 11, 2001 on the turn around of Pakistani economy. A fuller analysis of this event is therefore quite critical.

#### IMPACT OF SEPTEMBER 11 EVENTS

A large number of observers and casual empiricists both within and outside Pakistan have been making bold but untested assertion that it is the massive aid flows and debt relief resulting from Pakistan's participation in the war against terror after September 11, 2001 that has been responsible for the large reserve accumulation and economic turnaround. It is true that following this event workers' remittances were diverted from open market to inter bank, debt relief was provided and new loans and grants were received, official sanctions were removed, foreign direct and portfolio investment poured in large volumes, access to international financial institutions was much easier, bilateral donors became active. There were, however, also huge costs incurred by Pakistan. It is conveniently forgotten that thousands of innocent lives of Pakistani soldiers and civilians have been lost, a deep sense of in-security prevails in the country, foreign travel advisories have discouraged visits of businessmen, tourists and buyers, higher war risk premia are charged, shipping freights have gone up, insurance premia on Pakistani goods have escalated and export orders have been diverted. The frequency and ferocity with which suicide bombers are attacking the political leaders, installations and targets has added to the gravity of law and order problem in the country. Export orders of several billion dollars were cancelled right after the event and the recovery has not yet taken place. As against continued growth in exports in other countries of the region there has been a significant slow down in Pakistani exports particularly textiles due to the uncertainty created in the minds of buyers abroad and their limited exposure to the actual conditions. IT industry that was just taking off in 2001 has been badly hurt as all contracts for outsourcing were cancelled. Pakistan is no longer on the radar screen of the global IT industry which is expanding rapidly.

The data presented in Table III shows that even if it is assumed that all official transfers, debt relief and all foreign loans/credits represent the "gift" of September 11 to Pakistan, this combined amount represents only 10% of total Foreign Exchange Earnings of the country in FY-06. At its peak in FY-02, the amount of flows from foreign assistance was 21.6%. But this entire amount is not a direct fall out of September 11 because Pakistan has been receiving foreign loans and grants every year since the 1950s. For example, in FY-00 and FY-01, the two years prior to September 11, 16 per cent and 19.9% of Foreign Exchange Earnings were received in form of foreign loans and grants. The country had a positive overall balance and positive current and capital account balances in 2000-01 much before September 11, 2001 occurred. Even in FY 1999-00 the deficit on the overall balance was quite small – less than 1% of GDP. Pakistan's reserves had started accumulating in FY01 and SBP's own reserves had almost doubled after paying off foreign currency deposits of almost \$ 1.7 billion to the non-residents and institutional holders and \$ 2.8 billion in debt servicing to external creditors. Thus the perception that every thing good that has happened to the country is a direct consequence of September 11 is not only incorrect but highly exaggerated for the reasons described below.

### TABLE-III

# SOURCES OF FOREIGN EXCHANGE EARNINGS

## <u>FY 00 - FY 07</u>

\$ Million

	FY 00	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07
A. Exports of Goods & Services	9,574	10,284	11,056	13,686	15,103	17,801	20,254	21,202
B. Workers' Remittances	983	3,087	2,390	4,237	2,871	4,168	4,600	5,500
C. Other Private Transfers	2111	2,853	1,899	1,559	2,293	4,202	5,345	4,608
D. Official Transfers	940	842	1,500	1,051	634	398	679	528
E. Debt Relief	-	-	-	1,000	-	-	-	0
F. Foreign Direct Investment	472	323	485	798	951	1,096	1,981	4,873
G. Privatization Proceeds	-	-	-	-	-	363	1,540	267
H. Euro / Sukuk Bonds					500	600	800	977
I. Equity Securities	-	-	-	-	-	-	-	2,303
J. Foreign Loans / Credits	1589	2812	2,910	2,293	1,726	2,431	2,728	4,140
K. Others	158	175	164	271	199	1,642	2,527	1759
TOTAL:	15,827	18,377	20,404	24,895	25,253	32,106	40,508	46,157

It should be recognized that any external financial relief such as provided in the aftermath of Sept 11 would have dissipated quickly and thus remained temporary

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and transitory in nature until it was accompanied by fundamental structural reforms that clean up the economic landscape, unshackle the entrepreneurial energies of private economic actors, lay the foundations for competitive markets under the vigilant eyes of regulators and expand the productive and foreign exchange earning capacity of the country. As pointed out earlier it would not have been possible to take advantage of the benefits offered by Sept. 11 in absence of the reforms of financial sector, liberalization of trade and tariff regime, improvement in tax policy and administration, deregulation of oil and gas and telecom sectors and privatization of state owned enterprises.

The data presented in Table-III clearly demonstrates that Pakistan's foreign exchange earning capacity has expanded from \$ 15 billion annually to \$ 46 billion during the last six years or 33% of GDP from 20% of GDP. Contrary to popular perception, it is the Pakistani businesses and nationals working abroad who provide the bulk of the foreign exchange earnings of the country. It is totally fallacious to argue that if the foreigners, particularly Americans withdraw their financial assistance then the country will be in dire trouble. About \$ 30 billion are generated by Pakistani businesses and nationals and the remaining amount accrues from foreign direct investment, privatization and international markets. If this pattern of foreign exchange earnings persist in the future the relative share of foreign assistance in form of grants or loans from United States, other friendly bilaterals and multilateral will continue to decline and will become insignificant in the next 5-10 years.

In order to further evaluate the veracity of the assertions of the theory of dependence of our economy on the US, four key indicators are selected (a) US assistance as percent of Pakistan's total budgetary expenditure (b) US assistance as percent of total current account receipts of Pakistan and (d) US assistance as percent of total value of imports of Pakistan. These indicators have been carefully chosen to see as to how much damage will accrue to our balance of payments and fiscal accounts if the US for one reason or the other abruptly decides to withdraw its assistance of all types.

The results of this analysis shown in Table IV indicate that even under he worst case scenario of zero aid flows and no reimbursements for logistics services rendered in connection with the war on terror, the diminution in foreign exchange receipts or budgetary resources would be insignificant – varying between 4.5% of total foreign exchange receipts to 7.2% of total budgetary expenditures. The other two indicators, i.e. the proportions of total value of imports and current account receipts financed by U.S. assistance account for 6.4% and 5.8% respectively – not worrisome amounts. The common held belief that Pakistan's economic turnaround and sustained growth has taken place due to massive foreign assistance from the U.S.

as a reward for participation in the war against terror is un-substantiated by the above empirical evidence.

		2006-07
1.	Annual US assistance (of all forms) as	7.2%
	% of total budgetary expenditure (\$ 25	
	billions)	
2.	Annual US assistance (of all forms) as	4.5%
	% of total foreign exchange receipts (\$	
	40 billions)	
3.	Annual US assistance (of all forms) as	6.4%
	% of total imports (\$ 28 billions)	
4.	Annual US assistance as % of current	5.8%
	account receipts (\$ 31 billions)	

### TABLE-IV KEY INDICATORS OF US ASSISTANCE

### **ECONOMIC REGRESS 2007/08**

The year 2007-08 has been a difficult year for Pakistan's economy. It must be conceded that the momentum of growth slowed down and a temporary derailment from the track has taken place. What has happened to the economy in this period can be gleaned from the following facts:-

- GDP growth rate was below the target, i.e. 5.8 per cent but was still quite respectable in view of the severe political and economic difficulties faced by the country.
- Fiscal deficit widened to 7.4 per cent of GDP breaching the limit prescribed in the Fiscal Responsibility Act.
- As public expenditure outpaced revenue collection, government borrowing from the State Bank of Pakistan jumped to a record Rs.688 million compared to Rs. 112 billion in the previous fiscal year.
- The consequence of such excessive government borrowing was a sharp growth in reserve money fuelling inflationary pressures.
- In agricultural sector, cotton, wheat and rice crops did not perform well and together with increased prices of imported commodities, contributed to food inflation.
- Electricity and gas load shedding due to shortfall in generation had adverse impact on manufacturing and export sectors. Large scale manufacturing growth slowed down to 4.8 percent almost one half of the rate recorded in FY07.

- A worsening trade imbalance fuelled external current account deficit to exceed 8.4 per cent of GDP.
- Foreign capital inflows that were required to finance the current account deficit dried up leading to depletion of foreign exchange reserves.
- The drawdown of foreign exchange reserves to meet the balance of payments deficit created pressures on Rupee-dollar exchange rates leading to a depreciation of about 25 per cent.
- Inflationary pressures have intensified largely due to exceptionally high food inflation that is hurting the poor and the fixed income groups badly. Inflation crossed 12 per cent.

The trajectory of high growth trends has been disrupted in FY08 because of political uncertainty, worsening of law and order situation, macro-economic instability and micro-economic inefficiencies such as energy shortages. Remedial action is required on all these fronts to put the economy back on track. The immediate issues are (a) tackling inflation (b) raising external financing to meet current account deficit (c) reducing fiscal deficit and repaying State Bank borrowings (d) managing energy shortages in a way that favours the manufacturing and export industries in allocation.

The widening fiscal and current account deficits continue to create complications and add to inflationary pressure. The combination of rising fiscal deficit and weak external receipts pushed the government borrowings from State Bank of Pakistan to a record level in FY08. This exceptionally high level of government borrowing has been instrumental in sustaining the growth of broad money for the period at 15.4 per cent significantly offsetting the Central Bank's efforts to tighten monetary policy.

In agriculture sector, the disappointing performance of cotton and rice crops and the likely shortfall in wheat crop did result in a dismal 1.5 per cent growth rate. Large scale manufacturing has been encountering relatively slower growth due to strong increases in the international commodity prices, domestic energy woes and dampened external demand for textile exports. Economic losses in the aftermath of December 27, 2007 further weakened prospects and the sector recorded almost half of the targeted rate of 10.9 per cent.

The relative slowdown in foreign inflows to Pakistan triggered both by the turmoil in international financial markets and protracted and complicated political transition put pressure on exchange rate, foreign exchange reserves and the differential between the inter-bank and open market rates.

The momentum of privatization that began to slow down in FY07 was almost lost in FY08 as none of the intended transactions was completed. 61 state entities that were in the pipeline remained untouched. On the other hand, the subsidies claimed by WAPDA, and PIA escalated substantially, the inter-enterprise circular debt that was completely eliminated in the earlier years resurfaced again, payments to oil marketing companies for price differential were delayed or only partially made and the independent private producers were not paid on time aggravating the energy shortages.

Food, oil products, power and gas tariffs were not fully passed through to consumers in the wake of international price hikes accumulating large fiscal imbalance. Support price for wheat was not announced on time and slight shrinkage in area under wheat cultivation was observed. Unprecedented increase in prices of DAP and shortages of irrigation water further exacerbated the situation. The doubling of world rice prices however, helped in a 60 per cent rise in the export earnings from rice.

The newly elected government has taken some measures to come to grip with the economic situation. It has entered into a 22 month stand-by agreement with the IMF that is aimed primarily at macroeconomic stabilization. On the production side in the real sector the main constraint being felt is the persistent energy shortages. In the short term the existing capacity of the IPPs and other generating units can be fully utilized if the problem of the circular debt is quickly resolved. External environment has, in the meanwhile, become more hostile in the aftermath of global financial crises and Pakistan's exports are likely to be hit. The good news is that a significant decline in world oil and commodity prices would help Pakistan in reducing trade imbalance and also fiscal deficit.

#### WEAKNESSES AND SHORTCOMINGS

There is some truth that the benefits of the growth in this eight year period have not been widely shared. But it is the poor implementation capacity arising from a weak administrative structure in the country at all levels that is mainly responsible for this outcome. Policy decisions are taken but they are questioned, reopened, and their implementation is hampered unnecessarily, delayed or slowed down at the bureaucratic level. The lack of access of the poor to the basic public services arises due to apathy, indifference and corruption prevalent among the civil servants who deal with public at large. Civil Service Reforms, Judicial Reforms along with effective devolution of powers to local governments are badly needed in the country.

Both theoretical and empirical studies have clearly demonstrated that good governance and well functioning institutions are critical for sustained and equitable economic development. In Pakistan, the thrust of policy reforms has not been contested by any government – civil or military – for almost three decades. But it is the lack of implementation of policies due to weak governance, poor institutional capacity and malfunctioning structures and processes that has played havoc in meeting the goals and expectations.

Using a Growth Diagnosis framework developed by Hausmann, Rodrick and Velasco, Qayum et al have attempted to identify the constraints to growth in Pakistan. They found governance failure and institutional shortcomings are the heart of the matter. Corruption is rampant, judicial independence is low, educational institutions do not furnish the right kind of labour force, legal institutions do not protect the lenders against loan defaults, ambiguous land titles constrain, mortgage financing and construction activity, labour market institutions restrict hiring / firing. They identify three binding constraints to growth in Pakistan (i) poor state of governance (ii) poor state of institutions (iii) lack of competitive environment.

The other burning issues which confronted most Pakistanis during this subperiod were (a) high inflation (b) dissatisfaction with privatization of state owned enterprises (c) growing income inequalities (d) energy shortages (e) food security. These concerns are justified but there were cogent reasons behind each of these issues

The strong growth performance increased the incomes of the middle class. As a consequence, the higher purchasing power of a growing middle class translated into the increased demand for more goods and services. Some of these demands was higher imports but it also created shortages domestically in food and other essential commodities. Higher international prices of oil, food and other commodities have in fact, worsened the situation. The rising demand due to increasing purchasing power of an expanding middle class combined with international factors have intensified inflationary pressures. Tight monetary policy pursued since 2005 did reduce core inflation but the higher food inflation (food forms 40 percent of consumer basket) did not allow the overall inflationary pressure to be mitigated. The average growth of 25% in imports reflecting the increase in oil prices, higher machinery imports over FY 03-07 and commodities out paced export growth of 13% leading to a widening external current account deficit. Until FY07 capital inflows funded fully the external current account deficit and helped in building foreign exchange reserves (growing by \$ 5.6 billion over FY 03-07) but the slowdown in inflows since then has caused anxiety.

During the period FY2000-08 the Government sold off cumulatively almost \$ 7 billion of assets and eased pressure on its budgetary resources as it no longer underwrote the losses of state owned companies and enterprises. For example, the Government had to inject Rs.41 billion to recapitalize Habib Bank and United Bank when it was under its control. After privatization not only the market value of the residual shares held by the government has risen significantly but these banks are paying hefty dividends and also taxes on their profits. The efficiency gains to the economy achieved after privatization have not been studied and therefore its impact has not appreciated. The Supreme Court judgment on Pakistan Steel Mills created some doubts about the transparency of the process and it is necessary to make suitable changes in the law and processes to allay these suspicions and fears once for all. The process of privatization should move forward and the public should be made aware of the relative costs and benefits of privatization to the economy.

The growing income and regional inequalities do pose some serious problems. This difference has arisen mainly due to the nature of the societal relationship that under pin various parts of the country. Southern Punjab, Rural Sindh, Balochistan outside Quetta, Northern and Southern districts of NWFP have not so far gained much from development activities relative to others because of the stranglehold of feudal and tribal traditions, remoteness and low literacy. The expanding inroads of urbanization and the communication revolution are likely to dilute these negative influences. In the meanwhile the Government took upon itself to invest heavily in infrastructure and connectivity in Balochistan. It is expected that these projects, when completed, will help in removing some of the constraints that impede the remote areas of Balochistan from participating in the economy. Consultations with and participation of local communities and stakeholders in the design and implementation of these mega projects may set at rest some of the resistance against these projects in Balochistan.

Energy shortages have resulted from a combination of factors such as unanticipated high growth in demand, substantial hike in international oil prices, poor planning and weak implementation capacity, lack of response from the private sector, convoluted tariff setting process, bureaucratic and inter-agency turf fighting and the accumulation of circular debt. Power shortages have inconvenienced the consumers and also caused serious problems for the businesses. Some of the projects in pipeline would be ready for commissioning in 2009-10 and ease the situation somewhat. In the meanwhile the industry, particularly the manufacturing sector is suffering gravely due to the electricity outages and gas load shedding. Priority has to be given to the industries in allocation of power and gas if the trend in production losses has to be reversed. The negotiations with Iran and India for Iran-Pakistan-India gas pipeline have become protracted and time consuming. A number of problems have been resolved in last one year but progress is still slow and has to be expedited.

Food security issues had assumed serious proportions in 2007 and 2008 because of global supply and price shocks of main food staples. International prices of wheat had jumped 92 percent in one year period and rice prices had doubled. The Pakistani markets could not remain insulated from these shocks despite the best efforts of the government. Wrong estimation of the surplus wheat crop led to

erroneous decisions and the delay in fixing the support price causing uncertainty in the minds of the growers. The new Government has, however, taken decision to revise the support price and also imports have been allowed. These steps should help, along with targeted subsidies, in mitigating the hardships faced by the poor.

#### CONCLUSIONS AND THE WAY FORWARD

The Military government which came to power in October, 1999 was faced with four main challenges (a) heavy external and domestic indebtedness; (b) high fiscal deficit and low revenue generation capacity; (c) rising poverty and unemployment; and (d) weak balance of payments and stagnant exports. In addition, Pakistan was perceived as a highly corrupt country with poor governance. Transparency International survey ranked Pakistan as he second most corrupt country in 1996. The situation was exacerbated by the initial negative reaction of the international community to the military takeover of the government as well by the high expectations of domestic populace and the media to hold those found guilty of corruption accountable. Further, the lingering dispute with Independent Power Producers (IPPs), particularly HUBCO during the preceding three years had damaged the investor-friendly image of Pakistan. The distrust engenderd by the freezing of foreign currency deposits of non-resident Pakistanis in May 1998 had not yet been erased. Thus investor confidence was at its lowest ebb.

Pakistan's credibility was quite low with international financial institutions since the track record of performance on agreements reached with them, over the preceding ten years, was dismally poor. There was little empathy for Pakisan among these institutions and bilateral creditor governments, while at the same time it was not in a position to service its external debt obligations without immediate rescheduling. The country faced a serious liquidity problem as its reserves were barely sufficient to buy three weeks imports and could not possibly service its short term debt obligations. Workers, remittances were down by \$500 million, foreign investment flows had dwindled by \$600 million, official transfers had turned negative and Pakistan had no access to private capital markets.

In the domestic sector, the declining Tax-GDP ratio and inflexible expenditure structure, whereby 80 percent of revenues were pre-empted to debt servicing and defence, constrained the government's ability to increase the level of public investment.

It was against this backdrop of imminent default on external debt and a heavy debt servicing burden in the budge that the military government had to design a strategy for economic revival in December, 1999. The facts and the analysis presented above clearly show that Pakistan's economy has developed the strength and become resilient to withstand adverse shocks in relation to the situation

prevailing in the decade of 1990s. Major structural reforms carried out between 1999/2000 - 2006/07, modest improvement in economic governance particularly key institutions and timely decisions paved the way for the turnaround and built the resilience of the economy. The fiscal space created by sound economic management as well as provision of international assistance allowed the Government to raise the level of development expenditure five fold during this period, i.e. from Rs.100 billion annually in FY99-00 to Rs.525 billion in FY07-08. This massive expansion in development outlay allowed completion of many large projects and work on 90 other mega projects is in different phases of implementation. When completed these projects will bring large benefits to the economy. In the Education sector, the allocation to Higher Education sub-sector was raised ten fold from Rs.3.8 billion in 2001-02 to Rs.33.76 billion in 2007-08. President's Education Sector Reforms program was launched at a cost of Rs.100 billion to achieve universal primary education, strengthen science education and to promote public-private partnership. Health indicators have shown considerable improvements and population growth has decreased from 2.7% to 1.8%. This large public investment in infrastructure and social services will start to pay dividends to the economy in the coming years and contribute to growth momentum in the future provided rash decisions are not taken to discontinue or disrupt their implementation just because they were initiated by the previous government.

The lessons from the decade of 1990s clearly show that the policy pursued by the successive governments in abandoning the projects and programmes initiated by the previous regimes cost the economy huge losses in terms of lower output and incomes, increased poverty and unemployment. Of course, fine tuning and adjustments should be carried out by the incoming government to get rid of the weaknesses and deficiencies but whole scale rejection of the initiatives that make economic sense should be avoided. Devolution of powers to local governments, upgrading of higher education, adult literacy programs and health care delivery by involving volunteers and communities, Primary Education projects to achieve universal education, Private-Public Partnerships in infrastructure and Social Services, strengthening and expanding technical and vocational education, filtered water supply, lining of water channels, are some of the commendable initiatives that are in the midst of implementation. These can be reviewed and suitably modified but allowed to complete as costs have already been incurred but the benefits have yet to start accruing to the population.

No doubt that the economy has derailed from the track in 2007/08 but with proper management it can be brought back to the track. Both international and domestic factors have contributed to the setbacks, slippages and hence a deterioration in key economic indicators. The government's reluctance to make gradual adjustments in the prices of oil, electricity and gas, particularly in response to the changing international conditions, the mismanagement of wheat situation, the

postponement of new GDR and bond issues, the slowdown in further reforms particularly in the area of governance and devolution, the pre-occupation with political issues and judicial crises, the absence of effective social protection and social assistance framework accentuated the inflationary pressures, amplified the imbalances on fiscal and external current account, created shortages of wheat, electricity and gas and wrongly gave a widespread impression that the gains achieved in the previous seven years were illusory in nature based on fudged facts and figures. Nothing can be far from the truth. The seven year track record cannot be dismissed summarily as it has been verified by international financial institutions, international bond issuers, fund managers, research analysts and foreign investors who have invested more than \$ 14 billion in Pakistan's economy. What is true is that the original targets specified for 2007/08 could not to be achieved and the actual economic outcomes were worse than what was anticipated and prescribed in the beginning of the fiscal year. The motive for the understatement of domestic interest payments in the original budget estimates can be questioned. Whether it was sheer incompetence or deliberate attempt to put a lower number to contain fiscal deficit can be investigated, ascertained and disclosed to the public at large. But the nonachievement of many other targets and worsening of outcomes cannot be ascribed to across-the-board suppression or concealment of facts or fudging of figures but to the indecision and paralysis in management of the economy exhibited during the year by the previous elected government and the caretaker government.

Some of the weaknesses in economic planning and management manifested themselves in the last eight months. The first was the inability to cope with the looming energy shortages. The plans and projects of additional electricity generation, natural gas imports, alternative energy sources remained unfulfilled at the same time when the government was pushing the demand side through massive rural electrification, new gas connections, substantial increase in the use of air conditions and gadgets by a rising middle class and liberal consumer credit. Second the previous government did not develop a sound food security plan in which subsidies were targeted towards the poor and vulnerable segments of the population. Third, the Government did rightly increase public expenditures on development particularly and social sectors but in many cases the cost overruns and delays in completion have not brought the benefits to the population.

The temptation to blame the previous governments should be tampered with caution and not carried too far. To the extent that it raises doubts about the country's financial and economic integrity, weakens the capacity to raise funds to meet the deficits and erodes investor confidence to bring in new investment the present government will have to bear the consequences. While a clear account should be placed before the public, the potential for the damage to the economy by indulging in scoring political points or attributing motives should also be considered.

Finally, the question of sustainability of growth in the future has to be addressed squarely. There is a legitimate concern among many quarters that the growth achieved in the past five years is unsustainable as it was driven mainly by consumption liberalization. The sequencing embedded in the economic strategy adopted in December 1999, emphasized macro-economic stabilization in the first phase and stepping up of growth in the next phase. It is quite possible that the first phase may have extended a few years beyond FY 02 if the external circumstances had not taken a turn for the better. Different options were considered to kick start the economy that was trapped in low level equilibrium of low growth and low inflation in FY 02. As the country was faced with a heavy public debt burden and the aim of stabilization was to bring fiscal deficit down, the fiscal policy stimulus option was ruled out. The improvement in financial intermediation process and low inflation rate motivated the policy makers to use monetary policy lever for the purpose of economic recovery. Low cost of capital enabled the banks to extend credit to a large number of businesses, SMEs, agriculture and also to the consumers for automobiles, mortgages and consumer durables. Large increase in private sector credit enabled an expansion in aggregate demand. Manufacturing industries which were operating at low capacity got a boost due to rising consumer demand and some of them were able to attain profitability because of the lowering of unit cost of production. Manufacturing sector recorded growth of 14 percent in FY04, 15.5 in FY05 and 10 per cent in FY 06 up from 4.5 per cent in FY 02 and 6.9 per cent in FY 03. As capacity was fully utilized in most industries, new investment was undertaken to respond to this rising demand. The total fixed capital formation in manufacturing sector between FY 02 and FY 07 amounted to Rs.1300 billion due to double digit annual growth. Fixed investment level in the manufacturing sector jumped from Rs. 140 billion in 1999/2000 to Rs.404 billion. It is estimated that the textile industry alone invested about Rs.300 billion in import of new machinery and equipment during this period. Cement industry increased its capacity from 18 million tons to 34 million tons while in 2000/01 only 9 million tons were sold. Along with manufacturing, transport and communications sector was the recipient of investment totaling Rs.1320 billion. As most of this investment is in various stages of implementation the benefits will accrue over next five years at least. It is true that complementary investment in power and gas was missing in this period eventually leading to disruptive energy shortages and slow down in growth in the current year. But the cumulative public and public and private sector investment of Rs.8053 billion or US \$ 134 billion made in the last eight years still has to add to output stream in the coming years. Investment - GDP ratio had already moved up to 23 percent in FY 07 – almost five percentage points higher than the average rate of 18 percent. Political stability after 2008 elections should also confer some dividends in form of further improvement in this investment ratio. The popular notion that agriculture and manufacturing sectors were neglected during 1999/00 - 2006/07 period is factually incorrect. The share of the manufacturing sector in GDP has actually risen from 14.7 percent to 19.1 percent.

A new dimension has been introduced in the growth equation in the past one year, i.e. demand for food. If managed carefully and assiduously this demand can earn foreign exchange through exports of surplus food staples, while transferring increased purchasing power for the rural areas of Pakistan where most of the poor live. The rice export capacity has already exceeded 3 million tons and an average price of \$800 / ton can fetch almost \$2.4 billion. Similarly, the wheat and maize crops have the potential of producing surpluses if proper pricing and marketing incentives are provided to the farmers. In case it is mishandled, food shortages and price hikes can lead to riots like in other countries. The big question mark about the sustainability of growth in the future is as to how quickly and effectively the new government is able to tackle the issues of fiscal and current account imbalances, reassure the foreign and domestic investors about the direction of policies and governance and how the energy shortages are mitigated. In case, the agreement with the IMF is faithfully implemented, the energy situation improves in the coming year the country should be able to resume its path on the growth trajectory that it has followed since FY 03. The economic fundamentals remain strong and only a course correction is needed.

### LOOKING AHEAD

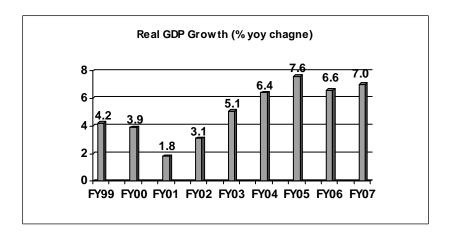
There is no doubt that the year 2007/08 was a difficult year for Pakistan's economy. The incoming government has indeed inherited a difficult financial position. The momentum of economic growth has slowed down, macroeconomic stability has derailed from the tracks, investor confidence is in a state of hiatus and the tension between taking tough policy decisions to get the economy back on track by reducing the imbalances and providing immediate relief to the poor and the vocal fixed income earning classes poses serious political challenge for the new government. Externally, the environment is not favorable either. Turbulent financial markets and recession in the advanced economies make the task of economic management even more difficult. Internally political uncertainty, recalcitrant bureaucracy, truculent terrorists and rent seeking businesses have worsened the situation.

In the short term, the fiscal deficit has to be brought down by curtailing unproductive expenditures, slowing down the development projects that have not yet started and are not of critical nature, accelerating energy conservation and generation programmes, taxing the capital gains in stock market earned through short term trading, revaluing the urban property and recovering agriculture income tax from land owners beyond a certain limit, imposing taxes on services that are outside the net. In the medium term, food and agriculture production, agro-processing industries, marketing, storage and warehousing, transport, retail distribution have to be paid highest priority along with agriculture credit, insurance, microfinance and upgrading of rural infrastructure. Devolution to local governments to allocate resources and manage their own affairs should be strengthened along with fundamental reforms in the governance structure.

In the long term, the reforms of institutions and governance structure will hold the key to sustainable and equitable growth in Pakistan. Inter-personal and regional inequalities have to be reduced, access to finance and education has to be ensured, property rights and contracts have to be protected and enforced. Industrial and export structure have to be diversified into more dynamic products such as engineering goods and services, steel, petrochemical complex, oil refineries that are essential ingredients upon which the new structure is to be based along with heavy investment in skilled and unskilled manpower development.

#### STATISTICAL APPENDIX

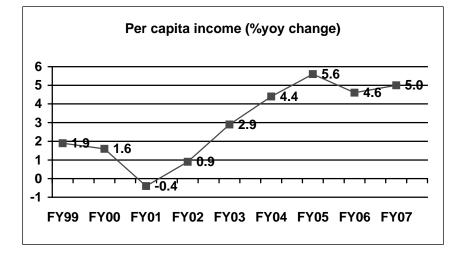
#### CHART - I



#### **Acceleration in Real GDP Growth**

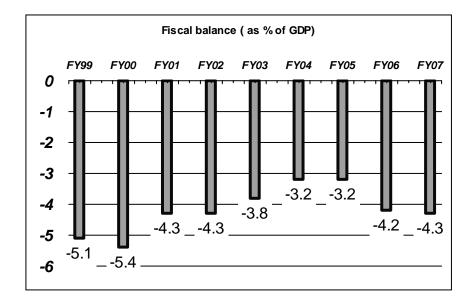
## <u>CHART – II</u>

## **Rise in Per capita income**



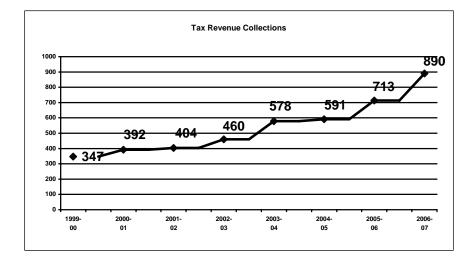
## <u>CHART - III</u>

## **Decline in Budgetary deficit**



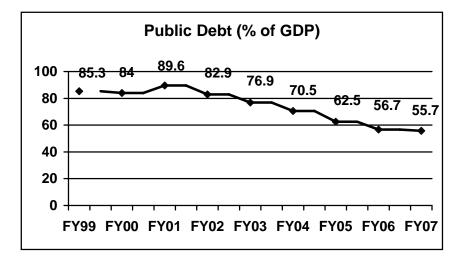
## <u>CHART – IV</u>

## **Rising Tax Revenues**



## CHART - V

### Fall in Public debt



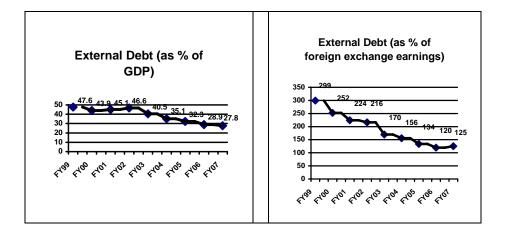
### CHART - VI

#### Interest Payments (as % of Revenues) **60** 51.2 47 45.1 44 7 50 40 <del>32.8</del> 30.1 28.4 25 30 22 20 10 0 FY99 FY00 FY01 FY02 FY03 FY04 FY05 FY06 FY07

### Improved Debt servicing capacity

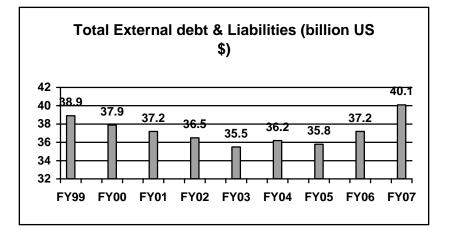
## CHART - VII

### Lower External Debt burden



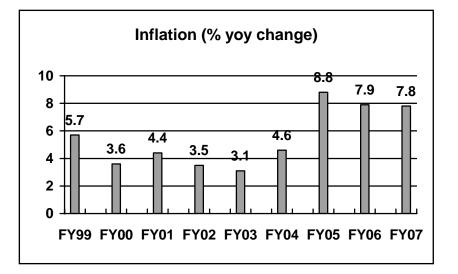
### CHART - VIII

## Stagnant External debt & liabilities



## CHART - IX

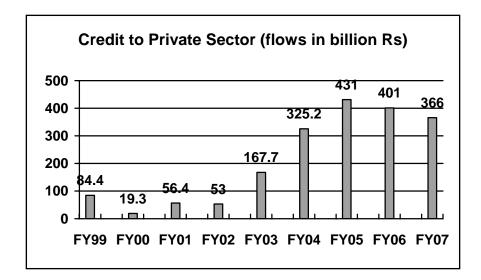
### Low Inflation for first five years



40

## CHART - X

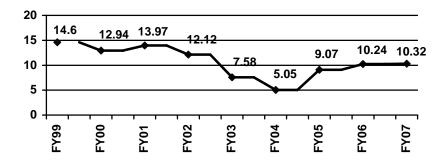
Large demand for Private sector credit



### <u>CHART - XI</u>

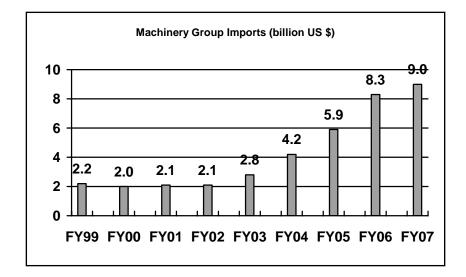
Lower Cost of capital

Weighted Average Lending Rates (in %)



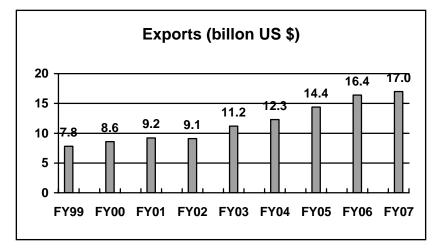
## CHART - XII

## **Rise in Imports of machinery**



## <u>CHART – XIII</u>

## **Expansion in Exports**



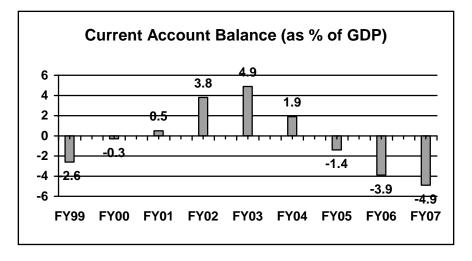
## CHART - XIV

Workers Remittance (billion US \$) 5.5 6 4.6 5 4.2 4.1 3.9 4 2.4 3 2 1.1 1.0 1.1 1 0 FY99 FY00 FY01 FY02 FY03 FY04 FY05 FY06 FY07

Sharp increase in Remittances

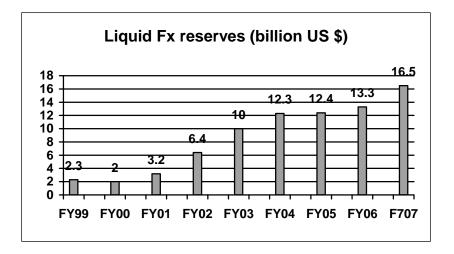
## CHART - XV

### Surplus current account until FY 04



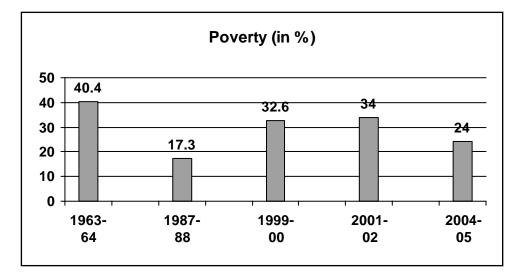
## CHART - XVI

**Strong Foreign Exchange Reserves** 



## CHART - XVII

## **Decline in incidence of poverty**



44

#### REFERENCES

ABN-Amro Economic Bulletin - Various Issues

AKD Pakistan Research, Pakistan Market 2008-2009 (January 5, 2009)

AKD Pakistan Research, Pakistan Market 2007-2008 (January 7, 2008)

Asian Development Outlook 2008 Update

Asian Development Bank. An Analysis of Pakistan's Macroeconomic situation and Prospects. (Working Paper 136, December 2008)

Asian Development Bank. A note on Competitiveness and Structural Transformation in Pakistan. (Working Paper 110, December 2007)

BMA Research Strategy Pakistan Outlook 2008 (January 22, 2008)

BMA Research, Strategy Pakistan Outlook 2009 (January 14, 2009)

Commission on Growth and Development, The Growth Report (World Bank 2008)

Citigroup Credit Research, Islamic Republic of Pakistan, Credit Turnaround Story, February 17, 2007.

Deutsche Bank, Pakistan Primer – Opening the door to Pakistan (June 29, 2006)

Devarajan S. and I. Nabi 'Economic Growth in South Asia' (World Bank 2007)

Easterly, W. 'The Political Economy of Growth without Development: A Case Study of Pakistan (Harvard University, March 2000)

Goldman Sachs, BRICs and Next Eleven (2007)

Government of Pakistan, Finance Division, Economic Survey 2007-08

Government of Pakistan, Planning Division, Poverty Reduction Strategy Paper II November 7, 2008.

Government of Pakistan, Planning Commission, Medium Term Development Framework 2005-2010 (May 2005) Hausmann, R, D. Rodrick and A. Velasco. "Growth Diagnostics": (JFK School of Government, Harvard University 2005)

HSBC, Pakistan: Reaping the rewards of reform, December 15, 2004

International Monetary Fund, Request for Stand-by Arrangement – Staff Report (December 2, 2008)

International Monetary Fund, World Economic Outlook (September 2008)

International Monetary Fund, Pakistan: 2001 Article IV Consultation Staff Report (January 17, 2008)

Institute of Public Policy, State of the Economy: Challenges and Opportunities (BNU Lahore, 2008)

Invest Cap Research, Pakistan Economic Report (February 21, 2008)

J.P. Morgan, Pakistan: Favourable Trends Abound, September 5, 2003

J.P. Morgan, Pakistan: Showing its mettle and staying the course, March 1, 2005

J.P. Morgan, Pakistan: Making a remarkable come back, January 21, 2004

Mahbubul Haq Centre for Human Development, Human Development in South Asia – A Ten Year Review (Oxford University Press)

Merrill Lynch, Pakistan Strategy (December 23, 2008)

Merrill Lynch, Investment Strategy (November 18, 2008)

Merrill Lynch, Pakistan Opportunities and Challenges (January 6, 2008)

Planning Commission, Panel of Economists, Economic Stabilization with a Human face (October 31, 2008)

Qayyum A, Idress Khawaja and Asma Hyder, "Growth Diagnostics in Pakistan" PIDE Working Paper 2008:47

Social Policy Development Centre, Fiscal Policy Choices in Budget 2008-09. (Research Report No.76, 2008)

Standard and Poor, Asia - Pacific Sovereign Report Card. (Sept. 2006)

State Bank of Pakistan, Annual Reports Vol. I, Performance of the Economy. (2007-2008)

State Bank of Pakistan, Quarterly Economic Report. (Various issues)

State Bank of Pakistan, Financial Stability Review, 2008

State Bank of Pakistan, Banking System Review, 2007.

UBS Investment Research, "Pakistan Arrives" (Sept. 15, 2006)

World Bank, Pakistan: Development Policy Review (April 3, 2002)

World Bank, World Development Indicators 2008

World Bank, Global Economic Prospects 2009

#### Not to see something but to be something

Art thou in the stage of 'life', or 'death,' 'death-in-life'? Invoke the aid of three witnesses to verify thy 'Station'. The first witness is thine own consciousness -See thyself, then with thine own light. The second witness is the consciousness of another ego -See thyself, then, with the light of an ego other than thee. The third witness is God's consciousness -See thyself, then, with God's light. If thou standest unshaken in front of this light, Consider thyself as living and eternal as He! That man alone is real who dares -Dares to see God face to face! What is 'Ascension'? Only a search for a witness Who may finally confirm thy reality -A witness whose confirmation alone makes thee eternal. No one can stand unshaken in His Presence; And he who can, verily, he is pure gold. Art thou a mere particle of dust? - Iqbal

## ARTICLE

# Total Quality Management and Hoshin Kanri for Construction Organizations

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#### ABSTRACT

Quality trends in construction projects have advanced from quality assurance to quality management under the ISO 9000 standards. Having achieved ISO 9000 certification and established a systematic approach to operations, the journey towards Total Quality Management (TQM) seems to weigh significantly on the ability of an organization to translate, integrate and institutionalize TQM behaviour into its business culture. More importantly, there is a need for organizational-wide management and a need to provide alignment of processes and people in the TQM environment. The Japanese concept of Hoshin Kanri, a form of policy management which prescribes a participative way of quality management, offers such leverage. Hoshin Kanri is a system for translating an organization's vision and objectives into actionable and measurable strategies throughout the company, and is also a means by which TQM can be institutionalized. The concept of Hoshin Kanri provides a powerful tool for deploying the strategic direction of the organization. This paper presents the essential steps in deploying the Hoshin Kanri form of policy management using a construction firm as a case study. A framework for implementing Hoshin Kanri in the construction industry is also recommended for the first time.

Keywords: TQM, Hoshin Kanri, Quality, Strategy, Construction

#### INTRODUCTION

Quality remains the strategically critical dimension it has been for over 25 years. Customers now expect quality products and services, along with continuous improvement in them (Gruska, 2000). The construction industry is no exception. Quality trends in construction projects seem to be advancing from Quality Assurance (QA) under ISO 9000 to quality management (Low and Teo, 2003). As such, many construction firms are embarking on the journey of Total Quality Management

(TQM) in some way or another. Having achieved ISO 9000 certification and establishing a systematic approach to their operations, the journey of TQM seem to weigh heavily on the ability of the organization to translate, integrate and institutionalize TQM behavior into the business culture. *Hoshin Kanri*, a form of policy management, seems to offer such leverage.

TQM is a structured and systematic process for creating organization-wide participation in planning and implementing continuous improvement in quality (Shortell et al., 1995). TQM is a set of systematic activities, carried out by the entire organization, to effectively and efficiently achieve company objectives; so as to provide products and services with a level of quality that satisfies customers, at the appropriate time and price.

The origins of modern TQM began with Walter Shewhart in the 1920s, and found recognizable expression in the post-Second World War Japan through quality gurus like Deming and Juran, and others like Ishikawa, Crosby and Feigenbaum. Low and Teo (2004) report that their approaches may vary, but generally focus on statistical techniques for process control, involvement of employees in the decision-making process, and orientation to customer needs.

In 1950, the Union of Japanese Scientists and Engineers (JUSE) established the Deming Prize to recognize companies that implemented new approaches to quality management methods known as Total Quality Control (TQC). One of the top quality awards in the world today, the Deming Prize, is given annually to companies that achieve an ever increasing rigorous level of quality. TQC that had been developed in Japan was subsequently re-exported back to the United States in the 1980s and had contributed to the revitalization of industries in the United States. While the term TQC had been used in Japan, it appears to be translated as TQM in the West. To follow an internationally-accepted practice, Japan changed the name from TQC to TQM.

TQM is the most common quality tool and program adopted by many companies. According to George and Weimerskirch (1998), the key idea of TQM is the "total" aspects of quality management. Essentially, TQM is a quality concept which emphasizes continuous refinement to the "total" aspects of a company's business. In TQM, quality is pervasive in all aspects of works, and the successful implementation of TQM is not relying on how well the company follows the program, but how well the company can maintain, sustain and improve the quality in response to rapid changes in the business environment.

TQM focuses externally on meeting customer requirements exactly, while internally it focuses on management commitment, employee training and education. Its main objective is to embed quality into processes, and thus into products and services. TQM stresses the involvement of everyone inside an organization and related persons outside the organization, such as customers and suppliers. TQM uses statistical process control (Amsden et al., 1986) as its main tool to ensure the firm's quality. However, TQM entails much more than just statistical tools. It requires top management commitment, leadership, training and teamwork. These are the key factors in the successful implementation of TQM.

Low and Teo (2004) studied how TQM can successfully be implemented in construction firms and provided a framework for implementing TQM in construction. Low and Teo (2004) concluded that implementing TQM requires a major organizational change that would transform the culture, processes, strategic priorities, and beliefs of an organization. Moreover, top management must educate its employees on the need for TQM and communicate clearly that TQM is not an additional burden. The following factors as identified by Low and Teo (2004) highlighted the important considerations for TQM implementation: an understanding of TQM requirements, strategic review of education and implementation plans, provision of ample budget and resources, teamwork, training, and timely feedback (Low and Teo, 2004).

Although many TQM studies have been completed, the key to successful TQM program is not fully understood (Weintraub, 1993). According to Rivers and Bae (1999), successful implementation of TQM requires a matching of organizational information system infrastructure and other management systems so that they are aligned with the new TQM environment. Powell (1995) suggested that tacit resources such as organizational culture, commitment, empowerment and business processes drive TQM success.

Sahney (1992) pointed out key concepts to implementation of TQM, which included: top management leadership, creating a corporate framework for quality, transforming corporate culture, a collaborative approach to process improvement, integration with the process, etc. However, for TQM to be successful, management processes must be aligned and integrated within a TQM environment. For example, the bureaucratic system must be transformed, strategies must be aligned, and information systems must be integrated to ensure the success of TQM.

Some studies showed that it is important for top management to take a leadership role and showed a strong commitment at the time of implementing TQM (Lee and Dale 1997; Rivers and Bae, 1999; Weintraub, 1993). Weintraub (1993) also pointed out that the quality management process will be successful only when it becomes integrated with the activities of every employee.

The notion of process alignment and people involvement is related to organizational performance. Core processes and people are two key points of implementing TQM.

From the process management point of view, structure, strategy and IT should be aligned and aggregated together with the TQM environment to improve organizational performance. Top management commitment and people empowerment should also be combined along with TQM to influence organizational performance.

In summary, in order to harness the full benefits of TQM, there appears to be a need for organization-wide management, and a need to provide alignment of processes and people in the TQM environment. Most conventional accounts of TQM typically focus on organizational culture and employee empowerment rather than management procedures. For this purpose, this study aims to show that *Hoshin Kanri* can provide this very means by which the overall control system and TQM can be deployed.

*Hoshin Kanri*, as a technique for strategic quality management, provides an appropriate tool for declaration of the strategic vision for the business while integrating goals and targets in a single holistic model (Witcher and Butterworth, 1999, 2000, 2001).

Most reported applications of *Hoshin Kanri* have originated from companies based in Japan or in overseas divisions of Japanese companies, although there have been some successful examples of Western businesses applying the technique. Witcher and Butterworth (1999, 2000, and 2001) reported the findings on *Hoshin Kanri* in Xerox, Japanese-owned UK subsidiaries and Hewlett Packard respectively. The management framework provided in *Hoshin Kanri* offers much potential for organizations in the construction industry.

This study describes the application of *Hoshin Kanri* - an organizing framework for strategic management that provides a planning, implementation and review process for managing change and to recommend an implementation framework for construction organizations.

#### **CONCEPT OF HOSHIN KANRI**

*Hoshin Kanri* is a planning system developed in Japan as a derivative of Management by Objectives, and has operated as a management system in many Japanese firms since the 1960s. In the West, *Hoshin Kanri* is being referred to as "Policy Deployment", "Management by Policy" or simply "Policy Control". The various names for this approach are but approximate translations of the Japanese phrase, and none of them capture the subtleties of the original meaning without being misleading. It is for this reason that the original phrase *Hoshin Kanri* is adopted in this study.

Quality management practices were first introduced to the Union of Japanese Scientists and Engineers (JUSE) by Dr W. Edwards Deming in the 1950s and this led to the widespread use of the PDCA (Plan-Do-Check-Act) cycle and the "seven QC tools" for the management of operations for many industries and organizations.

The Deming Prize, and in particular the Deming Application Prize established by JUSE in 1951 has had immense influence in promoting the continued development of quality control/management in Japan. And amongst the Japanese companies which have won the Deming Prize, there laid one essential feature - *Hoshin Kanri*. In 1965, the Bridgestone Tire Corporation published a report that analyzed the planning techniques that were utilized by Deming Prize winning companies. The techniques that were used to incorporate strategy development into business operations were subsequently termed "*Hoshin Kanri*".

By 1975, *Hoshin Kanri* became widely used in Japan and soon filtered into the United States in the early 1980s through US companies (who had subsidiaries and divisions in Japan that were Deming Prize winners). Fuji-Xerox, Texas Instrument's Oita Plant and Hewlett-Packard were among the Deming Prize winners. Today, *Hoshin Kanri* is recognized and applied in most internationally focused Japanese-owned companies.

*Hoshin Kanri* is an organizing framework for strategic management that provides a planning, implementation and review process for managing change. *Hoshin Kanri* as a systematic approach to organization-wide management was based on the idea that unity and organizational purpose could be managed. It is thus a means to pull together the forces within a company and to unite the minds internally, to perpetually improve its performance by adjusting quickly to change (Akao, 1991). Many sources locate *Hoshin Kanri* in the domain of TQM (Witcher and Butterworth, 2001).

The Japanese translation of *Hoshin Kanri* is as follows (Tennant and Roberts, 2000, 2001):

ho	=	method
shin	=	shiny metal showing direction
kanri	=	planning

In essence, *Hoshin Kanri* is a system that points the organization in the right direction. It is a management compass; a management tool to align people, activities, and performance metrics with strategic priorities. In another words, Witcher and Butterworth (2001) surmised that *Hoshin Kanri* is a form of corporate-wide management approach that combines strategic management and operational management by linking the achievement of top management goals with daily management at the operations level.

Hoshin Kanri has three alignment purposes (Shiba and Walden, 2001):

- It aims to align all the people throughout the company towards key company goals, using indirect rather than direct enforcement, creating a sense of urgency.
- It aims to align all jobs and tasks, whether routine work or improvement work, focusing and coordinating efforts and resources toward the key company goals in order to create breakthroughs.
- It aims to bring the company's goals and activities quickly and effectively into alignment with rapid societal or environmental changes.

Bechtell (1995) shows how *Hoshin Kanri* can be used to communicate direction, coordinate activity, and monitor progress and how it enables members of the organization to work together in the most creative way to define and achieve the strategic intent. In short, its governing principles can be summed up in two words: focus and alignment. However, *Hoshin Kanri* does not replace other management strategies; it is a type of strategic planning system that orchestrates continuous improvement and breakthroughs.

#### PRINCIPLES OF HOSHIN KANRI

The seven principles of *Hoshin Kanri*, as summarized by King (1989), are reviewed below:

#### Principle 1: Participation by all managers

All managers should participate and give their inputs in setting the five-year vision. The top management group will put together a vision, and send that down to the managers in the organization for comments.

#### Principle 2: Individual initiative and responsibility

Each manager will subsequently set personal goals or objectives (monthly and yearly targets). In *Hoshin Kanri*, the manager sits down by himself and decides what he thinks the target ought to be, and then gets together with others in the organization to align those targets. This system focuses on the individual developing his own ideas of what needs to be done, and then integrates them into these ideas. Goals are measured by the individual manager who sets them for himself.

#### Principle 3: Focus on root causes

The focus of *Hoshin Kanri* is to go beyond the "fix-it" mentality into the "continuous improvement" mentality, and to look for causes that inhibit enhancement. Each manager sets monthly targets, and evaluates the progress monthly with a focus on getting past symptoms to root causes. The five w's, the cause and effect diagram, and ongoing analysis are some of the tools that can make this possible.

#### Principle 4: No tie to performance appraisals

In the opinion of Dr W. Edwards Deming, performance appraisals in many companies are a lottery with results based on chance as well as effort, with no way of

distinguishing between the two. In Japan where *Hoshin Kanri* is applied, companies want everyone to "buy in" so that it will be a team effort. If *Hoshin Kanri* is part of performance appraisals, there may be problems. For example, there may be a direct correlation between helping another employee and a drop in the helper's pay. Deming first observed such negative effects of performance appraisals in 1984 as a result of his work in large corporations in the United States. As such, when implementing *Hoshin Kanri*, there should be no tie to performance evaluations or other personnel measures.

The point of *Hoshin Kanri* is to encourage and facilitate constant improvement as pointed out by Stephen and Colin (1993). This involves some risk taking. Using the possibility of failure to encourage attempts at success will be important, as there will be many false-starts and some failures in the search for quality improvement. Few risks will be taken if people feel that their career development and advancement in the system is irrevocably tied to the ups and downs of improving performance.

#### Principle 5: Quality first

In genuine *Hoshin Kanri* in powerful TQM organizations, quality and process improvement are prerequisites for sustainable improvement in performance. Once achieved, standardizing the process will sustain the gains. It is important that the focus should be on quality and the planning process system and not on profits or targets as a priority. Good results will become a regular by-product if this principle is followed.

#### Principle 6: Catch-ball

Communication is the cornerstone of TQM commitment and culture building. The catch-ball principle is a communication idea in which parties communicate extensively, vertically and horizontally. It is a process of consensus building to develop understanding about what seems to be the right course of action for a particular policy. It is a vital element that requires constant communication to ensure the development of appropriate targets and means, and their deployment at all levels in the organization.

Kondo (1998) opines that through catch-ball, discussion takes place among the people at various levels of organization, and thus deepens their understanding of the policies and enables them to think about the "necessities" and "possibilities" aspects of the proposed targets. Through this process, companies are more likely to be able to effect a qualitative change in top-down mandatory targets, turning them into bottom-up voluntary targets (Kondo, 1998).

Catch-ball can be linked to the broader Japanese concept of *nemawashi*, an informal and intensive form of consultation ahead of formal decisions (Witcher and Butterworth, 2001). It can also be compared to the Japanese consensus building method, known as the *ringi* system of decision making, which is reputedly employed

by over 80% of all Japanese industries (Tennant and Roberts, 2001). The *ringi* system is characterized as a bottom-up method of decision making, which even when originating at the top management level, has to have unanimous approval of everyone in the system (Irving, 1989). *Ringi* allows individuals to communicate a level of dissatisfaction, without actually halting the course of the decision, by signing under protest. It can be concluded that the *ringi* system has many similarities to the process of catchball, and in fact, reinforces the potential value of *Hoshin Kanri*.

#### Principle 7: Focus on process

Outcomes follow processes. To achieve process gains, everyone with goals should review them monthly and ask "what is helping them develop this process and how our process for changing the process is working?" The focus of *Hoshin Kanri* is on the process and assessment of why what one does was helpful or unhelpful in moving one towards the target.

In designing a process for development of goals, it is important that each of the principles set out above are adhered to. King (1989) describes, in Table 1, the common problems that may occur during planning and how the various *Hoshin Kanri* principles may be used to rectify the situations.

#### HOSHIN KANRI'S ROLE IN TQM

*Hoshin Kanri* is a successful TQM system that contains uniform business practices, utilizes cross-functional management, and applies the PDCA cycle in its daily business practices.

Witcher and Butterworth (2001) opine that conventional accounts of TQM and Japanese total quality control (TQC) typically focus on organizational culture and employee empowerment rather than management procedures. This applies most to *Hoshin Kanri* and the part played by policy in daily management.

In a review of management innovation and their transfer from Japan, Lillrank (1995) observed that for "linking strategy to operational improvements (and) for providing the indirect means of motivation (that) includes setting annual improvement targets, (and) their breakdown to specific targets for each unit... in the West this was not understood and (it was) therefore overlooked (Lillrank,1995, p.980)". There is an implication that because of the culturally induced blind spot, *Hoshin Kanri* may have become such a part of the Japanese organizational structure that it simply passes unnoticed.

Although TQM provides a common language and approach to general management and daily work, it is not a competitive-based corporate strategy; this is based on a competitive difference, which is too difficult for a competitor to imitate. Thus, Porter (1996) concluded that TQM is primarily about operational effectiveness because it can be copied. Stalk *et al.* (1992) opined that *Hoshin Kanri* takes TQM further as a competitive weapon. It can provide the necessary external focus for breakthrough change, and makes internal processes across the organization respond quickly and in a concerted way. The separation of breakthrough and continuous improvement in *Hoshin Kanri* turns TQM into an effective core capability, like in the case of Hewlett-Packard (Stalk *et al.*, 1992).

Witcher and Butterworth (2000) stated that *Hoshin Kanri* is based on TQM, and in particular, it addresses the primary task of strategic management according to the PDCA principles. Corporations see *Hoshin Kanri* as a necessary extension to TQM. TQM provides the discipline in terms of accountability and resource use that gives the review process a powerful and realistic expectation of what is to be achieved; while *Hoshin Kanri* is used as an organizing framework for review (Witcher and Butterworth, 2001). It enables management to have a clear idea of where the organization progress stood in strategic and operational terms.

#### ESSENTIAL STEPS OF HOSHIN KANRI

*Hoshin Kanri* is a systems approach to the management of change in critical business processes using a step-by-step planning, execution and auditing phase in its simplest form. In its more detailed form, it includes a long range plan (five-year vision), a one-year plan, deployment to departments, execution, monthly audits, and the president's annual audit.

The success of its deployment does depend on having a clear set of objectives articulated by the Chief Executive/Company President. *Hoshin Kanri* can then be applied to translate the strategic intent into required day-to-day actions and behaviours. The main objectives of *Hoshin Kanri* are summarised by Tennant and Roberts (2000) as:

- To identify important areas of opportunity for the organization to change and improve.
- To determine the most cost effective actions throughout the organization to achieve these changes.
- To create a detailed implementation plan.
- To provide a review mechanism to identify corrective actions and learning.

The major steps of the Hoshin Kanri model summarized by King (1989) are presented below.

#### Step 1 – Five-year vision

This involves a draft plan by the president and executive group. This is normally an improvement plan based on internal and external obstacles, with revisions to the

draft plan based on inputs from all managers. This enables top management to develop a revised vision they know will produce the desired action.

#### Step 2 - The one-year plan

This involves the selection of activities based on feasibility and likelihood of achieving desired results. Ideas are generated from the five-year vision, the environment, and ideas based on last year's performance. The tentative plans are rated against a selection of criteria and a decision made on the best action plans. In other words, annual *hoshins* are developed from mid-term plans. *Hoshins* are statements of desired outcome for the year, plus the means to accomplishing the desired outcomes and measuring the accomplishment (Shiba and Walden, 2001). Each *hoshin* ideally should include the five elements as shown below.

*Hoshin* = statement of desired outcome for next year

- + focused means
- + metrics to measure progress
- + target values for metrics
- + deadline date

#### Step 3 - Deployment to departments

Annual *hoshins* are then deployed or cascaded throughout the organization. In other words, a hierarchy of sub-goals and means of accomplishing and measuring them is developed, all in alignment with the annual *hoshins*. The deployment also includes the selection of optimum targets and means. It focuses on the identification of key implementation items and a consideration of how they can systematically accomplish the plan. The individual plans developed are evaluated using the same criteria that were used for the one-year plans.

#### Step 4 - Detailed implementation

This is the implementation of the deployment plans. The major focus is on contingency planning. The steps to accomplish the tasks are identified and arranged in order. Things that could go wrong at each stage are listed and appropriate countermeasures are selected. The aim here is to achieve a level of self-diagnosis, self-correction, and visual presentation of action.

#### Step 5 - Monthly diagnosis

This is the analysis of things that helped or hindered progress and the activities to benefit from this learning. It focuses attention on the process rather than the target and the root cause rather than the symptoms. Management problems are identified, and corrective actions are systematically developed and implemented. Some of the advantages of this audit process are that it is data driven, objective not subjective, and it focuses on the process.

#### Step 6 - President's annual diagnosis

The president's yearly diagnosis analyses the *Hoshin Kanri* system and suggests improvements relating to the effectiveness of the system. Other considerations like the environmental changes that have occurred, the company's long term and midterm plans are also factored in.

This is essentially the review of progress to develop activities that will continue to help each manager function at his full potential. The president's audit focuses on numerical targets, but the major emphasis is on the process that underlies the results. The job of the president is to make sure that management in each sector of the organization is capable. The annual audit provides that information in details.

When it is time to plan for the coming year, the data on which means were carried out and what was accomplished, are analyzed to surface the areas that need to be improved for the next cycle. Decisions are consequently made on appropriate actions.

#### APPLICATION IN CONSTRUCTION ORGANIZATIONS

*Hoshin Kanri* appears to be generic enough to be applied in construction organizations although no known literature has yet recognized the use of *Hoshin Kanri* in the construction industry or has found a quality management practice in a construction organization that fits the *Hoshin Kanri* model.

The following discussion seeks to draw application of *Hoshin Kanri* to the construction industry in order for the construction organization to have an organizing framework for strategic management in the four primary areas:

- To focus the construction organization attention on the corporate strategic direction, by setting few vital strategic priorities.
- Align these strategic priorities with organizational plans and programs.
- Integrate strategic intentions with daily management.
- To provide a structured review process for progress monitoring.

The approach taken is to analyze the quality practice in an established construction firm, known as CS Corporation, and to discuss how construction quality management can be improved with the aid of *Hoshin Kanri*. Thereafter, an implementation framework for *Hoshin Kanri* in a construction organization will be recommended.

CS Corporation operates as a leading multinational general contractor. It provides a comprehensive range of construction-related services at all levels, from assistance with the planning of facilities based on client strategies, through to design, construction, maintenance, renovation and management. CS Corporation, Singapore

Office is the local office of CS Corporation back in Japan. Also housed in Singapore is the CS Corporation's International Division, which heads the operations of its international construction activities. At the top of the hierarchy are the Director of the International Division and his three Deputy Directors. Placed lower down in the ranks are the General Managers of the individual countries including the Singapore office as shown in Figure 1.

CS Corporation is an A1 grade Japanese contractor (registered with the Building and Construction Authority, Singapore) which has implemented TQM and has attained ISO 9000, ISO 14000 and OHSAS 18000 certification. CS Corporation seeks to continuously secure projects and deliver them in the highest quality possible, so as to continue to make valuable contributions to both CS Corporation's International Division as well as the Head Office. In all its activities, CS Corporation is guided by the needs of its clients.

The quality management system used will be described in the following sections. It is noteworthy that the working culture had been passed down from its Japanese origin and has become an ingrained working system used in the local office in Singapore. A chart of the organisation showing the hierarchy within the project team is shown in Figure 2.

#### QUALITY MANAGEMENT SYSTEM

The quality management system used in CS Corporation is discussed below, and graphically represented in Figure 3.

#### 1. Commencement meeting

The Director of the International Division decides on the five-year vision of the division, and determines the targeted work volume, the profit margin and the budget according to the countries. Prior to the start of a project, the General Manager (GM) in turn would give his policy directive to the Project Manager (PM) regarding the objective statements and project directions, as a planning guidance to the project. The appointed PM in-charge of the project is required to consider these and subsequently present his project plans and strategy at a meeting attended by top management and the PMs from all the other projects.

The PM would articulate at this commencement meeting, his project strategy and directions to the group present. Included in his plan are details of his plans of construction in the various aspects, such as sequence of construction, special methods used or even difficulties faced. Comments and suggestions from the top management and the project managers will be shared to assist the PM (who is presenting his project strategy), and possibly share experiences learnt from other relevant projects.

#### 2. Project Quality Plan

From the contributions and comments raised at the commencement meeting, the PM and his project team will study these additions and work out modifications to the project plans. Once the method statements and project directions are firmed up, these are translated into the Project Quality Plan (PQP) which serves as the guiding plan for the quality management of the project. On a shorter term basis, quality objectives and targets are set for each year of the project life and are set out in the form of a Quality, Environmental, Health and Safety (QEHS) plan. An example of a quality objective is as follows:

To achieve the corporate objective on CONQUAS (Construction Quality Assessment System) 21 score as:

- a) Above 82 for Architectural category
- b) Above 92 for Structural category
- c) Above 95 for Mechanical & Electrical category

#### 3. Monthly Project Manager meeting

The monthly PM meeting is a periodic review process that monitors targets and facilitates a channel of feedback on problems faced on site. Such a review aims to capture progress by the project team and allows exchange of essential feedback amongst the PMs for learning. The monthly report submitted by individual PMs follows a standard format which aims to capture the main priorities for actions – namely procurement, safety, CONQUAS scores (where applicable) and costs (in particular the three main construction items of concrete, labor and steel).

#### 4. Monthly site safety visit

Each month, every site of an ongoing project will be visited by a group of top management staff, PMs and safety officers from other projects, to primarily evaluate site safety issues via a site walk-about. Originally designated as a site safety patrol, this has evolved into an all-purpose on-site observation of work standards, progress and environmental quality. Ideas, recommendations and observations are highlighted from an "outsider" perspective – from personnel uninvolved in the project. This routine review process enables the top management to validate the actual progress and instill cross-project learning throughout the organization.

#### 5. Completion meeting

At the end of the project, a final review session will be conducted with the same composition of members as the commencement meeting. This meeting serves to encapsulate experience and performance data of the project to provide an audit trail of how the project performed. The lessons pertaining to the key aspects of the projects - especially procurement, safety, CONQUAS scores and costs are captured in a standard document format and filed in the company's virtual database that is retrievable company-wide. However, it was noted that this documentation was written in Japanese and hence restricted its use to only Japanese literate employees. Decentralized project control is practiced at CS Corporation. The operations of the project per se are largely left to the prerogative of the PM and his management team. In other words, the system of review in the likes of commencement meeting and monthly PMs review meeting are only dictated at the headquarter level; and the process stops at the PM level, beyond which, the PM and his management team have liberty in implementing their own quality management system. Needless to say, the practices at the project level still conform to the ISO 9000 certification standards that CS Corporation has obtained.

At the project level, the PM will set quality targets for the project and for the work year. The deputy PM and his teams of site managers will work towards the targets set accordingly. The site management teams comprising of the engineers and supervisors would follow the in-house method statements of construction together with the specifications of the clients and consultants to ensure that the quality required is met. However, there appears to be no formal quality system other than the Quality Circle (QC) that addresses the quality improvement needs of CS Corporation.

Central to its quality practice at CS Corporation is the QC, which is gaining popularity in the organization. It was first introduced locally through its first implementation at the inception of the Singapore Airport Terminal project and has to date gone through its sixth quarterly cycle. At the airport project, each of its departments such as the Contracts Department, Safety Department and Site Operations Department is tasked to form QC teams periodically to tackle prevailing issues in the projects. These may vary from the rectification of defective work to the improvement of coordination and communication between CS Corporation and the sub-contractors.

The composition of these teams is at the prerogative of the QC team leader, and is usually varied across different QC cycles. Each QC cycle essentially spans a quarter of the work year. The usefulness and effectiveness of such a quality initiative is, however, debatable. More importantly, the implementation team of a successful quality improvement initiative is usually separate from the QC conceptualising personnel. Thus, the QCs are found to be limited in their scope and provide little opportunity for the employees to have meaningful inputs.

#### HOSHIN KANRI ISSUES

Observations were drawn to parallel quality management in CS Corporation and the *Hoshin Kanri* model. From the study of how higher management in CS Corporation ensure quality in the organization, some traces of *Hoshin Kanri* seem to be practiced amongst the executive planning matrix of the organization. However, *Hoshin Kanri* is about organization-wide deployment, which is not evident in CS Corporation, as shall be elaborated below.

#### 1. Traces of Hoshin Kanri in CS Corporation's quality management

At the HQ level of quality management in CS Corporation, there appears to be some forms of practice akin to *Hoshin Kanri*. The setting of long term visions, policy directives for projects and the review process before, during and after project completion seem to reveal traces of *Hoshin Kanri*, albeit not in its entirety. Top management have in place a review process structure that allows a periodic review of the construction project progress and its key aspects as mentioned in the earlier section. There appears to be participation by all managers down to the PM level.

#### 2. Absence of strategic goals and their measurements

Key measurement indicators used for monitoring are procurement, safety, CONQUAS scores and material costs. These are generic means of measurement used for periodic project monitoring and should not be confused with the measurements needed to monitor the processes in *Hoshin Kanri*. To implement *Hoshin Kanri*, the monitoring method should cater specifically to the policy objectives set out. These policy objectives should be that of the breakthrough strategies (translated from long term visions), and not of standardised PDCA targets.

#### 3. Lack of architecture to cascade Hoshins to all employees

Moreover, at the project level, there appears to be a lack of an organization architecture that is sufficiently transparent to link the daily management or operations of the project work with the strategic intent of CS Corporation. There is no formal or appropriate system that transcends throughout the organisation for policy objectives to cascade down to the individual worker. The only visible participation of the managers and engineers of the project in quality improvement is in the form of QC or other ad-hoc initiatives by the PM or deputy PM. In other words, participation in the strategic goals of CS Corporation terminates prematurely at the PM level.

#### 4. Inadequacies of quality circles

With *Hoshin Kanri*, staff on site can work in teams and manage their contributions to the strategic priorities. *Hoshin* plans are only finalised when the ownership of the objectives and the means to achieve them are clear. This process involves the site operations staff in an interactive process to agree on their contributions to the strategic priorities. Unlike QC, the *Hoshin* process manages the close loop delivery of predicted and sustained improvement that each individual and team as a whole has agreed upon.

#### 5. Performance appraisal

Since the employees are committed in their contribution to the corporate strategic priorities, their performance should be linked with their appraisal. At CS Corporation, the appraisal format takes on a majority of subjective criteria, mostly tied to the superior's perceptions and personal evaluation of the subordinate's performance. Since *Hoshin Kanri* utilises actual performance data and measurable targets to monitor progress, this augers well for a more objective and a more transparent approach to appraise workers. For example, an engineer's contribution to the construction quality can be measured in term of the amount of reworks for a specified amount of in-site concrete cast. His performance and possibly monetary benefits can thus be tied to the degree in which his quality objective has been reached. This can be achieved with *Hoshin Kanri* 

In summary, Table 2 compares the main difference between the quality management practices of *Hoshin Kanri* and of CS Corporation.

#### **ORGANIZATIONAL FRAMEWORK**

A suitable organizational structure is necessary to implement *Hoshin Kanri* in a construction organization. A generic format for the organizational structure which should be in place before *Hoshin Kanri* can commence is shown in Figure 4. The organization components of CS Corporation (Figure 2), is used as a sample construction corporation model.

At the top of the structure and in ultimate control is an Executive Steering Committee, comprising the GM and a small number of senior executives like the Deputy GMs. As part of their overall TQM responsibility, they conduct the annual corporate review, set the corporate vision and approve final plans, including budget and resource allocation.

The policy deployment arm of the Executive Steering Committee is the Policy Deployment Committee, also comprising relevant top executives. Their role is to coordinate the policy deployment activities. It is important for top management to understand the whole *Hoshin* process and drive the policy deployment in a manageable way. They set the initial mid- and short-term corporate plans and also schedule and guide the catch-ball deployment process. This committee is responsible to the Executive Steering Committee.

The final plans are determined through a series of catch-ball, in an iterative attempt to optimize the company's interests. This involves cascading information and ideas between four parties - Departmental committees, Cross-functional committees, Project Operations committee and the Policy Deployment Committee. It is essential if the company is eventually to operate with maximum productivity at minimum cost. Customer needs, such as quality (Q), cost (C) and delivery (D) of the product, enter as the organization's super-ordinate goals, and are the concern of the responsible cross-functional group.

Departmental and Project operations objectives are then aligned with these primary considerations in the optimization process. Departmental committees are traditional structures consisting of top departmental management in business support roles like logistics and finance, while Project Operations committees comprise of project director and managers from the site operations. Cross-functional committees, on the other hand, are headed by the department with greatest interest and expertise in the super-ordinate goal. For example, the financial controller may chair the Cost Cross-functional Committee, whereas the project managers may chair the Quality Cross-functional Committee.

Task teams operate either inter-departmentally or intra-departmentally, with improvements standardized into the underlying framework of daily control. Department, project operations and cross-functional team leaders report to the Executive Steering Committee in the annual corporate review. In summary, the organization architecture suggested in Figure 4 serves to facilitate the deployment and development of *Hoshin Kanri*, and the administering of support for learning.

#### **IMPLEMENTATION FRAMEWORK**

Adopting *Hoshin Kanri* is a long process that requires much fine tuning. Organizations need time to carefully consider the most suitable review and measurement system that caters to the organization's needs. However, no known framework is recorded in existing quality management literature. Hence, a framework recommended for the implementation of *Hoshin Kanri* in the construction industry is suggested in Figure 5. This consolidates the research findings from the experience gained from CS Corporation.

In so far as the *Hoshin Kanri* planning report format is concerned, the literature review suggests that the format used for documentation of the *hoshins* and their planning process often vary from organization to organization; and in certain cases, even amongst departments. Some examples of the standard forms, drawing on the CS Corporation's case study that may be used are recommended below.

#### 1. Hoshin process

Table 3 illustrates the goals set at various levels of a construction organization through the application of *Hoshin Kanri*. *Hoshins* or goals at higher level are more general and less prescriptive. The details of the *hoshins* become more specific as these filter down the hierarchy of management. Support departments, like the Planning Department, provide cross-functional management which affects the strategic goals of the other functional units, like the site team.

#### 2. Hoshin plan report

The format shown in Table 4 has often been used by other *Hoshin Kanri* practitioners in Western countries. Table 4 is a sample of a *hoshin* plan that construction organizations might formulate together with the goals to be achieved. Note that the goals are restricted to a vital few. The business outlook is often highlighted for better appreciation of the strategies needed.

#### *3. Activity plan report*

Table 5 shows a generic format of documentation for *Hoshin Kanri* adapted from Pascal (2002). It is essentially a storyboard following a logical and standard structure depicting the process of planning. This structure can be modified to reflect the current status or address the problems as they occur. In this example, the *hoshins* from the country HQ are cascaded down to the project level, where the Project Manager sets out the activity plan for the particular project for implementation in the coming year's project progress. After the catch-ball activity (typically lasting a month), the managers of each project or department will identify action items (targets) and action plans for achieving them. Control points (indicated in the activity plan and report) for deploying the plans are also listed for monitoring purpose.

#### 4. Implementation plan report

As the action plans cascade down through the department, further plans and tactics have to be made for implementing each action plan. Table 6 shows a breakdown of the strategy and tactics to be employed. Owners or responsible persons for the specific strategy are also named to ensure the means of achieving the target action plan goals.

#### 5. Hoshin review table

As part of the review structure, there needs to be clear documentation for proper review analysis and progress monitoring. The use of a standardized format or review allows seamless and effective analysis across functional departments. Table 7 is an example of a review table – in this case it is the review plan for the Deputy Project Management Team 1. *Hoshin* performance may be reviewed weekly or monthly within the team. Performance measures are taken at a regular basis, so that any deviations from the strategic objectives are easily spotted. While corrective actions may first require emergency counter measures, or even a short term fix, such follow up actions must ultimately provide a permanent solution.

#### 6. Communication network

The progress and review of the *hoshins* should be reported through the specialist network of quality managers and equally important, through the company's communication media. The two channels are essential to relay information about best practices and success stories. The network in tandem with the communication media plays an important role in cross departmental learning and even in the dissemination of lessons across projects. At CS Corporation, documentation of project data is stored and accessed through its intranet network, albeit in the Japanese language. It is recommended that in this digital age, construction companies can also set up an internal network for submission of all *hoshin* reports, for real-time monitoring by management and also for organization-wide learning by all employees.

#### CONCLUSION

This study is an attempt to bring the relevance of *Hoshin Kanri* into the construction industry by suggesting an implementation framework for the application of *Hoshin Kanri* into a construction organization. Using CS Corporation and its practices as a model, the issues of applying *Hoshin Kanri* are discussed, with recommendations for organizational framework, *Hoshin* report and review formats. There is a potential for *Hoshin Kanri* to propel the construction industry further upstream in its TQM journey.

Porter (1980) defined strategy as the application of resources to pursue the aims of policy, which should contain two critical elements. Firstly, strategic thinking - where managers synthesize their strategic vision using intuition and creativity to create an integrated perspective of the enterprise, or a vision of direction; and secondly, conversion of the vision into actionable steps to achieve realization of the vision.

Hamel and Prahalad (1994) sees strategy as an envisioning process, which creates an organizational wide consensus where employees help develop and manage strategies; and the means for achieving them. Hayashi (1978) contends that a primary purpose of Japanese corporate planning is to set up targets of endeavor for the business. This hopes to unify managerial thoughts within the organization and to create an achievement orientation and motivational effect in the organization.

The primary role of strategic planning is to set the right objectives for the business, determine the best means of achieving the objectives, and facilitate the effective implementation and review of the means as the plan is executed. This requires that the planners should work in the context of the objectives and purposes of the organization. As such, this is where *Hoshin Kanri* is proposed by Tennant and Roberts (2000) as an effective methodology for Strategic Quality Management (SQM).

The benefits of *Hoshin Kanri* as a tool for strategic quality management compared with the conventional planning system include integration of strategic objectives with tactical daily management, the application of the Plan-Do-Check-Act cycle to business process management, parallel planning and execution methodology, company-wide approach, improvements in communication, increased consensus and buy-in to goal setting, and cross-functional management integration (Tennant and Roberts, 2000).

*Hoshin Kanri* represents a very powerful tool for deploying the strategic direction of any organisation. It not only ensures that everyone in an organisation understands the strategic direction but it also ensures that they understand how their work and the work of other teams within the organisation fit together. It is also a powerful tool for bringing out the best in everyone through participation.

#### REFERENCES

Amsden, R.T., Butler, H.E. and Amsden, D.M. (1986). *SPC simplifed: practical steps to quality*. White Plains, New York: Unipub, Kraus International.

Akao, Y. (1991). *Hoshin Kanri: policy deployment for successful TQM*. Cambridge, MA: Productivity Press.

Bechtell, M.L. (1995). *The management compass: steering the corporation using Hoshin Planning*. New York: American Management Association.

George, S. and Weimerskirch, A. (1998). *Total Quality Management – Strategies And techniques proven at today's most successful companies* (2<sup>nd</sup> ed.) New York: The Portable MBA Series, John Wiley and Sons Inc.

Gruska, G.F. (2000). W. E. Deming in the new millennium. *Total Quality Management*, 11(4), 779-787.

Hamel, G. and Prahalad, C.K. (1994). *Competing for the future*. Boston, MA: Harvard Business School Press.

Hayashi, S. (1978). Corporate planning practices in Japanese multinationals. *Academy of Management Journal*, 21(2), 211-226.

Irving, L.J. (1989). *Crucial decisions: leadership in policy making and crisis management*. New York: Free Press.

King, B. (1989). *Hoshin Planning: the developmental approach*. Methuen, MA: GOAL/QPC.

Kondo, Y. (1998). Hoshin Kanri – a participative way of quality management in Japan. *The TQM Magazine*, 10(6), 425-431.

Lee, R.G. and Dale, B.G. (1997). Business process management: a review and evaluation, *Business Process Management Journal*, 4(3), 214-225

Lillrank, P. (1995). The transfer of management innovation from Japan. *Organization Studies*, 16(6), 971-989.

Low, S.P. and Teo, A. (2003). Implementing total quality management in Construction through ISO 9001:2000. *Architectural Science Review*, 46(1), 159-166.

Low, S.P. and Teo, A. (2004). Implementing total quality management in Construction firms, *Journal of Management in Engineering*, 20(1), 8-15.

Pascal, D. (2002). Lean production simplified: a plain language guide to the world's most powerful production system. New York: Productivity Press.

Porter, M.E. (1996). What is Strategy? *Harvard Business Review*, November-December, 61-78.

Porter, M.E. (1980). Corporate strategy. Boston: Free Press.

Powell, T.C. (1995). TQM as competitive advantage: a review and empirical study. *Strategic Management Journal*, 16(1), 15-37.

Rivers, P.A. and Bae, S. (1999). Aligning information systems for effective total

Quality management implementation in health care organizations, *Total Quality Management*, 10(2), 281-289.

Sahney, V.K. (1992). The quest for quality and productivity in health services. *Frontiers of Health Services Management*, 2(1), 34-56.

Shiba, S. and Walden, D. (2001). Four practical revolutions in management: systems For creating unique organisational capability. Portland: Productivity Press.

Shortell, S.M., Levin, D.Z., O'Brien, J.L. and Hughes, E.F.X. (1995). Assessing the evidence on CQI: is the glass half empty of half full? *Hospital & Health Services Administration*, 40(1), 4-24.

Stalk, G., Evans, G.P. and Shulman, L.E., (1992). Competing on capabilities: the new rules of corporate strategy. *Harvard Business Review*, March-April, 57-69.

Stewart, T. A. (1992). The search for the organization of tomorrow. *Fortune*, May 18, 92 98.

Tennant, C. and Roberts, P. (2000). Hoshin Kanri: a technique for strategic quality management, *Quality Assurance*, 8(1), 77-90.

Tennant, C. and Roberts, P. (2001). Hoshin Kanri: implementing the catchball process. *Long Range Planning*, 34(2), 287–308.

Weintraub, D.L. (1993). Implementing total quality management, *Economic Development Review*, 11(3), 1-6.

Witcher, B. and Butterworth, R. (1999). Hoshin Kanri: how Xerox manages. *Long Range Planning*, 32(3), 323-332.

Witcher, B. and Butterworth, R. (2000). Hoshin Kanri at Hewlett Packard. *Journal of General Management*, 25(4), 70-85.

Witcher, B. and Butterworth, R. (2001). Hoshin Kanri: Policy Management in Japanese owned UK subsidiaries. *Journal of Management Studies*, 38(5), 651-674.

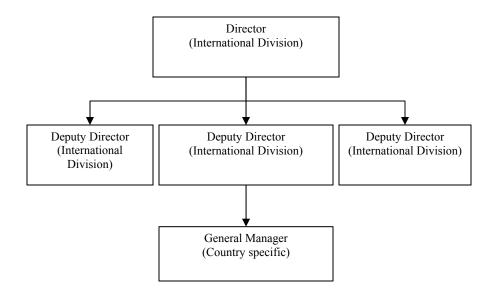
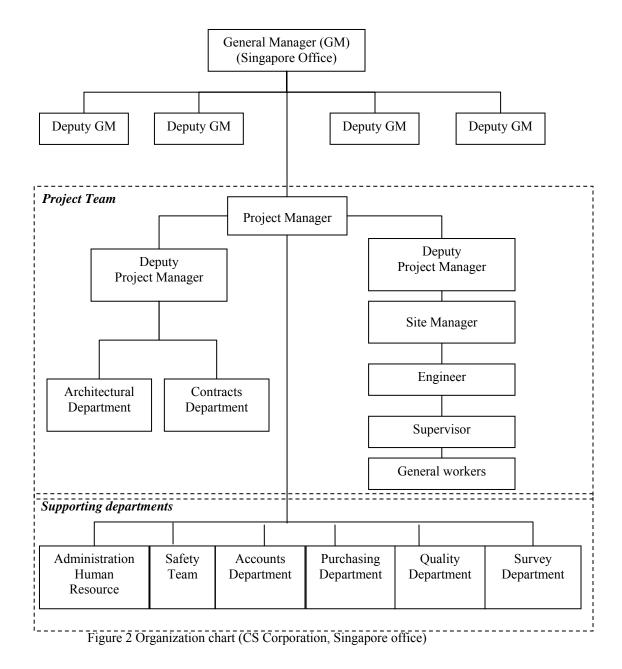


Figure 1 Organization structure (CS Corporation's International Division)



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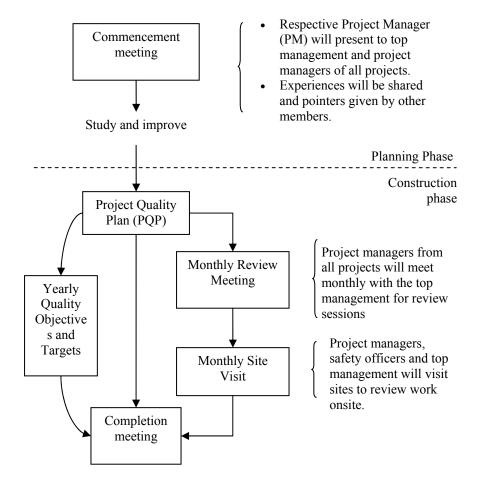


Figure 3 Quality management system in CS Corporation

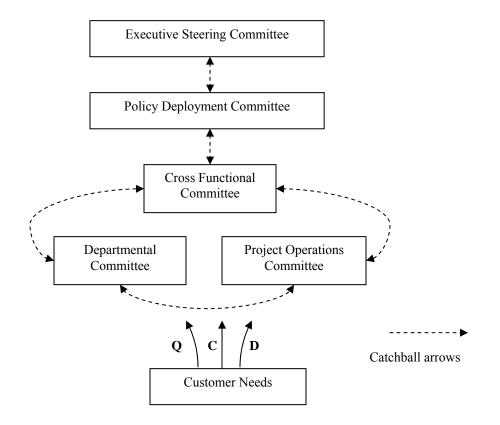


Figure 4 The organization of Hoshin Kanri management model

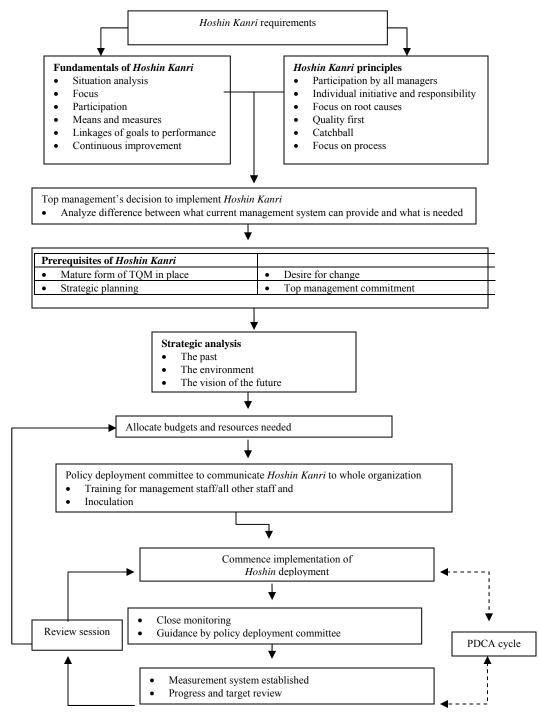


Figure 5 Implementation framework

	Hoshin Kanri Principles							
Problems	Participation by all managers	Individual initiative and responsibility	Focus on root causes	No tie to performance appraisal	Quality first	Catchball understanding	Focus on process	
No Plan	•	•			•			
Short-term focus				•	•		•	
Difficult to measure success		٠						
Goals not measured		•			•		•	
Language problems	•	•				•		
Gets filed		•				•	•	
Fragmented	•					•		
Long range by corporate only	•	•				•		
Long range not related to daily operations		•	•			•	•	
Can't handle emergencies	•	•		•	•	•		
New manager						•	•	
Don't plan for progress	•	•	•		•		•	
People plan for others	•	•				•		
Unrealistic plan		•	•	•		•	•	
Plan as a weapon, not a tool	•	•	•	•	•	•	•	
Plan poorly communicated (Source: King 1989)	•	•				•		

Table 1 *Hoshin Kanri* principles used to rectify common problems that occur during planning

(Source: King, 1989)

Table 2 Comparison between *Hoshin Kanri* and quality management at CS Corporation

Hoshin Kanri	Quality management at CS Corporation
Strategic goals linked to long term vision of the organization	Internally focused on specific short-term issues

Consultative participation - catchball	Objectives are either passed down or of short-term nature in QC
Total management philosophy	Limited management involvement especially within the project

Table 3 Goals at various levels of the construction organization

Level	Goal
Corporate	Providing customers with maximum value
International Division	Improving the competitiveness and earning potential of its construction operations
Country (Singapore)	To improve competitiveness and quality of construction works.
Project Team	To achieve CONQUAS 21 (Construction Quality Assessment System) scores of: (a) Architectural category: 82 (b) Structural category: 92 (c) M&E category: 95
Site Team	Reduce rework for non-conformance work by double checking prior to casting
Support departments Examples: Safety Department	Improve safety awareness of all staff on site
Planning Department	Reduce work stoppage due to inefficient scheduling
Administrative	Hire workers of adequate and matching skill level

# Table 4 A hoshin plan format

Prepared by: General	l Manager	Entity/Dep	artment: HQ
	or construc	is expected to decline shotion is anticipated to rem limate.	
Objective	No.	Strategy/Owner	Measures

To improve competitiveness and quality of construction works	1.	Improve corporate image and quality branding: Deputy General Manager (Strategic Marketing)	To secure three high profile building projects
Goals	2.	Reduce errors in planning: Deputy General Manager (Construction)	Reduce schedule error from 5% to < 3%
Q1: Increase work volume by 15% Q2: Improve profit margin by 5%	3	Improve quality assessment grade: Deputy General Manager (Construction)	Improve CONQUAS score from 82.0 to 87.0

Table 5 Department/Project activity plan and report

Department/Team: F	Project Manager	Project: Singapore	Airport Terminal	
A. Last year's target	s and results:	C. This year's target/mid-term targets:		
CONQUAS score	e of 82.0	Achieve CONQ	UAS score of 89.0	
B. Reflections on las and results:	st year's activities	D. Action Plan (for Breakthrough Targets):		
• Lack of coordination and supervision on site		• Conformance of rebar layout and M&E fittings to specifications.		
E. Control points:				
Item Current performance		Target	Completion date	
1. Uniformity in concrete density in columns		Deviation of 1%	3 <sup>rd</sup> Quarter	

Table 6 Hoshin implementation plan

Department:	Deputy Proj	ect Manageme	nt Tear	n 1	FY: 2008		
Manager: Mr. P K Lee							
Action Plan:	Conforman	ce of rebar layo	out and	M&E f	ittings to spe	ecification	ns.
Strategy	Tactics	Owner	Q1	Q2	Q3	Q4	Review Date
Inspections	Visual inspection by engineer prior to calling for inspection by clerk- of-works Hiring of better skilled rebar workers	Team Engineers Admin Department		•		•	End of Q2 End of Q2

#### Table 7 Hoshin review table

Department: Deputy Project		FY: 2008	Date: N	ovember	Prepared
Management Team 1			2007		by: Mr. P
					K Lee
Objectives/Strategy	Achieved	Deviation	Status	Future	Corrective
	Performance			implications	actions
Improve	86.0	- 1.0	Below	Problems	Suggest
CONQUAS scores			Target	associated	alternative
from 82.0 to 87.0				with design	design to
				of rebar	design
				layout	consultant

In the words of Erich Fromm, an astute observer of the roots and fruits of the Personality Ethic:

Today we come across an individual who behave like an automation, who does not know or understand himself, and the only person that he knows is the person that he is supposed to be, whose meaningless chatter has replaced communicative speech, whose synthetic smile has replaced genuine laughter, and whose sense of dull despair has taken the place of genuine pain. Two statements may be said concerning this individual. One is that he suffers from defects of spontaneity and individuality which may seem to be incurable. At the same time it may be said of him he does not differ essentially from the millions of the rest of us who walk upon this earth. – *Stephen R. Covey* 

# ARTICLE

# Foreign Direct Investment (Fdi)-Destination India

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#### ABSTRACT

Foreign Direct Investment (FDI) is becoming more and more revolutionary and happening phenomenon across the globe. The FDI is giving new hope and height to the economy of the nations across the frontiers of the countries. It is adding extra pace of economic growth and sustainability in terms of capital, human skills, machineries and equipment. FDI is not only enriching the Balance of Payments (BOP) but at the same time helping the nations in establishing the social bonds with other nations. The recent approval made on March7'2008 by the Ministry of Finance, Govt. of India, clearing 18 FDI proposals worth Rs. 15.5326 billions indicate the seriousness and willingness of the Govt. of India to bring more financial resources through FDI.

This research paper has attempted to find out the factors that may be responsible for attracting more and more foreign investors. Some light has also been thrown on the issues concerning the security of investment and the likely return on their investment (ROI)

Key Words: FDI, IMF, OECD, In-bond FDI & Out-bond FDI

#### INTRODUCTION

The term Foreign Direct Investment (FDI) is also called Direct Foreign Investment, or more simply, Direct Investment or Foreign Investment. It is an activity where foreigners come to a particular country to set up or run a factory, hotel, farms, or other business enterprise. Foreign Direct Investment is defined as International interest in which a resident in one country obtains a lasting interest in an enterprise resident in another. It is a situation where a foreign country creates a subsidiary to provide goods and services. Some of the most precise definition of Foreign Direct Investment can be given as below:

**Definition 01:** Direct Investment refers to investment that is made to acquire a lasting interest in an enterprise operating in an economy other than that of the

investor, the investor's purpose being to have an effective voice in the management of the enterprise. (IBM balance of payment manual, 4th ed, 1977, p.36)

**Definition 02:** The balance of payment (BOP) accounts define Direct Investment as that part of capital flows that represents a direct financial flow from a parent company to an overseas firm that it controls. (E.M.Graham & P.R. Krugman, The Surge in The FDI)

**Definition 03:** Direct Investment is intended to comprise investment involving a certain degree of control (by the investor) over the use of the funds invested, whereas portfolio investment lacks such control (Rivera –Batiz & Rivera Batiz)

**Definition 04:** Foreign Direct Investment is an international finance flow with the intention of controlling or participating in the management of an enterprise in a foreign country. (Dr.Shakil, 2006)

International guidelines for the compilation of balance of payment and international involvement position statistics appear in the international monetary fund's balance of payments manual and the OECD's bench -mark definition of Foreign Direct Investment. This body of recommendation provides comprehensive and detailed international standards for recording both positions and flows related to FDI. The recommendations cover a wide range of issues, including concepts and definitions, time of recording, collection methods, dissemination etc.

#### ACCORDING TO IMF/OECD RECOMMENDATION

Direct investment is the category of international investment that reflects the objective of a resident entity in one economy of establishing a lasting interest in an enterprise resident in another country.

A direct investment is defined as an individual, an incorporated or unincorporated public or private enterprise, a government, a group of related individuals, or a group of related incorporated and/ or unincorporated enterprises which have a direct investment enterprise that is a subsidiary, associate or branch, operating in a country other than the country or countries of residents of the direct investors.

A direct investment enterprise is defined as an incorporated or unincorporated enterprise in which a foreign investor owns 10% or more of the ordinary shares or voting powers of an incorporated enterprise or the equivalent of an unincorporated enterprise. Ownership of 10% or more of the ordinary shares or voting stock is the guidelines for determining the existence of a direct investment relationship. An effective voice in the management as evidenced by at least 10% ownership, implies that a direct investor is able to influence or participate in the management of an

enterprise but absolute controls by a foreign investor is not required. Direct investment enterprise may be subsidiaries, associates and branches.

Thus, a firm undertakes FDI in a foreign country if it possess an ownership advantage over the local competitors. The ownership of the foreign investment usually remains in the investing country (home). FDI represents the primary means of transfer of private capitals (i.e. physical or financial), technology personnel and access to brand names and marketing advantage. In most countries, FDI serves as one of the means of successful transitions.

United Nations Conference on Trade and Development (UNCTAD, 1999) findings reveal that FDI continues to increase at a global level as multinational corporations (MNCs) integrate their business operations throughout the world. The report confirms that the FDI transfer technology as well as firm specific assets to host countries. The foreign investors, e.g. USA, Japan, E.U. (Triad) and other countries penetrate global markets through FDI. Despite the dominance of market seeking motives, foreign entities or foreign affiliates turn out to be more export oriented than local firms. These investors have better access to internal production and distribution networks.

**INWARD** This term refers to direct investment in the reporting country.

OUTWARD This term refers to direct investment made abroad.

#### **REASONS FOR THE FLOW OF FDI**

It is well known fact that FDI is expensive and risky when compared to exporting and licensing. FDI is expensive because a firm must bear the cost of establishing production facilities in a foreign country or of acquiring a foreign enterprise. FDI is risky because of the problem associated with doing business in another culture, where the rules of the game may be different. Yet, the firms go for FDI. The reasons for the FDI can best be explained with the help of the following factors that have been detected during my research period.

- Transportation cost
- Market imperfection
- Competition
- Product life cycle
- Location advantage
- Developing countries

- 1. **TRANSPORTATION COST** From the transportation cost perspective, goods may be of low value to weight ratio type or the opposite, namely high value to weight ratio type. In the former, transportation cost is considerable and it is unprofitable to shift them over long distances. They can also be produced in almost any location. In products of this type, relative to either FDI or licensing, the attractiveness of exporting decreases. For products with a high value to weight ratio, however, transport costs are a minor component of total landed cost. In these products, transportations costs have little impact on the relative attractiveness of exporting, FDI and licensing.
- 2. MARKET IMPERFECTION The market imperfection theory offers a major explanation why firms prefer FDI to exporting or licensing. Alternatively called internationalization theory in the literature on global business. This approach highlights two major impediments:
- **BARRIER TO EXPORTING** Impediments to the free flow of products between nations decrease the profitability of exporting, relative to FDI, and licensing. Governments are the main source of impediments to the free flow of products between nations. By imposing tariffs on imported goods, governments can increase the cost of exporting relative to FDI and licensing. Similarly, by restricting imports through the impositions of quotas, govt. increases the attractiveness of FDI and licensing.
- **BARRIERS TO THE SALE OF KNOW-HOW** Sale of know-how takes place through licensing; impediments to the sale of know-how increase the profitability of FDI relative to the licensing. Though licensing is less expensive and less risky, firms do not prefer it because of the following reasons.
  - a. First, licensing may result in a firm giving away its know-how to a potential foreign competitor.
  - b. Licensing does not give firm the right control over manufacturing, marketing and strategy in a foreign country that may be required to profitably exploit its advantage in know-how.
  - c. A company's know-how itself may not be for licensing. This is particularly true of management and marketing know-how. It is one thing to license a foreign firm to manufacture a particular product, but quite another to license the way a firm does its business –how it manages its process and market its products.
- **3. COMPETITION** FDI flows are often a reflection of rivalry among firms in the global market place.

- 4. THE PRODUCT LIFE CYCLE THEORY Product Life Cycle theory was considered earlier to explain the flow of trade between countries. But the theory has implications for FDI too. Vernon argues that often the same firms that pioneer a product in their home markets produce a product for consumption in foreign market. Vernon's view is that firms undertake FDI at particular stages in the life cycle of a product. They have pioneered. They invest in other advanced countries when local demands in those countries grow large enough to support local production. They subsequently shift production to developing countries when product standardization and market saturation give rise to price competitiveness and cost pressures. Investment in developing countries, where labour costs are lower, is seen as the best way to reduce costs.
- 5. LOCATION ADVANTAGES The location specific advantages include natural resources such as oil and other minerals, which are by nature specific to certain locations. A firm must undertake FDI to exploit such endowments. This explains the FDI undertaken by many of the world's oil companies, which have to invest where oil is located. Another example is the valuable human resources such as low cost highly skilled labour force. The argument that location specific advantages attract FDI is propounded by the British economist John Dunning. Dunning believes that market imperfections make licensing and exporting difficult and thereby rendering FDI an obvious choice to globalization.

#### FDI IN DEVELOPING NATIONS

The nature of FDI to developing countries does appear to have changed somewhat over the last decade. In the past, it was often assumed that multinationals enterprise invest in developing countries in order to gain access to resources or to integrate low wage locations into their global value chains. However, there has been an increasing tendency for companies to invest in the largest developing countries, as part of strategies to serve local clients or to acquire a strategic position in markets that could become prosperous in future. This trend was further underpinned by the privatization programme of many high and medium income developing countries in the 1990's, whereby national utilities were transferred into the hands of private strategic investors.

The world's second largest country, India is no where near the rivaling China's success with attracting investment, but it has made considerable progress over the last decade. Owing chiefly to a policy change to allow foreign investment into a growing number of sectors, inward FDI rose from almost Zero in 1990's, and annual inflows have been consistently above USD 2 billion since 1995. The 2003 inflows at USD 4 billion were only a fraction beneath the peak year 2001.

India's cumulative outbound FDI that stood barely USD 0.6 billion in 1996 crossed the USD 10 billion mark in 2005, and seems to take a big leap forward in the coming years. Most foreign direct investment are made through acquisitions of existing firm, because the alternative route of starting and building a new company would be more time consuming and possibly more expensive. The size of the acquisitions deals ranged from USD 5700 million to as little as USD 0.05 million and the range of equity stake acquired varied from 100% to as little as 2.5%.

#### DESTINATIONS OF FDI FROM INDIA

Country	2001	2002	2003	2004	2005	Total
USA	25	19	19	21	20	104
UK	8	5	8	7	8	36
Germany	2	1	3	2	2	10
Spain	1	-	-	-	2	3
Romania	1	-	-	-	2	3
Portugal	1	-	-	-	-	1
Ireland	1	-	-	1	2	4
Belgium	_	1	_	2	1	4
France	-	-	3	2	1	6
Russia	-	-	-	-	1	1
Singapore	1	1	2	1	3	8
Australia	1	4	1	2	2	10
China	_	1	2	1	3	7

#### (Figures indicate the no. Of acquisition in each country)

Industry	No. Of acquisition	% of total
Computer & IT	78	35.29
Drugs & pharmacy		35
	15.84	
Cement	2	0.90
	3	1.38
Steel	7	3.17
Chemicals	10	4.52
Textiles & garments	4	1.80
Oil & gas	10	4.52
Trading	4	3.17
Media/communication	7	3.17
BPO/ outsourcing	9	4.07
Electrical & electronics	4	1.80
Auto & ancillary	17	7.69
Mining	5	2.26
Cosmetics	4	1.80
Paints & varnishes	4	1.80
Tea & coffee	3	1.38
Telecommunication	3	1.38
Banking	3	1.38
Consultancy	4	1.80
Miscellaneous	15	6.78
Total	221	100

### INDUSTRY WISE ANALYSIS OF INDIA'S OUT BOND INVESTMENT

(Source: Indian Management-June'2006)

Industry	<b>No.of Acquisitions</b>	% of total
0-10 million	80	61.54
10-25 million	26	20.00
25-50 million	13	10.00
50-100 million	-	nil

#### SIZE WISE ANALYSIS OF INDIA'S OUTBOUND INVESTMENTS

Business Review – Volume 4 Number 1		January – June 2009
7100 million	11	8.46

2000

Total	130	100

(Source: Indian Management, June'2006)

\$7.1

4 NT

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#### **OUTBOUND DRIVERS**

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Indian companies have been investing abroad for many years. But the new phase of foreign acquisitions as a trend setting phenomenon probably started when TATA acquired Tetley (European Firm), a firm larger than itself in 2000 and in the process emerged as the world's biggest tea company. Since then, buoyed by an encouraging government policy, many cash rich Indian companies (both manufacturing as well as service oriented, large and small) have acquired a wide spectrum of businesses around the globe. Having been exposed to severe competition from multinationals corporations (MNCs), the opening up of the Indian economy began in 1991 (NIP); the Indian corporate have gained much confidence and learnt to succeed in the global competitive environment. They have developed a taste for competition and a selfconfident mind set. Going by the premise "aggression is the best defense", they have learnt that the quickest way to achieve global competitiveness is through purchasing businesses abroad. Clearly, growth in O-FDI would not have been possible without an enabling and liberal foreign exchange policy followed by the government, which has in turn been made possible by the huge foreign exchange resources of the country (around 140 billion) in 2005. Favourable capital markets and liberalization of FDI rules in host countries have also contributed to this trend.

From an investing company's point of view, overseas investments have several potential advantages, which may be grouped into two categories.

- Strategic reasons
- Economic reasons

#### STRATEGIC REASONS

The strategic reasons could be either of defensive or aggressive types. Defensive reasons include the fear of losing a market competitor' of the foreign country and the need to protect patents and intellectual rights /property.

#### AGGRESSIVE REASONS

The aggressive reasons could include such factors vas the search for cheaper labour or other resources, need to access foreign knowledge or natural resources, search for more profitable uses of scarce resources, escape from domestic market or just the urge to expand beyond domestic market for the prestige attached to being a multinational. The category of economic incentives relate to the economies of scale and better risk management achieved from diversified and larger scale of operations. Increasing scale of operations in areas such as production, purchasing, marketing and distribution are typically accompanied by lower average cost per unit, thus increasing profit margins. Company operating in several countries can reduce the volatility of its cash flows, and to a single economy or a block of parallel moving economies. The foreign investments by Indian companies in recent years have been driven by a combination of strategic and economic reasons. Some of them are discussed at length here.

- 1. Accessing Foreign Markets and Brand Names: The acquisition of Tetley for GBP 271 million in 2000 provided TATA tea an access to the Tetley brand name and the European markets. This is one of the main reasons behind a majority of foreign acquisition by Indian companies. The acquisition of a reputed foreign firm often results in shifting of the established set of clients to the newly merged firm, establishing goodwill and bringing strong revenues from existing clients. Infosys technologies acquired expert information services of Australia in 2003 to gain access to the Australian market and clients of the acquired company. Such acquisitions also brings in economies of scale and help in hedging risk
- 2. Access to Technology and Knowledge: This is one of the main strategic reasons that have driven several Indian firms from the IT, Pharmaceuticals and other industries to acquire foreign companies specializing in IT and research and development. For instance, Wipro acquired Nerve Wire Inc (USA) in 2003 to gain deep domain knowledge, I-Flex acquired Supersolutions corporations (USA) to gain access to technologies and knowledge and Ranbaxy has acquired R& D companies abroad. In 2005, Jubilant Organosys acquired Target Research Associate Inc (USA) to access clinical research knowledge and technology. Similarly, Matrix Laboratories of India acquired 43% stake in Explora Laboratories (Switzerland) to access Explora's expertise in the area of Bio catalysis.
- 3. Securing Natural Resources and Production Assets: ONGC acquired stake in Sudanese, Russian and Myanmar oil and gas fields to ensure future supply of valuable natural resources. Essar steel has bought two Korean steel making units in 2005 that would be dismantled and shipped to India for use in any of Essar's steel plants.
- 4. Backward Integration: Acquisition of Australian and Canadian mining companies by steel authority of India and Hindalco are examples of backward integration, in addition to the benefits of securing resources.

#### THE REGULATORY FRAMEWORK

Since 2000, the Govt. of India and the Reserve Bank of India have pursued a more liberal policy towards overseas investments with the objectives of promoting Indian companies to reap the benefits of globalisation. This will have a statutory impact on the growth of the Indian O –FDI flows. Some of the salient developments in this policy are as follows:

#### **1. INVESTMENT LIMIT RAISED**

In 2005, the RBI, raise the limit of investment overseas from 100% net worth of an Indian entity to 200% net worth of the investing company. Accordingly, under the automatic routing for overseas investment, eligible entities are now permitted to invest in joint ventures or wholly owned subsidiaries up to 200% of their net worth.

#### 2. INVESTMENT OUT OF ACCOUNTS

The above ceiling is not applicable to investments made out of balances held in exchange earner's foreign currency (EEFC) accounts. Thus, Indian companies in special economic zones can freely make overseas investment up to any amount if such investments are financed out of the exchange earner's foreign currency account balances.

#### 3. INVESTMENT OUT OF ADR/GDR ISSUES

The above ceiling of 200% of the net worth of the investing entity is also not applicable to investments made out of the proceeds of ADR/GDR issues. Overseas investments are thus lowered to be financed up to 100% by ADR/GDR proceeds (up from the previous limit of 50%)

#### 4. INVESTMENT IN UNRELATED AREAS

Indian companies can now invest or make acquisitions abroad in areas unrelated to their core business at home. Earlier they were allowed to invest in or acquire only such businesses that were related to their core activities at home.

#### 5. OTHER RELAXATIONS

Several other rules concerning overseas investments have been simplified, including those related to the following.

- a. Investments by registered partnership firms
- b. Investment through special purpose vehicles, under the automatic route, and

c. Investment by way of share swaps.

To sum up, given the favourable environment, the growing competitiveness of Indian firms coupled with their increasing desire to venture abroad, outward FDI seems all set to grow rapidly in the medium to long term; and may overtake several other developing economies in the number as well as the volume of foreign investments. If theses investments help in the achievement of development objectives that are expected of them, it could be a win-win situation for all concerned.

Rank	Economy	Value (\$ Billions)
1.	Hong Kong	336
2.	Singapore	90.9
3.	Taiwan	65.2
4.	Brazil	54.6
5.	China	37
6.	Republic of Korea	34.5
7.	Malaysia	29.7
8.	South Africa	24.2
9.	Argentina	21.3
10.	Mexico	13.8
11.	Chile	13.8
12.	Venezuela	8.00
13.	Islamic Republic of Iran	6.8
14.	India	5.1
15.	Nigeria	4.6

(SOURCE: Word Investment Report, UNCTAD)

#### INBOUND FOREIGN DIRECT INVESTMENT (I-FDI)

China remains the most popular FDI destination but ASEAN also continues to be an important production location. Some firm worries about too much concentration in China. Thailand, India and Vietnam are the most popular destination to diversify the China risk. However, while many firms, have actual expansion plans for Thailand, they don't have concrete ideas for India and Vietnam, they are only potentially popular. Indonesia has gone down in popularity in recent years while Russia has become a little more popular than before.

As per my own survey during the research process I asked the following question from the respondent and their views are like:

Where do you p	lan to expand business in the next three years?	
1.	China (central coast)	68.9%
2.	Thailand	47.8%
3.	China (southern coast)	47.6%
4.	North America	44.3%
5.	China (northern coast)	35.00%
6.	EU 15	31.5%
7.	Korea	24.2%
8.	Taiwan	21.3%
9.	Eastern Europe	17.4%
10.	Vietnam	15.9%
11.	India	15.5%
12.	Malaysia	15.5%
13.	China (north-east)	13.7%
14.	Singapore	12%

China remains a very popular FDI destination in the near future, but Thailand is also very popular as the ASEAN production base. India comes at the bottom of the list.

As per the risk of doing business in India my next question from the respondents was,

What is the risk of doing business in India?	
Shortage of electric supply	60%
<ul> <li>Price increase in energy and materials</li> </ul>	38%
<ul> <li>Violation of intellectual property rights</li> </ul>	33%
<ul> <li>Logistic and transportation problem</li> </ul>	25%
<ul> <li>Frequent changes in FDI policy</li> </ul>	10 %
<ul> <li>Market shrinkage.</li> </ul>	2%

When I asked regarding the merits and demerits of investing countries, the responses were as:

Country	Top 3 Merits.	Top 3 Demerits.
1. China	Future Market Potential	Ambiguity of Laws
	Cheap labour Violati	on of Intellectual Property Rights
	Supporting Industries Property Rights	S Unrecoverable Receivables
2. Thailand	Future Market Potential	Competition with other Firms
	Cheap Labour	Rising Labour Cost
	Stable Policies and Societies	Lack of Managers
3. India	Future Market Potential	Lack of Infrastructure,
	Cheap Labour,	Crime & Social Instability,

	High quality human resources	lack of Information
4. Vietnam	Cheap Labour,	Undeveloped Legal System
	Future market potential,	Ambiguity of Laws
	High Quality of Human Resources	Lack of Infrastructure
5. USA	Current Market Size	Competition with other Firms
	Future Market Potential	Rising Labour Cost
	Good Infrastructure	Labour Problems
6. Russia	Future Market Potential	Crime & Social
	Cheap labour	Instability
	High quality human resources	Lack of Information
		Undeveloped legal system.
7. Indonesia	cheap labour	crime and social
		Instability
	Future market potential	competition with other
	Export base for third market	firms.

Japanese firms are generally attracted by market size and low labour cost. On the demerit size, legal uncertainty is a big problem in China and Vietnam, and lack of infrastructure is a problem in India, Vietnam, and Russia. Social instability and personal safety is a problem in India, Russia, and Indonesia.

FDI INFLOWS IN INDIA (\$Million)		
1990-1991	1 97	
1991-1992	129	
1992-1993	315	
1993-1994	586	
1994-1995	1314	
1995-1996	2144	
1996-1997	2821	
1997-1998	3557	
1998-1999	2462	
1999-2000	2155	
2000-2001	2633	

(Source: Word Investment Report, 1999, UNCTAD)
GLOBAL FDI

Developed Countries	1997
USA	109
UK	37
France	23
Luxemburg	12
Netherlands	9

Canada Italy Switzerland	11 4 5
Japan	3
Developing Countries	1997
China	44
Brazil	19
Mexico	13
Malaysia	5
Thailand	4
India	3
Hong Kong	6
S. Korea	3

(Source: World Investment Report 1999, UNCTAD)

#### DETERMINANTS OF FOREIGN DIRECT INVESTMENT (FDI)

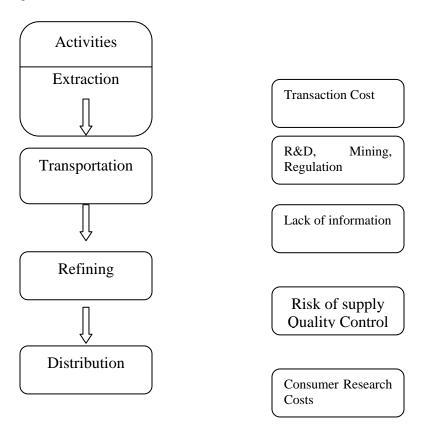
Caves (1982) have found that the MNCs tend to be a multiple firm. Its key decision is to find the boundary between the allocation of resources in either an internal market or a regular market. Caves says that MNCs occur when their internal market experience lower transaction cost than those that arise in operating in a distant market. As a result MNCs are generally of three types.

- Horizontally Integrated MNCs
- Vertically Integrated MNCs
- Diversified Integrated MNCs
- 1. Horizontally Integrated MNCs: Usually each MNC has a special firm specific advantage or asset. The firm specific advantage can be in the form of technological knowledge, management skills, or marketing know-how. In some cases, the firm specific advantage can be protected by patents, trademarks or brand names. In other cases, the firm specific advantages may lie in a market intelligence network, channels of distribution, or sourcing, expertise in marketing or service or organization. Each and every MNC operates to gain, maintain and utilize unique firm specific advantages, which give it a competitive edge over other MNCs.

Caves (1971,1982) identifies two general types of natural market imperfections facing horizontally integrated MNCs- the public goods nature of knowledge and the extent of information impact and buyer uncertainty aspects of market failure. Theses market imperfections are the fundamental reasons for the internationalization of market by MNCs. As an example of the application of the concept of internationalization to FDI, it is of interest to study the pricing of pharmaceuticals by horizontally integrated MNCs. There is an externality in the production and pricing of pharmaceuticals. Multinational firms have to incur huge expenditure in R&D. In order to recover these huge cuts; the government gives them patent rights and create conditions for monopoly profit.

2. Vertically Integrated MNCs. The second type of MNCs are vertically integrated MNCs, such as oils, minerals resources firms. In the case of vertically integrated multi-plant firms, the internal market can be used to establish control and minimize transactions costs. This gives another sort of FSA (**abbrev**) to the MNCs. We can consider oil firms as a case study of vertically integrated MNCs.

Petroleum firms engage in vertical integration in response to both natural and government included market imperfections. Their control over sources of supply and market is justified when an FSA needs to be generated in order to bypass a host of transaction costs involving supply uncertainties, logistics and search costs.



#### **VERTICAL INTEGRATION OF OIL MNCs**

**3. DIVERSIFIED MNCS** The third type of multi-plant MNC identified by Caves (1982) is the diversified MNC. Multinational enterprises of this type are explained by the principles of international diversifications. By the very nature of their international operations, MNCs are engaged in risk pooling. They are exposed to less variation in sales than are uni-national firms confined to a single market. Although international diversification is an explanation based on financial factors instead of real asset factors, it is still relevant for FDI; since risk pooling is an excellent reason for cross industry investments.

The version of international diversification of relevance here is that in which market imperfection in the international capital market constraints simple portfolio diversification. Multinational enterprises rather than individuals assemble an efficient world portfolio by buying into the stock markets of various nations. This is because the individual has to bear information and search costs; and has also to consider political risks, exchange risks, and other environmental uncertainties.

The MNC is a potential surrogate vehicle for individual financial assets diversification. Since it is already operating internationally and the business cycles of nation do not move in perfect tandem. The advantages of real asset diversification of MNCs arise since MNCs avoid market imperfections by internationalizations. There is a type of FSA involved in the financial diversification achieved by the specific MNC. Each MNC is a portfolio asset, with an FSA, which is unique to each individual MNC. There has been a close linkage between then role of the MNC as an international diversifier and the growth of FDI in recent years.

The unpredictability of autonomous FDI flows, in both scale and direction, has generated a substantial research effort to identify their major determinants. An extensive literature based generally on three approaches – aggregate econometric analysis, survey appraisal of foreign investors' opinion, and econometric study at the industry level – has failed to arrive at a consensus. This can be partly attributed to the lack of reliable data, particularly at the sectoral level, and to the fact the most empirical work has analysed FDI determinants by pooling of countries that may be structurally diverse. The remainder of this paper is mainly concerned with examining the factors influencing the destination of the investment: host-country determinants, rather than industry-specific factors.

#### SIZE OF MARKET

Econometric studies comparing a cross section of countries indicate a well-established correlation between FDI and the size of the market (Proxied by the

size of GDP) as well as some of its characteristics (for example, average income levels and growth rates) Some studies found GDP growth rate to be a significant explanatory variable, while GDP was not; probably indicating that where the current size of national income is very small, increments may have less relevance to FDI decisions than growth performance (as an indicator of market potential). Three is little doubt that the size of China's market explains, in large part, the massive FDI flows it has attracted since the early 1980s. Within China, FDI has been concentrated (over 90%) in the coastal areas. Provincial GNP, reflecting economic development and potential demands, has also been indicated as the major determinant of this concentration (Broadman and Sun, 1997)

For sub-Saharan Africa as a whole, Bhattacharya *et al.* 1996 identifies GDP growth as a major factor. Only three SSA (**abbrev**) low-income countries are amongst the nine main recipients of FDI flows in recent years (see Table 1), and of these only Nigeria is close to being classified as a large market (according to UNCTAD's benchmark of \$5.5bn GNP). Angola and Ghana (with GNP of \$8.9bn and \$5.5bn in 1995 respectively), received larger proportional FDI flows in 1995 than Nigeria (see Table 2), indicating that small market size need not be a constraint in the case of resource-endowed, export-oriented economies. In fact, extractive industries in the low-income African countries continue to attract foreign investors as they have always done.

In contrast, India, Pakistan and, to a certain extent, Bangladesh, have large markets but received proportionately relatively small (below 1%) FDI flows in 1986 -1995. Some analysts interpret this as evidence of high potential for increased FDI flows in the future; others stress that constraints are still restraining the channeling of foreign investment to these countries.

For the majority of low-income countries, which fail to attract large FDI flows; their small domestic markets are often cited as the main deterrent. Given other economic and political shortcomings, most investors are doubtful about the value of installing a factory unless they can achieve a 'critical mass' for their products. Regional integration is often perceived as a positive means of compensating for small national markets. There is currently no clear evidence of the degree of this influence on FDI flows. Some investors expect positive spillover effects from South Africa and are generally optimistic about economically stronger states.

#### **OPENNESS**

Whilst access to specific markets - judged by their size and growth – is important, domestic market factors are predictably much less relevant in exportoriented foreign firms. A range of surveys suggests a widespread perception that 'open' economies encourage more foreign investment. One indicator of openness is the relative size of the export sector. Singh and Jun's 1995 study indicates that exports, particularly manufacturing exports, are a significant determinant of FDI flows and that tests show that there is strong evidence that exports precede FDI flows. China, in particular, has attracted much foreign investment into the export sector. In Bangladesh, on the other hand, foreign investors have been attracted to the manufacturing sector by its lack of quota for textiles and clothing exports to the European Union and US markets. Garment exports, for example, rose from virtually nil in the 1970s to over one-half of its export earnings by the early 1990s. In contrast, most low-income SSA economies have remained more inward oriented.

#### LABOUR COSTS AND PRODUCTIVITY

Empirical research has also found relative labour costs to be statistically significant, particularly for foreign investment in labour-intensive industries and for export-oriented subsidiaries. The decision to invest in China, for example, has been heavily influenced by the prevailing low wage rate. The rapid growth in FDI to Vietnam has also been attributed primarily to the availability of low-cost labour. In India, in contrast, labour market rigidities and relatively high wages in the formal sector have been reported as deterring any significant inflows into the export sector in particular.

However, when the cost of labour is relatively insignificant (when wage rates vary little from country to country), the skills of the labour force are expected to have an impact on decisions about FDI location. Productivity levels in sub-Saharan Africa are generally lower than in low-income Asian countries, and attempts to redress the skill shortage by importing foreign workers have been frustrated by restrictions and delays in obtaining work permits. The lack of engineers and technical staff in these countries is reported as holding back potential foreign investment, especially in manufacturing, it lessens the attractiveness of investing in productive sectors.

#### POLITICAL RISK

The ranking of political risk among FDI determinants remains somewhat unclear. Where the host country possesses abundant natural resources, no further incentive may be required, as is seen in politically unstable countries such as Nigeria and Angola, where high returns in the extractive industries seem to compensate of political instability. In general, so long as the foreign company is confident of being able to operate profitably without undue risk to its capital and personnel, it will continue to invest. Large mining companies, for example, overcome some of the political risks by investing in their own infrastructure maintenance and their own security forces. Moreover, these companies are limited neither by small local markets nor by exchange-rate risks since they tend to sell almost exclusively on the international market at hard currency prices.

Specific proxy variable (e.g. number of strikes and riots, work days lost, etc.) has proved significant in some studies; but these quantitative estimates can capture only some aspects of the qualitative nature of political risk. Surveys carried out in South Asia and sub-Saharan Africa appear to indicate that political instability, expressed in terms of crime level, riots, labour disputes and corruption, is an important factor restraining substantial foreign in investment.

#### INFRASTRUCTURE

Infrastructure covers many dimensions, ranging from roads, ports, railways and telecommunication systems to institutional development (e.g. accounting, legal services, etc.). Studies in China reveal the extent of transport facilities and the proximity to major ports as having a significant positive effect on the location of FDI within the country. Poor infrastructure can be seen, however, as both an obstacle and an opportunity for foreign investment. For the majority of low-income countries, it is often cited as one of the major constraints. But foreign investors also point to the potential for attracting significant FDI if host governments permit more substantial foreign participation in the infrastructure sector. Recent evidence seems to indicate that, although telecommunications and airlines have attracted FDI flows (e.g. to India and Pakistan), other more basic infrastructure such as road building remains unattractive, reflecting both the low returns and high political risks of such investments.

Surveys in sub-Saharan Africa indicate that poor accounting standards, inadequate disclosure and weak enforcement of legal obligations have damaged the credibility of financial institutions to the extent of deterring foreign investors. Bad roads, delays in shipments of goods at ports and unreliable means of communication have added to these disincentives.

#### **INCENTIVES AND OPERATING CONDITIONS**

Removing restrictions and providing good business operating conditions are generally believed to have a positive effect. In China, the 'open-door' policy and enhanced incentives for investing in the special economic zones contributed to the initial influx of FDI. Further incentives, such as the granting of equal treatment to foreign investors in relation to local counterparts and the opening up of new markets (e.g. air transport, retailing, banking), have been reported as important factors in encouraging FDI flows in recent years. The Indian Government has recently relaxed most of the regulations regarding foreign investment. This is seen as contributing to the increased FDI flows in the last couple of years. However, the lack of transparency in investment approval procedures and an extensive bureaucratic system are still deterring foreign investors; hence the relatively low FDI/GNP ratios. In 1991, Bangladesh and Pakistan implemented reforms allowing foreign investors to operate with 100% foreign ownership but still failed to attract significant flows (as a proportion of GNP) because of political instability and an overextended bureaucracy. Nigeria, in contrast, continues to attract foreign investment as an oil-exporting country despite its erratic and relatively inhospitable policies. With regard to the remaining low-income countries with small FDI inflows, surveys indicate that the lack of a clear-cut policy with respect to foreign investment and excessive delays in approval procedures are amongst the most important deterrents. Although a number of African countries setup 'one-stop investment ships' during the 1980s in order to simplify approval procedures, the increased workload created bottlenecks.

#### PRIVATISATION

Though privatization has attracted some foreign investment flows in recent years (e.g. Nigeria in 1993 and Ghana in 1995), progress is still slow in the majority of low-income countries, partly because the divestment of state assets is a highly political issue. In India, for example, organised labour has fiercely resisted privatization or other moves, which threaten existing jobs and workers' rights. At a regional level, 1994 figures show 15% of FDI flows to Latin America as derived from privatization, but only 8.8% in sub-Saharan Africa and 1.1% in South Asia. A number of structural problems are constraining the process of privatization. Financial markets in most low-income countries are slow to become competitive; they are characterized by inefficiencies, lack of depth and transparency and the absence of regulatory procedure. They continue to be dominated by government activity and are often protected from competition. Existing stock markets are thin and illiquid and securitised debt is virtually non-existent. An under-developed financial sector of this type inhibits privatization and discourages foreign investors.

Over the last 25 years, FDI in low-income countries has been highly concentrated in three countries, China, Nigeria and India. Large market size, low labour costs and high returns in natural resources are amongst the major determinants in the decision to invest in these countries. New major destinations for FDI flows in the 1990s include Vietnam, Ghana and Bangladesh. Given the easier access to their markets, motives for investment in these economies are mainly determined by the low cost of labour and the availability of natural resources.

For the vast majority of low-income countries, however, FDI is minimal. The structural weaknesses of these economies, the inefficiencies of their small markets, their skill shortages and weak technological capabilities, are all characteristics that depress the prospective profitability of investment. These factors also make it less worthwhile for potential international investors to incur the costs of a serious examination of local investment opportunities, thus leading to informational inefficiencies. The financing requirements of economic growth in these countries are therefore unlikely to be fulfilled by private capital inflows. Until these constraints on possible investment are addressed, they are likely to continue to rely heavily on receipt of foreign aid.

#### **DESTINATION INDIA**

FDI flows to developing countries are in rising mood and India is the hot destination in today's FDI culture. The country offers to any MNC, a vast market, a strong legal system, well developed capital market, a class of private sector partners, high quality of human resources, dedicated and hard working peoples, and a vast majority of English speaking managers who can well manage and operate business.

India has a well-entrenched democratic set up and perhaps India is the only country that has come out of the 40 years old socialist trap successfully. Most of Asia has done it at the cost of or in the absence of democracy.

India is also blessed with two separate sets of variables that attract the attention of the global investors. The first group is made of what is called the institutional background of an attractive investment climate. The second group is more directly related to doing business with a country's supply of economic and human resources.

#### **1. THE INSTITUTIONAL BACKGROUND**

India has the following well defined, established and ever growing institutions that are attracting the foreign investors.

(a) Political and macroeconomic stability: This is the most important prerequisite for non –footloose foreign investors. Investors in general are deterred by risk; moreover they need to be able to evaluate their investment return on a medium to long-term period.

India in recent past has been able to show to the rest of the world that we are economically and politically stable. There have been no frequent changes in the political system at the center and the economic environment is also conducive for the investors. These two factors alone have resulted in more foreign investor's attraction.

(b) A transparent stable and non-discriminatory legal and regulatory environment. The country is showing a sign of improvement in legal system and the rules are made as per the international code of conduct.

(c) Finally, bureaucratic procedures and institutional rigidities are diminishing or rather strictly banned. The administrative procedures are made simple and easy in order to attract more and more foreign investors. Several anti corruption units are working round the corner to eliminate the bribery system, which used to be a major hurdle in the ways of multinationalisation and globalisation.

**2. THE ECONOMIC AND SOCIAL BACKGROUND** In recent past, India has been able to make economic and social system stable. According to D.Ricardo's inquiry findings, there are five main groups of economic and social factors that are necessary to make a country attractive.

(a) A big and growing market: India is very big and the most growing market with a huge population of over one billion. Along with India, there is regional market like SAFTA, which is recently signed (2005) between the Asian members, which is also attracting a huge amount of FDI because they have free access to a very big regional market being members of SAFTA. The rate of growth of market size is also growing which is good sign for the foreign investors.

(b) An efficient communication system is a key factor for MNCs to efficiently operate far-flung subsidiaries in the rest of the world as well as the home office. Subsidiaries need to be able, on a day-to-day basis, to send and receive faxes, email and make telephone calls. They also need proper transportation links both within the country and to the outside world.

There has been communication revolution in India and the connections are provided to even the remotest part of the country. A number of key players in the field of telephone have entered both from within the country and outside the country. The major cities of India are well connected with air routes, surface routes, rail routes and even sea routes. These all characteristics are attracting the foreign investors.

(c) **QUALIFIED AND SKILLED LABOURS** Another most vital factor that attracts the foreign investors is the availability of the qualified and skilled labour force. Cheap labour was playing a dominant role in the 1960's and 1970's when most MNCs were following a vertical outsourcing strategy. Today, all the firms stress that the availability of qualified manpower, particularly for middle ranking and senior technical position, is a major consideration. Most of the subsidiaries are using the same sophisticated technology as that employed in the home country units. The presence of sophisticated and specialized engineers, management graduates,

computer professionals, technicians and scientists are reasons for the attraction of FDI.

(d) The presence of efficient local firms is also a huge source of attraction for the foreign investors.

(e) India way back in 1956, adopted the principle to promote the private sectors along with the public sectors. Privatization programmes are also an investment opportunity for most of the firms investing in foreign countries. India is becoming the hub of the privatisation and as a result of this the foreign investors are getting lured to this country.

(f) Fiscal incentive: India has brought a radical change in its fiscal policies and all kinds of taxes are modified and readjusted as per the international standard and norms.

Strength	Scale	Rank
Stock Market:		
Stock market is important for new financing	5.42	13
Science and Engineering		
Schools excel in basic and Maths	5.27	16
Country has a large pool of competent		
Scientists & Engineers	6.37	1
Engg. As a profession greatly attracts		
Young talent	6.26	1
Labour force:		
Country has first class business schools		
to train mangers	5.05	8
Country has an abundant labour	6.77	1
Rule of law:		
Judiciary is the independent of Govt.	5.40	9
Companies with court ruling is high	5.37	14
Firms have recourse to courts		
for challenging Govt. Actions	5.56	1

India's strength and weakness can be discussed as below:

Weaknesses:		
Financial markets:		
Citizens prohibited from investing		
in foreign stocks	1.60	53
Financial sectors sophistication is lower		
than international norms	2.74	43
Venture capital is scarce	2.63	50
Public administration		
Administrative regulations that constrain		
Business are pervasive	2.90	47
Govt. subsidies keep old industries alive	2.68	52
Civil service is subject to political pressure	2.65	43
Tax evasion is rampant	2.27	48
Infrastructures:		
Overall infrastructure is far worse than		
major trading partners	1.92	53
Port facilities are underdeveloped	2.18	53
Country suffers from severe power shortages	1.95	53
Labour Regulations:		
Average workers are unproductive	2.94	51
Extra payments connected with permits		
and licensee are common	2.79	48

FDI INFLOW
A. Cumulative FDI Equity Inflow (equity capital components only):

1.	Cumulative amount of FDI inflow	Rs. 2,32,041	US\$54,628
	(from August 1991 to March 2007)	Crore	Million
2.	Amount of FDI inflow During 2007-08 (from April to February2008)	Rs. 80,732 Crore	US\$ 20136 Million
3.	Cumulative amount of FDI inflows (updated Up to February2008)	Rs. 3,12,773 Crore	US\$ 74764 Million

<u>Note:-</u> FDI inflow include amount received on account of advances pending for issue of share for the year 1999 to 2004

B.	FDI E	quity	Inflow	during	Financial	Year	2007-2008

Financial Year 2007-2008	Amount of FDI inflow			
(April – March)	(in Rs. Crore)	(in US\$ million)		
April 2007	6,538	1,551		
May 2007	8,642	2,120		
June 2007	5,048	1,238		
July 2007	2,849	705		
August 2007	3394	831		
September 2007	2876	713		
October 2007	8008	2027		
November 2007	7353	1864		
December 2007	6146	1558		
2007-2008 (up to	80732	20136		
February 2008)				
2006-2007 (upto February	53734	11888		
2007)				
%age growth over last	(+)50%	(+) <b>69%</b>		
year				

## C. FDI Equity Inflow during Calendar Year 2008

Calendar Year 2008	Amount of FDI inflow		
	(in Rs. Crore)	(in US\$ million)	
Year 2008 (up to February	29489	7437	
2008)			
Year 2007 (up to February	11595	2619	
2007			
%age growth over last year	(+)154%	(+)185%	

Ran	Country	2004-	2005-	2006-	2007-	Cumulativ	%age
k	_	05	06	07	08	e Inflows	with
		(April	(April	(April	(April	(from	total
		-	-	-	–Dec.)	Apr2000 to	Inflow
		March	March	March)		Dec07)	s (in
		)	)				term of
							rupees)
1	Mauritius	5141	11441	28759	22435	88,325	44.46
		(1129)	(2570)	(6363)	(5564)	(20104)	
2.	USA	3005	2210	3861	2540	18121	9.12
		(669)	(502)	(856)	(627)	(4070)	
3.	U.K	458	1164	8389	1103	15478	7.79
		(101)	(266)	(1878)	(274)	(3461)	
4.	Netherland	1217	340	2905	2101	11243	5.76
	S	(267)	(76)	(644)	(525)	(2535)	
5.	Japan	575	925	382	2630	8629	4.34
		(126)	(208)	(85)	(637)	(1948)	
6.	Singapore	822	1218	2662	5632	11438	5.76
		(184)	(275)	(578)	(1411)	(2695)	
7.	Germany	663	1345	540	1195	5859	2.95
		(145)	(303)	(120)	(293)	(1323)	
8.	France	537	82	528	358	3159	1.59
		(117)	(18)	(117)	(89)	(705)	
9.	Switzerland	353	426	257	861	2792	1.41
		(77)	(96)	(56)	(211)	(634)	
10.	South	157	269	321	133	3366	1.57
	Korea	(35)	(60)	(71)	(33)	(855)	
Т	otal FDI	17138	24613	70630	51234	222680	
INFLOW		(3754)	(5546)	(15726	(12699	(50628)	
				)	)		

# D. SHARE OF TOP INVESTING COUNTRIES FDI EQUITY INFLOW (Financial year- wise):

Rank	Sector	2004- 05 (April – March)	2005- 06 (April – March)	2006- 07 (April – March)	2007- 08 (April – Feb)	Cumulative Inflows (from April 2000 to Feb 2008)	% age with total Inflows (in term of rupees)
1	Service Sector (Financial & Non Financial)	1986 (444)	2399 (543)	21047 (4664)	6442 (1557)	40844 994430	22.42%
2.	Computer software & hardware	2441 (539)	6172 (1375)	11786 (2614)	5476 (1373)	32020 (7241)	14.03%
3.	Telecommunications	570 (125)	2776 (624)	2155 (478)	4846 (1198)	16491 (3778)	7.23%
4.	Construction Activities	696 (152)	667 (151)	4424 (985)	6119 (1527)	12515 (2947)	5.49%
5.	Housing & Real Estate	0 (0)	171 (38)	2121 (467)	7186 (1792)	9598 (2324)	4.21%
6.	Automobile Industry	559 (122)	630 (143)	1254 (276)	2204 (553)	9363 (2115)	4.10%
7.	Power	241 (53)	386 (87)	713 (157)	2003 (503)	7755 (1741)	3.40%
8.	Drugs & Pharmaceuticals	1343 (292)	760 (172)	970 (215)	1326 (334)	5607 (1276)	2.46%
9.	Metallurgical Industries	836 (182)	6540 (147)	7866 (173)	3856 (971)	6519 (1557)	2.86%
10.	Chemicals	909 (198)	1731 (390)	930 (205)	868 (216)	6091 (1373)	2.67%

# E. SECTORS ATTRACTING HIGHEST FDI EQUITY INFLOWS

# FDI INFLOW FINANCIAL YEAR WISE DATA

# A. AS PER INTERNATIONAL BEST PRACTICES

S.No	Financial Year (April- March)	Ec FIPB	quity Equity	Reinves ted earning +	Other Capital +	Total FDI Inflow	% age growth over previou s year
		Route	capital				
		/	of				
		RBI's	Unincor				
		Auto	porated				
		matic	bodies #				
		Route					
· ·	01-2000	15483				15483	
	August						
	o March						
2000)							
1.	2000-01	2339	61	1350	279	4029	
2.	2001-02	3904	191	1645	390	6130	(+)52
3.	2002-03	2574	190	1833	438	5035	(-)18
4.	2003-04	2197	32	1460	633	4322	(-)14
5.	2004-05	3250	528	1904	369	6051	(+)40
6.	2005-06 (P)	5540	280	1676	226	7722	(+)28
7.	2006- 07(P)*	15585	480	2936	530	19531	(+)153
8.	2007-08 (April- Dec07)	12699	334	2054	254	15341	
	b Total (1	48088	2668	18097	3095	71948	
	ove) (from						
-	2000 to July						
2007)							
Cumul	ative Total	63571	2668	18097	3095	87431	
(A)+(H	B) (from						
Aug 19							
July07	)						

#### WHAT MAKES A COUNTRY ATTRACTIVE?

Interviews made by me during my research work provide a good picture of what makes a country attractive from the viewpoint of global investors

To put a country on their short list, global investors consider two separate sets of variables and both sets are prerequisites. The first group is made of what may be called this institutional background of an attractive investment climate. The second group is more directly related to doing business with a country's supply of economic and human resources. If the latter fits with the MNC are looking for according to its strategy, and as long as the institutional background is fine, the country might be put on the short list. This step is a necessary condition for attracting FDI; however in most cases, it is not a sufficient one.

### a) THE INSTITUTIONAL BACKGROUND

For a country to be attractive, a set of institutional prerequisites has to be fulfilled:

Political and macroeconomic stability: This is the most important prerequisite for non-footloose foreign investor. Investors in general are deterred by risk; moreover, they need to be able to evaluate their investment return on a medium to long-term period.

A transparent, stable, and non-discriminatory legal and regulatory environment. Specific foreign investment laws or codes, mostly adopted in the 1960's, including a whole set of TRIMs, have to be liberalized before starting any promotion. Moreover, laws, regulations and contracts must be followed. In cases of conflict, an efficient, non-corrupt judicial system is required. This point has very often been stressed by the managers interviewed by FIAS. At minimum, international arbitrage has to be permitted by the law.

Finally, bureaucratic procedures and institutional rigidities must be banned. A global strategy is no longer compatible with wasting time in bureaucratic procedures and negotiations, with a myriad of different and uncoordinated services. MNCs now want a free foreign exchange regime with repatriation and a flexible labor market. In the past, during the time when MNCs were following a "multidomestic" strategy, the situation was quite different. Bureaucratic procedures and its usual informal "payments" (i.e., bribes) were considered as the price to pay for having access to the domestic market and for benefiting from a rentier position due to the existing level of tariff barriers (those which deterred the current foreign investor from exporting). Global investors need free trade, on the one hand, to maximize economics of scale generated by manufacturing in different sites and in various countries and, on the other, by exporting to the world market. Transaction costs have to be as small as possible – an objective not compatible with red tape. In the case when administrative procedures are too long and too complex, global investors prefer to move to another place.

With globalization, competition for attracting FDI is now among hostcountries; it is no longer among foreign firms trying to have access to domestic markets.

#### b) THE ECONOMIC AND SOCIAL BACKGROUND

The economic and social background is becoming primarily important when a global investor is deciding what business to do in country with a good institutional background. To be able to decide, he compares what he needs to start a profitable activity with what factors for FDI is defined. Note that in the globalization framework, the country location advantage has to be an absolute advantage—on this point; A. Smith is taking his vengeance on D. Ricardo.

According to the inquiries there are five main groups of economic and social factors that are necessary to make a country attractive:

A big and growing market: for all the companies in the FIAS sample, market size is a prerequisite. However, it does not mean a big domestic market. More and more, as was previously emphasized, global investors are mainly attracted by big and growing regional markets. Ireland or Portugal each has a small domestic market. Nevertheless, they are attracting a huge amount of FDI because they have free access to a very big regional market by being members of eh European Union. Similarly, the beginning of NAFTA increased Mexico's attractiveness as an FDI location. A high growth rate market is also very important for global investors whose home markets are saturated. This issue shall be discussed later.

An efficient communication system is a key factor for MNCs to efficiently operate far-flung subsidiaries in the rest of the world, as well as home office. Subsidiaries need to be able, day-to-day basis, to sent and receive faxes, email, and make telephone calls. They also need proper transportation links both within the country and to the outside world. All this may seem obvious; however a dysfunctional telecommunications system in a country can cause an investor to regret his initial choice to locate there. This point is of special importance to governments in the case where they are planning to implement an export-processing zone or to rehabilitate an existing one.

Qualified labor is another major attractive advantage from a global investors' viewpoint. Cheap labor was playing a determinant role in 1960's, when most MNCs were following a vertical outsourcing strategy. Today, all the firms interviewed, whatever their home country or industrial sector, stressed that the availability of qualified manpower—particularly for middle-ranking and senior technical positions – is a major consideration. Most of the subsidiaries are using the same sophisticated technology as that employed in the home country units. Often, technology used abroad is even more sophisticated than in the home country because the plants are more recent and embody the latest technology. The present of specialized engineers and scientists in key sectors, many of whom once worked in the military-industrial complex, is the major locational advantage of CEE countries.

The presence of efficient local firms is at first sight an expansion of the qualified labor force argument, but in fact it is covering an increasingly important dimension of a countries' attractiveness value. Very efficient local support industries are defined by their capacity to meet the needs of subsidiaries in terms of technical specification, quality for product, and delivery time. With the growing externalization process followed by an increasing number of firms, the issue of efficient local support industries is drastically changing. It can no longer be limited to sub-contracting operations. Now it is in fact commanding the growth of a new type of MNC: the "network firms" or "hollow corporations" or "virtual firms".

Privatization programs are also an investment opportunity for most of the firms interviewed. It is particularly important in the case of the CEE countries. But, for global investors, the main interest in buying a public enterprise is in most cases to acquire a market share. Taking over the productive facilities is generally a secondary consideration and may even be seen as a drawback. Most of the enterprises in the former Comecon zone will require heavy injection of new investments to rehabilitate them. However, the main attraction played by the existence of privatization programs has to be looked at from another perspective i.e. that of the oligopolistic competition pressure among MNCs. As a matter of fact, a firm that fails in its bid under a particular privatization may find itself excluded from the market permanently or for a long time. This risk is especially severe in the case of sectors where economies of scale are important, such as chemicals, electricity generation, or luxury hotels, where there is room for only a very small number of players given the size of the market.

Fiscal incentives ( tax holidays or subsidies) have been mentioned by only a minority of firms polled as a factor that can enhance a country's attractiveness. The incentive issue is very broad and cannot be dealt with in the framework of this note. Nevertheless it might be of interest to stress two major points which are formulated in a more implicit than explicit way in the answers made by most of the firms surveyed. First, incentives cannot be a substitute for a country's lack of attractiveness, except for investors who are putting financial profitability above economic profitability. Most of the time, investors who are making such a choice are footloose investors. Attracting them is of a very limited interest for a host country. Second, in the case of countries which are competing for the same investment project and which are in the same circle as defined before, incentives are playing a different role: that of the icing on the cake. Unfortunately for public finance, the cost of getting an investment project is often too high compared to the benefit of having it. This is the rule in a non-cooperative game.

#### FDI EQUITY INFLOWS TFDI PROMOTION UNDER FREE TRADE

For developing countries, what kind of policies is required in a world with free and fastidious FDI? I recommend the following. This advice comes from my experience of talking to the Vietnamese officials and enterprise managers in the last ten years. It assumes a country which already receives a certain amount of FDI and hopes to receive more, above the critical mass, to industrialize and join the regional flying geese [For those countries with little or no FDI absorption in manufacturing, a different strategy must be taken.]

First, understand FDI dynamics from the viewpoint of foreign investors (as discussed above). Too many officials think in terms of domestically set goals and requirement, and scare away potential investors. National goals and social concerns are certainly important, but they must be realized in a way that is consistent with FDI inflows.

Second, do not change rules after foreigners have already invested. Policy changes are fine, sometimes. But for those who came earlier, the old rules should continue to apply so that will not suddenly face an unfavorable situation ("grandfather clause"). Policy uncertainty is the biggest problem in Vietnam. Third, do not try to have a vertically integrated industry, from raw materials to final assembly. In the age of globalization, no country can do that, not even developed ones Target where your dynamic (i.e., future) comparative advantage is, and concentrate your effort on it.

Fourth, do not try to use domestically available natural unless they are highest quality and lowest cost (or nearly so) in the world. From the viewpoint of competitiveness, it is better to import best raw material from the most efficient producers in the world.

Fifth, building supporting industries and technical transfer will take time. They must be done in proper speed and sequence. Hasty requirement of local contents not only violates WTO but also drives away foreign investors.

Six, accumulate assembly-type FDI. First, without selectivity, even though domestic value-added is low. Second, as assemblers naturally desire to procure inputs domestically, promote or invite domestic and foreign part suppliers. If successful, a virtuous circle between assembly and parts will emerge. Technology transfer will come after this, not before Seven, work cooperatively with foreign investors. Listen to their needs carefully (you don't have to accept all of their complaints; sometimes they are selfish). Set agreed goals for technical transfer, domestic procurement, etc. and design consistent supporting policies. Work with foreign investors toward these goals, and also solve any problems with them.

Eight, simple external opening (free trade and investment) is not enough. You must use targeted policies to create superior locational advantage and lower the costs of doing business in your country. This requires, among other things, improving domestic skills (production management, marketing, engineering-not just primary education), infrastructure, supporting institutions, efficient government services, good management of industrial and export processing zones (if any), and so on.

Nine, export-oriented FDI should be welcomed most, while domestically oriented FDI is a different story and must be treated differently. Do not attract them with high import protection. If they are already here with high protection, show them a tariff reduction schedule and give them incentive to lower costs. The final outcome (survive or exit) should be determined by global competition and efforts of individual enterprises. This is the same for protected local enterprises as well.

#### CONCLUDING REMARKS

I would like to conclude by making two kinds of remarks, both being oriented towards the further and going beyond the finding of the FIAS (**abbrev**) inquiry. On the one hand, I would like to return to the trade-off issue which was originally at the beginning of the story, and which might be changed in a backwash effect. On the other hand, I would like to raise incidentally the question of the future or FDI promotion involved by the new firm's organization.

#### REFERENCES

Ohno kenichi, "The East Asian Experience of Economic Development and Cooperation", Chapter-4, East Asian Growth and Japanese Aid Strategy, GRIPS Development forum, 2003

T.Marukani,T.Mimura, Saito & M.Suzuki, "The survey report on the Overseas business expansion of Japanese manufacturing firms: The result of 16<sup>th</sup> FDI questionnaire survey", Kaihatsu Kinyu Kenkyushoho (Journal of JBIC Institute), no.22, February 2005, Japan.

International Financial Statistics FDI inflow and population Figures, IMF.

Dailani, M.H.Kalsi & W.Shaw (2003) "Coping with weak private debt flows"

global Development finance.

OECD (2002) FDI for development maximizing benefits, minimizing Costs, pp.60-61

D.H.Kalsi and Ratha (2003) "Sustaining and promoting equity related Finance for Developing Countries ", World Bank.

Ishwar C.Dhingra, Indian Economy, S.Chand and Sons, 2002, pp. 460-461.

K.Ashwathappa, International Business, Tata Mc.Graw Hill Publications Company Ltd, 2003.

We are what we repeatedly do. Excellence, then, is not an act, but a habit. – Aristotle

# ARTICLE

# Customer Perception of the Commercial Banks' Services in Kano Metropolis

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#### **1.1 INTRODUCTION**

It is a general belief that business is changing and will continue to change the way we work and live in the twenty- first century. For instance, technology shrinks time and space, customers can be anywhere in the globe and they can transact business at anytime of the day. The business environment in the present time is practically undergoing a major revolution in the way customers buy, shop, and decide to come back or to take their business elsewhere. Companies are increasingly realising that the balance of power is shifting from sellers to buyers. The customers need exactly what they want, at the right time and place they want it, with a high specification and at the lowest possible price. In addition, businesses must make customers feel special or else they will take their money to another business that can provide all what customers want (LeBoeuf, 1987).

All these developments are as a result of the fact that, today's customer is better educated and better informed, and has more choices than ever before. In the global business, geographic distance between buyers and sellers is irrelevant.

The service industry is growing and dominating world economy. According to UK office of statistics, the service industry can be categorised into financial, transport, retail and personal service (Jick, 1999). The service sector comprises a wide range of companies including banks and insurance companies. Now that the service sector employs more and more people, there has been compelling interest in services in many parts of the world and in different functional areas.

Nigerian commercial banks had been sleeping with respect to delivering excellent customer service until the advent of the so called 'new generation' banks in the early 1990s. One interesting thing is that, the coming up of the 'new generation' banks in the early 1990s, revolutionized the banking sector. Prior to this period, there was not much competition among the banks, and consequently, the customer service was very poor. The situation was so bad, to the extent that customers going to the bank either to deposit or withdraw their money would waste that day on the queue. The arm- chair banking was the order of the day; whether banks' staff look for customers or not, they would come naturally. However, with the emergence of the 'new generation' banks, the trend of competition and customer service has changed entirely. The slogan 'customer is a king' became popular in the banking industry.

Marketing departments and customer service units were created in almost all the banks. Arm-chair banking became out-dated, as banks were seen all around on the streets running after customers. According to Idowu et al (2002), the increased demand for customer deposits resulted due to the fact that Nigerian banks, especially the new generation banks, have realized the imperative of good and prompt customer service. Proximity to the bank is no longer the issue: safety and the level of service (with regard to quality, speed and efficiency) has become the major imperative. Customer service is the key-word in this highly competitive environment. The only way to win and keep customers in this new millennium is to give them the most value for their money as they perceived it. Quality and a competitive price no longer guarantees success, it is merely a ticket to enter the race. Delivering superior service gives a business the winner's edge.

Few would argue against the importance of customer satisfaction being essential for customer loyalty within banking industry. However, to achieve customer satisfaction, a superior level of customer service and customer orientation is required (Bick et al, 2004). In addition, delivering offerings which comprise a competitive bundle of benefits or value to the customer is seen as crucial to an organization's ability to compete effectively in a particular market (Devlin, 2000). In their study, Bick et al (2004) found that a major difference existed between customer perceptions of the services they were receiving from their banks and their expectations of those services in South Africa.

The purpose of this paper is to examine the perceptions of banks' customers regarding services delivered by commercial banks in Kano metropolis. Hence, the following research questions were raised with the hope of answering them at the end of the study:

- RQ 1 How is the service delivered by commercial banks is perceived by
- their customers and does it meet the expectation of their customers?
- RQ 2 Is there an inverse correlation between the need of the customers for direct contact and improved electronic banking?
- RQ 3 Is there a perception that a particular commercial bank is delivering more value/service than the other banks?

#### 2.1 RESEARCH METHODOLOGY

Descriptive survey design is adopted for this study because there is no need to control the variables in the research. Although preliminary interviews with the target respondents were not conducted; but only served them with structured questionnaires which made the bulk of the research quantitative, and concentrated on information from banking customers.

#### 2.1.1 POPULATION AND SAMPLE

The population of the study comprises of all the customers of commercial banks who reside in Kano metropolis. The population constitutes working professionals and students that are active customers of these banks. These are people who would normally patronize the retail and personalized banking services in Kano. A convenience sampling technique was used. Those who completed and returned the questionnaire comprise the sample of the study. Out of the 200 questionnaires distributed, 115 were duly completed and returned.

#### 2.1.2 RESEARCH INSTRUMENT

In order to test the perceptions and expectations of banks customers within the framework of the value disciplines, a questionnaire with four sections was designed. Section A captured demographic information for the purpose of describing the sample. Section B was designed to measure customer perceptions of the value being delivered by their banks, and to measure whether or not they were willing to forego direct personal contact for the benefit of improved electronic banking. Section C was designed to measure customer expectations of the value delivered by commercial banks. Section D was designed to measure the extent to which commercial banking customers approve or disapprove marketing promises.

#### 2.1.3 DATA ANALYSIS

A total of 115 questionnaires were completed and returned. This represented a response rate of 57.5%. An additional five questionnaires were received from customers of first inland Bank, and two from customers of Zenith after the cut-off date. These were not included in the sample. The data from the completed questionnaires were analysed using descriptive statistics specifically using simple percentages and tables.

#### **3.1 LITERATURE REVIEW**

#### **3.1.2 INTRODUCTION**

This part presents a review of existing literature related to the study. In view of the nature of the research topic, the review centers on: customer value; customer perception and customer satisfaction.

#### **3.1.3 CUSTOMER VALUE**

In this section of the paper, relevant materials have been synthesized and reviewed. Customer value is created when the perception of benefits received from a transaction exceed the costs of ownership (Christopher, 1996). This can be presented thus:

Customer value = <u>Perception of benefits</u> Total cost of ownership

The marketing task is to find ways to enhance customer value by improving the perceived benefits and/or reducing the total cost of ownership. Both the numerator and the denominator of this ratio should be measured relative to competitive offers. Total cost of ownership rather than price is used here because, in most transactions, there will be costs other than price involved. In business – to – business markets, as buyers become more sophisticated, the total cost of ownership can be a critical element in the purchase decision (Ellram, 1993).

The concept of customer value is of equal importance in consumer marketing as it is in business – to – business environments. Again, according to Christopher (1996), to deliver superior customer value, the marketer must clearly define and communicate a 'value proposition', which is recognized by the target market as a better proposition than that presented by the competitors. It should also be recognized that in most markets there will be different value segments but that to be successful in any one of them, the customer value ratio must be seen to be superior to competitive offers.

#### **3.1.4 CUSTOMER PERCEPTION**

Schiffman and Kanuk (2004: 158) defined perception as the process by which an individual selects, organizes, and interprets stimuli into a meaningful and coherent picture of the world. In the other words, perception could be described as 'how people see the world around them'. Two individuals may be exposed to the same stimuli under the same apparent conditions, but how each person recognizes, selects, organizes, and interprets these stimuli is a highly individual process based on each persons needs, values, and expectations. Hence, customers interpret what they hear or see in many unique ways (LeBoeuf, 1988; Daffy, 2001). What one customer views as delightful could be seen as just average by another. Every consumer has a worldview that is already formed and which affects the product you want to sell.

According to Godin (2005), marketer should not try to change someone's worldview. Do not try to use facts to prove your case and insist they change their biases. Instead, identify a population with a certain worldview and frame a marketing communication in terms of that worldview.

Perception has a strategic implication for marketers; this is because customers make decisions based on what they perceive rather than on the basis of objective reality. Just as individuals have perceived images of themselves, they also have perceived images of products and brands. The perceived image of a product or service is probably more important than its actual physical characteristics (Schiffman and Kanuk, 2004). Products or services that are perceived favourably have a much better chance of being purchased than products or services with unclear or unfavourable image. It is very important for businesses to know their customers very closely for this will enable them to deliver the most desired products and/or services to the customers. The reason why customers patronize is logical from their point of view. Consequently, understanding customers derives from this fundamental premise. Everybody is unique, as they have individual pressures and criteria for making a purchase decisions (Fox, undated). Customer perceptions of service are determined by reliability, responsiveness, assurance, empathy, and tangibles, plus "intangible feel"; hence they should be properly managed (Daffy, 2001 and Piercy, 1995).

In view of the above; banks' customers for instance, perceive the quality of services they receive differently. However, it should be noted that it is more difficult for consumers to evaluate the quality of services than the quality of products. This is because of certain distinctive features that are inherent in services: intangibility; variability; perishability and inseparability. To overcome the difficulty that consumers normally face in comparing competing services side – by – side as they do with competing products, consumers rely on surrogate cues (i.e. extrinsic cues) to evaluate service quality.

#### **3.1.5 CUSTOMER SATISFACTION**

Satisfaction is a person's feelings of pleasure as a result of comparing a product perceived outcome in relation to his or her expectations. Consequently, if the performance exceeds the expectation, the customer is delighted. If the outcome equals the expectation, the customer is satisfied. But if the product performance falls below the expectation, then the customer is dissatisfied (Kotler and Keller, 2006:144)

Customer satisfaction is very important in shaping the customer perception favourably towards offerings, and in fact, is central to organisations' objectives. General management gurus – One of the earliest of the modern management gurus was, and is, Peter Drucker, who was writing nearly 40 years ago about the central purpose of the business being to "create a customer" (Drucker, 1958 in Piercy, 1995). In the same vein, the pursuit of excellence – perhaps the most widely-read management books of all time were "In Search of Excellence" and "Passion for Excellence", where lessons from what were believed to be the most "excellent" and "successful" companies in the world were associated with principles such as "getting close to the customer", and using measured customer satisfaction as a management tool (Piercy, 1995).

With commercial banking, the competitiveness of the providers' offerings can be expected to affect a customer's overall satisfaction and ongoing patronage. Research has shown that location is a major determinant choice (Anderson et al, 1976 and Laroche & Taylor, 1988). Another determinant of bank choice is competitive interest rates (Laroche and Taylor, 1988). Customer satisfaction is likely to be influenced by the perceived competitiveness of interest rates.

Customer complaint handling is a major reason why customers often switch service providers when it is unsatisfactorily resolved (Hart et al, 1990). When customers face a problem, they may respond by exiting (switching to a new supplier), voicing (attempting to remedy the problem by complaining) or loyalty (staying with the supplier in anticipating that 'things will get better') (Hirschman, 1970).

To date, little empirical evidence exists as to how customer product usage patterns impact on customer satisfaction. Customers or segments with different needs or usage patterns may have different determinants of customer satisfaction. In the retail banking sector, customers who use particular products (e.g. loans or mortgages) may focus on service features, such as competitive interest rates, more than customers who do not hold these products. Thus, the determinants of customer satisfaction towards the service provider may vary depending on customer or segment characteristics.

#### **COMMERCIAL BANK SERVICES**

Significant portion of the services delivered by commercial banks in Kano is retail banking. The retail banking means banking services that are supplied by banks to individual customers (Bick, Brown and Abratt; 2004). It excluded all forms of business banking and related financial products, and private banking. Retail banking have been generally classified under the following categories: transaction and payment products, such as cheque accounts and debit cards; investment products, such as saving accounts, fixed deposits and unit trusts; credit and borrowing products, such as credit cards, home loans, overdrafts and car finance; and financial planning products such as retirement annuity plans and education policies. Based on observed practices, most of the commercial banks in Nigeria offer the aforementioned assorted services.

According to Bick, Brown and Abratt (2004), retail banking is a mature industry and banks offer similar services/products. Marketing strategies in the maturity stage include consideration of market modification, product modification or changing the marketing mix.

Some confusion surrounded the concept of a 'product' in financial services. Retail banks referred to a cheque account or a credit card as a product. Actually, it is service that facilitates the exchange of value between a seller and a buyer. Devlin and Ennew (1997) see Bick et al (2004) distinguished between services features, e.g. a cheque account, and service support such as a bank teller or an Automated Teller Machine. Again, Devlin and Ennew (1997) see Bick et al (2004) noted that, the intangible nature of financial services makes it difficult to envisage the use of specific services features as the basis for establishing competitive advantage. Services cannot be patented, so service features generally can be easily copied.

Another confusion existed as to whether internet or telephone banking constitutes a product or part of the delivery mechanism of the bank. However, for the purpose of this paper, all forms of electronic banking are classified as part of the distribution channels and not products.

Obviously, service employees should not be left out in the discussion of service delivery. This is because of the inherent nature of service- inseparability; the simultaneous production and consumption nature of service. In high contact service industries, where the service is inseparable from the person providing it, the interaction between customers and service workers offers a potential means by which a firm can achieve true customer loyalty. Many researchers such as Barnes, (1995); Beatty, Mayer, Coleman, Reynolds, and Lee, (1996); Gremler and Gwinner, (1998); Gwinner, Gremler, and Bitner, (1998) (see Bove and Johnson, 2000) have maintained that customer relationships with service workers are influential in the development of true customer loyalty to a service organisation, particularly in situations of ongoing service where there is a high level of interaction required by the participants. However, there is a lack of empirical evidence to support this and little attention has been given to the mechanism by which this could be achieved (Gwinner, Gremler, and Bitner, (1998)).

Given that employees are necessary in the service delivery, by implication, they determine the perception- positive or negative- a customer will hold on the service of a company. Consequently, the person who delivers the service is of key importance to both the customer he serves and the employer he represents. To the customer, he is in fact part of the product. Thus, his ability and willingness to satisfy, his manner and appearance, all play a part in determining how satisfied the customer is with the service encounter. On the other hand, to the employer, those delivering the service can make or break the organization (Mudie and Cottam, 1993). Similarly, Hammond (2003) suggests that organizations should keep its people happy and they will make money for the firm. A happy team of motivated employees, pulling together and having fun with customers, brimming with ideas and enthusiasm, can build huge performance improvements.

Excellent service on the part of frontline employees is never a co-incidence, rather it is usually the result of a careful selection, plenty of customer service training, and a well-designed reward system. This suggests the need to properly screen and recruit the frontline staff.

#### DATA PRESENTATION AND ANALYSIS

The data collected were tabulated in tables, a simple percentage ratio calculated to show the degree of responses made by the selected respondents. The tables are followed by relevant interpretation.

Responses	Respondents	Percentage
Strongly agreed	95	83%
Agreed	20	17%
Disagreed	0	0%
Total	115	100%

Q1. Customers perceived that value of some kind is being delivered by banks

Source: field survey, March 2007

From the above table, customers certainly feel that some value of one kind or the other is being delivered by banks as 95 respondents strongly agreed to that. However, none of the respondent believes that banks do not deliver value of some sort.

Q2. The perceived value delivered differ between banks

Responses	Respondents	Percentage
Strongly agreed	89	77%
Agreed	17	15%
Disagreed	09	8%
Total	115	100%

Source: field survey, March 2007

It can be seen from the above table that most of the respondents strongly agreed that the value deliver by banks differ significantly. Only 9% disagreed with the statement.

Q3. Please indicate the level of your satisfaction with the value delivered by banks products and services.

Responses	Respondents	Percentage
Highly satisfied	75	65%
Just satisfied	34	30%
Not satisfied	06	5%
Total	115	100%

Source: field survey, March 2007

While 5% of the respondents are not satisfied with the products and services rendered by banks, the majority of the respondents think otherwise. 65 percent and 30 percent of the respondents are highly satisfied and just satisfied respectively.

Q4. What do you feel about the charges of your bank?

Responses	Respondents	Percentage
Outrageous	13	11%
High	32	28%
Reasonable	70	61%
Total	115	100%

Source: field survey, March 2007

Majority of the bank customers, that participated in the research, were comfortable with their banks' charges; as 61% percent of the respondents felt that their various banks' charges are reasonable, and only 13 respondents (representing 11%) felt that their bank charges are outrageous.

Q4. You get fair value for the banks charges you pay?

Responses	Respondents	Percentages
Agreed	45	39%
Neutral	38	33%
Disagreed	32	28%
Total	115	100%

Source: field survey, March 2007

From the above figures, although 39% of the respondents believed that they derived fair value for the charges they pay, a fairly large number of them (28%) disagreed with the statement. Also relatively large number of the respondents felt indifferent about the statement.

Q5. Does your bank engage in electronic banking?

Responses	Respondents	Percentage
Yes	97	84%
No	04	4%
No idea	14	12%
Total	115	100%

Source: field survey, March 2007

More than three-quarter of the respondents said that their respective banks engage in electronic banking. Only four respondents representing 4% said that their banks do not engage in the electronic banking.

Q6. If yes, to what extent does your bank use electronic banking in delivering services?

Responses	Respondents	Percentage
High	38	33%
Moderate	43	37%
Low	34	30%
Total	115	100%

#### Source: field survey, March 2007

While 33 percent of the respondents are of the view that their banks utilize electronic banking to a large extent, 43 respondents (representing 37%) felt that their banks moderately use electronic banking. On the other hand, 30% of the respondents said that the usage of electronic in their banks is low. This shows that till now there are substantial number of banks that are yet to start electronic bank operations.

Q7. You might decrease the level of direct contact as a trade-off for improved electronic banking

Responses	Respondents	Percentage
Agreed	74	64%
Neutral	27	24%
disagreed	14	12%
Total	115	100%

Source: field survey, March 2007

The above table indicates that quite a large number of customers prefer electronic banking than the usual conventional banking. 74 respondents (representing 64%) agreed that they are ready to reduce direct contact because of improved electronic banking. This means, both the banks and customer could benefit from the electronic banking. More often customers undergo inconveniences in direct checking transaction; and the banks, on the other hand, must have make arrangements of more cashiers/tellers at peak period.

Q8. Your bank's electronic banking facilities allow you to perform transaction easily

Responses	Respondents	Percentage
Agreed	65	57%
Neutral	35	30%
disagreed	15	13%
Total	115	100%

Source: field survey, March 2007

Only 13% of the respondents disagreed with the statement that electronic banking allows easy banking transaction and more than 50% of the respondents believed that electronic banking facilitates easy banking transaction. This corroborate the previous statement that electronic banking has simplified and made banking transaction more convenient than ever before.

Q9. What is the level of reliability of your bank's electronic facilities?

Responses	Respondents	Percentage
Highly reliable	19	16%
Just reliable	33	29%
Moderately reliable	48	42%
Unreliable	15	13%
Total	115	100%

#### Source: field survey, March 2007

While 16% and 13% of the respondents felt that the bank electronic facilities are highly reliable and unreliable respectively; a relatively large number of the respondents (42%) believed that the banks electronic facilities are moderately reliable. This presumably is because of the fact that Nigerian banks are just adopting electronic banking and they do not possess much experience and therefore, some failures are bound to occur.

Q11. Indicate the level of your satisfaction with electronic banking system

Responses	Respondents	Percentage
Highly satisfied	77	67%
Just satisfied	38	33%
Not satisfied	0	0%
Total	115	100%

Source: field survey, March 2007

Although Nigerian banks face some difficulties in operating electronically, majority of the people participating in the research (67%) were highly satisfied with the banks electronic banking and none was dissatisfied with it.

Q13. Competition affects service delivery among ba	banks	among	deliverv	service	affects	petition	Com	013.
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Responses	Respondents	Percentage
Agreed	105	91%
Neutral	10	9%
disagreed	0	0%
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Source: field survey, March 2007

Over 90% of the respondents agreed that competition in the banking industry influence service delivery, while 9% felt indifferent and none disagreed with the statement. This means that level of competition affects the nature of service delivery to a large extent.

Q14. Your bank offer better online product/services than other banks

Responses	Respondents	Percentage
Very sure	14	12%
Sure	38	33%
Not sure	63	55%
Total	115	100%

Source: field survey, March 2007

The above figures show that there is variation in terms of online services/products offered by various banks. To this effect, 12% of the respondents were very sure that their online products/services surpass that of other banks, while 33% were just sure. On the other extreme, 55% were not sure about the statement.

Q15. How do you rate convenient location of bank as a factor in bank choice?

Responses	Respondents	Percentage
Very important	88	77%
important	22	19%
Not important	5	4%
Total	115	100%

Source: field survey, March 2007

The above table shows that a convenient location of bank is a major determinant of bank choice and consequently bank patronage. While 88 respondents (representing 77%) considered location to be a very important determinant of bank choice, only 4% of the respondents felt otherwise.

## CONCLUSION

The purpose of the research was to provide satisfactory answers to the research question raised earlier on, as well as to meet the objectives of the research. In this section, the major findings with respect to the research questions and the key research objectives are summarized:

RQ1: How is the value delivered by commercial banks in Kano metropolis perceived by their customers and does it meet the expectation of the customers?

This question was answered in two parts. The first part concerns customer perceptions of the value delivered to them by commercial banks. The results were overwhelmingly positive, indicating that customer were satisfied with the services, products and level of customer service delivered by their banks.

The second aspect of the question involved customer's expectations of value. A significant leaning towards the operational excellence value resulted. This indicated that customers rated problem-free, convenient and efficient banking as the most important aspect of value. And majority of the respondents appeared to be enjoying these expectations from their various bankers.

RQ2: Is there any relationship between customer's need for direct customer contact and improved electronic banking?

The results showed that, most of the commercial banks engage in electronic banking. Although, in most of the banks, the electronic banking is just moderately reliable; still the customers preferred it against the conventional banking in the branch. They were very happy to trade off direct customer contact for the convenience of electronic banking.

RQ3: Is there a perception that a particular commercial bank is delivering more value than the other banks?

This research revealed that customers did perceived significant difference between the values offered by various commercial banks. This is presumably because of the fact that the banks possess different experiences in the adoption of electronic banking. And, in some cases, they have different electronic banking facilities of different quality.

#### REFERENCES

Bick, G.; Brown, A.B. and Abratt, R. (2004), 'Customer Perceptions of the value delivered by retail banks in South Africa', *International Journal of Bank Marketing*, Vol. 22 No. 5, 2004

Barnes, J.G. (1997), "Closeness, strength, and satisfaction: examining the nature of relationships between providers of financial services and their retail customers", *Psychology and Marketing*, Vol. 14 No. 8, pp.765-90.

Bove, L.L. and Jonhnson, L.W. (2000), 'A Customer-service Worker Relationship Model' *International Journal of Service Industry Management*, Vol. 11 No. 5, 2000, pp. 491-511

Christopher, M. (1996), 'From brand value to customer value' Journal of Marketing Practices, vol. 2 No. 1, pp 55-66

Daffy, C. (2001), Once a Customer, Always a customer: How to Deliver Customer Service that Creates Customers for life, Oak Tree Press.

Ellram, L. (1993), 'Total cost of ownership: Elements and Implications', International Journal of Purchasing and Materials Management, vol. 29 No.4

Fox, H.W. (undated), *Understanding Your Customers*, hppt: //www.i2m.org/ftp/freepubs/6005.pdf

Godin, S. (2005), All Marketers Are Liars: The Power of Telling Authentic Stories in a Low-Trust World, Portfolio

Hart, C.W.L., Heskett, J.L. and Sasser, E.W. Jr (1990), 'The profitable art of service recovery', Harvard Business Review, Vol. 68 No. 4, pp 148-156

Hammond, R. (2003), *Smart Retail: How to Turn Your Store into a Sales Phenomenon*, Richard Pearson Prentice Hall Business,

Website: http://tools.ashridge.org.uk/ashridge/vlrc.nsf/site/BRSmart.htm

Idowu, P.A., Alu, A.O. and Adagunodo, E.R. (2002), 'The Effect of Information Technology on the Growth of the Banking Industry in Nigeria', *The Electronic Journal on Information Systems in Developing Countries*, EJISDC, 10, 2, 1-8, http://www.ejisdc.org

Kotler, P. and Keller K.L. (2006), Marketing management 12<sup>th</sup> ed, Prentice-Hall, Inc, Upper Saddle River, New Jersey USA.

Laroche, M. and Taylor, T. (1988), 'An empirical study of major major segmentation issues in retail banking', nternational Journal of Bank Marketing, Vol. 6 No.1, pp 31-48

LeBoeuf, M. (1987), *How to Win Customers & Keep them for them for Life*, Berkley Publishing Group, New York USA

Levesque, T. and McDougall, G.H.G. (1996), Determinants of customer satisfaction in retail banking', International Journal of Bank Marketing, 14/7, pp 12-20

Mudie, P. and Cottam A. (1993), the Management and Marketing of Services, Butterworth-Heinemann Ltd, Oxford

Piercy, N.F. (1995), *Customer Satisfaction and the Internal Market: Marketing our customers to our employees*, Journal of Marketing Practice:Applied Marketing Science, Vol. 1 No. 1, 1995, pp. 22-44. © MCB

Schiffman L.G. & Kanuk L.L. (2004), Consumer Behaviour  $8^{\rm TH}$  ed., Peason Education Ltd, India

## APPENDIX

Q1. Customers perceived that value of some kind is being delivered by banks

Responses	Respondents	Percentage
Strongly agreed		
Agreed		
Disagreed		
Total		

Q2. The perceived value delivered differ between banks

Responses	Respondents	Percentage
Strongly agreed		
Agreed		

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Disagreed	
Total	

Q3. Please indicate the level of your satisfaction with the value delivered by banks products and services.

Responses	Respondents	Percentage
Highly satisfied		
Just satisfied		
Not satisfied		
Total		

## Q4. What do you feel about the charges of your bank?

Responses	Respondents	Percentage
Outrageous		
High		
Reasonable		
Total		

Q4. You get fair value for the banks charges you pay?

Responses	Respondents	Percentages
Agreed		
Neutral		
Disagreed		
Total		

Source: field survey, March 2007

Q5. Does your bank engage in electronic banking?

Responses	Respondents	Percentage
Yes		
No		
No idea		
Total		

Q6. If yes, to what extent does your bank use electronic banking in delivering services?

Responses	Respondents	Percentage
High		
Moderate		
Low		
Total		

Q7. You might decrease the level of direct contact as a trade-off for improved electronic banking

Responses	Respondents	Percentage
Agreed		
Neutral		
disagreed		
Total		

Q8. Your bank's electronic banking facilities allow you to perform transaction easily

Responses	Respondents	Percentage
Agreed		
Neutral		
disagreed		
Total		

Q9. What is the level of reliability of your bank's electronic facilities?

Responses	Respondents	Percentage
Highly reliable		
Just reliable		
Moderately reliable		
Unreliable		
Total		

Q10. You benefit more from electronic banking than conventional banking

Responses	Respondents	Percentage
Agreed	83	72%
Neutral	22	19%
Disagreed	10	9%
Total	115	100%

Your bank's electronic banking transactions are secured

Responses	Respondents	Percentage
Agreed		
Neutral		
disagreed		
Total		

Q11. Indicate the level of your satisfaction with electronic banking system

Responses	Respondents	Percentage
Highly satisfied		
Just satisfied		
Not satisfied		

Total

Q12. Your bank delivers its promise on the appointed time

Responses	Respondents	Percentage
Agreed		
Neutral		
disagreed		
Total		

Q13. Competition affects service delivery among banks

Responses	Respondents	Percentage
Agreed		
Neutral		
disagreed		

Q14. Your bank offer better online product/services than other banks

Responses	Respondents	Percentage
Very sure		
Sure		
Not sure		
Total		

Q15. How do you rate convenient location of bank as a factor in bank choice

Responses	Respondents	Percentage
Very important		
important		
Not important		
Total		

Q16. Indicate the level of your satisfaction with account operations in your bank

Responses	Respondents	Percentage
Very satisfied		
Just satisfied		
Not satisfied		

The expression, "Knowledge is power," is used by Lord Bacon; but it had its origin long before his time, in the saying of Solomon, that "a wise man is strong: yea, a man of knowledge increaseth strength."

Socrates said that a knowledge of our own ignorance is the first step toward true knowledge. – And Coleridge said, We cannot make another comprehend our knowledge until we first comprehend his ignorance.

"Knowledge," says Bacon, "is power"; but mere knowledge is not power; it is only possibility. Action is power; and its highest manifestation is when it is directed by knowledge. – T.W. Palmer.

# ARTICLE

# Asian Financial Crisis 1997: An Empirical Investigation

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#### ABSTRACT

Multinomial Asian Financial Crises are said to happen because of financial mismanagement due to post Bretton Woods era financial liberalization, enhancement in private sector debt, currency crises, investor panic as well as inept attitude of the governments in these countries after start of the crises. Since Taiwan is the only country that was not hit as hard as the other countries in the region due to the brunt of these crises we decided to analyze its firm structure to unfold the causes of its survival.

Our analysis reveal evidence that manager operated firms finances their growth through external finance without taking into account the profitability of the firm. Contrary to this, the owner operated firms finance their growth from earned profits. This is a possible explanation of why Taiwan was not affected seriously due to 1997 Asian financial crisis because most Taiwanese firms are operated by owners or managers who are loyal to the business of the family.

**Keywords:** owner-controlled firms; management-controlled firms; control type; financial crisis

JEL Codes: C31, C40, D92; Word Count- Main Text: 2901

### **INTRODUCTION**

East and South East Asian countries i.e. Indonesia, Republic of Korea, Malaysia, Philippines, Singapore, and Thailand encountered financial crises from July 1997 to February 1998. The worst hit among them was Indonesia whose stock market declined to about more than 80 percent and exchange rate vis-à-vis US dollar fell by almost 75 percent (Singh 1998). Although the currency crises and stock market decline was one aspect of the financial crises in these countries, the other aspects that include macroeconomic imbalances, decline in export growth, decline in property prices, as well contagion effect and state controlled financial system in these countries all are reported to be causes of the Asian financial crises.

Although there are a number of hypotheses that include capital supply shock, financial liberalization and so forth, there appeared no advance warning of such crises as international financial institution like World Bank and IMF strongly commended growth and economic development in these countries. For example, the World Bank Economist in their research in 1991 entitled "World Development Report: The Challenge of Development" claimed that East Asian countries were successful because they followed a market-friendly strategy of development and integrated their economies closely with that of the world economy assuming that governments of these countries intervene reluctantly, and if it becomes necessary, it should be transparent and should be subject to check and balances. However, later they figured it out that the governments in these countries pursue only export oriented policies and therefore, in another publication in 1993 entitled "The East Asian Miracle: Economic Growth and Public Policy" the World Bank economists significantly changed their characterization of the East Asian model because of fully acknowledged enormous government interventions in these economies.

Yilmaz Akyüz (2000) concluded that the 1997 Asian financial crises emerged due to systemic global financial instability that appeared after the collapse of the Bretton Woods systems that enhanced liberalization and mobility of international capital flows. However, some kind of financial mismanagement appeared to be common among all the East and Southeastern Asian countries that were followed by the inept attitude of the governments in these countries in implementing timely policy actions. For example, Thailand, political disarray at various times during 1996-97, including in the wake of the November 1996 general election, delayed the implementation of necessary policy measures to avert financial crises in the economy.

There are a number of arguments why 1997 Asian Financial Crises were so different and unpredictable when compared to financial turmoil experienced in other parts of the world. Most financial crises in the post-Bretton Woods era are said to happen because of a combination of currency instability with banking crises, which has historically been preceded particularly by financial liberalization of the economy. That is the reason why all episodes of financial crises started by sharp increase in capital inflows followed by a similar turnaround which caused the world economy to witness consecutive repeated bouts of financial instability in early 90s i.e. a debt deflation in the United States and thereafter the crisis in Europe in 1992–1993 which was followed by the Mexican crisis of 1994–1995 and by the East Asian crisis beginning in 1997, and thereafter crises in Brazil and in the Russian Federation. Needless to say that world economy also witnessed repeated bouts of financial crises in transition economies particularly in Finland because of liberalization of the financial sector in the economy.

Another argument why financial crises in emerging markets occurred under varying macroeconomic conditions e.g. current-account deficits, budget deficits and external

debts. For example crises in Mexico and Thailand occurred when these countries had large and unsustainable current-account deficits, although in Indonesia and the Russian Federation such deficits where very small. However, financial crises in Brazil and the Russian Federation were coupled with large budget deficits and the debts were owed primarily by the public sector whereas both Mexico and East Asia had either balanced or surplus budgets and debts were owed primarily by the private sector. Finally, Brazil, Mexico and the Russian Federation all experienced financial crises due to currency turmoil that happened in bringing down the inflation but in most these East Asian countries the appreciation of the currency was moderate or negligible.

Out of all these episodes of financial crises, the Asian crisis was generally more difficult to predict than the Mexican, Russian or Brazilian crises. This is important because these economies had been examples of prudent and sustainable economic policies. The crisis in East Asia, like crises almost everywhere else, was preceded by a sharp increase in capital flows to the region. Starting in the early 1990s, there was a rapid increase in short-term lending by commercial banks to both banks and firms in the region. Most bank lending was non-syndicated that was directed to non-financial private firms. Such transactions must have been perceived to be profitable by both international lenders and the Asian borrowers. However, it turned out that more capital flowed into these economies than could have been profitably used at modest risk; i.e. there was a misjudgment of return and risks by both lenders and borrowers. Pomerleano (1998) noted that there was an excessive investment in these countries without taking into account poor returns on these investments.

A number of researchers that include Radelet and Sachs (1998), Marshall (1998), and Chang and Velasco (1999) demonstrate that the Asian crises in 1997 propagated over time mainly because of sudden shifts in market expectations and confidence followed by regional contagion. While admitting the worsening of the macroeconomic performance of some affected countries in the mid-1990s, this view suggests that the extent and depth of the crisis should not be attributed to deterioration in fundamentals, but rather to panic on the part of domestic and international investors. According to this view, fundamental imbalances triggered the currency and financial crisis in 1997 even after the crisis started; market overreaction caused the plunge in exchange rates, assets prices, and economic activity more severe than what one would have expected because of initial weak economic conditions in these countries.

In the present research, however, we argue that Asian crises and any other crises can be averted with macroeconomic policy that has microeconomic foundations. As mentioned in the previous paragraphs, most debts were owed by private sectors and government policies of intervention were not followed and as such the policy actions were inept at the start of the crises. We do not argue for financial liberalization nor we have a counter proposal on it but we think that there should be some kind of financial discipline at firm level that should be related to a typical external financing that might help a situation where excessive financial mobility would be minimized to support the related macroeconomic policy that could avert a future financial crises like 1997 Asian Financial Crises. For the same reason, we study conservative financial firm structure of Taiwanese firms if that was the reason why Taiwan was not much affected by the 1997 Asian Financial Crises as hard as other countries in the region did.

#### **RELATED LITERATURE**

Despite substantial growth in corporate culture in developed countries especially in North America, the question whether ownership should be separated from control is still un-answered although researchers since Berle and Means (1932) have been trying to explore whether firm ownership should be separated from control because mangers tend to obviate from profit or present-value maximization of the firms (Lee 1990) and set other goals such as lifetime income (Mosen and Downs 1965), sales volume (Baumol 1959), growth rate (Marris 1964), or staff expenditure (Williamson 1964). Indeed, managers' profit-satisficing behavior might be acceptable to some owners (Colli 2003) who operate family-run and closely-held firms because they might have additional goals distinct from pure profit-maximization. That is why Penrose (1995) characterizes firm owners in two categories, which are productminded entrepreneurs and empire builders.

Although this is the main principle in the context of agency theory, its innovation is the result of a misaligning of interests between Berle and Means, as Berle saw a project with a new conception of property, contrary to Means who recommend separation of management from control (Nodoushani and Nodoushani 1999). Because of asymmetric information due to separation of ownership from control, highly dispersed stockholders will not be able to evaluate managers' performance (Jensen and Meckling 1976). Moreover, separation of ownership from control is the cause of asymmetric information in corporate relationships, which could lead to different business behaviors. To solve this problem, Leibenstein (1966) suggests tying managers' compensation with their performance. However, managerial performance is more likely to become unsatisfactory when a corporation attains significant market power (Williamson 1964), or capital market imperfections develop (Smiley 1976), or managers do not receive ample incentives in their contracts (Williamson 1985), or when it is difficult to replace managers (Fama 1980).

Compared to the United States of America, Taiwan has family-owned or controlled corporate enterprises that tend to have a large degree of separation of ownership from control in the Asian region (Claessens, Djankov, and Lang (2002). Separation

of ownership from control in large firms in Taiwan is evident but is often illusionary because managers may be picked on the basis of loyalty to the family than competence. In addition, corporate governance structures in Asia are not very well organized and there is a great risk of minority shareholder rights expropriation (Claessens and Fan, 2002; Johnson *et al.* 2000). This can lead to higher profitability but reduces accountability, which can be attributed to be one of the factor that caused late 1990s Asian financial crises (Iu and Batten, 2001).

Indeed, separation of ownership and control can lead to an inability to monitor managerial performance in the context of highly dispersed stockholders (Jensen and Meckling 1976). Thus, a firm can be thought of as a nexus of contracts and the growth of the corporation could be attained through reduction of transaction costs (Coase 1937). However, the complexity of corporate relationships leads to asymmetric information that is why New Institutional Economics argues that the separation of ownership from control may lead to different business behaviors.

In the present research, we focus on the possibility of growth maximization of the firm as well as investigate if the interests of managers and owners are misaligned. Therefore, in the analysis, a managerial growth constraint is incorporated to anticipate the possible impact of control type on financial crises. Moreover, we investigate how Taiwan was able to weather the storm of the Asian financial crises in 1997, a problem that others including Wang (2000) have investigated at more macroeconomic rather than firm level. The remaining paper is organized as follows. Section 2 incorporates related literature, and in section 3 we present an overview of corporate governance in Taiwan. Section 4 presents our empirical approach and discussions. Finally section 5 incorporates conclusion that can be drawn from the paper.

# CORPORATE GOVERNANCE IN TAIWAN

Compared to the U.S.A., Taiwan has a higher degree of family-owned or controlled large corporate enterprises. Claessens, Djankov, and Lang (2002) noted that there tends to be a large degree of separation of management from control within family firms in the Asian region, especially in Taiwan. This separation of management from control is evident within the larger firms in Taiwan, exhibiting a similar pattern to that of the United States, but this separation is often illusionary because managers may be picked more on the basis of loyalty to the family than due to managerial competence. Thus, while in the United States, managers may rise due to managerial competence but have little loyalty to the interests of the corporation, Taiwanese managers may be more loyal but less managerially competent. In addition, corporate governance structures in Asia are not very well organized and there is a great risk of minority shareholder rights expropriation (Claessens and Fan 2002; Johnson *et al* 2000). This can lead to greater profitability in some respects but it reduces

accountability, which has been noted as one factor causing the East Asian economic crisis of the late 1990s (Iu and Batten 2001).

We would expect that there will be differences between management-controlled firms and owner-controlled firms. Given that members of families tend to exhibit similar preferences on risk and that family owned businesses may be seen as having an importance to the family that goes beyond profit considerations, we would expect that family controlled businesses would engage in practices that would be more risk averse and thus would lead to reduced profitability in the short run, but greater likelihood of survival. We do not directly test the profitability question in this paper but if firms undertake a conservative approach to financing growth this would be consistent with our hypothesis that owner controlled firms will finance growth out of profits while manager controlled will use equity and leveraging strategies for firm growth.

#### **EMPIRICAL APPROACH**

Our analysis draws heavily from the results contained in Chen, Kiani, and Madjid-Sadjadi (2007) wherein they employed data from 300 Taiwanese corporations which were they obtained from the publications of the Taiwanese Management Securities Commission volume 20, No.1 2002, and the Review of the Investment Information No. 12, 2000. In their analysis, Kiani and Madjid-Sadjadi (2007) segregated the selected Taiwanese firms in various groups using discriminant analysis, and incorporated managerial resource constraint in the analysis due to Penrose (1995) to discipline managers. Further, they concluded that control type had significant effect on the firm growth in Taiwan.

Taiwanese firms are controlled by family relationship. In this context Godajlovic and Shapiro (2005) maintained that Taiwanese firms are controlled more by family relationships than would be obvious by merely looking at the extent of holdings by these individuals. Thus, the control of Taiwanese firms is maintained through cultural norms and placement in management from the members of the family or those who are loyal to the family.

The chief hypothesis of interest of this research is whether control type has an impact (if any) on the growth of the firms as well as if the firm data would be advantageous to explain the reasons how Taiwan escaped from the 1997 Asian financial crises whereas other did not. Our results that are based on the results drawn from in Chen, Kiani and Madjid-Sadjadi (2007) show that because of conservative corporate structure most Taiwanese corporations are controlled by the owners or the manager loyal to the family. These firms finance their growth from earned profits rather than borrowed funds. This is crucial in understanding why Taiwan suffered for less in the 1997 Asian Financial crises that did other economies in the region.

#### DISCUSSIONS

Glancey (1998) notes that among entrepreneurs who have not ceded control, larger firms grow faster than smaller firms and younger firms grow faster than the well-established firms. James (1999) suggested that family firms where management and control are interwoven allow them to have longer time horizons than firms where management-control is present. In addition, agency costs are reduced, enabling greater profitability.

Managerial-controlled firms are more likely to exhibit a tendency towards a shorter time horizon associated with a need to address maximization of the present-value of the firm via stock price changes (the traditional mechanism for determining profit maximization of corporations within the neoclassical framework), while family firms may be more concerned with riskier long-term goals (Harris, Martinez and Ward 1994). At the same time, arguments between family owners may provide a greater degree of managerial autonomy even with close corporate supervision as managers align themselves with one faction or another (Davis and Harveston 2001). Alternatively, when managers see themselves serving the interests of the family, or when they come from the family itself, this can lead to greater strategy cohesion compared to non-family firms (Ensley and Pearson 2005).

Most Asian countries that faced the 1997 financial crisis borrowed heavily for financing their growth because a common reason for sustainability of high growth in these countries was excessive investment through debt financing without taking into account the poor returns on these investments (Pomerleano 1998). However, because of the conservative corporate structure where most firms have a strongly binding growth constraint, Taiwan was able to weather the storm better than the other East Asian countries.

#### CONCLUSION

This paper is an extension to Chen, Kiani and Madjid-Sadjadi (2007) wherein the empirical validity of the growth hypothesis due to Berle and Means (1935) is investigated. The analysis includes managers' resource constraint that impedes the managers' actions to deviate from shareholders goals. Therefore, the present research investigates the reasons that made Taiwan get away from the 1997 Asian financial crises.

Since most Taiwanese firms are owner controlled or controlled by the managers loyal to the family, management of these firms finance their growth from the earned profits. Interestingly, such firms willingly obviate opportunities for risky short term profits in exchange for steady long term sustainability. Based on these observations, we can conclude that most Taiwanese firm did not finance their growth from external borrowings; Taiwan was saved from the brunt of the 1997 Asian financial crises.

#### REFERENCES

Berle, A., and G. Means 1935, *The Modern Corporation and private property*, New York: McGraw-Hill.

Baumol, William J., 1959, *Business Behavior, value and growth*. New York: Macmillan.

Chang, R., and A. Velasco, 1999, Liquidity crises in emerging markets: Theory and policy. NBER Working Paper Series No. 7272, National Bureau of Economic Research, Massachusetts.

Chen, E. Kiani, K. and Madjid-Sadjadi, Z. 2007, Impact of Control Type on Firm Growth in Taiwan, *International Journal of Applied Economics*, 4(1), 76-84.

Claessens, Stijn, Simion Djankov, and Larry Lang, 2000, The separation of ownership and control in East Asian Corporations, *Journal of Financial Economics* 58: 81-112.

Claessens, Stijn, and Joseph Fan, 2002, Corporate governance in Asia: A Survey, *International Review of Finance* 3: 71-103.

Coase, Ronald, 1937, The nature of the firm, *Economica* 4: 386-405.

Colli Andrea, 2003, *The history of family business, 1850-2000*, Cambridge University Press: Cambridge England.

Davis, Peter S., and Paula D. Harveston, 2001, The phenomenon of substantive conflict in the family firm: A cross-generational study, *Journal of Small Business Management*, 39: 14-30.

Ensley, Michael D., and Allison W. Pearson, 2005, An exploratory comparison of the behavioral dynamics of top management teams in family and nonfamily new ventures: cohesion, conflict, potency, and consensus, *Entrepreneurship Theory and Practice*, 29: 267-284

Fama, Eugene, 1980, Agency problems and the theory of the firm, *Journal of Political Economy* 88: 288-307.

Glancey, K., 1998, Determinants of Growth and Profitability in Small Entrepreneurial Firms," *International Journal of Entrepreneurial Behaviour and Research* 4(1): 18-27.

Godajlovic, Eric, and Daniel M. Shapiro, 2005, Ownership structure and firm profitability in Japan, *Academy of Management Journal* 45: 565-575.

Harris, Dawn, Jon Martinez, and John Ward, (1994), Is Strategy Different for the Family-Owned Business, *Family Business Review* 7: 159-174.

Iu, Justin, and Jonathan Batten, 2001, The Implementation of OECD corporate governance principles in post-crisis Asia, *Journal of Corporate Citizenship* 4: 47-61.

James, Harvey, 1999, Owner as Manager, Extended Horizons and the Family Firm, *International Journal of the Economics of Business*, 6: 41-55.

Jensen, M., and W. Meckling, 1976, Theory of the firm: managerial behavior, agency costs and ownership structure, *Journal of Financial Economics* 3; 305-60.

Johnson, Simon, Peter Boone, Alasdair Breach, and Eric Friedman, 2000, Corporate Governance in the Asian Financial Crisis, *Journal of Financial Economics* 58: 141-186.

Lee, Frederic S., 1990, The modern corporation and Gardiner Means's critique of neoclassical economics, *Journal of Economic Issues*, XXIV (September): 673-691.

Leibenstein, Harvey, 1966, Allocative efficiency vs. X-efficiency, *American Economic Review* 56:392-415.

Marshall, D., 1998, Understanding the Asian Crisis: Systemic Risk as Coordination Failure, Economic Perspective Third Quarter:13-28. Federal Reserve Bank of Chicago.

Morris, Robin, 1964, *The Economic Theory of Managerial Capitalism*, London: Macmillan.

Mosen Joseph, and Anthony Downs, 1965, A theory of large managerial firms, *Journal of Political Economy* 73: 221-236.

Nodoushani, Omid, and Patricia A. Nodoushani, 1999, The debate on corporate governance: an historical analysis of Berle and Means contributions, *The Journal of Behavioral and Applied Management*, 1: 55-66.

Pomerleano, Michael, 1998, The East Asia and Corporate Finances: the Untold Micro story. Working paper, World Bank, October.

Penrose, Edith 1995, *The Theory of the Growth of the Firm*. New York: Oxford University Press.

Radelet, S., and J. Sachs, 1998, The Onset of the East Asian Financial Crisis. NBER Working Paper Series No. 6680, National Bureau of Economic Research, Massachusetts.

Singh, Agit, 1998, Asian Capitalism and the Financial Crisis, Center for Economic Policy Analysis (CEPA) Working Paper Series III, Working Paper No. 10, New York, NY.

Smiley, Robert H., 1976, Tender Offers, Transaction Costs and the Theory of the Firm, *Review of Economics and Statistics* 58: 22-32.

Radelet, S., and J. Sachs, 1998, The Onset of the East Asian Financial Crisis. NBER Working Paper Series No. 6680, National Bureau of Economic Research, Massachusetts.

Wang, Jiann-Chyuan, 2000, Taiwan and the Asian financial crises: Impact and response. In Chow, Peter, C. and Gill, Bates, (eds). *Weathering the Storm: Taiwan, its Neighbors, and the Asian Financial Crises*. Washington D.C.: Brookings Institute.

Williamson, Oliver E., 1964, *The Economics of Discretionary Behavior: Managerial Objectives in a Theory of the Firm.* Englewood Cliffs, NJ: Prentice-Hall.

\_\_\_\_ 1985, The Economic Institutions of Capitalism, New York: Free Press.

World Bank, 1993, The East Asian Miracle: Economic Growth and Public Policy, New York: Oxford University Press for the World Bank.

World Bank, 1991, World Development Report: The Challenge of Development, NewYork: Oxford University Press for the World Bank.

Yilmaz, Akyüz, 2000, Causes and Sources of the Asian Financial Crisis, Symposium on Economic and Financial Recovery in Asia, UNCTAD X, Bangkok, 17 February 2000.

# DISCUSSION

# A Panel Data Analysis of Working Capital Management Policies

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# ABSTRACT

The present study investigates into the traditional relationship of working capital management and firm's profitability. Using panel data set for the period of 1998-2005, the impact of aggressiveness of working capital investment and financing policies have been evaluated on return on assets as well as Tobin's q. Managers can create value if they are adopting for a conservative approach towards working capital investment and working capital financing policies. However, if firms are having aggressive approach to manage the short term liabilities, investors give more value to those firms in stock markets.

**Keywords:** working capital, aggressiveness, conservativeness, profitability, panel data

# INTRODUCTION

The corporate finance literature has traditionally focused on the study of long-term financial decisions, particularly investments, capital structure, dividends or company valuation decisions. However, short-term assets and liabilities are important components of total assets and needs to be carefully analyzed. Management of these short-term assets and liabilities warrants a careful investigation since the working capital management plays an important role for the firm's profitability and risk as well as its value (Smith, 1980). Efficient management of working capital is a fundamental part of the overall corporate strategy to create the shareholders' value. Firms try to keep an optimal level of working capital that maximizes their value (Howorth and Westhead 2003, Deloof 2003, Afza and Nazir 2007).

In general, from the perspective of Chief Financial Officer (CFO), working capital management is simple and a straightforward concept of ensuring the ability of the organization to fund the difference between the short term assets and short term liabilities (Harris 2005). However, a "Total" approach should be followed which cover all the company's activities relating to vendor, customer and product (Hall 2002). In practice, working capital management has become one of the most important issues in the organizations, where many financial executives are struggling to identify the basic working capital drivers and the appropriate level of working

capital (Lamberson 1995). Consequently, companies can minimize risk and improve the overall performance by understanding the role and drivers of working capital.

A firm may adopt an aggressive working capital management policy with a low level of current assets as percentage of total assets or it may also used for the financing decisions of the firm in the form of high level of current liabilities as percentage of total liabilities. Excessive levels of current assets may have a negative effect on the firm's profitability; whereas, a low level of current assets may lead to lower level of liquidity and stockouts resulting in difficulties in maintaining smooth operations (Van Horne and Wachowicz 2004).

The main objective of working capital management is to maintain an optimal balance between each of the working capital components. Business success heavily depends on the ability of financial executives to effectively manage receivables, inventory, and payables (Filbeck and Krueger 2005). Firms can reduce their financing costs and/or increase the funds available for expansion projects by minimizing the amount of investment tied up in current assets. Most of the financial managers' time and effort are allocated in bringing non-optimal levels of current assets and liabilities back toward optimal levels (Lamberson 1995). An optimal level of working capital would be the one in which a balance is achieved between risk and efficiency. It requires continuous monitoring to maintain proper level in various components of working capital i.e. cash receivables, inventory and payables etc.

In general, current assets are considered as one of the important component of total assets of a firm. A firm may be able to reduce the investment in fixed assets by renting or leasing plant and machinery, whereas, the same policy cannot be followed for the components of working capital. The high level of current assets may reduce the risk of liquidity associated with the opportunity cost of funds that may have been invested in long-term assets. The impact of working capital policies on profitability is highly important, however, a little empirical research has been carried out to examine this relationship. This paper investigates the potential relationship of aggressive/conservative policies with the accounting and market measures of profitability of Pakistani firms using panel data set for the period of 1998-2005. The present study is expected to contribute to better understand these policies and their impact on profitability especially in the emerging markets like Pakistan.

# LITERATURE REVIEW

Many researchers have studied financial ratios as a part of working capital management; however, very few of them have discussed the working capital policies in specific. Some earlier work by Gupta (1969) and Gupta and Huefner (1972) examined the differences in financial ratio averages between industries. The conclusion of both the studies was that differences do exist in mean profitability,

activity, leverage and liquidity ratios amongst industry groups. Johnson (1970) extended this work by finding cross-sectional stability of ratio groupings for both retailers and primary manufacturers. Pinches et al. (1973) used factor analysis to develop seven classifications of ratios, and found that the classifications were stable over the 1951-1969 time periods.

Chu et al. (1991) analyzed the hospital sectors to observe the differences of financial ratios groups between hospital sectors and industrial firms sectors. Their study concluded that financial ratios groups were significantly different from those of industrial firms' ratios as well these ratios were relatively stable over the five years period. Sathyamoorthi (2002) focused on good corporate governance and in turn effective management of business assets. He observed that more emphasis is given to investment in fixed assets both in management area and research. However, effective management of working capital has been receiving little attention and yielding more significant results. He analyzed selected Co-operatives in Botswana for a period of 1993-1997 and concluded that an aggressive approach has been followed by these firms during all the four years of study.

Filbeck and Krueger (2005) highlighted the importance of efficient working capital management by analyzing the working capital management policies of 32 non-financial industries in USA. According to their findings significant differences exist between industries in working capital practices over time. Moreover, these working capital practices, themselves, change significantly within industries over time. Similar studies are conducted by Gombola and Ketz (1983), Soenen (1993), Maxwell et al. (1998), and Long et al. (1993).

However, Weinraub and Visscher (1998) have discussed the issue of aggressive and conservative working capital management policies by using quarterly data for a period of 1984 to 1993 of US firms. Their study looked at ten diverse industry groups to examine the relative relationship between their aggressive/conservative working capital policies. The authors have concluded that the industries had distinctive and significantly different working capital management policies. Moreover, the relative nature of the working capital management policies exhibited remarkable stability over the ten-year study period. The study also showed a high and significant negative correlation between industry asset and liability policies and found that when relatively aggressive working capital asset policies are followed they are balanced by relatively conservative working capital financial policies.

In literature, there is a long debate on the risk/return tradeoff between different working capital policies (Pinches 1991, Brigham and Ehrhardt 2004, Moyer et. al. 2005, Gitman 2005). More aggressive working capital policies are associated with higher return and higher risk while conservative working capital policies are concerned with the lower risk and return (Gardner et al. 1986, Weinraub and

Visscher 1998). Working capital management is important because of its effects on the firm's profitability and risk, and consequently its value (Smith, 1980). Greater the investment in current assets, the lower the risk; but also the lower the profitability obtained. In contradiction, Carpenter & Johnson (1983) provided empirical evidence that there is no linear relationship between the level of current assets and revenue systematic risk of US firms; however, some indications of a possible non-linear relationship were found which were not highly statistically significant.

For the first time, Soenen (1993) investigated the relationship between the net trade cycle as a measure of working capital and return on investment in U.S firms. The results of chi-square test indicated a negative relationship between the length of net trade cycle and return on assets. Furthermore, this inverse relationship between net trade cycle and return on assets was found different across industries depending on the type of industry. A significance relationship for about half of industries studied indicated that results might vary from industry to industry. Another aspect of working capital management has been analyzed by Lamberson (1995), who studied how small firms respond to changes in economic activities by changing their working capital positions and level of current assets and liabilities. Current ratio, current assets to total assets ratio and inventory to total assets ratio were used as measure of working capital, while index of annual average coincident economic indicator was used as a measure of economic activity. Contrary to the expectations, the study found that there is very small relationship between changes in economic conditions and changes in working capital.

In order to validate the results found by Soenen (1993) on large sample and with longer time period, Jose et al. (1996) examined the relationship between aggressive working capital management and profitability of US firms using Cash Conversion Cycle (CCC) as a measure of working capital management (where a shorter CCC represents the aggressiveness of working capital management). The results indicated a significant negative relationship between the cash conversion cycle and profitability, indicating that more aggressive working capital management is associated with higher profitability. Shin and Soenen (1998) concluded that reducing the level of current assets to a reasonable extent increases firms' profitability. Later on, Deloof (2003) analyzed a sample of large Belgian firms during the period 1992-1996 and the results confirmed that Belgian firms can improve their profitability by reducing the number of days accounts receivable are outstanding and reducing inventories. Teruel and Solano (2005) suggested that managers can create value by reducing their firm's number of days accounts receivable and inventories. Similarly, shortening the cash conversion cycle also improves the firm's profitability.

From another angle, Chiou and Cheng (2006) have analyzed the determinants of working capital management by using net liquid balance and working capital requirements of a firm as measures of working capital management of a firm. The

paper explored that how working capital management of a firm is influenced by the different variables like business indicators, industry effect, operating cash flows, growth opportunity for a firm, firm performance and size of firm. Economic recession, age and firm size were relating to working capital requirements positively and significantly, whereas, cycle, leverage, operating cash flow; growth and return on assets were having significant negative relationship with firm's requirements of working capital. The result showed that firms operate on a loose working capital policy in the times of economic recession because it is hard to acquire external capital during recession so a relatively higher level of liquid assets is maintained.

In the Pakistani context, Rehman (2006) investigated the impact of working capital management on the profitability of 94 Pakistani firms listed at Islamabad Stock Exchange (ISE) for a period of 1999-2004. He studied the impact of the different variables of working capital management including Average Collection Period, Inventory Turnover in Days, Average Payment Period and Cash Conversion Cycle on the Net Operating Profitability of firms. He concluded that there is a strong negative relationship between above working capital ratios and profitability of firms. Furthermore, managers can create a positive value for the shareholders by reducing the cash conversion cycle up to an optimal level. Similar studies on working capital and profitability includes Smith and Begemann (1997), Howorth & Westhead (2003), Ghosh & Maji (2004), Eljelly (2004), and Lazaridis and Tryfonidis (2006).

Finally, Afza and Nazir (2007) investigated the relationship between the aggressive/conservative working capital policies for seventeen industrial groups and a large sample of 263 public limited companies listed at Karachi Stock Exchange using cross sectional data for a period of 1998-2003. Using ANOVA and LSD test, the study found significant differences among their working capital investment and financing policies across different industries. Moreover, rank order correlation confirmed that these significant differences were remarkably stable over the period of six years of study. Finally, ordinary least regression analysis found a negative relationship between the profitability measures of firms and degree of aggressiveness of working capital investment and financing policies. The current study further validates the impact of the degree of aggressiveness of working capital policies on market measures of profitability i.e. Tobin's q using panel data approach.

# **RESEARCH METHODOLOGY**

#### VARIABLES OF THE STUDY

The study used aggressive investment policy and aggressive investment policy as measuring variables of working capital management as used by Weinraub and Visscher (1998), who analyzed working capital policies of 126 industrial firms in US market. Aggressive Investment Policy (AIP) results in minimal level of investment

in current assets versus fixed assets. In contrast, a conservative investment policy places a greater proportion of capital in liquid assets with the opportunity cost of lesser profitability. As the level of current assets increased in proportion to the total assets of the firm, the management is being more conservative in managing the current assets of the firm. In order to measure the degree of aggressiveness of **Working Capital Investment Policy**, following ratio has been used:

= Total Current Assets (TCA) = Total Assets (TA) : Where a lower ratio means a relatively aggressive policy.

On the other hand, **Aggressive Financing Policy** (**AFP**) utilizes higher levels of current liabilities and less long-term debt. In contrast, a conservative financing policy uses more long-term debt and capital and less current liabilities. The firms are more aggressive in terms of current liabilities management if they are concentrating on the use of more current liabilities, which put their liquidity on risk. The degree of aggressiveness of a financing policy adopted by a firm will be measured by **Working Capital Financing Policy** and following ratio has been used:

= Total Current Liabilities (TCL) = Total Assets (TA) : Where a higher ratio means a relatively aggressive policy.

The impact of working capital policies on the profitability has been analyzed through *accounting measures* of profitability as well as *market measures* of profitability i.e. *Return on Assets (ROA)* and *Tobin's Q*. These variables of return are calculated as:

	Net Earnings after Taxes (NEAT)
<b>Return on Assets (ROA)</b> =	Book Value of Assets (BVA)

Tobin's q compares the value of a company given by financial markets with the value of a company's assets. A low q (between 0 and 1) means that the cost to replace a firm's assets is greater than the value of its stock. This implies that the stock is undervalued. Conversely, a high q (greater than 1) implies that a firm's stock is more expensive than the replacement cost of its assets, which implies that the stock is overvalued. It is calculated as:

**Tobin's** q =  $\frac{\text{Market Value of Firm (MVF)}}{\text{Book Value of Assets (BVA)}}$ 

Where:

: Market Value of Firm (MVF) is the sum of Book Value of long plus short term and market value of equity. Market value of equity is calculated by multiplying the number of shares outstanding with the current market price of the stock in a particular year.

#### **CONTROL VARIABLES**

In working capital literature, various studies have used the control variables along with the main variables of working capital in order to have an apposite analysis of working capital management on the profitability of firms (Lamberson 1995; Smith & Begemann 1997; Deelof 2003; Eljelly 2004; Teruel and Solano 2005; Lazaridis and Tryfonidis 2006). On the same lines, along with working capital variables, the present study has taken into consideration some control variables relating to firms like the size of the firm, the growth in its sales, and its financial leverage. The size of the firm (SIZE) has been measured by the logarithm of its total assets as the original large value of total assets may disturb the analysis. The growth of firm (GROWTH) is measured by variation in its annual sales value with reference to previous year's sales  $[(Sales_t - Sales_{t-1})/Sales_{t-1}]$ . Moreover, the financial leverage (LVRG) has been taken as the debt to equity ratio of each firm for the whole of sample period. Some researchers like Deloof (2003), in his study of large Belgian firms, also considered the ratio of fixed financial assets to total assets as a control variable; however, this variable can not be included in current study because of unavailability of appropriate data as most of firms don't disclose the full information in the financial statements. Finally, since good economic conditions tend to be reflected in a firm's profitability (Lamberson 1995), this phenomenon has been controlled for the evolution of the economic cycle using the variable GDPGR, which measures the real annual GDP growth in Pakistan for each of the study year of 1998-2005.

#### STATISTICAL ANALYSIS

The impact of aggressive and conservative working capital policies on the profitability of the firm has been evaluated through applying the panel data regression analysis. The performance variables (ROA, and Tobin's q) as well as the TCA/TA and TCL/TA along with the control variables have been regressed in SPSS software. The following regression equations are run to estimate the impact of working capital policies on the profitability measures.

**ROA**<sub>i</sub> =  $\alpha$  +  $_1(TCA/TA_i)$  +  $_2(SIZE_i)$  +  $_3(GROWTH_i)$  +  $_4(LVRG_i)$  +  $_5(GDPGR_i)$  +  $\varepsilon$  ......(1) **Tobin's**  $\mathbf{q}_i = \alpha$  +  $_1(TCA/TA_i)$  +  $_2(SIZE_i)$  +  $_3(GROWTH_i)$  +  $_4(LVRG_i)$  =  $_5(GDPGR_i)$  +  $\varepsilon$  ......(2)

#### And

 $\mathbf{ROA}_i = \alpha + {}_{1}(\mathrm{TCL/TA}_i) + {}_{2}(\mathrm{SIZE}_i) + {}_{3}(\mathrm{GROWTH}_i) {}_{4}(\mathrm{LVRG}_i) {}_{5}(\mathrm{GDPGR}_i) + {}_{\epsilon} \dots \dots (3)$ 

**Tobin's**  $\mathbf{q}_i = \alpha + \frac{1}{1}(\text{TCL/TA}_i) + \frac{2}{3}(\text{SIZE}_i) + \frac{3}{3}(\text{GROWTH}_i) + \frac{1}{4}(\text{LVRG}_i) + 5$ (GDPGR<sub>i</sub>) +  $\varepsilon$  ......(4)

Where:

$TCA/TA_i$	=	Total Current Assets to Total Assets Ratio
TCL/TA <sub>i</sub>	=	Total Current Liabilities to Total Assets Ratio
$ROA_i$	=	Return on Assets
Tobin's q <sub>i</sub>	=	Value of q
$SIZE_i$	=	Natural Log of Firm Size
GROWTH i		Growth of Sales
$LVRG_i$	=	Financial Leverage of Firms
$GDPGR_i$	=	Real Annual GDP Growth rate of Pakistan
	=	intercept
3	=	error term of the model

# SAMPLE & DATA

The total population of the study is all non-financial firms listed at Karachi Stock Exchange. Karachi Stock Exchange (KSE) has divided the non-financial firms into various industrial sectors based on their nature of business. In order to be included in the population, firms must be in their businesses for the whole study period. Neither of the firms should be de-listed by the Karachi Stock Exchange (KSE) nor should it be merged with any other firm during the whole window period. The merged and de-listing from the Karachi Stock Exchange, due to any reason/restriction imposed by the regulators, make the firm ineligible to be included in the study. New incumbents in the market during the study period have also not included in the population. Furthermore, firms must have complete data for the period of 1998-2005. Firms with negative equity during the study period have also removed for the population of study leaving us with the final population of 204 non-financial firms from 17 various industrial sectors. The whole population has been taken as the sample for analysis of working capital policies.

The study has used annual financial data of 204 non-financial firms for the period of 1998-2005. The panel data set has been developed for eight years of study and 204 sampled firms which produced 1632 year-end observations. For the data collection purpose, various sources have been utilized. The book based required financial data of these firms was obtained from the companies' annual reports and publications of

State Bank of Pakistan. The data regarding annual average market prices has been collected from the daily quotations of Karachi Stock Exchange (KSE).

#### ANALYSIS

Some descriptive statistics have been reported in Table 4.1 for the study variables. There are 1632 observations for the panel data set for 204 non financial firms over the 8 years of period from 1998-2005. The firms tend to keep, on average, more than fifty percent of their total assets in the current portion which varies from 4% to 98%. Whereas, the level of current liabilities is found to be approximately 45% of the total liabilities which also ranges from 4% to 94% on the extreme values. The average size of the studied firms is found to be 4000 millions rupees where the smallest firm has 50 millions rupees and largest firm has 134 billions rupees of total assets. The mean growth rate of the sales of the sample for 204 firms is a bit low i.e. 16.65% with the huge variation of 140% in the sales. The average real annual Gross Domestic Product (GDP) growth rate for the last eight years of study is 4.72% with 8.96% at the highest growth. Some other descriptive statistics regarding the variables of study are also given in Table 4.1.

Table 4.1: Descriptive Statistics
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Variable	Ν	Minimum	Maximum	Mean	SD
Investment Policy	1632	.0379	.9769	.5354	.202
Financing Policy	1632	.0445	.9406	.4425	.169
Size (in million rupees)	1632	49.92	134433.64	4012.89	11895.81
Growth of Sales (%)	1632	-201	495	16.65	140.97
GDP Growth (%)	1632	1.97	8.96	4.72	2.19
Leverage	1632	-88.68	84.14	2.71	14.02
ROA (%)	1632	-19.68	67.68	5.68	11.31
Tobin's Q	1632	.29	18.09	1.14	1.12

Table 4.2 represents the result of regression model in which the impact of working capital investment policy on performance measurements has been examined. The F-values of regression models run are found statistically significant whereas Durbin-Watson statistics of more than 1.8 indicating less correlation between the independent variables of the regressions models. The t-statistics of working capital investment policy is positive and statistically significant at 1%level for Return on Assets and Tobin's q. The positive coefficient of TCA/TA indicates a negative relationship between the degree of aggressiveness of investment policy and return on assets. As the TCA/TA increases, degree of aggressiveness decreases, and return on

assets increases. Therefore, there is negative relationship between the relative degree of aggressiveness of working capital investment policies of firms and both performance measures i.e. ROA and Tobin's q. This similarity in market and accounting returns confirms the notion that investors do not believe in the aggressive approach of working capital management, hence, they don't give any additional value to the firms in Karachi Stock Exchange.

Variables	ROA		Tobin's q		
	t-value			t-value	
TCA/TA	.158	6.506***	.149	6.156***	
SIZE	.082	3.363***	.092	3.771***	
GROWTH	.137	3.805	004	104	
GDPGR	.043	1.759*	.162	6.627***	
LVRG	202	-5.606***	.004	.101	
F-Value	17.166***		19.2	45***	
D-W	1.875		1.	948	

Table 4.2: Regression Analysis of Performance Measures & Working Capital Investment Policy

\*\*\* Significant at 1% Level \*\* Significant at 5% Level \* Significant at 10% Level

Table 4.3 reports regression results for working capital financing policy and the performance measures. The F-value of regression models and Durbin-Watson statistics indicate same results as we have in Table 4.2. The negative value of  $\beta$  coefficient for TCL/TA also points out the negative relationship between the aggressiveness of working capital financing policy and return on assets. Higher the TCL/TA ratio, more aggressive the financing policy, that yields negative return on assets. However, surprisingly, the relationship between Tobin's q and working capital financing policy has been established as positive and statistically significant. Investors in the stock exchange are giving more value to the firms which are adopting an aggressive approach towards working capital financing policy and having higher levels of short term and sponstaneous financing in their balance sheets.

Table 4.3: Regression Analysis of Performance Measures & Working Capital Financing Policy

	working Capital Financing Foncy						
Year		ROA		Tobin's q			
		t-value		t-value			
TCL/TA	171	-6.940***	.087	3.506***			
SIZE	.064	2.630***	.087	3.522***			
GROWTH	.116	3.204***	.011	.312			
GDPGR	.011	.440	.163	6.578***			
LVRG	168	-4.628***	013	354			

F-Value	18.363***	13.946***
D-W	1.822	1.923

\*\*\* Significant at 1% Level \*\* Significant at 5% Level \* Significant at 10% Level

The control variables used in the regression models are natural log of firm size, sales growth, real GDP growth and average leverage. All the control variables have their impact on the performance of the firms. Firm's size causes the returns of the firms to be increased and it is statistically found significant. Moreover, GROWTH and LVRG is found to be significantly associated with the book based returns on assets which confirms the notion that leverage and growth are strongly correlated with the book value based performance measures (Deloof 2003; Eljelly 2004). Real GDP growth may not be affecting the returns based on book values; however, investors working in the economy may react positively to a positive change in the level of economic activity which is in accordance with the findings of Lamberson (1995).

The above results are contradictory with Gardner et al. (1986), Deloof (2003), Eljelly (2004), Teruel & Solano (2005) as well as in accordance with Afza and Nazir (2007) and produced negative relationship between the aggressiveness of working capital policies and accounting measures of profitability. Managers cannot create value if they are adopting for an aggressive approach towards working capital investment and working capital financing policy. However, if firms are having aggressive approach to manage the short term liabilities, investors give more value to those firms in stock markets. The degree of aggressiveness of working capital policies is worthwhile only for creating shareholders' wealth through increasing market performance, whereas accounting performance cannot be increased by being aggressive in managing of working capital. Our results are somewhat different from those studies conducted in the developed economies. The Pakistan is one of the emerging economies and Pakistani markets are not much transparent and efficient to fully absorb the impact of information. The results found are the clear example of this state of Pakistani markets.

# CONCLUSION

The present study investigates the relationship of the aggressive and conservative working capital asset management and financing polices and its impact on profitability of 204 Pakistani firms divided into sixteen industrial groups by Karachi Stock Exchange for a period of 1998-2005. The impact of aggressive/conservative working capital investment and financing policies has been examined through panel data regression models between working capital policies and profitability. We found a negative relationship between the profitability measures of firms and degree of aggressiveness of working capital investment and financing policies. The firms yield negative returns if they follow an aggressive working capital policy. These results are further validated by examining the impact of aggressive working capital policies

on market measures of profitability which was not tested before. The results of Tobin's q were in line of the accounting measures of profitability and produced almost the same results for working capital investment policy. However, investors in the stock markets are giving more value to the firms through q if they are more aggressive in managing their current liabilities.

As we used a new measure of profitability i.e. Tobin's q and panel data regression analysis to estimate the relationship of working capital management and firm returns in Pakistan, the present study is expected to be a significant contribution in finance literature. Although the results of present study are in contradiction to some earlier studies on the issue, yet, this phenomenon may be attributed to the inconsistent and volatile economic conditions of Pakistan. The reasons for this contradiction may further be explored in upcoming researches and this topic is left for future.

The study also suggests some policy implications for the managers and prospective investor in the emerging market of Pakistan. Firms with the more aggressive policy towards working capital may not be able to generate more profitability. So, as far as the book value performance is concerned, managers can not yield more return on assets by following aggressive approach towards short term assets and liabilities. On the other hand, investors are giving more value to the aggressiveness of firms towards working capital financing policies. Firms which are using high level of current liabilities in their financing their market value is more than the book value. The investors believe that firms using less equity and less amount of long term loans would be performing better than the others. However, other factors, like agency problem, may play a pivotal role in such firm, and so these factors may further be explored in future.

# REFERENCES

Afza T and MS Nazir (2007). Working Capital Management Policies of Firms: Empirical Evidence from Pakistan. In the *Proceedings of 9th South Asian Management Forum (SAMF) held on February pp 24-25, North South University, Dhaka, Bangladesh.* 

Brigham EF and MC Ehrhardt (2004). *Financial Management: Theory and Practice* (11<sup>th</sup> Edition). New York: South-Western College Publishers.

Carpenter MD and KH Johnson (1983). The Association between Working Capital Policy and Operating Risk. *The Financial Review* 18(3): pp 106-106.

Chiou JR and L Cheng (2006), "The Determinants of Working Capital Management", *Journal of American Academy of Business*, Vol. 10, No. 1, pp. 149-155.

Chu DKW, TW Zollinger, AS Kelly, and RM Saywell Jr. (1991). An Empirical Analysis of Cash Flow, Working Capital, and the Stability of Financial Ratio Groups in the Hospital Industry. *Journal of Accounting and Public Policy* 10(1): pp 39-58.

Deloof M (2003). Does Working Capital Management Affect Profitability of Belgian Firms? *Journal of Business, Finance and Accounting* 30(3&4): pp 573-587.

Eljelly AMA (2004). Liquidity-Profitability Tradeoff: An Empirical Investigation in an Emerging Market. *International Journal of Commerce and Management* 14(2): pp 48-61.

Filbeck G and T Krueger (2005). Industry Related Differences in Working Capital Management. *Mid-American Journal of Business* 20(2): pp 11-18.

Gardner MJ, DL Mills, and RA Pope (1986). Working Capital Policy and Operating Risk: An Empirical Analysis. *The Financial Review* 21(3): pp 31-31.

Ghosh SK and SG Maji (2004). Working Capital Management Efficiency: A Study on the Indian Cement Industry. *The Management Accountant* 39(5): pp 363-372.

Gitman LA. (2005). *Principles of Managerial Finance* (11<sup>th</sup> Edition). New York: Addison Wesley Publishers.

Gombola MJ and JE Ketz (1983). Financial Ratio Patterns in Retail and Manufacturing Organizations. *Financial Management* 12 (2): pp 45-56.

Gupta MC (1969). The Effect of Size, Growth and Industry on the Financial Structure of Manufacturing Companies. *Journal of Finance* 24(3): pp 517-529.

Gupta MC and RJ Huefner (1972). A Cluster Analysis Study of Financial Ratios and Industry Characteristics. *Journal of Accounting Research* 10(1): pp 77-95.

Hall C (2002). "Total" Working Capital Management". *AFP Exchange* 22(6): pp 26-32.

Harris A (2005). Working Capital Management: Difficult, but Rewarding. *Financal Executive* 21(4): pp 52-53

Howorth C and P Westhead (2003). The Focus of Working Capital Management in UK Small Firms. *Management Accounting Research* 14(2): pp 94-111.

Johnson CG (1970). Ratio Analysis and the Prediction of Firm Failure: Comment. *Journal of Finance* 25(5): pp 1166-1168.

Jose ML, C Lancaster and JL Stevens (1996). Corporate Returns and Cash Conversion Cycle. *Journal of Economics and Finance* 20(1): pp 33-46.

Lamberson M (1995). Changes in Working Capital of Small Firms in Relation to Changes in Economic Activity. *Mid-American Journal of Business* 10(2): pp 45-50.

Lazaridis I and D Tryfonidis (2006). Relationship between Working Capital Management and Profitability of Listed Companies in the Athens Stock Exchange. *Journal of Financial Management and Analysis* 19 (1): pp 26-35.

Long MS, IB Malitz, and SA Ravid (1993). Trade Credit, Quality Guarantees, and Product Marketability. *Financial Management* 22: pp 117-127.

Maxwell CE, LJ Gitman and SAM Smith (1998). Working Capital Management and Financial-Service Consumption Preferences of US and Foreign Firms: A Comparison of 1979 and 1996 Preferences. *Financial Practice and Education* 8(2): pp 46-52.

Moyer RC, JR McGuigan and WJ Kretlow (2005). *Contemporary Financial Management* (10<sup>th</sup> Edition). New York: South-Western College Publication. Pinches GE (1991). *Essentials of Financial Management* (4<sup>th</sup> Edition). New York: HarperCollins College Division.

Pinches GE, KA Mingo and JK Caruthers (1973). The Stability of Financial Patterns In Industrial Organizations. *Journal of Finance* 28(2): pp 389-396.

Rehman A (2006). Working Capital Management and Profitability: Case of Pakistani Firms (Unpublished Dissertation). Pakistan: COMSATS Institute of Information Technology Islamabad.

Sathamoorthi CR (2002). The Management of Working Capital in selected cooperatives in Botswana. *Finance India Dehli* 16(3): pp 1015-1034.

Shin HH and L Soenen (1998). Efficiency of Working Capital and Corporate Profitability. *Financial Practice and Education* 8: pp 37-45.

Smith K (1980). *Profitability versus Liquidity Tradeoffs in Working Capital Management, in Readings on the Management of Working Capital.* New York: St. Paul, West Publishing Company.

Smith MB and E Begemann (1997). Measuring Association between Working Capital and Return on Investment. *South Africa Journal of Business Management* 28(1): pp 1-5

Soenen LA (1993). Cash conversion cycle & corporate profitability. *Journal of Cash Management* 13(4): pp 53-58

Teruel PJG and PM Solano (2005). Effects of Working Capital Management on SME Profitability. Working Papers Series. Dept. Organización de Empresas y Finanzas, Facultad de Economía y Empresa, Universidad de Murcia, Campus Espinardo, Spain.

Van-Horne JC and JM Wachowicz (2004). *Fundamentals of Financial Management* (12<sup>th</sup> Edition). New York: Prentice Hall Publishers.

Weinraub HJ and S Visscher (1998). Industry Practice Relating To Aggressive Conservative Working Capital Policies. *Journal of Financial and Strategic Decision* 11(2): pp 11-18.

Man often acquires just so much knowledge as to discover his ignorance, and attains so much experience as to see and regret his follies, and then dies. - *Clulow*.

To comprehend a man's life it is necessary to know not merely what he does, but also what he purposely leaves undone. There is a limit to the work that can be got out of a human body or a human brain, and he is a wise man who wastes no energy on pursuits for which he is not fitted; and he is still wiser who, from among the things that he can do well, chooses and resolutely follows the best. – *Gladstone*.

# DISCUSSION

# Panel Data Models: An Appraisal Of Lead-Lag Relation In The Kse-30

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# ABSTRACTS

The lead-lag relation between index futures and the underlying index has been at the core of discussion of the researchers in the developing and the developed world. This study examines the lead-lag relationship between spot and future prices of 21 companies from the KSE-30 Index for the monthly data of the period from October 2004 to February 2008. It applies panel data estimation techniques of common constants, fixed effects and random effects. These estimations are considered to be the most recent and efficient analytical methods in handling econometric data. The data is balanced; therefore, no additional assumption has been employed. The common constants were estimated under the principle assumption of no differences among the data matrices of cross-sectional dimension. For the validity of the fixed effects, F-statistic with the assumption of homogeneity of constants against the heterogeneity proved significance of the fixed effect; notwithstanding our data of stock prices is very reasonably volatile. Yet, in order to get more satisfactory results, this study also estimates random effects. Both the GLS transformed regressions and unweighted statistics in terms of random effects are relatively better for the causal effect of future on the spot. In order to make a choice between the fixed effects and random effects, the Hausman Test was applied; which proved that the fixed effects will be always more consistent for these types of volatile data than random effects. Keywords: lead-lag relation, index futures, spot market, panel models.

JEL Classifications: G14/G15

# 1. INTRODUCTION

Investigating the lead-lag relation between the future and spot prices is the focus of this paper. The lead-lag relation between the futures and spot markets can be affected by the constraints, such as the lack of institutional and regulatory framework of short selling of stocks. According to Modest and Sundaresan (1983), in a frictionless market, the contemporaneous returns of an index futures contract and its underlying index should be perfectly and positively correlated to avoid arbitrage. A lead-lag phenomenon reflects the situation when the two prices move in a sequence. A number of studies<sup>i</sup> have estimated even the timings of relation of lead and lag between the futures and the spot. Most of the studies apply error-correction methods,

Granger Causality and VAR tests to examine the lead-lag relationship<sup>ii</sup>. This study examines the two way causation between the returns on the spot and future prices using the monthly data by employing panel data techniques such as common constants, fixed effects and random effects.

Panel data estimations are considered to be the most recent and efficient analytical methods in handling econometric data. In the lead-lag relationship, this paper, perhaps, is the first attempt to determine the causal relationship between the returns from the future and the spot prices of the stocks. The same data was employed in the methodologies such as VAR impulse response functions, unit roots and Granger Causality tests in order to measure the lead-lag relationship but no clear relationship could be ascertained.

The popularity of panel data analysis among economists and researchers can be due to the important feature that it allows the inclusion of data for a number of cross-sections. Additionally, panel data methodology provides more efficient estimation of parameters by considering broader sources of variation, and the results from this methodology outsource more information to the analyst. They also allow the study of the dynamic behaviour of the parameters<sup>iii</sup>.

A common problem of time-series estimations is that while estimating samples with very few observations, it is difficult for the analyst to obtain significant t- ratios or F -statistics from regressions. This problem is more common with annual data estimations in the developing economies, including Pakistan, where very few annual series extend more than 50-60 years. Panel studies are considered to be the most extensive way of testing statistical samples, as they supplement all previous studies and successfully answer causality issues.

Sections 2, 3, 4, after the introduction, present review of literature, methodology, results and analysis respectively. Section 5 concludes the paper with some recommendations of policies and further research.

# 2. **REVIEW OF LITERATURE**

The literature related to the area of lead-lag relation can be divided into three categories:

- 1) The lead-lag relation between futures and cash markets
- 2) The short-selling restrictions
- 3) The factors affecting the lead-lag relation

This study addresses the very first area of lead-lag relation on account of the data constraints. Methodologies employed by the previous studies can be outlined as follows:

- 1) ARMA-Auto regressive moving average
- 2) VAR-Vector auto regression
- 3) ECM-Error correction methods
- 4) Granger Causality
- 5) ADF-unit roots tests (Augmented dickey fuller)

Whereas this study employs panel data models for the reasons specified in the introduction.

The forward and future stock price index in most of the studies<sup>iv</sup> is considered to determine the underlying index. With arbitrage being a costly and risky activity, lead-lag relation between the two prices would be a natural phenomenon. This phenomenon results in mispricing in the market and reverts to a negative mean value<sup>v</sup>. The cost of arbitrage includes the transaction cost of trading the futures, the financing cost for the margin deposits for each side of the position and so on. Additionally, the risk of arbitrage consists of execution, uncertainty in respect of interest rates, and dividend payments<sup>vi</sup>. The lead-lag relation between the futures and spot markets can be affected by the constraints such as the lack of institutional and regulatory framework of short selling of stocks. This lead-lag relation is the focus of this paper.

Given the weaknesses of manual trading and order-routing system, a gap between cash and derivatives markets has been observed during extreme market conditions<sup>vii</sup>. In the KSE, the stocks are traded on-screen through the Automatic Matching System (AMS). AMS enables traders to obtain immediate order execution via computers, through brokers, linked to the central computer of the exchange. The futures are traded in with the conventional open outcry method in the KSE. In some markets, brokers cans levy a fee against short-sellers for borrowing stocks. The restrictions on short selling generally impose extra cost on arbitragers whenever short selling of stocks is needed. Some studies viii show that restrictions against short selling slow the downward adjustment to negative information of stock prices. This obviously suggests that the futures should lead the cash index by a greater extent in a falling. This relation may be attributed to the fact that futures are settled daily, and no stochastic interest rates and dividend flows can drive a gap between the prices of the forward and futures but this gap between the two prices is negligible<sup>ix</sup>. The shortselling restrictions explain a portion of the variation in the lead-lag relation<sup>x</sup>. Therefore, removal of restrictions should effectively reduce the extent of the lead-lag relation between the index futures and the cash index. Moreover, relaxing the constraints against short-selling should increase the contemporaneous correlation between changes in the two prices.

Chan (1992) finds that the lead-lag relation is not affected by whether the market is rising or falling. Chan also postulates that futures should lead when information is market-wide and spot indexes would lead when information is firm-specific. This study examines the lead-lag contemporaneous relation for the 21 stocks selected from the KSE-30 companies over the periods from October 2004 to February 2008.

# 3. METHODOLOGY<sup>xi</sup>

In general, simple linear panel data models are estimated, depending upon the type of data, by the following three different methods:

- (a) Common constants;
- (b) Allowing for fixed effects, and
- (c) Allowing for random effects.

# **3.1 THE COMMON CONSTANT METHOD**

The hypothesis for common constant assumes that the data set is a priori homogeneous.

The common constant method, presents results under the principal assumption that there are no differences among the data matrices of the cross-sectional dimension. This, in other words, means estimation of common constant for all cross-sections. For example, there is common constant for all the 21 companies in the study under consideration. Practically, the common constant method implies that there are no differences between the estimated cross-sections.

#### **3.2 THE FIXED EFFECTS METHOD**

In the fixed effects method, the constant is treated as group or company-specific and there is a different constant for each stock or company. The fixed effects estimator is also known as the least-squares dummy variables (LSDV) estimator. The dummy variable is the one that allows us to take different group-specific estimates for each of the constants for every different company/stock.

The fixed effects model has the following problems:

- 1. It ignores all explanatory variables that do not vary over time. This way it compels us avoid using other dummies in the model, such as days of the week in case of daily data, months of the year and other dummy variables.
- 2. It is very inefficient because it estimates a very large number of parameters. Hence, it uses up greater degree of freedom.

3. It makes it very hard for any slowly changing explanatory variables to be included in the model, because they will be highly collinear with the effects.

Nevertheless, our data set of stock prices frequently changes over time. Yet this study also employs the random effects method in order to understand the data more resiliently. It also employs Hausman test to make a choice between the random effects and the fixed effects.

# 3.3 THE RANDOM EFFECTS METHOD

This is an alternative method of estimating a model. The difference between the fixed effects and the random effects method is that the latter handles constants for each section not as fixed, but as random parameters the variability of which, for each stock, comes from the fact of including random error term.

In this approach, we need to make specific assumptions about the distribution of the random component. The random effects model has the following advantages:

- 1. It has fewer parameters to estimate as compared to the fixed effects method.
- 2 It allows for additional explanatory variables that have equal value for all observations within a group including the use of dummies.

The use of random effects estimator is superior to the fixed effects estimator, because the former is the GLS estimator and the latter is actually a limited case of the random effects model, as it corresponds to the cases where variation in individual effects is relatively large. The fixed effects model assumes that each stock/company differs in its intercept term, whereas the random effects model assumes that each stock/company differs in its error term.

Usually, when the panel is balanced as is the case of present study, one might expect the fixed effects model working the best. However, in the cases where the sample contains limited observations of the existing cross-sectional units, the random effects model might be more appropriate.

The Hausman test is the criterion in making a choice between the fixed effects and random effects models. Hausman (1978) adapted a test based on the idea that under the hypothesis of no correlation, both OLS and GLS are consistent but OLS is inefficient; while under the alternative, OLS is consistent and GLS is not. Given a panel data model, the Hausman test investigates whether random effects estimation could be almost as good as fixed effects estimation. In a way, the Hausman statistic

is a distance measure between the fixed effects and the random effects estimators<sup>xii</sup>. If the value of the statistic is large, then the difference between the estimates is significant, as is the result of this study; so, we reject the null hypothesis that the random effects model is consistent and we use the fixed effects estimators. The Hausman test for this study strongly recommends the fixed effects model. In contrast, a small value of the Hausman statistic implies that the random effects estimator is more appropriate.

# 4. **RESULTS AND ANALYSIS**

Our model is balanced panel in the sense that no value is missing either across the periods, which ranges from 2004:10 to 2008:02 for all the companies, or across the groups of stocks. So, there is no question of heterogeneity in this panel and consequently there is no need for any additional assumptions.

# 4.1 COMMON CONSTANTS

For the common constant we have tested the model using pooled OLS under the principle assumption of no differences among the data matrices of cross-sectional dimension. With this context, two way pooled regression results have been obtained and reported in the Tables 1-a and 1-b for perusal. SR and FR represent returns series from spot prices and future prices respectively.

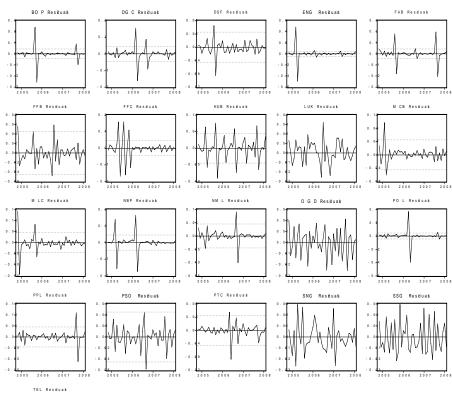
Though the results are statistically significant for both the cases, SR as repressor (Table 1-b) as well as FR as repressor (Table 1-a); and the diagnostic tests, such as Sum of the Squared residuals, and Adjusted R-squared prove to be identical for both. Standard error of the regression recommends the second model. The graphs of the residuals for all the 21 stocks have also been shown above. For almost all the stocks, most of residuals fall within the  $\pm 2$ SD indicating relatively a better fit, if at all not the perfect fit, of the model.

# Table 1-a

Dependent Variable: SR\_? Method: Pooled Least Squares Date: 06/06/08 Time: 23:22 Sample(adjusted): 2004:11 2008:02 Included observations: 40 after adjusting endpoints Number of cross-sections used: 21 Total panel (balanced) observations: 840 White Heteroskedasticity-Consistent Standard Errors & Covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.001199	0.001699	0.705687	0.4806

FR_?	0.935699	0.018637	50.20654	0.0000
R-squared	0.863170	Mean dependent var		0.014072
Adjusted R-squared	0.863007	S.D. depender	0.121732	
S.E. of regression	0.045056	Sum squared resid		1.701185
Log likelihood	1412.964	F-statistic		5286.380
Durbin-Watson stat	3.000055	Prob(F-statisti	c)	0.000000





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# Table 1-b

Dependent Variable: FR\_? Method: Pooled Least Squares Date: 06/06/08 Time: 23:19 Sample(adjusted): 2004:11 2008:02 Included observations: 40 after adjusting endpoints Number of cross-sections used: 21 Total panel (balanced) observations: 840 White Heteroskedasticity-Consistent Standard Errors & Covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.000777	0.001717	0.001717 0.452357	
SR_?	0.922487	0.033860	27.24396	0.0000
R-squared	0.863170	Mean dependent var		0.013758
Adjusted R-squared	0.863007	S.D. dependent var		0.120869
S.E. of regression	0.044737	Sum squared resid		1.677165
Log likelihood	1418.936	F-statistic		5286.380
Durbin-Watson stat	2.987037	Prob(F-statisti	c)	0.000000

# 4.2 FIXED EFFECTS

On account of limitations of the common constants, as specified in the section of methodology, the other panel tests such as fixed effects and random effects were considered.

Fixed effects incorporate the concept of different constants for each group. For the validity of the fixed effects, F-statistic with the assumption of homogeneity of constants against the heterogeneity was calculated. The value of F-statistic, being approximately 12 at 5 percent level of significance, rejects the null hypothesis in support of fixed effects against the common constants. AR term was included owing to the nature of the data being time series. There is negative autocorrelation but its intensity is extremely low (-0.482077). The Heteroscedasticity consistent covariance computes the Bollerslev-Wooldridge quasi-maximum likelihood (QML) standard errors. This QML is robust to the non-normality<sup>xiii</sup> which exists in this data of 21 companies.

Graphs of the residuals are much better than the previously estimated values from common constants for all the 21 stocks. For almost all the stocks, most of residuals fall within the  $\pm 2$ SD indicating relatively a better fit of the model.

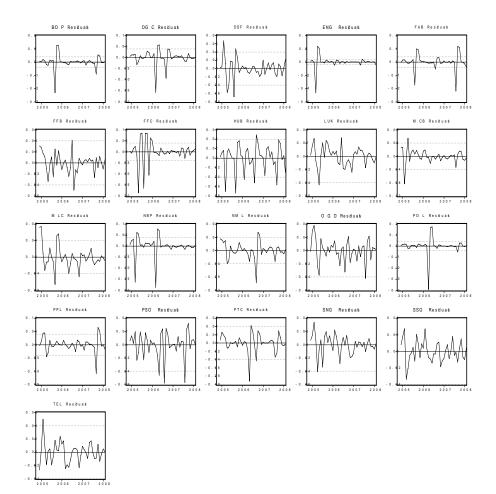
# Table 3-a

Dependent Variable: FR\_? Method: Pooled Least Squares Date: 06/06/08 Time: 23:43 Sample(adjusted): 2004:11 2008:02 Included observations: 40 after adjusting endpoints Number of cross-sections used: 21 Total panel (balanced) observations: 819 Convergence achieved after 4 iteration(s) White Heteroskedasticity-Consistent Standard Errors & Covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SR_?	0.952126	0.021060	45.20947	0.0000
AR(1)	-0.482077	0.112536	-4.283761	0.0000
Fixed Effects				
BOPC	0.000627			
DGCC	0.000739			
DSFC	-0.000795			
ENGC	0.000636			
FABC	-0.000312			
FFBC	0.001515			
FFCC	-0.000313			
HUBC	-0.000480			
LUKC	0.001358			
MCBC	0.002830			
MLCC	0.001735			
NBPC	0.001580			
NMLC	0.001374			
OGDC	0.001070			
POLC	0.000614			
PPLC	0.000560			
PSOC	0.000696			
PTCC	3.67E-05			
SNGC	0.000257			
SSGC	6.33E-05			
TELC	-0.000354			
R-squared	0.895674	Mean depende	ent var	0.012676
Adjusted R-squared	0.892791	S.D. depender		0.121979
S.E. of regression	0.039939	Sum squared 1		1.269740
Log likelihood	1487.056	F-statistic		6833.930
Durbin-Watson stat	2.382203	Prob(F-statisti	c)	0.000000

For the regression of SR on FR, the fixed effects seem to have produced more significant results than the regression of FR on SR. The value of adjusted R-squared (0.893418 > 0.892791), for the former regression, is relatively better. However, the coefficients of the stocks such as DSF—C, MLC—C, TEL—C posses surprisingly a negative sign. Whereas in the regression of FR on the SR the companies such as DSF—C, FAB—C, FFC—C, HUB—C come up with negative sign.

It is not difficult to determine the direction of causal relationship. Future and spot prices move in the same direction. When future prices are high, returns from future stocks are high and this attitude positively affects the spot market returns.

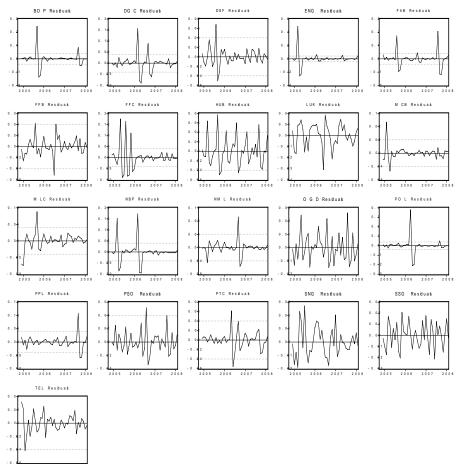


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# Table 3-b

Dependent Variable: SR\_? Method: Pooled Least Squares Date: 06/06/08 Time: 23:55 Sample(adjusted): 2004:11 2008:02 Included observations: 40 after adjusting endpoints Number of cross-sections used: 21 Total panel (balanced) observations: 819 Convergence achieved after 5 iteration(s) White Heteroskedasticity-Consistent Standard Errors & Covariance

White Heteroskedustien				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
FR_?	0.958295	0.014937	64.15661	0.0000
AR(1)	-0.484462	0.128594	-3.767387	0.0002
Fixed Effects				
BOP—C	0.000505			
DGC—C	0.000884			
DSF—C	-0.000810			
ENG-C	0.001789			
FAB—C	0.001663			
FFB—C	2.59E-05			
FFC—C	0.000545			
HUB—C	0.000609			
LUK—C	0.001434			
MCB—C	0.002042			
MLC—C	-0.003031			
NBP—C	0.001299			
NML—C	0.000348			
OGD—C	0.000407			
POL—C	0.000536			
PPL-C	0.001203			
PSO—C	0.000652			
PTC—C	3.93E-05			
SNG—C	0.000128			
SSG—C	0.000247			
TEL—C	-0.000233			
R-squared	0.896285	Mean depende	ent var	0.012529
Adjusted R-squared	0.893418	S.D. dependen	it var	0.122728
S.E. of regression	0.040067	Sum squared r	resid	1.277859
Log likelihood	1484.446	F-statistic		6878.858
Durbin-Watson stat	2.390038	Prob(F-statisti	c) _	0.000000



0.646 2005 2006 2007 2008

# 4.3 RANDOM EFFECTS

Notwithstanding, the problems faced by the fixed effects model, as explained in the section of methodology, random effects model was employed and results have been reported in the Table 4-a and Table 4-b.

# Table 4-a

Dependent Variable: SR\_? Method: GLS (Variance Components) Date: 06/07/08 Time: 00:03 Sample: 2004:11 2008:02 Included observations: 40 Number of cross-sections used: 21 Total panel (balanced) observations: 840

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.000459	0.000142	3.224167	0.0013
FR_?	0.989433	0.006285	157.4343	0.0000
Random Effects				
BOPC	0.050544			
DGCC	-0.010723			
DSFC	0.151833			
ENGC	-0.227277			
FABC	-0.314636			
FFBC	0.032313			
FFCC	0.055917			
HUBC	-0.117778			
LUKC	-0.026202			
MCBC	-0.075753			
MLCC	0.105414			
NBPC	0.020770			
NMLC	0.038017			
OGDC	0.039375			
POLC	0.032734			
PPLC	-0.067262			
PSOC	0.019024			
PTCC	0.076608			
SNGC	0.082197			
SSGC	0.041125			
TELC	0.093761			
GLS Transformed Regression				
R-squared	0.856327	Mean depender	nt var	0.014072
Adjusted R-squared	0.856155	S.D. dependent		0.121732

S.E. of regression	0.046169	Sum squared resid	1.786262		
Durbin-Watson stat	2.945036				
Unweighted Statistics including Random Effects					
R-squared	0.065878	Mean dependent var	0.014072		
Adjusted R-squared	0.064764	S.D. dependent var	0.121732		
S.E. of regression	0.117724	Sum squared resid	11.61377		
Durbin-Watson stat	0.452963	_	_		

Again, the results of the regression of SR on FR are relatively better than the regression of FR on SR. Both the GLS transformed regressions and unweighted statistics in terms of random effects are relatively better for the causal effect of future on the spot.

# Table 4-b

Dependent Variable: FR\_? Method: GLS (Variance Components) Date: 06/07/08 Time: 00:14 Sample: 2004:11 2008:02 Included observations: 40 Number of cross-sections used: 21 Total panel (balanced) observations: 840

Variable	Coefficient	Std Emer	t Statiatia	Duch
Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	1.30E-06	0.000143	0.009129	0.9927
SR_?	0.977590	0.006217	157.2566	0.0000
Random Effects				
BOPC	-0.055252			
DGCC	-0.028988			
DSFC	0.031477			
ENGC	0.129141			
FABC	0.305810			
FFBC	-0.069071			
FFCC	0.007029			
HUBC	0.192787			
LUKC	-0.101734			
MCBC	-0.187725			
MLCC	0.078036			
NBPC	-0.144143			
NMLC	-0.081500			
OGDC	-0.057709			
POLC	-0.037743			
PPLC	0.024507			

PSOC PTCC SNGC SSGC TELC	-0.034372 -0.001784 -0.021455 0.017479 0.035211				
GLS Transformed Regression					
R-squared Adjusted R-squared S.E. of regression Durbin-Watson stat	0.856020 0.855848 0.045891 2.941192	Mean dependent var S.D. dependent var Sum squared resid	0.013758 0.120869 1.764802		
Unweighted Statistics including Random Effects					
R-squared Adjusted R-squared S.E. of regression Durbin-Watson stat	0.053360 0.052230 0.117670 0.447343	Mean dependent var S.D. dependent var Sum squared resid	0.013758 0.120869 11.60323		

The Hausman Test was applied in order to make a choice between the fixed effects and random effects. Further details about this test are given in the section on methodology. As specified earlier in the methodology that the Hausman statistic measures the distance between the fixed effects and the random effects estimators<sup>xiv</sup>, the Hausman statistic was calculated. The value of this statistic calculated in the excel sheet comes out to be 1348.692716 which is highly significant at 1 per cent level of significance. Thus we are compelled to reject the H<sub>o</sub> hypothesis that random effects are inconsistent for this particular data set. Thus the fixed effects will be always consistent for this type of volatile data.

Hence, returns arising from the future prices lead the returns from the spot prices.

# 5. CONCLUSIONS AND RECOMMENDATIONS

This study looks into the lead-lag relation between index futures and the spot for the 21 companies included in the KSE-30 index. This study has been conducted consequent upon dissatisfactory results obtained from the time series econometric tests such as VAR, EG and ADF. However, the results from Panel data models, as an alternative methodology, more clearly determine future leading the spot. Hence, panel data models seem to be the most extensive way of testing statistical samples as they supplement all previous studies and successfully answer causality issues. Generally, the advantages of using panel data can be described as follows:

- (a) They provide more efficient estimations of parameters by considering broader sources of variation,
- (b) They outsource more information to the analyst, and
- (c) They allow the study of dynamic behaviour of the parameters.

The direction of relationship between the future and the spot prices leads the investors in the stock markets to take position for short-selling. Short-selling is one the market activities of the investors. The short-selling restrictions can enhance the informational efficiency of the stock market relative to the index futures. The lead-lag relationship gets stronger when restrictions on short-selling are the least in the secondary markets. That was one of the temptations to investigate lead-lag relationship in this study. Moreover, the problems of over pricing and under pricing can also be rationalized. The study strongly recommends the role of arbitrage facility in the determination of lead-lag relationship in the presence of short-selling facilities. In order to determine better policy prescription, the quarters concerned are required to bring the data constraints at the minimum possible level enabling the researchers to employ better econometric methodologies. The financial institutions can be encouraged to facilitate arbitrage activities related to the secondary markets in the country.

# FOOT NOTES

<sup>1</sup> Grunbichler, Longstaff, and Schwartz (1994) find lead from the DAX futures to spot is about 15 to 20 minutes. Niemeyer's (1994) shows one hour periods between the spot and futures leading to each other.

- <sup>2</sup> Fung and Jiang (1999).
- <sup>3</sup> For more details please refer to the section of methodology.
- <sup>4</sup> Cornell and French, (1983); Modest and Sundaresan, (1983)
- <sup>5</sup> Kempf (1998).
- <sup>6</sup> Kawaller, Koch, and Koch, (1987).
- <sup>7</sup> Kleidon and Whaley (1992).
- <sup>8</sup> Diamond and Verrecchia (1987).
- <sup>9</sup>Cornell and Reinganum, (1981); French, (1983).
- <sup>10</sup> Puttonon (1993).
- <sup>11</sup> Methodology has been adapted from Asteriou (2006).
- <sup>12</sup>Ahn and Moon (2001)
- <sup>13</sup> Normality of the data was tested applying JB, Kurtosis, and skewness tests at different levels of significance. For space saving results have not been reported.

<sup>14</sup>Ahn and Moon (2001)

# REFERENCES

Ahn S.C. and H.R. Moon, 2001. "Large-N and Large-T Properties of Panel Data

Estimators and the Hausman Test, August 2001", USC CLEO Research Paper No. C0120.

Asteriou, D. 2006. "Applied Econometrics: A Modern Approach", Palgrave Macmillan, New York, N.Y. 10010.

Chan, K., 1992. "A Further Analysis of the Lead Lag Relation between the Cash Market And Stock Index Futures Market", Review of Financial Studies 5, 123-152.

Cornell, B. and K. French, 1983. "Taxes and the Prices of Stock Index Futures", Journal of Finance 38, 675-694.

Dickey, D.A. and Fuller, W.A. (1979): "Distribution of the Estimators for Autoregressive Time Series with a Unit Root", *Journal of American Statistical Association*, 74, 427-31.

Engle, R.F. and Granger, C.W.J. (1987): "Cointegration and Error Correction: Representation Estimation and Testing", *Econometrica*, 55, 251-276.

Fung, J.K.W. and L. Jiang, 1999. "Restrictions On Short-Selling And Spot-Futures Dynamics", Journal of Business Finance and Accounting 26, 227-248.

Grunbichler, A., F.A. Longstaff, and E.S. Schwartz, 1994. "Electronic Screen Trading And The Transmission Of Information: An Empirical Examination", Journal of Financial Intermediation 3, 166-187.

Hausman, J., 1978. "Specification Tests in Econometrics", Econometrica, 46, pp.125171.

Kempf, A., 1998. "Short Selling, Unwinding, And Mispricing", Journal of Futures Markets 18, 903-923. Kleidon, A.W., and R.E. Whaley, 1992. One market? Stocks, futures, and options during October 1987, The Journal of Finance, 47, 851-877.

Modest, D.M. and Sundaresan, M., 1983. "The Relation Between Spot And Futures Markets", Journal of Futures Markets 3, 15-42.

Niemeyer, J., 1994. "An Analysis of the Lead-Lag Relation between the OMX Index Forwards and the OMX Cash Index", Paper presented to the Seventh Annual European Futures Symposium, Bonn. The great bulk of those who do real harm are not criminals at all. A large group of them are tort-feasors...Another large group are merely fools – politicians who negligently bankrupt nations and stupidly provoke wars, rhetoricians who teach in schools of business administration, and philosophers of law who confuse judges. – *Philosophy in Context* 

Vol. 2, 1973, p. 39

# DISCUSSION

# The Impact of Mobile Phones on a student's life In various cities of Pakistan

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# ABSTRACT

This paper examines the impact of mobile phone on the personal, financial, psychological, physical, educational and also the social life of a student. We have taken a sample of hundred students from the various cities of Pakistan, such as, Karachi, Lahore, Islamabad, Peshawar, and Dera Iamail Khan. Mostly their educational level is from Matric to PhD, considering both males and females equally and their age group is from teenager to adulthood.

The results of this study show that 65% students have their own mobile phones, while 35% do not have their own. Mostly 28% students are using U-fone, while 23% are using Mobilink and 18% students are the subscribers of Warid Telecom. Nokia is the most useable brand by the students. 60% students have said that there is no need of personal mobile, while 40% response is positive. 50% students have given the response that, mobile phone can be used for cheating purpose through messaging and blue tooth etc. 35% students daily consume 1-20 minutes, while 25% students consume more than one hour regarding use of cell phone.

Results also show that mostly students have bought their cell pone in adulthood. 29% students do 1-5 messages a day. Mostly students have bought their cell phone for general purposes. Generally its expenses varies from Rs: 250-600 monthly and these expenses are generally paid by their parents. Students mostly like to buy a phone more than Rs. 4000 and generally replace it after one year. Majority of student have said that mobile phone has increased both social and psychological problems. During the study 56% have said that it should be kept silent and there should also be problem rules and regulations regarding use of mobile phone. So there are some other facts and figures which are given this article.

Less attention has been dedicated to the reconstruction and analysis of the impulse that its users have given the mobile. The main idea of this article is that the mobile is changing not only the student's life, but also the framework of society. In a nut shell, the results and recommendations of this study can help us to improve the usage of Cell phone among the young generation specially students.

**Keywords**: Mobile phone; educational impact, social impact, psychological impact, physical impact and student life.

# INTRODUCTION

"God meant us to be wireless. The last cord we were connected to was cut at birth" Frank Sanda, Motorola (2003)

Mobile telephony is without doubt one of the most explosive developments ever to have taken place in the telecommunications industry. By the end of 1990 there were just 11 million cellular subscribers world-wide; eight years later that figure had jumped to 320 million and is now forecast by the ITU to exceed 550million by the end of next year. Penetration rates in the Nordic countries were close to 60% by September 1999, led by Finland (63%), Norway (58%), Iceland (56%) and Sweden (53%). Mobile growth around the world has also been nothing short of astonishing. China posted an 87% combined annual subscriber growth rate from 1995 to 1998, with other major economies like Brazil (82%) and South Africa (67%) not far behind.

For the world's poorest countries, cellular telephony and wireless local loop systems represent the best chance yet of bringing the power of telecommunications to economically disadvantaged or isolated communities. Cambodia, for example, is one of only half a dozen countries in the world where cellular subscribers already outnumber fixed-line subscribers (www.itu.int/Telecom).

# ACCORDING TO STATISTICS FROM VARIOUS SOURCES

- By the end of 2005, the world's cell phone subscribers will total 1.7 billion, according to research firm IDC.
- According to CTIA, the number of cell phone subscribers in the United States will reach nearly 195 million by the end of 2005, up from 25 million in 1994.
- According to Cincinnati.com, American teenagers spend more than \$150 billion a year more than the gross domestic product of Finland, Ireland or Chile.
- A national survey conducted by the student market research group, Student Monitor, indicated that nearly 90% of college students owned cell phones in fall 2004, up from 33% in 2002.
- According to CTIA, average monthly cell phone bill is just under \$50

- It might be of use to someone else. Many charities will collect cell phones for fundraising or to give directly to people who need them.
- Parks Associates predicted in March 2005 that 28% of the US households are likely to purchase a mobile phone in the following 12 months.
- 65.4% of the U.S. population own cell phones, according to the Yankee Group.
- The average user replaces his or her cell phone every 18 months.
- Nationwide, 130 million cellular phones will go out of use this year, according to the U.S. Environmental Protection Agency. That creates an estimated 65,000 tons of electronic garbage.
- According to a March 2005 article by InsideBayArea.com, of the more than 100 million cell phones being retired, 75% will be stored in people's homes and another 5% will be recycled. The final 20% will simply be thrown as trash.
- According to M:Matrics, a student's mobile phone bill ranges from \$41 to \$60 per month, but 57.5% of students are on family plans and don't pay the bills themselves.

Without doubt, mobile telephony offers enormous advantages – added convenience, greater personal security, and the ability to take advantage of 'dead' time to do business on the move. But the picture isn't all rosy. Like most young technologies, mobile telephony is experiencing its share of teething troubles, including concerns about environmental impact, health and safety, and, of course, the social changes being wrought by a technology which, by making us permanently contactable, is having a profound effect on our interpersonal interaction.

The last decade has seen a significant increase in the use and growth of mobile phones in the general community. This has led to changes in the way individuals communicate, including the fact that they can reach people by phone at anytime of the day no matter where they might be.

Each of us has anecdotes and opinions about the mobile phone, but few of us can boast a truly informed view, much less a database upon which to think, or act, about the best use of mobile phone technology. We recognize the incapacity of the elderly to embrace the utility of mobile phone technology, we have some feel for our individual limitations and we must all be stunned at how we middle aged adults lag frustratingly behind our children who manipulate the phones as if they were born with them. How do they do it? Should we control it? How can we make this technology work best for them (and us) and how can we contribute to a future where this profoundly useful technology maximizes social and economic good for all the citizens and institutions in Pakistan? Keeping in view the impact and importance of mobile phones on the student's life can not be ignored. It has changed the personal, financial, psychological, physical, educational and also the social life of a student.

Pakistan is a developing country so it is very important to do research in mobile sector. That is why researchers have considered some major cities of Pakistan in order to see its positive or negative impacts on the society in general and student's life in particular.

#### LITERATURE REVIEW

There has been a massive increase in the use of personal mobile phones over the past five years and there is every indication that this will continue. According to Black (2002), by 2008 almost 100% of working people in Australia will carry personal mobile phones. Black describes this phenomenon as 'serious in the extreme, potentially undermining the foundations of communication in our society' (2002, p 167).

#### BY THE AUSTRALIAN PSYCHOLOGICAL SOCIETY

The last decade has seen a significant increase in the use of mobile phones in the general community. This has led to changes in the way individuals communicate, including the fact that they can reach people by phone at anytime of the day no matter where they might be. According to IDC Australia (a large market research group), who released data on mobile phone use in 2003, 14.9 million Australians use a mobile phone and this figure is projected to increase to 17.2 million by 2007. IDC also state that the Australian mobile phone market is approaching saturation.

Adolescents in particular appear to have become preoccupied with mobile phones with very high rates of mobile phone ownership. Furthermore, adolescents participate in a high rate of SMS communication. In a Norwegian study, Ling (1999) found that more than 70% of adolescents who owned mobile phones were frequent SMS users.

Australian research has looked at the rate of mobile phone ownership among adolescents, the way adolescents use mobile phones, and the costs associated with mobile phone use. However, there is a lack of research on the psychosocial implications of the high rate of mobile phone use among adolescents. Areas of interest to investigate include: how mobile phones contribute to the development of social relationships for adolescents; the impact of social isolation for adolescents who do not have a mobile phone; the impact of mobile phone use on family time and family relationships; and concerns surrounding mobile phone use, including costs, that may impact on family relationships. The Australian Psychological Society conducted a survey to explore issues surrounding mobile phone use by adolescents with a specific focus on psychological and social issues.

Two focus groups were conducted with adolescents (one with younger adolescents in years 7 to 9 at school and one with older adolescents in years 10 to 12) to identify their views and issues around mobile phone use. Information gained from the focus groups was used to guide the development of two questionnaires on adolescent mobile phone use. Questions in the two questionnaires paralleled each other, with one questionnaire to be completed by adolescents and the other to be completed by parents of adolescents.

Two hundred and fifty eight adolescents in years 7 to 12 from schools in Melbourne (127) and Sydney (131), and 166 parents of adolescents, took part in the study. Schools that took part were considered to be in low- to middle-class areas. Of the adolescents, 54% were male and 46% were female. The majority of the adolescents (67%) fell in the group defined as younger (school years 7 to 9) and the remaining 33% were in the older group (school years 10 to 12). When conducting analyses of the results, group means were compared to investigate the effects of gender and the age level of the adolescent (younger or older) to see if any differences exist between these groups.

# PSYCHOSOCIAL ASPECTS OF MOBILE PHONE USE AMONG ADOLESCENTS

The Australian Psychological Society - November 2004 v32 younger age group is a prime market for mobile phone providers. Alternately, it may be that adolescents begin to abandon their mobile phones as they get older, although this is unlikely to explain results in this study as only 2% of adolescents reported having had a mobile phone at some time but no longer having one.

The age at which adolescents first got a mobile phone did not differ between males and females. Neither did the number of mobile phone calls made, however girls send significantly more SMS messages per week than do boys. There was also an age difference in mobile phone usage, with older adolescents more likely to make voice calls than younger adolescents.

In general, views on mobile phone use by adolescents were largely positive, with both parents and adolescents highlighting the positive aspects of mobile phone use rather than difficulties that have at times been identified with adolescent use of mobile phones. Nevertheless, a range of issues emerged from the study findings affecting adolescents and parents which require consideration. These findings will be discussed under the following topic headings, which were of particular interest in the current investigation: safety, peer and family relationships, and financial issues.

#### SAFETY ISSUES

The main reason highlighted by both parents and adolescents for getting a mobile phone was for contact with parents and safety. Facilitating contact between the adolescent and his or her parents was seen to be the primary purpose of having a mobile phone by many adolescents (43%) and parents (37%). The other prominent and probably related reason given was safety with 28% of adolescents and 48% of parents highlighting the need to have a mobile phone for safety in case of emergencies. Further 35% of parents in the study believed that their child was safer when away from the home because they had their mobile phone with them and 68% of parents believed that they knew where their child was at any time because they could contact him/her on the mobile phone. However, one parent did acknowledge that this was merely a perception and that knowing where her son was, was still based on trust. Older adolescents were more likely than younger adolescents to report feeling safer when going out because they have a mobile phone with them. However, this difference between older and younger adolescents' perceptions of safety may reflect the different activities that these age groups are likely to take part in.

Although parents of adolescents appear to believe that a mobile phone helps them to keep track of their children and that their children are safer because they can contact their parents using their mobile phone, this is not always successful, with 77% of parents of adolescents with mobile phones reporting that there has been an occasion when they needed to contact their child urgently but were unable to do so. Furthermore, 37% of adolescents reported an occasion when they needed to contact their parents urgently but were unable to because they were out of credit.

#### FAMILY RELATIONSHIPS

Results reported above highlight the important role that mobile phones play in facilitating communication between parents and adolescents. Given that both parents and adolescents view the primary function of a mobile phone for adolescents as providing safety, but the fact is not the same.

# PSYCHOSOCIAL ASPECTS OF MOBILE PHONE USE AMONG ADOLESCENTS

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surprising that adolescents rated being able to contact parents at anytime and parents being able to contact them as 'very' or 'extremely' important (82% and 76% respectively). Surprisingly, for a large number of adolescents (58%), there were no

rules set by parents regarding their mobile phone use. Analyses showed that parents were more likely to set rules for older adolescents than for the younger ones. It may be that adolescent mobile phone use generates more family problems as adolescents get older, or alternatively that it takes some time before parents view mobile phone use as an activity that requires rule setting.

For those adolescents who did have set rules about mobile phone use, the most common rule reported was having to leave their mobile phone out of their room at night (56%). Other rules included having to share a mobile phone with a sibling, using the phone only in emergencies, and not using the phone during meal times. Thirty per cent of adolescents reported 'always' sticking to the rules and 45% stated that they stick to the rules 'most of the time'. However, investigation of the results (as reported by the adolescent) demonstrated a significant association between the age of the adolescent and the likelihood that the adolescent would stick to the rules. As the age of the adolescent increased, it was less likely that they would abide by rules set by parents. In 12% of cases parents had confiscated their adolescent's mobile phone at some point as a form of punishment. Overall, however, few family difficulties emerging from adolescent mobile phone use were revealed in the study findings. Only a relatively small number of adolescents reported arguing with parents over mobile phone bills (16%) or the adolescent being on the mobile phone in general (4%). A further 6% of adolescents reported parents complaining because they did not spend enough time with them because they were always on the mobile phone, and 2% suggested that family time suffers because of their mobile phone use. Ten per cent of adolescents reported parents frequently asking them to get off the mobile phone late at night. An investigation of gender and age group differences showed that it was the younger adolescents who were significantly more likely than older adolescents to stay up late at night using their mobile phones. Consistent with this, parents of younger adolescents were significantly more likely to identify this as a problem than were parents of older adolescents. However, it may also be that parents of younger adolescents are more aware of their child's behaviour late at night than are parents of older adolescents.

A reasonably large number of adolescents (27%) reported using their mobile phone to organize activities that their parents were not aware of. However, only 6% of parents reported having called their adolescents on their mobile phone and found them to be doing something that they were not supposed to. As with the findings from the adolescent data, only a small number of parents reported conflict surrounding mobile phone bills (8%). The most common disagreement between adolescents and parents was parents having to continually ask their adolescent to get off the phone late at night (12%). In addition, 5% of parents stated that family time suffers because of their adolescent's mobile phone use. Nevertheless, only a small number of parents (5%) wished that their child did not have a mobile phone.

# PSYCHOSOCIAL ASPECTS OF MOBILE PHONE USE AMONG ADOLESCENTS

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#### PEER RELATIONSHIPS

As well as for contacting parents, adolescents clearly view mobile phones as important for contacting friends. For a large number of adolescents (63%) over half of the calls they make using their mobile phone are to friends and for 19% of the adolescents in this study over three quarters of mobile phone calls they make were to friends. Older adolescents were significantly more likely to use their mobile phones for calling friends than were adolescents in the younger age group. In contrast, adolescents in the younger age group were significantly more likely to be contacting parents when making a voice call on their mobile phone.

Fifteen per cent of adolescents reported having more friends because they can be contacted on their mobile phone and 27% believe that having a mobile phone has improved their friendships. Mobile phones appear to have facilitated easier communication between adolescents, with 34% of adolescents admitting using SMS to flirt with someone who they were interested in, and a large number of adolescents (47%) reporting that they felt they could say things to others using SMS that they would not be able to say in person (significantly more for males). Interestingly, when reporting their view of adolescents who do not own a mobile phone, those adolescents who do own a mobile phone were highly positive: 91% of these adolescents reported that they 'respect kids who decide that they don't need a mobile phone', suggesting that these adolescents were not necessarily excluded.

Although 98% of adolescents reported that their school had rules about mobile phone use, only 46% of adolescents reported always sticking to the rules. Thirty-two per cent of adolescents reported using their mobile phone to SMS friends during class time with younger adolescents more likely to take part in SMS use during class time than the older adolescents.

A surprising number of adolescents reported a range of experiences that can be considered bullying through mobile phone use. Ten per cent of adolescents in this study reported having received threatening messages on their mobile phone and 29% stated that they had received messages from someone that they did not want to be in contact with. Further investigation revealed that the younger group of adolescents was significantly more likely to have experienced threatening messages than the older adolescents, suggesting that this form of bullying may be more common in the early secondary school years. Parent reports confirmed this finding, with parents of younger children more likely to report these negative effects of mobile phone use

experienced by their child. However, it is unclear whether this is because the younger adolescents are more likely to report being bullied using the mobile phone than are older adolescents. It also seems that the younger adolescents may be most attached to their mobile phones, as they were more likely than the older adolescents to report needing to return home to collect their phone if they forget it.

#### FINANCIAL ISSUES

Recent studies have highlighted the financial costs for families associated with adolescent mobile phone use. The aim of this study in relation to costs was to investigate the impact that this added financial burden might have on family relationships.

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The results suggest Psychosocial aspects of mobile phone use among adolescents that for participants in this study mobile phone costs were not a major source of conflict within families. Consistent with earlier studies, the majority of adolescents in this study were on a pre-paid system (66%) with a large number of adolescents reporting that the parents chose this system because it allowed them to control costs (49%). For many adolescents, parents pay all of their mobile phone costs (51%) with a smaller number paying costs themselves (26%), sharing costs with parents (18%), and 5% of adolescents have other arrangements.

Some other studies have been conducted to make the best use of mobile phone, such as:A detailed research has been done on the Mobile Society (Cooper, G.Green, N., and R. Harper, 2005).

Researchers have also worked about the problem raised due to new media and cultural based perceptions of Cell phones (Leonardi, P.M, 2003), plus Critical studies in Media communication, 20(2), 160-179.

Few researchers have also discussed about Gender issues in college students Use of Instant Messaging. Journal of Language and Social Psychology 23(4): 397-423.

Some researchers studied about "Extention of hands, Children's and Teenager's relationship with the mobile phone", Oksman, V. and Rautiainen (2001).

Park, W.K. (2003). Mobile phone addiction: A case study was done through the Korean college students in order to see the positive and negative impacts of mobile phone.

Weilenmann, A. and C. Larsson (2001) have also worked about the Local use and sharing of Mobile phones in order to see its impacts.

So considering all of the above references, we felt that some research work must also be done for the students in Pakistan, in order to see its contribution in positive or negative sense.

#### THEORETICAL FRAMEWORK

Present study is based on both independent and dependent variables. It consists of one independent variable i.e. "mobile phone". It means its impact on student's life. And others are dependent variables i.e. student's personal, psychological, physical, educational and social life. It means these independent variables are affected by the dependent variable.

#### HYPOTHESIS

The hypothesis of research study is: Higher the exposure to mobile phone, greater will be its effects on the student's life.

 $\begin{array}{l} Ho = 0 \\ H1 = 0 \end{array}$ 

#### DATA COLLECTION AND METHODOLOGY

In the modern world, research has been considered as the most dedicated truth finding effort in various fields of life. Modern research is based on active process and procedure of question-answer and analysis of problems through relevant data and area of research work. The work is considered as the most systematic formula and intensive process of carrying on the scientific method of analysis about exciting problem or question (Saleem, 2001).

#### SURVEY RESEARCH

The researchers have used survey research particularly questionnaire method in this study. This is so exploratory in nature. The questionnaire has been designed according to nominal and ordinal scales of measurement. And covering different aspects of students life.(A copy of questionnaire is attached at the end of this article).

#### **UNIVERSE OF THE STUDY**

All the students of area underlying Lahore, Peshawar, Islamabad, Karachi and Dera Ismail Khan are the population of the study. In this study only those students who are

studying in Matric, intermediate, bachelor, master and PhD are considered as our universe.

#### **RESEARCH QUESTION**

The research question is: How mobile phone has affected different aspect of student's life in positive or negative sense?

#### SAMPLING/ SAMPLE SIZE

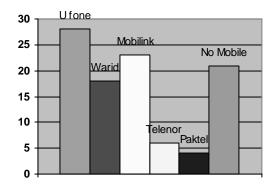
Researchers have collected data through Simple Random, Stratified, and convenience sampling from a sample of hundred respondents. And the whole population of students belongs to the five cities such as Peshawar, Islamabad, Karachi, Lahore and DIKhan, from Matric to PhD.

#### ANALYSIS OF THE DATA

The primary data collected through the research techniques, as mentioned above, has been tabulated for the purpose of interpretation & analysis. Data collection and tabulation follow the analysis given here.

Table # 1, Mobile Services				
Response Category	Frequency	Percentage		
U fone	28	28%		
Warid	18	18%		
Mobilink	23	23%		
Telenor	6	6%		
Paktel	4	4%		
No Mobile	21	21%		

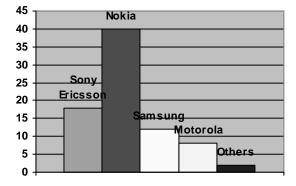
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First of all we asked about the Mobile phone services generally used by the students. We found that students are mostly using U-fone (28%), and Paktel is being used by the students, which is 4%. And other details are as above.

Response Category	Frequency	Percentage
Sony Ericsson	18	18%
Nokia	40	40%
Samsung	12	12%
Motorola	8	8%
Others	2	2%

Table # 2,	Mobile	phone	brand.
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The above table depicts that mostly students are using Nokia mobile sets (40%). 2% of other brands and other details are mentioned as above.

Table # 5, Personal Woonles			
Response Category	Frequency	Percentage	
Yes	65	65%	
No	35	35%	

Table # 3, Personal Mobil	e
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Source Questionnaire (2006)

Table #3 shows us that 65% students have their own mobile phone while others 35% do not have their own.

Table # 4, Mobile for student.			
Response Category	Frequency	Percentage	
Yes	40	40%	
No	60	60%	

Source Questionnaire (2006)

This table tells us that 60% students think that there is no need of mobile phone for the students but on the other side 40% students say that it is must for the students.

Table # 5, Mobile and cheating				
Response Category	Frequency	Percentage		
Calls	30	30%		
Using Camera	20	20%		
Message using Blue Tooth or infrared	50	50%		

Source Questionnaire (2006)

By seeing this above table we can say that mobile is being used for cheating in the examinations and the most useful method for cheating is messaging using IR or Blue tooth (50 %). And other details are mentioned as above.

Table # 0, Daily consumption of time.				
Response Category	Frequency	Percentage		
1-20 min	35	35%		
20-60 min	15	15%		
More than one hour	25	25%		

Table # 6. Daily consumption of time.

Source Questionnaire (2006)

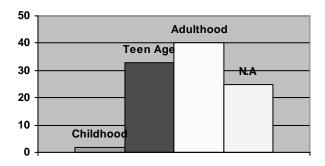
40 -	 			
	1-20 m in		More	
			than one	
30 -			hour	
25 -		20-60		
20 -		min		
15 -				
10 -				
5 -				
0 -				

The above table shows us that mostly students spend 1-20 min. i.e (35%) a day, and 25% students have no mobile phones. Other details are above.

Table # 7, Stage of buying mobile phone.			
Response Category	Frequency	Percentage	
Childhood	2	2%	
Teen Age	33	33%	
Adulthood	40	40%	
N.A	25	25%	

Table # 7.	Stage	of buy	ving	mobile	phone.

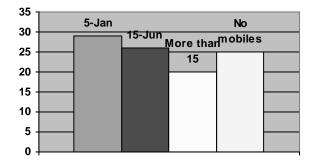
Source Questionnaire (2006)



According to upper facts we can say that 40% students have bought their mobile phones in the stage of adulthood and other details are as above.

Table # 8, Number of messages and cans.				
Response Category	Frequency	Percentage		
1-5	29	29%		
6-15	26	26%		
More than 15	20	20%		
No mobiles	25	25%		

Table # 8	, Number o	of messages	and calls.



This above table depicts that 29% students do 1-5 total messages and calls a day and 20% students mostly do more than 15 messages a day. Others have no mobile phones.

Table # 9, Main purpose of mobile phone.				
Response Category	Frequency	Percentage		
For General Purpose/ For Friend Ship	38	38%		
To contact with parents	30	30%		
For Business	3	3%		
For Study	4	4%		
No Mobile	25	25%		

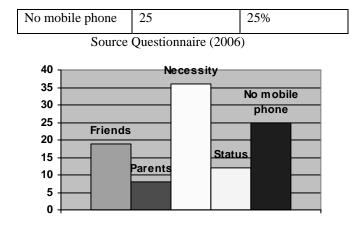
Table # 9. Main purpose of mobile phone.

Source Questionnaire (2006)

Above table shows us that the main purpose for buying mobile phone is for friendship and general purposes. And other details are above in table #9.

Table # 10, Motivation for buying mobile phone.

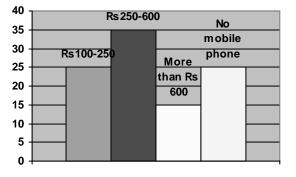
Response Category	Frequency	Percentage
Friends	19	19%
Parents	8	8%
Necessity	36	36 %
Status	12	12%



Upper figures show that 36% students are motivated to buy mobile phones due to necessity and other details are as above in table 10 .

Table # 11, Monthly mobile expenses.

Response Category	Frequency	Percentage
Rs100-250	25	25%
Rs250-600	35	35%
More than Rs 600	15	15%
No mobile phone	25	25%



Above table shows that 35% students spend Rs:250-600 monthly and other details are in above table 11.

Response Category	Frequency	Percentage
Pocket money	30	30%
Parents	38	38%
Friends	4	4%
Illegal way	3	3%
No mobile phone	25	25%

Table # 12, Mobile phone expenses paid by.

Source Questionnaire (2006)

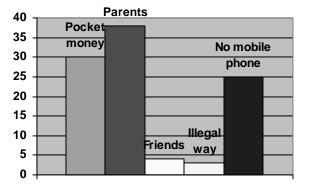


Table #12 illustrates that mostly 38% students pay their mobile phone expenses through parents. And other details are given.

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Response Category	Frequency	Percentage
1000-2000	5	5%
2000-4000	25	25%
More than 4000	45	45%

Table#13 depicts that 45% students have the mobile phone of more than Rs: 4000 and other details are given.

Response Category	Frequency	Percentage
1-6 months	19	19%
6-12 months	25	25%
More than one year	39	39%

Table # 14, Mobile phone changing time period

Source Questionnaire (2006)

Table no. 14 shows that 39% students usually replace their mobile phone with in more than one year, while 19% replace with in 6 months. Other details are given.

Table # 15, Mobile phone and social plus psychological problems.

Response Category	Frequency	Percentage
Yes	79	79%
No	15	15%

Source Questionnaire (2006)

Table 15 shows that from a sample of 100 students 79% students have said that, mobile phone has increased the social and psychological problems. And 15% have given positive response.

Table # 10, Main distarbing feature of mobile profi				
Response		Frequency	Percentage	
Category				
Unknown		42	42%	
missed calls				
Unknown		30	30%	
messages				
Network		21	21%	
problems				
Misuse	of	7	7%	
camera				

Table # 16, Main disturbing feature of mobile phone.

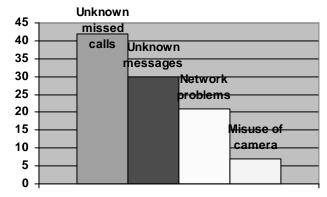


Table 16 depicts that the main disturbing feature of a mobile phone is unknown missed calls and other details are as above.

Table # 17, Mobile rules in educational institutions

Response Category	Frequency	Percentage
Yes	90	90%
No	10	10%

Source Questionnaire (2006)

Table no. 17 gives us the fact that 90% students say that there must be proper rules and regulations regarding institution and proper manners should be adopted. While 10% students have given negative response.

Response Category	Frequency	Percentage
Silent	56	56%
Off	37	37%
On	7	7%

Table #18, During study mobile must be

Source Questionnaire (2006)

Table 18 shows us that 56% students say usually mobile must be kept silent during the study, while other facts are given.

Table # 19, Sharing of events through

Response Category	Frequency	Percentage
Mobile	44	44%
Personal Contact	30	30%
Internet	20	20%

Source Questionnaire (2006)Table # 20,

Table 19 shows us that society is affected by the use of mobile phone because 44% students like to share their social events through using this device. Other details are also given.

Mobile industry as a career

Response Category	Frequency	Percentage
Yes	54	54%
No	46	46%

Source Questionnaire (2006)

Mobile sector has also changed the employment preferences because 54% students said that they would like to join the mobile sector as a career and 46% have given the negative response.

#### Table # 21, Messages are mostly

Response Category	Frequency	Percentage
Informative	51	51%
Vulgar	11	11%
Greeting	30	30%

Source Questionnaire (2006)

Table no. 21 depicts that mostly students messages are informative while remaining options are Vulgar and Greeting etc.

#### Table # 22, Students mostly use mobile

Response Category	Frequency	Percentage
Positively	36	36%
Negatively	64	64%

Table 22 shows that 64% students use mobile phone in negative sense, while 36% use this device positively.

Response Category	Frequency	Percentage
Yes	84	84%
No	16	16%

Table # 23, Mobile phone gives early adulthood.

Source Questionnaire (2006)

Table no. 23 shows us the fact that mobile phone has given early adulthood to the students and other facts are given in the above table.

#### **RESULTS AND CONCLUSIONS**

The results of this study show that 65% students have their own mobile phones, while 35% do not have their own. Mostly 28% students are using U-fone, while 23% are using Mobilink and 18% students are the subscribers of Warid Telecom. Nokia is the most useable brand by the students. 60% students have said that there is no need of personal mobile, while 40% response is positive. 50% students have given the response that, mobile pone can be used for cheating purpose through messaging and blue tooth etc. 35% students daily consume 1-20 minutes, while 25% students consume more than one hour regarding use of cell phone.

Results also show that mostly students have bought their cell pone in adulthood. And 29% students do 1-5 messages a day. Mostly students have bought their cell phone for general purposes. Generally its expenses varies from Rs: 250-600 monthly and these expenses are generally paid by their parents. Students mostly like to buy a phone more than Rs. 4000 and generally replace it after one year. Majority of student have said that mobile phone has increased both social and psychological problems. During the study 56% have said that it should be kept silent and there should also be problem rules and regulations regarding use of mobile phone.

#### A THOUGHT FOR A DIGITAL AGE

Aside from yet-unanswered questions relating to health, the positive use of mobile technologies lies largely in our hands – in the hands of government, when it comes to environmental issues and safety regulations; in the hands of operators, who can do much to ensure the smooth integration of the technology into our society, both in terms of equipment design and aesthetics, and through initiatives which help train people in mobile phone etiquette; in the hands of employers, who can take pains to ensure staff with corporate mobiles are not abused; and ultimately, in the hands of

users, who need to cultivate a greater level of awareness and work to ensure that their phone use does not negatively impact the lives of those around them.

#### SUGGESTIONS

- The student himself must be very careful and self responsible regarding positive use of mobile phone.
- The Educational institutions must establish some rules and regulations regarding use of mobile phone.
- Govt. must also take positive steps and must apply the mobile manners.
- Society must create positive awareness regarding use of mobile phone.
- Parents are also responsible to keep an eye over their children and must tell them about the prospects and consequences of mobile phone.
- Parents and adolescents/students should discuss expectations regarding mobile phone use and form an agreement when the phone is first purchased to ensure that parent's and adolescent's understanding match.
- If parents are concerned about the adolescent's mobile phone use, rules should be implemented as soon as the phone is purchased to ensure that poor habits do not develop, as they are more difficult to change later on.
- Parents should ask their students to keep their mobile phones on and to answer them when out without parental supervision so that they can always be contacted.
- Parents should encourage adolescents/students to discuss openly with them if they feel they are the victim of mobile phone bullying or harassment.
- A responsible attitude to the cost of mobile phone ownership should be discussed as a stand-alone, important issue.

#### REFERENCES

Agar, J. (2003). *Constant Touch: A Global History of the Mobile Phone*. Cambridge, Icon Books.

Bakalis, S., M. Ablern, et al. (1997). The Adoption and Use of Mobile Telephony in Europe. *Communications on the Move: The Experience of Mobile Telephony in the 1990s, COST248 Report.* L. Haddon.

Baron, N. S. (2004). See You Online: Gender Issues in College Student Use of Instant Messaging. *Journal of Language and Social Psychology* 23(4): pp 397-423.

Brown, B. (2001). Studying the Use of Mobile Technology. *Wireless World*. B. Brown, N. Green and R. Harper. London, Springer.

Byrne, R. and B. Findlay (2004). Preference for SMS versus Telephone Calls in Initiating Romantic Relationships. *Australian Journal of Emerging Technologies and Society* 2(1).

Castells, M., Fernandez-Ardevol, M., Qiu, J. L., & Sey, A. (2004) The mobile communication society: A cross-cultural analysis of available evidence on the social uses of wireless communication technology. *Conference: Wireless Communication Policies and Prospects: A Global Perspective*, Los Angeles, University of Southern California.

Cooper, G. Green, N., and R. Harper. (December 2005). The Mobile Society, Berg.

Crabtree, J., M. Nathan, and S. Roberts (2003). MobileUK: Mobile Phones & EverydayLife http://www.theworkfoundation.com/research/isociety/MobileUK\_main.jsp. The Work Foundation – iSociety

Donner, J. (2005). The use of mobile phones by microentrepreneurs in Kigali,

Fortunati L., J. E. Katz and R. Riciini. (2003). *Mediating the Human Body: Technology, Communication and Fashion*. Lea.

Leonardi, P. M. (2003). Problematizing "new media": Culturally based perceptions of cell phones, computers among United States' Latinos. Critical Studies in Media Communication, 20(2), pp 160-179.

Mariscal, J. and E. Rivera (2005) New Trends in Mobile Communications in Latin America.

Nyíri, K. (2003). *Mobile Communication: Social and Political Effects*. Vienna, Passagen Verlag.

Oksman, V. (2002). Wireless Kids Mobile Communication Cultures of Teenagers. *European Media Technology and Everyday Life*, London, pp 23-26 April.

Oksman, V. and P. Rautiainen (2001). Extension of the Hand. Children's and Teenager's Relationship with the Mobile Phone. A Case Study of Finland. The Human Body Between Technologies, Communication and Fashion. L. Fortunati. Milano, FrancoAngeli.

Palen, L., Salzman, M. and E. Youngs (2001). Discovery and Integration of Mobile Communications in Everyday Life, *Personal and Ubiquitous Computing* (5):2

Palen, L. and M. Salzman (2001). Welcome to the Wireless World: Problems Using and Understanding Mobile Telephony in *Wireless World*. B. Brown, N. Green and R. Harper. London, United Kingdom, Springer.

Park, W. K. (2003). Mobile phone addiction: A case study of Korean college students. *Mobile Communication and the Renegotiation of the Social Sphere*, Grimstad, Norway, pp 22-24 June.

Pedersen. P. E. (2002). The adoption of text messaging services among Norwegian teens: development and test of an extended adoption model. SNF-report no. 23/02. Foundation for Research in Economics and Business Administration, Bergen, Norway http://ikt.hia.no/perep/publications.htm

Persson, A. (2001). Intimacy Among Strangers: On Mobile Telephone Calls in Public Places. *Journal of Mundane Behavior* (2)3.

Plant, S. (2001). On the Mobile: The Effects of Mobile Telephones on Social and Individual Life. Motorola.

Reid, D. and F. Reid (2004). Insights into the Social and Psychological Effects of SMS Text Messaging. http://www.160characters.org/documents/SocialEffectsOfTextMessaging.pdf

Smith, S. A. (2001). 'Until there's evidence there's no comment': Risk, Fear and the Mobile Phone. *Politics of a Digitial Present: An Inventory of Australian Net Culture, Criticism and Theory*. H. Brown et al. (Eds.) Melbourne: Fibreculture Publications.

Stone, A. (2004). Designing scalable, effective mobile learning for multiple technologies in Learning with mobile devices: research and development, Learning and Skills Development Agency.

Thiel, S. M. (2004). Passing Notes and 'Dear Diaries' for the Digital Age?: Adolescent Girls and Identity Articulation Through Instant Messagaging as a Personal Record. *International Communication Association Conference*, New Orleans, Louisiana, USA, May pp 27-31

Waverman, L. (2005). Mobile Telecommunications and Economic Growth.

Web Site: Center for Mobile Communication Studies, Rutgers University - http://www.scils.rutgers.edu/ci/cmcs/

Weilenmann, A. and C. Larsson (2001). Local Use and Sharing of Mobile Phones. *Wireless World*. B. Brown, N. Green and R. Harper . London: Springer.

Yoon, K. (2003). Youth Sociality and Globalisation: An ethnographic study of young Koreans' mobile phone use, PhD Thesis, Cultural Studies and Sociology, University of Birmingham.

#### Research Questionnaire On The Impact of Mobile Phones on a Student's Life

- 1. Gender -----
- 2. Age: -----
- 3. City: -----

(Tick any one option of the following answers)

#### 4. You are a student of

(i. Middle, ii. Matric, iii. Intermediate, iv. Graduation, v. Master, vi. Ph.D ).

5. Do you have your own mobile Phone? (Yes or No)

#### 6. Your current mobile phone service is

(i. U-fone, ii. Warid, iii. Mobilink, iv. Telenor, v. Paktel, vi. N.A)

#### 7. Your current mobile phone brand is

(i. Sony Ericsson, ii. Nokia, iii. Samsung, iv. Motorola, v. Others)

- 8. Is mobile phone must for a student? (Yes or No)
- 9. Mobile phone has increased your academic efficiency (Yes or No)

#### 10. Usually mobile phone can be used for cheating through

(i. Calls, ii. Using camera, iii. Messages using blue tooth or infrared. )

#### 11. How much time your mobile phone consumes daily?

(i. 1-20 min, ii. 20-60 min, iii. more than one hour.)

#### 12. At what stage did you buy your mobile phone?

(i. Childhood, ii. Teen Age, iii. Adulthood, iv. N.A)

#### 13. Your total number of Calls and messages a day are

(i. 1-5, ii. 6-15, iii. more than 15)

#### 14. Main purpose of your mobile phone is

(i. For General purpose Ii. For Friendship, ii. To contact with parents, iv. For business, v. For study.)

#### 15. What has motivated you to buy mobile phone?

(i. Friends, ii. Parents, iii. Necessity, iv. Status)

#### 16. Your monthly mobile phone expenses are

(i. Rs. 100-250, ii.Rs.250-600, ii. more than Rs.600)

#### **17. Your bill is paid by:**

(i. Your pocket money, ii. Parents, iii. Friends, iv. Illegal ways)

#### 18. You would like to purchase a mobile phone of Rs:

(i. 1000-2000, ii. 2000-4000), iv. More than 4000)

#### 19. Your mobile replacement time period is:

(i.1-6 months, ii. 6-12 months, iii, more than 1 year)

20. Do you think that mobile phone has increased the social and psychological proble (Yes or No)

#### 21. Main disturbing feature of mobile phone is:

(i. Unknown Missed calls, ii. Unknown messages,

iii. Network problems, iv. Misuse of camera.)

- 22. Specific rules are must in educational institution regarding use of mobile phone (Yes or No)
- **23. During studies should we keep mobile phone:** (i. Silent, ii. Off, iii. On )
- 24. You like to share different events through: (i. Mobile, ii. Personal contact, iii. Internet)
- 25. Would you prefer to join mobile industry as a career? (Yes or No)
- **26. Your received messages are mostly** (i. Informative, ii. Vulgar, iii. Greeting)
- 27. Students mostly use mobile phones (Positively/ Negatively)
- 28. Mobile phone gives our new generations early adulthood. (Yes or No)

### **NEWS AND VIEWS**

### **Call for Papers**

The Third International Conference on Information and Communication Technologies (ICICT'09)

> August 15-16, 2009 Karachi, Pakistan http://www.iba.edu.pk/icict2009/index.htm

The IBA, being the premier business School in Pakistan, plans to organize a broad based, multi-topic, fully reviewed conference on Information and Communications Technologies. This activity aims to capture the new wealth of research initiated by scholars inducted by the Higher Education Commission of Pakistan to enhance the interaction of local and overseas scientists and to foster tangible focus on problems related to the socio-economic uplift of the nation. This conference is the only forum of its kind in Pakistan that brings together technical and business related issues pertaining to Information and Communications Technologies.

#### IMPORTANT DATES

- \* Paper submission due: March 2, 2009
- \* Notification of acceptance: May 18, 2009
- \* Camera ready due: June 15, 2009
- \* Registration deadline: June 25, 2009

The major areas of interest at the 3rd International Conference on Information and Communications Technologies are:

- 1. Software Engineering
- 2. Management Information Systems (MIS)
- 3. Database and Data Warehousing
- 4. Data Mining
- 5. Artificial Intelligence
- 6. Decision Support Systems

- 7. Modeling and Simulation
- 8. Computer Graphics and Interactive Systems
- 9. Operating Systems
- 10. Network Security
- 11. Wireless Networks
- 12. Grid Computing
- 13. Web Services
- 14. Application of Computing in Accounting and Finance
- 15. Mobile Computing
- 16. Education issues in ICT
- 17. Standardization issues in ICT
- 18. Advances in Satellite Communications
- 19. Wireless Sensors Networks
- 20. All other areas related to ICT

# A WORD ABOUT THE IBA



Our logo reflects "our resolve to meet the future challenges with integrated and multi - disciplinary knowledge and its creative application in a changing global environment."

#### **INTRODUCTION**

The IBA is the oldest business school outside North America. It was established in 1955 as a USAID financed project. Initially, the Wharton School of Finance, University of Pennsylvania, provided the technical support; later the University of Southern California got the contract to set up various facilities at the institute and several prominent American professors were assigned to IBA. A large number of Pakistani faculty members received advanced degrees from Wharton and University of California. In 1994, the Sindh Assembly elevated the Institute's status to that of a degree awarding institution.

Despite of a rapid increase in the number of business schools, the IBA has maintained its position as the premiere institution of higher learning in the field of management and business administration. The IBA sets the standards of educational and professional excellence. It seeks to advance and encourage new ideas and promote enduring values to guide the practice of management. Over the years, the IBA has built a reputation for producing graduates of unmatched professionalism and sound ethical and moral values. The IBA has an academic environment in which talented and outstanding young men and women are inspired to reach out to the farthest limits of their vision and capacities.

The IBA is proud of its 7,500+ accomplished alumni who are engaged in highly specialized and professional undertaking all over the world. Many of them hold demanding positions of administrative responsibilities in various fields of governance in Pakistan and abroad. We proudly celebrate their association with the IBA.

#### CORE VALUES

We uphold:

- Merit
   Truth
   Integrity
- Creativity
   Discipline
   Tolerance
- Humility

as the creative dimensions of the "highest good" – summum bonum – of an ethically motivated academic life based on moral foundations.

#### MISSION

After completing its 50 glorious years of excellence, the IBA is geared up to achieve more milestones in the field of education, hence providing its commitment to continuous improvement.

At the IBA, our mission is to provide education and training for management leadership in business and public sector in Pakistan. We aspire to be the best business school in Asia and amongst the best in the world.

It is our cherished mission to establish links with renowned business schools in the world and with business and public sector organizations in Pakistan in order to introduce the current and contemporary business education, culture and work ethics for making Pakistan amongst the most competitive countries in the world.

#### PHILOSOPHY

The recurrent theme of the 53 years of IBA's existence is that business education should be relevant and looking to the future.

Our philosophy is rooted in the creative urge to strive continuously to improve upon all components of our system; culture, people and infrastructure; and to turn bright students with leadership potential into outstanding human beings and business professionals and leaders for tomorrow.

#### **MEETING THE CHALLENGES**

The IBA provides an enabling environment, conducive to scholarship and research. The faculty, staff, students and members of the industry work together to achieve learning goals. Students acquire knowledge and skills through constructive and distinctive processes that encourage them to develop understanding of business concepts and issues, think independently and to make rational choices. They are encouraged to take responsibility for their own learning, to become active participants and leaders and to apply their knowledge in real-world context.

A fine blend of our academic environment, research culture and the highly qualified and devoted faculty at the IBA, moulds bright and intelligent students with leadership potential into high performing entrepreneurs and professional managers.

#### THE GOALS AHEAD

The IBA is set on a path of constant improvement, introducing changes in all critical fields of its undertaking. Its partnership with MICROSOFT has given a new dimension to the Center for Computer Studies, enabling students and faculty to remain abreast with the most advance technologies in software as well as hardware. It has entered into agreements with CBR to impart not only the quality education to its probationers but also to its senior members in the field of management in order to realize the government's policy to change the culture and the managerial practices of this sensitive department and to bring them to the accomplished level of modern-day needs and expectations.

#### PROGRAMS OF STUDY AT THE IBA

The IBA programs are designed to provide world-class professional training to managers and entrepreneurs for the business and industry in Pakistan. Students take part in a broad variety of activities ranging from volunteering for charity work and participating in athletic events to organizing conferences on a variety of business issues. A spirit of involvement is important because teamwork, leadership and being a responsible citizen are the foundations of the IBA experience.

Our programs have been growing steadily in keeping with the needs of the society and the competence of the Institute of Business Administration. We offer courses in the fields of:

- Doctor of Philosophy Ph.D. (MIS/ Information & Communication Technologies (ICT)/ Computer Science & Engineering (CSE)
- Master of Business Administration MBA (Morning Program)
- Master of Business Administration Management Information System MBA- MIS (Morning Program)
- MS (Economics)
- MS (Finance)
- Master of Business Administration MBA (Evening Program)
- Master of Business Administration Management Information Systems MBA- MIS (Evening Program)
- Postgraduate Diploma in Business Administration PGD (Evening Program)
- Certificate Courses (Evening Program)

- Visiting Students Program (Evening Program)
- Master of Business Administration Tax Management (Morning Program)
- Bachelor of Business Administration BBA (Morning Program)
- Bachelor of Business Administration Management Information Systems BBA- MIS (Morning Program)
- Bachelor of Computer Studies BCS (Morning Program)
- Preparatory Program for Rural Students (Talent Hunt)
- Business English Program

#### **CAREER OPPORTUNITIES**

In view of the increasing professionalism in management and growing competition in Pakistan, job opportunities for qualified and trained business administration graduate will continue to grow. Multinational firms and professionally managed Pakistani companies hire IBA graduates with confidence because of the high level of professionalism instilled in them during their course of study.

The Institute offers a flexible curriculum, a highly motivated student body and committed faculty that are willing to embrace and encourage new ideas and thought patterns. This provides the students with tools, values and confidence to be leaders in the corporate world of today and tomorrow.

The interaction of researchers, business and industry is necessary for new ideas to develop and be implemented. The Research Wing undertakes projects and assignments specific to a particular industry or an organization. A broad classification of these research projects pertains to areas related to Strategy, Growth, Economics, Organizational /HR Development, Marketing and Production Management.

#### **CENTER FOR EXECUTIVE EDUCATION**

The Center for Executive Education is a state-of-the-art learning and training resource center. It focuses on developing managers and providing opportunities for refining the skills needed to succeed in today's business environment.

The Center aims at helping organizations gain competitive advantage by developing their most important resource - their people. It is a nucleus for activities designed to enhance organizational effectiveness through training and developing working professionals in various disciplines and equipping them with the tools and knowledge to improve their managerial skills. The programs offered are designed to strengthen the participants' leadership skills with a focus on personal development, productivity improvement and strategic thinking. The Center specializes in executive education and management development activities through "open-enrolment courses, client-specific programs, consultancy and applied research.

# FEDERAL BOARD OF REVENUE (FBR) – CAPACITY BUILDING PROGRAM

The IBA is providing training to the Tax and Customs officers of FBR in Karachi, Lahore and Islamabad. Up till now, 325 officers of grade 17 - 21 have been trained at the Center for Executive Education, Institute of Business Administration, Karachi. While under the FBR Capacity Building Program (Lahore) 2007, conducted at the Directorate of Training (Income Tax), Lahore from July 02-December 08, 2007, nearly 275 officers were trained

All the courses are designed by the faculty at IBA in consultation with FBR, which include Computer Skills, Communication and Presentation Skills, Management Skills, Leadership and Teambuilding Skills.

#### MBA TAX MANAGEMENT PROGRAM FOR FBR

This program is started in January 2005 at the Institute of Business Administration. Currently fourth batch of 35 students is enrolled under this program.

Around 149 FBR students have been trained under the said program up till now.

The MBA Tax Management Courses include Business & Banking Laws, Financial Accounting, Human Resource Management, International Trade, Public Economics, Statistics & Math for Business, Analysis of Financial Statements, Auditing, Business Policy, Change Management & Business Process Reengineering, Financial Management, International Accounting Standard Financial Reporting in Pakistan, Management Accounting & Control System

#### CENTER FOR ENTREPRENEURIAL EXCELLENCE IN PAKISTAN

United States of America has chosen the IBA for establishing a Center for Entrepreneurial Excellence in Pakistan under its broader Middle East and North African initiative. There will be a distinguished advisory panel titled as 'Blue Ribbon Panel', consisting of the Directors of Entrepreneurship Institutes at MIT, Babson, Harvard and Stanford. This panel will not only advise but also assist and support the new Pakistani Center. Dr. Peter Bearse, who is an international consulting economist and an expert in developing entrepreneurial center, is supervising the project. This Centre is important for boosting economic activity, employment and trade within the country and across the international markets. The centre will conduct research to identify training needs, to document how entrepreneurship is developed and run in the country, what are the opportunities and obstacles, rules and regulations for business and give proposal for policy and procedural improvements.

#### **RESEARCH CENTER**

The IBA has established a Research Center at the City Campus. The purpose of the initiative is to play a key role in the development of industrial and financial sectors of Pakistan by providing useful research and evaluation guidance. The activities of the IBA's Research Center consist of both core and collaborative research to provide help to the federal and provincial governments, non-governmental organizations and the private sector.

The Center is a repository of the core research done by the IBA faculty, scholars and students. The research papers written are documented, archived and made available to other researchers and industry. The IBA faculty and students can access these research papers via the IBA internet.

#### **HIGH PROFILE FACULTY**

The IBA faculty comprises of teachers with high academic achievements as well as successful, practical business management experience. Most have advanced degrees in their field of specialization from foreign institutes of repute. The faculty members are well regarded for their insight and command over current issues facing business and industry. The faculty ensures that the system of education at the IBA is a unique blend of the best in classroom instruction, case studies, role-playing, business games, research and practical training in business organizations.

#### **HIGH ACHIEVING STUDENTS**

Our students win distinctions and praises from foreign and local dignitaries for their confident, reasoned discourse, organized team work and knowledge. The IBA student groups arrange dozens of seminars and conferences every year. As individual contestants our students have been successful in national and international competitions. Two of our students; Muniva Mahmood and Asim Ali Raza were chosen to go to Geneva in an international seminar. They joined 30 other business students from around the world. The IBA was the only school in the world which had the distinction of having two students accepted for the seminar. Last year Asnia Asim topped contestants from 109 countries to win the World Bank Essay Contest. The IBA team won Pakistan round of Microsoft India's Imagine Cup 2006.

The IBA students are continuously giving evidence of being world class. During the past years, four students of IBA participated in the "Battle of Minds" organized by Pakistan Tobacco Company (PTC) wherein highly talented students of top Pakistani Universities competed against one another. The IBA students obtained the second

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position for presenting a live research project in the Grand Slam. They were awarded trophies along with a cheque of Rs 200,000/-. In another competition namely "Novartis Biocamp", a team of two IBA students, competing with those of leading institutions of Pakistan, was sent to Tokyo, Japan in October.

The sure foundations of the state are laid in knowledge, not in ignorance; and every sneer at education, at culture, at book learning, which is the recorded wisdom of the experience of mankind, is the demagogue's sneer at intelligent liberty, inviting national degeneracy and ruin. -G. W. Curtis.

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Both the Character Ethic and the Personality Ethic are examples of social paradigms. The word *paradigm* comes from the Greek. It was originally a scientific term, and is more commonly used today to mean a model, theory, perception, assumption, or frame of reference. In the more general sense, it's the way we "see" the world – not in terms of our visual sense of sight, but in terms of perceiving, understanding, interpreting. – *Stephen R. Covey* 



### **BUSINESS REVIEW**

**Research Journal** 

of The Institute of Business Administration Karachi, Pakistan

#### **About Our Authors**

**Ishrat Husain** took over as the Dean and Director of the Institute of Business Administration (IBA), Karachi on March 12, 2008. Immediately before that he had been holding the office of Chairman, National Commission for Government Reforms (NCGR) in the Prime Minister Secretariat at Islamabad, with the status of the Federal Minister. In that capacity he completed a comprehensive report on the reorganization of the Government's structure, processes and human resource management policies.

Dr. Ishrat Husain became the Governor of Pakistan's Central Bank in December, 1999. During the next six years, he implemented a major program of restructuring of the Central Bank and steered the reforms of the banking sector, which are now recognized by the World Bank and IMF to be among the best in developing countries. In recognition of his meritorious services he was conferred the prestigious award of "Hilal-e-Imtiaz" by the President of Pakistan in 2003. The Banker Magazine of London declared him as the Central Bank Governor of the year for Asia in 2005. He received the Asian Banker Lifetime achievement award in 2006.

For over two decades, between 1979-1999, he served in various capacities at the World Bank in Washington DC. Among the positions he occupied at the Bank were Country Director for Central Asian Republics; Director, Poverty and Social Policy Department; Chief Economist, East Asia and Pacific Region; Chief Economist, Africa Region. Division Chief, Debt and International Finance and Resident Representative, Nigeria.

Dr. Ishrat Husain was selected to the elite Civil Service of Pakistan in 1964 and served in the field and also held mid-level policy making positions in Bangladesh (then East Pakistan) and in the Finance, Planning and Developing Departments in the Government of Sindh until 1979. He has maintained an active scholarly interest in development and globalization issues. He is the author of a dozen books, contributor of 15 chapters in edited books and more than 25 referred journal articles. Two of his books "Pakistan: The Economy of an elitist state" and "Economic Management in Pakistan: 1999-2002" published by the Oxford University Press are widely read in and outside Pakistan. He is regularly invited as a speaker, resource person, discussant, panelist or chairperson at International Conferences/ Seminars/ Workshops in different parts of the World held under the auspices of the World Bank, IMF, UN agencies, research institutions, think tanks. He has so far attended 100 such events.

Dr. Husain is Higher Education Commission's (HEC) Distinguished National Professor of Economics and Public Policy and is also the Chairman, HEC Social Sciences Council. He is currently serving on the Board of Trustees of the Aga Khan University, the Senate of Pakistan Institute of Development Economics, Board of Governors, National School of Public Policy and Mahbub-ul-Haq Centre for Human Development. He was a member of the Steering Committee on Higher Education appointed by the President of Pakistan in 2003.

Dr. Husain received his M.A. in Development Economics from Williams College and was at the top of his class and Ph. D in Economics from Boston University receiving International Student Award for outstanding academic achievement. He is a graduate of the Executive Development Program jointly sponsored by Harvard, Stanford Universities and INSEAD.

*Low Sui Pheng* is a professor of construction technology and project management at the Department of Building, National University of Singapore. He received his PhD from University College London and is a Fellow of the Chartered Institute of Building. His research interests include international construction, productivity and quality.

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*Muhammad Shakil Khan* is Head of the Department of Management at Integral University, Lucknow, India. Dr. Shakil is also the Executive Editor of Integral Review, a Journal of Management published from the University. He is an MBA and

has a Ph.D in Management from Magadh University, Bodh Gaya, India. He also has two Masters Degrees to his credit, one in Public Administration and the other in Human Rights and Duty Education, both from University of Madras, Chennai, India. He has been on various educational boards and is a resource person for teaching to the students of management. Dr. Shakil Enjoys a good research track record and has published a number of research papers both Nationally and Internationally. Dr. Shakil has an experience of about fifteen years in Research and Teaching in the areas of International Marketing and International Business.

*Ahmed Audu Maiyaki* graduated from Bayero University, Kano, Nigeria with a B.Sc Business Administration. He got a postgraduate degree from University of Ilorin, Nigeria. Presently he is teaching in the department of Business Administration, Bayero University, Kano, Nigeria. He is an associate member of the Nigerian Institute of Management. His research interest is in Services Marketing.

*Khurshid M. Kiani* Khurshid Kiani holds an M.A. in Economics from the University of Punjab, Lahore, Pakistan an M.A. in Economics from the Kansas State University, Manhattan Kansas, and a Ph.D. in Economics from Kansas State University, Manhattan Kansas USA, in 2003. Kiani worked as Assistant Professor in the Department of Economics at Wilfrid Laurier University, Waterloo, Ontario, Canada, Assistant Economic Adviser, and Research Officer to the Government of Pakistan, Ministry of Finance, Islamabad, and Assistant Director, National Tariff Commission, Ministry of Commerce, Islamabad Pakistan. At present he is a faculty member in the Department of Economics at the University of the West Indies at their Mona Campus at Kingston Jamaica and teaches econometrics at all level and sequence of financial economics courses at graduate level.

His research interests center on conventional statistical modeling that encompasses stable distributions, conditional heteroskedasticity, and long memory, and unconventional statistical predictive modeling, using techniques such as neural networks, genetic algorithms, and entropy in an out-of-sample predictive framework. His research work appears in Oxford Bulletin of Economics and Statistics, Computational Economics, Applied Financial Economics, Quarterly Review of Economics and Finance, Applied Economics and International Development, Transition Studies Review, Pakistan Development Review, International Journal of Applied Economics and Business Review.

*Mian Sajid Nazir* holds a MS Finance COMSATS Institute of IT. He has a master degree in Business Administration from the same university. He has four years of experience of research and teaching in the areas of Credit, Investment and Portfolio Analysis, Financial Management, Business Finance, and Strategic FM. Prior to his joining at COMSATS, he has worked at the Department of Management Sciences GCU Faisalabad as Project Manager. Currently, he is working as Lecturer in the

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