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Where Pakistan Stands?**

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**PAKISTAN INSTITUTE OF DEVELOPMENT ECONOMICS**  
**ISLAMABAD**

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## **ABSTRACT**

The concept of competitiveness has been widely accepted and has become a part of discussion in world-wide forums. Today global economy cannot be explained in the same manner as it was a few decades ago. Improved competitiveness of economies is a need of the day and ability to compete in the world market is of major concern.

This paper attempts to assess the position of Pakistan in the International Competitiveness. As a survey paper, the concept, definition and the measurement of competitiveness have been analysed further to assess Pakistan's position in the region. Competitiveness is linked with export performance of other trading and non trading countries. Pakistan's export performance is analysed in this context. Lessons for Pakistan have been drawn on the basis of experiences of emerging economies.

It has been concluded that countries can strengthen their export markets with the passage of time. They need to improve the governance as well as technological progress to increase high-tech exports. Developing countries like Pakistan start from low technology and with passage of time shift to improved technologies. Technology-based activities help improving export performance that brings competitiveness of a country. The paper also suggests a model to government of Pakistan which describes that high technology exports will be a result of extensive Research and Development (R&D) using human capital as an investment in the country. The success depends upon the combined efforts of the government, individuals and business initiatives both in public and private sectors.

*JEL classification:* O33

*Keywords:* Competitiveness, Growth Performance

## I. INTRODUCTION

The concept of competitiveness is gaining importance and has become a part of discussion in worldwide forums in this era of globalisation. Improvement in competitiveness of economies has become a dire need of the day. Initially most of the economists explained the concept of international trade based on comparative advantage, and then emerged a new dimension of Trade theory.

This paper attempts to assess position of Pakistan's economy in the context of International Competitiveness. The main focus of this paper is to understand the concept of competitiveness, to analyse Pakistan's position in world market and to see what lessons Pakistan can learn from newly emerging economies.

It has been divided into five sections. First section sets out the theoretical background behind the concept of competitiveness. The second section elaborates concept, definition and measurement methods of competitiveness. Some recent competitive indices are briefly reviewed and the ranks given in this study are based on Index generated by World Economic Forum (WEF). WEF has introduced a new Global Competitiveness Index in 2004 by combining the two previously generated Indices [World Economic Forum (2004-05)]. Index of 2005-06 and 2006-07 has also been reviewed. Section three analyses, world market export trends focusing on Pakistan's competitiveness. Pakistan's growth performance since 1960s and onwards has been assessed to measure the country's position in competitiveness. Furthermore the discussion is extended by reviewing World Bank's value chain analysis [World Bank (2006)] and Asian Development Bank's manufacturing value added analysis [ADB Institute (2004)]. Pakistan's competitive performance of exports is determined by markets positioning matrix. To assess competitiveness based on certain benchmarks, initiatives of Government of Pakistan have been reviewed.

It has been seen that with the growing globalisation some of the world economies have shown remarkable progress. In section four, the performance of emerging economies has been reviewed and lessons for Pakistan have been drawn from their experience. This section introduces a new dimension of thinking for Pakistan's economy.

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At the end a model has been suggested and placed in section five. It is suggested for the government of Pakistan to adopt a strategy to improve the competitiveness of country.

### **Theoretical Background**

Most controversial and intensely debated concept of competitiveness was first developed by Porter. He presented an idea that how a country could play a strategic game and succeed in extracting high levels of gains from trade, based on new trade theories. The Ricardian theory of comparative advantage gained a new dimension as Porter stressed on development of innovative or comparative advantage by upgrading to maintain higher market shares. Hence, the concept of productivity which can manage to achieve higher levels of international competitiveness (IC) emerged [Porter (1990)].

Productivity based indices are widely used in the assessment of competitiveness. According to Porter productivity is the most useful concept on international competitiveness. The best productivity index that reflects this advantage is the Total Factor Productivity (TFP). A country is competitive if its industries have an average level of TFP greater than its trading competitors. TFP is a measure of growth and overall efficiency.

Competitiveness is also assessed by indices that reflect trade performance and exchange rate management. For the latter, the real effective exchange rate (REF) or the Purchasing Power Parity (PPP) of national currency is the preferred tools of competitiveness assessment used by economists and financial analysts. These indices include structure (commodity and destination) of exports and commodity growth and dynamics, as well as intra-trade, concentration, complementarily, revealed comparative advantage, etc.

## **II. UNDERSTANDING COMPETITIVENESS**

The concept of competitiveness has been controversial and is linked with two extremes macroeconomic issues or microeconomic issues. Krugman (1994) argues that firms compete for export, not the nations. Lall (2001) emphasises that national competitiveness is a real issue that can be defined and measured. Moving from low tech to high tech is difficult process involving many policy interventions.

Krugman thinks the concept of competitiveness is not relevant and considers it as “dangerous obsession”. It is dangerous when applied to national economies. His comments and his contributions in development of the strategic trade theory which is often associated with competitiveness were widely noticed. He considers that focus of competitiveness is on trade balances which detract from the determinants of growth in domestic productivity. In competitiveness debate a due attention has been given to international trade. Along with international trade investment, technology and human resources were also given importance which is key elements of

productivity. Krugman's criticism comprises several points: that countries are not like companies and any comparison among them is misleading, competitiveness does not explain productivity and competitiveness does not provide sound base for public policy [Daniel (1994)].

As defined by World Economic Forum (WEF) Competitiveness is linked to the set of institutions, policies, and factors that determine the level of productivity of a country. The most intuitive definition of competitiveness is "A country's share of world markets for its products". *This makes competitiveness a zero-sum game, because one country's gain comes at the expense of others* [World Economic Forum (2004-05)].

*True competitiveness is measured by productivity. Productivity, allows a nation to support high wages, a strong currency, and attractive return to capital and with them a high standard of living. World economy is not a zero sum game and many nations can improve their prosperity if they can improve productivity* [World Economic Forum (2005)].

Competitiveness [World Economic Forum (2005)] defined as: "A collection of factors, policies and institutions which determine the level of productivity of a country and that, therefore, determine the level of prosperity that can be attained by an economy". *Productivity is a key driver of the rates of return on investment, which in turn determine the aggregate growth rate of the economy. Thus a more competitive economy is one that is likely to grow faster over the medium to long term.*

The two different notions of productive efficiency are: relative efficiency in producing tradable products and absolute level of production costs relative to other countries. Relative efficiency does not indicate overall competitiveness of countries but it explains the pattern of international specialisation in production while absolute production costs explain how successful countries are in world market for individual products [Irfan ul Haque (1995)].

### **Measuring Competitiveness—Recent Indices**

Competitiveness is a multi-faced phenomenon and difficult to summarise in a single index. The annual report of WEF and International Management Development (IMD) use a large set of variables (quantitative and qualitative) in order to measure competitiveness. These data are organised in factors, sub-factors, and indicators that allow to summarise competitiveness in one index.

World Economic Forum's report 'The Global Competitiveness' is published annually since 1979. Initially it covered 16 countries and in its latest edition published in 2006-07 the coverage has been extended to 125 countries. The Global Competitiveness Network highlights the achievements by member countries. It gives a picture of member country's overtime achievements of normalised GDP per capita and also presents difference in GDP per capita among countries.

In Global Competitiveness network, key insights focus on many factors that determine the level of productivity of a country. These factors matter differently for different countries depending on their stage of development, the relative importance of these factors changes over time. The most recently developed four competitiveness indices are mentioned in Table 1. These include indices reported in Global Competitiveness Report- World Economic Forum, World Competitiveness year book- International Institute for Management Development, World Industrial Development Report UNIDO, and Wignaraja and Taylor and Harbison-Myers Index.

Table 1

*Features of Competitive Indices*

	World Economic Forum (2003)	Institute of Management Development (2003)	UNIDO (2002)	Wignaraja and Taylor (2003)
Index	Growth Competitiveness Index	World Competitiveness Scoreboard	Competitiveness Industrial performance Index	Manufactured Export Competitiveness Index
Variables	160	321	4	3
Weights	Two groups: core and non core. Different weights applied to each group in final index	20 categories weights at 5 percent	4 variables equal weights	3 variables weights as 30,30, and 40
Data Sources	Published data, and entrepreneur surveys	Published data, and entrepreneur surveys	Published data	Published data
Coverage	102 countries (8 small states)	59 countries (no small state)	87 countries (3 small states)	80 countries (11 small states)

Source: Wignaraja, *et al. Measuring Competitiveness in the World's Smallest Economies: Introducing the SSMECI* (2004), ADB.

According to Global Competitiveness Index, Table 2 provides a glimpse of countries ranked as Top 10. While Table 3 provides a picture of few selected economies.

Table 2

*The Global Competitiveness Index-Top 10*

Country	2006 Ranks	2005 Ranks
Switzerland	1	4
Finland	2	2
Sweden	3	7
Denmark	4	3
Singapore	5	5
United States	6	1
Japan	7	10
Germany	8	6
Netherlands	9	11
United Kingdom	10	9

Source: [World Economic Forum (2006)].

Table 3

*Few Selected Economies*

Country	2006 ranks	2005 ranks
Hong Kong SAR	11	14
Taiwan	13	8
Ireland	21	21
Korea, Rep.	24	19
Chile	27	27
India	43	45
Sri Lanka	79	80
Pakistan	91	94
Bangladesh	99	98
Nepal	110	–

Source: [World Economic Forum (2006)].

The Global Competitive Index is computed for 125 countries in 2006 and world competitiveness rankings are provided. Switzerland is ranked first as it is most competitive economy of the world; Finland is ranked second and Sweden is ranked third. Switzerland's top ranking shows its innovation capacity and presence of sophisticated business. The Scandinavian countries are among the top performers as Finland, Sweden and Denmark are ranked as second, third and fourth [World Economic Forum (2006)].

Among Asian countries Singapore is ranked as fifth, Japan as seventh, Hong Kong as eleventh and Taiwan as thirteenth. These economies have high quality infrastructure, efficient markets and healthy workforce [World Economic Forum (2006)]. India is ranked as forty three and has shown high scores in capacity for innovation and sophistication of firm operations. Firm use of technology and technology transfer rates are observed to be high, but penetration rates of latest technologies are still low by international standards [World Economic Forum (2006)].

Pakistan is ranked as ninety one in Global Competitiveness index 2006-07 and comes among worse performers because of the absence of good governance. The country has shown quite low ranks in all nine pillars of index especially in health and primary education, Macro economy, Higher education and training, and Technological readiness. The Global Competitiveness Index 2006 shows countries at lower end are Angola, Burundi and Chad [World Economic Forum (2005)].

### III. WORLD MARKETS TRENDS

Recent years have witnessed technological progress in world markets. A common measure of technological progress is seen as R&D spending as percentage of GNP. Technology intensive activities grow more rapidly than

other activities as they provide productivity increase, potential for sustained learning, and scope of FDI that offer enormous possibilities of export. Countries can strengthen their export market by shifting on from simple to improved technological progress. Although low technology and resource based products are starting point for building competitiveness in developing countries but world market trends suggests that it is necessary to promote structural change too. The countries that maintain high rates of export growth have upgraded their technological composition of exports and production. Technological groups are generally classified in terms of products as

- Primary/Resource Based
- Low Technology (LT)
- Medium Technology(MT)
- High Technology(HT)

ADB report explains exports by technology category by explaining world market share of regions. There is a remarkable growth of East Asian economies in HT than in MT products. Singapore, Korea, Malaysia, Thailand and Philippines have shown a rise in HT and MT exports [ADB Institute (2004)].

Some developing countries like Korea, China have built domestic capabilities in high technology. This development of capabilities was driven in the early stages by strong industrial policy, with restrictions on inward FDI, protection of infant industries, allocation of credit, promotion of local R&D and specialised skills [Lall (2001)].

Countries without strong local capabilities have become major HT exporters. They paid attention to integrated production systems, starting by performing relatively simple assembly. Many countries have managed to upgrade their role by moving into greater local content, design and development, regional marketing and so on. Singapore is worth mentioning for advanced electronics, with impressive design capabilities and growing local linkages. However, some countries like the Philippines or Mexico are still at the bottom of the value chain [ADB Institute (2004)].

The three Latin American Economies, i.e., Argentina, Brazil and Mexico, are good examples of complex MT exports led by Auto industry [ADB Institute (2004)].

East Asia dominates in high technology products. South Asia gains market shares in all categories, particularly in resource-based and low technology products. However it remains a small player in both by global standards [Lall and Albaladejo (2003)].

### **Pakistan's Competitiveness—Where Country Stands ?**

As observed in world markets international competitiveness is dealing with national capabilities in innovation and adaptation of sophisticated

technologies so the question arises where Pakistan stands? Broadly speaking the competitive position of Pakistan if compared to newly emerged economies is quiet discouraging. The country's exports are mainly related to low technology products and they have not expanded with time to meet the international levels. In Pakistan, the economy has shown a recovery due to the current economic reforms, debt restructuring and concessional financing. Pakistan's growth performance in 1960 and onwards is presented in Table 4.

Table 4  
*Pakistan's Growth Performance 1960 and Onwards*

Economic Growth	Causes
<b>1960s</b> Above average	Reform efforts, Economic and political stability
<b>1970s</b> Weak	First oil crisis, Restrictive economic policies, Bangladesh emerged as a new state
<b>1980s</b> Above average	Reform efforts, Economic and political stability
<b>1990s</b> Weak	Political unrest, nuclear explosion and sanctions, Macro economic instability

It is very obvious that in Pakistan improvements and reforms are needed to bring sustained macro economic stability. Along with fiscal and monetary disciplines the country strongly needs to promote investment friendly business environment to compete effectively in the global market. This situation leads to analyse Pakistan's competitive position in next section.

### **Measuring Pakistan's Position in Competitiveness**

Pakistan's position in competitiveness is analysed by reviewing some of the findings of various recent studies.

Pakistan's share in total world exports has declined between 1990 and 2002. Its share of global manufacturing exports has remained stagnant at 0.18 percent. Many developing countries (China, Malaysia, Thailand and India) have shown a rapid expansion in exports over this period [Sherani (2004)]. Pakistan invested heavily to prepare for post-MFA regime and showed satisfactory performance in first 6 months of 2005. In terms of its exports in cotton manufactures, the share in US market exports has increased by 11 percent but share in EU market has fallen by around 16 percent [Amjad (2005)].

Despite having structural and economic reforms, Pakistan's economy remains dependent in producing and processing cotton. More than 70 percent of its exports are based on cotton products. The cotton products contribute almost 12 to 15 percent of all national products [Amjad (2005)]. Pakistan scores relatively low on export sophistication. The low score indicates its dominance in

low technology products. Pakistan has limited capacity in high technology areas (Scientific and other R&D areas). Pakistan is having low share in technology intensive products and also failing to raise it. Pakistan's exports have remained concentrated in low technology areas. According to one estimate of 2002, 76 percent of country's exports were low technology. In comparison Sri Lanka has a favorable technology profile of exports than Pakistan [Sherani (2004)].

The country faced neglect in skill development, social/human capital. Harbison-Myers Index of Skills shows decline in education spending. In comparison Pakistan is below Bangladesh and Nepal. A comparison of productivity measures with few regional economies indicates that Pakistan's estimated manufacturing value-added (MVA) per capita is lower among Thailand, Philippines, Sri Lanka, India and China. In large scale manufacturing, there is slow growth in private investment which is one of the key constraints on Pakistan's economic growth. Pakistan's unit wage costs are higher than most regional economies. Reasons for less encouraging business climate include inadequate provision of infrastructure, high business costs, and high level of government regulation, bureaucracy and political situation [Sherani (2004)].

### **Capabilities of Pakistan's Economy**

Country's exports show few areas of potential opportunity principally in Textile and Clothing segment. Unfortunately, it has been observed that most of the exports of the country are low tech which affects the required competitive performance.

Pakistan's exports increased at a compound growth rate of 10 percent, rising from US\$ 9.2 billion in 2001 to an expected level of around US\$ 12.1 billion by end-June 2004. Major gains in exports are from Textile and Clothing (T&C) sector. Pakistan's exports have benefited from eliminating of the import quotas imposed by developed countries. Pakistan's reliance is on low technology T&C sector, with low barriers to entry for new entrants. This increases the vulnerability of export earnings in the post Agreement on Textile and Clothing (ATC) quota-free regime. Pakistan has dependency on textile exports is much more than value-added clothing segment. A positive thing is the two trends observed in Pakistan's T&C exports, firstly over time there is seen a shift into higher value added products within the T&C domain. Secondly Pakistan has shown positive rate of growth in product categories which are mainly non quota exports [Sherani (2004)].

A review of World Bank's "value chain analysis" and Asian Development Bank's "value added analysis" will be useful to analyse the situation.

### **Review of Value Chain Analysis (World Bank 2006)**

Value Chain Analysis (VCA) is highly useful tool in assessing export competitiveness. It identifies particular areas where policy/institutional actions

may have greatest positive impact on the productivity of local firms, export competitiveness and diversification, and on the over all economic growth [World Bank (2006)]. Value chain analysis for Pakistan's export items was carried out on five specific products which were identified after consultations with the government and the private sector. These include: Major Export Items (Textiles/Blue Jeans, Fisheries/Shrimps), New Potential Exports (Marble Tiles/Mining, Powdered Milk/Agribusiness/Dairy Product, and Automobile Radiators/Light Engineering).The analysis is developed, separately on selected items, to quantify production costs of all segments of value chain involved. The productivity and export competitiveness is assessed by this method. Findings reveal relevant policies/constraints to cost and quality issues, and identifies inappropriate technologies and policy distortions.

Major constraints identified by this analysis are infrastructure, burdensome regulation, weak legal and enforcement frameworks, inadequate coordination among government agencies, inadequate access to finance, food quality and safety standards, and pockets of trade protection.

#### **Review of Manufacturing Value Added Analysis (ADB 2004)**

To bench mark Pakistan's performance the report focuses upon the structure of exports and Manufacturing Value Added (MVA). The comparative analysis has been taken among Pakistan, Bangladesh, India, PRC, Indonesia, Malaysia and Thailand. MVA in Pakistan grew at compound real rate of 5.5 percent from 1980-2000, and its per capita GDP at 2.2 percent. Performance was better in 1980s as compared to 1990s. In South Asia, Pakistan showed higher MVA growth than in Bangladesh but lower MVA growth if compared to other large economies. Its per capita has lowest growth rate in the region. The results revealed that manufacturing activity in Pakistan is low technology and resource based. The country does not show good performance in manufacturing as its activities are not technology intensive and in turn the export performance is not very satisfactory. In comparison the East Asian Tigers performed well as they adopted high technological measures.

Pakistan's exports pattern indicates the shift from primary products to manufactures but in manufactures it relies on low technology products. This dependence is on textiles and clothing which are among the slowest growing industrial activities and attract lesser FDI. The current export structure of the country shows a weak competitive base. In 1985-2000 Pakistan faced a slowdown of growth in textile and clothing exports.

In analysing Medium and High Technology Products (MHT) in production and export for Pakistan and its competitors in 1990 and 2001, it was observed that Pakistan has very low MHT shares with slow upgrading over time. Again in comparing value of manufactured exports Pakistan emerged as small exporter and the growth remains low. Bangladesh and Sri Lanka in comparison

with Pakistan managed higher growth rates as they have become more competitive. Moreover, World Market Shares (WMS) of manufactured exports of South Asia in 1990-2001 shows that Pakistan hardly retains its WMS in comparison of Sri Lanka, Bangladesh and India.

Table 5 present a snapshot of Pakistan's competitive performance of Exports. A market positioning matrix is explains the four quadrants: Lost Opportunities/ Underachievers, Rising Stars/ Champions, Recreates/Declining Sectors and Falling Stars/Achievers in Adversity

Table 5

*Pakistan's Competitive Performance of Exports-Market Positioning Matrix*

<b>Lost Opportunities/Underachievers</b>	<b>Rising Stars/Champions</b>
Leather accessories	Household linens
Baby Carriages	Curtains and other furnishings
Foot wear with metal toe-cap	Equine leather
Women garments	T-shirts, vests
Dried fruits	Poly carboxylic acids
Medical instruments	Blankets and travel rugs
<b>Retreats/Declining Sectors</b>	<b>Falling Stars/Achievers in Adversity</b>
Textile yarn	
Floor coverings	Cotton and Textile fabrics
Refined petroleum products	Garments
Sports goods	Women fabric
Knitted or crocheted fabrics	Clothing accessories of fabric
Other garments, not knitted or crocheted	Carved and modeled goods
Fresh Fruits	Carboxylic acids

*Source:* Sherani (2004), ADB Institute(2004).

Pakistan's major export comprises *textile* articles for which Pakistan gained world market shares (WMS) in 1990s. Unfortunately for *cotton fabric* and *textile yarn* Pakistan lost WMS and now these exports are stagnant in world trade. An analysis carried out by ADB, on the country's top 20 exports, brought only five products above the line for the average world rate of export growth. In the products below the line, the country gains modest WMS. Out of those 20 exports medical instruments are losing a grand share of WMS [Sherani (2004)].

It is clear that only specialisation in, textiles are not needed but improvement and innovation is much more desirable. In recent years investment

in technology has been done in this industry but not to ignore that its major competitors are also investing heavily in upgrading the industry, skill and quality.

### **Benchmarking and Improving Competitiveness**

It is well documented that competitiveness is the ability of enterprises to take advantage of the opportunities offered by global trends, and a competitiveness strategy is a response of national governments to this problem. Government of several countries has been debating issues of competitiveness and what they can do to support their firms since long. Government interventions in this regard must involve micro and macro level initiatives, investment in human capital, research and innovation in technology. This can bring out favourable results if done by defining short and long term goals for economy. This idea is supported by “*Benchmarking*” economy’s current strengths and weaknesses.

Benchmarking involves evaluation of industrial performance in domestic and export markets. The macroeconomic and policy framework, human resources, technology, FDI, finance, physical infrastructure and supporting institutions are considered as main drivers of performance. The evaluation may use qualitative aspects and also quantitative aspects [ADB (2004)].

After benchmarking, allocation of resources at different levels is the main concern. The government has to make certain decisions at sectoral and sub sectoral levels that which areas have to be supported. The process continues by allowing winners to emerge in the sets of activities that hold long term economic and technological growth. These activities are identified from “*clusters*” of interlinked industrial activities which share rich technological externalities, use the existing base of skills and capabilities, can develop good backward linkages and face competition locally and internationally [ADB (2004)]. Clusters play a significant role in developing economies and of course Pakistan is no exception to it.

It has been observed that clusters are naturally evolved sectoral/ geographical concentration of enterprises and the potential they have is yet to be realised. In Pakistan, under British rule few clusters were developed but not given due attention afterwards. The main clusters are: Cutlery-Wazirabad, Fans-Gujrat, Garments-Lahore, Leather-Karachi, Gems and Jewelry-Karachi.

***Pakistan Government Initiatives:*** In Pakistan, it is observed that most of the roles are being played by various ministries which are acting in different dimensions. The problem of governance arises here as no single institution is responsible for dealing with international competitiveness. Government of Pakistan has now realised the weakness as it is focusing on this issue in implementing second phase of economic reforms.

Pakistan has experienced substantial economic growth in GDP, exports and investment in the recent past and most of the macro economic indicators are showing significant strength. The government of Pakistan is implementing several initiatives to improve the countries business environment and competitiveness. Focus is on making substantial investments to improve infrastructure, financial sector reforms and increasing the role of private sector.

Creation of Competitiveness Support Fund (CSF) enables support for competitive initiatives. Ministry of Finance has launched as joint initiative of Government of Pakistan and the United States Agency for International Development (USAID). USAID has contributed around US \$ 12 million, and some other donors will join too. CSF is a platform forming Public/private partnership to promote cluster development, establish linkages between academia and industry, encourage formation of innovative business incubator programmes, promote knowledge based enterprise development, create better jobs and boost economic growth. The CSF targets to support two types of pilot projects: those which are generated through Pakistan's initiative for strategic development and competitiveness projects, and others that contribute to advance good strategy i.e. make a sector competitive, help producer and the value chain to obtain better value and better prices at each point in that chain .

The trade policies have been liberalised over the last decade. Presently, the country is one of the more open trade regimes in South Asia. Pakistan has reduced import tariffs so that its applied rates are often below the bound rates committed by WTO membership. Over the last few years full access to imported inputs duty free and other fiscal concessions are available to firms located in Export Processing Zones (EPZs) in Karachi, Risalpur and Sialkot. Two special Export Zones are to be established in Karachi and in one of the industrial cities of Punjab.

Policies for inward foreign direct investment to Pakistan have been liberalised by regional standards. This has been done under the investment policy introduced in 1997. In case of foreign investors low import duties are agreed upon plant and equipment, and first year profits tax allowance. In selected cases full foreign ownership is allowed and there is no restriction on level of royalty payments. Intellectual Property Rights are also been introduced.

Official statements of Government of Pakistan have recognised the need for: (i) export diversification, (ii) development of clusters, (iii) firm-level technological upgrading, (iv) encouragement of export-oriented FDI. Currently technical education is being imparted through 546 technical and vocational institutions, having capacity more than 200,000. Technical Education and Vocation Training Authority (TEVTA), a technical and vocational institute, has been established in province of Punjab. TEVTA is expected to focus on enrollments, and quality training. Similar organisations will be established in Federal and other provincial areas. Some other institutions working in Pakistan are Punjab Training Council, Directorate of

Manpower and Training of Labor (DMT) Sindh, Technical Education and Vocational Training, NWFP, DMT Balochistan.

Planning Commission has launched a Medium Term Development Framework (MTDF) 2005-10 with the objective to take Pakistan into the knowledge economy. It sets out a strategic vision by committing increased allocations for (a) Higher education, (b) Science and technology/Research and Development, (c) Improvements in ICT infrastructure.

Textile Institute of Pakistan in Karachi is focusing on specialised needs of industry. Textile Vision 2005 is also targeting human resources development [Amjad (2005)].

#### **IV. PERFORMANCE OF NEWLY EMERGING ECONOMIES**

Selling domestically means approaching small number of potential customers. Exports enable governments to diversify their portfolios and bring changes in economy. For this the performance of all sectors needs to grow to meet global trade standards in order to increase number of potential customers. Some of the countries are now gaining place in growth based on exports. Newly industrialised East Asian Economies of Republic of Korea, Hong Kong, Singapore, and Taiwan joined the race in 1970s and 1980s, the ASEAN in 1980s, China and Ireland in 1990s. Here few cases are analysed to judge how these countries managed to compete well. This analysis will be further used for recommending a model for Pakistan.

##### **Korea**

Industrial promotion in Republic of Korea was supported by Private industry. Government adopted two approaches: Firstly, a flexible approach was followed to develop business sector. Secondly, the government adopted policy approaches borrowed from other countries.

A meaningful planning between government and business brought positive results. Well managed export promotion system was introduced. Export targeting system of Republic of Korea was practiced at the industry, product and firm levels with their targets set by the firm and industry associations in consultation with the government. Monthly meetings between government officials and leading exporters were held. The president himself chaired the meetings and the bureaucracy was involved. Important information to administer country's export was sought out in these meetings by taking up to date information on export performance by firm, product, and market and on reasons for discrepancy between target and performance. Their president and ministries themselves took interest in collaboration with firms to identify the problems and to take suitable actions. The system within the country provided a flexible and adjusted incentive system for firms. Firms become a part of government's long term commitment to keep exports profitable [Lall (2004)].

**Taiwan**

Taiwan managed to make remarkable progress with passage of time. Taiwan's early trade policies had extensive quantitative restrictions and high tariff rates. This restricted domestic consumer goods from foreign competition. In 1970s the province sought foreign advice to upgrade industrial structure and enter into secondary import substitution. Capital intensive, heavy and petrochemical industries were established. The reason behind was to increase production of raw materials and intermediate goods for the use of export industries.

In 1990s low Tech exports of Taiwan lost its competitiveness and there was a need to restructure the economy. The government made new strategy to focus on high tech industry. The demand of new strategy was the close co-ordination of industrial, financial, science and technology and human resource policies. The review of Taiwan's economy showed variation in individual tariff rates with quantitative restrictions in use. Within 2-5 years time period, the use of tariffs was made conditional on prices moving towards international levels.

Taiwan formed a R&D consortium in technological learning, upgrading in 1980s and it gained power in 1990s. Institution as encouraged firms to cooperate in raising their technological levels to compete with advanced technology industries. The alliance in 1990s formed an innovation system in Taiwan as it brought together firms and Public sector research institutions with organisational input of trade associations. Alliance was mainly in IT sectors, consumer products, telecommunications, data switching systems and products. A worth mentioning achievement of Taiwan is that when IBM introduced a new PC based on its power PC microprocessor, in June 1995, Taiwan firms exhibited a range of computing products based on the same processor just one day latter. This nurtured R&D consortium of both IBM and Motorola, joint developers of Power PC microprocessor as external parties. Firm's capacity to leveraging and adopting new levels of technological capability made the country flourish. Industrial Technology Research Institute in Taiwan played key role for the leveraging of advanced technologies from abroad and their diffusion to Taiwan's firms [Lall (2004)].

**Chile**

Chile has made impressive strides in past decades. There inflation has fallen sharply from double digit levels in early 90s. The country introduce reforms in pension, tax systems and capital markets, trade liberalisation, functioning of labor market, significant curtailment of level of government interventions through subsidies and deregulation, privatisation of state enterprises and social security. These reforms contributed to sustained increases in output and per capita income. Chile's experience shows firstly good policies matter a great deal, and secondly as the fiscal discipline is well managed and

integrated global economy has reduced the ability of government authorities to control the policy environment [Andersson and De Silva (2006)].

### **Ireland**

After partial independence in 1922 Ireland dependency was on UK market. The country was having characteristics same as any other developing country such as high unemployment, chronic poverty, a heavy dependence on agriculture, dependency on textile, high rate of immigration, high indebtedness, and low level of Investment. This pattern continued till 1980s and ended at the end of decade [Albert (2006)].

The Irish government's claim is quite reasonable that economic development is the result of series of domestic political choices, decisions and directions made over a period of many years. The government's strategy was that they opened Ireland to foreign industrial investment in 1960s; became member of EU, heavy investment in educational system, adoption of digital communications technology in 1980s. The government's initiative is appreciated as they accepted to take risk of running with novel ideas e.g. establishing an international financial services centre with low corporate tax rate of 12.5 percent and it went successful as unemployment stood at 17 percent and employment creation became a new goal. Now the picture is very different in Ireland as it has become a first world country. Its per capita income is now about 140 percent of the EU average. The economy achieved high growth rates in 1990s in OECD countries. In 2000-2004 the growth rate of Ireland was the highest of all OECD countries and it is expected that growth of the order (4.25 percent to 5 percent) can be maintained until the end of this decade. The growth rate in employment has been annual average of 4 percent and employment has doubled since 1991. The level of indebtedness is second lowest in the EU. On per capita basis the country is third largest merchandising exporter in the world after Singapore and Hong Kong. The country maintains the highest proportion of high tech exports in Europe. Irish GDP per capita has now converged with the wealthier countries of Europe, UK and US [Albert (2006)].

### **Singapore**

Singapore restructured its comparative advantage from low tech to high tech manufacturing industries from 1980-1995. Almost one-third of Singapore's exports in 1980 were refined petroleum products. The country strongly increased high-technology exports, while maintaining solid export growth in traditional lower technology, manufacturing industries, especially exports of textiles, apparel and footwear. Singapore's philosophy on foreign investment is that multinationals are to be 'tapped' for the competitive assets they bring to the country [Lall (2004)].

The government focuses to maximise learning, technological acquisition, rapid movement up the industrial ladder, and the skills and incomes of its working population. On the other hand, the government is willing to contribute capital, tax concessions, infrastructure, education and skills training, and a stable and friendly business environment. To attract Multi National Companies (MNCs) the government gave grants and incentives to firms to meet their specified requirements. Investment by MNCs in electronics industry in 1970s and early 1980s was a major opportunity for Singapore. Some supporting industries were actively promoted by government as part of 'clustering' approach to ensure competitiveness of electronics industry. Similarly with the passage of time, by providing incentives to MNCs, the country managed to drag several foreign firms and majority of them preferred establishing their regional headquarters in country. The management of industrial policy and FDI targeting by Economic Development Board is also supported by periodic strategic and competitiveness studies for industrial evaluation. Since 1991, the government focused its strategy around industrial clusters. The government further analyses the strengths and weaknesses of leading industrial clusters, and undertakes FDI promotion and local capability building to promote their future competitiveness. The Cluster development fund was also established in the country to support specific clusters [Lall (2004)].

#### **Lessons for Pakistan from Emerging Economies Experience**

It has been observed from the review of emerging economies that there was no specific model and each country applied a different model according to economic shortfalls in those countries. Different interventions were adopted by these countries to meet different objectives. By reviewing innovative growth interventions, an opportunity can be availed to suggest some measures for Pakistan economy.

Currently Pakistan's specialisation is in low technology products and so technology intensive exports are far behind its targets. Initially, Taiwan was doing the same thing but with passage of time the country managed to make remarkable progress by bringing together firms and public sector research institutions. Advanced technologies were worked on by research institutes, and then they were adopted at firm level. Technology intensive and sophisticated exports are more desirable. Same strategy can work in Pakistan as research institutes are gaining strength in country. There is no lack of talent. The government should initiate public private partnerships to generate employment in R&D and encourage new talented people to join them. A foreign assistance can be sought to train the new personnel. The country can initiate some joint projects with advanced countries to improve the technological aspects.

Currently Pakistan is a weak performer but suitable strategic interventions by government can make the country focus on technology intensive

sophisticated products. To adopt new technology country needs higher investments, and restructuring of industrial sector. The review of emerging economies brings out a common strategy adopted by all was public private partnership and targeted interventions by the government.

A strategy adopted by Chile was different. Their government revised the structure and then introduced reforms. Pakistan can learn from Chile's experience in a way that country should first create a better governance atmosphere. All the government departments should undergo retrenchment phenomena. New, incentives should be floated for producers so that they inturn introduce some suitable incentives for the consumers. Similarly, some reforms in country can be introduced in tax systems; pensions, labour and capital markets, trade liberalisation, banking system. Fiscal discipline should be given priority.

As learnt from Ireland experience, Pakistan must invest in human capital, educational system, and adoption of new technology. It has been observed that in Pakistan the main drivers of competitiveness: human resources, technological effort, technology inflows and institutions are not making remarkable improvement over time.

Korea, Taiwan and Singapore have shown impressive performance. Korea and Taiwan have adopted almost the same strategy. Korea's focus was on business, better planning as their bureaucracy has also involved firms to identify problems. As opted by Korea, Pakistan can also adopt a flexible approach to develop business sector and also the policy approaches can be developed by consultation of other countries. In Korea the basic initiative behind expanding primary and secondary education in 1960s was the expansion of vocational training to raise skilled labour. The government, till 1990s, kept a strict control over university entrance and engaged young people into vocational schools and technical universities. Similarly, Pakistan needs to train young people to form skilled labour force.

Pakistan has always been an important player in global textile market but this cannot be considered enough. The country needs to break the low level skills trap and needs to bring diversification. This needs to be done by strengthening institutions, education and training. One strategy can be opted by government of Pakistan is to invest in clusters. Many clusters exist in the country and skilled labour is involved in it. Products produced in these clusters are not getting suitable export opportunities. Clusters are beneficial as they have increased flexibility and creativity.

Foreign Direct Investment (FDI), an investment in productive activities within an economy, is an important source of private external finance for developing countries. The strategy adopted by Singapore was based on FDI and the country followed a strict focused criteria. If Pakistan adopts the same strategy FDI will definitely add to resources and capital formation. This will transfer

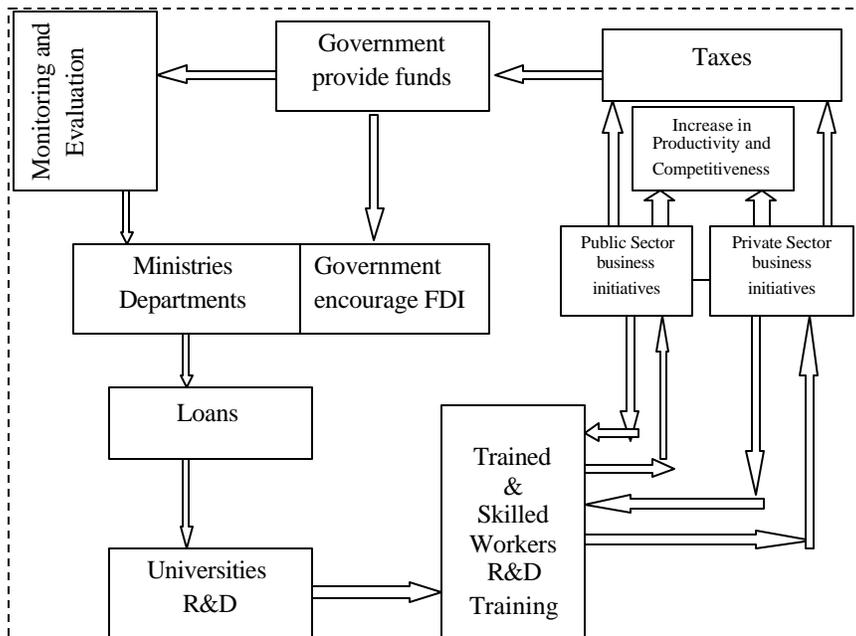
production technology, skills, innovative capacity and international marketing network. Inflow of FDI, in Pakistan, is mainly in Telecom, Energy, Trade, Construction and Financial services sectors. Although, government is playing a proactive role to attract FDI and Pakistan is open to invest in any of the following six major sectors: (a) Power generation, (b) Oil and Gas Exploration and Development, (c) Engineering, (d) Housing, (e) Hotels, and (f) Infrastructure.

Now the government of Pakistan should focus on improving investment policies time to time to make country investment friendly. Pakistan has been ranked among top ten reforming countries in the world according to World Bank report. Once the reform process is started, the country should make further moves too.

## V. SUGGESTED MODEL FOR GOVERNMENT OF PAKISTAN

### Model Explanation

As discussed earlier Pakistan tend to rank quite low in Global Competitive Index. The country is far behind targets in scientific and technological performance. The initial steps are expected to be taken by the government. Governance and national policies matter a lot in setting competitive standards. To serve the purpose, this paper suggests a model for the government of Pakistan which focuses on investment in human capital; and employment generation and in turn improves technological progress.



The model explains that combined efforts of different actors are important. Three main actors are government, individuals and business initiatives (firms in public and private sector). Human capital present in country will contribute in public and private sector business initiatives (firms). These business initiatives, in turn, will refine their skills more. Public and private sector will pay taxes to the government. Country can be benefited if the taxes collected from Public and Private sector business initiatives are utilised well. This will increase overall productivity in country and in terms of its exports. This will lead to improve competitiveness of country. The revenue collected in form of taxes can be divided to serve two purposes: first monitoring and evaluation of Ministries and Provincial departments, who are working to generate efficient activities in the economy, secondly some further investments by public sector will boost productivity. The loans and grants will be given to universities and R&D institutions to invest in human capital. Human capital will get trained and the skilled workers will be inducted in public and private sector. The Investment done by government in productive resources will also be used for generating employment within country. This cycle will bring technological changes through skilled human capital and country can move from low technology output to high technology products. Exporting high technology products to other countries will improve Pakistan's competitive position.

### CONCLUSION

A snapshot of Pakistan's competitiveness linked with export performance has been presented in this paper. As a survey paper, the concept, definition and measurement of competitiveness has been discussed and carried on further to see world market trends. Competitiveness is linked with export performance of various countries and Pakistan's export performance is analysed as main subject matter.

It has been concluded that countries can strengthen their export markets with passage of time. They need to improve their governance and technological progress. Initially developing countries may start from low technology as also in case of Pakistan, but with passage of time there is a need to shift from simple to complex technologies. Technology intensive activities help improving competitiveness of a country. Pakistan is on the stage where it needs to meet international competitive standards. The paper ends up by suggesting a model for government of Pakistan which highlights that high technology exports will come by strengthening research and development through investment in human capital in the country. This requires combined efforts of three main actors: government, individuals and business initiatives (firms in public and private sector).

## REFERENCES

- ADB Institute (2004) Industrial Competitiveness: The Challenge for Pakistan.
- Albert, Reynolds (2006) Keynote Address, Competitiveness Institute 1st Regional Conference for Asia and the Pacific, Islamabad.
- Amjad, Rashid (2005) Skills and Competitiveness: Can Pakistan Break Out of the Low-Level Skills Trap? The 21st Annual General Meeting and Conference, Pakistan Institute of Development Economics.
- Anderson, Thomas and Sara Johansson De Silva (2006) Chile's Innovation System in International Comparison. IKED.
- Daniel F. Burton, Jr. (1994) Competitiveness: Here to Stay. *The WASHINGTON QUARTERLY* 17:4
- Irfan ul Haque (1995) Trade, Technology, and International Competitiveness, Economic Development Institute of The World Bank.
- Krugman, P. (1994) Competitiveness: A Dangerous Obsession. *Foreign Affairs* 73:2, 28-44.
- Lall, S. (2001) Competitiveness Indices and Developing Countries: An Economic Evaluation of the Global Competitiveness Report. *World Development* 29:9, 1501-25.
- Lall, S., and M. Albaladejo (2003) China's Export Surge: the Competitive Implication for Southeast Asia, Report for the World Bank, East Asia Department, Oxford: Queen Elizabeth House.
- Lall, S. (2004) Reinventing Industrial Strategy: The role of Government Policy in Building Industrial Competitiveness 28.
- Porter, Micheal (1990) *The competitive advantage of Nations*. London: Macmillan.
- Sherani Sakib (2004) Pakistan's International Competitiveness: Issues, ADB sponsored report for Ministry of Commerce, Government of Pakistan.
- Wignaraja, Ganeshan, and David Joiner (2004) Measuring Competitiveness in the World's Smallest Economies: Introducing the SSMECI, ADB.
- World Economic Forum (2004-2005) *The Global Competitiveness Report*, Palgrave Macmillan.
- World Economic Forum (2005-2006) *The Global Competitiveness Report*, Palgrave Macmillan.
- World Economic Forum (2006-2007) *The Global Competitiveness Report*, Palgrave Macmillan.
- World Bank (2006) *Pakistan Growth and Export Competitiveness, Poverty Reduction and Economic Management Sector Unit South Asia Region*.