International Journal of Development and Sustainability
ISSN: 2168-8662 – www.isdsnet.com/ijds
Volume 3 Number 6 (2014): Pages 1393-1409
ISDS Article ID: IJDS13082804

The critical analysis of industrial efficiency, crisis and development In Pakistan: 1955–2003

Sobho Khan Jamali [1*], Albeena Mirza [1], Lawal Mohammed Anka [2]

[1] *Department of Economics, University of Sind Jamishoro Sindh, Pakistan*
[2] *Zamfara Agricultural and Rural Development Authority, Post Office Box 422, Gusau, Zamfara State, Nigeria*

Abstract

The aim of this paper is to critically analyse industrial efficiency, its crisis and development in Pakistan, examine the structure of manufacturing sector and growth of selected industrial items, analyse the textile industry crisis, textile vision, failure and efficiency of industries and assess the impact of industrial sector. The major conclusion drawn from this paper were growth rates were high during the sixties, large scale manufacturing rate declined due to industrial structural reforms. In 2002 – 03 marginal improvement was recorded in the manufacturing sector growth rate. The crisis affecting the textile industry has resulted from poor policies, bad management and inability of the industry to adapt to changing world demand needs. Recent evidence shows that some of the problems affecting the industrial sector are in fact not true. Finally, the paper identified general government support and encouragement through provision of energy, infrastructure, and credit with low interest rates opportunities for export and foreign direct investment. This paper recommends some strategies to address the problems of industrial sector in Pakistan.

Keywords: Pakistan economy; Industrial sector; Large scale Industries; Small scale Industries; Industrial efficiency/Crises; Credit

Cite this article as: Jamali, S.K., Mirza, A. and Anka, L.M. (2014), "The Critical Analysis Of Industrial Efficiency, Crisis And Development In Pakistan: 1955 – 2003", *International Journal of Development and Sustainability*, Vol. 3 No. 6, pp 1393-1409.

[*] Corresponding author. *E-mail address:* jamalisobho@yahoo.com

1. Introduction

At independence, in the field of industry, Pakistan inherited only 34 small industrial units out of 921 in the sub-continent. These largely pertained to cotton textile, cigarettes, sugar, rice husking, and cotton ginning and flour mills. All these contributed only to seven percent (7%) of GNP and employed a little over 26,000 people in the country (Saeed, 2010, p. 42). It has been experienced that the growth rate of industrial sector of Pakistan (1950s) has took place from non-existence base. Where, the growth rate of the industrial sector was doubling itself, in early years. However, more-than 20% growth has been achieved between 1950 and 1955 in large scale manufacturing. While on the other hand, during 1960 large scale manufacturing came close to extraordinary performance (Saeed, 1995, p. 40).

The justification of industrialisation and manufacturing depends more on the meaning viewed both in the developed on developing as well as under developed economies. It is a process which accelerates economic growth manifest changes in the economic segments by way of exploitation of resources, their utilisation and distribution pattern, production functions, income generation including social changes conducive for further growth and development (Khan, 2006).

While industrial and manufacturing growth has been more or less stable in the last five decades, although there have been some important fluctuations, the growth rates of the mining and quarrying, construction, electricity and gas sectors has been much more volatile. Construction in particular has experienced huge growth in one year, followed by negative growth in the very next year. The fluctuation shows that the construction could be due to the commission factor of large projects in different years (Naqvi and Kemal, 1991, p. 111).

The public sector dominated in the 1970 and the role of government was also increased in the same period. The most recent figures available for 2001/2 suggest that a pattern similar to the 1960s is once again emerging, with possible difference that the share of government is greater. With more privatisation and the involvement of private sector in areas, which were earlier the exclusive terrain of the public sector in the economy will grow at the expense of the public sector (R.M.R.D.C., 2009).

The challenge for Pakistan is to promote industrialisation and improve efficiencies of industries and manufacturing units that will allow rapid growth of exports. Pakistan's strategy to promote industrial growth and performance must therefore address the fundamental issue crisis in the textile industry, efficiency and productivity industrial units and export competitiveness (Anka, 2010).

1.1. Problem statement

The industrial sector in Pakistan has suffered over the last two decades since the Structural Adjustment Programme (SAP) was initiated in 1988. Many scholars and intellectuals have argued that SAP was a failure due to implementation problems. The programme did not help industrialisation process in Pakistan. IMF conditions derail the textile vision initiated by the government in 2005 to provide soft term loans to the textile industry but IMF wants elimination of all such credits in future. This will put an end to an ambitious textile export promotion programme envisaged by the government to boast industrialisation in the country.

Furthermore, issues such as power failure and emphasis given to imported raw materials instead of local one have affected the industrial sector. Efficiency, performance, and other issues were examined and solutions to above problems were recommended.

1.2. Objectives

The objectives of this paper were:

- To review the Pakistan's economy and policy measures for industrial sector and efforts to attract foreign direct investment.
- To examine the structure of manufacturing sector and growth of selected industrial items
- To critically analyse the textile industry crisis, textile vision failure and efficiency of industries in Pakistan
- Assess the impact of industrial sector on Pakistan's economy.
- Recommend strategies for improving efficiency of industries.

2. Overview of Pakistan's economy

Pakistan's economic surveys 2005 have shown exceptionally strong growth during 2004/2005. This was attributed to accommodative macroeconomic policies, growing domestic demand, renewed confidence of the private sector, fiscal discipline and competitive exchange rates. Pakistan's real GDP growth of 8.4percent in 2004 – 2005 is the fastest in two decades. Pakistan achieved its highest ever production of cotton 4.16million bales and wheat 21.1million tonnes. Large-scale manufacturing grew by 15.4 percent against a target of 12.2 percent.

- Agriculture registered a growth of 7.5%
- Services sector registered a growth of 7.9%
- Transport and communication sector showed a modest growth of 5.6%
- Per capita income grew by an average growth rate of 13.5% per annum.
- Under the fiscal policy revenue of GDP in 2002 – 2003, this declined sharply to RS14.6billion in 2004-2005.
- Exports registered an increase of US$1.3billion in absolute terms. The surge in export is undermined by a strong growth in primary commodities.
- Imports are also concentrated on a few items 70 percent of imports comprise of machinery, petroleum, chemicals, transport equipment, iron and steel, fertilisers and tea.
- Current account balance showed a deficit in 2004 – 2005 after posting surplus for three consecutive years.
- Foreign exchange reserve touched about US$13billion in 2005 – 2005.
- Under the privatisation programme, a sum of RS13.6billion was received. The proceeds of the KESC privatisation on 4th February 2005 amounting to RS20.24 was not received.

2.1. Policy measures for industrial sector

The following incentives were provided to promote the domestic industry during the fiscal year 2002.

- Government enhanced duty drawback rates on export of all kinds of grey, bleach and dyed/printed fabrics, garments, wearing apparels. This decision will provide an impetus to the local industry to increase their access to new markets.
- To provide relief to pharmaceutical industry from increasing production costs, the import of over 400 raw and packing materials for the industry was exempted from custom duty.
- To boast the tyre and tube industry repayments of custom duty on the export of tyres and tubes of trucks, buses, cars, jeeps and motorcycles was allowed.
- In order to provide relief to textile industry, the Central Board of Revenue (CBR) with effect from 2002 announced repayment of custom duty on the import of raw materials to be used in manufacturing.
- General sales on import and local supply of raw materials were imposed on September 2001.
- To promote domestic production of air-conditioners for motor vehicles, the custom duty rate on their import was increased from 25% to 30%.
- In a move to encourage the textile industry, the Federal Government in 2002 exempted textile machinery from custom duty.
- In order to expand industrial base and revive sick units, the Central Board of Revenue (CBR) exempted special industrial zones from the levy of income tax with effect from 2002.
- The Central Board of Revenue (CBR) in 2002 extended the scope of tax credit/incentive for industrial unit executing BMR.
- In order to boost foot wear industry cut to duty drawback rates for the manufacturers of synthetic and leather show was withdrawn in 2002.

2.2. Policy measures to attract Foreign Direct Investment (FDI)

The World Bank documents on Pakistan attempts to attract FDI stated that since late 1990s, the government in Pakistan has initiated a number of policy and regulatory measures to improve the business environment in general and attract FDI in particular. Liberalisation regime of foreign exchange has been considered an important measure of FDI. People (i.e. local or foreigners) in Pakistan are now allowed to bring in or transfer foreign currency, and also they can open accounts in Pakistan (Mamoon and Mushid, 2006, p. 99).

Export incentives have been introduced or broadened. The highly cumbersome duty-drawback system is being replaced with a scheme whereby 80% of the duty drawback is paid automatically within three days to the firm and the remaining 20% is paid within one week after inquiry. Moreover, import policy has been partially liberalised, the average import duty on raw materials was also covered (Muslehuddin et al., 2007). Finally, 55% income tax rebate on export earnings was changed into a 75% rebate for export of high value added products and a 50% rebate for all other products. A number of other fiscal and monetary incentives are offered for projects in selected industries like electronics, tourism, pharmaceutical, dairy farming, mining, engineering, fertiliser and cement. Experience in other countries generally indicates, however that these kinds of incentives are not cost effective (World Bank, 2004, p. 40).

2.3. Credit allocation for industry

Credit plays a critical role in investment as the Institute of Development Economies shows. The allocation and cost of credit to industrial sectors is a key tool for implementing industrial policy. It has been used extensively in countries with active state interventionist policies, to ensure that targeted industries are provided with adequate input of capital to meet their investment and working capital requirements. Multilateral financial institutions under the influence of neo-classical thinking have been opposed to the use of targeted and concessional financing on the grounds that it distorts capital allocation and causes financial repression, through their structural adjustment loans they have brought considerable pressure to Pakistan planners to phase out concessional credit. The planners are concerned about the effects this would have on local machinery manufacturing industry and the export sector, which relies heavily on concessional funding (Zaidi, 2005, p. 139).

Opponents of the scheme point out that while access to export financing has been increasing substantially. It does not seem to have had a corresponding effect on the level of export, which is primarily determined by competitiveness. Quality standard tariff policy and exchange rate policy, they point out that interest rate subsides cannot compensate for a lack of competitiveness, poor quality and a discriminatory tariff regime and an overvalued exchange rate (Zaman, 1986, p. 43).

The Pakistan industry should always rely on equity financing rather than debt financing, this is because the volume of credit made available to industrial sectors is a crucial determinant of its output growth (Ziaul Haq and Stolen, 2004, p. 16).

3. Structure of manufacturing sector

Before considering the impact of manufacturing sector on various economic variables it is necessary to study its structure which changed drastically during industrialisation process and it is the change in its structure which led to the change in employment and income distribution. The structure of manufacturing sector changed drastically since 1950s. The percentage of large-scale manufacturing rose much rapidly over the years than small-scale manufacturing sector due to its high productivity. Although growth rates in the fifties must be viewed keeping in mind the small industrial base from which the economy started, this was certainly not true of the sixties when high industrial growth rates were achieved from a substantial base built up in the fifties (Table 1).

Overall growth during 2002-2003 was 7.2 percent, 2003 – 2004 was 18.2percent and 2004 – 2005 was 15.4percent. During 1972 – 1977 with the impact of the breakup of the two wings of the country on the economy, the increase in oil prices and the internal recession, the attempt to create a substantial base of heavy and basic industry in the public sector and the reduced role of the private sector in industrial development, the growth rate of large scale manufacturing declined substantially.

In the last five years, there has been substantial recovery mainly as a result of a better export performance and a more liberal import policy which improved the level of capacity utilisation and also because a number

of long gestation industrial projects established in the earlier years of the seventies has started production (Saeed, 2010, p. 45).

Table 1. Growth Rates in Manufacturing Sector in Pakistan

S.N.	Periods in Years	Large Scale	Small Scale
1.	1949-50 To 1954-55	23.6	2.3
2.	1954-55 To 1959-60	7.7	2.3
3.	1959-60 To 1964-65	16.9	2.9
4.	1964-65 To 1969-70	9.9	2.9
5.	1972-73 To 1976-77	1.5	7.4
6.	1976-77 To 1981-82	9.4	7.3
7.	1981-82 To 1988-89	7.1	8.4
8.	1989-90 To 1993-94	4.14	5.31
9.	1994-95 To 1999-2000	-0.01	5.31
10.	2000 To 2002	4.00	5.31

Source: Pakistan Economic Survey (2002)

3.1. Gross fixed capital formation in private, public and general sectors 1980 – 2002

The contribution of both the public and private sectors is presented in Table 2. The shift towards the private sector in most fields is quite noticeable mainly for the reasons in future years, the role and contribution of the private sector in the economy will grow at the expense of the public sector. In Pakistan large scale industry is now almost fully in the control of private sector and with pro-private sector policies, denationalisation policy; the private sector is playing vital role in construction and the electricity and gas sector.

Table 2. Gross Fixed Capital Formation for Private, Public and General 1987 – 2002

S.N.	Formation	1987 – 1988 RS Million	1994 – 1995 RS Million	2001 – 2002 RS Million
1.	Private Sector	51.769	165,807	303,574
2.	Public Sector	34.886	96,556	102,152
3.	General	24,611	58,553	70,387
Total		111,266	320,896	476,113

Source: Pakistan Economic Survey, Government of Pakistan 2002 – 2003

Table 3. Production Index in Manufacturing 1965 – 2002

S.N.	Year	Index
1.	1965 – 1966	39.1
2.	1966 – 1970	46.4
3.	1970 – 1975	64.4
4.	1975 – 1980	76.1
5.	1980 – 1981	100
6.	1981 – 1985	123.0
7.	1985 – 1990	174.4
8.	1990 – 1995	225.3
9.	1995 – 2000	258.9
10.	2000 – 2002	303.0

Source: Pakistan Economic Survey Various Issues Government of Pakistan Islamabad

3.2. Growth of selected industrial items

Table 4. Growth Selected Industrial Items 1950 – 2002

S.N.	Years	Cotton Yarn	Fertiliser	Cement	Sugar
1.	1950s	32.89	1.47	8.16	20.68
2.	1960s	5.63	27.49	10.68	34.26
3.	1970s	3.37	13.19	2.52	2.24
4.	1980s	9.96	10.69	8.56	14.36
5.	1990s	6.34	3.97	2.89	5.10
6.	1990/1	14.22	-2.66	3.66	4.15
7.	1991/2	12.44	-5.50	7.20	20.06
8.	1992/3	4.12	14.63	2.76	3.23
9.	1993/4	7.44	20.96	-5.27	21.90
10.	1994/5	4.59	-1.27	-2.31	4.33
11.	1995/6	9.16	8.89	20.90	-18.15
12.	1996/7	1.72	-3.53	-0.32	-1.77
13.	1997/8	6.76	-3.15	-1.80	49.18
14.	1998/9	6.52	6.67	2.30	-0.48
15.	1999/2000	8.41	4.62	-3.33	-31.41
16.	2000/2001	3.06	9.21	3.87	21.70
17.	2001/2002	5.09	-0.38	2.70	9.84

Source: Pakistan Economic Survey Various Issues Government of Pakistan Islamabad 2002 – 2003.

Note: Figures from 1950s, 1960s, 1970s, 1980s, 1990s represent the average annual growth rate. Figures from 1990/1 onwards represent growth over previous years.

Table 4 shows the annual growth for some selected industrial items and the most marked feature of the 1950s. An equally interesting feature is the very high fluctuation in these items in the 1990s where very impressive growth in one year is followed by negative growth in the next. One important exception is output of cotton yarn, which although it has fluctuated has shown impressive growth rates for most of the last decade.

4. The textile industry crisis

Textile industry is one of the most important sectors of Pakistan. It contributes significantly to country's 8.5 percent GDP and value-added, but especially in the contribution the industry makes to export. It has the highest manufacturing value added contributing 17.5percent with the food sector next in line contributing 16 percent. It provides 38 percent of the workforce in the country (Zaidi, 2005, p. 139-140).

Pakistan textile industries have lost its important position in different periods (i.e. 1960s, 1970, 1980s and 1990s). Currently, it merely holds about over 2 percent of the world market. However, Pakistan has performed very well during the 1960s, and was among the leading under developed countries in the world for cotton textile market. In fact, Pakistan record was quite envious, as between 1962 and 1970 it cornered over 11percent of the world market many fortunes were made in the 1960s by leading Pakistani Industrialists almost of all whom had significant interest in the textile sector. In 1959, the nine largest houses accounted for as much as 71 percent of total production; engineering came second with 79%. Table 5 presents a rather unflattering picture of Pakistan's prime industrial sector, cotton textiles.

Table 5. Cotton Textile Statistics 1955 – 2002

S.N.	Years	No. of Mills	Spindles (000)		Looms (000)	
			Installed	Working	Installed	Working
1.	1955 – 1959	NA	1,537	1,434.2	25.1	88.4
2.	1959 – 1964	74	1,674	1,629.6	28.2	93.6
3.	1964 – 1969	92	2,058	1,923.4	30.4	90.8
4.	1969 – 1974	131	2,877	2,711.8	29.8	89.3
5.	1974 – 1979	139	3,536	2,700.8	28.0	68.6
6.	1979 – 1984	156	4,077	3,008.6	24.8	54.8
7.	1984 – 1989	184	4,446	3,467.0	18.4	50.0
8.	1989 – 1994	271	6,356	5,150.0	14.8	48.6
9.	1994 – 2000	349	8,315	6,452.0	11.1	45.0
10.	2000 – 2002	353	8,707	7,284.0	10.0	45.0

Source: Federal Bureau of Statistics 2002 – 2003

Pakistan Economic Survey Government of Pakistan Various Years Islamabad 2002 – 2003

Although the number of installed spindles has been growing steadily and shows a rise of 440percentage, the percentage of spindles actually working is substantially lower than during 1950s and 1960s. Currently only 83percent of installed spindles are working. In the loans sector, the position is far worse with only 45percent of installed capacity being installed. Moreover, the number of installed looms has been cut by almost half and the number of working looms is currently less than one fifth of that in the 1950s and 1960s. The main industry of Pakistan does not seem to be doing well at all a fact confirmed in Table 6. While yarn production may have increased fifteen fold since 1955, cloth production having touched a peak in the early 1970s has now fallen to well below 1960 rates.

Table 6. Indices of Production of Yarn and Cloth 1955 – 2002

S.N.	Year	Total Yarn Produced	Total Cloth Produced
1.	1955	100.0	100.0
2.	1955 – 1960	118.5	123.5
3.	1960 – 1965	159.2	170.8
4.	1965 – 1970	198.8	178.6
5.	1970 – 1975	305.2	185.4
6.	1975 – 1980	283.4	122.6
7.	1980 – 1985	370.0	94.0
8.	1985 – 1990	598.8	82.2
9.	1990 – 1995	1,068.8	95.6
10.	1995 – 2000	1,355.0	111.0
11.	2000 – 2002	1,542.0	162.0

Source: Federal Bureau of Statistics 2002 – 2003

Pakistan Economic Survey Government of Pakistan Various Years Islamabad 2002 – 2003

4.1. Failure of public sector industry

The public sector and the role of government in general have been much maligned and discredited in recent years. There have a wave of denationalisation and privatisation of state owned enterprises not only in underdeveloped countries but in advanced capitalist states such as UK as well. Not only have publicly owned and managed industrial and non industrial units been handed over to the private sector but with the process of liberalisation, deregulation and market friendly policies adopted by underdeveloped countries, usually in the guise of structural adjustment programme, the role of state in the provision of basic social and infrastructural facilities has also diminished markedly (Zaidi, 2005).

Today, the conventional wisdom is that, as far as intervention by the government is concerned, less or better so in many ways the existence of public sector industry is itself in question and with increased pace of privatisation taking place in most countries, including Pakistan, one wonders if in a few years, any state

owned enterprises will exist at all, one of the reason why privatisation is process is proceeding at such a pace is that there is a strong belief that public sector enterprises are inefficient, costly to run, poor performers and a major drain on the national exchequer.

The argument goes that the state should no longer subsidise loss making enterprises and they should be either sold to the private sector to run and manage or closed down altogether (Zaidi, 2005, p. 141).

4.2. Efficiency of the textile industry

Syed Nawab Hyder Naqvi and A.R. Kemal who have extensively analysed the performance of public sector enterprises have carried out a more detailed analysis on efficiency of textile industry. The salient conclusions from this analysis are as follows:

- Of the corporations, which run the public enterprises, five of them accounting for 71percent of output originating in public enterprises have been reasonably profitable even from a strictly commercial view.
- It is presumed that the effective rates of protection are usually higher for the public sector than for then private enterprises but their results show that these rates are relatively lower in industries where public enterprises dominate.
- The industries dominated by the public sector do not suffer from a higher level of inefficiency than that observed in the private sector; hence efficiency levels across industries are independent of the levels of ownership.
- The incidence of the worst kind of a locative inefficiency is in the private sector rather than in the public sector.
- Of the sixty inefficient industries identified, only 9 were in the public sector.
- Capacity utilisation is high in public enterprises where thirty-nine of the sixty enterprises had capacity utilisation rates exceeding 75percent.

The overall conclusion of Syed Nawab Hyder and A. R. Kemal regarding the public sector are articulated as follows:

The public sector's profit was neither due to the higher level of protection rate, nor due to any restrictions which placed on the entry of new firms. However, it was only because of the better performance and superior productive efficiency, and the change of the inherent inefficiency of the public industrial enterprises (Naqvi and Kemal, 1991, p. 112).

It shows clearly that the changing of locus of industry ownership came out by itself, not due to the efficient operation of specific industrial enterprises. Indeed both the private and public sector firms have operated efficiently depending on the type of industry to which they belong.

Finally, for them, where industrial inefficiency is the problem government should take action to develop the situation of the ownership. The change of public enterprises on ideological grounds to secure uncertain gains or to satisfy the donors and creditors, it is not an optimal policy and it will lead us naturally to the theme of privatisation.

4.3. Debate over efficiency of industries in Pakistan

Following the end of industrial boom of the late 1960s, a number of books and papers were written on Pakistan's industrial performance and the collective view was that the high growth had been achieved at very considerable costs and that the entire industrial structure was severely inefficient. The policy instrument that were held responsible for creating this inefficiency rested on the extent and degree of state intervention in distorting price in the domestic market which was said to affect the manufacturing sector adversely (Kemal, 1978).

Little Tibor Scitovsky and Maurice Scott undertook the main work that leads to debate over the inefficient nature of Pakistan's industrial structure and work challenged the premises of import substitution, protection and industrialisation process. This study found that amongst developing countries studied, Pakistan had the highest effective rates of protection in manufacturing. Recalculating the manufacturing sector's contribution to value-added, the authors found that the industrial value-added actually grew at a negative rate and not at 16percent as believed Cheema (1995). The conclusions of the study were that too much emphasis had been given to the manufacturing sector and hence the agricultural sector and manufactured exports had suffered. The policy tools that caused these distortions were the multiple exchange rates, the tariff structure and to some extent, the system of import licensing. The multiple exchange rates meant that exporters imported their inputs at a very below par exchange rate and then exported either goods at a higher rate (Zaidi, 2005, p. 143).

4.4. The textile vision

While the government of Pakistan intends to provide soft term loans to the textile industry under the textile vision, the IMF wants elimination of all such credit in future. This will put an end to an ambitious textile export promotion programme envisaged by the sitting government. Both the government and IMF have dissenting views on the provision of concession credit to the export oriented textile manufacturers. With the advent of World Trade Organisation (WTO) agreement and subsequent elimination of quota system by the year 2005, Pakistan textile manufacturers will be facing enormous challenges to market their products globally.

In a bid to meet the tough revenue target, the Central Board of Revenue (CBR) has neither provided any significant tax relief to the textile sector. To meet the shortfall in tax revenue during the first fiscal year, Central Board of Revenue (CBR) withheld refunds of more than RS15billion, creating a liquidity crisis for the entire export industry in the country, which ultimately showed down the growth of exports in the later months.

The textile industry has generated around $550billion additional foreign exchange last fiscal year, while during this fiscal year this sector is expected to attract even more through exports. The textile sectors can double its exports within the next three to four years if given the adequate credit; it can implement the balancing modernisation and replacement plan (Zaidi, 2005, p. 143-144).

5. Impact of industrial sector on Pakistan's economy

Table 7 shows how much lower the growth rate of manufacturing is in the 1990s compared to the 1980 following falling from a very impressive 8.21percent average annual increase over the decade to only 4.8 percent for the 1990s. Moreover, in the last five years of the 1990s, the growth was only 3.22percent. In 1976/77, the growth for industrial sector was -0.1 percent and was only 1.5percent in 1999/2000. Clearly, this has been a worrying trend and the fact that it has risen in the 2000 – 2003 period. Other trends in the industrial sector in the 1990s only reconfirm the deteriorating condition of industry to the country. For example, fixed investment, as a percentage of GDP in 2002/2003 is only 13.1percent down from 19percent in 1992/2003 falling gradually and noticeably each year. What is more disturbing is that while all governments have been relying on the private sector to lead Pakistan to higher levels of developments, private investment as a percentage of GDP has also fallen from around 10percent in 1992/1993 to around 8percent since 1989/1999. Most importantly the Gross Fixed Capital Formation (GFCF) in the private sector in the large scale manufacturing sector 1980/1981, in constant prices, fell continually over the 1990s by as much as 60percent between 1991/92 to 1998/99 (Table 7).

Table 7. Key Indicators in the Industrial Sector 1990 – 2003

S.N.	Item	1990/1	1991/2	1992/3	1993/4	1994/5	1995/6	1996/7	1997/8	1998/9	1999/2000	2000/1	2001/2	2002/3
1.	Fixed Investment	17.4	18.5	19.1	17.9	16.9	17.2	16.2	14.7	13.9	14.4	13.9	13.1	13.1
2.	Public Investment	8.5	8.7	9.1	8.3	8.2	8.2	6.8	5.2	6.1	6.0	5.5	4.8	4.5
3.	Private Investment	8.5	8.8	10.0	9.6	8.7	9.0	9.4	9.6	7.9	8.4	8.4	8.4	8.6
4.	Gross Fixed Capital Formation	-	14,468	14,076	14,448	8,619	9,814	9,289	8,248	5,741	7,293	7,523	10,199	12,844

Source: Pakistan Economic Survey Government of Pakistan Various Years, Islamabad 2002 – 2003

The numbers above reveal the stark reality that the industrial sector has suffered over the last decade and a half since the structural adjustment programme was initiated in 1988. We can examine the various policy interventions on account of the structural adjustment programme and their consequences on industrial inputs and performance. For example, if we examine the cost of borrowing, the rate of interest to borrowers of capital, we will see how reforms in other sectors impact upon the industrial sector. From an average of 12percent in 1990, the rate of interest for financing long term industrial investment rose to an average of 20 – 23percent by 1997. The interest rate on working capital also increased to 25 – 30 percent in the same period. The rate of interest in Pakistan was controlled and regulated rate, which was kept low around 6percent in the 1990s, was liberalised (increased) and supposedly made market determined as a consequence of reforms in the financial sector.

5.1. Protection inefficiency measurement

Viqar Ahmed and Rashid Amjad discuss the methodology used in calculation of effective rates of protection and show how we come up with concepts as a negative value added by industries. Basically, these exercises calculate the cost of input and the value of outputs first at market or domestic prices which include protection and other subsidises and compare these with costs of inputs and the value of outputs.

The effective rate of protection is then defined as the percentage of value-added due to protection. A simple version of the concept may be shown as follows:

$$\text{Effective rate of Protection of value added Due to protection} = \frac{W - W}{W}$$

Let us illustrate by taking three different cases, suppose value added at domestic prices is a hundred but at world prices is only ten, then value added due to protection or the effective rate of protection is 90perceent in the second case. Support value added at domestic price as is again a hundred but at world prices is negative i.e. sale value of output is less than the cost of inputs (say minus ten), in this case then, the rate of effective protection is 100 (Viqar and Amjad, 1984).

Arshad Zaman also measure EPR as follows: - The concept of effective protection was designed to be a summary measure of the degree of incentive provided to an industry and is usually measured in terms of effective protection rate (EPR) defined as the different between value-added at domestic prices (VAD) and that in world prices (VAW) expressed as a ratio to the latter. Thus:

$$EPR = \frac{VAD - VAW}{VAW} = \frac{VAD}{VAW}$$

In practice, a number of assumptions are made in calculating EPR which should be bone in mind. First the calculations assume that domestic producers are taking full advantage of the protection offered by tariffs. Where prices are controlled the producers are unable to exploit the potential advent age of protection. Second survey data on which EPR estimates are based exhibit under reporting of protection estimates. Third

prices comparisons based on reported CIF import prices reflect under invoicing of imports and consequently lead to overestimates of implicit EPRs (Zaman, 1986).

5.2. Productivity Growth Measurement

Asia's growth performance has been in spectacular and so sustained that it has been dubbed the East Asian miracle in a study conducted by the World Bank. To challenge the received wisdom that Asia has a magic formula for success, we have Professor Paul Krugman of Stanford University who states flatly that the miracle is based on perspiration rather than inspiration. Krugman argument relies heavily on Empirical work by Professor Alwyn Young of MIT and others is very simple he says that Asian growth has been driven by growth in inputs like labour and capital rather than by gains in efficiency in this sense.

Paul Krugman Introduced Growth Accounting – Krugman makes his case by using a basic equation of growth accounting. This is a technique which uses regression analysis to isolate and quantify contributions to economic growth the equation is as follows:

GDP Growth – Growth in Labour Input + Growth to Capital Input + Total Factor Productivity (TFP)

The rationale behind this is simple, economic growth comes about either through the application of more inputs or through a rise in output per unit of input i.e. improvements in TFP. The labour input variables captures all the influences that increase either the quantity or quality of labour used in the production process. These include growth in population rising participation rates, growth in employment and improving levels of education in the stock of physical capital used in production and is measured by spending on plant, machinery, equipment, roads, and telecommunications and so on.

What is left is TFP which is a pure measure of efficiency i.e. improvement in management and work organisations and improvements and innovations in technology. Since this is very difficult to measure TFP directly, empirically is derived as a residual in the growth equation. TFP is what is left after the contributions of labour and capital are determined and subtracted out (Fleming Jar dine, 1996, p. 18).

6. Summary, conclusion and recommendation

6.1. Summary

The overall objectives of this paper were to critically analyse the efficiency, crisis and development of industries in Pakistan, specific objectives were:

- To review the Pakistan's economy and policy measures for industrial sector and efforts to attract foreign direct investment
- Examine the structure of manufacturing sector and growth selected industrial items.
- Critically analyse the textile industry crisis, textile vision, failure and efficiency of industries in Pakistan.

- Assess the impact of industrial sector on Pakistan's economy.
- Recommend strategies for improving efficiency and performance of industries.

6.2. Conclusion

The major conclusions drawn from this paper were:

- Growth rates were high during the fifties and sixties, large scale manufacturing rate declined due to industrial structural reforms.
- In the 2002 – 2003, there have been marginal improvements in manufacturing sector growth rates.
- In Pakistan the worst level of allocation inefficiency in the private sector and also in the public sector.
- The crisis affecting the textile industry has resulted from political interference, poor policies, bad management and inability of the industry to adapt to changing world demand needs.
- Today many people believe that much of industry is considered sick and thousand of industrial units remain closed.
- Recent evidence shows that although many problems and hindrances have affected industrialisation process in Pakistan, the causes and claims are in fact not true.
- Finally, the paper identified general government support and encouragement through the establishment of a textile vision for the country, access to energy infrastructure, credit at concessionary rate and opportunities for exports and foreign direct investment.

6.3. Recommendations

On the basis of the above, the following recommendations were made:

- There must be a limited share of public sector in manufacturing or direct industrial projects.
- A crucial issue that needs our utmost attention is the deteriorating law and order situation in the country. Similarly, insecurity and increasing lawlessness ground business centres makes it very difficult for local and foreign investors impossible to go for long term investment.
- Government must use its powerful resources for improving the law and order situation in the country. This will ensure security and confidence of business to make investment.
- The private sector as the engine of economic growth must continue to take up challenges in the process of manufacturing.
- Foreign private investment in Pakistan need to be increased, policies to attract private investors must be re-examined to encourage investment.

Some of the key factors that provide incentives for foreign investors are:

- Simplifying permissions or sanctions for making investment.
- Liberal tax concessions in terms of import duties, surcharges and tax holidays must be given.
- Income tax-rates must be calculated at different rates realising the importance of foreign investment in that particular sector. An important factor is environment for long term investment.

- Small scale industries in Pakistan require further encouragement from the government. This sector can help reduce unemployment figures in the country.
- Research plays an important role in the development of new products and efficient production of existing ones. Therefore, modernisation of industrial processes and adapting to new technology are vital for industrial development. For this purpose research, must be conducted by both public and private sectors for feasibility and profitability of projects in the country and their impact on international market.
- The industrial efficiency is an important issue in Pakistan. Government takes such, action for upgrading the condition of the locus of ownership.
- In future, we should avoid divesture of public enterprises mainly on ideological grounds or to satisfy donors and creditors, certainly it is not an optimal policy this will lead us to privatisation.
- The increased availability of imported fabric and garments after implementing the trade reforms would encourage restructuring in the textile industry. Such a restructuring will help Pakistan textile sector to make better use of its competitive advantage in world markets.
- All other areas of the textile industry profits will suffer unless the efficiency of production is increased. In particular, the weaving and finishing and woollen yarn industries which are currently operating under high protection with low levels of efficiency.

In order to overcome shortage of energy for industries, we recommend the following:

- Electricity supply be substantially increased by building new dams energy losses be decreased during various operations of production and distribution of electricity.
- Load shedding be eliminated in order to retain the projected growth of different sectors of the economy
- The use of indigenous fuels like coal and gas in power generation and other sectors be encouraged to reduce high cost of their import.
- An efficient load management system must be established for the optimum use of generated power.
- There must be rational use of energy consumption, charges and structural anomalies be removed so that the public appreciate government intentions.
- Necessary incentives for energy conservation and substitution of different fuel be given to the public.

References

Ahmed, M.B. and Laporte, R. (1989), *Public Enterprises in Pakistan: the Hidden Crisis in Economic Development*, West view Press Boulder Colorado State, USA 1989, PP. 173 – 5.

Anka, L.M. (2010), "Empirical Analysis of the Determinants of Rural Poverty in Sindh Province of Pakistan", Unpublished PhD Dissertation, submitted to University of Sindh Jamshoro Sindh, Pakistan.

Cheema A. (1995), *Pakistan's Textile Policy and Trade Performance 1972 – 90 Mimeo*, Sydney Sussex College, Cambridge UK.

Fleming, J. (1996), *Asian Economic Outlook*, Hong Kong 1996, p.18.

Institute of Developing Economies (1994), *The Study on Japanese Cooperation in Industrial Policy for Developing Economies*, Pakistan, Tokyo, 1994, P.340.

Kemal, A.R. (1978), "An Analysis of Industrial Efficiency in Pakistan: 1959 – 60 to 1969 – 1970", Unpublished Ph.D Dissertation, Submitted to University of Manchester, U.K.

Khan, S.J.I. (2006), Potential Analysis of Large and Small Scale manufacturing Industry (Pakistan Manufacturing Sector Evidences) of Early Fifty Years.

Mamoon, D. and Mushid, S.M. (2006), "Trade Policy", Openness and Institutions, Pakistan Development Review, Vol. 45, No. 1, Spring 2006, pp. 99 – 119.

Muslehuddin, G.E. and Mahmood, T. (2007), Technical Efficiency of Pakistan's Manufacturing Sector: A Stochastic Frontier and Data Envelopment Analysis", *The Pakistan Development Review*, Vol. 46 No. 1, pp. 1 – 18.

Naqvi, S.N.H and Kemal, A.R. (1991), "The Privatisation of the Public Industrial Enterprises in Pakistan", *Pakistan Development Review*, Vol. 31 No.2, p. 111.

R.M.R.D.C. (2009), "Baseline Study on Industrial Upgrading and Restructuring", A Report of the Technical Committee on Baseline Study for Industrial Competitiveness in Nigeria, Raw materials Research and Development Council, RMRDC Survey Series 060.

Saeed, K.A. (2010), *The Economy of Pakistan Core Text for Universities and Colleges in Pakistan*, Revised and Updated, Oxford University Press, Karachi, Pakistan.

Saeed, K.A. (2005), "Political Alignments, the state and Industrial Policy in Pakistan: A Comparison of Performance in the 1960s and 1980", Unpublished PhD Thesis, University of Cambridge U.K., 1995, P.40.

Viqar, A. and Amjad, R. (1984), *The Management of Pakistan Economy 1947 – 82*, Oxford University Press, Karachi, Pakistan.

World Bank (1993), "Pakistan Country Economic Memorandum FY93: Progress under the Adjustment", Programme Report No. 11590 – Pakistan, Washington, 1993, pp. 48 – 49.

World Bank (2004), *Growth through Adjustment Report No. 7118 – Pakistan*, Washington, p.40.

Zaman, A. (1986), "Effective Protection and Performance of Public Enterprises in Pakistan", *Journal of Public Enterprise*, Vol. 7 No. 1, p. 43.

Zaidi, S.A. (2005), *Issues in Pakistan's Economy Second Edition Revised and Expanded*, Oxford University Press Pakistan, pp. 139-144.

Ziaul Haq and Stolen, J.D. (2004), "Total Quality Management Contrasts in Manufacturing and Service Industries", *Pakistan Management Review*, Vol. XLI, No. 4, Fourth Quarters, 2004, Page 16 – 38