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Md. Iftekhalrul Islam Bhuiya ^α, Emran Ahmed ^σ & Shabuz Mahmud ^ρ

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I. INTRODUCTION

After 1990, the private sector in Bangladesh boomed with growing exports, employment, and investment encouraged by the government's liberalization of trade. In Bangladesh, EPZ was not established until after 1980 that the government began to develop EPZs. Export Processing Zones were established in developing countries after 1960. However, in last two decades, the export-processing zones have been important for Bangladesh in terms of investment, exports and employment growth. EPZs are an important attraction for potential investors, who require that the host country have a well-organized policy mechanism, with good incentives, such as tax-free status and strong security (Kenkesu, 2003a).

EPZs are an essential part of Bangladesh's economic strategy and Bangladesh now has eight EPZs. In 1983 the first EPZ was established in Chittagong, this was followed in 1993 by a second in Dhaka and by 2005 there were eight EPZs altogether. Export-processing zones provide crucial advantages for both host countries and foreign investors. The host

Country gets benefits like investment, exports and employment. On the other hand; foreign investors are able to take advantage of cheap labour, incentives and others facilities.

a) Objectives of the Study

- i. To analyze the relative performance of Bangladesh Export Processing Zones (BEPZs).
- ii. To identify the reasons for the difference in their (BEPZs) performance.

II. LITERATURE REVIEW

An Export processing zone (EPZ) is one of many trade policy instruments that can be used to attract foreign direct investment (FDI) to a host country. FDI may benefit the host country by increasing foreign exchange earnings, employment growth, technology transfer, and modern management skills for example. In addition, EPZs aim to promote non-traditional exports from the host country. An EPZ is a category of Special Economic Zones (SEZs), which is an area where the government provides facilities and incentives to attract foreign investors. Types of SEZs include free industrial zones (FIZs), free trade zones (FTZs), and EPZs. These all are similar but there are some differences. The idea of EPZs developed from the older concepts of industrial parks and free trade areas that appeared in the late 1950s and early 1960s (Madani, 1999). Export processing originally meant that the zone sold its products on international markets but over the time host country governments have softened the rules and regulations. So that now some proportion of EPZ products are allowed to be sold in host country domestic market (ILO, 2008).

The export processing zone is the enclave where so many things come together to influence of EPZs efficiency like government incentives in these areas, it's size and position that convenient to operate these zones smoothly. The infrastructures, training, education and university, these each element stimulate EPZs acts very smoothly and that brings EPZs success (Madani, 1999). EPZs require good transport links, which includes easy access to roads, railways, air and seaports (Tantri, 2011). Without proper road access, railway, air and seaport these zones cannot be lucrative for foreign investors (Magnus, et al 2000).

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The export processing zone is seen by many countries as the dynamic bullet to change country's economy. Its positive effects are expected to include modern management systems, changes in the country's exports, employment, investment and technology. EPZs have been shown to be one of the vital instruments in developing a country's economy over the last few decades (OECD, 2007; ILO, 2011; UNCTAD, 2009; WEPZA, 2012; World Bank, year).

When Bangladesh experienced severe economic problems after independence, EPZs played an important role in response to employment, exports and investment; particularly after 1990 (OECD, 2007, BEPZA, 2008-09). In China these zones have changed the technology sectors according to WEPZA report. WEPZA report 2012 said that in China most of the achievements came from EPZs especially success in technology transfer, unemployment decrease and investment increase in last decade (WEPZA, 2012). Similar benefits were achieved in South Korea, Taiwan, Vietnam, and Malaysia (World Bank 2009). By contrast some African EPZs achieved little, especially in technology sectors but in employment and exports improved (World Bank 2009). In Malaysia in the 1970s, the annual growth was around 13.3 percent, EPZs contributed to this by increasing export earnings, employment and foreign direct investment (Furby 2005).

Basic objectives of EPZs are the encouragement of non-traditional manufacturing exports because of increased multinational company inward investment. More precisely, this FDI should lead to employment, production and exports from EPZs. There are also hoped to be important demonstration effects, which should help to develop domestic industry's international competitiveness (Furby, 2005). Another crucial effect is the knowledge spill over effect, which should lead local factories raising production efficiency by adopting methods and technology used by MNCs in the EPZ.

Another form of indirect effect from the EPZs is backward linkages. These will occur when EPZs companies buy inputs from companies in the host country (Furby, 2005). These effects help the country to produce their own raw materials, design their machinery and gain critical tactic to get higher output. If the host country government allows the sale of EPZs company products on the domestic markets, this can act as a forward linkage. For example in Mexico, 20-40% EPZs Company output can be sold in the domestic market. Similarly, in the Dominican Republic 20% EPZs Company output can be sold on the domestic market (Tantri, 2011). The sale of EPZ production in the domestic market produces more competition which promotes efficiency. Local firms are forced to make higher quality products and meet stricter delivery routines to be competitive with MNC (James, 2009).

III. METHODOLOGY OF THIS RESEARCH

This research is based on an interpretive philosophy. This research uses data from the Bangladesh Export Processing Zone Authority (BEPZA). This research is using the data from the BEPZA website is because the BEPZA is the authority for any EPZ related issues. Therefore, among various available data sources in Bangladesh, BEPZA data could be considered the most reliable in relation to EPZs. The particular BEPZA data that have been used include annual employment, investment and export data (BEPZA, 2012a)

The Research design has three dimensions explanatory, exploratory, and descriptive (Saunders et al, 2003). This research has followed the explanatory and descriptive approaches. Bangladesh export processing zone facilities are designed to attract FDI in order to improve economic performance (Islam and Mukdatir 2011). Therefore, this study analyses how successful the EPZs are in terms of investment, employment, exports. It may be termed a comparative study (Saunders et al, 2009), because the research has evaluated the relative performance of the eight Bangladesh BEPZs and seen whether this related to factors such as location, size, infrastructure and incentives.

There are primary data available from previous studies. Results of those analyses are represented in this paper to find an overall idea about the EPZ expansion in Bangladesh. Annual reports of organisations were useful sources in case of some collected information. This paper tries thoroughly to present the positive and negative relationships between various progress indicators such as-

1. Amount of investments (foreign, local and hybrid)
2. Export volume
3. Number of workers

While evaluating the above indicators, this paper has also tried to explore more indicators through analysis previous studies and the current facilities within the zones.

IV. BEPZS PERFORMANCE ANALYSIS

a) *Analysis:* Investment

For the EPZs to generate output, employment and exports they must attract investment to the country. So analyzing investment in the EPZs is one to measure their performance. In 2000-1 total Bangladesh investment was \$2691mn and total investment in BEPZAs was \$48.41mn, only 2% of overall national investment. Within of five years in 2005-6 total

Bangladesh investment was \$3204mn and total investment BEPZAs was \$112.9mn 4% of the total , so the importance of BEPZ investment seems to be growing.

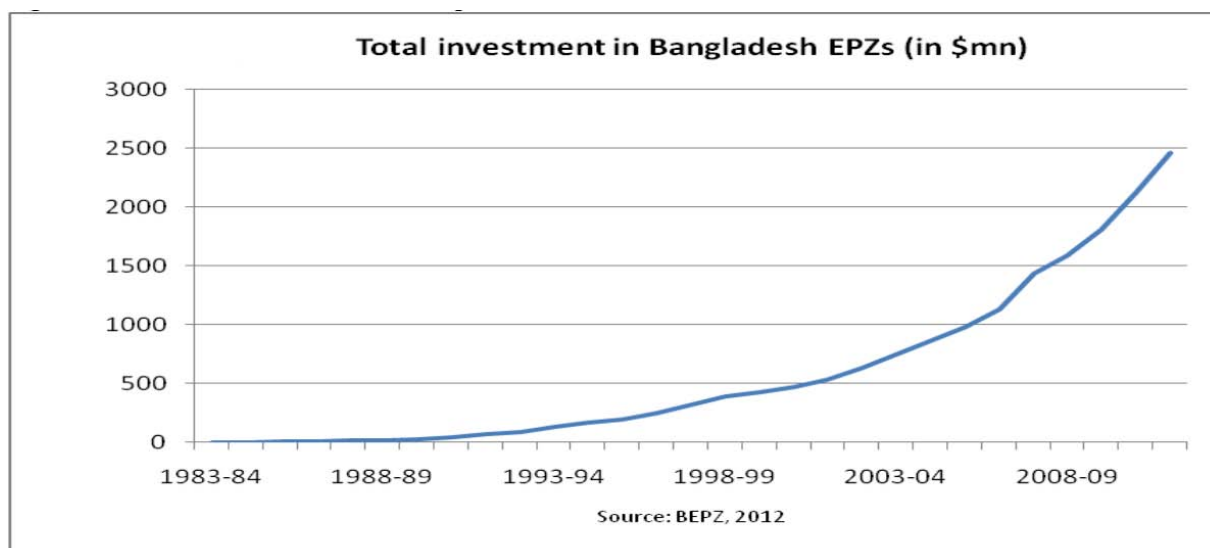


Figure 1 : Total Investment in Bangladesh EPZs

The figure above shows the total changes in investment in BEPZs. To get more accurate figure, this study adjusted the cumulative yearly investment figure with the respective yearly rate of inflation. Over the year, it is seen a positive improvement in the cumulative investment amount. Moreover, through increasing the number of Export Processing Zones, BEPZA has been attracting more and more investors in the area. Even after the inflation adjustment, that means considering

the whole figure into present condition, it is prevalent that the trend went sharply upward from 2000. After a moderate start in the 1980s total investment in BEPZs has grown very fast after 1990. This rising investment is the result of increasing investment in individual BEPZs and an increasing number of BEPZs. The rising trend of investment, even in the difficult recent economic climate, indicates the attractiveness of BEPZs including government incentives.

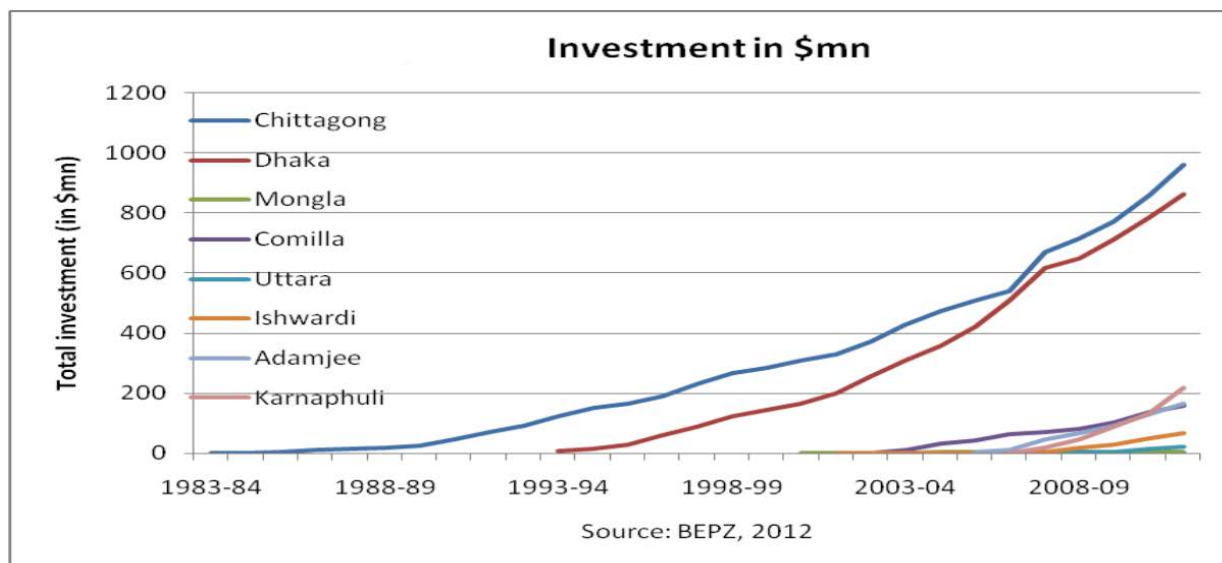


Figure 2 : Investment in Separate BEPZs

Although Chittagong and Dhaka receive most of the investment in BEPZs, with the development of the other BEPZ their share of investment is falling. So in 2011-12 Chittagong and Dhaka received 74.2% of investment in BEPZs. Among newly established BEPZs

Comilla, Adamjee and Karnaphuli have succeeded in attracting significant investment, comparable with that in Chittagong and Dhaka in their early years. Ishwardi, Uttara and Mongla have been noticeably less successful as destinations for investment.

Table 1 : Annual Rate of Change in Investments in Bepzs

	Chittagong	Dhaka	Mongla	Comilla	Uttara	Ishwardi	Adamjee	Karnaphuli
1983 - 88	2.898							
1987 - 91	11.76							
1992 - 95	23.584	15.49						
1996 - 01	28.11	27.322	0.05					
2002 - 07	42.29	61.776	0.566	12.262	0.516	0.162	5.84	1.91
2008 - 12	73.08	61.08	-0.025	21.2425	4.9525	16.375	29.71	49.2175

Source: BEPZA, 2012

Table 1 is showing the annual rate of change in investment over specific periods. Table 1 again confirms the importance of Chittagong in the BEPZs, in every period it attracted more investments. Dhaka has also collected substantial amount of investments and among the new ones, the Karnaphuli EPZ is promising.

Figure 3 below depicts how investment in the EPZs has changed over time. Chittagong EPZ (CEPZ)

did not have much investment in the beginning but it rose sharply in the 90s and recently CEPZ has been attracting the largest amount of investment among all the BEPZs. Dhaka EPZ (DEPZ) shows a similar trend but the initial growth of investment was more rapid and the level of investment in Dhaka EPZ is quite close to that in the Chittagong EPZ.

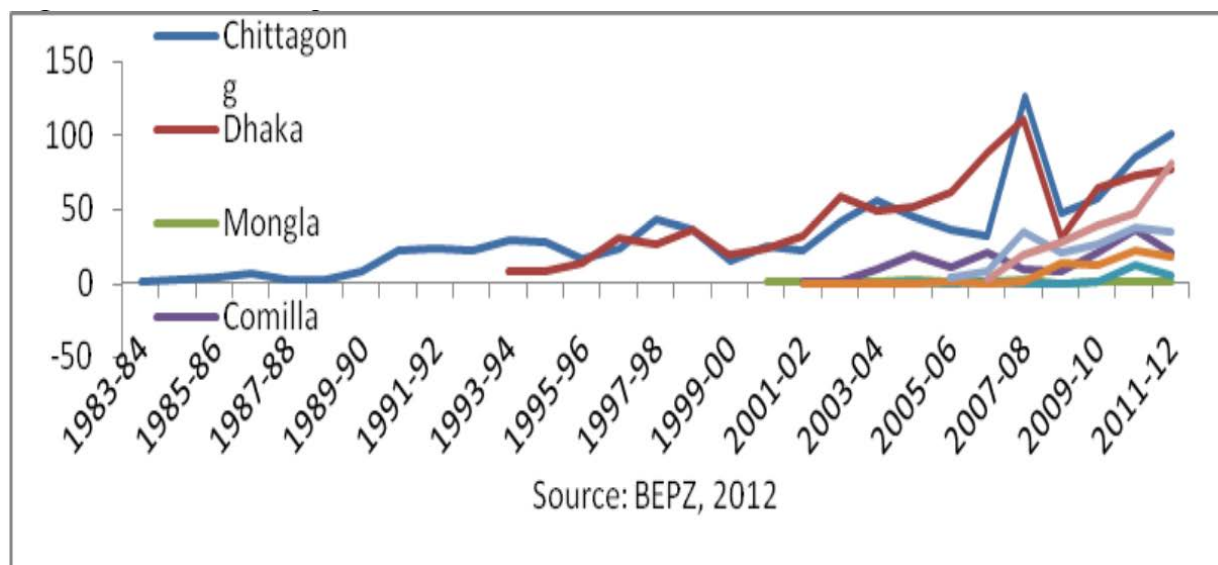


Figure 3 : Annual Changes in Investments in BEPZs

b) Analysis: Volume of Exports

Another potential benefit of EPZs is that their production will be exported. So export volume is a measure of EPZ performance. Adding value to EPZ exports adds value to the overall country economy, as well as providing valuable foreign exchange. In April-June 2012 Bangladesh total exports were \$5669mn, of which BEPZs contributed \$921mn (Bangladesh Bank, 2012). This represents 16.9% of total exports, a significant contribution by the BEPZs. BEPZs have generated \$1067mn in 2000, compared to \$4210mn in 2012, which is a fourfold increase in the volume of exports.

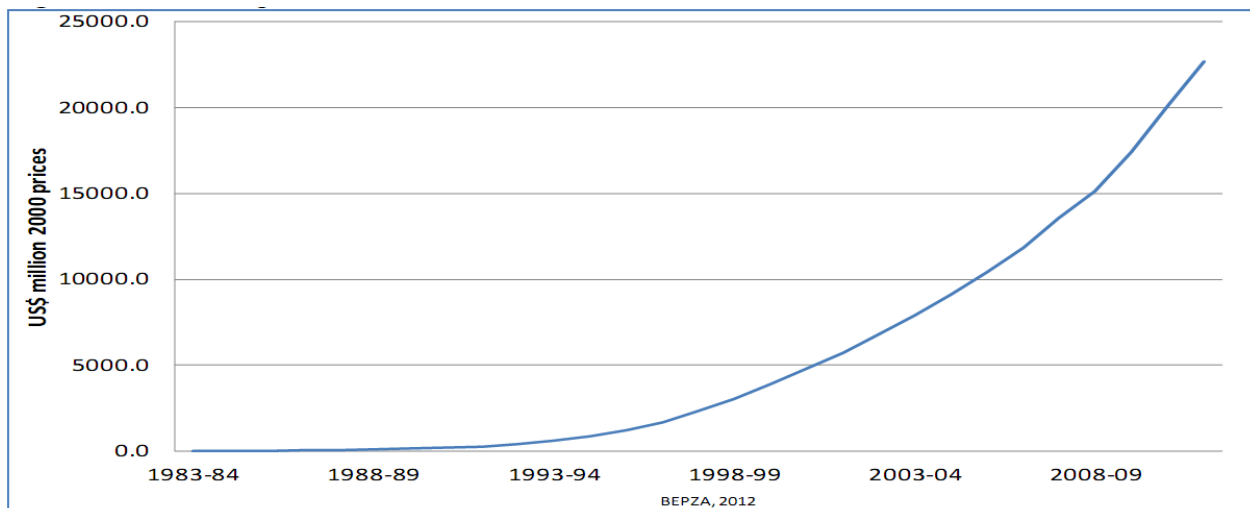


Figure 4 : Total Exports of BEPZs

Figure 4 above shows the total exports of BEPZs from 1983 to 2012. The trend is clearly upward. While the individual BEPZ's exports were rising, the number of BEPZs was increasing and these two factors led to total exports expanding. From 1983-93 when there was only one export processing zone, the total export volume increased at a relatively slow pace, after this export volume rose sharply.

dominated by the Chittagong and Dhaka EPZs. Until 2009-10 these two accounted for over 90% of BEPZs exports. However, in 2011-2 out of \$4210.79mn total BEPZ exports, CEPZ and DEPZ together accounted for \$3498.26mn (83.08%). The other EPZs have been established since 2000, within last decade. Among them, Karnaphuli and Adamjee showed a relatively competitive performance; though they are still far behind from CEPZ and DEPZ.

Figure 5 below shows the exports of individual BEPZs. Again as with Investment BEPZ exports are

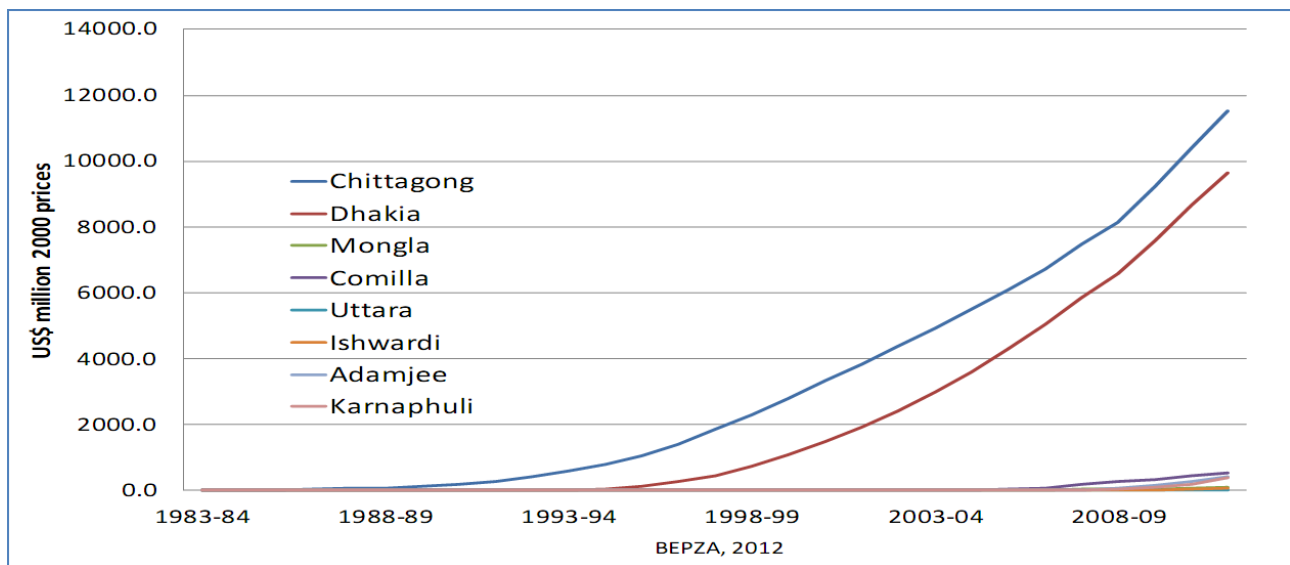


Figure 5 : Export of Individual BEPZs

To analyze further the progress of BEPZ exports, we can examine Figures 6 and 7 below.

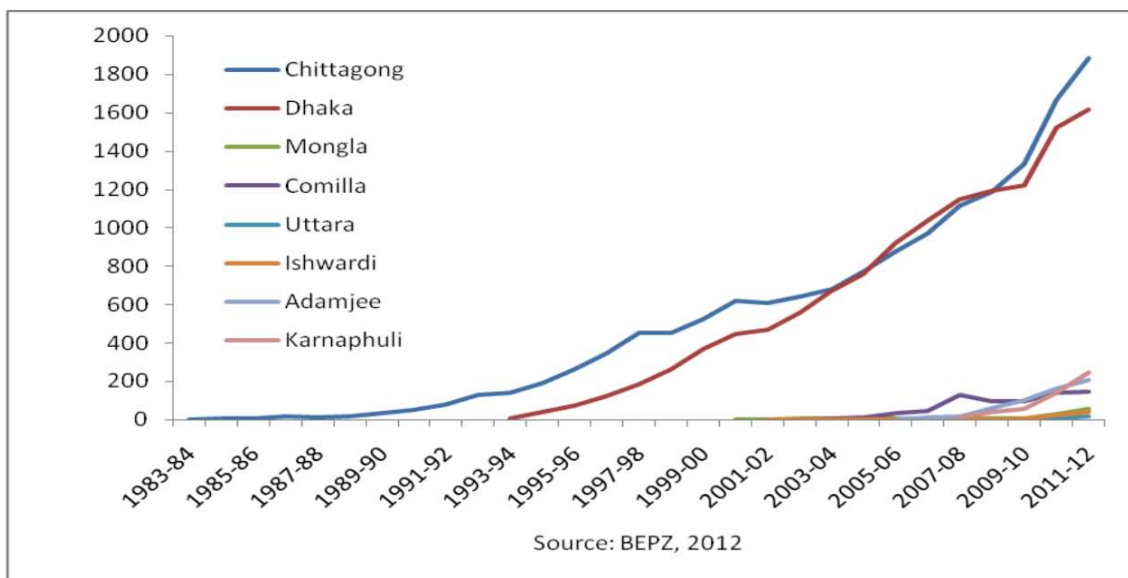


Figure 6 : Annual Changes in Exports in BEPZs (\$mn)

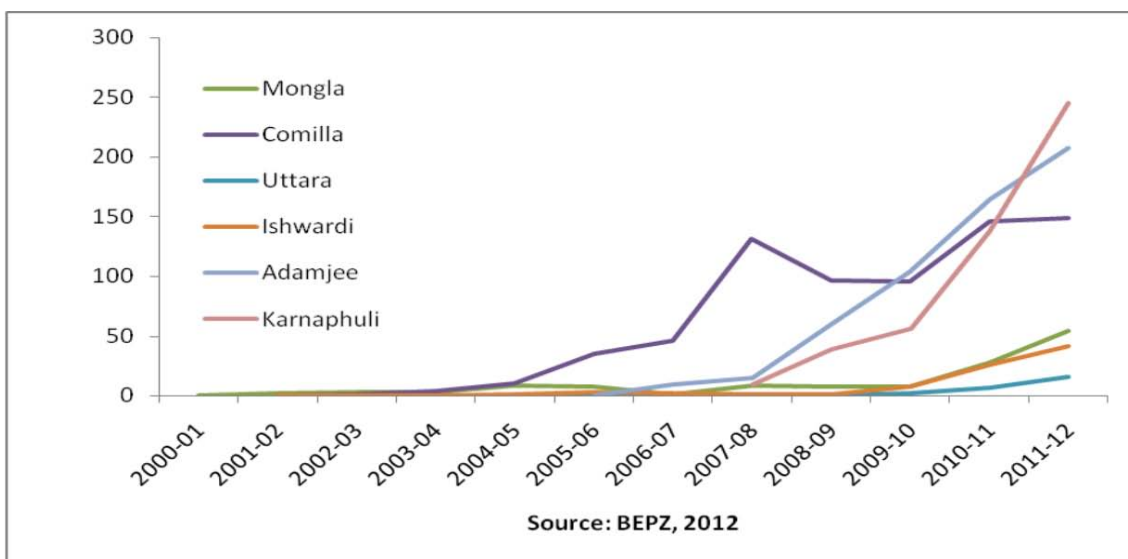


Figure 7 : Annual Changes in Export Volume in BEPZs Established Since 2000

Figure 6 and 7 show that Chittagong and Dhaka EPZs dominate the growth of exports and among the newer BEPZs Karnaphuli and Adamjee are showing a strong growth in their exports. Comilla EPZ's exports grew fast to begin with but they fell sharply in 2008-9 and have taken a while to recover.

Table 2 : Annual Rate of Change in Export Volume in BEPZs

	Chittagong	Dhaka	Mongla	Comilla	Uttara	Ishwardi	Adamjee	Karnaphuli
1983 - 88	8.28							
1987 - 91	37.84							
1992 - 95	212.30	59.80						
1996 - 01	478.46	275.38	0.00					
2002 - 07	787.45	786.29	4.49	19.18	0.02	1.17	4.85	
2008 - 12	1518.09	1385.77	24.13	121.26	6.24	18.96	133.95	119.79

Source: BEPZA, 2012

This cross-sectional analysis enables a comparison between the different EPZs. In Chittagong EPZ, exports developed slowly to begin with but have grown rapidly since 1991. Dhaka EPZ's exports grew more quickly and since 2000 growth of Dhaka EPZ has been comparable with that of Chittagong. The other BEPZs are a long way behind these two in terms of exports but it is early days yet and if Comilla, Adamjee

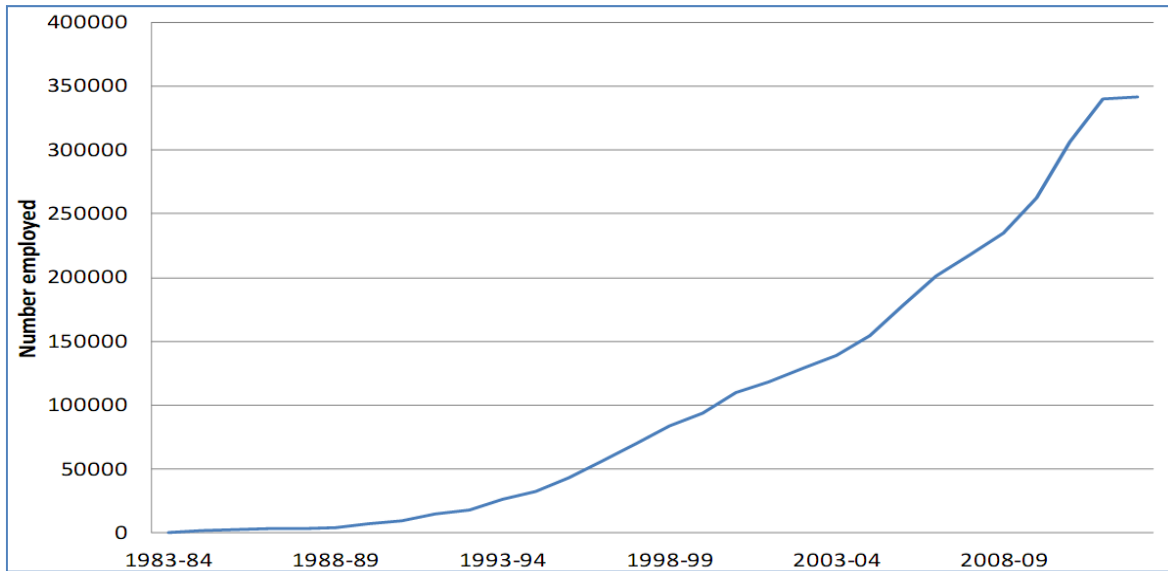
and Karnaphuli EPZs' exports continue to develop they could become very significant.

c) *Analysis: Employment*

The purpose of EPZs is to aid economic development. One way this could be judged is by employment. The number and quality of jobs created are measures of the extent to which this objective is achieved. These jobs should also not be at the expense of employment in the wider economy. The quality of employment in BEPZs is indicated by the higher wages in these zones. In 2010, fact the Bangladesh's average

wage was \$58 per month (ILO, 2012), whereas in BEPZs skilled labours' monthly wage ranged between \$61 and \$109 (BEPZA, 2012).

Data on employment in Bangladesh EPZs were obtained from the BEPZA. The time period for which the data is available, reflects of course the period over which the EPZ has been operational. These periods vary from 29 years in the case of Chittagong to six years for Karnaphuli. Thus cross-sectional data for all eight BEPZs is available only for the last six years.



Source: BEPZ 2012

Figure 8 : Total Employment in Bangladesh Epzs

Figure 8 shows total employment in BEPZs. This employment is the result of increasing employment in individual BEPZs and an increasing number of BEPZs.

After a slow start total employment in BEPZs has grown relatively quickly after 1990. Employment growth flattens off in 2012.

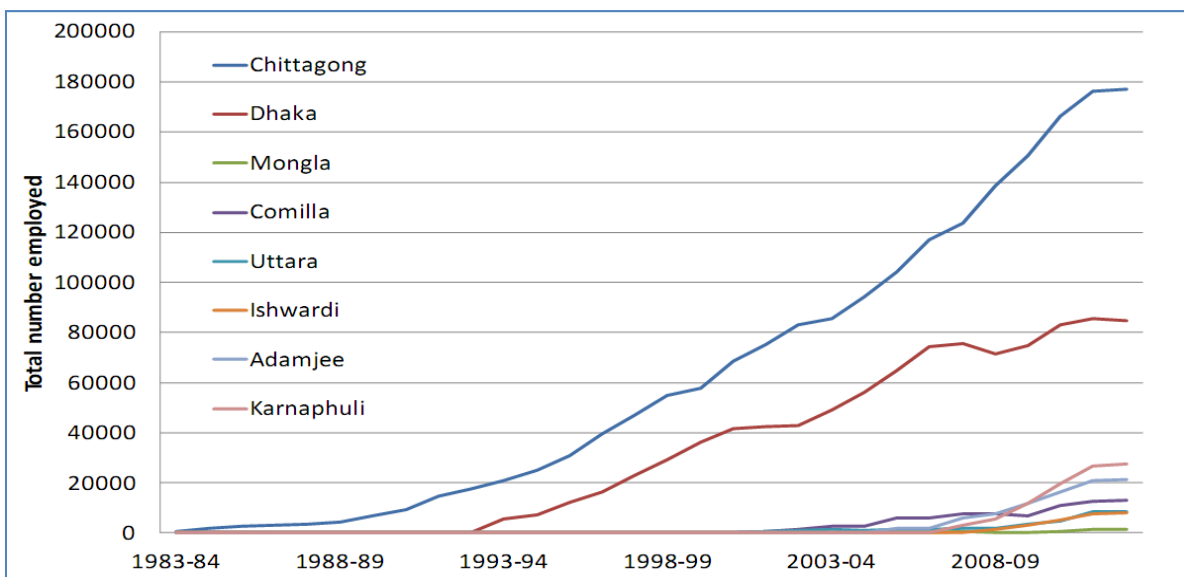


Figure 9 : Employments in each of the BEPZs

Figure 9 shows total employment in each of the BEPZs. It can be seen that Chittagong and Dhaka account for most of the employment in BEPZs. Even with the development of the other BEPZ these two still account for over 75% of BEPZ employment. Of the newer BEPZs

Adamjee and Karnaphuli is the more important, accounting for over 9% of total BEPZ employment in 2011-12.

Figure 10 below shows how employment in BEPZs has changed from year to year. It can be seen that there is a large fluctuation in the number of people hired each year. From relatively small numbers at its inception, employment in Chittagong increased relatively slowly from 1983 to 1989, but since then the growth has

been rapid and relatively stable. Dhaka started off at a large scale, even in the year it started 1993, it increased employment more than Chittagong which had already been operating for ten years. Many skilled employees were transferred from the CEPZ to the DEPZ to ensure a smooth establishment of the newly formed EPZ. There was an \$8.22mn investment, which was the largest one off investment for the country at that time (BEPZA, 2009). Then DEPZ employment grew rapidly until 2006, since when its rate of growth has slowed. In some years particularly 2008-9 employment fell in the Dhaka, Mongla and Comilla EPZs, but these falls were more than compensated by increasing employment in other EPZs, so BEPZ total employment continued to rise.

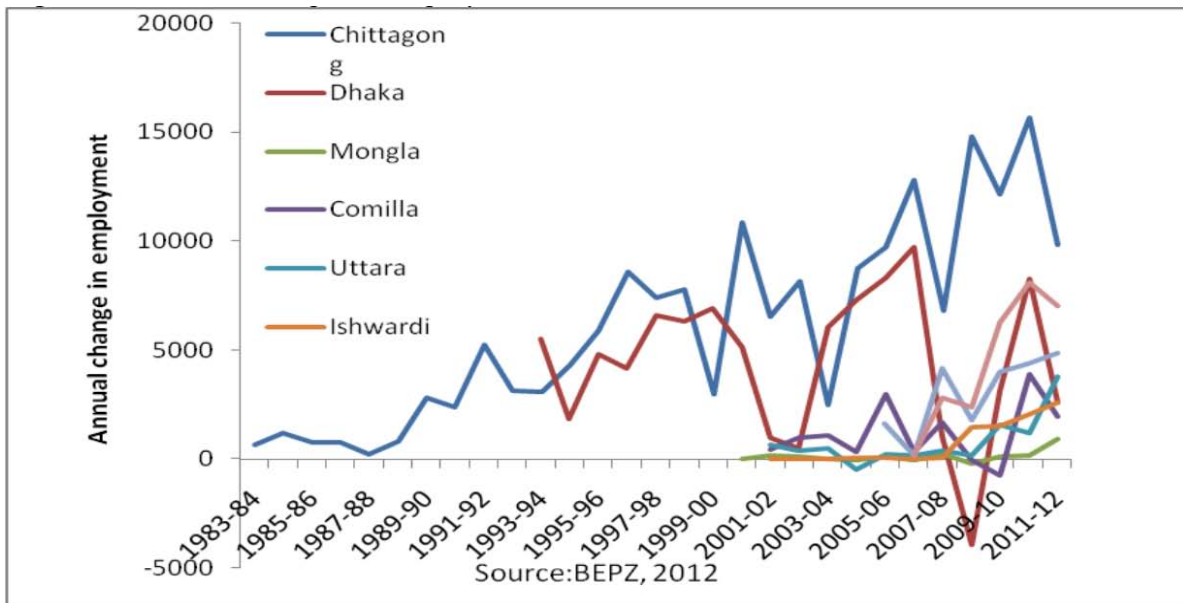


Figure 10 : Annual Changes in Employment in BEPZs

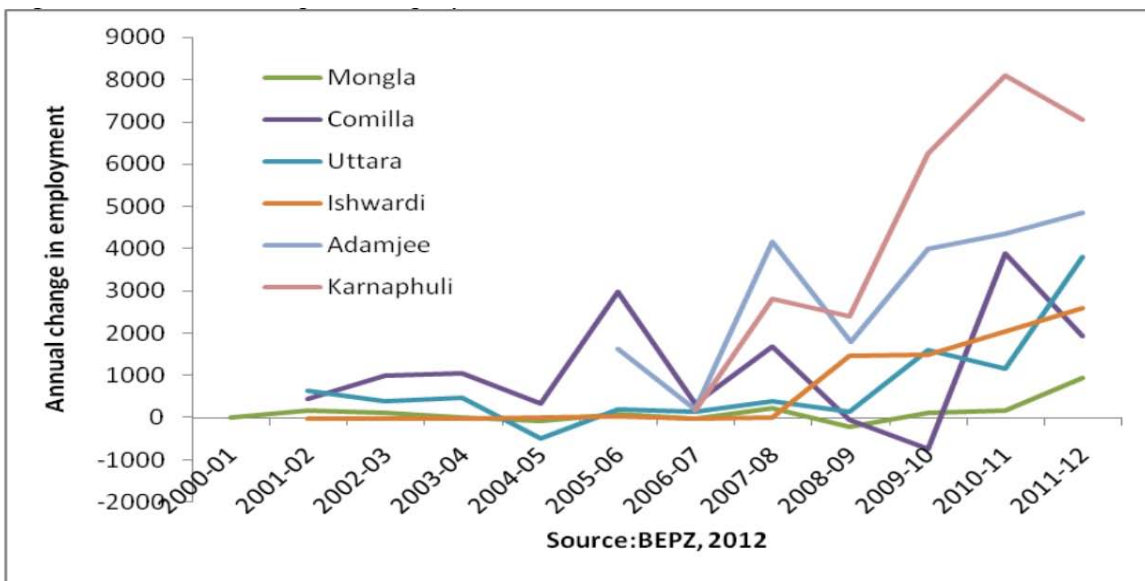


Figure 11 : Annual Changes in Employment in BEPZs Established Since 2000

The assessment of the relative performance of BEPZs is made difficult by the different time periods over which they have operated. Thus the employment in an individual BEPZ depends upon the characteristics of

the BEPZ, the stage of development of the BEPZ and the economic circumstances in Bangladesh and the world.

Table 3 : Annual Rate of Change of Employment in BEPZs

	Chittagong	Dhaka	Mongla	Comilla	Uttara	Ishwardi	Adamjee	Karnaphuli	Total
1983 - 88	687.6								687.6
1987 - 91	2274.8								2274.8
1992 - 95	4992	4602.4							8268.4
1996 - 01	7103	5204.2	85	442	644				12558.4
2002 - 07	8379	6396.6	18	1132.6	150.6	9.4	908	174	16484.2
2008 - 12	11858	2219	242.2	1334.2	1422.6	1521.2	3840.2	5331.2	27770.4

Source: BEPZA, 2012

Examining the annual rate of change of employment over specific periods as shown in Table 3, again confirms the importance of Chittagong in the BEPZs, in every period it created the most jobs. Dhaka is also very important; it is second in creating jobs in every period except 2008-12. In the latest period both Adamjee and Karnaphuli created more jobs than Dhaka. The other BEPZs are a long way behind these four in terms of employment.

This cross-sectional analysis compares BEPZs in the same time period when external factors are similar, but these EPZs are at different stages of their development. Over time Chittagong has had a greater increase in employment in each successive period. This was also the case with Dhaka until 2008-12 when there was a large reduction in the amount of jobs created. Comilla EPZ has the growth of employment been increasing in every period. Adamjee and Karnaphuli show very great progress in employment change over the two periods in which they have operated.

Quite clearly, it seems that Chittagong has been most successful in creating employment. Dhaka was very successful for a period but the reason for the slowing in its growth needs to be established. For the others it is still a little early to judge but Adamjee and Karnaphuli seem to be very successful.

V. PREVALENT DIFFERENCES

Although all EPZs are subject to a common set of incentives and regulations, they differ in their characteristics. For example they were established at different times and so they are at different stages in their development. The success of EPZs is influenced by a number of factors. This study considers the two oldest EPZs Chittagong and Dhaka as the standards and draws a comparison with the others.

Bangladesh is known to foreign investors as a provider of low-cost labour (BEPZA report 2004-05). It is an over populated country but the population density is not even across the regions of the country. Official figures shows that the current population of the country is 160 million but the city of Dhaka alone has over 15 million inhabitants. This is the 9th largest city in the world

(World Bank. 2010). Dhaka is also the second oldest city in the country with more urban facilities than any other Bangladesh city. This is the reason why more skilled labour is available in the DEPZ and why labour costs are comparatively higher in this area. This also explains why the land is more expensive here, and these two factors contribute to higher production cost. Availability of skilled labour is an advantage for the DEPZ but scarcity of land is a disadvantage.

To trace out the disadvantages available in DEPZ and provide more room for skilled labours, the BEPZA established Adamjee EPZ in 2005. This is the closest substitute of DEPZ. It has 293 acres of lands whereas Dhaka EPZ has 361 acre with almost double the number of occupied plots. Other close substitutes of DEPZ are the two EPZs situated in the northern part of the country Uttara EPZ and Ishwardi EPZ. Here it should be noted that we are calling Uttara and Ishwardi EPZs as substitute of DEPZ not as an official point of view. There is no convention that one EPZ is substitute for another as each of them could substitute one another. Therefore, here the word substitute means DEPZ was established long ago than Uttara and Ishwardi. Therefore, after those new two were being established there were many businesses and labour forces were going to Uttara and Ishwardi who might have come to DEPZ. From that point of view, new ones are substituting the capacity of the old ones.

Uttara EPZ was established in one of the most backward areas in the country. This EPZ does not even have any existing gas connection which discourages foreign investors. It has 211.99 acres of land one fourth of which is still unoccupied (BEPZA 2012). The above comparison of exports, investment and employment confirms its worst performance among the EPZs. The facilities available for Uttara EPZ are far superior. Ishwardi EPZ has efficient utility services, cheap labour is available in the Northern region and Ishwardi is one of the major gateways to the largest trade partner of Bangladesh, India.

Ishwardi EPZ (IEPZ) was established in 2001 but it became operational in 2004. In the beginning it could not attract investment due to lack of road links

and utility access, because Northern Region of the country was under developed plus there were lots of trade conflicts taking place with India at that time. The primary reason behind the underperformance of Ishwardi is the unavailability of direct road connections with the economic hub of the country- Dhaka and the largest sea port of the country – Chittagong. In 1998, the government spent \$696 million building the Jamuna Multipurpose Bridge, the 11th longest bridge in the world. This massive project improved connections between Northern Region and the rest of the country but there was still a shortage of highways that could connect the major towns to the bridge. Within a few years these roads were built, so from 2008 investment and employment at Ishwardi rose sharply. The effect of improved transport links was reinforced by the government's new policy to strengthen the economy of the North West Bangladesh. This has meant that Ishwardi EPZ has received is now getting more and more incentives than other EPZS. It is also the closest from to the Benapol port which is the largest Land Port in the country. Recent establishment of the high bandwidth internet connection made Ishwardi a potential gateway for sophisticated technologies. Although IEPZ has a lot of potential, it still has a far to go to match the performance of Dhaka EPZ.

Chittagong is undoubtedly the best performing EPZ, it is clearly outperforming its neighbours. Take Mongla EPZ for example, it is clearly the worst performing EPZ in the country, so why is it a flop? Only 30 plots out of 142 plots of Mongla EPZ had been let and only 11 factories built. At present the plot number has been reduced to 124 (BEPZA 2012) but the situation is not improving. Like Uttara EPZ, Mongla does not have any gas supply. Although the distance from both Dhaka and Chittagong is favourable but the century old roads and highways need much refurbishment. Mongla EPZ is situated in one the most backward regions of the country (Aggarwal 2006).

Comilla EPZ is situated in the middle point between cities Dhaka and Chittagong, the two economic hubs of the country. Facility-wise, it provides the necessary utilities and transportation. This EPZ has 267.47 acres of land with water and electric from its own sources. It has streetlights covering a 14-kilometre area and internal gas transmission pipeline (BEPZA 2010). The fact that Comilla EPZ's infrastructure and transport links are superior for example to Uttara and Mongla EPZs, Comilla, has contributed to it being the second best performer among newly established EPZs after Karnaphuli.

Karnaphuli EPZ (KEPZ) earned \$244 million from export in the 2011-12 fiscal year, up by 39 per cent against the target. The government set the target at \$175.00 million for the year 2011-12. Therefore, it is presumable that Karnaphuli EPZ has been performing well. KEPZ is the EPZ closet to CEPZ, so it has

benefitted from business's seeking an alternative location because of CEPZs' higher costs. KEPZ has 222.42 acres of lands with 254 industrial plots. KEPZ has the largest seaport (6 km from the Chittagong seaport) in the country to benefit it. KEPZ is situated at 9 km away from Chittagong Shah Amanat Intl Airport. The land area is much more developed in the KEPZ region with self sufficient utilities and facilities.

In 2010 Chittagong had a GDP of \$25.5 billion one fourth of Bangladesh's GDP. This gives us an idea of the economic significance of Chittagong within the country. The location is the first factor behind the success of the CEPZ. The CEPZ has the largest exports, investment and employment of the EPZs since its beginning. If we compare between the CEPZ with the DEPZ, we find the followings-

1. CEPZ was established about a decade before DEPZ came into operation which gives CEPZ some competitive advantage.
2. Being the capital of the country and the most expensive town, Dhaka regularly faces lots of political unrests, employee wage hike and many other problems. Whereas Chittagong is less politically unstable. It helps keep running the CEPZ production process more smoothly.
3. Population density is in a more favourable condition in Chittagong (15351/km²). In Dhaka the figure is 23029/km². This helps keep the city dwellers in Chittagong in more advantageous situation than those of Dhaka. Therefore, many skilled labours are now not moving from Chittagong.
4. Chittagong has an international sea-port which Dhaka doesn't have.

In view of the fact Chittagong EPZ (CEPZ) was the first to be established, it was not surprising that it developed slowly. Investment was low in the 1990s and consequently so was employment and exports. This was to be expected with foreign and domestic investors being tentative about such a new development. But from 1990s the CEPZ started to attract increasing amounts of investment and to generate significant amounts of employment and exports, to the extent that it has remained in the lead among BEPZAs in all these three areas of performance. These happened due to having a strong transportation linkage with the other parts of Bangladesh. CEPZ also gets advantage from the sea-port which is the largest of its kind in Bangladesh. Many skilled labours are now staying in Chittagong as the work facilities and political stability are more in Chittagong. Also Chittagong is one of the major tourist spots in the country which can easily determine Chittagong as one of the most favourite places to work in. CEPZ is the oldest EPZ with self sufficient facilities. It has the largest available land area among all eight EPZs (453 acres). It is situated in North which is within 6 km

from Chittagong Port, 10 km from main business center of Chittagong and 9 km from Shah Amanat International Airport. It has uninterrupted supply of water, gas and power (BEPZA 2012). Moreover we can see a strong position of CEPZ in terms of exports, investment and employability among all eight EPZs in the country. This keeps CEPZ stands out of the crowd.

VI. RECOMMENDATIONS

EPZs are playing a vital role in keeping the wheels of the economy turning. Therefore, facilitating the continued development of the EPZs should be a strategic priority for the Government. In particular the adequacy of gas and electricity supplies in BEPZs should be prioritised. The lack of a gas connection was shown to be a factor limiting the performance of Mongla and Uttara EPZs. The availability of high skill workers should be enhanced by expanding training facilities.

Besides developing roads and highways, it is also necessary to have airports near to EPZs. Also existing seaports need to enlarge and their facilities enhanced. For instance Mongla has the country's second largest seaport capacity but the port is silting up. The establishment of backward linkage from production in EPZs is vital to ensure that the EPZs impact on the wider economic development of Bangladesh. This will also enhance the attractiveness of the EPZs as locations for investment.

Encouraging diversified investment is another recommendation that comes from this analysis. More diversified products mean less sensitivity to the adverse shifts in the world economic climate. This would eventually help Bangladesh upgrade its economy.

VII. LIMITATIONS

Many companies don't want to share their confidential information in the public. Information from the BEPZA has been limited to that which is publically available. This has meant that it has been possible to evaluate the performance of EPZs only in terms of their gross effect on the economy.

It has not been possible to establish the net effect for example the figure for exports did not take account of the additional imports needed to produce these products. Similarly figures for employment did not take into account any employment generated or lost outside of the zone.

VIII. CONCLUSION

Bangladesh has eight operating EPZs. Though public involvement, EPZs are still way behind in introducing the sophisticated technology such as internet banking but overall the progress of EPZs in the country is satisfactory.

The comparison among eight EPZs in Bangladesh has enabled us to evaluate their relative

performance. This study considered volume of export, investment and employment of each zone as the performance determining factors. After analysing the data, this study found that Chittagong EPZ is the best performing EPZ in the country, with Dhaka close behind. Dhaka EPZ did not experience the slow early development that was the case in the CEPZ, since it was the second to be established this was perhaps because investors were familiar with the concept. So investment in the DEPZ grew very quickly after its establishment and so did employment and exports. Recently the level of investment and exports in DEPZ has approached but not quite exceeded that in CEPZ. Until 2000 the growth of employment in the DEPZ paralleled that in the CEPZ but since then employment has grown more slowly in the DEPZ.

Clearly the CEPZ and DEPZ have been successful, the more recent establishment of the other BEPZs make evaluation of their performance more problematic. The most recently established Adamjee and Karnaphuli have developed quickly attracting levels of investment comparable with the early development of DEPZ. This has been associated in these EPZs with employment and exports which are again comparable with the early DEPZ. So these two newer EPZs can be regarded at least as an initial success.

Comilla despite being established earlier has not quite achieved a level of investment, employment and exports comparable with Adamjee and Karnaphuli, thus it can be regarded as a partial success. The other three EPZs Ishwardi, Uttara and Mongla have been much less successful attracting much less investment, generating less employment and investment.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Aggarwal, A. et al. 2010. Special Economic zone in south Asia: Industrial Island or Vehicle for Diversification. International Trade department, the World Bank, 200, 23-24.
2. Aggarwal, A. 2005. Performance of Export Processing Zones: A Comparative Analysis of India, Sri Lanka and Bangladesh. Indian Council for Research on International Economic Relations, 155, 10-13.
3. BEPZA, 2012a. Year wise employment, Bangladesh Export Processing Zone authority, <http://www.epzbangladesh.org.bd/bepza.php?id=YREEMPL>
4. BEPZA, 2012b. year wise investment, Bangladesh Export Processing Zone authority, <http://www.epzbangladesh.org.bd/bepza.php?id=YRINV>
5. BEPZA, 2012c. year wise export, Bangladesh Export Processing Zone authority, <http://www.epzbangladesh.org.bd/bepza.php?id=YREEXPORT>
6. BEPZA, 2012d. Chittagong, [online] Available from: http://www.epzbangladesh.org.bd/bepza.php?id=c_epz

7. BEPZA, 2012e. Dhaka, [online] Available from: <http://www.epzbangladesh.org.bd/bepza.php?id=E PZ-D>
8. BEPZA, (2012f. Comilla, [online] Available from: <http://www.epzbangladesh.org.bd/bepza.php?id=e pz-col>
9. BEPZA, 2012g. Uttara, [online] Available from: <http://www.epzbangladesh.org.bd/bepza.php?id=E PZ-U>
10. BEPZA, 2012h. Adamjee, [online] Available from: <http://www.epzbangladesh.org.bd/bepza.php?id=E PZ-Adamjee>
11. BEPZA, 2012i. Karnophuli, [online] Available from: <http://www.epzbangladesh.org.bd/bepza.php?id=E PZ-Karna>
12. BEPZA, 2012j. Ishwardi, [online] Available from: <http://www.epzbangladesh.org.bd/bepza.php?id=E PZ-Ishwardi>
13. BEPZA, 2012k. Mongla, [online] Available from: <http://www.epzbangladesh.org.bd/bepza.php?id=E PZ-Mongla>
14. BEPZA, 2009. Annual report. [ONLINE] Available at: <http://www.epzbangladesh.org.bd/bepza.php?id=r eport>
15. Bijoy, c. 2007. special economic zones: profits at any cost, counter currents.org. [online] available from: <http://www.countercurrents.org/bijoy221007.htm>
16. Furby, M. 2005. Evaluating of the Malaysian export-processing zone, especial focus on the electronic industry. [ONLINE] Available at: <http://129.3.20.41/eps/it/papers/0510/0510004.pdf>
17. Islam, Z. and Muktatir, U. 2011. EPZ history in Bangladesh and its administration and legislation for economic enclave. Business and management review, 1/7, 86-107
18. ILO. 2008. Economic development and working conditions in export processing zones: A survey of trends. [ONLINE] Available at: <http://ilo.org/public/french/dialogue/download/wp3englishfinal.pdf>
19. ILO. 2011. Export processing zones: Comparative data from China, Honduras, Nicaragua and South Africa. [ONLINE] Available at: http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---dialogue/documents/publication/wcms_158364.pdf
20. ILO. 2002. SME clusters in Indonesia: An analysis of growth dynamics and employment conditions. [ONLINE] Available at: http://www.oit.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-jakarta/documents/publication/wcms_123971.pdf
21. James, E. 2009. Theory of local economic development. Surrey: Ash gate publishing limited
21. Kankesu, J. 2003. Benefit cost appraisals of export processing zones, development policy review. [ONLINE] Available at: http://siteresources.worldbank.org/EXTEXPCOMNET/Resources/2463593-1213887855468/13_BenefitCostAppraisalsOfEPZsASurvey.pdf
22. Madani, D. 1999. A Review of the Role and Impact of Export Processing Zones. [Online] <http://siteresources.worldbank.org/INTRANETTRAD E/Resources/MadaniEPZ.pdf>
23. Magnus, et al (2000) Foreign direct investment: firm and host country decision. London: Macmillan press ltd.
24. OECD. 2007. EXPORT PROCESSING ZONES: PAST AND FUTURE ROLE IN TRADE AND DEVELOPMENT. [ONLINE] Available at: <http://search.oecd.org/officialdocuments/displaydocumentpdf/?cote=TD/TC/WP%282006%2939/FINAL &docLanguage=En>
25. Queder, M. 2009. An empirical analysis on its determinants and impacts, Munic personal repec achieve, "pp". 1-24.
26. Saunders, M. et al. 2003. Research Method for Business students. 3rd ed. Harlow: Pearson Education Limited.
27. Tantri, M. 2011. Special Economic Zones in India: Are these Enclaves Efficient? [Online] Available from: http://www.isec.ac.in/WP%20274%20-%20Malini%20L%20T_5.pdf
28. UNCTADSTAT, (2009). [Online]. Available From: <http://www.unctad.org/Templates/Page.asp?intltempl D=5329&lang=1>
29. WEPZA, 2012. free zone modern world, [online] Available from: <http://www.wepza.org/>
30. World bank, 2009. "clusters for competitiveness: a practical guide and policy implications for developing cluster initiatives." [online] available from: http://siteresources.worldbank.org/intranettrad e/resources/cluster_initiative_pub_web_ver.pdf