

The Impact of Export Processing Zones on Economic Development of Bangladesh.

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Abstract:

In order to enhance economic growth of a country foreign investment need to be promoted and export processing zones (EPZ) act as an economic enclave for this. The BEPZA is the official organ of the government of Bangladesh to promote, attract and facilitate foreign investment in the EPZs. This study has explored the performance of EPZs and its contribution to the economy of Bangladesh. Data analysis composed of three parts. First part covers the performance analysis of EPZs in terms of investment, national export and employment. Second part encompasses contribution of EPZs to national export and foreign direct investment (FDI). Third part evaluates the financial performance of EPZs based on some key ratios. This study explores the performance of the EPZs between 2011 and 2019. Secondary data is the main data source and data were being collected from the official website of Bangladesh Export Processing Zone Authority (BEPZA), Bangladesh Bank (BB) and Bangladesh Bureau of Statistics (BBS).

Key Word: *Export Processing Zones (EPZs), National economy, Investment, National Export, Employment, Foreign Direct Investment (FDI).*

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I. Introduction

The economy of Bangladesh is a developing market economy, since 2004 average GDP growth rate of Bangladesh is 6.5% that has been largely driven by exports of garments products, remittances and the domestic agricultural sector. EPZs contribution to the economy of Bangladesh is significant. Now there are eight active EPZs and two proposed EPZs in different locations of Bangladesh which provides foreign and local investments opportunity thus contributing to FDI, infrastructure and administrative facilities, promoting exports, creating employment opportunities, transfer of technology and development of forward and backward linkage industries and so on.

The BEPZA is the governing authority to perform the inspection and supervision of the compliances of the EPZs related to social and environmental issues, safety in EPZs. With the assistance and proper guidance of BEPZA, EPZs are tremendously contributing to the national economy of Bangladesh.

This study basically focuses on evaluating the performance of EPZs in terms of investment, export and employment as well analyzing the contribution of EPZs to the economy of Bangladesh based on EPZs contribution to National export and Foreign Direct Investment (FDI). The objectives of the study are to analyze the performance of EPZs in terms of investment, export and employment, to show the contribution of EPZs to the economy of Bangladesh based on National export and Foreign Direct Investment (FDI) and to analyze the financial performance of EPZs using financial ratios.

II. Literature review

Hasan and Ali (2019) studied the role of EPZs on Bangladesh national economy. Study based on 2005 to 2018 data, showed that EPZs effectively contribute to FDI, export and investment although its performance in terms of size, location and infrastructure basically attracting the foreign investors.

The impact of EPZs on national economy a study developed by Islam (2018) revealed that EPZs playing an important role in foreign earnings by promoting exports, foreign direct investment and employment creation. On the other side study showed that net profit of EPZs were not in a good position.

Cirera and Lakshman (2017) conducted a study on the impact of export processing zones on employment, wages and labour conditions in developing countries. The study results shows that the employment

created in EPZs in developing countries is additional as well EPZs also pay higher wages both to males and females.

Bhattacharya (1998) conducted study on export processing zones in Bangladesh: economic impact and social issues, results showing that foreign investors are increasing as well showing a positive relationship between foreign capital and labour intensity.

Sivalingam (1994) had attempted to show the economic and social impact of export processing zone of Malaysia through a working paper. He showed several things in this study such as industrial policy and growth of EPZ in Malaysia, origin and ownership structure, direct employment effect, economic and social linkages, training, working condition and labour relations, condition of women workers.

An assessment of the impact of export processing zones and an identification of appropriate measures to support the development of EPZ of some selected countries has been observed by Gibbon et al. (2008). Study showed the performance of EPZ based on investment per capita, export per capita and export per investment, export performance by region, share of imported inputs in developed country manufacturing, changes in infrastructural development and efficiency.

Wang (2013) attempted to show the role of economic development zones in national development strategies of China. The dissertation employs data from over 50 EDZs and their host cities and use difference-in-differences (DID) model to analyze the impact on foreign direct investment in the zones of China. Based on the analysis the dissertation finds that EDZs generate industrial output, enhance export as well attracted large share of foreign direct investment.

United Nations (2015) conducted a conference on enhancing the contribution of export processing zones to the sustainable development goals: an analysis of 100 EPZs and a framework for sustainable economic zones. They suggested that EPZs should move towards the way to become a champion and contribute to the SDGs. Also they revealed that EPZs are making social and environmental excellence part of their investment promotion strategies.

Rondinelli et al. (1987) conducted a study on export processing zones and economic development in Asia: a review and reassessment of a means of promoting growth and jobs. This review showed that almost every developing country in Asia now established EPZs and FTZs but not all are benefited rather they faced high construction and labour cost, poor labour quality, unstable employment, little contribution to domestic value added, lack of modern technology in operation. Whereas some large EPZs been dependent on foreign owned firms which results in cut back production when wages, costs or international trends change.

III. Methodology

For conducting this study mainly secondary data is used as a main data source. Secondary data were being collected from the official website of Bangladesh Export Processing Zone Authority (BEPZA), Bangladesh Bank (BB) and Bangladesh Bureau of Statistics (BBS). To analyze the impact of EPZ on national economy of Bangladesh, Islam (2018) use data regarding export, employment and FDI for nine years from 2009 to 2017 and Ali & Hasan (2019) use data from 2010 to 2018. In our paper we have used data for last nine years from 2011 to 2019. We divided the analysis in three parts. First we analyze the historical performance of EPZs based on investment, export and employment along with a graphical presentation. Second we measure the percentage contribution of EPZs in respect of total export and total FDI. Last one is the key ratio analysis of EPZs from 2011 to 2018 for measuring performance.

IV. Analysis and Findings

Data analysis composed of three parts they are performance analysis of EPZs, contribution of EPZs to national export and FDI and financial performance evaluation of EPZs.

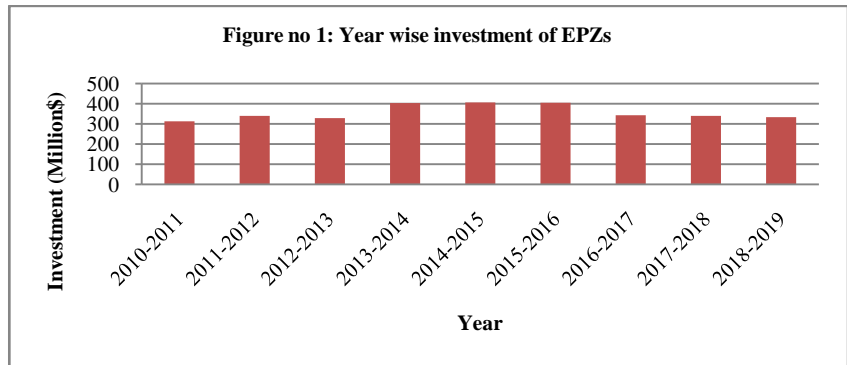
Performance analysis of EPZs: Performance analysis is based on three areas: investment, export and employment.

(i) **Investment analysis:** Bangladesh Export Processing Zones Authority follows an open door policy to attract investment from home and abroad. Investors are facilitated in three categories: Type- A: 100% foreign ownership investment, Type- B: Joint Venture between Bangladeshi and Foreign investors with no limit to the extent of equity share and Type- C: 100% Bangladeshi ownership.

Table no 1: Investment of EPZs

Year	Investment (Million\$)
2010-2011	313.25
2011-2012	339.25
2012-2013	328.53
2013-2014	402.56
2014-2015	406.38
2015-2016	404.37
2016-2017	342.48
2017-2018	339.59
2018-2019	333.38

Source: Website of BEPZA



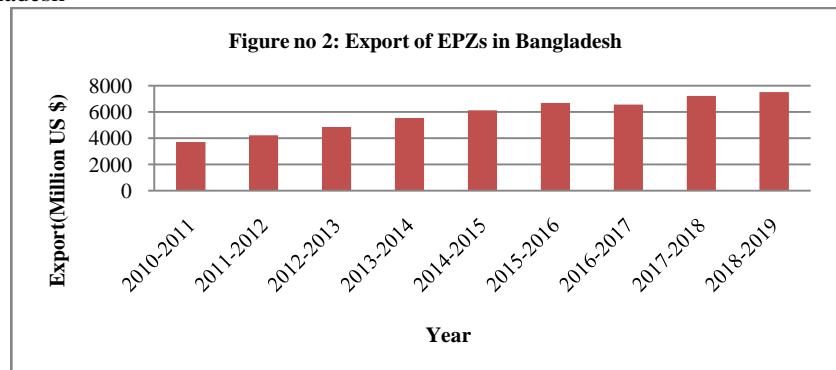
Investment is one of the key indicators of performance. Table no.1 and Figure no.1 are showing the year wise investments of EPZs, here investment in the year of 2010-2011 was 313.25 million US\$. From 2014-2016 investment was in a better position. Later on investment was decreasing and at the year of 2018-2019 it becomes 333.38 million US\$. Comparing to previous year investment was in a decreasing pattern.

(ii) Export analysis:

Table no 2: Export of EPZs in Bangladesh

Year	Export(Million US \$)
2010-2011	3697.63
2011-2012	4210.77
2012-2013	4856.69
2013-2014	5525.34
2014-2015	6113.47
2015-2016	6676.31
2016-2017	6549.37
2017-2018	7208.77
2018-2019	7513.89

Source: Website of BEPZA



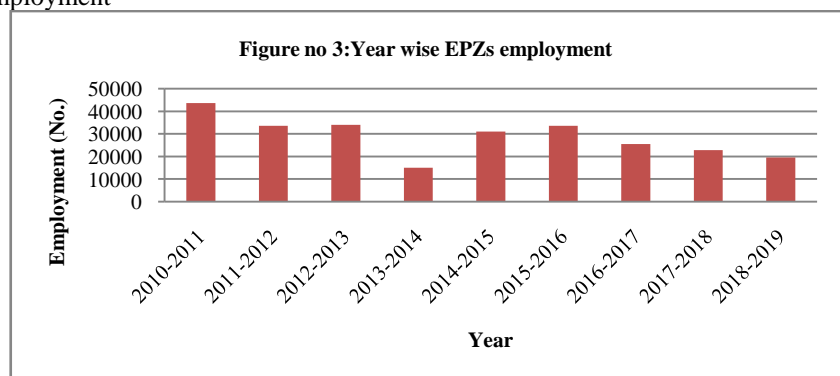
Above data and graph are showing the export of EPZs, exports at the year of 2010-2011 was worth 3697.63 million US \$ and from the data it's quite clear that every year export was increasing. At the year of 2018-2019 export of EPZs became 7513.89 million US \$, which undoubtedly showing a positive mode of export and it's a good sign because enhancement of export obviously enhance the economy of Bangladesh.

(iii) Employment analysis:

Table no 3: Year wise EPZs employment

Year	Employment (No.)
2010-2011	43666
2011-2012	33598
2012-2013	33987
2013-2014	15009
2014-2015	31084
2015-2016	33551
2016-2017	25529
2017-2018	22832
2018-2019	19548

Source: Website of BEPZA



EPZs place an important role for creating employment opportunity and thus from the above data we can see that every year EPZs provided employment to a huge number of peoples. 43666 peoples becomes employed in the year of 2010-2011 and following the trend every year EPZs appointed peoples to this sector and create employment. The most recent data of the year 2018-2019 showed that 19548 peoples been employed in EPZs.

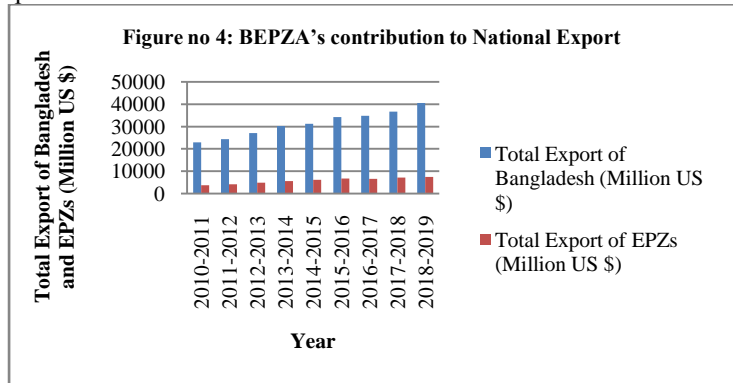
Contribution of EPZs to the economy of Bangladesh: Contribution of EPZs is mainly expressed in two aspects: contribution to national export and contribution to foreign direct investment.

(i) Contribution to national export:

Table 04: BEPZA’s contribution to National Export

Year	Total Export of Bangladesh (Million US \$)	Total Export of EPZs (Million US \$)	BEPZAs contribution (%)
2010-2011	22928.22	3697.63	16.13
2011-2012	24301.90	4210.77	17.33
2012-2013	27027.36	4856.69	17.97
2013-2014	30186.62	5525.34	18.30
2014-2015	31208.94	6113.47	19.59
2015-2016	34257.18	6676.31	19.49
2016-2017	34846.84	6549.37	18.79
2017-2018	36668.17	7208.77	19.66
2018-2019	40535.04	7513.89	18.54

Source: Website of BEPZA and Bangladesh Bank



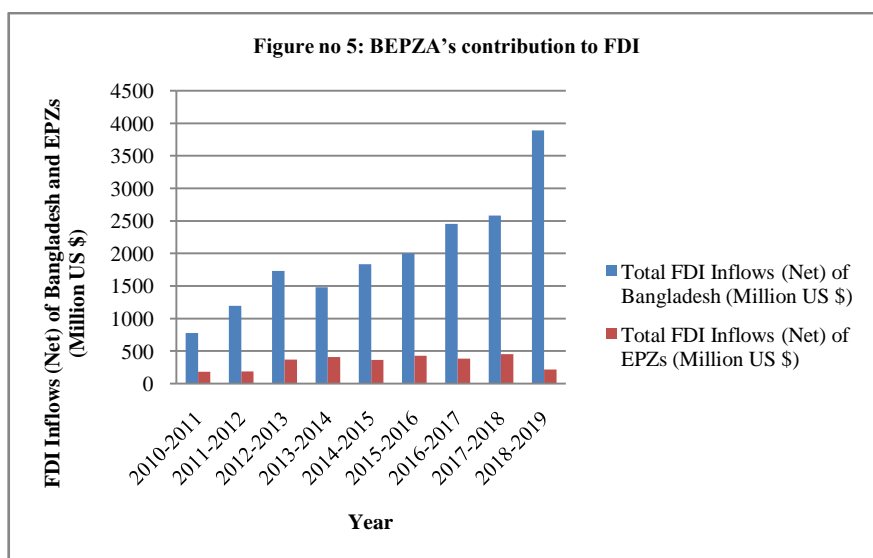
BEPZAs contribution to national export can undoubtedly be realized from the above mentioned data. From year 2010-2011 to 2018-2019 its increased while having a slight decrease in the year of 2016-2017 and 2018-2019. Rather than that BEPZAs contribution to national export is really appreciable.

(ii) Contribution to foreign direct investment (FDI):

Table 05: BEPZA’s contribution to foreign direct investment (FDI)

Year	Total FDI Inflows (Net) of Bangladesh (Million US \$)	Total FDI Inflows (Net) of EPZs (Million US \$)	BEPZAs contribution (%)
2010-2011	779.04	181.45	23.29
2011-2012	1194.88	185.26	15.51
2012-2013	1730.63	369.75	21.37
2013-2014	1480.34	406.34	27.45
2014-2015	1833.87	363.54	19.82
2015-2016	2003.53	427.64	21.34
2016-2017	2454.81	383.46	15.62
2017-2018	2580.44	450.41	17.45
2018-2019	3888.99	216.76	5.57

Source: Website of BEPZA and Bangladesh Bank



These data represent total FDI inflows of Bangladesh as well FDI inflows of EPZs. This data shows that in respect of total FDI inflows, EPZs FDI inflows were not in a good percentage. In year 2010-2011 it was 23.29%, year 2013-2014 showed a better performance of about 27.45%, whereas year 2018-2019 showed poor FDI inflows of only 5.57%.

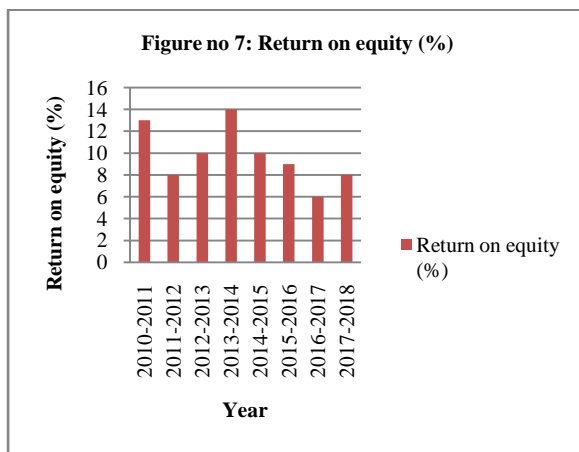
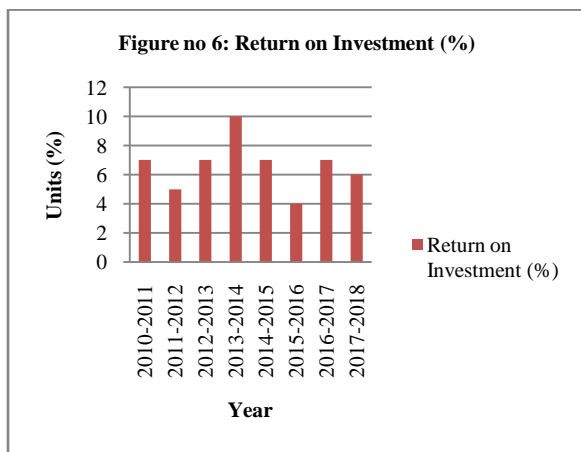
Financial performance analysis of BEPZA:

To analyze the profitability and financial performance of BEPZA following ratios are calculated:

Table 06: Key ratios of EPZs

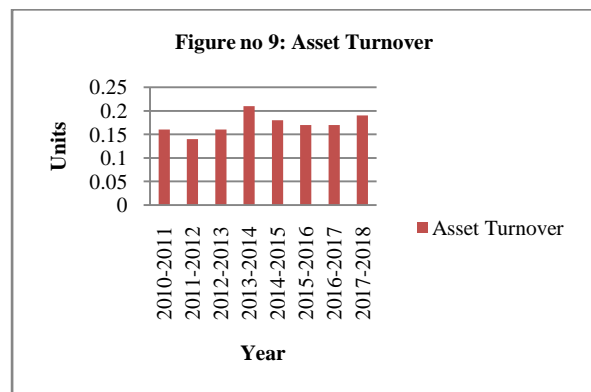
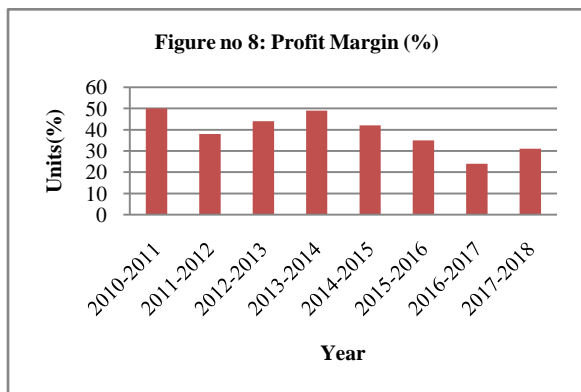
Ratios	Units	2011	2012	2013	2014	2015	2016	2017	2018
Return on Investment	%	7	5	7	10	7	6	4	6
Return on Equity	%	13	8	10	14	10	9	6	8
Profit Margin	%	50	38	44	49	42	35	24	31
Asset Turnover	#	0.16	0.14	0.16	0.21	0.18	0.17	0.17	0.19
Debt to Value	#	0.41	0.36	0.35	0.33	0.30	0.17	0.33	0.32
Accounts Receivables	Days	67	73	66	50	30	25	29	32

Source: Annual report of BEPZA



From figure no.6 it's seen that return on investment was best in year 2014 of 10% and going to decrease in following years and again in year 2018 increase to 6% from 4% in year 2017. Such ranges of return on investment which is not an acceptable outcome for an infrastructural project such as EPZ.

Figure no.7 shows the return on equity percentage of EPZs, this result shows that year 2014 at the highest point of 14% among the years and gradually its decreases from year 2015 to 2017 and a slight increase in the year 2018 of 8%.



In figure no.8 X axis focuses Fiscal Year and the Y axis focuses Units. The bar chart focuses profit Margin of BEPZA. The Profit margin of BEPZA was 50 percent in 2011 which was satisfactory and then gradually decreased to 31 percent in 2018.

From figure no.9 it's seen that asset turnover was in its best position in the year 2014 and then going to decrease and tries to recover in the year 2018. As we know that the higher the asset turnover the better the utilization of the asset it shows. Results showing that asset turnover are increasing that's a good sign.

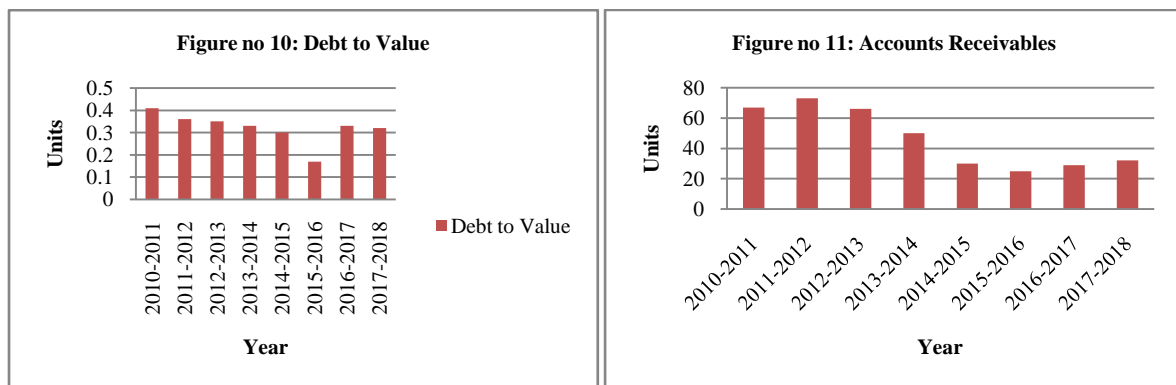


Figure no.10 showing that debt to value ratio in the year 2011 was 0.41 and going to decrease up to year 2016 and again going to the point of 0.33 in the year 2017 further increase to 0.31 in the year 2018. Generally, a ratio of 0.4 or lower is considered a good debt ratio. A ratio above 0.6 is generally considered to be a poor ratio, since there's a risk that the business will not generate enough cash flow to service its debt. In comparison to the standard value it's showing a good position of EPZs.

Figure no.11 showing that EPZs accounts receivables was about 67 days in 2011, 73 days in 2012 and started to decrease from 2013 to 2018, it's a good sign and representing that EPZs were able to collect their credit amount in a shorter time comparing to previous which indicate collection is efficient and effective.

V. Conclusion

Throughout the developing world EPZs have been a common tool set by governments with a hope to enhance economies export capacity and capability. In Bangladesh also EPZs performing tremendously to enhance the economy through contributing to investment, export, employment generation and also through promoting foreign direct investment. To smooth the performance of EPZs government support and proper assistance is much needed. Islam (2018) said that for encouraging investment in the EPZs several options could be introduced such as minimal customs regulations, duty-free tax incentives, developing infrastructure according to investor's requirements etc. EPZs also have a geographical impact around the areas where they have been established as a result of infrastructural development including roads, electricity, gas, water supply, telecommunication etc. There are much scope to enhance EPZs contribution with proper guidance of BEPZA under the supervision of the government of Bangladesh.

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