The Instrumental Relationship of Special Economic Zones and Foreign Direct Investment: From the Context of Bangladesh

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Abstract

Bangladesh has been planning to establish 100 SEZs in next 15 years. Generally, it is believed that Special Economic Zones will attract FDI and develop the host country. We intend to find some concrete evidence to evaluate the decisions taken by Bangladesh regarding establishing SEZs. We used instrumental variables expressing the growth of EPZs (main form of SEZ in Bangladesh) to find relationship of those variables with FDI. Our Granger Causality analysis with instrumental variables proves SEZs have causal relationship with FDI. But our graphical analysis shows that most of the FDI is going to the non-SEZ sectors. This proves that our SEZs are not being able to accommodate the FDI coming in our country; hence we require more SEZs to attract more FDI. We have conducted experimental analysis of the causality on other developing countries which shows that many developing countries were not successful in reaping the benefit of SEZs as they lacked domestic backward linkages, skill transfer and innovation. These results are also consistent with literatures studied for this analysis. We provide evidence that SEZs and favorable macroeconomic condition cause FDI inflow. Hence, our research yields the recommendation that Bangladesh should restructure its rules and regulations regarding SEZs so as to foster inward linkages, increase domestic capabilities, arrange efficient technology transfer, improve labor skills and ensure strict government tax management.

Keywords: Special Economic Zone (SEZ), Foreign Direct Investment (FDI), Export Processing Zone (EPZ)

1 Introduction

1.1 Statement of the problem

Special Economic Zones (SEZ) are defined as the zones within a country where the rules and regulations are not the same as they prevail in the other areas of the same country. In simple terms the business organizations in SEZs enjoy certain benefits and eases from the government and other regulatory authorities than business organizations outside of SEZs. Inspired by China, many developing countries have started to build SEZs since the 80s. With the exception of India, almost all the developing countries implementing SEZs have enjoyed the benefits (Shah 2008). Bangladesh is one of them (Shah 2008). But why the developing

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countries would want to establish SEZs in the first place in where they forgo the benefits they are supposed to receive? Farole and Akinci (2011) have mentioned four prime objectives why developing countries would want FDI: (1) to attract foreign direct investment (FDI), (2) serve as "pressure valves" to alleviate large-scale unemployment, (3) work in support of a wider economic reform strategy, (4) perform as experimental laboratories for the application of new policies and approaches (Farole and Akinci 2011). From these four objectives, Bangladesh is relatively successful in achieving objective 1 and 2. Now the government of Bangladesh is pursuing the latter two (Shakir and Farole 2011). For this purpose, Bangladesh government has already approved the proposal of establishing 24 SEZs and planning to increase this number to 100 (Byron 2016). In this paper, we evaluate this decision based on the past performance of SEZs in attracting FDI.

1.2   Objectives

Special Economic Zones have proved to be useful in attracting FDI. We have seen this from the empirical examples of the developing countries (Farole and Akinci 2011). However, FDI also can be attracted by other macroeconomic and social factors. The main objective of this article is to find the causality of SEZs in attracting FDI by taking the examples of Export Processing Zone (EPZ), the major form of SEZ, of Bangladesh. Beside this main objective, following objectives have also been pursued:

1. To find if there are any other factors other than SEZs that can attract FDI
2. To analyze the FDI inflow of Bangladesh
3. To evaluate the SEZ initiatives of Bangladesh with the example of other developing countries.

1.3   Methodology

There are numerous factors that can affect the flow of FDI into any developing country. The factors can be qualitative and quantitative. The methodologies of analyzing both these kinds of data are different in nature. In this article both the qualitative data and quantitative data have been used. Therefore, we used mainly two techniques for this article; the secondary publications analysis for analyzing the qualitative data and statistical analysis for the quantitative data. Statistical analysis includes Granger Causality test which has given the statistical proof of the causality of SEZ in causing FDI inflow and regression analysis to understand the explaining capability of other macroeconomic variables. After having the stochastic framework from these tests, as forms of controlled experiment, the SEZ implementation in similar developing countries has been analyzed. One of the objectives of this paper is to evaluate the SEZ implementation decision taken by the government of Bangladesh and for this we have analyzed the FDI inflow history of Bangladesh.

For testing the Unit Root problem of each of these time series data, we used Augmented Dickey Fuller (ADF) Test. To remove the problem of Unit Root problem we have transformed the data whenever necessary.

1.4   Sources of data

Only secondary data have been used in this article. The secondary data are ensured to have the required authenticity before using in this article. For regression analysis, as dependent variable, we have used FDI inflow, collected from the World Bank Database and as independent variables we have used EPZ export, employment and investment collected from Export Promotion Bureau[3] and macroeconomic variables from World Bank database. The secondary publications analysis has been made from the earlier publications.

2   Literature review

In 1983, first EPZ as first SEZ was introduced in Bangladesh. Though set up in 80s, Bangladesh started to get the benefit of this initiative from the early 90s. In a working paper, Debapriya Bhattacharya (1998) has analyzed the economic and social impact of EPZs of Bangladesh. He sets up his analysis stating the rationale behind the establishment of EPZs and uses trade regime argument and structural bottleneck argument for evaluating the rationales (Bhattcharya 1998). He stipulates that from trade regime argument the establishment of EPZs will yield welfare for Bangladesh's economy as benefits of these sorts of establishment are analogous to those of free trade because, he argues that, elimination of tariffs and other distortions cause the factor intensity of production activities to correspond more closely with the factor endowment of the host country. However, he lessens the strength of this argument by stating that "free trade" enclaves are diminishing from the present world as structural reforms and liberalization are widely being implemented. But he uses the second argument to emphasize the impact of EPZs in attracting FDI. By supporting the argument with "significant public investment in utility services" and "absence of collective bargaining rights for worker", he proves that EPZs attract FDI through providing a congenial business environment to those foreign investors who remain shy if the structural bottlenecks remain present in the host country. Likewise, Aggarwal (2005) has also proposed new growth theory, neo institutionalism and the developmental state theory evolved in the 1980s to describe the necessity of the establishment of SEZs. These theories reaffirm that economic, social and political organizations have key role in developing any country. He argues that underdeveloped and developing countries face acute shortage of necessary technology which results in production failure as well as bottlenecks which characterize their economies (Aggarwal 2005).

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[3] http://bepza.gov.bd/investments, http://bepza.gov.bd/employments, http://bepza.gov.bd/exports

The structural bottlenecks argument of Debapriya (1998) and similar theory by Aggarwal (2005) are supported by a report by Semil Shah (2008). In his paper prepared for The World Bank from Harvard, he has attributed the lack of infrastructural facilities behind the unsuccessfulness of the SEZs of India. He mentioned situational problems such as not being in the close proximity of key transportation links such as railheads, seaports, airports and highways, not exporting products in related or clustered industry, lack of domestic backward linkages and wrong measurement of performance of SEZs. His research conducted after 10 years of Debapriya's research yielded results consistent with the Debapriya's findings. Semil (2008) correlates the low performance by the EPZs of Bangladesh with inadequate infrastructures, slow window service, weak governance, bureaucratic bottlenecks and labor unrest. Each of these variables is mentioned by Debapriya (1998) as the requisite behind the EPZ's success of Bangladesh. In a journal article, Bhuiya, et al., (2014) is inconsistent with the underperformance notion of Semil (2008). They proved that from 1990s, EPZs are effectively contributing in the economy of Bangladesh. But they agree with Semil (2008) regarding the reasons of lack of performance of some of the EPZs, commonly measured by the flow of FDI, with the lack of proximity with main transportation links. They also attributed shortage of gas and electricity supply as one of the major reasons behind being unsuccessful. They have compared the performance of EPZs of Bangladesh cross-sectionally and found out the reasons behind the underperformance of EPZs. But they lacked the substantiality in proving whether the EPZs were successful in attracting FDI. Though they were not substantial in proving this fact, earlier in a World Bank publication, Shakir and Farole (2011) say that EPZs successfully attracted FDI in Bangladesh which is consistent with what Bhuiya, et al., (2014) say in their journal article. Shakir and Farole (2011) attempt to demonstrate the attractiveness of FDI with the EPZs of Bangladesh by exhibiting some key success factors and they are, among exogenous variables wages and market size, provision of serviced land and supporting infrastructure, efficiency of the administrative regime and incentives regime. They try to prove qualitatively the impact of SEZs over the FDI. Any of the above literatures haven't proved anything quantitatively or specifically and nor did establish any certain prediction that increase in the number of SEZs will attract more FDI in Bangladesh.

In 2011, in a journal article, Islam and Mukhtar (2011) endeavored to find the impact of SEZs on the economic growth with the help of regression analysis and they find encouraging results on the association of SEZs and FDI (Islam and Mukhtar 2011). Their time series data table considered the trend of investment, export and employment national as well contribution of EPZ with respect to economic growth and they find DEPZ predictors are high relation with GDP growth as well economic growth, where the adjusted R-square explained 50.1% of total variance at 5% level of significance. Though their analyses were quantitative, they were not specific about the relationship of FDI and SEZs.

In a discussion paper, Kim (2013) analyzed the relationship of FDI and SEZs from another point of view. He evaluated China's recent initiatives of establishing SEZs in Africa. For establishing the soft power, a term coined by Joseph Nye of Harvard University, of China in Africa, these SEZs are being constructed (Kim 2013). If this is the intention behind any FDI, the host country should be aware that it is not being dependent on the foreign fund. On the other hand, in World Bank paper, Brautigam, et al. (2010) are postulating that China's recent moves to establish SEZ in several African countries can make a significant contribution to industrialization in Africa. In both of these literatures, it is found that it is not the interest of the host country that attracts FDI, it is the interest of the foreign countries. With the establishment of SEZ, foreign country investors will normally be attracted. Following the trails of China, Iran has also established 15 SEZs in its territory, but yet to get the benefit of these zones, though it is a little early to tell considering the time of the set up and serious lack of information (Hakimian 2009).

2.1 Finding the research gap

Now, after going through these literatures, we can identify the following aspects which have not been cleared earlier:

1. All of the literatures have considered the performance of SEZs and theoretically shown building SEZs will attract the foreign investors but none proved or tried to prove it with the evidence of past results, especially for Bangladesh.
2. No variable has been identified by which we can measure whether SEZs can attract the FDI or not.
3. The integration of theoretical aspects with the real world is missing in the literatures.

3 Theoretical framework

Let's assume the cost of a foreign firm doing business in Bangladesh is C per unit. The foreign firm will do business in Bangladesh as it is cheap to produce goods and services and sell the product to the world market. Here we assume that the world market is a perfect market where average revenue is equal to price which is equal to marginal revenue which is a horizontal line and the firms will invest more in the area where the return on investment is higher than any other sector. Special Economic Zone with its special purposes gives the foreign investors some benefits such as one stop service, logistic support and tax benefits (BEZA, 2015). These services will reduce the cost of the foreign investors by T. Following graph depicts the whole scenario:

Here, let us consider two places- one with the facilities of a SEZ and another a normal place. In the normal place, there will be additional cost T, which will be per unit cost as without any production this cost will not incur. As this is additional cost, the slope of the normal cost function will be steeper than that of a firm of SEZ. Normal cost curve and SEZ cost curve intersect the Average Revenue or Price curve at point 1 and 2 producing the quantity Q and Q_s respectively. The investment is denoted by I and the fixed cost is denoted by F. Now, from the graph we find:

$$Q_s > Q$$

$$P*Q_s > P*Q$$

$$P*Q_s - C*Q_s - F > P*Q - C*Q*T - F$$

$$\frac{P*Q_s - C*Q_s - F}{I} > \frac{P*Q - C*Q*T - F}{I}$$

Return on Investment in SEZ > Return on Investment in Normal Place

Above simple mathematical illustration suggests that as the return is higher, investment in the SEZ will be more attractive and FDI inflow would be caused by the establishment of SEZs. In the data analysis part this mathematical framework is supported by statistical proof. If any firm has the profit motive and no other scope related limitations, this mathematical model should always hold. However, firms may have limitations and this aspect is described in the FDI inflow analysis section.

4 Data analysis and interpretation

4.1 Setting the analysis

Based on the literatures explored for this analyses and research gaps identified, in this section we set the background of the analysis. As per the first research gap, we analyze the data of past thirty years to evaluate the establishment of SEZs in attracting FDI in Bangladesh. From that analysis, we get a clear and concise idea regarding whether SEZs are successful in achieving the first and prime target of causing the FDI inflow. We have used three instrumental variables for expressing the growth in SEZs: Investment, Export and Employment to test the relationship. Following is the graph depicting the data trend over the years:

Figure 4-1: Instrumental Variables

From the above presentation of the data, it is apparent that the data will have Unit Root problem. We have also tested each dataset with ADF test which yielded Unit Root problem for each data set. Then we have transformed the data taking log difference. When we have found no unit root problem with the transformed dataset, only then we have conducted other statistical tests (e.g. Granger Causality Test). Here we will also analyze the alternative options of FDI. We will scrutinize the FDI pattern of the same time period to find the

effectiveness of establishing SEZs in Bangladesh. It will give us the alternatives for FDI, if any, where currently it is getting invested.

At the last part of the analysis, we will conduct an empirical analysis bringing all the examples of the real world SEZs and their FDI attracting capabilities. Through this part, we try to integrate the theories with the real-life experiences.

4.2 Relationship of SEZ to FDI

To evaluate the relationship of the SEZs to FDI, we have taken the example of the EPZs that we have since 1983. The EPZs are taken in this analysis because this is the only form of SEZs that are available in Bangladesh for the time period considered for this analysis. Here for expressing the growth of the EPZs, we have taken three instrumental variables. One is Export from the EPZ, another is Employment in EPZs and the other is Investment in EPZs. The rationales behind taking all of these variables as instrumental variables for the growth of EPZs in Bangladesh are as follows:

- Export is the sales from the EPZ; hence higher the sales, higher the growth and higher FDI in EPZs. Therefore, the year wise FDI inflow behavior should be defined by the variability of the year wise export. But as the export data contain Unit Root problem, we cannot test this variable as the instrumental variable for SEZ development in Bangladesh.
- Employment in EPZ also expresses the growth in flourishing the EPZ which is assumed to be done by the FDI; hence year wise employment should also be able to define behavior of FDI. We have tested the data series for Unit Root Problem[4] and in the first difference level of this variable, found no Unit Root problem. The first difference level of this data set is the year wise employment availability in the SEZ. Hence, we have used this variable in testing the relationship.
- Investment in EPZ, if comes mostly from FDI, it should also be able to define the behavior of FDI inflow. But this data set also has the Unit Root problem disqualifying it from the relationship test.

4.3 Causality test

For testing the causality, we have used Granger Causality test. As specified earlier, the causality of employment with its first difference has been tested against the FDI inflow in Bangladesh. The result of the causality is stated below:

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[4] For testing the Unit Root Problem, we have used Augmented Dicky Fuller test.

Pairwise Granger Causality Tests
Date: 03/28/17   Time: 09:22
Sample: 1 30
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
YEAR_WISE_FDI does not Granger Cause D(CUMULATIVE_EMPLOYMENT__N)	27	2.73296	0.0871
D(CUMULATIVE_EMPLOYMENT__N) does not Granger Cause YEAR_WISE_FDI		4.12755	0.0301*

*- indicates the significance level.

On the basis of the significance level, we reject the null hypothesis that first difference level of cumulative employment does not Granger Cause FDI. However, only on the basis of this test we cannot say that development of SEZ (as employment is a proxy for SEZ) is causing FDI. For proving on the causality, we have to conduct at least some controlled experiments. As the study field does not allow us to do such experiments, we have taken the examples of other developing countries. We have analyzed the development of SEZs and the behavior of FDI inflow in those countries (presented in the later sections).

4.4   FDI to macroeconomic variables

We have seen the predictability of the EPZs' performance in predicting FDI. Now we will check if the macroeconomic variables have anything in attracting FDI into our country. Following variables are selected for this analysis:

1. **Exchange Rate:** This is an important factor which affects the international trade between two countries (Madura 2010). For bringing consistency in terms of the time period, first four years' exchange dollar value is assumed at the growth rate of the period 2004-05 to 2005-06 as these periods are the last available data period.
2. **Inflation Rate:** This is another important factor affecting the value of the host country's currency (Madura 2010).
3. **Foreign Assets:** This variable implies the strength of the host country in paying the import payments. This also inspires the foreign investors to invest in the host country; thus, resulting in FDI (Madura 2010).

We ran a multiple regression with three variables as independent variables and FDI as dependent variable. But inflation rate and the exchange rate do not

have such explanatory power over FDI inflow of Bangladesh. Then we have reduced these two variables and found the following results:

Dependent Variable: D(FDI)
Method: Least Squares
Date: 03/28/17   Time: 11:36
Sample (adjusted): 1988 2015
Included observations: 28 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.127662	0.182537	0.699374	0.4905
D(FOREIGN_ASSETS)	0.523499	0.166768	3.139089	0.0042*

*- implying 95% significance level.

Only foreign assets have explanatory power to analyze the behavior of FDI inflow into Bangladesh. Here both the stochastic data set are tested for non-stationarity and transformed accordingly to remove Unit Root problem. After this regression, we have tested for Granger Causality test which yielded the following results:

Pairwise Granger Causality Tests
Date: 03/28/17   Time: 11:50
Sample: 1987 2015
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
FOREIGN_ASSETS does not Granger Cause FDI	27	4.88694	0.0175*
FDI does not Granger Cause FOREIGN_ASSETS		0.70214	0.5063

*- implying the significance level.

From the result, we reject the null hypothesis that Foreign Assets does not Granger cause FDI. This result is also consistent with our literature review (Bhattcharya 1998) (Demirhan and Masca 2008).

4.4.1   Interpretation

This result opens up another dimension in our theory that SEZ attracts FDI into any country. There are macroeconomic variables such as foreign assets can also cause FDI inflow. In the experimental analysis of other developing countries this second dimension will be tested. In the light of this analysis we can have the following situations:

1. There are other variables which are contributing in attracting FDI, along with establishing SEZs. This is consistent with the literature by Semil

Shah (2008) which tells us that establishment of SEZs in India has not yielded that much success which was predicted due to other deficiencies. The analysis proves that foreign assets significantly affect the FDI flow in a host country along with SEZs establishment.

4.5   FDI inflow analysis

In this section of the analysis, we see the pattern of the FDI inflow of past 16 years. The purpose of this analysis is to see whether the FDI in Bangladesh is going to its SEZ which is designed for the foreign investors. For this analysis, we use simple graph showing the FDI in EPZ and Non-EPZ area and after that sector wise FDI flow will be shown. The darkest line below of the figure 3.1 implies the FDI in EPZ area, the middle dark line is the FDI in Non-EPZ area and the light dark line above is the total FDI line. Here we see that the flow of FDI in non-EPZ area is more consistent with the total FDI inflow and it is much closer to the total FDI area which means most of the FDI goes to the non-EPZ area.

From the FDI survey by Bangladesh Bank we see the following sectors get most of the FDI (ranked according to the amount) (Bangladesh Bank 2016):

1. Banking Sector- $ 389.58 million (21.24%)
2. Textiles & Wearing- $ 351.62 million (19.17%)
3. Gas & petroleum- $ 199.54 million (10.88%)
4. Telecommunication- $ 197.22 million (10.75%)
5. Food- $ 96.59 million (5.27%)

These are first 5 sectors where more than 60% of the FDI is engaged from which more than 40% is in the Banking Sector and Gas & Petroleum sector and these sectors are not included in the list of SEZs sectors. From this point of view, here we find that SEZs are not being able to attract as they are supposed to.
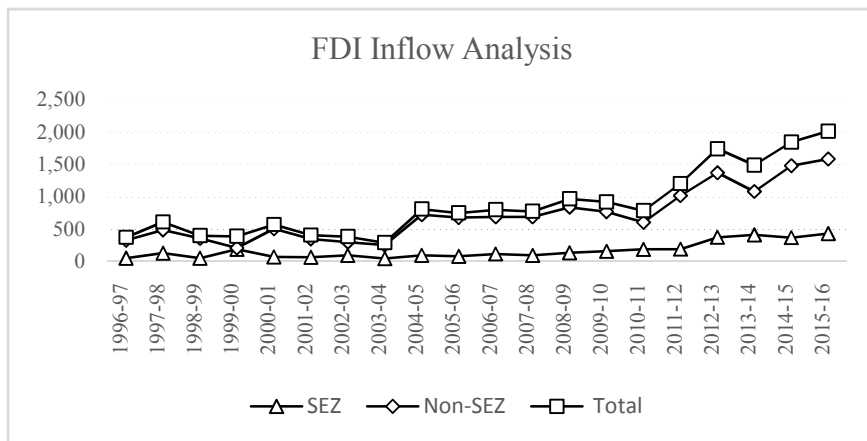

Figure 4-2: Total FDI distribution in EPZ and Non-EPZ
Source: Bangladesh Bank FDI Survey (2016- January to June)

4.6   Experimental analysis on other developing countries

We have analyzed both mathematically and graphically the attractiveness of FDI to the SEZs implementation. The results prove, though EPZs are attracting FDI, other sectors of Bangladesh are accommodating more of the total FDI. The implication of this finding is that Bangladesh requires more SEZs to attract more FDI.

Now we will see the SEZs of other countries to validate whether the mathematical results are consistent with the real world, or the result is only applicable for Bangladesh.

One of the first countries where the concept of free trade zone has arisen is Honduras. The Maquila concept by which in Latin America and the Caribbean mean the factories which use duty-free materials and equipment to assemble products that are predominantly exported to US market was first implemented in Honduras (Engman 2011). Though started early, the main revolution started from 1998, when all the national area is declared at the free zone area allowing privately owned and managed EPZs (or "ZIPs," Zonas Industriales de Procesamiento) to be established anywhere in the country. The main objective of SEZs in that country was employment generation and evidently, they have achieved that. Behind the success of the free zone area following factors have been identified:

1. Willingness to evolve the legal framework for the program
2. Effective use of preferential trade agreements
3. Effective institutional support, particularly in marketing and promotion; and, most important, a dynamic, entrepreneurial domestic private sector etc.
4. The most critical success factor according to the researcher is that all the factors came at the nick of time.

These key success factors mostly imply the factors that work outside the country. The preferential trade agreement, the US recession in the early 90's and Honduras's environmentally stable position are outside of the establishment of SEZs. So, the SEZs have enabled this country to take the timely advantage.

We see the same situation in terms of China's investment in Africa. The main objectives identified by the researcher are increasing the demand for Chinese-made machineries and equipment, avoiding export frictions imposed on China's export by European and North American countries, boosting domestic restructuring, creating economies of scale in the overseas economy and the intention of transferring China's success strategy to other developing countries (Brautigam and Xiaoyang, China's Investment in Special Economic Zones in Africa 2011). The government of the continents of Africa is also taking necessary

steps to facilitate China with its initiative. Therefore, SEZs are attracting China's investment and fostering the development process in Africa.

This argument gets weakened when we look at the Free Zones of the Republic of Dominica. It is also one of the countries bringing the concept of free zones from 1960s and was considered one of the glorious success stories in the literatures describing the effectiveness of SEZs. But from 2003, the stagnation of FZs of this country starts because of the oil price rising, global economic slowdown; the impact of September 11, 2001, on tourism; and the collapse of the second-largest Dominican private bank, Baninter. To improve upon this situation, following steps were taken: customs procedures were streamlined, tariffs were reduced, import surcharges and export taxes were eliminated, and new legislation was adopted on government procurement, competition policy, and intellectual property rights and other trade policies were adopted. But again, with the crash of 2008-09, this situation got worse. Till now, this country is not getting what it is supposed to get for the FZs it has implemented (Burgaud and Farole 2011). For Dominica, though they are providing incentives, SEZs are not being able to attract FDI and dependency on foreign fund has worsened the situation.

Therefore, this controlled experiment suggests that SEZ can attract FDI and can cause FDI inflow into the country. The experiment also suggests that the development of SEZs should be accompanied by a structured planning from the government, congenial policies for the investors and SEZs' resilience of any economic downturn of the country. This is consistent with the findings of the literatures studied and our statistical analysis (White 2011). In the next section, we evaluate the decision taken by the Government of Bangladesh regarding SEZs.

4.7   SEZs and Bangladesh

In 2015, Bangladesh Government approved the plan to establish 24 new Special Economic Zones (SEZs) with a vision to establish 100 SEZs within 2030, create employment of 10 million people and earn $ 40 billion from exports per year. This step is in coherence with the target of middle income country status within 2021 and a developed country status by 2041 (BEZA 2015). This step will also help to achieve the targets of seventh five-year plan substantially. The newly approved SEZs include other sectors with EPZs, the only SEZs available in Bangladesh for the last couple of decades.

In the brochure of Bangladesh Economic Zone Authority (BEZA) we find that the objectives are set according to vision 2021. This is really a timely and required initiative from the government. For the following evaluation criteria, we have come up with this comment:

- We have seen SEZs' establishment attracts FDI and increasing proper development of SEZs will certainly bring more FDI and foster the economic development.
- The approved SEZs include other sectors such as industrial park, economic zone along with traditional EPZs. From the empirical analysis, we see only EPZs are not efficient enough to attract FDI; hence, including other sectors is expected to cause more FDI inflow.
- In the approved SEZs, some of them are dedicated for the investors of India, Japan and China. This will create an edge for the investors of those countries alluring them to invest in our country and improve the bilateral relations creating more synergies.
- The SEZs can be formed at fully foreign fund, fully domestic fund and partnership of foreign and domestic fund. The Public Private Partnership (PPP) is especially encouraged. This scope will significantly help the domestic investors to boost up their investment. Therefore, the factor endowment of our country is expected to flourish.
- Emphasis on the backward linkage industries with these economic zones is another significant step towards reaping the benefits of giving benefits through SEZs.

There are also some other important implications of this step which are expected to foster the planned development of Bangladesh: employment generation emphasis, establishing social rights of the workers in SEZs, encouraging efficient and effective monitoring and relocation of polluting and unplanned industries.

5   Recommendations and further research scope

Bangladesh is following the path of other developing countries that used SEZs as their economic development ladder. But all the developing countries have not been able to reap the benefits of SEZs. We have shown those reasons in our empirical analysis. In the light of our analysis following recommendations are made:

- There are mainly two types of benefits of SEZs: direct benefits include current account enrichment, export growth, foreign exchange earnings, FDI and increased revenue as well as indirect benefits such as skill upgrading of workforce and management, technology transfers, backward linkages with domestic firms, demonstration effect, export diversification, and knowledge of international markets (White 2011). In BEZA brochure we find only the backward linkages with domestic firms as emphasized objectives but if we cannot get all the other indirect benefits we will not be benefitted more than the costs that we are incurring for these SEZs.

- For skill upgrading of workforce and management, all the foreign firms doing business in SEZs should be required to provide "on the job training" to the employees for a certain period. This is not any new concept. China, Republic of Korea, Malaysia, Mauritius, Sri Lanka, Thailand and Taiwan have such provisions in SEZs (White 2011).
- Labor or employee circulation should be increased among the domestic and foreign firms as in Korea, Taiwan and Ireland. This has increased the development of the domestic firms and lessened the dependency of the foreign funds. Dependence on the foreign funds can be harmful for the host country as we have seen in the Republic of Dominica in our empirical analysis.

- Currently the SEZs, in the form of EPZs that we have should be restructured. By restructuring we mean to change the rules and regulation with taxes and duties and implement the recommendations made for the new SEZs, as our analysis has yielded that FDI is attracted by the establishment of SEZs.

5.1 Further research scope

We have done this analysis based on mostly secondary data that was easily availabl. Therefore, the authenticity of the data is dependent on the authenticity maintained by the data collection authority. More research can be done in this sector with more variables, cross sectional research methodologies, qualitative analysis etc. to find out the following aspects:

1. Other variables specifically affecting the EPZs of Bangladesh,
2. Current practices in the EPZ in real scenario in terms of reaping indirect benefits,
3. The costs including opportunity and real that Bangladesh is incurring can be identified to make a cost benefit analysis for finding whether the costs are less than the benefits.

6 Conclusion

We have cleared the doubt about the fact that SEZs develop the economy of the host country. Through this analysis, we have been able to find the reasons why SEZs do not perform as they are supposed to, to know where the current FDI of Bangladesh is going and if there is any other factors that affect the FDI inflow, to evaluate the initiative of the government of Bangladesh with the examples of other successful and unsuccessful developing countries and to make some recommendations that are absent in the objectives behind the establishment of SEZs by BEZA. Bangladesh's history of Economic Zones is successful but has little data and short period to conform to complete accuracy of this success. Further analysis should be made to find more exogenous variables that affect

FDI. Bangladesh should take steps by taking the examples of India and the Republic of Dominica in to consideration because she may not be as fortunate as Honduras. Competition in the world market is rising and our country's status is changing; hence she will no longer be considered as an adorable country that needs help but a steady country that is going to compete in international market. Therefore, the authority needs to be cautious in taking any initiative and SEZs is such an initiative. There lies the scope and background of our analysis.

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