



Foreign Direct Investment and the Shipbuilding Industry: A Bangladesh Perspective

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ABSTRACT

Traditionally, Bangladesh has been a shipbuilding country. Bangladesh had exported ships even in the seventeenth and eighteenth century. The modern shipbuilding industry started since the period the country was called East Pakistan in mid 1950s, and has made some progress since then and also attracted foreign buyers. It took a number of years before the country could register its name as an ocean-going shipbuilder. The Bangladesh Shipbuilding Industry got a spurt in 2008 when a 2,900 DWT ocean-going ship was exported from Bangladesh. Bangladesh created a new history for the export sectors of the nation. Almost exclusively, the Ready Made Garment (RMG) has been the largest export sector in Bangladesh. There is both a necessity and opportunity for expansion to other sectors and to widen the export base. Shipbuilding is an opportunity which can grow into a billion-dollar industry in a single decade. The Present study describes the segment of the market where Bangladesh enjoys the highest advantage and to draw out a strategy for exploitation of the potential. The present study also identifies that attracting Foreign Direct Investment (FDI) is a necessity for exposure to market, infusing management as well as technology and much needed finance.

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1. Introduction

Bangladesh being a maritime country owns a long tradition of shipbuilding not only for the domestic market but also for foreign countries. With more than 200 rivers and a sea area of around 166,000 square km, the maritime cluster of the country possesses a multi-dimensional associate. The shipbuilding industry has been considered a prime component of the cluster. However, the industry has been mostly focused on the ships for domestic market basically serving in the inland and coastal

trade which numbers more than 10,000. More than 200 shipyards located in different location of the country are involved in this tonnage generation of which some are of international standard having the capacity to export ships. A baseline study conducted by the Danish Embassy, Dhaka in September 2009 (Baseline Study, 2009) identified that there are four shipyards in the country having a capacity to build class ship of small size of 10,000 DWT, whereas six more yards are in expansion process of accommodating such facilities. The same study also identified there are 13 yards who have postponed the expansion due to recession.

The shipbuilding history of Bangladesh is quite long. It is found that in the fourteenth century the famous tourist Ibn Batuta came to Bangladesh and in his way back he used a wooden ship built in Sonargaon near Dhaka, Bangladesh. There are several instances in history where it can be found that shipbuilding in Bangladesh has been an exporting industry for several centuries. Modern shipbuilding industry started in the former East Pakistan in mid 1950s and made some progress. It took several decades before the nation could register its name as an

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ocean-going shipbuilder and attract foreign buyers. Bangladesh shipbuilding industry got a spurt in 2008 when a 2,900 DWT ocean-going ship was exported from Bangladesh. It created a new history for the export sectors of the nation.

Bangladesh is currently dependent almost exclusively upon Ready Made Garment (RMG) for export. There is both necessity and opportunities for expansions to other sectors and widen the export base. Shipbuilding is an opportunity, which can expand, to few billion dollars in a single decade. There is a need to identify the segment of the market where Bangladesh enjoys the highest advantage and to draw out a strategy for exploitation of the potential. Among other measures, attracting Foreign Direct Investment (FDI) is a necessity for exposure to market, infusing management as well as technology and much needed finance.

2. International Shipbuilding Market and Bangladesh

According to (UNCTAD Secretariat, 2014), after passing a declining scenario in new shipbuilding order since the peak in 2008/09, for the first time the customer orders book have increased but very slightly during 2013. The excessive orders received during the booming period created a disproportionate (over) supply of tonnage and this might need some more years to adjust even as the world economy seems to recover to some extent. However, whatever the economic scenario of the world, the shipping world needs to replace its old tonnage with a new one. Around 53% of the total world fleet is showing an average age of more than 20 years among which the general cargo ship is covering the largest share. 57% of general cargo ship are more than 20 years old. Moreover the average size of this 20 years old group is 6330 Dead Weight (DWT) of which the general cargo ship is showing even lowest average DWT, which is 2917 (UNCTAD Secretariat, 2014). Therefore, there is a huge upcoming demand of small size general cargo or multipurpose ship. It is true that the containerization and port specialization is declining the demand of general cargo ship, however, 4.6% (UNCTAD Secretariat, 2014) of world tonnage share still shows its significance in world trade.

On the other hand, considering the four stages of shipping market cycle that are the trough, recovery, peak and collapse, the market is now lying somewhere in the trough stage as the freight market is still showing a very low mark in all segment of the shipping (UNCTAD Secretariat, 2014). The ship building cycle analyzed by Stopford (Stopford, 2009) shows the average duration is 9.6 years from a peak to another peak and the standard deviation is 6.4 years. It is almost eight years now since the last recession started in 2008 therefore, there may be cyclic recovery as well as boom in the coming years. This is a very general assumption but the time series data show that there will be a change in the cycle sooner or later. As soon as the recession is over, a rush of orders is expected. Actually, huge orders are expected even if there is no expansion of the economies and goods transportation does not increase. The expansion of economies, usually experienced after recessions, will put a further pressure. However, if Bangladesh has to utilize the opportunity, it is imperative to make necessary preparation.

Jon (Jon, J. S., 2010) stated shipbuilding as an attractive development tool in newly industrialized country and mentioned three points behind this. The first point is that shipbuilding is a medium technology industry, which helps the emerging country to utilize the cost advantage from its cheap labour and other inputs. The second point is the international aspects of shipbuilding. Since it is an export-oriented industry, the country could earn huge foreign currencies, which might strengthen its economy. The last point is the multiplier impact of this industry as it has a strong linkage with other emerging industries. Burns (Burns, M.G., 2015) observed nine key points that creates the competitive advantage over the other examining the world shipbuilding history. These nine elements are innovation and modernization, investment, production management, low cost covering labour, resource management and utilization, domestic steel industry, cheap currency, upstream and downstream linkages, government support & subsidies and regulatory framework. However, Burns (Burns, M.G., 2015) also highlighted that among other the low cost labour and government policy, cheap currency has a significant impact in attracting ship building. The evolution of world ship building analyzed by Stopford (Stopford, 2009), concluded that the new comers with low cost labour, decent capital investment as well as hard working and adaptation with market leads a successful ship building nation. Most of the giant in shipbuilding was supported by the national fleet that is serving the domestic market for example UK and Japan while some few had an international exposure from the beginning for example South Korea. South Korea even started with a huge capacity of making large bulk carriers, which is typically less technology intensive that is concentrating to a particular segment of market. However, in either case there was government support through industrial programmer covering both policy and financing.

According to Stopford (Stopford, 2009), in shipbuilding the labour accounts for 40-50% while the material cost 60% or more of the total cost, therefore, wages have a major impact on the competitiveness. In this aspect Bangladesh has a greater prospect, as the labour cost is very low compared to the other ship building nations along with the low currency aspects as well. The efficiency of the labour might create some drawbacks in relation to the productivity and management. However, the weighted average output cost per DWT calculated by Bari (Bari, 2010), where the weighted labour cost as well as the weighted DWT productivity per persons have been taken into consideration, still shows a positive result for Bangladesh. The per DWT weighted average output cost for Bangladesh is almost one half of those in India and China.

No doubt that the world shipbuilding is predominantly controlled by three East Asian giants namely China, Korea and Japan. They delivered almost 93% of the Gross Tonnage (GT) in 2013 (UNCTAD Secretariat, 2014). The comparative advantage of China is obviously their low labour cost along with the strong government support whereas the South Korean shipyards have the benefit of largest productivity. The Japanese shipyards are preferred by the ship owners for the advantage of fuel efficiency along with the currency depreciations, Burns (Burns, M.G., 2015). Among the emerging shipbuilding na-

tions for example India, Philippine, Vietnam and Brazil, the Philippines have shown a remarkable progress. In 2013 the country has managed to deliver 1,360,000 GT (UNCTAD Secretariat, 2014), which is almost 1.95% of the world total new delivered tonnage (GT). Burns (Burns, M.G., 2015) highlights the prospects of Philippine in the shipbuilding industry as a combination of low currency and low labour along with the geographical location. Such an advantageous position of the Philippines managed the country to attract investment in shipbuilding facilities development by Korean Hanjin H.I. Subic and Japanese Tsuneishi-Cebu. In April 2015 the Philippines has secured for the first time the top position in the number of orders received beating South Korea. The Philippine yards prevailed new buildings of 590,000 *cgt*, left behind by Korea with 530,000 *cgt*, China taking 290,000 *cgt* and Japan grabbing 150,000 *cgt* of orders (Slash24/7, 2015).

Bangladesh needs to analyze therefore, how to start and concentrate in which area of the market as well as to identify the role of the government. In the later part of this paper, these areas have been analyzed accordingly.

3. Scenario of the Foreign Direct investment (FDI) Bangladesh

Shipbuilding industry offers an opportunity for foreign participation and investment. Bangladesh has managed to attract foreign investments in different industry mainly textile and wearing, telecommunication, banking, oil and gas, and power sector. The FDI stock has reached to USD 9355 million at the end of December 2014 (Bangladesh Bank, 2014) shows the relative competitiveness of Bangladesh as a low cost production centre in South Asia. Liberal investment policy as well as incentive regime has been considered the essence of attracting a steady inflow of FDIs in Bangladesh [9]. Following figure is the annual FDI stock illustrating the increase of Bangladesh in attracting FDI.

Bangladesh has not managed to attract any FDI in ship building sector till now (Kathuria and Malouchi, M. M., 2016), however, a high labour intensive industry would find Bangladesh as an ideal location for foreign investment. There is an example of working with the other world ship building leaders as in 1979 the Japanese shipbuilding giant Mitsui Engineering and Shipbuilding (MES) developed the first joint venture with High Speed Ship Building and Engineering Co. Ltd., Bangladesh and successfully completed eight grain carriers for Food and Agriculture Organization (FAO) of international class. High Speed could not maintain its standard of an international level and focused on the local market although this explains the potential of the country of working with the developed ship building nations together. Bangladesh has managed to export around 20 vessels worthing a value more than USD 100 million (Kathuria and Malouchi, M. M., 2016). That is a milestone to show the capability of the country in delivering international ship building orders, which might work as a brand for the ship owners to find Bangladesh as an attractive country to invest.

Board of Investment (BoI), Bangladesh in their brochure entitled Shipbuilding industry of Bangladesh: Prospects and Challenges' (Official Website of Board of Investment, 2015),

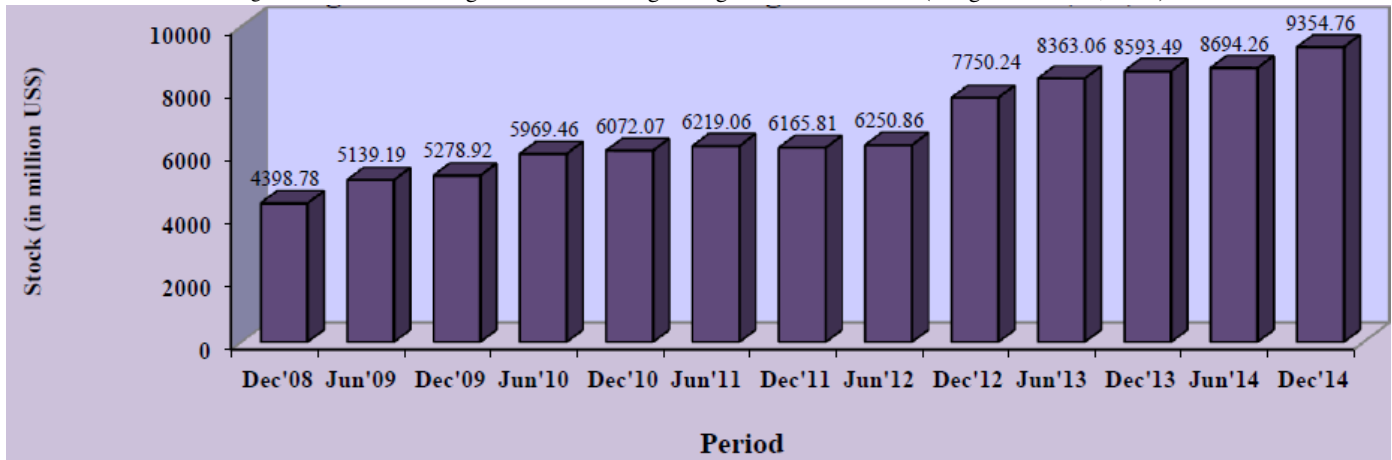
highlighted the comparative benefits for the foreign investors in the shipbuilding in Bangladesh. BoI defines Bangladesh as the most liberal regime in South Asia as there is no equity limit and repatriation of profit and income, tax holidays and accelerated depreciation allowed, bonded warehouse facilities including duty free import of machineries and spare parts for industries exporting 80% of their product, cash incentives for selective products, equal treatment for local and foreign investors, foreign investment is protected by act, complete duty and quota free access to most of the developed countries such as EU, Japan, Canada and Australia, investors can repatriate dividend and capital at exist and others.

4. Comparative Advantage of Investing Shipbuilding in Bangladesh

From Burns (Burns, M.G., 2015) nine key elements of shipbuilding leadership the industry success in Bangladesh mostly depends on the low labour cost, cheap currency as well as the regulatory regime for foreign investment. The technology and innovation aspects would better be covered by the foreign investors who will be interested to invest considering expertise and know-how to exercise in the advantageous elements of Bangladesh, that is low labour, low currency and regulatory regime. That may also cover the investment in a specific segment of market or industry rather than the scattered ones. The production of steel even though considered as an important element but at the same analysis Burns (Burns, M.G., 2015) stated that there might not be a close connection in shipbuilding growth with national steel production since the high steel production as well as technological advancement did not boost shipbuilding in United States and EU. In case of Bangladesh, though the country is not a major steel producer, but its friendly regulatory regime would not create any obstacle since the import of raw material for exporting industries is duty free. It is found that almost 40% of all equipment and spares for local shipbuilding are produced locally therefore; it will not be difficult for international shipbuilding to develop the upstream and downstream linkage to the industry in Bangladesh. Poor production management and efficiency might create some problem but these can be solved gradually. Bangladesh has a large workforce covering engineers, managers and technicians presently working in several renowned shipyards in Singapore and Dubai. These people are ready to come back even with a comparative lower but reasonable payment in Bangladesh. Moreover, the local people may be able to learn very fast and work well with the expertise of the foreign investors. Although Bangladesh could not provide sufficient subsidiaries and techniques, the government is facilitating an investment friendly environment for the foreign investors where an indirect subsidy is available.

Bangladesh may be chosen as a place to build ships considering some additional attributes as well. The geography of the country adds some extra value since the country has a coastline of 720 *km* and more than 22,155 *km* of river which is very suitable for establishing shipbuilding facilities. 60% of total population is economically active and provides a pool of huge work force. Every year more than one million graduates join the workforce (Official Website of Board of Investment, 2015)

Figure 1: increase of Bangladesh in attracting Foreign Direct Investment (Bangladesh Bank, 2014)



who have better communication and inter personal skills. The shipbuilding capacity already developed here meeting the local demand is now eager to enter the international arena.

Shipbuilding is of national importance for some countries like Japan and Korea. The Korean industry development was based on huge investment for exporting very large size of vessels. On the other hand the Chinese shipbuilders also look for alternatives in low cost regimes. For countries like Korea and Japan, Bangladesh could be a good alternative to establish facilities where they could secure cost efficiency and also sustain their industry. Moreover, Korea and Japan have long history of working with Bangladesh in other industries, which might help them to take a decision of outsourcing their shipbuilding to Bangladesh. The similar scenario can work with China as well, as China has outsourced a lot of its work to Bangladesh in other industries like textile and clothes.

Therefore, it could be concluded that the foreign investment along with technological knowledge and innovation, managerial ability and international exposure can find Bangladesh as the best place with low labour, low currency, investment friendly regulatory regime, geographical location and geophysical structure as well as huge work force willing to work hard and learn.

5. Area of Focus for the Government of Bangladesh

The Government of Bangladesh has already declared shipbuilding as the thrust sector and introduced green channel port clearance system for importing raw materials for shipbuilding. A 20% subsidy for the exporting ship is also in discussion (Official Website of Board of Investment, 2015). However, there might be some further steps to take in consideration to support the sector. To develop shipbuilding villages in suitable locations in the coastal areas or estuaries of the rivers, a separate policy and act encouraging shipbuilding and FDI in the sector, which has been done in the Philippines (Official website of the Philippines Government, 2015), create a fund to facilitate the industry or a separate authority could be developed as the Public Private Partnership (PPP) office under the Prime Ministers'

office. Moreover, a database of the experts and technicians can be developed and maintained to ensure the investors that the government is proactive for the development of this industry, which has also been done in the Philippines.

6. Conclusion

Shipbuilding industries in Bangladesh have already exported ocean-going cargo vessels and more export orders are being executed. The delivery value has exceeded 100 million USD mark. The optimistic projection puts the earning by the export at about \$2 billion annually in the five years and much more in the years beyond. According to industry people, the global market for small vessels (3,000 to 12,000 DWT) is about \$400 billion with China, India and Vietnam as the main competitor to Bangladesh. The shipbuilding industries in some of the competing countries are supported by up to 30% government subsidies. In Bangladesh, the Government has just introduced 5% subsidy. Even without the subsidy, the shipbuilders in Bangladesh had been doing well because of better productivity. Currently the extent of value addition in the shipbuilding industries is 35%. This share may rise to over 50% with little effort and the competitiveness of the shipyard will be even stronger. This makes the country very prudent destination of investment in the shipbuilding industry both in form of setting up shipyard or placing orders for ships.

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