AN ANALYSIS OF ALTERNATIVE INDUSTRIALIZATION STRATEGIES FOR DEVELOPING ECONOMIES

Masud Jahan [1], Samiur Rashid [2]

[1] *Lecturer, Division of Accounting, Department of Science & Humanities, Military Institute of Science and Technology, Mirpur Cantonment, Dhaka-1216, Bangladesh, masudjahan@gmail.com*

[2] *Program Director, BIMS College, Dhanmondi, Dhaka-1207, Bangladesh, samiur.rashid@bimsedu.com*

Abstract: Industrialization is the process of social and economic change whereby a human group is transformed from a pre-industrial society into an industrial one. Import Substitution Industrialization (ISI) is an industrialization policy based on the premise that a country should attempt to reduce its foreign dependency through the local production of industrialized products. Because of limitations of ISI, the concept of Export-led industrialization was supported by economists. Export-led industrialization (ELI) is an industrialization policy aiming to speed-up the industrialization process of a country through exporting goods for which the nation has a comparative advantage. Export-oriented industrialization is often contrasted with import substitution industrialization. The objective of this paper is to critically appraise the role of Easy ISI strategy in economic development.

Keywords: *Gross Domestic Product (GDP), Import Substitution Industrialization (ISI), Export-led Industrialization (ELI), Protected Industry*

1.0 INTRODUCTION

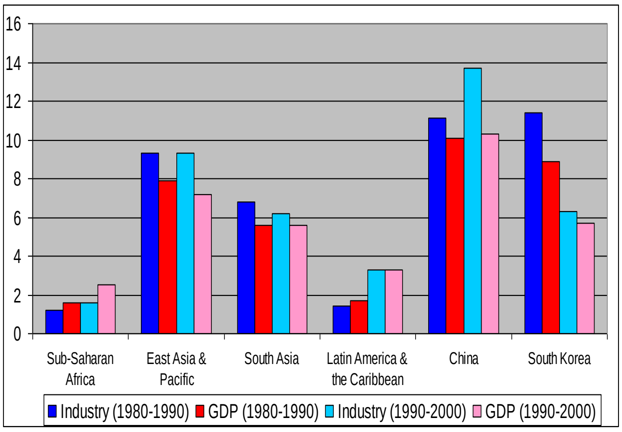
Economic growth or development may ensure better standard of living for citizens of any country. Development in the agriculture, industry and service sectors contribute to the overall economics growth of all economies. Most economists believe that industrial development is crucial for economic development of any nation. In order to initiate and expedite industrialization, governments can adopt many strategic maneuvers including Import Substitution Industrialization (ISI) policy.

In this paper we will try to critically appraise the role of Easy ISI strategy in economic development. In the first part of this paper, we will try to find a relationship between economic progress and the growth of industrial sector. Secondly, we will explain the basics of ISI strategy and arguments favoring this strategy. In later parts of this paper, we will outline some limitations of Easy ISI strategy and few alternative trade policies relevant for industrialization.

2.0 ECONOMIC PROGRESS AND INDUSTRIALIZATION

Economic progress of any nation is claimed to be associated with the growth of industrialization. Economic Growth can be measured by the growth of total output or income generated by any country over a period of time. On the other hand, level of industrialization can be understood by looking at the contribution of industrial sector to the country's total output. In simplest terms, many economists define industrialization as the higher rate of growth of manufacturing sector.

The following illustration shows “historically-proven” positive correlation between the rate of growth of industry and the rate of growth of total national output. For example, in South Korea when annual growth rate was 8.9% the growth rate of industry was 11.4%. Later overall growth reduced to 5.7% whereas the industrial growth reduced to 6.3%. Hence, the direction of industrial and overall economic growth is positive though critics would definitely say there may be other underlying reasons that resulted in such positive trend.



(Source: World Bank 2002: 406, Table 4.1)

Figure 1. Industrialization & Economic growth (percentage annual growth)

However, more empirical studies and trend analysis have tried to prove that industrialization is associated with rising national income. In other words, increased share of industrial sector in GDP is likely to result in higher per capita income. Many development economists defined this pattern as “Structural Transformation”, which goes beyond mere industrialization. Industrialization may result in decreased contribution of agricultural sector in national output, increased exports of manufacturing goods and rising employments in the manufacturing sector (Chenery and Syrquin, 1975).

Besides the apparent positive association between industrial expansion and economic growth, there is a further reason for pursuing industrialization. According to the Presbisch- Singer hypothesis, countries which predominantly produce and export primary products and import the bulk of their manufactured goods are apt to experience instability in their terms of trade, that is, in the purchasing power of their exports in being able to buy imports. In fact, there can be a long-term deterioration in the purchasing power of these exports relative to the manufactured goods these countries import.

Industrialization is therefore can be a means to create not only a more productive domestic economic structure which raises domestic incomes, but also to create the possibility for an import and export pattern more similar to that of the “already-developed” nations. Hence, the importance of industrialization may never be underestimated.

3.0 EASY ISI: AN INTRODUCTION

After understanding relative importance of industrialization for development, we will now focus on policies that governments may pursue to promote industrial sector. Import-Substitution Industrialization (ISI) strategy is one of the most talked-about maneuvers to promote industrialization. ISI strategy is known as policy to promote domestic production of goods that will substitute import demand. There are two stages in ISI Strategy. The first stage known as “Easy ISI” involves the import substitution of consumer goods. And the second stage involves the substitution of imports of intermediate or capital goods.

ISI begins with support to increase the domestic production of non-durable consumer goods, the demand of which is currently being met primarily by import from other countries. The production of non-durable consumer goods would require low technological know-how, moderately skilled tabor force and tabor-intensive production process. Hence, a poorer economy which has relatively less experience and success in industrial sector would be able to promote some manufacturing sub-sectors for the growth of industrialization. More importantly, since the industries will concentrate on (non-durable consumer) products which have proven market demand, it will create a situation in which industrial entrepreneurs of poor country would face lower risk and higher probability of increased profit. This first stage of ISI has been defined as the easy, primary or horizontal ISI.

4.0 ARGUMENTS FOR ISI STRATEGY

After scrutinizing the basics of Easy ISI strategy, we may look into the arguments that were put forward by the proponents of Easy ISI strategy.

- **The Historical Argument:** Except for United Kingdom, most modern industrialized countries protected domestic industries from import competition with success. Some economists uphold their success as an argument in favor of promoting ISI strategy. This historical argument is weak since it assumes that economic realities (cause and effect phenomenon) will persist irrespective of its place of occurrence. In reality, Easy ISI strategy that was successful in one country may not be suitable in other economies that have different conditions (such as, endowments of factors of production). However, in the past, many countries in the world experienced both industrial and economic growth as a result of successful implementation of Easy ISI strategy.

- **The Income Elasticity Argument:** According to Presbisch-Singer hypothesis (that we discussed earlier) productivity growth in the richer country lead to higher income. In the poorer country (that primarily export primary products), productivity growth leads to lower levels of employment, lower wages and lower prices. More importantly, as income rises in poor countries, their demand for import from rich country rises. On the other hand, income increases in the rich country would not result in more demand of primary goods export from poor country. Hence, the importance of industrialization in import substitution sector cannot be underestimated.

- **The Employment Argument:** In order to promote import-substitute industry, government may require to provide subsidy, tariff protection and equity or debt financing to the local entrepreneur. If the government gives tariff protection (by taxing import competition) to import-substitute industry, the entrepreneurs are likely to benefit from "artificial" profit because of increased price of imported goods. Such profitability would invite more suppliers in the industry as a whole and subsequently may result in greater employment. However, the success of ISI strategy in terms of employment generation should be compared against that of alternative trading strategies for industrialization. For example, an economy may generate more employment with Export-led Industrialization strategy in stead of ISI strategy.

- **The Infant Industry Argument:** This argument suggests that domestic manufacturing cannot fight with import competition from the outset. The new industries of relatively poorer country need time and assistance to learn to develop them. Hence, protection for a limited time period would help them to capitalize on experience and learning. If the industry can utilize this protected learning period, then the economy as a whole may gain from externalities which may spread into other linked industries. Skills, teaming and technical progress developed by infant industry can be shared by the similar industries of the economy. In many cases, development in one industry automatically develops its backward and forward industries. For example, development in Knitting Sector may result in growth in Spinning Sector (Backward Linkage) as well as Garments Sector (Forward Linkage). Hence, ISI strategy may assist the economy like ours to get benefit from positive externalities and backward and forward linkages.

5.0 LIMITATIONS OF EASY ISI

As we have found out many issues against historical argument, employment argument and income elasticity argument, we may also need to extend our analysis on limitations of ISI and Infant Industry Argument in order to have a balanced appraisal of ISI strategy. Economists would agree that all poor countries do not just have the social and economic infrastructure that is prerequisite for successful ISI. Economies of scale require certain level of production that will result in lower cost per unit of production.

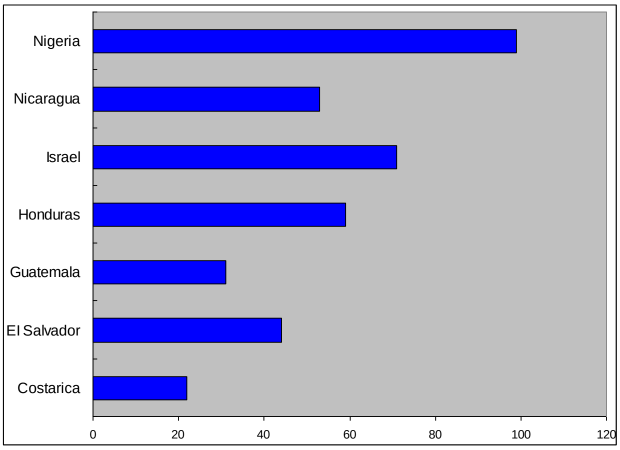
Infant industries of a poorer country may not be able to reach lower cost level (in comparison to its international competitors) only because of its size of plant and size of domestic market. Some industries may need input that is not locally available. In the case of many infant industries, dependence on imported inputs would result in lower local value-addition and lower foreign exchange savings. Because of protection, infant industries may feel complacent to improve efficiency and lower cost. Unless they learn to fight in the international market, infant industries may fail to realize the benefits of ISI strategy.

Because of increased pace of technological development in recent days, industrial growth may not be achieved with prolonged investment in "time and protection". Governments may need to abruptly invest in technological capacity to develop its industry. Hence, periods of protection may not increase the growth of industrialization. ISI strategy, if deployed, has to be managed by the government. Tariff protection or subsidy to infant industries is part of strategic public policy. And implementation and formulation of government policy, particularly in third world country, is associated with bureaucracy, corruption and inefficiency.

Although under ISI initially infant industry can grow faster than domestic demand for manufacturing goods, LDCs may soon run out of import substitution possibilities. After that growth rates can only be maintained by a growth in domestic demand or in exports: but by then the structure and inefficiency may stand in the way of conquering export markets.

The existence of import restrictions or tariff on imported goods decreases aggregate import demand. As a result the exchange rate of the country concerned may become overvalued and the existing exporters may loose income. Hence, ISI strategy can be biased against exports. In addition, protection to industry may decrease the relative price of agricultural products and receipts from agriculture exports. That is, ISI strategy may also be biased against agricultural sector.

Many empirical studies identified more pitfalls of ISI strategy. A study by Corden and Balassa (1971) used the term "Effective Rate of Protection" (ERP) to appraise the potential of protected industry. ERP shows the percentage increase in value added afforded by protection over the value added which would prevail in a non-protected situation. The following table illustrates the ERP for different countries in the year 1968.



(Source: *Schmitz, H. (1984) 'Industrialisation Strategies in Less Developed Countries: Some Lessons of Historic Experience', Journal of Development Studies 21 (1): 1-21)*

Figure 2: Average ERP in Manufacturing Industry of LDCs (1968)

This study of ERP revealed levels of protection substantially higher than those ever enjoyed by the existing developed countries. Since one can assume that most of this protection was actually used by LDC producers, above illustration provides a general picture of the magnitude of inefficiency as measured by effective rates of protection[3]. Hence, implementation of ISI strategy sometimes may lead to inefficient industrialization.

6.0 EXPORT-LED INDUSTRIALIZATION: AN ALTERNATIVE STRATEGY

Many economists believe Export-led industrialization is more efficient than ISI strategy. Because of limitations of ISI, the concept of export-led industrialization and substitution was supported by these economists. "Export Substitution" implies the export of non-traditional products or manufactured goods. Export-led Industrialization may overcome some limitations of ISI strategy.

By exporting to world market, LDCs can achieve higher economies of scale. In order to serve the world market, domestic industry will be required to learn to achieve "sustained" efficiency as compare to the international standard. Intense competition in the world market would compel domestic industries to embrace advanced technological know-how. In addition, the value of exports that could be produced with a given use of scarce factors is frequently greater than the value of imports that could be replaced.

Many proponents of Export-led Industrialization gave credit to export promotion strategy of Newly Industrialized Countries of East Asia for their industrial growth in 1970s. However, critics of export-promotion argue that the same economic strategies cannot achieve desired objective every time. Since countries differ in terms of their infrastructure, same (export-promotion) strategies cannot earn the same outcome (industrialization) for different economies.

Different economies face different external and domestic conditions as well. According to Hubert Schmitz, the government in NICs intervened to control selected imports. He questioned the role of export promotion strategy as a catalyst of industrialization during 1970-1980 in NICs in

East Asia. Under ever-changing external conditions, export-led strategy may not always be right the strategy industrialization growth.

7.0 SELECTIVE PROTECTION FOR INDUSTRY

Since both "Export Promotion" and "Easy ISI" have their own advantage and limitations, some economists came up with new strategy known as selective protection strategy. Selective protection of industry is known as the trade strategy of export promotion via import substitution. The theory may be applicable to industries that require human-capital and knowledge-based initiative. For many LDCs, some sectors (such as Information Technology) do have too small a market to make profit. If high-tech companies of richer countries get support and protection from governments, they will have relatively larger advantage over companies from LDCs. Hence, LDC governments require to provide protection to firms in these strategic industries. However, selective protection strategy has also been criticized. Critics identified that this strategy is not relevant to most of LDCs that do not have infrastructure to nurture industries which are knowledge-intensive.

8.0 CONCLUSION

Development, in the simplest term, can be defined as the increase in average income of citizens of any country. For every country to move forward economic development is an imperative. Agriculture, Industry and Service - all these sectors do contribute to the development or growth of output. Though relative importance may differ at different phases of an economy, one country may not always put emphasis on one sector without regard for another sector. Every economist in the world, perhaps, would agree that industrialization is at least relevant for growth and development of any economy. However, the best policies and strategies to promote industrialization would be dissimilar for different economies at different periods of time. Both Import Substitution Industrialization and Export-led Industrialization have their own benefits and drawbacks. Moreover, changing domestic and external conditions would provoke different policies. Even within the same economy different industrial sector may require different strategic treatment. Hence, there are no universally accepted policies for industrialization and economics development. One might wonder the relevance of analyzing the “traditional” debate for finding suitable strategies for industrialization. However, since we are heeding towards “A vision for 2021”, we do believe strategic public policy regarding industrialization needs to be given due importance and to be supported by well-designed analysis and synthesis.

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