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Issues And Pattern Of Industrialization In Developing Economies - A Verification Of Hoffman's Hypothesis

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INTRODUCTION

Industrialisation has a major role to play in economic develpment of the low income economies. The gap in per capita income between the developed and underdeveloped countries is largely reflected in the disparities in the structure of their economies, the former are largely industrial economies, while in latter, production is confined predominantly to agriculture. The underdeveloped regions have observed that there is strong positive linkages between the wealth and standard of living of a country and the extent of its industrialization (Bryee 1960). Undoubtedly, industrial process involved those basic changes that accompany the moderniation of an enterprise, the building up of new industry, the opening of new market and the exploitation of natural resources. They are endowed with rich natural resoruces but owing to the lack of capital and entrepreneurship, underdeveloped coutnries (UDCs) are entrapped in the industrial stagnation and low productivity. The economies of UDCs require a high degree of industrialization in order to meet the challenge of low per capita income, mass poverty, unemployment and low productivity.

Though there is no conflict between agriculture and industrial development in an underdeveloped economy the fact that productivity of labour in industry is much higher than agriculture points to the need for rapid industrial development. Moreover, in an underdeveloped economy the surpluses created in the industrial sector are likely to be available for investment relatively more easily than the surpluses in the agricultural sector. The industrial sector which possesses a relatively high marginal propensity to save and invest contributes significantly to the eventual achievement of self sustaining economy with continued high levels of investment and rapid rate of increase in income and industrial employment. Therefore, industrialisation acts as an instrument both of creating capacity to absorb excess labour force and of catering for the diversification of the market required at higher stages of economic development.

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PATTERN OF INDUSTRIALIZATION

The important role of indutrialization in economic development has always been recognized in the planning strategy of an underdeveloped country. Once it is admitted that industrialisation is necessary for the development of the economy, another question which becomes pertinent is what should be the pattern of industrialisation. Economists have been raising a fierce battle regarding large scale industries versus small scale industries. The controversy seems really sterile. For improving the base of the economy it is suggested that manufacturing industries have to be started on large scale with an assistance of the private and public ventures.

But for want of capital and technical personnel one can not be too ambitious to start all the industries at large scale. Many of the consumer goods industries may therefore, have to be started in agricultural sector on small scale. However, the basic industries and capital goods industries on large scale will ceate infrastructure in development, the consumer good industries and agro-based industries on small scale will raise the living standard and will transform the traditional society into new one upgrading the quality of the human resources (Meier 1964).

No doubt, the pattern of industrialisation to be adopted, the relative emphasis on capital good industries and consumer good industries, is to be decided in the light of several technical economic and social factors. Hoffman (1958) has divided industrial development into four phases. In early phase of industrial development the ratio of consumer goods to capital goods is more. In the second phase the ratio of consumer goods to capital goods will be slightly less. In the third phase the production of both consumer and capital goods will be equal. In the final phase, the production of capital goods will be more than the consumer goods.

In the poor countries the resources and needs are determined essentially by the structural imbalances of the global economy. In the developing economies, the average rate of growth of output is not likely to exceed 3 percent per annum for sometime compared to the average rate of growth of world trade of around 7 percent per annum during 1960's and 1970's.

CHANGES IN THE PATTERN OF INDUSTRIALISATION IN DEVELOPING ECONOMIES

Building Up Of Heavy And Capital Goods Industries

The period between 1955 to 1970 witnessed the development of heavy and basic industries in order to strengthen the industrial base of the economy. Since the emphasis from beginning of the planned development was on building up the productive power of the economy, a large part of investment in the industrial sector was embarked for sectors which increase the capacity for further production. On account of this reason, the heavy and capital goods industries received the major attention of the planners. As a result the share of capital goods industries in total industrial output and in gross value added rose consistently while that of consumer goods industries declined.

Emergence Of Public Sector

The key role in industrial development programme belongs to the public sector. There was no public sector worth the name in pre-colonial period. The entire range of activities in the industrial sector was conrtrolled by the private sector. The post-colonial period saw the emergence and massive expansion of public sector. As a result more stress was given on public sector. But higher increase in the share of public sector means a definite decline in the share of private sector. This pattern of industrialisation with a bias towards public sector has failed the desired goals of industrail planning in the developing economies. The poor performance of public. undertakings and the restricted private sector led to some deceleration in the rate of industrial growth. The growth of basic and capital goods industries, which were mainly in the public sector, suffered a steep decline.

Structural Changes In Capital Goods Sector

Production in the capital goods sector has also undergone significant structural changes. In developing economies the major emphasis on consumer goods industries to capital goods industries have showed a structural imbalance in industrial pattern. The structure of consumer goods sector has also changed. Today a large number of industries belong either directly or indirectly to elite consumption goods industries. The structural change in the field of consumer goods sector has led to scarcity of mass consumption commodities, their rising prices and miseries of the masses. Concentration of economic power and growth of monopolistic trends have been another feature in consumer goods sector. The main reason why consumer goods industries develop first seems to be that expansion of capital goods industries requires huge capital amount, advance tecniques of production and skilled labour force. The ratio of consumer goods to capital goods industries has decreased both in developed and low income countries.

Elite Oriented Consumption And Growth Of Regional Imbalances

In recent years the production of industrial goods catering to the requirements of masses has expanded only marginally industries catering to the demand of a small minority of rich consumers which has registered phenomenal increase.

In developing economies regional concentration of industries has become special feature of industrial structure. The uneven growth among different regions has led the palnners to adopt a strategy of development which would promote an even development of regions. The rationale for this is derived from the fact that the location of industries is not only essential to generate employment and income in the backward regions but also that a decentralised industrialisation process is an important factor in balanced regional development. Inter-regional and intra-regional disparities in level of industrial development instead of reducing showed a tendency of growing divergence, effecting the agglomerated pattern of industrialisation. The expectation that a massive investment in public sector projects would have a wide ranging trickle down effect on stimulating small and ancillary industries failed to materialise in many developing economies.

Industrial Sickness

The problem of industrial sickness and some cases is due to bad and inefficient management. The pattern of industrial development has not been suficiently guided by cost considerations. Industries have tended to get established at sub-optimal capacities leading to a high cost industrial structure. Adequate attention has also not been given to inmprovemtns in technological and quality of products. Some of these factors have led to the emergence to sickness, particularly in market conditions tend to generate a measure of competition with the economy.

ISSUES OF INDUSTRIALISATION

There are several issues of industrialisation facing the capital poor economies of the world. The most imortant issue of industrialising such economies is either to give more empahsis to small scale industry or large scale industry. The small scale industry possesses the inherent advantages of low capital intensity and high employment generation potential. Development of the small scale sector promotes decentralizaiton of industrial growth and widens the entrepreneurial base. George Rosen (1988) opines that small industry policy which is protective is anti-growth and that small scale production may not be capital saving in terms of output or employment or both relative to large scale production.

Capital intensive technology or labour intensive technology is an another important issue facing the UDCs. A labour intensive technology implies a lower fixed capital per unit of output and a large amount of employment per unit of output, lower wage and lower surplus each per

An another important issue facing the UDCs is location factor which is an index of degree of concentration of industry in a particular place. The index is arrived at by taking the percentage of all workers in a particular industry found in a certain region of the total industrial workers in the country. The underlying idea of such an index is that location should be explained as the degree of dissimilarity between the geographical distribution of the industry and the population of the country (Florence 1948).

In the early phases of industrialisation, greater use of machinery especially in manufacturing increases labour productivity and output. As industrialisation continues, further increase in labour productivity reduces the growth of industry's demand for labour. In the early phases, high growth of employment in industry is made possible by low growth in agricultural employment. In the later phases high growth of employment in services is made possible by lower growth in industrial and agricultural employment.

In the global economy the share of manufacturing in GDP has risen in the early phase of industrialisation. After a time, however, it has tended to fall, while the basic underlying forces of industrialisation technological change, specialisation and trade have continued to proper output per capita upward. Thus for most countries, the ratio of (a) the share of manufacturing or industry in GDP to (b) GDP per capita follows an inverted U as industrialisation proceeds (World Bank 1995).

Table 1

Structure Of Manufacturing In Selected Countries

(In Percent)

Name of the Country	Consumer Goods		Capital Goods		Ratio of Consumer Goods to Capital Goods Industries	
Developed Economies	1970	1992	1970	1992	1970	1992
Japan[c]	16	15	85	86	0.18	0.17
United States[c]	20	18	80	81	0.25	0.22
France[c]	22	20	78	81	0.28	0.24
Low Income Economies						
India	34	27	66	74	0.51	0.36
Bangladesh	77	62	24	39	3.20	1.59
Pakistan	...62*	48	38	...52*	1.63	...0.92*

Note : The symbol... means not available; c means value added in manufacturing data at purchaser values; *means data of WDR, 1993

Source : World Bank, The World Development Report, 1993, 1995 Oxford University Press, p. 72 and 248.

The Table 1 reveals that the rate of consumer good to capital good industries has decreased both in developed and low income economies from 1970 to 1992. The classification of industrial output in WDR is threefold. In which the first two categories are clear cut as they fall under consumer and capital goods industries. The remaining one i.e. other is a mix of both and for this purpose it is included in the category of capital goods. No doubt, the structure of manufacturing shows clearly imbalance in the industrial pattern of low income economies. Though to strengthen the country's industrial structure the strategy and structure of industrialisation has undergone a definite change, a large part of investment in the industrial sector of low income economics has been earmarked for the sectors which increase the capacity for further production i.e. for the production of machines to make machines. As a result the share of capital goods industries in total industrial output and in gross value added rose consistenly while that of consumer goods industries declined.

HOFFMAN'S HYPOTHESIS

In the economy whatever the relative amounts of the factors of production, whatever the location factors, whatever the state of technology, the structure of manufacturing sector of the economy has always followed a uniform pattern. The food, textile, leather and furniture industries always develop first during the process of industrialization. But the metal working, vehicle building, engineering and chemical industries and capital goods industries soon develop faster than the first group. This can be seen throughout the process of industrialization. Consequently, the ratio of the net output, value added of the consummer goods industries continually declines as compared with the net output of the capital goods industries.

The main reason why consumer goods industries develop first seems to be that expansion of capital goods industry requires large amounts of capital and advanced techniques of production as well as skilled labour force. Manufacturers such as food and textile industries have to be developed before conditions favourable to the growth of capital goods industries appear in such a way that consumer goods industries utilise the technical knowledge already possessed by skilled craftman from domestic industries to a great extent than in possible use in the case of capital goods industries.

CONCLUSION

No doubt industrialization has become one of the great crusades of UDCs. It is regarded as the surest means of ensuring a sustained economic development in the poor countries. Traditional theory of economic development and growth considers industrialization as the generator of economic momentum. Theories of economic development, centred around

Kuznet's findings and Lewis type models, outlines the process of industrialization as the gradual shifts of labour force from the primary sector to secondary sector. The process of industrialization can be divided into three stages in terms of relationship between capital goods to consumption goods. Firstly, predominance of consumption goods industries, secondly, relative increase of capital goods industries and finally balance between both. Considering the pattern of industrialisation in developing economies it can be concluded that before mid-sixties witnessed a high rate of growth in industrial sector, mainly because public investment was growing at very high rate. More strees was given on capital goods industries. Expansion of consumer goods industries was also planned so as to raise the level of their supply in view of the general growth of demand. But this strategy after mid-sixties has been departing due to subsequent failure to increase in the level of public investment, increasing demand of consumer goods, increase in price and growth of populations.

After mid-sixties, in pursuance of the objective of balanced regional development, dispersal of industries into rural areas and the development of new centres of industry has been undertaken. Though pattern of industrialisation has been centred around the building up of heavy and capital goods industries but in recent years the production of elite oriented consumption goods, the growth of regional imbalances and industrial sickness are some of the major problems in the industrial pattern of UDCs, which require immediate attention. In order to give a big push to the economy much emphasis are generally placed on large scale basic and heavy industries, which lack co-ordination with small scale industries as a result, small units can not flourish in a proper way. They generally suffer from low capacity utilisation, scarcity of raw materials and imported components and equipments, limited resources, lack of standardisation and trademark leading towards market imperfection, inadequate power supply, etc. Various causes of sickness should be identified and remedial measures be taken to provide overall relief to sick units for bringing them to normal footing. Thus the government must provide market protection through the reservation of products for exclusive production in small scale sector. The sector should get purchase preferences by the government and financial assistance should be also provided by government and financial institutions. Besides the government should also provide raw materials, machninery on hire-purchase bsis, training and quality control facilities, subsidies and incentives, income tax rebate, exemption in excise duty, concession in interest and prioity in the disbursement of loans by the financial institutions. Management must develop basic qualities, dynamism, and sufficient know-how of latest management techniques. No doubt the problem of industrial sickness has become a complex issue for the small scale industries.

It is obvious that the economy needs competition and efficiency and not excessive control and regulation and therefore, liberalisation policy assumes great virtues in the market mechanism. Most of the governments of developing economies have started to move in this direction and indudtrial economies have also started to slow some healthy trends of improvement. The private sector is being allowed to work under a competitively free environment. Several concessions and incentives are being allowed to work under a competitively free environment. Several concessions and incentives are being allowed for the development and expansion of private sector undertakings. But the process of liberalisation had not gone far enough and there is still a wide gap between promise and performance. The various issues regarding industrialisation confronting the planners are choice of technology, size of limit, scale of operations, locations, commodity mix, capital mix, ownership and management. They are central to the type of economic system that is being evolved in any country.

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