CHAPTER TWO

INDUSTRIAL SICKNESS: THEORY AND EMPIRICAL FINDINGS

2.1 Introduction

Industrial sickness is not a country specific phenomenon. It is a global phenomenon. Industrial sickness is neither an industry specific phenomenon. It encompasses all industries, may be with varying degree. It is a concomitant of industrial development. Incidence of sickness is pervasive to all segments of economy ruled by the market forces. It is as abundant in developed countries as it is in the developing countries; to the extent capitalist market economy has developed in these regions. At the micro or firm level, the apparent causes of sickness are many: inefficient management; shortage of fund; use of obsolete technology and inefficient plant and machinery leading to poor capacity utilisation and substandard products; labour problem; market recession etc. These factors, which are considered to be responsible for sickness at micro level, cannot fully explain the phenomenon of sickness unless we consider the issue of industrial sickness at macro level and theorise it.

2.2 Schumpeter and the Theory of Creative Destruction

At the macro level, industrial sickness is an economic consequence of industrial development. The phenomenon of industrial sickness can be theorised on the basis of Joseph Schumpeter's well-known theory of innovation. Schumpeter, as one knows,

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2 Innovation refers to the economic application of a new idea. According to Schumpeter, entrepreneur commercialises invention through innovation. As Schumpeter observes, innovation covers the following five cases (1) the introduction of a new good – that is one with which consumers are not yet familiar – or of a new quality of a good, (2) The introduction of a new method of production, that is one not yet tested by experience in the branch of manufacture concerned, which need by no means be founded upon a discovery scientifically new, and can also exist in a new way of handling a commodity commercially, (3) The opening of a new market, that is a market into which the particular branch of manufacture of the country in question has not previously entered, whether or not this market has existed before, (4) The conquest of a new source of supply of raw materials or half-manufactured goods, again irrespective of whether this source already exists or whether it has first to be created, (5) The carrying out of the new organization of any industry, like the creation of a monopoly position (for example through trustification) or the breaking of a monopoly position.............', Schumpeter, Joseph A (1934), pp 63.
developed a theory of economic development in terms of the concept of innovation. A class of people, according to Schumpeter, has the animal spirit of utilising the results of scientific inventions in industrial modernisation. Such a class of people known as entrepreneur\(^3\) can bear the risk associated with the new technology. As a result of the introduction of new technology in a given area of economic activity, the existing technology becomes obsolete in as much as the existing technology does not remain cost effective. The obsolete technology is destroyed as a consequence. Such a destruction of social assets, according to Schumpeter, is a creative destruction. This is so because such destruction paves the way for the adoption of new technology which produces the output at a lower average cost or a new facility is added to the existing product line. In Schumpeter's conception, such a transformation should be noted as 'development'. The destruction of old technology is, therefore, a creative destruction for development and the entrepreneur is an agent of such 'development'\(^4\). In sum, the key agent in Schumpeter's theory of development is the entrepreneur. The entrepreneur is the initiator of significant advances in an economy. And these advances do not occur through a smooth, continuous process; economic development is an uneven, disharmonious process. Destruction of social assets in this process is the cost of economic development under capitalism.

\(^3\) 'The function of entrepreneurs is to reform or revolutionize the pattern of production by exploiting an invention or, more generally, an untried technological possibility for producing a new commodity or producing an old one in a new way, by opening up a new source of supply of materials or a new outlet for products, by reorganizing an industry and so on. ......................... To act with confidence beyond the range of familiar beacons and to overcome that resistance requires aptitudes that are present in only a small fraction of the population and that define the entrepreneurial type as well as the entrepreneurial function. This function does not essentially consist in either inventing anything or otherwise creating the conditions which the enterprise exploits. It consists in getting things done'. Schumpeter, Joseph A (1942). pp 132.

\(^4\) '........Development in our sense is a distinct phenomenon, entirely foreign to what may be observed in the circular flow or in the tendency towards equilibrium. It is spontaneous and discontinuous change in the channels of the flow, disturbance of equilibrium, which forever alters and displaces the equilibrium state previously existing. Our theory of development is nothing but a treatment of this phenomenon and the processes incident to it. These spontaneous and discontinuous changes in the channel of the circular flow and these disturbances of the center of equilibrium appear in the sphere of industrial and commercial life, not in the sphere of the wants of the consumers of final products. ..........Development in our sense is then defined by the carrying out of new combinations............'. Schumpeter, Joseph A (1934). pp 61-90.
Based on the concept of creative destruction, one can theorise the phenomenon of industrial sickness, in general. With technological advancement, the basis for technological innovation remains ever present in a capitalist society. The entrepreneurial class has thus a basis for its existence. Given a proper macro economic environment, such a class takes up innovation which threatens the existing industrial units which would become less competitive as the innovation takes place. Such units would fail to survive in competition and would thus be eliminated from the industrial scenario. The process of the exit starts with morbidity that is identified as the symptom of industrial sickness. If the signal of morbidity is not properly noted, as the management does not take adequate measures for technological upgradation in the form of turnaround management, the unit would ultimately shut down and would fall prey to the creative destruction. Industrial sickness, in the framework of Schumpeter’s theory of development, is the logical consequence of industrial development through innovation.

The theme may be elaborated further. As we have pointed out, Schumpeter observes the process of creative destruction as the key factor responsible for economic development. He describes ‘creative destruction’ as an economic process by which old techniques of producing goods are endogenously destroyed and replaced by the new one. This becomes possible through innovation by entrepreneurs. As Schumpeter argues that innovation and technological change come from an entrepreneur who can commercialise the invention into productive use by their wild spirit along with his access to capital. This results in new pattern of production and consumption. According to Schumpeter, adding a new pattern is development; expansion along a given pattern is growth. Innovation brings development. Development calls for new investments. The cost of development is capital.

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5 'The opening up of new markets, foreign or domestic, and the organizational development from the craft shop and factory to such concerns as U.S. Steel illustrate the same process of industrial mutation...that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one. This process of creative destruction is the essential fact about capitalism. It is what capitalism consists in and what every capitalist concern has got to live in'. Schumpeter, Joseph A (1942). pp 83.

6 In so far as the ‘new combination’ may in time grow out of the old by continuous adjustment in small steps, there is certainly change, possibly growth, but neither a new phenomenon nor development in our sense............’. Schumpeter, Joseph A (1934). pp 67.
intensive. The old firms which cannot cope up with such technological change and cannot make new investments, fail to survive in the market and ultimately perish. According to Schumpeter, 'Capitalist economy is not and cannot be stationary. Nor it is merely expanding in a steady manner. It is incessantly being revolutionised \textit{from within} by new enterprise, i.e., by the intrusion of new commodities or new methods of production or new commercial opportunities into the industrial structure as it exists at any moment. Any existing structure and all the conditions of doing business are always in a process of change........ Economic progress, in capitalist society, means turmoil. .......... In this turmoil, competition works in a manner completely different from the way it would work in a stationary process, however perfectly competitive. Possibilities of gains to be reaped by producing new things or by producing old things more cheaply are constantly materialising and calling for new investments. These new products and new methods compete with the old products and old methods not on equal terms but at a decisive advantage that may mean death to the latter. This is how 'progress' comes about in capitalist society' (Schumpeter, 1942, pp 31-32).

Schumpeterian theory does not give importance to price competition. It lays stress on competition that a given product faces from the new commodity, new technology, new source of supply and the new type of organisation. According to Schumpeter, 'in capitalist reality as distinguished from its text book picture, it is not that kind of competition which counts but the competition from the new commodity, the new technology, the new source of supply, the new type of organization (the largest scale unit of control for instance) – competition which commands a decisive cost or quality advantage and which strikes not at the margin of the profits and the outputs of the existing firms but at their foundations and their very lives are more effective than the price competition' (Schumpeter, 1942, pp 84). According to him, 'Every piece of business strategy acquires its true significance only against the background of that process and within the situation created by it. It must be seen in its role in the perennial gale of creative destruction; it cannot be understood irrespective of it or, in fact, on the hypothesis that there is a perennial lull' (Schumpeter, 1942, pp 83-84). Following Schumpeter, one may argue that such change has been taking place since the time of
industrial revolution and at every phase of such change, plant and equipment, production process and skill of the workforce become obsolete rendering loss of capital equipments and employment. At the same time, it creates opening for others who possess entrepreneurial skill and can exploit the new opportunities. The process is continuous, but in Schumpeter's paradigm, the technological innovation is absorbed in a society with some lag. Schumpeter explains the occurrence of business cycle as the period between the time of technological revolution and the period when the result of the revolution is absorbed in the economy.

What we find from the analysis of Schumpeter's theory of economic development is that sustained long term economic development depends on three variables – technological innovation, commercialisation of technological innovation by entrepreneurs and market driven economy devoid of much state intervention. These three variables are interdependent on each other and for a successful industrial growth, all these variables must function together. For example, technological innovation alone cannot accelerate growth of productivity unless it is freely used by the entrepreneurs. First two factors are capital intensive. Companies that once revolutionised and dominated in a particular line of product(s) may see fall in their profit margins and loss of market share if a new set of companies start using improved technology reducing cost and charging lower price to customers. Once the old companies are caught behind by their competitors, they have to reorganise their business which involves huge cost. Sometimes, this cost cannot be borne by the old firms. Moreover, reorganisation is also a time-consuming process. The existing legal provisions, no doubt, cover reorganisation and restructuring, but the cost and the delay are so enormous that in many cases it either prevents or dissuades the firms from pushing ahead with new proposals. By the time they reorganise, further innovation takes place which they cannot match if they fail to acquire innovative spirit. In the process, they eventually close their shop rendering the workforce jobless and leaving the capital assets idle. In a closed economy, where market and commodities to be produced are influenced by state intervention, firms do not normally face price competition. In such a situation, firms tend to employ traditional process technology. Investment in research and development activities for upgradation of process technology and development of new
products is hardly made. Overhauling of plant and equipment is neglected. All these result in lower productivity leading to uneconomic use of scarce resources. Profit margin reduces and the enterprise fails to meet the debt obligation. The problem gets further aggravated when the owners shift to other business by diverting funds from the existing business. Thus, the cow which he has so far milked drops dead. The result is loss of capital assets and employment. Such a reality that we experience in preliberalised India—the reality of shifting to other type of industry in preference to the existing one can thus be explained also in terms of the Schumpeterian concept of creative destruction.

Schumpeter's theory of economic development through creative destruction is till now the basic macro economic theory in terms of which the phenomenon of industrial sickness can be explained to a large extent.

2.3 Karl Marx's Theory of Capitalist Development

One may, however, point out that the phenomenon of industrial sickness leading to closing down of a unit or closing down a particular line of industrial endeavour, can as well be explained in terms of Karl Marx's Theory of Capitalist Development. In the chapter on 'Competition', as outlined in Capital, Volume - 1, and the further discussion on the problem of realisation of value, as outlined in Capital, Volume - 3, one can theorise the phenomenon of industrial morbidity and mortality in a capitalist economy7.

7 In the Marxian thought of capitalist economy, small capitalists cannot compete with the large capitalists. The latter being powered by centralization of capital cheapens the commodities with a view to weed out the small capitalists from the market. According to Karl Marx “......With the accumulation of capital, the number of capitalists grows to a greater or less extent....... The part of social capital domiciled in each particular sphere of production is divided among many capitalists who face one another as independent commodity-producers competing with each other ......Accumulation, therefore, presents itself on the one hand as increasing concentration of the means of production, and of the command over labour; on the other, as repulsion of many individual capitals one from another....... Capital grows in one place to a huge mass in a single hand, because it has in another place been lost by many. This is centralization proper, as distinct from accumulation and concentration. The battle of competition is fought by cheapening of commodities. The cheapness of commodities depends, ceteris paribus, on the productiveness of labour, and this again on the scale of production. Therefore, the large capitals beat the smaller. ......It always ends in the ruin of many small capitalists, whose capitals partly pass into the hands of their conquerors, partly vanish...." Marx, Karl (1890), pp 624-626.
Briefly speaking, capitalists' accumulation follows the process of concentration and centralisation of capital. The essence of the theory of concentration of capital is that the organic composition of capital increases in one line of operation. The producers in this line of operation are placed in a situation where they can absorb a part of surplus value produced by its competitors through the cheapening of the prices of production. The victor thus gets a bigger share of the market, the capital gravitates to the victor and gives rise to concentration of capital. This is how Karl Marx described the process of accumulation of capital by 'concentration'.

Following this line of reasoning, one may observe that accumulation through concentration is achieved by increasing the organic composition of capital. In essence, this implies the rising productivity of labour which is brought about mainly by technological innovation. Innovation is the powerful instrument by which the competitor gains in the market as Schumpeter's innovator does. The line of operation in which the technological innovation does not take place is threatened by 'sickness' that might ultimately lead to the closing down of the unit or the industry itself. Marx's theory of accumulation through concentration of capital can thus be utilised for explaining industrial sickness in a capitalist economy.

Further, according to Karl Marx, in the capitalist mode of production, "no capitalist ever voluntarily introduces a new method of production, no matter how much more productive it may be, and how much it may increase the rate of surplus-value, so long as it reduces the rate of profit". It is competition which drives "every capitalist to lower the individual value of his total product below its general value by means of new machines, new and improved working methods, new combinations, i.e., to increase the productivity of a given quantity of labour, to lower the proportion of variable to constant capital ........................." Cheapening of commodity leads to fall in rate of profit. In such a situation, capitalists realise less surplus-value. The new method of production increases the quantum of sales. Thus, even with lower rate of profit, accumulation of capital is accelerated resulting in "an increase in the absolute magnitude, or total mass, of the surplus-labour (surplus-value, profit) appropriated by it." This happens as according to Karl Marx, "The law that a fall in the rate of profit due to the development of productiveness is accompanied by an increase in the mass of profit, also expresses itself in the fact that a fall in the price of commodities produced by a capital is accompanied by a relative increase of the masses of profit contained in them and realized by their sale". Karl Marx further explained that "examination of competition shows, furthermore, that under certain circumstances, when the greater capitalist wishes to make room for himself on the market and to crowd out the smaller ones, as happens in times of crises, ................. he deliberately lowers his rate of profit in order to drive the smaller ones to the wall". Marx, Karl (1894). pp 220, 221, 250, 259.
In one sense, Marx’s theory is more insightful. It considers the phenomenon of centralization of capital which, according to Marx is a process by which a powerful capital grabs a weak capital. In other words, a morbid unit is taken over and (possibly through restructuring) is allowed to survive, thus minimizing the loss of social capital. In fact, the process of merger and acquisition which appears as a very powerful phenomenon during the phase of industrial restructuring can hardly be explained in terms of Schumpeter’s theory of innovation based on creative destruction. It appears that such a phenomenon is better explained in terms of Karl Marx’s theory of capital accumulation.

2.4 Industrial Sickness in the Era of Globalisation

Whatever be the explanation, the fact of the matter is that sickness turns a running industry unviable. It loses its competitive efficiency. The implication is that these are threatened by competitors that enter in the market with reduced long run average cost. The reduction in long run average cost is realised by technological innovation that shifts the long run average cost curve downwards. Even in the era of globalisation when incidence of sickness is increasing at an accelerated rate, the basic reasons for sickness are to be located in the factors that developed out of new technology that might reduce the cost by various ways. Now, let us see what happens during the present era of economic liberalisation and globalisation.

The present era of globalisation can be conceived as a period of boom in innovation in a Schumpeterian paradigm of capitalist development. Often described as the era of the fourth industrial revolution, in this era, new opportunities for innovation have developed 

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8 Acquisitions of Arcelor by Mittal Steel and that of Corus, an Anglo-Dutch steel maker by Tata Steel are the recent phenomena of merger and acquisition, i.e., the centralization of capital, as in Marx.

9 The fourth industrial revolution which is also known as electronic revolution began in the early 80’s of the last century. It started with the advent of knowledge based technology with electronics technology at the heart. This revolution is an outcome of enormous progress in the development of microprocessors, opto-electronic devices and telecommunication systems. Such a revolution has not only induced incremental innovation, radical innovation and change in technology system but has also caused change in techno-economic paradigm. It has reduced the cost of production and changed the quality of life. Knowledge-based technology has now become the main engine of economic development and growth. In this era, as one would expect, society will be driven by well networked individuals, who are not just capable for technological innovation; they are more creative than in the past. According to Freeman and Perez, “Some changes in a
at an unprecedented scale, thanks to information technology-based expansion of knowledge in every branch of natural and social science. The boom in innovation needs expansion of market within and outside a nation state. The need for expansion of market had always been there under capitalism. Capital had always exhibited the tendency to cross the boundary of a nation state after destroying the reminiscence of pre-capitalism within the boundary of a nation state. But then, the intensity of such a tendency has increased at an unprecedented scale in the present era. The new opportunity for accelerating the production with enhanced productivity achieved by technological innovation has aggravated the problem. The innovations cannot be sustained and the results of innovations cannot be absorbed by the economy unless the domain of the market is expanded. The necessity of removing national barrier for the movement of commodities and capital as also the necessity of integrating all domestic markets with a global market has also become intensive. Globalisation is the term that captures this reality.

One may point out that revolution in electronic technology that propelled the fourth industrial revolution has also paved the way for expansion of innovative activities so much so that development through creative destruction has become an order of the day. Easy access to the information on new inventions and the possibility of commercial use of such inventions has brought about a sea change in the scenario of adoption of new technology. Unprecedented advancement in the area of telecommunication and computer technology makes it possible to close the information gap on such a scale that the entrepreneurial risk can now be based on more rational judgement so that Schumpeterian animal spirit for innovation gets a more solid foundation. Consequently, innovation at global scale is now advancing at an accelerated pace.

technology system are so far-reaching in their effects that they have a major influence on the behavior of the entire economy. A change of this kind carries with it many clusters of radical and incremental innovations, and may eventually embody a number of new technology systems. A vital characteristic of this fourth type of technical change is that it has pervasive effects throughout the economy, i.e., it not only leads to the emergence of a new range of products, services, systems and industries in its own right; it also affects directly or indirectly almost every other branch of the economy, i.e., it is a 'meta-paradigm'. We use the expression 'techno-economic' rather than 'technological paradigm' because the changes involved go beyond engineering trajectories for specific product or process technologies and affect the input cost structure and conditions of production and distribution throughout the system........... From this, it is evident that we view Schumpeter's long cycle and 'creative gales of destruction' as a success of 'techno-economic paradigm' associated with a characteristic institutional framework, which, however, only emerges after a painful process of structural change". Freeman, C. & Perez, C (1989). pp 38-66.
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The nation states have conceded to the need for allowing the innovative activities at cross border level to an extent which was never there in human history. The national barrier for movement of commodities and capital along with the knowledge of the technology conceded the demand for more stringent intellectual property right. The nation state now facilitates the innovating activities in a better way. Innovation has also taken place in restructuring the individual firm with lean management and lean workforce that may retain competitive efficiency at the global level.\(^{10}\)

The nation states have to undertake broad based external and internal economic reforms for allowing the innovators to operate on a level playing field. This is the essence of globalisation. In the Schumpeterian paradigm, globalisation is the triumph of capital in achieving its expansion through innovations where the process of creative destruction is facilitated by removing the institutional barrier to innovative activities. Strictly speaking, this is a phase of economic development where capital in its history of progress has attained the most favourable institutional back-up.

To put the elements of changes in the institutional set-up in brief, one may point out that in the era of globalisation, barriers to the cross-border movement of capital have been removed to a great extent in many of the countries of the world. Tariff cuts on imports, reduced quantitative restrictions on trade under WTO agreement, more liberalised foreign investment policy backed by TRIMs along with GATT had paved the way for cross-border investment in manufacturing and service related industries. Internal institutional reforms including the reduction in excise duty, removal of licensing requirements in industries, encouragement to private capital and reduced state interventions have encouraged the innovators to operate in an economy in a better way. The innovators now understand that they shall have to operate in an economy where the rules of market would

\(^{10}\) A study made by the All India Management Association (AIMA) showed that eight big industry houses of India had downsized manpower and management staff while undertaking corporate restructuring. See AIMA (ed) (1995).

Study made by Pradip Khandwalla has also shown that firms that had undertaken corporate restructuring for turnaround in India and abroad had adopted downsizing in manpower and management staff. See Khandwalla, Pradip N (2001).
be supreme. In the financial sectors, free movement of capital creates the possibility of reducing the cost of capital. The bankers now learn to live in a market economy where the regulatory measures are being withdrawn gradually. The state, as an agent in the economic arena, learnt to live with the reality of fiscal consolidation and a market driven monetary policy. The state and the other agents in an economy get the message that in order to survive they must operate efficiently. The efficiency *inter-alia* depends on the innovative skill of an agent. The world, as it appears, learns to live in a Schumpeterian world of creative destruction where innovation is the *mantra* for survival. At the level of an enterprise, the message of globalisation is that the competitive efficiency is the key for survival. Those who cannot adopt innovative strategy will simply be eliminated from the market. The incidence of sickness in the era of globalisation can be rationalised in this perspective. The incidence of creative destruction at an unprecedented scale in the era of globalisation has mounted the problem of industrial sickness. It is a global phenomenon because innovation nowadays hardly faces any institutional barrier – the barrier that might provide protective umbrella for the non-innovative enterprises within the national boundary.

### 2.5 Industrial Sickness in India

Given this background, we can now discuss the particularities of sickness in Indian industries. In order to get a proper perspective of the issue, we would first consider various policies announced by the Government of India since independence for industrial development and their impact on performance of industries in India. As one knows, there were three different policy regimes in India, namely, regime of control and regulation (1950 – 80) followed by partial deregulation (1980 – 90) and the regime of economic liberalisation (1991 onwards).

#### 2.5.1 Regime of Control and Regulation

Policy regime upto 1980 gave stress on industrialisation based on the public sector as the engine of growth within a broad socialist framework. Till 1980, India followed an
inward-looking development strategy with the state assuming an important role in development exercise. It started with Industrial Policy Resolution (1948) which introduced the policy of industrial licensing in independent India. Following this, the Industries (Development and Regulation) Act, 1951 (IDRA) laid the foundation for administrative controls on industrial capacity. IDRA restricted entry, location, expansion and diversification through the instrument of industrial licensing, which was mandatory for all (except small scale industry which was exempted).

A more elaborate arrangement was worked out in 1956. The Industrial Policy Resolution (1956) classified industries into three categories with the main objective of demarcating the area of product reservation for the public and private sector. Schedule-A included seventeen key industries (including defence, capital goods, minerals, iron and steel, shipbuilding, rail and air transport, telecommunication and electricity) in which all future investments were reserved for the public sector. Existing private enterprises were allowed to operate, excepting defence and transport which were to be public sector monopolies. Schedule-B included twelve industries, such as, various intermediate goods (fertilisers, aluminium tools, drugs, plastics, synthetic rubber, etc.), and road and sea transport, which were intended to be progressively owned by the state, though there was scope for the private enterprises to expand. All remaining industries formed the third category in which primary reliance was placed on the private sector.

The government also attempted to arrest the growth of monopoly in Indian industries under the Monopolies and Restrictive Trade Practices (MRTP) Act which came into effect from 1970. It required large or interconnected firms to seek prior approval before investment. However, they were allowed to invest only in a selected list of 'core'

11 The First Schedule of the IDRA gave an exhaustive list of all the industrial activities that needed licensing.

12 Chapter III of this Act regulated the expansion of large industrial houses with gross assets exceeding rupees twenty crores, or of 'dominant' firms (defined by market shares exceeding one third) with assets over rupees one crore. Such firms would have to seek special approval for expanding capacity by more than twenty five per cent of existing levels. Mergers and amalgamations that resulted in firms' satisfying the above definition would also require clearance from the commission set up under the Act.
During this regime of control and regulation, 'these regulatory measures were supplemented by a host of other instruments of control'\(^{15}\). As one knows, industrial policies during this regime encouraged the development of a vast and diversified industrial base. They had adverse impact on the economy in terms of lower growth, underutilisation of capacity, slack in factor productivity and uneconomic size of the production units\(^{16}\). Another adverse impact was the loss of economy of scale in many cases, because emphasis was on small plant size compared to the international standard\(^{17}\).

On one hand, import and export policies implemented during this regime restricted import by both quantitative restriction and tariff barrier, and on the other hand, it encouraged export by providing heavy incentives by way of cash compensatory support, replenishment licences, duty drawback and funds at concessional rate of interest. The state patronage was extended to such an extent that unviable private firms were taken over and run by the government with budgetary support to avoid winding-up. The government also prevented some non-resident Indians' hostile take over of some Indian companies.

\(^{13}\) Accepting the recommendations of the Industrial Licensing Policy Inquiry Committee (Government of India: Report of the Industrial Licensing Policy Inquiry Committee, July 1969, pp-12), the government, in February, 1970, announced its new industrial licensing policy. According to this policy, the concept of 'core' industry in the economy was introduced. The core sector consisted of: A. Agricultural inputs, (a) Fertilisers: (i) Nitrogenous, (ii) Phosphatic, (b) Pesticides; (c) Tractors and power tillers; (d) Rock-phosphate and pyrites; B. Iron and Steel: (a) Iron ore; (b) Pig iron and steel; (c) Alloy and special steels; C. Non-ferrous metals; D. Petroleum: (a) Oil exploration and production; (b) Petroleum refining; (c) Selected petrochemicals such as integrated petro-chemical complexes, D.M.T., Caprolactum Acrylonitrile and synthetic rubber; E. Coking coal; F. Heavy industrial machinery; G. Ship-building and dredgers; H. Newsprint and electronics.

\(^{14}\) In 1973, the government introduced a new version of the Foreign Exchange Regulation Act (FERA). It defined any firm which had foreign equity of forty percent or more as a FERA company, and prohibited such a firm from (i) carrying on existing activities without periodic approval from the Reserve Bank of India, (ii) acquiring or purchasing shares of any other company, (iii) expanding capacity or output.

\(^{15}\) For further information please see Mukherjee, Dilip (ed) (1995). pp 1-8.

\(^{16}\) Khatkhate, D (1992), pp 54.

\(^{17}\) World Bank (1989) and World Bank (1991), Vol. 1. The latter report makes a tabular comparison of Indian and international scales in selected industries. Of the 17 consumer, capital and basic industries covered by Khatkhate (1992), all except two had average plant sizes ranging from two percent to fifty percent of international norms.
2.5.2 Regime of Deregulation

Report of the many official committees appointed by the government\textsuperscript{18} recognised that the policy of industrial licensing could not reap satisfactory benefit according to plan priorities. This led the government to adopt policies towards deregulation. First such step was initiated by the announcement of the Industrial Policy of 1980 followed by the announcement of 1982 as the ‘Productivity year’ by the Prime Minister, Indira Gandhi. Further steps towards liberalisation of industrial controls were taken by the Rajiv Gandhi government during 1985 and 1986. During this period, for the first time, reforms to the system of economic controls took place, affecting both industrial policy and trade policy. Licensing restrictions were relaxed. A system of ‘broad banding’ was introduced enabling firms to shift product mixes and switch capacity to related items. Controls on large companies and foreign corporations were relaxed. The number of firms subjected to MRTP rules was also reduced and the focus of the MRTP shifted from control of the large business houses towards control of specific restrictive practices. The 40 per cent limit on equity participation by foreign companies was raised to 51 per cent in cases leading to technology transfer or improved exports, quantitative restrictions on imports were reduced, and most outright bans on import of products were abandoned. Import restrictions on capital goods which had no Indian source of supply and intermediate goods were reduced in order to increase the efficiency of Indian industries\textsuperscript{19}.

Report of the Committee on Distribution of Income and Levels of Living (Chairman: P.C. Mahalanobis) (1964b).

2.5.3 Regime of Liberalised Industrial and Economic Policy

This regime started with the announcement of the New Industrial Policy by the Narasimha Rao government in July, 1991. Tariff levels were reduced significantly, quantitative restrictions on imports were largely abandoned, scope of foreign direct investment was enlarged, exchange controls were simplified, the industrial licensing system was abolished, the scope of reservation of economic activities for the state was reduced and restrictions on large companies were relaxed. In short, government of India mainly took three kinds of steps: disbanding complex and bureaucratic system of industrial controls, industrial licensing and allotment of permit; liberalising foreign trade and currency transactions and enhancing the scope of foreign direct investment. A number of other reform measures were also taken during this regime. They are: removal of import licensing, simplification of the tariff structure, three year continuous trade policy, liberal Exim Policy which facilitated simplified procedures and rationalisation of tariff rates\(^{20}\), etc.

2.5.4 Effects of Various Industrial Policies on Sickness in Indian Industries

All the Indian industries that used to enjoy the state patronages during the regime of control and regulation, which in effect placed them under protective umbrella of the state, became less competitive and inefficient. They had neither to face the Schumpeterian entrepreneur nor the Schumpeterian turmoil of creative destruction. During the period of deregulation, when government started withdrawing the protective measures gradually, those industries, whose unviable status were otherwise hidden, were subjected to market competition. The result was that these industries started incurring huge losses.

Let us elaborate this point. The challenge that Indian industries faced in the era of economic reforms had been quite difficult for them. Most of the Indian industries in the post-independence period enjoyed protection from the state, thanks to the Nehruvian

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policy of industrialisation with state patronage. Many of them enjoyed direct or indirect
subsidies from the state. Many of them utilised the licensing policy of the government for
promoting their rent-seeking interest. Economic reforms aimed at removing these state
patronages. More difficulties that the Indian industries had to confront were from the
policy of opening up of economy to competitors from abroad. These competitors were the
vehicles of technological modernisation that brought about a sea change in the business
environment of the country. In many cases, they were producing the same or an improved
product at a reduced cost. The indigenous producers could survive only by adopting the
fruits of fourth industrial revolution without further delay. A turnaround management was
the need of the day. Endogenous producers could meet such a challenge in a lack-luster way.
Since they operated under a protective umbrella of the state, they hardly had the quality
of Schumpeterian innovator. The animal spirit of entrepreneurial risk-taking was missing.
It is no wonder that they fell prey to the Schumpeterian creative destruction to the extent
the economy was opened up to the global competition. Since the social cost of such a
process would have been heavy, the Indian state, thanks to the existing democratic set-up
of the government, did not take a big bang approach for industrial modernisation. Process
of creative destruction was moving in a haltered way. The endogenous capital thereby got
a breathing space for learning the rules of survival in a competitive set-up.

Many of the industrial houses could learn to live by adopting new management policies.
The essence of such policies was to inculcate Schumpeterian spirit of risk-taking
entrepreneurship. A new set of management people did emerge in India who could learn
the rule of turnaround management. Industrial climate was thus changing slowly.
Nevertheless, many of the industries or companies in a group of industries could not cope
with such a changing climate. They became morbid and ultimately many of such morbid
industries had to wind up the business. Sickness became a familiar phenomenon in Indian
industries. The government of India could not escape this reality. Since 1980’s, as the
economy was opening up, the symptoms of sickness were surfacing. The initial reaction
was to take over such industries under government management so that social cost of
sickness could be minimised. Gradually, however, the wisdom that prevailed was of
intervening in the process as the facilitator of the revival. The Sick Industrial Companies
(Special Provisions) Act, (SICA, 1985) was the outcome of such an endeavour.
In order to operationalise the provisions of SICA, the government, in 1987, constituted the Board for Industrial and Financial Reconstruction (BIFR) which was conceived as the main agency for restructuring and rehabilitating the sick industrial companies. The main objective of the Act, as laid down in the SICA, was to detect sickness following certain predetermined norms and to suggest remedial measures after going through proper hearing of the individual cases. The Act also empowers the BIFR to formulate effective steps for either restructuring and rehabilitation or exit by recommending for winding-up. SICA was thus a retreat for the earlier policy of providing outright state support for running the sick units. At the same time, it did not empower the BIFR to wind-up a company.

BIFR could not, however, tackle the problems of industrial sickness effectively. Main reasons were: (a) SICA defines industrial sickness only to capture the reality of terminal sickness when it has reached a stage of moribundity. Since the moribundity is usually preceded by the signs of disease, intervention for revamping the unit should have been taken at the stage when the unit was morbid. The SICA definition thus fails to capture the initial stage of sickness when appropriate remedial measures could have turned around the company; (b) The BIFR is not manned by the person having adequate technical competence in assessing the problems of terminally sick companies. Thus, the proper technological solution to those problems were never taken into account while working out the policy for revival; (c) Due to bureaucratic approach and many other reasons, the rate of disposal of cases in the BIFR is very slow; (d) The provisions of SICA keep wide scope for utilising them for such purposes for which they were never framed. Thus, the

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21 In terms of section 20 of SICA, when a company is not likely to become viable in future and that it is just and equitable that the company should be wound up, BIFR may record and forward its opinion to the concerned High Court.

22 Under the provisions of this Act, 'sick industrial company' means an industrial company (being a company registered for not less than five years), which has at the end of any financial year accumulated losses equal to or exceeding its entire net worth. Net worth is defined as sum total of the paid-up capital and free reserves. Free reserves means all reserves credited out of the profit and share premium account but does not include reserves credited out of re-evaluation of assets, write back of depreciation provisions and amalgamation.
provisions under SICA have been abused and utilised as a protective shield for getting immunity from the repayment obligation to its creditors\(^2\). 

Thus, the units who used to get protection from the government by way of various regulatory measures during the regime of control and regulation started getting the protection from the provisions of SICA. Result was increase in magnitude of sickness in Indian industries. During the period from 1980-81 to 2002-03 (i.e., the period when the government took various steps for deregulation followed by ten years period when liberal industrial and economic policies were pursued), total number of sick industrial units in India increased by about seven times (from 24550 in 1980-81 to 1,71,376 in 2002-03). During this period, total amount of bank credit blocked (WPI adjusted) increased from Rs.1809.00 crores to Rs.8418.30 crores. The amount of gross non-performing assets (NPA) of scheduled commercial banks as on 31.3.2006 was Rs 51,816 crores, which is about 2 per cent of GDP at current price and about 10 per cent of manufacturing GDP at current price as on the same date\(^2\). 

2.6 Present Scenario and the Situation Likely to be Faced by the Domestic Industries

Looking at the figure of growing sickness in Indian industries, one can say that most of the industries were caught unaware in the changed scenario in the liberal industrial and economic policy regime following removal of institutional bottlenecks. This was expected. Industries which enjoyed various concessions and protection during the regime of control and regulation became exposed to the market driven economy during the post-liberalised period. In the era of globalisation, in order to acquire or improve competitiveness, one has to go through the process of complete reorganisation and restructuring by adopting technological innovation followed by improvement of quality of products and business model. Most of the industries could not cope with massive

\(^2\) According to the existing provisions of the Act, the creditors cannot take any legal action against the company if the unit is registered with the BIFR. Section 22 of SICA offers adequate protection to the defaulting company in this regard.

progress in technological innovation which is typical to the fourth industrial revolution. This has happened since these processes are capital intensive with high gestation. In other words, most of the Indian industries have failed to play its role in the perennial gale of creative destruction. Besides, in a globalised environment, even firms with advanced technology back-up may fail to see the success in their internationalisation effort due to resource constraint and lack of business model. The era of globalisation has thus become the period of embedment of sickness in Indian industries.

2.7 Summary and Conclusion

Industrial sickness is a global phenomenon. Incidence of industrial sickness is an economic consequence of industrial development. We say that economic theory of industrial sickness can be explained by the concept of ‘innovation’, ‘entrepreneurship’ and ‘creative destruction’ propounded by the famous economist Joseph Schumpeter in his theory of economic development. He describes ‘creative destruction’ as an economic process by which old technique of producing goods is endogenously destroyed and replaced by a new one. This becomes possible through innovation by entrepreneurs. Industrial sickness can also be explained by the theory of capitalist development as expounded by Karl Marx or other theories that discuss the short run and long run crisis of capitalist economy. Old firms who cannot cope with such technological change fail to survive in the market and ultimately perish. During the globalisation phase, rate of technological diffusion is high. Incidence of sickness also grows in this era. From the incidence of growing sickness in Indian industries, one can say that most of the Indian industries have failed to play its role in the perennial gale of ‘creative destruction’. The era of globalisation has thus become the period of embedment of sickness in Indian industries.
Chapter Two

References

- Datt, Ruddar (1992), Economic Reforms in India – A critique, S. Chand & Company Ltd., Delhi.
- Datt, Ruddar and K. P. M. Sundhararam (2002), Indian Economy, S. Chand & Company Ltd., Delhi.
- Report of the Committee on Distribution of Income and Levels of Living (Chairman: P.C. Mahalanobis) (1964b), Delhi.


• Report of the Committee on Controls and Subsidies (Chairman: Vadilal Dagli) (1979), Delhi.

• Reserve Bank of India (November, 2006), Report on Trend and Progress of Banking in India 2005-06, Table III.29.


