
UNIT 9 INDUSTRIAL DEVELOPMENT IN INDIA: AN OVERVIEW

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9.0 OBJECTIVES

After going through this unit, you will be able to:

- appreciate the need and rationale of rapid industrialisation in an emerging economy;
- know what constitutes favourable environment for rapid industrialisation;
- identify the constraints on rapid industrialisation of an emerging economy;
- explain varied 'push' and 'pull' factors that India got confronted with as it began its journey on the route to industrialisation and development;
- discuss the major features and deficiencies of the industrial economy as they obtain after almost six decades of growth; and
- draw out an agenda for future action in this sector.

9.1 INTRODUCTION

There is a general consensus among development economists – a rare phenomenon – that rapid industrialisation holds the key to rapid economic growth, as productivity levels in industry are much higher than in agriculture. Moreover, industrialisation is regarded as an important policy to affect fundamental economic and social changes in Developing Economy which are considered as necessary conditions to raise their growth potentials. No wonder, fast industrialisation as the developmental goal has a universal appeal, notwithstanding the fact that industrialisation may give rise to problems like pollution, premature exhaustion of raw materials, unemployment and inequalities in income distribution. India has been no exception to this universal urge.

9.2 INDUSTRIALISATION AND ECONOMIC DEVELOPMENT

Industrialisation has come to be regarded as synonymous with economic development. There is hardly a country in the world that could reach the level of per capita income of industrially developed countries of the West, on the back of its agriculture and processing of its products. (Petroleum producing countries, like Saudi Arabia, Kuwait and UAE represent a special case or exception to the positive relationship between per capita income and the share of manufacture.) The essential criteria that are being used to distinguish a developed economy from a developing one relate to the proportion of work force engaged in industrial activity, the proportion of national output originating in the industrial sector, etc.

9.2.1 What is Industrialisation?

Industrialisation is a process by which the center of gravity of the economy shifts from agriculture to industry.

Industrialisation involves two things:

- i) Adoption of technologically superior techniques of production that help to transform basic raw materials and intermediate goods into manufactured goods.
- ii) Application of modern techniques of management and organisation like economic calculations, accountancy and management techniques, etc.

9.2.2 Arguments for Industrialisation

The following factors favour rapid industrialisation as means to fast economic development.

A. Productivity of Labour

The productivity in the industrial sector is generally higher due to the operation of one or more of the following reasons:

- i) the existence of greater capital intensity,
- ii) continuity of production,
- iii) greater specialisation and division of labour,
- iv) less dependence on natural factors,
- v) a greater possibility of internal-external economies in the manufacturing sector.

Moreover, technological relationships change faster in manufacturing activity than in agriculture. Thus, if any serious effort is to be made to pull a Developing Economy out of poverty, it should get translated in a larger diversion of resources, both physical and financial, to investment in the industrial sector.

B. Employment Generation

With increase in productivity in the industrial sector, it will be possible to create more employment opportunities, thus attracting labour from less productive occupations. This process will add to the national output as also to the purchasing power and aggregate consumption expenditure which, in turn, will pull the aggregate demand upwards and would be instrumental in creating more employment opportunities.

C. Mobilisation of Surplus

A major constraint on development in a Developing Economy is the lack of adequate resources to finance the required needs. Inadequacy of resources is the result of two inter-related factors: (a) the absolute size of resources, national output and saving in a Developing Economy is low, and (b) it is not possible to mobilise the surpluses. Whereas the problem of inadequacy of resources is common to all the sectors of the economy, the problem of mobilisation of resources is peculiar in the agricultural sector, where the largest share of national income originates. The task of mobilisation of surplus savings in this sector is rendered difficult by the fact that there is no suitable organisational set-up for this purpose. Such a set-up can more easily be provided in the industrial sector of the economy.

Thus, by concentrating resources on industrialisation, the pace of economic development can be quickened.

9.3 SOURCES OF INDUSTRIAL GROWTH

- 1) The classical growth theories recognised the role of physical capital accumulation as a determinant of growth. The Harrod-Domar model of growth emphasised the influence of physical capital and savings in creating effective demand as well as productive capacity in explaining the growth process.
- 2) The role of productivity in the growth process was recognised by Solow in a growth accounting framework in late 1950s.
- 3) Evolution of the endogenous growth theory towards the end of the 1980s drew attention to the role of continuous advances in human skills and technology along with factor accumulation to offset the dampening effect of diminishing returns in sustaining the growth process.

9.3.1 Factors Hindering Industrialisation in Developing Countries

The process of industrialisation in a Developing Economy gets confronted with a number of barriers which have to be systematically tackled and removed.

A. Economic Factors

- i) There is scarcity of capital in Developing Economy. Scarcity of capital is the result of a low level of per capita income and low productivity. Scarcity of capital adversely affects investment in industry and infrastructure.

- ii) Developing Economies, by their very nature, do not possess adequate infrastructural facilities such as transport and communications, water, power, etc.
- iii) The absence of industries to use the by-product or existing industries results in waste and a bad economy.
- iv) In a Developing Economy, there are no proper institutions which can give education and training to labourers to improve their skill.
- v) Lack of repair facilities is another obstacle to a proper utilisation of machinery.
- vi) The absence of specialised institutions to provide proper credit facilities, sound banking, insurance cover etc., acts as a deterrent to industrial investment and activity.
- vii) Industrialisation may also be hampered by a lack of appropriate technology. Most of the developing economies tend to emulate technologies evolved in the developed countries. Such technologies encourage the substitution of labour by capital. Such sophisticated technologies are held to be 'appropriate' on the ground that they are so productive that unit production costs are potentially lower than otherwise. The potential advantages, however, are never realised because of the lack of higher level of technical and managerial skills that must accompany sophisticated technology.
- viii) In many a situation, industry in a Developing Economy may be confronted with a very small size of market which may not be sufficient to absorb production at an economically viable level. This results primarily from lack of adequate purchasing power in the wake of low productivity and low levels of income.

B. Socio-Demographic Factors

Among the demographic factors that hinder industrialisation is the fast-rising population. It acts in two ways:

- i) A fast-rising population implies a sharp rise in the level of consumption in the economy. Given the fact that productivity in these economies is low, as well it grows only at a very slow rate, a rising consumption level hardly leaves any surplus in the form of saving. Inadequate saving makes investment impossible.
- ii) As the population rises, the size of labour-force also increases. In the absence of alternative employment opportunities, a large part of the increased labour force finds work for itself in agriculture; it tends to affect productivity of this sector adversely. A lower productivity in agriculture has two implications for the industry:
 - Since the rural sector absorbs the larger proportion of total population, a major chunk of saving can originate from this source. But this does not happen when the level of productivity in agriculture is low.
 - Industry depends upon agriculture which is the major source of demand for industrial products. But low productivity and consequent low purchasing power in this sector work only as disincentives to further industrialisation, since the domestic market may not be sufficient to make the industrial activity viable.

As regards social factors, the social organisation and social attitudes in a Developing Economy are such as to hinder the growth of industrial production. These act through influencing the supply of various productive factors like labour, capital and entrepreneurial ability.

C. Administrative Factors

- i) Inefficiency of administration generally leads to mismanagement and loss in public sector undertakings;
- ii) Frequent changes in tax policy, in foreign exchange rates, in customs and excise, in trade controls and licensing policies, etc., create uncertainty in the minds of investors who may be reluctant to undertake new investment;
- iii) Improper and faulty labour legislation is another element of bad public administration which causes tension in these countries.

D. International Factors

- i) competition from the imported goods,
- ii) imposition of custom barriers by the developed countries,
- iii) high costs of imports of scarce raw materials, technical know-how, machinery and equipment, etc.

However, as would be seen, these difficulties are not insurmountable. At times, they may simply call for easy solutions; at other times some planned efforts by the State may be required. More frequently, a successful programme of industrialisation in a Developing Economy cannot be accomplished without an active involvement of the State in such an activity.

Check Your Progress 1

- 1) Define industrialisation.
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- 2) State in brief the factors that hinder industrialisation in developing economics.
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9.4 INDUSTRIAL DEVELOPMENT IN INDIA

India was one of the pioneers of industrialisation in the Third World, riding piggy back on a modern infrastructure — all-weather roads, railways, irrigation etc., the foundation of which was laid during the British Rule. Indian industries clearly reflected India’s comparative advantage. India’s industrial performance and manufacturing export performance were among the best in the world.

With Independence, India turned its back on an open economy in pursuit of its objective of industrial self-sufficiency. As a result, industrial structure has become considerably broad-based. The changes in the structure of industrial growth in India during the last six decades can be more easily examined and analysed under two broad heads, viz., i) Dimensions of Industrial Growth, and ii) Pattern of Industrialisation.

9.4.1 Dimensions of Industrial Growth

The entire period since 1950s can be divided into eight distinct sub-periods.

Broadly, these can also be regrouped into two categories, viz. (A) Pre-reforms period, and (B) Post-reforms period.

A. PRE-REFORMS PERIOD

I. Early Growth Phase: Till 1965-66

Industrial growth was rapid during the first two decades, especially during the Second Plan and the Third Plan. The Second Plan will go as a landmark in the industrial history of India in as much as it introduced an industrial revolution in the country — especially in the matter of acquiring basic industrial muscle. The pace continued during the subsequent Third Plan also. The high rates of industrial growth witnessed during the period were due to:

- i) Emphasis on industrialisation in economic policies,
- ii) The heavy industry-oriented strategy of industrialisation, and the pursuit of industrial growth as a supreme objective in the industrial policy and planning,
- iii) The substantial investments made and the capacities created in industrial sector as follow-up of the first two decisions,
- iv) Growing demands for a variety of new products on the part of the consumers in urban areas and the relatively better-off sections of the community,
- v) Pace of economic expansion which, though not spectacular, was yet made possible by an unusual combination of domestic saving and inflows of resources from abroad.

This period of growth has been named the period of “industrial growth with regulation”.

II. Slowdown Phase: Decade of 1970s

Industrial growth slowed down after the Third Plan. Not only industry stagnated during this period, ‘a blatantly elite-oriented production structure’ came into existence. The most damaging aspect of this was a steady decline in per capita domestic availability of key wage goods and an increase in the number of people below the poverty line. The structural retrogression took place at two stages:

- i) Growth of basic and capital goods industries was slower than even the meagre average growth in industrial output.
- ii) Where growth was moderately high, a majority of the industries belonged either directly or indirectly to elite-oriented consumption goods sector.

A disproportionately large increase in the output of man-made fibers, beverages, perfumes and cosmetics, commercial and office clocks, finer varieties of cloth, etc., took place. This phenomenon emerged at the cost of allocation of investible funds for mass consumption goods.

Thus, an imbalance in the industrial structure took place.

Causes of Slow Growth of Industries: A number of explanations have been offered for slow growth of industries during this period. These explanations cover a wide spectrum. At one end, there are those who located the cause for deceleration in the periodic shocks that the economy had received in the form of wars in 1965 and 1971, the oil crisis in 1973, and the droughts in 1965 and 1966. According to them, it is these shocks that prevented the economy from gaining momentum and achieving a higher rate of industrial growth. But, at the other end, some economists asserted that the crisis in industrial growth is rooted in the path of development that India has adopted and that there is no way out unless the fundamental property relations and structure of income distribution are altered.

Among the various explanations, four major factors which contributed to industrial stagnation could be identified as follows:

- i) Slow growth of agricultural incomes and their effect on limiting the demand for industrial goods;
- ii) Slowdown in public investment after the mid-1960s with its particular impact on the infrastructural investment;
- iii) Poor management of the infrastructure sectors, leading to severe infrastructure constraints;
- iv) Industrial policy framework including both domestic industrial policies and trade policies and their effects on creating a high cost industrial structure in the economy.

Besides, to be fair, it is important that simpler/explanations are not ruled out, like an erosion of the discipline of planning, a substantial decline in targeted level in investment and the desire to force savings.

III. Revival During the 1980s

The industrial scene underwent a change with the onset of the 1980s. Industrial growth rate moved up during this period, and the stagnation which characterised the earlier period could be overcome.

The major factors that contributed to this 'turnaround' can briefly be summarised as follows:

- i) Liberalisation of industrial policy; the process began in early 1980s, and caught up since 1985.
- ii) Public investment which played a crucial role in determining the growth of Indian industry had been at a much higher level during the 1980s than in the 1970s.
- iii) There had been a noticeable improvement in the investment made by the private corporate manufacturing sector.
- iv) Increased investment in industry got corroborated by the dramatic rise in imports of capital goods in the 1980s.

- v) Rapid investment in industry was facilitated by what has come to be known as 'liberal fiscal regime'. By this we mean a regime in which many of the standard precepts of traditional public finance were abandoned. The most significant feature of such a regime is the maintenance of high budgetary deficits year after year. A second feature is the resort to massive borrowing, often at high interest rates, and finally the encouragement of dissaving. The 1980s, especially the second half, witnessed all these phenomena.
- vi) Better performance of infrastructure industries as a consequence of improvement in the rate and pattern of gross domestic capital formation in general and public investment in particular.
- vii) A decline in the inter-sectoral terms of trade in favour of non-agriculture.
- viii) The State's role in stimulating industrial recovery during 1980s has been stimulating, through indirect, i.e., through the provision of jobs and incomes to a burgeoning middle class by creating a sprawling administrative empire. (Today, middle class accounts for about 300 million population which is more than the entire populations of France and Great Britain put together.)

Thus, the difference between this phase of industrial growth and what occurred over the first decade and a-half of planned development is that its mediation through incomes directly generated by the State permits a degree of percolation down to slightly lower income level of the demand for commodities which were earlier consumed only in the highest income segments of the population.

Quality of Growth: An analysis of industrial revival would be incomplete without a comment on the quality of the growth. The structural distortion brought about in the 1980s had also its effects at the micro-level. Within the secondary sector, the share of the elite-oriented products increased at a perceptibly faster pace than that of others.

The structural distortion at this micro level continued in the 1980s too, but the distortion at the macro level was certainly arrested. Yet another feature of industrial performance over the period was that growth rates of value added were higher in the 1980s than what they were in the 1970s.

Slowdown: Towards the end of 1980s, however, the growth rate of industrial production slowed down. The major cause for deceleration in industrial growth was the relatively lower rate of growth in capital expenditure, resulting from the need to reduce the overall deficit. The other factors responsible for deceleration can be summed up as (i) shortage of raw materials and other inputs, (ii) infrastructural difficulties, and (iii) obsolete machinery and technology and the consequent high costs.

B. POST-REFORMS PERIOD

The overall impact/contribution of the industrial growth to the economy can be studied with the help of some summary data as presented in Table 9.1 below:

Table 9.1: Selected macro-economic indicators in post-reforms period relating to real economy.

		Average 1990-91 to 1999-2000	Average 2000-01 to 2009-10	2010-11
I	<u>Overall Real GDI</u>	5.7	7.3	8.5
	a) Agriculture	3.2	2.4	6.6
	b) Industry of which:	5.7	7.3	7.5
	Manufacturing	5.6	8.0	8.3
	c) Services	7.1	9.0	9.2
	<u>Demand side Aggregates</u>			
	d) Final consumption expenditure	5.0	6.3	8.6
	e) Gross Fixed capital formation	7.2	10.2	8.6
II	<u>Share in GDP</u>			
	a) Agriculture	28.4	19.4	14.4
	b) Industry	20.1	20.0	20.0
	c) Services	51.5	60.0	65.6
III	<u>Index of Industrial Production</u>	6.3	7.4	8.2
	<u>Sectoral</u>			
	a) Mining	3.4	4.3	5.2
	b) Manufacturing	6.5	8.0	9.0
	c) Electrical	7.0	4.8	5.5
	<u>Use-based</u>			
	a) Basic Goods	6.3	5.6	6.0
	b) Capital Goods	5.5	13.3	14.8
	c) Intermediate Goods	7.5	6.2	7.4
d) Consumer Goods	5.9	8.2	8.6	
IV	<u>Core Infrastructure Industries</u>	6.3	5.5	5.8

Hereinafter we will make use of data provided in Table 9.1 to analyse the trends in industrial growth and the pattern of industrialisation that evolved out of it.

IV. Recession During 1991-94

During 1991-92, and subsequently in 1992-93, industrial production suffered a setback.

Both supply and demand factors were responsible for downturn in industrial production.

- a) ***On the supply side, the important factors were:*** import compression, rise in the cost of imports due to the cash margin requirement and the downward adjustment of the exchange value of the rupee and the tight monetary policy.
- b) ***On the demand side, the important factors were:*** a perceptible fall in effective demand due to inflationary pressure, reduction in public expenditure, and strict fiscal discipline. All of these factors are interlinked. One led to the other.

The setback in industrial production suffered during 1991-93 extended to 1993-94 also.

The set of forces working during the latter half of 1992-93 and 1993-94 were distinctly different than those in operation in the immediate post-reform period. During this latter period, credit controls had almost been totally dispensed with; rates of interest had been distinctly brought down. Import compression was never that serious as in 1991-92 with foreign reserves overflowing the bag. The adverse factors could be identified as:

- i) Rising import costs of intermediates and raw materials consequent on introduction of Liberalised Exchange Rate Management System (LERMS) and subsequent UERS;
- ii) Cut in customs duties with the attendant charge of dumping of critical intermediate goods in domestic market by foreign producers;
- iii) Rising inflationary trends;
- iv) Uncertainties associated with inflows of direct foreign investment which compelled the domestic producers also to postpone their investment plans and to put in storage their growth programmes.

V. Revival and Subsequent Slowdown 1994-2002

The slowdown in the rate of industrial growth during 1991-94 turned out to be only transitional, an immediate fallout of the stabilisation measures initiated by the government for the macro-economic adjustment of the economy, or to use Prof. N.N. Raj's eloquent words, "while the gears are being changed and new directions are set." It may be noted the rate of industrial growth began to accelerate in the second half of 1993-94. The change in trend could be accounted for by the following factors:

- i) Increased government expenditure/ public investment; Government expenditure provides both supply and demand side stimulus to growth. Development expenditure reduces infrastructure bottlenecks while consumption expenditure gives short run demand side stimulus;
- ii) The excise and customs duty cuts;
- iii) Growth in export volumes since 1993-94;

- iv) Continued stability in the growth of agricultural output;
- v) The release of funds from the banking system because of the sharp decline in the SLR; and
- (vi) Extension of MODVAT to capital goods.

Slowdown

Industrial revival was indeed remarkable; it generated enough euphoria among industry and government, so much. However, for the reasons to be discussed below, such optimism was not well-founded. The rate of growth slowed down during 1996-97 and continued to fall subsequently during 1997-2002, except for a short-lived recovery during 1999-2000.

The major factors responsible for the slowdown can be grouped in three parts; (A) demand constraints, (B) supply constraints, and (C) structural and cyclical factors.

A. Demand Constraints

Demand constraints arose in the form of low investment demand and low consumer demand.

- i) Real investment in industry which had risen fast until 1995-96 stagnated thereafter for several reasons, including the political instability, rising fiscal deficits after 1996-97 which kept real interest rates high, and the loss of momentum in economic reforms.
- ii) The productivity boosting effects of the major reforms of the early 1990s had weakened by 1997. Although reforms continued throughout the decade they did not regain the breadth and depth of the early years. Key reforms in industrial policy and privatisation remained unfinished or undone.
 - The rural purchasing power has been severely affected by lower agricultural growth and increased fluctuations in growth in the 1990s and in particular by the absolute declines in production during 1999-2000 and 2000-01. Besides, there has been a contraction in the funds flow into the rural areas in the form of special employment programmes in the 1990s unlike in the 1980s.
 - Indian industry got faced with depressed purchasing power not only from the rural substantial wealth erosion caused by the fall in the equities and real estate markets segment of the economy in wake of falling growth rates in agriculture but also in the urban markets; also hampered the average urban consumer's proclivity to spend. The fall in rates of interest on public provident fund, on bank deposits and in dividend yields from mutual funds has also made the urban consumer averse to spending.
 - There have been distinct signs of growing inequalities in the distribution of income, and in the face of reduced employment growth as well as deterioration in the quality of employment, there were obvious possibilities of narrowing of purchasing power in the hands of the vast masses of urban population.
 - There has been a serious mismatch between installed capacity and aggregate demand.

- iii) Huge 'hanging investment': Hanging investment may be defined as the gap between approved and actual FDI. Given the fear of competition from foreign investors, the domestic investors kept away or postponed their investments from such sectors where FDI was already approved or was anticipated to come.

To these may also be added global slowdown and recession in advanced economies. These adversely affected demand for our export industries.

B. Supply Constrains

Major supply constrains could be identified as follows: (i) The bottlenecks in infrastructure became worse over time, reflecting slow progress in reforms of pricing. (ii) The low quantity and quality of rural infrastructure combined with distorted pricing of some key agricultural inputs and outputs workers to damp growth of agriculture. (iii) The decline in fiscal discipline in the populous states of the Gangetic plains constrained growth prospects for over 30 per cent of India's population. (iv) The Asian crisis of 1997-98, the economic sanctions of 1998-99, the rebound of international oil prices during 1999-2001, and the American declaration of war against terrorism put together made the inter-national economic environment less supportive than in the early phase of the reforms.

C. Structural and Cyclical Factors

The major structural factors could be identified as follows: (i) The adjustment process of industry in response to increased competition in the form of mergers and acquisitions is taking longer time than required. (ii) High costs and inadequate and unreliable supply of services in transport, communications and the power sector. (iii) Low levels of productivity in the industry because of low volumes and inability to reap economies of scale, outdated technology and restricted labour laws. (iv) Lower speculative demand for sectors like automobiles and real estate due to expectation of lower prices and reduction of taxes and duties in the short and medium term. (v) High real interest rates.

The major cyclical factors could be identified as follows: (a) Periodic investment cycles, reinforced by government decision to reduce customs duties to levels in East Asian countries by 2004, which might have deferred investment decisions. (b) Business cycles affecting demand of some cyclical industries like cement, automobiles and steel. (c) There is no pent-up demand for consumer durables.

The above cycles have been reinforced by reduction in inventory levels resulting from the introduction of e-business and e-commerce and better management of supply and demand by industry to cut costs.

VI. Revival and Strong Growth 2002-08

The year 2002-03 opened on a slow note. However, during 2003-04, it became increasingly clear that strong revival was in offing.

In 2004-05, and again in 2005-06 the manufacturing sector grew at 9.1 per cent, 12.5 per cent during 2006-07 and 9.0 per cent during 2007-08.

The surge in industrial growth could be attributed to important structural changes in the economy. One is the rise in the savings rate from 23.5 per cent in 2000-01 to 37.7 per cent in 2007-08. Most of this increase came from turnaround in corporate and public savings. Due to rise in the savings rate, the economy moved to an altogether higher investment rate. The second important structural change

was enhanced export competitiveness that got reflected in the rising share of exports. The total exports (trade plus invisible receipts/GDP) ratio rose sharply from 16.9 per cent in 2000-01 to 33.2 per cent in 2007-08. Third change in recent years is financial deepening. The bank assets/GDP ratio rose from 48 per cent in 2000-01 to 80 per cent in 2005-06 on the back of a surge in bank credit. One factor in common to these three structural changes has been lower interest rates. The decline in interest rates helped fiscal consolidation, it boosted firms' competitiveness and led to a huge increase in retail credit. Lower interest rates were made possible by the rise in inflows on both the current and capital accounts.

In other words, it is clear that the industrial sector responded to the buoyant demand conditions of the economy through new capital stock additions. Modernisation of the capital stock, reduction/rationalisation of import tariffs and other taxes, increased openness of the economy, higher FDI inflows, greater competitive pressures, increased investment in information and communication technology, and greater financial deepening also contributed to productivity gains in the industry. As a result, the industry increasingly became an important growth driver in conjunction with the services sector. Many of the services such as trade, transport, communication and construction are directly linked to industry.

VII. Slowdown 2008-09 Onwards

The slowdown in manufacturing over successive quarters started from the first quarter of 2007-08. This was more or less replicated by the mining sector and closely followed by electricity. However, in the third quarter of 2008-09, the manufacturing sector witnessed a sharp drop in growth which turned negative in the fourth sector. Growth of the mining sector declined over successive quarters of 2008-09 to reach a zero rate in the fourth quarter. Overall, the index of industrial production increased by only 2.4 per cent in 2008-09 against 8.5 per cent 2007-08.

The major factors responsible for this drop in industrial production can be briefly stated as follows:

- i) Rising prices of crude oil and other commodities, particularly metals and ores had their adverse affect on the cost side of the manufacturing sector, which in turn had an adverse effect on the profit margins.
- ii) Another key component on the cost side, namely interest costs, also increased due to higher interest rates.
- iii) In recent years, the Indian corporate sector started to raise external capital (i.e., other than internal resources) mainly to fund its investment and this included foreign institutional sources. On the external front, resource mobilisation from American/Global Depository Receipts almost collapsed during 2008-09 and the flow of external commercial borrowings also suffered a sharp decline.
- iv) Among the domestic sources, while private placement by non-financial institutions grew on the strength of the resource mobilisation by public sector non-financial institutions, the private sector resource mobilisation on this count declined sharply. The sharp slowdown in financing accentuated the industrial slowdown that had already set in from the previous year.
- v) With the opening up of the economy, the trade orientation of Indian manufacturing increased over the years. The shrinkage in demand for exports

that followed beginning with September 2008 sharply dented the performance of industries with high export intensity. The impact of the export slowdown has been particularly pronounced in sectors like textiles, leather and transport equipment.

- vi) The manufacturing sector also suffered because of a decline in the construction and real estate affecting non-metallic minerals, wood and wood products and basic metals. These developments fed into the domestic economy, setting off what may be termed as second round effects that seem to have continued to the end of fiscal year 2008-09. The manufacturing demand, therefore, witnessed double squeeze, a decline in the demand originating from exports and a decline in domestic demand.
- vii) The foregoing developments impacted the growth of profits of the manufacturing sector. From the abridged results of a sample of manufacturing companies, it is seen that while profitability was under strain since the third quarter of 2007-08, it came down sharply in the third quarter of 2008-09 accompanied by a sharp dip in the growth in sales.

VIII. Sharp Revival

Green shoots had began to appear in the first two quarters of 2009-10. Manufacturing output accelerated fast during this period.

This is evident from the National Accounts Statistics (NAS) data as well as the Index of Industrial Production (IIP). While the Central Statistical Organisation (CSO's) estimates place industrial-sector growth at 8.2 per cent, as against 3.9 per cent in 2009-10, the IIP industrial growth is estimated at 7.7 per cent, significantly up from 0.6 per cent during 2008-09. The manufacturing sector, in particular, has grown at the rate of 8.9 per cent in 2009-10.

Growth in the major industrial groups has been a mixed bag. There was strong growth in automobiles, rubber and plastic products, wool and silk textiles, wood products, chemicals and miscellaneous manufacturing; modest growth in non-metallic mineral products; no growth in paper, leather, food and jute textiles; and a slump in beverages and tobacco products in 2009-10. In terms of use-based classification, there was strong growth in consumer durables and intermediate goods (partly aided by the base effect); moderate growth in basic and capital goods; and sharp deceleration in consumer non-durables.

Some of the important factors contributing to growth are as follows:

- i) The improvement in the cost structure of manufacturing companies seems to have catalysed the recovery.
- ii) Growth in the production of capital goods, a proxy for investment, is improving but different components of the "capital goods" group reflect a mixed picture.
- iii) The strength of the recovery has been helped by the favourable base effect and mild inflation in manufacturing articles, especially of industrial inputs.

Major contribution to this revival was made both by easy money policy pursued by the RBI and fiscal stimuli provided by the government.

However, these proved inadequate. Growth rate began to slowdown afterwards. The year 2011-12 recorded a slower growth; slow growth trickled down to 2012-13 also. The major-factors responsible for this phase of industrial growth could be identified as follows:

- i) Financial crisis in Euro zone dried up the demand for India's exports to this zone.
- ii) Recovery in US was slow; it failed to create demand, so that exports to this region also slowed down.
- iii) The macro-economic policies that have been pursued led to (a) increasing fiscal deficits, (b) widening current account deficits, and (iii) higher rates of inflation. These became critical factors in revision of macro-economic policies. Control over inflation assumed a higher priority.

In view of these, the growth rate of industrial sector slowed down.

9.4.2 Prospects for Revival

There are a number of positive factors that make the industrial outlook in the medium-term bright for India both in its own right as also in relation to most other countries.

- i) On the global front, there are tendencies by some trading partners to indulge in what may possibly be termed as dumping into the Indian market. The response will have to be calibrated by balancing the need to achieve cost advantages while protecting the legitimate interests of the Indian industry, given the possible global restructuring of industry to consciously build and maintain cost advantages.
- ii) The size of the Indian market and the unmet demand for industrial products provide reasonable hope that demand would not be a constraining factor by itself. There is an increasing realisation that the industry should make conscious efforts to reach out to the bottom of the pyramid. To be able to do so, the industry will need to deliver products that give value for money in a cost effective way.
- iii) The large pool of scientific manpower and research labs provide a potential for innovation that could create such products which can open up new market segments. However, for innovation to become a key driver of growth, the industry and the research fraternity need to actively collaborate in a time-bound and result-oriented fashion.
- iv) The inherent strength of Indian industrial corporate sector with strong entrepreneurial abilities provides a hope that they will continue to display the dynamism by adjusting to the current changes. This dynamism needs to be tempered with good corporate governance that adheres to the best standards of ethics in business and industry.
- v) The large investment plans made for infrastructure during the Eleventh Five Year Plan and beyond are expected to ameliorate the infrastructural constraints that bind the industry. The challenge rests in ensuring that such investments in infrastructure projects fructify quickly, for growth in infrastructure not only alleviates supply side constraints, but also stimulates additional domestic demand required for industrial growth.
- vi) The continuing inflow of FDI reinforces the positive view that the Indian market has the capacity to absorb investment and generate a return based on productive growth. At the same time, a balance needs to be struck between the immediate priorities for the Indian economy and the long-term concerns that include environmental and security concerns.

There are positive signs that the Indian industry may have weathered the most severe part of the shock and is now back on the fast track.

At this juncture, when the prospects for industrial output in most industrial economies seem to be grim, the configuration of prices, output and market size makes the Indian industry one of the few attractive destinations for investment.

A combination of factors will now determine the strength, pace and timing of the upturn.

- i) An easing of monetary policy can expedite the pick-up. Much will depend on the ensuing pick-up in the demand for credit.
- ii) On the fiscal side, an increase in spending on housing and infrastructure investment can facilitate the upturn. This combined with the expected impact on consumer spending of improving rural incomes, will determine the strength and timing of the economic revival.
- iii) Export growth should get a boost from global industrial revival led by the US recovery.

Check Your Progress 2

- 1) Discuss in brief the factors responsible for high growth of industrialisation in India during 1965-66.

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- 2) Trace in brief the stages of growth of industry in India during 1970s.

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- 3) Highlight in brief the prospects of industrial growth in India in post reform period.

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9.5 PATTERN OF INDUSTRIALISATION

The second important aspect of industrial growth relates to the pattern of industrialisation that has been followed since Independence. The pattern of industrialisation can be studied under two heads: (a) Functional pattern of industries, and (b) Ownership pattern of industries.

9.5.1 Functional Pattern of Industries

With use-based or functional classification as the criteria, various industries can be divided into four groups, viz., (i) Basic industries, (ii) Capital goods industries, (iii) Intermediate goods industries, and (iv) Consumer goods industries.

Five distinct phases relating to the compound rates of growth in different industries can be observed.

A. The First Phase: Till Mid-1960s

In the first phase, the rate of growth of industries, in general, had picked up very fast. A major contribution in this direction was made by the basic and capital goods industries.

The pattern of industrialisation that evolved during the period had shown two features:

- i) A rapid growth of basic and capital goods industries,
- ii) A slow growth of consumer goods industries.

This pattern was in consonance with the strategy of growth evolved during the Second Plan and followed during the subsequent Plan.

B. The Second Phase: 1965-75

In the next phase, beginning with the mid-1960s, the rate of industrial growth, as already seen, began to trigger off. The growth of basic and capital goods industries was slower than in the past and also slower than even the meagre average growth in industrial output; where growth was moderately high, a majority of the industries belonged either directly or indirectly to 'elite-oriented consumption goods' sector, like consumer durables which have been described, perhaps aptly, as the 'Cinderella of Indian industrialisation'.

C. The Third Phase: 1975-90

During this phase, the industrial growth was fairly diversified; growth rates in all the different segments picked up. Basic goods industries maintained a consistently fairly high rate of growth, as did the capital goods and intermediate goods industries.

D. The Fourth Phase: 1990s and Beyond

During the 1990s, while the relative contributions of basic and capital goods sectors declined, there was a rise in those of intermediate and consumer goods sectors. The relatively low contributions of the basic and capital goods sectors to overall industrial output in the 1990s reflect, among others, the import of trade liberalisation that enabled the corporate sector to make financial gains through 'other income', as also the lack of competitiveness requiring industrial restructuring and modernisation of technologies in a number of industries. It is in respect of the last factor that decisions need to be taken by the industries themselves, given the policy environment that is imbued with the spirit of incentivising foreign trade, financial and real sectors to play their due roles in economic growth.

Also, there has been a visible rise in the share of consumer durables (with new brands of consumer goods hitting shop-shelves at a fast and furious pace).

E. The Fifth Phase: Slowdown Phase 2008-09 Onwards

The slowdown started with consumer durables in the second quarter of 2007-08 but the overall growth was well supported by other use-based categories including intermediates and even consumer non-durables, albeit at lower rates of growth. Growth in production of capital goods continued at a robust pace reflecting perhaps the high investment rates. However, with the decline in the growth of intermediate

goods from first quarter of 2008-09 the overall growth showed a sharp dip that got accentuated in the third quarter of 2008-09 when the remaining groups also showed a sharp drop in growth.

By the last quarter of 2008-09, all sectors of the industrial economy had entered the revival mode. The industrial recovery got broad-based with reducing volatility. Within industry, the fastest growing sectors are capital goods and consumer durables. Capital goods sector grew robustly at an average rate of 17.1 per cent during 2009-10. Subsequently, during 2010-11, growth in capital goods is gradually moving on the path of high growth which is less volatile.

Consumer durable goods sector grew by an average of 25.8 per cent during 2009-10. Lower interest rates under expansionary monetary policy like increase in salaries and payment of arrears after the implementation of the Sixth Pay Commission recommendations boosted demand for consumer durables.

However, consumer non-durables goods continue to lag behind in performance. The sector has shown sharp volatility in its growth pattern.

Among other use-based categories, basic goods and intermediates also recorded higher and more consistent growth during 2009-10.

In brief, as it is, presently basic industries account for 21 per cent of total industries output, consumer goods 19 per cent, intermediate products 53 per cent, and capital goods 7 per cent.

9.5.2 Ownership Pattern of Industries

It was realised by the framers of the industrial strategy, which relied heavily upon basic and capital goods industries, that for its success, the State would have to bear the entrepreneurial function itself. The rationale for this was explained by the following factors:

- In the years that followed the First Plan and, thereafter, the public sector in India expanded very fast, so much so that it began to account for almost as much as two-thirds of the net domestic capital formation in the economy. However, the net domestic capital formation in the public sector began to slowdown after the Third Plan; since then it has, more generally, varied between 45 per cent and 48 per cent.
- These trends get reflected in the structure of ownership and organisation that has emerged over the years. Thus, beginning practically with a clean slate, the public sector (Central + State + Local), around the mid-1990s, saw its share going up to 4.7 per cent in total number of factories, 27.4 per cent in employment, 55.0 per cent in productive capital, 34.3 per cent in emoluments, 25.5 per cent in value of output and 30.1 per cent in value added. It would be observed, however, that government's, share in output, value added and employment is substantially smaller.

9.6 FEATURES AND DEFICIENCIES

Some distinguishing, but disturbing, features of the industrial development process in India and associated problems can be identified as follows:

- 1) **Contribution to the Country's Indebtedness:** Since the import-intensity of capital goods industries is generally heavier, these requirements had to be met

by foreign aid. Similarly, luxury consumption-led growth during the last two decades became synonymous with import-intensive industrialisation. Therefore, the entire industrialisation drive, although impressive, was indeed far from being financially self-reliant.

- 2) **Increase in Technological Dependence:** Alongwith external financial assistance, technological dependence also increased during this alongwith the role of the multinational corporations.
- 3) **Negligible Impact on Either Unemployment or the Sectoral Distribution of the Work-force:** The employment-creating capacity of industrialisation was not enough either to make a dent in the backlog of urban unemployment which also experienced a natural growth over time or to absorb immigrants from rural areas.
- 4) **Impact of Agricultural Growth:** Although the share of agro-based industries has declined over the years, the impact of agricultural growth on industrial growth does not seem to have weakened. This is borne out by the fact that the fluctuations in industrial production are preceded by fluctuations in agricultural production.
- 5) **No Effect on Real Wages:** This is not to say that with changing industrial composition and the creation of many more skilled jobs, opportunities have not been opened up or utilised but the picture of stagnation remains roughly valid for any particular category of workers, especially unskilled workers.
- 6) **Environmental Costs of Industrialisation Mind-boggling:** The huge quantities of pollutants – solid, liquid and gaseous which are being let out in the air, water and land systems – are investing the relationship between man and the nature with new complexities. Some of the statistics pertaining to the environmental scenario are quite revealing. At present, nearly 70 per cent of the available water in India is polluted. Over 73 million days are lost annually due to water related diseases. Every second, about half a hectare of forest is consumed for wood. Life support systems in-built in the eco-system are being strained almost to the point of no return.
- 7) **Neglect of Comparative Advantage:** The principal weakness of industrial growth has been that India has moved away from industries in which real comparative advantage lay and has made heavy investments in other industries. It is believed that the principal reason for such a drift lies in the planning strategy that had hitherto been pursued and treated the economy as a closed one.
- 8) **Growth of Family Business:** The end result was a haphazard growth of assets in unrelated diversifications, the conglomerates never having to pass the test of earning reasonable return under truly competitive conditions. Also, several companies resorted to high cost and distorted financing solutions to prevent dilution of their holding. With increasing competition, technological obsolescence and shortening product life cycles, the built-in inefficiencies are proving to be a mill around the corporate necks.
- 9) **Neglect of Fundamental Research:** Few of the industrial groups appear to have been interested in providing for systematic research. Industries have continued to depend on foreign technology and foreign machinery rather than developing them at home. Clearly, major corporates have completely

disregarded the fall-out of the changes in intellectual property rights that now necessitate technological self-reliance as borrowing technology from developed countries will no longer be economic. A somewhat uncertain policy environment with regard to sharing the benefits of innovation acted as a disincentive for the companies.

10) **Regional Imbalances:** Massive investment in the Central sector projects in the expectation that this would have a wide ranging 'ripple effect' in stimulating small and ancillary industries have not succeeded in many States such as Bihar, Orissa and Madhya Pradesh. The natural tendency of entrepreneurs to go where the infrastructure is strong, markets are close and various services are readily available cannot be ignored.

11) **High Cost of Production:** Another weakness of the industrial scene is the high cost of some of its products as compared to international prices.

This adversely affects India's growth competitiveness. India ranks 50th in a group of 134 countries in the World Economic Forum's Global Competitiveness Report, 2008. Similarly, on other parameters also India ranks low, e.g., macro-economic environment (109), government waste (127), Corruption (80), technology (63), sophistication of company operations (3), and quality of national business environment (31).

12) **Underutilisation of Industrial Capacity:** Some of the important industries have been reporting utilisation rates of only 25 to 50 per cent. Under utilisation poses serious problems to the process of growth. All-out efforts have to be made to create conditions conducive to optimum utilisation of capacity.

13) **Negligible Contribution to Social Development through Affirmative Action:** Undoubtedly, some significant moves have been made in this direction, but compared to the size of India, the extent of poverty and deprivation; industry's contribution is only a drop in the ocean. Indian entrepreneurs are talented and have emerged from the gains of globalisation with confidence and competence. But they are not trusted and cared for, as of now, by the government, NGOs and the public.

9.7 SUGGESTIONS FOR RAPID INDUSTRIAL GROWTH

The ongoing economic reforms aim at making Indian industry more competitive including by encouraging foreign competition. This essentially implies that the industry must withstand growing competition which originates from three sources:

- a) imported goods coming freely into the domestic market at lower tariffs;
- b) goods produced in the country for the domestic market by foreign controlled enterprises using their trade marks and technology; and
- c) goods produced by the domestic enterprises themselves, freed from licensing and other restrictions and regulations.

Industry must also achieve higher level of exports in face of varied challenges. Among these the two important ones are:

- i) competition from other developing countries, particularly of east and south-east Asia and some Latin American countries, who have taken to outward

orientation much earlier than India and have already enhanced their international competitiveness; and

- ii) non-tariff barriers in industrial countries in the guise of environment, health, safety and technical standards.

Industry must, as they say in the navy, “hit the decks running”.

Accelerated industrial growth is possible with restructuring and overhauling. The policies need to encourage modernisation, technology upgradation and economies of scale in production. Action along the following lines can be suggested.

- 1) **Scales of Production:** In the emerging liberal environment, economies of scale and size would be imperative for survival and expansion as would be financial muscle. It may become necessary to resort to merger or amalgamation to meet competition from outside and also to increase scales of production. One big advantage of mergers or acquisitions is that this will boost capitalisation. This, in turn, will help local companies to build capacity to withstand strong competition.
- 2) **Change in Business Strategies:** Higher industrial output requires business to expand markets, win more customers, and lower costs. All these will require changes in business strategies. One of these may be switch-over from competition to ‘*co-opetition*’. Co-opetition involves:
 - i) collabourating with competitors to expand existing markets and build new ones;
 - ii) joining hands with complementors to provide more value to the customer;
 - iii) teaming up with competitors to enable suppliers to spread their development costs;
 - iv) forming alliances with complementors to extract lower prices from suppliers.
- 3) **Realistic Projections:** In the changing new environment, it is of utmost importance that the state agencies charged with the responsibility of formulating projections for the future should be more responsible. This is specially so in case of demand projections for infrastructure of every type. Despite projections of a huge demand for infrastructure, private investors do not appear to be convinced.
- 4) **Viable Technology Policy:** The policy prescriptions for a viable technology policy include:
 - i) emphasis on in-house R & D expenditure, particularly on basic research;
 - ii) closer nexus between industrial establishments and research organisations;
 - iii) periodic dialogue between the recipients and producers of a given technology;
 - iv) focus on frontline technologies such as micro-electronics, space technology, satellite technology, fine chemicals, biotechnology, etc.;
 - v) practical application of technological breakthroughs already achieved; and

- vi) creating an environment for steady upgradation of technology in areas like management and renewable sources, fertilizers, water management, mineral development, communication, etc.
- 5) **Quality:** The industry is to realise the significance of quality and should note that it is now operating in a buyers' market. Today despite all the talks about the problems with stock markets and patent regimes, both capital and technology are more mobile. What we need to do is that our industry should be able to exploit opportunities fully: this way we can overcome our limitations and achieve tremendous progress in producing quality products at competitive prices.
- 6) **Cost of Production:** High capital cost, excessive burden of indirect taxes, and lower productivity result high capital-output ratio. Inadequacy and high cost of infrastructure are other factors that push costs. Action along these lines need be initiated.
- 7) **Entrepreneurial Development:** It is necessary to develop competent and highly motivated entrepreneurs-cum-managers. There is a need to revitalise the integrated Entrepreneurship Development Programme.
- 8) **Regional Economic Blocks:** Formation of regional economic blocks aimed at combined effort for development be encouraged. States forming a region should be encouraged to formulate a common tax policy, develop common infrastructure and remove inter-state trade barriers.
- 9) **Flexibility in Factor Use:** To secure higher levels of industrial and export growth, Indian firms need flexibility in factor use. An aspect of this is a more active market for the entry of efficient entrepreneurs, managers, corporate monitors.

Other flexibilities relate to the use of classically recognised factors: capital, land, and labour. Since July 1991, government policies have imparted considerable elasticity in the choice and use of capital. But, policies regarding the other two leave much to be desired. The barrier to a vibrant land market is in the form of the Urban Land (Ceiling and Regulation) Act (ULCRA) of 1976.¹ Likewise, before retrenching any labour, the management has to seek the permission of the Government under Sections 25 (N) and 25 (O) of the Industrial Disputes Act, 1947. This permission is hardly ever given. Both of these Acts need be suitably restructured.

- 10) **Industrial Relations:** It is argued that India's labour is overprotective and management has no right to manage. This has hampered productivity of labour, quality of products and made Indian products are costly despite low wages. To minimise cost, the management need full authority to reorganise its human resources. The present system of wage payment discourages productivity. In most countries where productivity is high, wages are linked to productivity. The countries in which wages are linked to cost of living, the productivity generally suffered, and industry lost its competitiveness.

¹ The Central Government has already abolished the ULCRA. However, only a few States have repealed their corresponding Urban Land Ceiling Acts. Full-scale industrial restructuring will not take place unless the remaining States also follow the example of others and repeal the existing Urban Land Ceiling Acts.

11) **Production for Domestic Market:** Producers need not only look to the global markets for sustenance. The Indian domestic market, especially at the lower end, is extremely large, and very price and functionality sensitive. We need to encourage companies that focus on producing for this market. We need to now think beyond the glamorous IT and high-tech sectors and pay attention to the needs of the non-elite strata of society and use manufacturing as a means for providing employment, and goods and services for them.

12) **Management and Control**

- i) With capital markets emerging as a major source of funding and the expanding role of mutual funds and foreign financial institutions, for Indian companies which wish to grow, significant institutional shareholding may be unavoidable. Therefore, instead of trying to reduce the institutional holding, it is necessary to ensure that a healthy practice of committing support to managements so long as they perform is established.
- ii) Another mind block needs to be tackled on the part of family owners. They must be ready for realignment with other Indian companies if that is the best way. There is no sense in waiting for units to become unviable before finding solutions. The restructuring of companies and industrial groups when the economy is going through, a major metamorphosis has to be a proactive rather than a reactive process.

9.7.1 Government’s Role

Industrial success in the long run requires better institutions, low transaction costs (or costs of doing business), markets that respond to price changes, and access to efficient and appropriate technology. In developing countries these conditions cannot be generated exclusively through the market because factor and product markets are often missing, public goods (including infrastructure) are under-provided, and market failures in technology and R & D are acute.

In the liberalised environment for Indian industry, the role of government therefore remains even greater and not less. What is to be changed is the nature of government intervention from being a patronising agent trying to develop and regulate every aspect of business activity to an active and responsive catalyst for industry. The government’s primary objective should be to provide the necessary physical and financial infrastructure.

To facilitate this, a policy framework should be in place where the focus is on increased commercialisation of infrastructure services, appropriate legal, regulatory and administrative frameworks to support both foreign and domestic private sector investment and the introduction of new and innovative financial price cuts for infrastructure funding.

Complementary action is required in the fiscal, monetary and trade policies; the key words of the desired strategy should be dynamism and accelerated growth. The range of solutions available to a well-meaning government is somewhat limited, and steps have to be taken promptly. Inaction or a delayed response to industry’s problems will hurt not only the owners of industry but also the economy as a whole.

Check Your Progress 3

- 1) What do you mean by pattern of industrialisation?

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2) What do you mean by functional pattern of industrialisation?

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3) Identify the disturbing factors of Industrial development process in India.

9.8 LET US SUM UP

The policy changes made in the last few years have clearly reinforced the modernising role of industrialisation in the development process. Looking ahead, the task is indeed two-fold:

- a) Restructuring the consolidation of enterprises to maximise the productivity of resource use for the attainment of plan targets,
- b) Accelerating modernisation based on futuristic technologies so as to position the industry to more rapid development.

The shift to a qualitatively new pattern of industrial growth cannot be possible without tackling the issue of surplus labour. It is, therefore, desirable to evolve a new approach that recognises the rights of labourers and provides suitable incentives to them.

9.9 EXERCISES

- 1) Give an outline of the trends in industrial production since 1951. Point out the major factors responsible for this trend.
- 2) Explain the shortcomings in the industrial development of the country. What suggestions would you make for achieving rapid industrial growth?
- 3) Analyse the rate and pattern of industrial growth during the last two decades of liberal economic policy regime. To what extent do these trends differ from that of the product specific capacity licensing regime?
- 4) What changes have been brought in the industrial structure of the economy as a result of industrialisation in India? Explain. Also discuss the deficiencies in the pattern of industrial development in India.
- 5) Bring out the major trends in Indian Industrialisation since independence with respect to its rate of growth and composition of output. Has economic liberalisation had a positive impact on Indian industrial development?
- 6) Examine the rationale behind heavy industry biased import substitution strategy followed in India. Evaluate the impact of economic reforms since 1991 on industrial growth and development in India.

9.10 SOME USEFUL BOOKS

Alfaro, Laura and Anusha Chari (2009): *India Transformed?*, National Bureau of Economic Research.

Asian Development Bank (2009): *Trade Policy, Industrial Performance, and Private Sector Development in India*, Oxford University Press, New Delhi.

Basu, Kaushik (ed.) (2010): *The Oxford Companion to Economics in India*, Oxford University Press, New Delhi.

Bhagwati, Jagdish N. (2008): *Sustaining India's Growth Miracle*, Stanza, New Delhi.

Subramaniam, Arvind (2008): *India's Turn, Understanding the Economic Transformation*, Oxford University Press, New Delhi.

Virmani, Arvind (2009): *The Sudoku of India's Growth*, Business Standard, New Delhi.

9.11 KEY WORDS

Public Sector	: It consists of those production units which are owned and controlled by the state.
Heavy Industries	: These production units produce some capital goods.
Industrialisation	: A process by which the centre of gravity of an economy shifts from agriculture to industry.
Recession	: Refers to an ab-normal fall in economic activity.

9.12 ANSWERS OR HINTS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

- 1) See Sub-section 9.2.1
- 2) See Sub-section 9.3.1

Check Your Progress 2

- 1) See Sub-section 9.4.1
- 2) See Sub-section 9.4.1 (II)
- 3) See Sub-section 9.4.2 (B)

Check Your Progress 3

- 1) See Section 9.5
- 2) See Sub-section 9.5.1
- 3) See Section 9.6