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## **The Study of Employment Growth in Industrial Sector of Haryana(1966-2020)**

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**Abstract:** The present paper is an attempt to study the employment growth in industrial sector of Haryana according to Statistical Abstract of Haryana. The manufacture sector is playing a lead role to drive the growth of secondary sector. As almost similar growth rate is investigated for Haryana of secondary sector from 1966 to 2020. The total growth rate of industries was 3.033 per cent and employees in industries were 7.555 per cent.

**Key Words:** Growth Rate, Industry, Employment, Haryana.

**JEL Code:**E24

### **1. Introduction & Review of Literature**

The theories relating to employment always put different emphasis on the role of employment. During the process of economic development, in the wisdom of new classical economist (Myrdal 1968, Williamson 1965, Kuznets, S, 1966 and 1971, Chenery and Talyor, 1968) of an economy it follows the path of economic transformation i.e., at first stage a shift from agriculture to industry and then from industry/secondary sector to tertiary sector. Hence for sustainable growth of economy, it is imperative that the industrial sector should be developed simultaneously with the agriculture sector. In Developing countries, the major share of employment and GDP comes from agricultural sector. Development economists in general and agricultural economists in particular have long focused on how agriculture can best contribute to overall growth and modernization during the initial stage of economic development. Many empirical studies of economic development (Rosenstein-Rodan 1943, Lewis 1954, Scitovsky 1954, Hirschman 1958, Jorgenson 1961, Fei and Ranis 1961) highlighted the importance of agriculture, because of its abundance of resources and its ability to transfer surpluses to industrial sector. Agriculture's primary role in the transformation of a developing economy was seen as subordinate to the central strategy of accelerating the pace of industrialization. Industry sector is commonly known as a pillar of growth of economy. This sector is a heart of the economy and has a power to pull the disguised unemployed from agriculture sector. A radical transformation of policies shift, from protected industrial to liberalised industrial policy was created comparative different industrial environment for the sector in the State.<sup>1</sup>



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## **2. Theoretical Framework**

### **1. Classical theory of Employment**

According to classical, full employment equilibrium is the normal feature of economy. It may be a short run situation of unemployment but due to flexibility in wage and price unemployment disappears in long run.

The classical economists didn't consider unemployment as a problem and full employment equilibrium was the normal feature of economy. However, in classical paradigm the employment was determined independent of product and money markets. The demand for labour changed only in short run. The supply of labour was thought as a function of population growth which responded positively to wages & availability of food and changed only in long run. Subsistence level of wages prevailed in all times. There could be a short run situation of unemployment but due to flexibility in wages and price unemployment disappears in long run. Money had no role to play in real wage rate determination.

### **2. Neo – Classical theory of Employment**

The neoclassical theory says that employees with the same abilities and in the positions with the same characteristics should be remunerated with the same wage. If it was not so, the employees with lower wage would migrate to better paid jobs, and the wages would gradually reach equilibrium.

The neo classical theory says that employees with the same abilities and in the positions with the same characteristics should be remunerated with the same wage. If it was not so, the employees with lower wage would migrate to better paid jobs, and the wages would gradually reach equilibrium. As the markets go nearer to perfectly competitive conditions with effective property rights systems, the resource allocation improves and the wages tend to move towards marginal productivities provided state intervention is least. However, the increased productivity shall lower the wages & employment and in-turn the decreased demand may cause unemployment. The demand for labour is determined with an input function. We understand that the general equilibrium approach miserably fails to explain the business & economic cycles. We reach to a situation in which the general equilibrium, neither exists, nor stable and provides no unique solutions. The later efforts to solve these problems by introducing money equation in general



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equilibrium theory seriously distorts the contract curve in Edgeworth box providing no solution to problem of tackling resulting inequalities. The introduction of money equation leading to development of quantity theory of money helped the monetarists to formulate that because the prices are sticky, hence if money supply is increased, the output level shall definitely go up leading to more employment. So, “Money does not matter” got a bashing. Monetarists generally believed in least government intervention through fiscal policies. But the great recession, two world wars, trade-cycles and failing capitalism forced the economists to re-examine its assumptions. Keynes provided a general theory combining all three markets i.e., product, financial and labour markets. His ideas became widely acceptable to governments as their credibility and moral power got a big boost.

Some unemployment was preached as good because less of it could increase inflation harming the purchasing power and welfare of masses in general.

3. **Keynes theory of Employment:** According to Keynes, output is determined where  $AD=AS$  under short run. Employment depends on effective demand where ( $AD=AS$ ) or national income.

$$Y = f(N)$$

$$N = f(ED)$$

Y = National Income

N = Level of Employment

ED = Effective Demand

According to Keynes, under employment equilibrium may exist at under potential level at output but equilibrium in  $AD=AS$  exist there. So aggregate demand increases, employment also increase and can be achieved full equilibrium.

Keynes' main criticism of the classical theory was on the following two grounds: (a) The classical prediction that full-employment equilibrium will be achieved in the long-run was not acceptable to Keynes, who wanted to solve the short run problem of unemployment.

Under Keynesian system, it was possible to give higher wages with higher employment through fiscal intervention (government expenditure and deficit financing) just contrary to neo-classicals.



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Keynesian ideas were improved and systematically presented by Hicks in the form of IS-LM approach.

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Employment depends on effective demand where ( $AD=AS$ ) or national income. The ED could be raised if the state acts as the buyer of last resort. These thoughts have persuaded the governments to take up public works as a major strategy to generate employment, stimulate demand and create public assets. Most of the economies became mixed economies due to Keynesian influences.

#### **4. Neo – Keynesian theory of Employment**

Neo-Keynesians did not place as heavy an emphasis on the concept of full employment but instead focused on economic growth and stability. The reasons the Neo-Keynesians identified that the market was not self-regulating were manifold. Labour markets are also imperfect.

#### **5. New Classical theory of Employment**

New classical economics is based on Walrasian assumptions. All agents are assumed to maximize utility on the basis of rational expectations. At any one time, the economy is assumed to have a unique equilibrium at full employment or potential output achieved through price and wage adjustment.

#### **6. New Keynesian theory of Employment**

New Keynesian economists, however, believe that market-clearing models cannot explain short-run economic fluctuations, and so they advocate models with “sticky” wages and prices. New Keynesian theories rely on this stickiness of wages and prices to explain why



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involuntary UNEMPLOYMENT exists and why monetary policy has such a strong influence on economic activity.<sup>2</sup>

Government of Haryana aims to develop the State as one of the most economically developed States in the Country and make it the best State in terms of ease of doing business. The study exploring the growth of employment in industrial sector of Haryana. Pushapangandan and Shanta (2004)<sup>3</sup> analysed the growth rate with the help of non-parametric analysis and found that the average annual growth rate of informal sector stayed at 8 per cent as compared with 6.2 per cent in the organized sector for the period 1993-94 to 1999-00 in the Indian economy. The contribution of informal sector to the GDP of Indian economy had been estimated at 62 per cent and was grown much faster than the organized sector in the economy. Within the unorganized sector, both agricultural and non-agricultural segments had contributed almost equally but non-agricultural sector was grown at much faster pace than the agricultural segment which had come to contribute 4.6 per cent in 1999-00 as against 3.4 per cent in 1993-94. The study further revealed that the service sector activities had achieved higher efficiency levels as compared to other sector of the economy.

Satpathy (2004)<sup>4</sup> has analysed the size, composition and characteristics of informal sector in India. The author examined the size and magnitude of informal employment in the informal sector by using three alternative techniques i. e residual, household and enterprise method. His findings suggested that, of the total five states, namely Uttar Pradesh, Maharashtra, West Bengal, Tamil Nadu and Andhra Pradesh accounted for maximum per cent share of workers in the informal non-agricultural sector. The combined share of these five states varied from 52 per cent in case of residential premises and 55 per cent each of households and enterprises-based estimates respectively. The study further indicated that the states like Himachal Pradesh and Jammu & Kashmir had shown low share of employment in the informal sector.

Rudrapan (2004)<sup>5</sup> examined the extent and determinants of farm and non-farm employment in the post reform period in Tamil Nadu. The results indicated the growth of agriculture sector employment at 1.4 per cent per annum, which account 60 per cent of the total employment. In absolute terms, the number of agricultural workers declined from 153.39 lakhs in 1993-94 to 144.29 lakhs in 1999-00. Similar trend was observed at the national level on account of a slower growth rate of agricultural employment, the number of employed workers in agriculture

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declined from 2424. 6 lakhs in 1993-94 to 2375. 6 lakhs in 1999-00 accounting for a deceleration of (-) O. 34 per cent, which was observed due to the changing structure of rural employment since post- reforms period in Tamil Nadu.

Nayak (2005)<sup>6</sup> study analysed the provision of social security measured to the workers employed in the informal sector. She stressed the need for enactment of bill which should protect the rights of these workers. In a state like Kerala, organization of such workers had played an important role in protected the rights of these workers. She concluded that the concept of social security should therefore be two pronged focusing i. e. (a) on the need to recognized and support the social and material base of living communities and (b) a cognizance of the growing structural poverty with the growth of unbridled capitalism.

Mehta (2005)<sup>7</sup> examined the existing situation, growth pattern and contribution of non-farm activities in providing employment and income opportunities with the help of primary survey of 3437 household in 32 villages in the rural area of Uttranchal. The study observed that of the total profit, all non-farm activities taken together contributed around 42 per cent. Within this, the contribution of service activities was 83 per cent and 65 per cent from manufacturing respectively. The share of farm sector employment in the total had declined from 75 percent in 1971 to 65 per cent in 1991. The corresponding share of non-farm employment had registered an increased from 25 to 35 per cent during 1971 to 1991. However, the work participation rate and the concentration pattern of men and women work-force in farm and non-farm sectors had varied to a certain extent in different geographical location in the state of Uttranchal.

Rajkumar (2005)<sup>8</sup>examined the determinants of labour absorption and mobility pattern with the help of primary survey of workers employed in urban formal and informal sectors in Chennai. He found that a significant proportion of workers both in the formal and informal sectors had been absorbed during the study period. The participation rate had been found considerably higher in the formal sector as compared to the informal sector. The greater mobility of workers was observed in all the sub-sectors of the informal sector except the domestic workers. He further observed that the participation rate of forward castes had been relatively higher in formal sector, while that of backward caste, it was found to be higher in informal sector as a whole.



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Venkateshwarlu (2005)<sup>9</sup> examined the inter-regional and inter-district variations based on census data in the rural non-farm employment in Andhra Pradesh during 1961 to 2001 period. His study revealed that there had been a favourable shift in the share of the non-agricultural employment during 1991 to 2001. In the rural areas, the share of non-farm employment among males, females and persons had been observed relatively high in 1961 which decreased during 1991-2001. The study further indicated that the share of household industry workers among rural non-farm workers peaked among males, females and persons in 1961 which declined in the subsequent period.

Bhowmik (2005)<sup>10</sup> concluded that street vending tended to increase with the shrinking of jobs in the formal sector and lack of gainful employment in the rural areas respectively. Further, the growth in self-employment and the rise in the number of street vendors was largely due to lack of employment opportunities in other sectors, but also directly linked with the expansion of the informal sectors in Asian countries like India, Sri Lanka, Bangladesh, Singapore and Manila etc. The total number of street vendors in India was estimated at around 10 million which constituted the 2 percent of the total population of a metropolis.

Lanjouw and Stern (2006)<sup>11</sup> study on off-farm opportunities for youth in the North Indian village of Palanpur found significant expansion in the non-farm economy in the past decades. In the mid-eighty's, more than a third of a villager's income was derived from non-agricultural activities and more than 70 villagers were employed regularly and semiregularly in the non-farm sector. The study further revealed that the expansion of non-farm occupation has accelerated migration of many young villagers from Palanpur to nearby situated towns to take up regular jobs in industrial workshops and nearby bakeries.

Unni and Raveendran (2007)<sup>12</sup> analysed the growth of employment during 1993-94 to 2004-05 with the help of NSS data. The result of the study indicated that employment opportunities had grown in the urban areas over the period of study. Further, a substantial increase had been noticed in poorly remunerated self-employed activities and observed a decline in the real wage rates of regular salaried workers and urban casual workers for the first time in the decade 1993-94 to 2004-05 in India. The rural male workers participation had remained stagnant since 1988.



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Whereas, urban male participation rate had improved gradually almost throughout the study period.

Unni and Lu (2007)<sup>13</sup> had examined the process of informalisation in India and China and found that the phenomenon of informal employment was as recent as 1996 in China, whereas began in India early 1980. According to the study, about a quarter of the workforce in China was now working in informal sector, which had the advantage of basic managerial skills required for quality manufacturing activities. Whereas, a large proportion of the Indian workforce was characterized by the absence of managerial skills and low levels of education which constraints seeking of new forms of employment in the market place.

World Bank (2007)<sup>14</sup> revealed that the rural non-farm economy was extremely heterogeneous and provided an important source to youth employment throughout the developing world. In Latin America, about half the youth population with age group 15-24 years in rural areas, whereas, more than 65 per cent of young population in the age group of 25-34, work in non-agricultural activities. The report further indicated that in 15 countries of this region, the higher share of youth employment in several non-agricultural sectors as compared to employment in agriculture bears out the importance of the rural non-farm economy. In rural India, the likelihood of moving into non-farm casual occupations peaks at age 22, and at around 33 in case of Brazil.

Bhalla (2008)<sup>15</sup> had examined the impact of globalization on the level of employment in India during 1999-2005. The author found that 60.7 million new jobs had been created in the country, out of which 52.3 million jobs were reported in the informal sector and the rest, 8.4 million jobs opportunities within the organized sector, which, were largely informal in nature. This increase in the work force had joined the already crowded informal workers with unsatisfactory conditions of work and inadequate social security provisions.

Hawthorne (1963)<sup>16</sup> conducted a study to observe what can organizations and government do to help employees in improving productivity and what employees themselves do. In his view the output improvement can best take place in the context of monetary growth. The study explained that many employees face the problems of change and uncertainty. This can be dealt with by training and retraining and by sufficient provisions of employees to go to other work within the same industry. He explained that the productivity can only be gained through effective teamwork

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and increased productivity should be common fairly among organization, employees and the public at large.

### **3. Objective and Methodology of the Study**

The main objective of the study is “The Study of Employment Growth in Industrial Sector of Haryana” using Statistical Abstract of Haryana using Employment data.

The data has been downloaded from the website of “Department of Economic and Statistical Affairs, Government of Haryana”.

In the downloaded files, first of all find out Employment data.

In this paper, only the Employment level data has been used. For computation of growth rate, an excel sheet has been prepared using statistical abstract data.

The growth rate has been computed by using following formula:

$$Y_T = Y_0 e^{rT}$$

Where  $Y_T$  is the number of employees in shops, commercial establishments, hotels & restaurants and total industry.  $Y_0$  is the initial estimated level of employees and ‘r’ is the exponential growth rate in time T. The ‘r’ can be computed by taking natural log of both sides and then finding the slope by regression such as:

$$\bullet \quad \ln Y_t = \ln Y_0 + r T \quad \text{or} \quad \ln Y_t = b_0 + r T$$

### **4. Results & Interpretations**

Table one shows the number of shops, commercial establishments, hotels & restaurants of Haryana. The table also shows that the number of persons employed in shops, commercial establishments, hotels & restaurants. This table shows the number of shops, commercial establishments, hotels & restaurants and persons employed from 1966 to 2020.



**Table 1: Growth Rate of Number and Employees of Shops, Commercial Establishments, Hotels and Restaurants**

Year	Shops		Commercial Establishments		Hotels & Restaurants		Total	
	Number	Employees	Number	Employees	Number	Employees	Number	Employees
1966	43,554	13,104	11,677	12,031	3,447	3,370	58,678	28,505
1970	56,663	15,419	10,644	13,853	2,683	3,141	69,990	32,413
1980	93,299	31,736	10,698	17,434	3,374	4,624	1,07,371	53,794
1990	1,31,126	52,206	8,420	17,204	3,691	6,610	1,43,237	76,020
1995	1,37,171	53,309	13,129	25,310	3,841	6,981	1,54,141	85,600
2000	1,54,358	76,801	11,073	35,501	4,107	9,481	1,69,538	1,21,783
2005	1,65,363	1,07,712	10,012	42,748	4,164	9,183	1,79,539	1,59,643
2010	2,08,782	2,53,433	15,237	1,40,456	3,931	13,209	2,27,950	4,07,098
2014	3,01,012	4,87,393	38,197	5,60,067	6,218	40,979	3,45,427	10,88,439
2015	3,22,488	5,66,026	42,750	8,48,937	6,554	46,806	3,71,792	14,61,769
2016	3,59,011	6,39,593	47,115	9,55,326	7,020	51,486	4,13,146	16,46,405
2017	3,90,959	7,26,924	51,044	10,77,246	7,656	57,194	4,49,659	18,61,364
2018	4,15,190	8,20,715	57,350	13,45,599	8,173	73,153	5,09,389	24,96,713
2019	4,35,030	8,87,082	65,677	15,36,478	8,682	79,421	5,39,717	27,71,900
2020	4,55,806	9,48,195	74,708	17,44,284	9,203	3,485	48,853	65,506
	4.046	8.223	3.579	9.925	1.941	5.026	3.033	7.555

Source: Developed by researchers.

These table shows that the growth rate of number of shops was 4.046 per cent and employees were 8.223 per cent. The growth rate of number of commercial establishments was 3.579 per cent and an employee was 9.925 per cent. The growth rate of hotels & restaurants was 1.941 per cent and employees were 5.026 per cent. The total growth rate of industries was 3.033 per cent and employees in industries were 7.555 per cent.



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## 5. Conclusion

The present study was an attempt to find out the employment growth in industrial sector of Haryana. This proves that the unbalanced growth between number of industries and employees of industries. Industrial development in the state and is issue of concern and need to attention.

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