

A COMPARATIVE ANALYSIS OF STRUCTURAL TRANSFORMATION BETWEEN HARYANA & PUNJAB

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ABSTRACT

Structural change has been considered as one of the essential ingredients of modern economic growth. Without structural change, no country can get sustainable and inclusive growth. So structural transformation is vital issue for developing country like India. The big concern for Indian economy is still high employment share in agriculture sector, on the other hand declining the share in GDP year by year. Moreover, the Contribution of Agriculture sector in Indian economy is much higher than world's average (6.1%). Contribution of Industry and Service sector is lower than world's average 30.5% for Industry sector and 63.5% for Services sector respectively. Even service sector has high productivity still unable to absorb surplus labour of agriculture sector. So if we want to attain third stage of structure transformation then India have to give importance to quality and vocational education. So that we can produce skilled labour which will be suitable for service sector also. In comparison of Haryana and Punjab, no significant difference could be surfaced between Punjab and Haryana. Overall, it may be concluded that Haryana could secure higher growth rates of primary sector of NSDP as well as total NSDP. However Punjab did well in social parameters in comparison of Haryana like literacy rate, life expectancy rate at birth, woman literacy, HDI etc.

INTRODUCTION

Structural change has been considered as one of the essential ingredients of modern economic growth. As a stylized fact in development economics literature, structural change is defined as a reallocation of economic activity across three broad sectors of the economy (agriculture, industry, and services) that accompany the process of modern economic growth. The reallocation, induced by some policy measures, occurs as factors of production moved from lower productivity to higher productivity uses (Lewis, 1954; Chenery, H. 1986). For Kuznets structural changes not only in economic but also in social institutions and beliefs are required for modern economic growth (Kuznets, 1971). Structural transformation is necessary step for economic development but not sufficient. In fact, economic development and structural changes go side by side. During process of development, due to increase in real income, the preferences of consumers will transform from less income elasticity goods (agriculture goods) to highly income elasticity goods (manufacturing and services sector goods). This results in diminishing significance of primary producing activities and growing dominance of manufacturing and services activities. Any shift of labour and other sources from agriculture to secondary or services sector results in immediate increase in overall productivity and income per capita. In essence, four essential and interrelated process define structural transformation in any economy.

A decline share of agriculture in GDP and employment.

A rural to urban migration underpinned by rural and urban development.

The rise of a modern industrial and service economy.

A demography transition from high rate of births and death to low rate of births and deaths – associated with better health in developed and urban areas. (United Nation Human Settlements Programme).

Achieving structural transformation is believed to be a priority agenda in development policy of developing countries like India. Without structural transformation, no country can attained sustained economic growth as well as inclusive growth and the scope for sustained increase in productivity narrows and consequently, the growth potential of the economy remains limited.

However, this narrow definition of structural transformation neglects the vital aspect of structural transformation: social transformation. This study tries to fill this gap by proposing some social indicators like morbidity rate, crude birth rate, urbanisation, education rate etc. This present paper is an attempt to understand structural transformation in India. What are the implications of structural transformation in India and comparative analysis of Haryana and Punjab? Identification of the factors that contribute in structural transformation in the region.

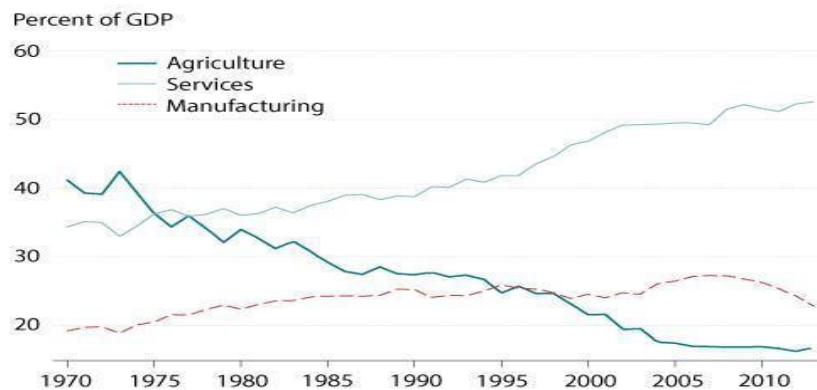
STRUCTURAL TRANSFORMATION IN INDIA

India's economic performance over the past two decades has often been excessively focussed on the achievement and prospects of a high rate of economic growth. Introduction of economic reforms in 1991 is seen as the turning point in India's post-

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independence economic history, providing a break from the low growth trap in which the country's economy had been caught for four decades. India is a developing country currently undergoing a structural transformation. However, its path is somewhat different from that of a benchmark developed country. Figure 2 shows the GDP shares of the three sectors over the past four decades for India. The services share has increased dramatically and currently stands at 53 percent. In comparison, the manufacturing share has remained stagnant, growing only from 19 percent in 1970 to 23 percent in 2012.

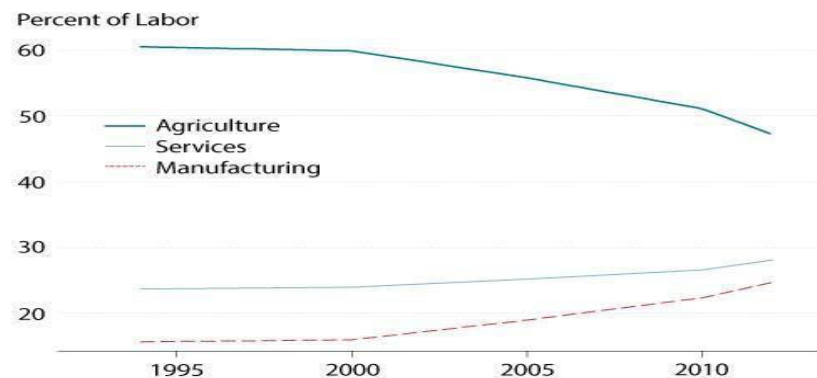
Figure 2
GDP Shares in India



SOURCE: World Bank World Development Indicators.

Sources: Authors Compilation

Figure 3
Labor Shares in India



SOURCE: World Bank World Development Indicators.

Sources: Authors Compilation

These changing shares of GDP suggest India might now be going through the second stage of its structural transformation. As shown in Figure 3, however, the manufacturing labour share has increased faster than the services labour share, which is unexpected. These findings imply that productivity in the services sector is remarkably higher than in the manufacturing sector and has sharply increased over the years.

This pattern of structural transformation in India is puzzling for two reasons. First, in principle, India's manufacturing and services sectors both operate in similar economic and regulatory environments. Second, compared with both developed and developing countries, the productivity of India's services sector relative to its manufacturing sector is an outlier. Its services sector is four times more productive than its manufacturing sector, whereas in most other countries the services sector is at most twice as productive (see Chari, Goel, 2015).

Why is India's structural transformation following such an unusual path? Is the cause a stagnant manufacturing sector or an exceptionally productive services sector?

It is possible that labour laws, lack of credit availability, and poor infrastructure more severely impede manufacturing firms than services firms. It has been argued that, because manufacturing is more dependent on intermediate inputs, pro-labour laws combined with regulation of input quotas have reduced productivity growth considerably more in the manufacturing sector than the services sector (see Gupta, 2009). These laws combined with lack of credit availability lead to non-optimal factor combinations in manufacturing firms but influence services firms far less.

Thus, while some studies attribute stagnant manufacturing in India to rigid labour laws and input quotas, others argue that rapid services growth is caused by increasing demand from manufacturing. We still do not have a comprehensive understanding, however, of why labour keeps moving into the manufacturing sector despite the already large and still widening productivity gap between the manufacturing and services sectors.

The big concern for Indian economy is still high employment share in agriculture sector, on the other hand declining the share in GDP year by year. Moreover, the Contribution of Agriculture sector in Indian economy is much higher than world's average (6.1%). Contribution of Industry and Service sector is lower than world's average 30.5% for Industry sector and 63.5% for Services sector respectively. Even service sector has high productivity still unable to absorb surplus labour of agriculture sector. There are so many reasons like unskilled labour, asymmetry information persisting in market etc. Service sector requires more skilled labour. But there is scarcity of skilled labour in India. Literacy rate in India is only 74.04% which is 10% below from world's literacy rate (84%). Only 24% of total enrolled students at primary level get enrolled in higher education. According to a survey, only 25% graduate of technical education and 15% graduate of general education are fit for employment. So it is a big concern for policy maker. While Indian government spends only 4-5% of GDP on education which is even less than Sri Lanka's expenditure on education. So if we want to attain third stage of structure transformation then India have to give importance to quality and vocational education. So that we can produce skilled labour which will be suitable for service sector also.

There are powerful empirical and theoretical arguments in favour of manufacturing growth as the main engine of growth in economic development. Theoretically, in comparison to, the manufacturing sector offers a large scope of capital accumulation, economies of scale, and embodied and disembodied technological progress, than do agriculture and services. Further, linkage and spill-over effects are also stronger in manufacturing than in agriculture or even services. This means, for instance, that employment growth in the manufacturing sector can positively influence productivity in other sectors as well, pushing the overall economy to a virtuous circle of high productivity and growth. Stagnation in the share of manufacturing sector in a country's GDP at low levels of income is a cause for serious concern. Belying the belief in service led growth, recent research by eminent development economists has shown that manufacturing is central to not only a nation's economy but also its democracy. A weak manufacturing sector may ultimately threaten the sustainability of a country's growth process. Concerned about the stagnant and low share of manufacturing, government, in line with a global trend, has launched several initiatives to promote manufacturing clusters over the past two decades. These are for instance: growth centres, food parks, textile parks, SEZs, and industrial parks. But, all of them have been languishing due to indecision, delays and policy reversals. If growth is to be sustained the country will have to adopt a well-defined development strategy that can address the issues being faced by the manufacturing sector. This will have an integrated framework to promote entrepreneurship and innovation, improve business climate and restore investors' confidence.

STRUCTURE TRANSFORMATION IN HARYANA AND PUNJAB:

Punjab and Haryana occupy an extremely important place in agriculture in India. Both of these two states are regarded as the Breadbasket of India and have contributed substantially to the country's food security. However, both face some major challenges which require some reorientation of priorities and new development strategies. Haryana which was initially at a lower level of economic development picked up subsequently. Now, a stage appears to have reached where Haryana's per capita income compares favourably with that of Punjab. Agricultural development has taken at a very fast rate in Punjab and Haryana especially after the mid-sixties due to Green Revolution. Haryana economy witnessed a very healthy annual real growth of 9.1%, as compared to 6.7% of Punjab and 7.9% of India during 11th Plan (2007-12). In 2012-13, the growth of real Gross State Domestic Product (GSDP) of Punjab was 5.2% only as compared to 7.1% of Haryana. There has been a relative deceleration in Punjab economy. During 1966-2013, the contribution of primary sector in GSDP of Punjab and Haryana went down from 58% to 21.8%, and 56.6% to 16%, respectively. Among all States the maximum growth in the workforce took place in the State of Haryana (2.83 percent) followed by the State of Punjab (2.53 per cent). Farm employment in Haryana has improved significantly in contrast with that in Punjab, but there are regional disparities in farm income in Haryana. Punjab once one of the richest Indian States, is now fast becoming poor amid economic challenges like shrinking land holdings, migration and the absence of big industries. On the other hand Haryana today is one of the fastest growing economies in the country. Experts ascribe the slow growth in Per Capita Income in Punjab to sluggishness in the agriculture sector.

Percentage Share of Primary Sector in NSDP of Punjab and Haryana in NSDP during 1970-71 to 2011-12:

Over the past 42 years, the states of Punjab and Haryana have experienced a significance structural transformation. At the beginning of the present study, during 1970-71 economies of both the States were predominantly rural and agricultural. But with the passage of time, in 2011-12 Industry and Services Sectors registered much higher growth rate than in agricultural sector in Haryana but the picture is not bright for the economy of Punjab. A close examination of the study of Table 1 shows that Primary Sector was the dominant sector of the economy of Punjab and Haryana and accounted for 58.36 in NSDP of Punjab and 64.74 percent in Haryana's NSDP. After fluctuations the share of Primary sectors of both Punjab and Haryana in 1979-80 declined to 47.43 percent and 51.77 percent respectively in Punjab and Haryana.

Table-1: Percentage Share of Primary Sector of Punjab and Haryana to NSDP at Constant Prices

Year	Haryana	Punjab
1970-1980	59.88	55.26
1981-1990	46.09	44.99
1991-2000	40.18	42.95
2001-2010	24.99	34.54
2013-2014	15.30	28.13

Sources: Authors Compilation

Again during Period-II Primary sector was the driving sector of both the States. In 1980-81 the primary sector was the dominant sector of the economy of Punjab and Haryana and accounted for 44.12 percent in NSDP of Punjab and 54.60 percent in Haryana's NSDP. After fluctuations the share of Primary sector of Punjab was 45.82 marginally higher than 1980-81 and of Haryana declined to 43.82 percent in 1989-90. In 1990-91 the primary sector was the dominant sector of the economy of Punjab and Haryana. The share of Primary sector of Punjab decreased to 34.21 percent from 45.54 percent during this Period while in Haryana this share decreased to 32.53 percent from 44.71 percent. The relative share of primary sector to NSDP was 38.30 percent in Punjab and 32.13 percent in Haryana in 2000-01 which fell down to 30.77 percent in Punjab and 21.54 percent in Haryana in 2011-12. The relative share of primary sector to NSDP was 58.36 percent in Punjab and 64.74 percent in Haryana in 1970-71 which fell down to 30.77 percent in Punjab and 21.54 percent in Haryana in 2011-12. Agricultural development has taken at a very fast rate in Punjab and Haryana especially after the mid-sixties due to Green Revolution.

Table-2: Comparison of Structural Transformation among Haryana, Punjab and India

Sectors	1993-1994			2004-05			2013-14		
	Haryana	Punjab	India	Haryana	Punjab	India	Haryana	Punjab	India
Primary	42.50	46.13	33.50	23.30	32.67	21.90	15.30	29.20	15.80
Secondary	26.20	21.76	23.70	32.70	24.74	25.10	27.70	24.69	24.30
Tertiary	31.30	32.12	42.80	44.00	42.59	53.00	57.00	46.11	59.90
Total	100	100	100	100	100	100	100	100	100

Sources: Authors Compilation

Haryana economy witnessed a very healthy annual real growth of 9.1%, as compared to 6.7% of Punjab and 7.9% of India during 11th Plan (2007-12). In 2012-13, the growth of real Gross State Domestic Product (GSDP) of Punjab was 5.2% only as compared to 7.1% of Haryana. There has been a relative deceleration in Punjab economy. Per capita income in Punjab (Rs 114561) is very less than Haryana (Rs 180174) in 2015-2016. However, Punjab has high consumption based HDI (0.605) in comparison to Haryana 0.552 in 2007-2008. In 2015, Punjab's HDI (0.6614) is slightly greater than Haryana's HDI (0.6613). In term of literacy, Punjab (76.68%) performed better than Haryana (76.64%) in 2011. Even female literacy rate in Punjab (71.34) is far more than that in Haryana (66.77). Life expectancy at birth in Punjab (71.6 years) is better than Haryana (68.6 year). Regional disparity in every aspect in Haryana is greater than Punjab. So we can say evidently that Punjab performed better in every social parameters but lagged behind in economic parameters.

Table-3: Comparison of Social Parameters

	Punjab	Haryana
Women Literacy Rate	71.34	66.77
Literacy Rate	76.68	76.64
Sex Ratio	895	879
Life Expectancy at Birth	68.60	66.77
Consumption Based HDI	0.605	0.552
HDI	0.6614	0.6613

Sources: Authors Compilation

There is an urgent need to adopt suitable corrective measure to boost capital formation, especially towards agricultural infrastructure and manufacturing sectors in both the neighbouring states of Punjab and Haryana. Since productivity in agricultural sector of Punjab has already started showing signs of stagnation and that small-scale sector in the state has been grossly wiped out (because of a large-scale shifting of industrial units to the adjoining hilly states due to tax incentives); as a result, the Punjab state has experienced a rapid deterioration in its financial health. Therefore, the state needs to give a serious reconsideration towards providing freebies (under populist measures) like water and electricity (across the board) in agriculture sector; cast-based free distribution of electricity; distribution of subsidised food items under Atta-Dal scheme to a large section; withdrawal of octroi in towns and cities; loan waivers from time-to-time; disbursement of money to the families of suicide committers; etc. Before giving such economic incentives, genuineness of the concerned cases need be examined critically, otherwise such measures may lead to wastages and corruption, and would further deplete economic conditions of the state. The state government, instead, needs to make allocation of its limited resources towards productive purposes via strengthening its physical infrastructure. Such steps would expectedly create a congenial environment for attracting foreign investment in the state, thereby improving employability of its youth.

CONCLUDING REMARKS AND POLICY IMPLICATIONS

On the average of 42 years under study, no significant difference could be surfaced between Punjab and Haryana. Overall, it may be concluded that Haryana could secure higher growth rates of primary sector of NSDP as well as total NSDP. However Punjab did well in social parameters in comparison of Haryana like literacy rate, life expectancy rate at birth, woman literacy, HDI etc. Primary sector exhibited crisis of stagnation during 1970-71 to 1979-80 and 2000-01 to 2011-12 in both the states. The incidence of farmer suicides can be traced out of this. The people of Punjab may be known for their lavish lifestyle and high spending power but it is true that the state itself lags behind Haryana as far as Per Capita Income is concerned. But it cannot be denied that agriculture forms the backbone of Haryana and Punjab economy. The share of agriculture to state income is also the highest; and it is also a source of supply of raw materials to the leading industries of the state. Hence, the prosperity of agriculture stands for prosperity of Haryana and Punjab. In order to raise state income and per capita income, it is essential that at least for some more, agriculture development may be given greater emphasis in Haryana and Punjab. Government should give emphasis on cash crop, organic agriculture and horticulture. Government should educate the farmers about using fertilizers, best seeds, and new technique of farming. This will boost the productivity and income of farmers. To achieve a rapid increase in incomes at least in the initial period, a greater proportion of investment should be made in agriculture. To address the issue of employability, the education system needs to be ready for changes in its organizational structure, policies, teaching-learning processes and the type of academic offerings. Universities need to be more than just the centres of knowledge transmission; they need to prepare a skilled work force ready to be absorbed in the market. Government should increase expenditure on education and research. No nation can be build a great nation without education. Government should promote manufacturing sector to absorb the surplus labour of agriculture sector because it is well recognised that growth in manufacturing output also creates new jobs in other sectors of the economy, through indirect input-output linkages. Given the strong backward and forward linkages of the manufacturing sector with the rest of the economy, its employment generation potential is much larger than that of other sectors.

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