

Growth of Indian Textile Industry during Post-Reform and Post-MFA Regime

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Abstract

The paper estimated that the growth of Indian textile industry at the aggregate and the sectoral level during post-reform (1991 to 2004) and post-MFA regime. The trend growth of Indian textile industry reported highest growth rate of all the parameters was found during post-reform (1991-2004) period when compared to post-MFA regime. The main contributor of growth rate of output in Indian textile industry was the capital in both the periods. Thus it is evidenced from the result that the growth performance of post-reform period was better than that of post-MFA regime.

INTRODUCTION

The Indian textile and apparel industry is the second largest employer after agriculture, with more than 5 million persons engaged in it. It contributes 14 per cent of industrial production, 27 per cent to the country's foreign exchange inflows and 4 per cent of the GDP. It provides direct employment to over 45 million people. The total export earnings was 15 per cent and the size of India's textile market in 2016 was around US \$ 137 billion. By virtue of being among the earliest established industries in the country, textile production has been an integral part of the lives of millions of people, including farmers in India, for centuries. Further, textile production has backward linkages with agriculture and allied activities, as far as natural fibres are concerned. Given these features, the link between the textile sector and development of India is quite obvious.

The structure of the textile industry is extremely complex with the modern, sophisticated and highly mechanized mill sector on the one hand and the handspinning and hand-weaving (handloom) sector on the other; in between falls the decentralized small scale powerloom sector. If we include all the three sectors, the cotton and synthetic textile industry in India is the largest industry in the country. The textile industry is one in which India has an opportunity for success on a global scale, given the low cost of labour. With the above background the main objective of this study is to discuss the growth of Indian textile industry during post-reform (1991 to 2004) and post-MFA (2005 to 2016) regime.

REVIEW OF EARLIER STUDIES

Nagaraj (1989) presents the growth rates of value added with references to National Accounts Statistics (NAS, 1989) in registered textile manufacturing for three time periods, period III (1980-81 to 1986-87) at 3.3 per cent per annum was lower than

that of period II (1966-67 to 1979-80) at 4.4 per cent per annum, whereas higher in period I (1959-60 1965-66) at 39 per cent per annum. **Goldar (2000)** observed that growth rates of Real Gross Value Added and employment in the organised textile manufacturing sector in India which exhibited varied growth rates in 1980's improved to an appreciable levels in 1990s. **Nagaraj (2003)** found that since 1980-81, Indian manufacturing sector including Indian textile sector output has grown at 7 per cent per year, with economic reforms making little difference to that trend in the 1990s and growth has decelerated over the last seven years, after peaking in 1995-96. **Balakrishnan and Prameswaran (2007)** also indicate little role for a liberalised trade and industrial policy having been the trigger of a new growth dynamics in India via faster manufacturing growth, at least up to the mid-1990s. **Kannan and Raveendran (2009)** noted that the textile sector average annual growth of output and employment increased in the 1990s when compared to 1980s. **Nagaraj (2017)** found that the manufacturing output grew 7 per cent to 8 per cent annually since 1991, with a marked improvement in the variety and quality of goods produced. Yet, its share in gross domestic product has practically stagnated, with a sharp rise in import intensity. Liberal (or market-friendly) policies were expected to boost labour intensive exports and industrial growth. The study suggested that the long-term constraints on industrialization perhaps lie in poor agricultural productivity and inadequate public infrastructure. Further, there is a need to re-imagine the role of the development state to realise goals, as the experience of all successful industrializing nations suggests.

METHODOLOGY GROWTH MODEL

Growth is studied with reference to annual growth rates computed based on the compound interest rate formula adopted by the World Bank using the least square methods.

The least squares growth rate 'r' is estimated by fitting a least squares linear regression trend line to the logarithmic annual values of the variable in the relevant period. More specifically, the regression equation takes the form

$$\text{Log } X_t = a + bt + e_t$$

where this is equivalent to the logarithmic transformation of the compound growth rate equation

$$X_t = X_0 (1+r)^t$$

In these equations, 'X' is the variable, 't' is time period and $a = \log X_0$ and $b = \log (1+r)$ are the parameters to be estimated, 'e' is the error term. If b^* is the least squares estimates of 'b' then the average annual percentage growth rate 'r' is obtained as $(\text{antilog } b^*) - 1$ and multiplied by 100 to express it as percentage.

DATA AND VARIABLES

The study makes use of the sub-sector level of Indian textile industry:

TABLE - 1
SUB-SECTORS OF INDIAN TEXTILE
INDUSTRY

Cloth
Cotton & Blended Yarn
Readymade Garments
Textile Processing

Man-made Filaments & Fibres
Diversified Cotton Textile
Other Textiles

The sub-sector level data were obtained from the electronic database PROWESS, Indian textile sub-sectors between 1991 and 2016.

Output

Gross value added, calculated by deleting total purchases of intermediate inputs from gross outputs, was taken as a measure of output, and was then deflated by the wholesale prices index of the textile industry, with the base of 1993-94 = 100.

Capital

The PROWESS database provides total fixed assets net of accumulated depreciation, including capital work-in-progress and revalued assets, if any. The total fixed assets were deflated by the wholesale prices index of machinery and machine products, and thus real total fixed assets were included in the function as a measure of capital stock.

Labour

The PROWESS database does not provide employment details. To estimate the number of workers engaged in an industry, the average wage rate of the industry concerned was calculated from the ASI data for all years of the study. The average wage rate was estimated by dividing the total emolument of the industry by the number of workers in the industry. This average wage rate, obtained from the ASI data, was then used to divide the total wages and salary of each industry, in order to estimate the number of workers in the industry¹.

Growth Indicators

This chapter presents the discussion on the growth of Indian textile industry in the post-reform period (1991 to 2004) and post-MFA (2005 to 2016) regime with reference to the following growth indicators such as (i) Output (Gross Value Added) (ii) Capital (Capital Stock) (iii) Labour.

GROWTH OF INDIAN TEXTILE INDUSTRY

The impact of policies changes in the Indian textile industry can be analyzed in terms of growth in the level of output, employment and capital.

Table 2 shows that the comparative analysis of growth rate of Indian textile industry during post-reform (1991 to 2004) and post-MFA (2005 to 2016) regime.

The trend growth of capital registered highest at 18.20 per cent followed by output reported at 7.82 per cent and 4.19 per cent in labour during the post-reform period in the Indian textile industry. The output growth mainly contributed by the capital rather than the labour. The Indian textile industry found in the liberalization process using more labour saving bias in other words the industry more using capital intensive technology in the study period.

Among the sub-sectors the maximum growth rate of output was found in Readymade Garments at 25.78 per cent followed by 15.65 per cent in Diversified Cotton

¹ This method was widely used by previous studies including **Kathuria (2000) and Saravanakumar and Kim (2012)**.

Textile and 8.26 per cent in Cloth during the post-reform period. The minimum output was evidenced by Textile Processing at 5.26 per cent.

In case of employment, the highest growth rate was found in Readymade Garments reported at 22.34 per cent followed by Diversified Cotton Textile at 7.42 per cent and by Textile Processing at 7.17 per cent. The lowest employment growth rate was reported in Man-made Filaments & Fibres at 0.88 per cent. The de-growth was observed in Cloth sector at (-) 0.48 per cent during the post-reform period.

The highest growth rate of capital was found in Readymade Garments at 49.06 per cent followed by Textile Processing at 28.88 per cent and 27.41 per cent was found in Diversified Cotton Textile. The lowest capital investment was observed in Man-made Filaments & Fibres at 14.43 per cent during the post-reform period.

TABLE - 2
GROWTH RATE OF INDIAN TEXTILE INDUSTRY DURING POST-REFORM AND POST-MFA PERIOD

Sl. No.	Sub-Sectors	POST-REFORM (1991 to 2004)			POST-MFA REGIME (2005 to 2016)		
		Output	Labour	Capital	Output	Labour	Capital
1.	Cloth	8.26	-0.48	20.35	4.36	4.00	9.73
2.	Cotton & Blended Yarn	7.40	5.40	18.72	4.19	-0.59	9.58
3.	Readymade Garments	25.78	22.34	49.06	10.67	8.24	18.08
4.	Textile Processing	5.26	7.17	28.88	6.72	0.09	8.35
5.	Man-made Filaments & Fibres	5.56	0.88	14.43	-2.22	-2.90	3.62
6.	Diversified Cotton Textile	15.65	7.42	27.41	9.90	6.53	22.01
7.	Other Textiles	6.22	5.65	18.44	3.77	-3.35	8.94
8.	Textile Industry	7.82	4.19	18.20	4.22	0.97	8.64

Source: Computed

During the post-MFA regime the trend growth of capital evidenced highest at 8.64 per cent followed by output reported at 4.22 per cent and 0.97 per cent in labour in the Indian textile industry. The output growth mainly contributed by the capital rather than the labour. Among the sub-sectors the maximum growth rate of output was found in Readymade Garments at 10.67 per cent followed by 9.90 per cent in Diversified Cotton Textile and 6.72 per cent in Textile Processing during the post-MFA period. The negative output was evidenced by Man-made Filaments & Fibres at 2.22 per cent.

In case of employment, the highest growth rate was found in Readymade Garments reported at 8.24 per cent followed by Diversified Cotton Textile at 6.53 per cent and Cloth at 4 per cent. The lowest employment growth rate was reported in Textile Processing at 0.09 per cent. The de-growth was observed in three sub-sectors during the post-MFA period.

The highest growth rate of capital was found in Diversified Cotton Textile at 22.01 per cent followed by Readymade Garments at 18.08 per cent and 9.73 per cent was found in Cloth sector. The lowest capital investment was observed in Man-made Filaments & Fibres at 3.62 per cent during the 2005-2016.

CONCLUSION

The paper estimated that the growth rate of Indian textile industry at the aggregate and the sectoral level during post-reform (1991 to 2004) and post-MFA regime. The trend

growth of Indian textile industry reported highest growth rate of all the parameters was found during post-reform (1991-2004) period when compared to post-MFA regime. The main contributor of output is the capital in both the periods. Among the sub-sectors the maximum trend growth of output, labour was in Readymade Garments whereas Diversified Cotton Textile sector in the (2005 to 2016) post-MFA regime. Thus it is evidenced from the result that the growth performance of post-reform period was better than that of post-MFA regime. Three out of seven sub-sectors recorded negative growth during the post-MFA period when compared with only one sector in the post-reform period. The negative or slow growth in employment, which can be observed in Indian manufacturing in the study period is frequently described as 'jobless growth'. **Goldar (2000); Balakrishnan and Babu (2003), Kannan and Raveendran, 2009 and Saravanakumar and Kim (2012)** have argued that the negative growth of labour is the consequence of labour-saving technological advancements in Indian manufacturing, as evidenced by impressive accumulations of capital.

REFERENCES:

1. Balakrishnan P. and Suresh Babu M. (2003), "Growth and Distribution in Indian Industry in the Nineties," *Economic and Political Weekly*, Vol. 38, No. 38, September-20, pp. 3997-4005.
2. Balakrishnan. P and M. Parameswaran, (2007), "Understanding Economic Growth in India: a Prerequisite," *Economic and Political Weekly*, Vol. 42, No. 27 & 28, July 14, pp. 2915-2922.
3. Goldar, B.N. (2000), "Employment Growth in Organised Manufacturing in India", *Economic & Political Weekly*, 1 April, pp. 1191-95.
4. Kannan, K.P and G. Raveendran (2009), "Growth Sans Employment: A Quarter Century of Jobless Growth in India's Organised Manufacturing," *Economic and Political Weekly*, Vol XLIV, No. 10, pp. 80-91.
5. Kathuria, V. (2000), "Productivity Spillovers from Technology Transfer to Indian Manufacturing Firms," *Journal of International Development*, 12 pp. 343-69.
6. Nagaraj, R. (1989), "Growth in Manufacturing Output Since 1980: Some Preliminary Findings," *Economic and Political Weekly*, Vol. XXIV, NO. 26, pp. 1481-1484.
7. Nagaraj, R. (2003), "Industrial Policy and Performance since 1980: Which Way Now?", *Economic and Political Weekly*, Vol. 38, No. 35, August, pp. 3707-3715.
8. Nagaraj R (2017), "Economic Reforms and Manufacturing Sector Growth: Need for Reconfiguring the Industrialisation Model", *Economic and Political Weekly*, Vol. LII, No. 2, pp.61-68.
9. Saravanakumar and Taegi Kim (2012), "The Impacts of Economic Reforms on Efficiency Improvement and Technological Progress in Indian Manufacturing", *The Journal of Developing Areas*, Volume 46, Number 1, Spring 2012, pp. 315-329.