

EMPLOYMENT ELASTICITY IN POST-LIBERALISATION INDIA: A SECTORAL COMPARISON WITH A FOCUS ON CONSUMER GOODS MANUFACTURING

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ABSTRACT

This paper examines how the employment elasticity of consumer goods manufacturing compares with other major sectors of the Indian economy during the post-liberalisation period. Using India KLEMS data for 1991–92 to 2019–20, the study estimates sector-specific employment elasticities with a log–log regression framework and assesses whether the elasticity of each sector differs statistically from that of consumer-goods manufacturing. The study focuses on two sub-periods, 1991–92 to 2002–03 and 2003–04 to 2019–20, which reflect the transition from a partially liberalised regime to a more fully liberalised one. The results show that in the 1990s, the employment potential of consumer goods manufacturing was broadly similar to other manufacturing and service sectors. After 2003, however, its elasticity becomes negative and significantly lower than that of most other sectors. These findings suggest a clear weakening in the employment responsiveness of consumer goods manufacturing in the later post-reform period and provide evidence of a widening divergence in sectoral employment performance.

Keywords: Employment Elasticity, Consumer Goods Manufacturing, Post-Liberalisation India, Labour Absorption, Structural Change

1. INTRODUCTION

The relationship between output growth and employment has become an important concern in the post-reform period, when India experienced sustained increases in real value added alongside relatively modest job creation. This has led to renewed interest in whether growth has become less employment-intensive and whether some sectors have been more responsive than others. Consumer goods manufacturing is central to this discussion because it comprises several

traditionally labour-using industries—such as food products, textiles, apparel, wood products, paper, and other light-manufacturing activities—that have historically provided a large share of employment within manufacturing.

At the same time, the structure and competitive environment of these industries have changed notably since the early 1990s. The first decade after liberalisation was characterised by gradual exposure to competition, as many consumer goods industries continued to be protected through import restrictions and small-scale industry reservation. By the early 2000s, most of these protections had been removed, and consumer goods producers operated in a more open domestic and global environment. Alongside these policy changes, India's wider growth pattern became increasingly capital-deepening, raising questions about whether consumer goods manufacturing retained its traditional role as a labour-absorbing sector.

These developments motivate the central question of this paper: how does the employment elasticity of consumer goods manufacturing compare with other major sectors of the Indian economy, and has this relative position changed over time? Using India KLEMS data—which classify the economy into a consistent set of 27 industries aggregated into nine broad sectors—this study provides a simple, sector-level comparison of employment elasticity over 1991–92 to 2019–20. The focus is on whether consumer goods manufacturing differs statistically from other sectors, and whether these differences shift between the 1990s and the more liberalised period after 2003.

The remainder of the paper is structured as follows. Section 2 reviews the literature on consumer goods manufacturing and employment elasticity. Section 3 describes the conceptual definition of the consumer goods sector used in the study. Section 4 presents selected stylised facts from the India KLEMS database. Section 5 explains the data and methodology, including the regression specification used to compare elasticities across sectors and over time. Section 6 reports the results. Section 7 concludes.

2. LITERATURE REVIEW

2.1. CONSUMER GOODS SECTOR: STRUCTURAL AND POLICY BACKGROUND

Early studies on Indian manufacturing provide the basic understanding of how the consumer goods sector has been defined and how it performed before the reforms. [Bhagavan \(1985\)](#), [Ahluwalia \(1986\)](#), [Ahluwalia and Rangarajan \(1989\)](#), [Chaudhuri \(1989\)](#) and [Coondoo et al. \(1993\)](#) all show that consumer goods industries have traditionally included a wide range of food-processing, textiles, wood and paper, and other light-manufacturing activities. These works point out that consumer goods manufacturing grew more slowly than intermediate and capital goods for several decades and was closely tied to agricultural income, rural purchasing power and domestic demand. They also note the difficulty of classifying individual products because many industries combine items used for different purposes, which makes aggregated sectoral analysis more appropriate. [Stiglitz \(1996\)](#) adds an international perspective by showing that labour-intensive consumer goods industries played a central role in the early industrialisation of East Asian economies. This comparison helps underline why the performance of India's consumer goods sector is important to study.

A second group of studies focuses on the policy environment after 1991. [Ahluwalia \(1995\)](#), [Ahluwalia \(2002\)](#), [Panagariya \(2004\)](#) and [Goldar \(2015\)](#) point

out that, unlike intermediate and capital goods, consumer goods remained protected for most of the 1990s. Import licensing continued until 1999–2001, and several hundred simple consumer goods items were still reserved for small-scale production. These policies limited scale expansion and slowed technological change. As a result, consumer goods manufacturing entered the reform period with a domestic orientation and only gradual exposure to foreign competition. This policy history helps explain why the sector adjusted more slowly than other use-based groups in the early years of liberalisation.

More recent studies examine how the consumer goods sector performed in the reform period. [Das \(2004\)](#) reports that productivity growth in many consumer goods industries was modest during the 1980s and 1990s because production remained labour-intensive, fragmented and focused on domestic markets. [Das, Wadhwa and Kalita \(2009\)](#) show that labour-intensive industries—most of which fall within consumer goods manufacturing—saw rising capital intensity and lower employment elasticity in the 1990s and early 2000s. Other work, including [Saikia \(2011\)](#), [Krishna et al. \(2017\)](#), [Erumban et al. \(2019\)](#) and [Erumban et al. \(2022\)](#), shows that although consumer goods manufacturing continues to be an important part of India's organised manufacturing, its contribution to value-added growth has declined, and its productivity improvements have been weaker than in intermediate- and investment-goods industries. Capital deepening has been the main source of labour-productivity growth, and competition from informal producers remains significant in several segments. Taken together, this literature shows that the consumer goods sector has long faced structural and policy constraints, and that its post-reform performance needs to be understood in this broader context.

2.2. EMPLOYMENT ELASTICITY: CONCEPTS, INTERNATIONAL EVIDENCE, AND INDIA-SPECIFIC FINDINGS

Research on employment elasticity provides the conceptual background for understanding how different parts of an economy convert output growth into jobs. Early cross-country work, such as [Padalino and Vivarelli \(1997\)](#), shows that employment responsiveness varies strongly across sectors, with services often absorbing labour even when manufacturing sheds jobs. [Islam and Nazara \(2000\)](#) add that elasticity is widely used in policy debates because it captures the job-creating content of growth, but they emphasise that the measure is not fixed and depends on technology, production practices and broader economic conditions. They also show that descriptive, two-point estimates can be very unstable, and that econometric methods provide more reliable results. A similar point appears in the work of [Kapsos \(2005\)](#), who argues that employment elasticity must be interpreted together with productivity and output growth, and that high elasticities sometimes reflect low-productivity job creation. Together, these studies highlight that elasticity differs across countries, depends on structural features of the economy and needs careful estimation and interpretation.

Several international studies further explain why elasticity varies across sectors and over time. [Mazumdar \(2003\)](#) shows that the distribution of output gains between wages and employment, along with labour-market institutions, shapes how much employment grows when output expands. [Islam \(2004\)](#) links employment elasticity to poverty reduction, arguing that growth benefits the poor more when it generates employment along with productivity increases. He also finds large cross-country differences in elasticity depending on structural characteristics. [Basu and Das \(2015\)](#) demonstrate that aggregate elasticity can be

misleading because it simply reflects a weighted average of sectoral elasticities, shaped by sectoral employment shares and growth rates. Their analysis highlights the need for sector-specific studies, since different industries contribute differently to changes in aggregate employment performance.

India-specific studies reinforce these themes and provide direct evidence for the present paper's focus on comparing employment elasticity across sectors. Upender (2006) finds that employment elasticity in India's organised manufacturing sector declined after the 1991 reforms, with substantial variation across industries. Mazumdar and Sarkar (2009) also show that elasticity in organised manufacturing has changed noticeably over time, with a sharp decline after the mid-1990s and considerable differences across technology groups, firm types and industry categories. Kannan and Raveendran (2009) show that organised manufacturing has experienced long phases of output growth with very little employment growth, and that this pattern reflects rising productivity, capital deepening and changing demand, rather than a single cause. Sectoral differences are also central in the work of Papola and Sahu (2012), who document declining employment elasticity in India over several decades and show that agriculture has very weak employment growth, while some non-agricultural activities are more employment responsive. Misra and Suresh (2014) add further evidence that elasticity in India varies widely across sectors, with construction and certain services absorbing more labour and manufacturing showing more modest but uneven responsiveness. Finally, Aggarwal and Goldar (2019), using India KLEMS data, show that employment elasticity has fallen over time even as output growth accelerated, and that manufacturing elasticity weakened especially after the early 2000s. Their results underline the importance of analysing employment responsiveness at the sectoral level rather than relying on aggregate indicators.

2.3. RESEARCH GAP AND RESEARCH OBJECTIVE

The literature shows how the consumer goods sector has evolved in India and how employment elasticity varies across countries and sectors. However, no study directly compares the employment elasticity of consumer goods manufacturing with other major sectors of the Indian economy within a single econometric framework. Existing work either analyses consumer goods industries descriptively or estimates elasticity at the aggregate or sectoral level without testing whether the differences across sectors are statistically meaningful. There is also limited evidence on whether these differences have changed over time within the post-liberalisation period.

Against this background, the present paper has the following research objective- To compare the employment elasticity of the consumer goods sector with other major sectors of the Indian economy and to examine whether these differences change over time in the post-liberalisation period.

3. DEFINITION OF THE CONSUMER GOODS SECTOR

The empirical analysis in this paper is based on the India KLEMS Database, a long-running dataset that provides annual, industry-level information on output, value added, labour, capital, intermediate inputs and productivity for 27 industries of the Indian economy since 1980–81. The database—maintained by the Reserve Bank of India—follows the KLEMS growth-accounting framework, which decomposes output growth into the contributions of Capital (K), Labour (L), Energy (E), Materials (M) and Services (S) inputs. Because it offers internally consistent

measures of output, factor inputs and productivity, it has become the main source for recent research on sectoral growth and structural change in India.

The India Productivity Report [Erumban et al. \(2022\)](#) groups the 27 India KLEMS industries into six broad sectors—agriculture, mining, manufacturing, utilities, construction and services—and further divides manufacturing into consumer goods, intermediate goods and investment goods, while separating services into market and non-market components. Earlier studies using India KLEMS data, such as [Krishna et al. \(2017\)](#) and [Erumban et al. \(2019\)](#), also rely on this sectoral mapping, although some combine consumer and intermediate goods into a single category for specific analytical purposes.

Following this approach, the present paper adopts the consumer goods manufacturing category as defined in the India Productivity Report. This sector includes the industries listed under “Manufacturing of Consumer Goods” in [Table 1](#). They correspond to ISIC Rev. 3.1 divisions 15–16, 17–19, 20, 21–22, and 36–37, covering:

- Food products, beverages and tobacco
- Textiles, apparel, leather and footwear
- Wood products
- Paper, printing and publishing
- Miscellaneous light manufacturing, including furniture, jewellery, toys, sporting goods, and other household-oriented items

In the KLEMS framework, these industries represent the final-use, household-oriented segment of manufacturing, and earlier literature consistently identifies them as the core of the consumer goods sector.

[Table 1](#) summarises how the 27 India KLEMS industries are grouped into nine sectors. This classification provides a clear and consistent basis for comparing employment elasticity in consumer goods manufacturing with other major sectors of the economy.

Table 1

Table 1 Mapping of 27 India KLEMS Industries into Nine Sectors			
Serial no.	ISIC Rev. 3.1 codes	Industry description	Sector
1	01, 02, 05	Agriculture, hunting, forestry and fishing	1. Agriculture
2	10–14	Mining and quarrying	2. Mining
3	15–16	Food products, beverages and tobacco	3. Manufacturing of consumer goods
4	17–19	Textiles, textile products, leather and footwear	3. Manufacturing of consumer goods
5	20	Wood and products of wood	3. Manufacturing of consumer goods
6	21–22	Pulp, paper, paper products, printing and publishing	3. Manufacturing of consumer goods
7	36–37	Manufacturing n.e.c.; recycling	3. Manufacturing of consumer goods
8	23	Coke, refined petroleum products and nuclear fuel	4. Manufacturing of intermediate goods
9	24	Chemicals and chemical products	4. Manufacturing of intermediate goods
10	25	Rubber and plastic products	4. Manufacturing of intermediate goods

11	26	Other non-metallic mineral products	4. Manufacturing of intermediate goods
12	27–28	Basic metals and fabricated metal products	4. Manufacturing of intermediate goods
13	29	Machinery n.e.c.	5. Manufacturing of investment goods
14	30–33	Electrical and optical equipment	5. Manufacturing of investment goods
15	34–35	Transport equipment	5. Manufacturing of investment goods
16	40–41	Electricity, gas and water supply	6. Utilities
17	45	Construction	7. Construction
18	50–52	Trade	8. Market services
19	55	Hotels and restaurants	8. Market services
20	60–63	Transport and storage	8. Market services
21	64	Post and telecommunication	8. Market services
22	65–67	Financial services	8. Market services
23	71–74	Business services	8. Market services
24	75	Public administration and defence; compulsory social security	9. Non-market services
25	80	Education	9. Non-market services
26	85	Health and social work	9. Non-market services
27	70, 90–93, 95–97	Other services (real estate and community, social and personal services)	9. Non-market services

Note. Adapted from Table 7 A.1 in Erumban et al. (2022), India Productivity Report, Centre for Development Economics, Delhi School of Economics and Reserve Bank of India.

4. STYLIZED FACTS

Table 2 shows that, even though the employment share of consumer goods manufacturing declines from 7.7 per cent to 6.1 per cent between 1991–92 and 2019–20, it remains one of the largest employing sectors outside agriculture. Within manufacturing, it is still the single biggest employer: both intermediate-goods and investment-goods manufacturing have much smaller employment shares throughout the period. Its value-added share stays broadly unchanged, which contrasts with the clear rise in investment-goods manufacturing and the strong expansion of market services. Taken together, the figures suggest that the consumer goods sector continues to play a major role in employment generation within manufacturing, even though its relative position in output has not increased in the way some other sectors have.

Table 2

Table 2 Sectoral Shares in Aggregate Employment and Real Value Added, 1991–92 and 2019–20						
Sector	Employment Share (%) 1991-92	Employment Share (%) 2019-20	Change (pp)	Real Value-Added Share (%) 1991-92	Real Value-Added Share (%) 2019-20	Change (pp)2
Agriculture	64.4	43	-21.4	32.0	15.1	-16.9
Mining	0.7	0.3	-0.4	5.3	2.4	-2.9
Consumer goods manufacturing	7.7	6.1	-1.6	5.0	5.1	-0.1

Intermediate-goods manufacturing	2.2	2.6	+0.4	7.4	7.8	+0.4
Investment-goods manufacturing	0.6	1.7	+1.1	2.1	4.1	+2.0
Utilities	0.3	0.5	+0.2	2.2	2.3	+0.1
Construction	3.7	11.6	+7.9	7.0	7.9	+0.9
Market services	12.0	23	+11	17.2	35.8	+18.6
Non-market services	8.3	11.2	+2.9	21.8	19.5	-2.3

Note. All Values are Calculated by the Author Using the India KLEMS Database January 2024 Release.

Table 3 shows that consumer goods manufacturing has remained one of the most labour-intensive parts of the economy. Its capital intensity is low in both years, ranking seventh out of nine sectors in 1991–92 and again in 2019–20. Within manufacturing, this places it well below intermediate-goods and investment-goods industries, both of which experience large increases in capital per worker over time. Because consumer goods manufacturing relies far less on capital than the other manufacturing groups, it continues to be the segment where employment prospects are naturally stronger. This contrast helps explain why, even when its output share does not grow much, the consumer goods sector still plays an important role in absorbing labour compared to the more capital-deepening manufacturing activities.

Table 3

Sector	1991-92	Rank (1991-92)	2019-20	Rank (2019-20)
Agriculture	62,818	8	1,81,533	9
Mining	5,17,309	4	40,69,978	2
Consumer goods manufacturing	2,04,273	7	8,34,531	7
Intermediate-goods manufacturing	5,09,578	5	24,62,443	3
Investment-goods manufacturing	5,63,362	3	15,29,960	5
Utilities	69,92,333	1	1,49,79,216	1
Construction	59,234	9	3,87,012	8
Market services	2,31,158	6	10,25,302	6
Non-market services	9,85,206	2	24,07,739	4

Table 4 shows that consumer goods manufacturing grew at a moderate pace, with employment rising by 0.66 per cent a year and real value added by a little over 6 per cent. While this output growth is comparable to other parts of manufacturing, its employment growth is clearly lower than intermediate-goods, investment-goods and utilities. Construction and market services record much stronger employment expansion, which explains why these sectors absorbed a large share of the workforce leaving agriculture. Viewed from the perspective of manufacturing as a whole, the consumer goods sector stands out as an industry where output growth has not translated into proportionate job growth, reinforcing its position as a relatively labour-using but slow-expanding employer within the broader set of manufacturing activities.

Table 4

Table 3 Average Annual Growth Rates of Employment and Real Value Added, 1991-92 to 2019-20		
Sector	Employment (%)	Real Value Added (%)
Agriculture	0.02	3.28
Mining	-1.46	3.12

Consumer goods manufacturing	0.66	6.07
Intermediate-goods manufacturing	2.01	6.19
Investment-goods manufacturing	4.98	8.47
Utilities	2.7	6.08
Construction	5.52	6.38
Market services	3.79	8.59
Non-market services	2.52	5.58

Note. All Values are Calculated by the Author Using the India KLEMS Database January 2024 Release. Growth Rates Represent Average Annual Compound Rates Over the Period 1991-92 and 2019-20.

5. DATA AND METHODOLOGY

5.1. DATA SOURCE AND PERIOD

The empirical analysis uses the India KLEMS Database (January 2024 release), which provides annual industry-level measures of employment and real value added for 27 sectors of the Indian economy. For this study, the 27 industries are aggregated into nine broad sectors, following the classification used in [Table 1](#). The sample runs from 1991–92 to 2019–20, covering the post-liberalisation period and ending just before the distortions caused by COVID-19. Following earlier work using India KLEMS data, the analysis is divided into two sub-periods: 1991–92 to 2002–03 and 2003–04 to 2019–20. Several studies identify 2003–04 as the beginning of a distinct second phase in India’s post-reform growth experience. [Goldar et al. \(2017\)](#), [Aggarwal and Goldar \(2019\)](#), and [Irshad and Qayed \(2023\)](#) note that productivity growth and integration with global markets strengthened after the early 2000s. [Ahluwalia \(2002\)](#), [Ahluwalia \(2018\)](#) also points out that key reforms affecting consumer goods industries—such as the removal of quantitative restrictions and the dismantling of small-scale industry reservation—were implemented around 2001–02, making the 1990s more of a transitional phase and the 2000s a shift to a more fully liberalised regime. Estimating the model separately for these two periods allows us to assess whether sectoral employment responsiveness changed once these reforms took effect.

5.2. DEFINITION OF VARIABLES

The analysis uses two main variables from the India KLEMS Database: employment and real value added. Employment refers to the number of persons engaged in each sector (in thousands), and real value added is measured in crore rupees at constant 2011–12 prices. Both variables are converted into natural logarithms for the estimation of elasticities.

In this paper, real value added is used as the measure of output, following the structure of the India KLEMS dataset. Throughout the analysis, the terms output and real value added are used interchangeably and refer to the value-added measure provided in KLEMS, rather than gross output.

5.3. MODEL SPECIFICATION

The following model is specified to allow us to compare the employment elasticity of consumer goods manufacturing with other sectors and to test whether these differences are statistically significant.

$$\ln(EMP_{it}) = \alpha_i + \beta \ln(VA_{it}) + \sum_{s \neq CG} \delta_s [\ln(VA_{it}) \times D_{si}] + \varepsilon_{it}. \quad (1)$$

In this equation:

- EMP_{it} is sectoral employment in sector i at time t .
- VA_{it} is real value added in sector i at time t .
- D_{si} is a sector dummy equal to 1 for sector s and 0 otherwise.
- CG denotes the consumer goods sector, which serves as the reference (omitted) category.
- $s \neq CG$ ensures that interaction terms are included only for non-consumer goods sectors.

From equation (1), the employment elasticity for the consumer goods sector is:

$$\varepsilon_{CG} = \beta, \quad (2)$$

and for any other sector s :

$$\varepsilon_s = \beta + \delta_s. \quad (3)$$

A positive δ_s means sector s has higher elasticity than consumer goods; a negative value means it has a lower elasticity.

This structure allows a direct statistical comparison between consumer goods manufacturing and every other sector for each time period. For each sector $s \neq CG$, we test the following hypothesis.

Null hypothesis: $H_0: \delta_s = 0$

Alternative hypothesis: $H_1: \delta_s \neq 0$

If H_0 cannot be rejected, the sector behaves similarly to consumer goods in terms of employment elasticity. If H_0 is rejected, the sign and magnitude of δ_s indicate whether that sector is more or less employment-intensive than the consumer goods manufacturing sector.

These comparisons are made separately for the two sub-periods (1991–92 to 2002–03 and 2003–04 to 2019–20), allowing us to examine whether sectoral differences relative to consumer goods manufacturing widened, narrowed, or remained unchanged over time.

5.4. ESTIMATION STRATEGY

The regression model in Equation (1) is estimated separately for the two post-liberalisation sub-periods. This allows us to see whether the employment elasticity of consumer goods manufacturing differs statistically from other sectors in each period. Because the model is in log-log form, the coefficients can be interpreted directly as elasticities or as differences in elasticities between the consumer goods sector and every other sector.

The estimation is carried out using ordinary least squares with heteroskedasticity-robust standard errors. The specification introduces sector differences only through the interaction terms, which is sufficient for comparing

elasticities across sectors. The main interest lies in the interaction coefficients, δ_s , which show whether a particular sector has a higher or lower employment elasticity than consumer goods and whether the difference is statistically significant.

Estimating the model separately for each sub-period helps identify whether such differences existed throughout the post-reform era or emerged only in the later years. This provides a simple way to examine how the employment responsiveness of the consumer goods sector compares with other sectors over time.

The next section presents the results for each sub-period and shows how the employment elasticity of the consumer goods sector compares with other major sectors.

6. RESULTS

6.1. SUMMARY STATISTICS

Before turning to the regression results, [Table 5](#) reports summary statistics for employment and real value added across the two sub-periods.

Table 5

Table 4 Summary Statistics for Employment and Real Value Added, 1991-92 to 2019-20

Variable	N	Mean	Std. De.v	Min	Max
Panel A: Sub period I, 1991-92 to 2002-03					
Employment	108	43,402	71,981	1,111	2,50,218
Real Value Added	108	3,80,841	3,31,654	50,971	11,29,863
Panel B: Sub period II, 2003-04 to 2019-20					
Employment	153	52,266	68,888	1,254	2,57,824
Real Value Added	153	9,44,131	8,94,640	1,07,560	47,33,585

Note. Summary Statistics are Reported in Levels (Not Logarithms). All Figures are Rounded to the nearest integer. Employment is Measured in Thousands of Persons. Real Value Added is Measured in ₹ Crore at 2011–12 Constant Prices.

6.2. SUB-PERIOD I (1991–92 TO 2002–03)

[Table 6](#) shows the regression results for the first sub-period. The employment elasticity of consumer goods manufacturing—the base sector—is positive (0.36) and statistically significant. This confirms that, in the 1990s, output growth in the consumer goods sector was associated with meaningful job creation. A notable result is that several other major sectors do not differ significantly from consumer goods in this period. Intermediate-goods manufacturing as well as investment goods manufacturing and both service-sector groups (market and non-market services) have statistically similar elasticities, indicating that consumer goods did not stand out as either more or less employment-responsive than these sectors in the 1990s. Construction is the only sector that shows a clearly higher elasticity than consumer goods, consistent with its traditional role as a labour-absorbing activity. On the other hand, agriculture and mining have significantly lower elasticities, but these sectors sit outside the core industrial comparison. Overall, the results from Sub-period I suggest that consumer goods manufacturing functioned as a typical labour-using industrial sector. Its employment responsiveness was neither unusually high nor unusually low relative to other manufacturing and service activities.

Table 6

Table 5 Regression Results for Sub-period I (1991–92 to 2002–03)			
Variable	Coefficient	Robust Std. Error	Sector-specific elasticity
Dependent variable: ln (Employment)			
ln (Value Added) (Consumer Good Manufacturing: base sector)	.36 *	.06	.36
Agriculture × ln (Value Added)	-.18 *	.07	.17
Mining × ln (Value Added)	-.28 *	.07	.07
Intermediate Goods × ln (Value Added)	-.04	.07	.32
Investment Goods × ln (Value Added)	.14	.08	.50
Utilities × ln (Value Added)	-.26 *	.07	.10
Construction × ln (Value Added)	.39 *	.08	.75
Market Services × ln (Value Added)	.11	.06	.46
Non-Market Services × ln (Value Added)	.13	.07	.49
Constant	6.0	.75	–
R²	.9997	–	–
Prob > F	0.0000	–	–
N	108	–	–

Note. Sector-Specific Elasticity Equals the Sum of the Base Coefficient and the Sector Interaction Term. Coefficients of Sector Dummies are Omitted for Brevity.

*p < 0.05.

6.3. SUB-PERIOD II (2003–04 TO 2019–20)

The results change quite sharply in the second sub-period. Table 7 shows that the employment elasticity of consumer goods manufacturing becomes negative (–0.09) and statistically significant. This implies that output growth was now associated with employment decline in the sector—an important structural shift compared with the earlier period. More importantly, the comparison with other sectors reveals a clear loss of relative position. Almost all other major industrial sectors now have significantly higher elasticities than consumer goods. Intermediate goods, investment goods, utilities, construction, and both service categories all show positive and statistically significant coefficients that exceed the consumer goods elasticity by wide margins. This stands in contrast to the earlier period, where consumer goods sector was broadly similar to its industrial counterparts. The widening statistical gaps in the later period indicate that the sector no longer behaved like a labour-using component of manufacturing. Agriculture and mining also display negative elasticities in this period, but these sectors are not comparable to the industrial structure under study. Within manufacturing and services, consumer goods sector is effectively the only major sector in which employment fell as output expanded.

Table 7

Table 6 Regression Results for Sub-period II (2003–04 to 2019–20)			
Variable	Coefficient	Robust Std. Error	Sector-specific elasticity
Dependent variable: ln (Employment)			
ln (Value Added) (Consumer Good Manufacturing: base sector)	-.09 *	.03	-.09
Agriculture × ln (Value Added)	-.33 *	.10	-.42

Mining × ln (Value Added)	-.63 *	.17	-.71
Intermediate Goods × ln (Value Added)	.29 *	.03	.20
Investment Goods × ln (Value Added)	.70 *	.04	.61
Utilities × ln (Value Added)	.68 *	.04	.59
Construction × ln (Value Added)	1.03 *	.04	.95
Market Services × ln (Value Added)	.45 *	.03	.36
Non-Market Services × ln (Value Added)	.47 *	.03	.38
Constant	11.63 *	.30	–
R ²	0.9992	–	–
Prob > F	0.0000	–	–
N	153	–	–

Note. Sector-Specific Elasticity Equals the Sum of the Base Coefficient and the Sector Interaction Term. Coefficients of Sector Dummies are Omitted for Brevity.

*p < 0.05.

7. CONCLUSION

This paper examined how the employment elasticity of consumer goods manufacturing compares with other major sectors of the Indian economy during the post-liberalisation period. Using India KLEMS data for 1991–92 to 2019–20 and estimating a simple log–log model of employment on real value added, the analysis focused on whether the employment responsiveness of the consumer goods sector differs statistically from other sectors, and whether these differences changed over time. The period was divided into two sub-phases following the broader literature on India's post-reform growth experience and the timing of key policy changes affecting consumer goods manufacturing.

The results show a clear shift in the position of the consumer goods sector. In the first sub-period (1991–92 to 2002–03), employment elasticity in consumer goods manufacturing was positive and statistically significant, and it did not differ markedly from intermediate goods, investment goods, or either service category. In this phase, the sector behaved much like other labour-using activities in the economy. Construction had the highest elasticity, while agriculture and mining had significantly lower values, but within the core industrial structure, consumer goods was not an outlier. This pattern is broadly consistent with earlier studies that describe the 1990s as a transitional period with gradual liberalisation and slow adjustment in labour-intensive industries.

In contrast, the second sub-period (2003–04 to 2019–20) shows a pronounced change. The employment elasticity of consumer goods manufacturing becomes negative, indicating that output growth was now associated with employment decline. At the same time, almost all major sectors record elasticities that are significantly higher than the consumer goods sector. Intermediate goods, investment goods, utilities, construction, and both service groups display positive elasticities, many of them statistically significant. This reversal suggests that the consumer goods sector lost its relative employment advantage and moved towards a pattern of labour-saving growth. This finding echoes concerns in the wider literature about rising capital intensity, technological upgrading, and increasing competitive pressures in labour-intensive manufacturing after the early 2000s.

The evolution across the two sub-periods has important implications. The fact that consumer goods manufacturing was broadly similar to other sectors in the 1990s but fell behind sharply in the more liberalised 2000s suggests that the deeper integration of the Indian economy—along with the removal of import restrictions

and dismantling of small-scale industry reservation—may have had uneven employment effects across manufacturing groups. While sectors such as intermediate and investment goods appear to have adjusted without losing employment responsiveness, consumer goods industries seem to have experienced structural changes that weakened their ability to absorb labour even as output expanded.

These results point to a broader shift in India's industrial employment structure. Consumer goods manufacturing has historically been regarded as a labour-intensive, demand-driven sector with strong linkages to household consumption. Its declining employment elasticity in the later period therefore raises questions about its ability to contribute to formal job creation in the future. The findings reinforce the need to examine the role of capital intensity, technology choices, competition from imported goods, and the growing presence of informal manufacturing, all of which may shape the employment potential of consumer goods industries.

While the paper has focused on a simple and transparent framework, the results highlight a clear empirical pattern: the relative position of consumer goods manufacturing in India's employment structure has weakened over time. Future research could explore industry-level heterogeneity within the consumer goods category, or examine the role of wages, exports, and technological change in explaining the observed decline in elasticity. Nonetheless, the evidence presented here shows that the sector's employment behaviour has changed significantly in the post-reform era, and that these changes should be taken into account when assessing its role in India's economic growth and labour-market prospects.

CONFLICT OF INTERESTS

None.

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