Analysis of Output and Employment of Trade in India: A Case of rising Capital Intensity and Its Implications

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Abstract:
Trade is by far labour-intensive sector. The sector is dominated by unorganized activities. Though, post-1990s, the share of organized sector has been rising but at slow pace. Till 2003-04, the sector has grown well as a consequence, output has risen and concomitant increase in the share of employment has been noticed. From 2003-04 onwards a significant increase in capital intensity has been noticed which increased the productivity of the sector. Therefore, contribution of the sector in employment generation has decimated, despite the fact that there was no decline in output. Rise in capital intensity is attributed to formalisation of the sector and resultant increase in investment.

Keywords: Trade, Output, Employment, Structural Change, Growth, Development

JEL Code: E24, O47, B17, L8

How to cite:

1. Introduction
The acceleration in growth India has experienced in the post-1980 period, the movement from the ‘hindu’ rate of growth to a higher growth trajectory, has been attributed to the service sector’s exceptional growth (Bhattacharya and Mitra,1990, Rodrik & Subramanian, 2005). The eighties’ reforms drive was a half-hearted- tinkering with policy and a complete overhaul was initiated only in the nineties- on structural change and macroeconomic stabilization under the auspices of IMF and is considered as a sea-change in Indian economy. India’s growth performance after 1980, however, defies the classical growth pattern. Not only has it not been preceded by significant industrialization, the enormous rise of the service sector’s share in output since 1980 has not led to a concomitant rise in the sector’s employment share. This is a unique path of growth because that violates the classical three-sector growth trajectory. However, Kaldor and Kuznets argued for the more influential view that economic growth can only be materialized owing to ‘industrialization’.

This peculiarity has to be understood of course with reference to the unique features of the tertiary sector in general – where the sector is blend of variegated services, both traditional as well as modern, and yet with common characteristics that allow them to be collectively
distinguished from the goods producing sectors. Like the other sectors, in India services too have organized and unorganized components.

To advance the understanding of the somewhat unique growth process in India, this article takes up the careful study the trade. It has been attempted to study the output trends of trade, from 1980-81 onwards and also corresponding employment trends. The objective is to understand the factors driving a rapid growth of trade services before 2003-04, and how the employment prospect of the sector get reduced? Also, it is attempted to explain the role of capital in raising the productivity of the sector after 2003-04.

2. Literature Review

Trade is one of the oldest services, and was always dominated by the unorganized sector. Use of technology in the sector has traditionally been limited and it is naturally predisposed to be mostly a labor-intensive sector with limited scope for productivity improvement. However, in the 21st century, the sector has undergone through rising capital intensity with big business houses are showing interest with huge investment.

The initial underplaying of the role of services in the growth process could be traced back to distinction between manufacturing and service made by Adam Smith (1776) who emphasized that services ‘perish as soon as they are produced’. The practices of ignoring or underplaying services continues, and it is termed as ‘residual’ or ‘tertiary’ or ‘post-industrial’ even in the present times, though the services sector is playing sizable role in every sector of the economy.

Trade is one of the oldest services, and also the largest in terms of contribution in GDP. Trade facilitates the distribution of goods. The role of trade, wholesale and retail, in economic development is so pervasive and integral that it becomes inalienable and invisible. The genesis of trade may be traced into uneven distribution of goods and natural resources, and comparative advantage of production. Ordinarily, these services were provided by merchants, in a very unorganized manner. With the big-bang phenomenon of industrialization, the scope of trade grows even faster, and gradually, organised trade activities have gain currency. Organized trade, characterized by high productivity, skilled labour (professional embodied with human capital), high wage, legally stipulated hours of work, skill/capital-intensive technology etc. becomes prominent relative to the relatively low productivity unorganized trade of the past. In recent times, a number of new avenues were created to further facilitate the trade activities world over. For example, supermarket in this regard is an important labor-saving innovation, which has dramatically changed the nature of trade services, especially retail trade. Under one roof consumers are replete with a score of goods. Supermarket is a large-scale method of distributive services. Artificial intelligence is a new potent tool in this field, which can replace selling agents in large scale. In the era of cost-cutting, robots with artificial intelligence can be a game changer for trade. E-commerce is growing by leap and bounds, and giving a credible threat to brick-and-mortar shops. Further, with growing urbanisation, the role of retail trade is likely to rise (Joseph, Soundararajan, Gupta, & Sahu, 2008).

CSO defines trade, “comprising wholesale and retail trade, in following manner- it deals in all commodities. It comprises domestic, imported or exported. It covers wide range of activities of agents, brokers and auctioneers, who engaged in selling or purchasing of goods. Wholesale trade and retail trade veritable activities- resell without transformation, new and
used goods generally to retailers and industries, commercial units, institutional and professional users or to other wholesalers.”

As per NIC 2004 classification, this sector consists of following five categories:

- “Maintenance and repair of motor vehicles
- Sale of motor vehicles
- Whole sale trade except of motor vehicles and auctioning activities
- Repair of personal household goods and
- Retail trade (except motor vehicles)”.

GVA estimates of trade account the ‘activities’ of agents engaged in the sale or purchase of goods (new or used). The term ‘activities’ is ambiguous. It may refer to services provided by the agents, but the agents provide a plethora of services and some of the services may neither be associated with retail trade nor be with wholesale trade. The ‘activities’ related to buying and selling of goods, new and old has been increased in the past for both retail and wholesale trade sector. But question remains that how the contribution of agents’ services is included in the GVA estimates of the trade sector.

3. Research Method

It’s based on simple comparative empirical analysis of data of output and employment of trade in India. Quantitative analysis of output is based on data collected from National Accounts Statistics (NAS). In the analysis used data of base year 2004-05 and back series. On 2004-05 back series, data is available till the year 2011-12. Therefore, to explain long periods, 1950 to 2012, we used 2004-05 data. However, for latest analysis of output along with employment, we prefer to use 2011-12 series GDP data of KLEMS India (published by RBI). Employment data is collected primarily from two sources- NSS and KLEMS India. Principal status and subsidiary status (PS+SS) is used for analysis.

4. Result and Discussion

4.1. Output Trends of Trade

Trade is one of the oldest services and has always had a significant share in GDP. At current prices, trade’s share was 5.95 percent in 1950-51 while at 2004-05 prices it stood at 7.81 per cent. Over the period, the share of trade in GDP has increased steadily (Figure 1), and this has been true both before and after of 1980. The only difference is that for several years before 1980, the trade share in GDP at current prices lay below that at 2004-05 constant prices, but this gap was eliminated in the 1970s.
Within the services sector GDP, trade accounted for 26.4 percent in 1950-51 at constant price and a slightly higher to 26.5 percent in 2011-12. In 1978-79, it achieved the highest share. What is remarkable to note here is that any increase in the trade share within services was limited to the share at current prices and happened in the period before 1980, and a slight recovery from a previous dip in the 2010s decade. Almost no change took place in the share during 1990s, despite economic reform. In fact, the constant price share has remained consistently below the average levels prevailing between the mid-1960s and the end of the 1980s.

Like almost all sectors of the Indian economy, trade is divisible into organized and unorganized components. Data for this division is not available in the back-series with 2004-05 series. Therefore, the 1999-00 base year series data on factor incomes for the period 1980-81 to 2010-11 has been used here to look at the relative shares of organized and unorganized components in trade over time.

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As Figures 3 shows, trade has always been dominated by the unorganized sector. However, reversing a slow trend of decline in the 1980s, after liberalization there was steady trend of increase in the organized sector’s share in Trade NDP that continued for a decade and a half. This carried the organized sector’s share from less than 5 percent at the beginning of the 1990s to nearly 33 percent by 2006-07, subsequent to which there was a dip in this. However, 2005-06 and 2006-07 were somewhat exceptional years when this share was much higher than the years immediately before or after. If we take them out of the frame, a steady process of trade becoming more organized is perceptible through the 1990s and till the beginning of the high growth phase from 2003-04, after which the distribution that had emerged, of about four-fifths of the NDP coming from the unorganized sector and one-fifth from the organized, stabilized.

![Figure 3: Distribution of NDP of Trade between Organized and Unorganized Sectors, 1980-81 to 2010-11](image)

Source: Based on NAS data

Retailing in India, even of products produced by the organized sector, has always been dominated by mom & pop stores (kirana shops), roadside grocery shops, paan-beedi shops, hawkers and vendors, most of which belong to the unorganized component. According to the study of ICRIER, the unorganised sector dominates in food and grocery business, and the proportion of organised sector is pittance. In India, unorganised sector may have dominated the trade sector, in contrast to Europe where the share of organized retail is as high as 80 percent in the United Kingdom, Germany and France per cent and in USA where it is 85 per cent. Even among the emerging economies, the share of organised retails is well above India (Hoda, 2008): Brazil (36); China (20); Indonesia (30); Korea (15) and Malaysia (55). The scope for expansion of organised retail was therefore immense.

With liberalization, trade did begin exhibiting an inclination towards formalisation- rise in the share of organised sector in output, with the rise of middle class and corporate-backed retail sectors growing fast. With the opening of the economy, inflow-outflow of goods and services has risen many folds. Trade GVA includes both new and old products. The second-hand goods market has also grown in leap and bounds in the past. Government has also been
encouraging recycling-reuse of products for environmental purposes. Over the period, the sector became more competitive and complex. The need for qualified and specialists became indispensable. The MBA, BBA and sundry professionals were engaged in these activities in supermarket and other organised trading activities. Marketing has become a potent tool for promoting products. Foreign capital investment has risen in this sector, which brings sophisticated technology. Government has relaxed the norms for promoting investment in this sector. Though the role of the government in allowing FDI has gone with snail’s pace as fearing it may drive out the unorganised sector, especially the mom-and-pop shops. By 2006, FDI was allowed in single-brand up to 51 per cent. The pace of construction of shopping malls also picked up in the 2000s. In 1999, India had just 3 shopping malls. By end of 2006, the number had gone up to whopping 137, and their number was estimated to be about 479 by end of 2008 (ICICI Property Services-Technopak, 2007). Subsequently, digital technologies also came into the picture. The unprecedented rise of ICT created the possibilities for trade services through online platforms i.e- e-commerce. For instance, in China the way Alibaba progressed in short span of time. India’s trade sector could also benefit from similar activities (Mehrotra, 2019), though, the penetration of technology is quite low in India.

All these impetuses were the harbinger of formalisation of the trade sector, in the post-reform period. However, the process of change has been modest and at slow pace. Also, it has not taken place on a sustained basis because of the several challenges faced. Retail trade is heavily depended on logistic support, and the logistic cost was as high as 15% of our GDP in 2005-06. India’s rank has declined from 44th in 2016 to 35th in 2018 in the Logistics Performance Index rankings. Foreign investment is also not very increasing, though government has approved as many as 51% foreign investment in multi-brand and 100% in single brand retail. Though, government has started a slew of measures to boost credit facilities, but end result is not very encouraging. Organised retail is only 10% and e-commerce accounts for 3% only (Economic Times, 2018). The organized sector is also more affected by archaic laws and acts and red-tapism – thus it was determined that the retail trade industry has to secure a total of 45 licenses, clearances, registration certificates or notification requirements for each outlet (Report of the High Level Group on services sector, 2008). One of the important State level Acts which regulates retail trade, the ‘Shops & Establishment Act’, was originally enacted in the 1950s.

4.2. Structural Changes in Trade and Determining Factors

Trade is a sector that deals in tradable products. Its growth should therefore be expected to have a close relationship with the growth in production of tradables and the degree to which these are actually traded. As far as tradability is concerned, goods in general possess this characteristic while many services do not. Within the goods producing sectors, manufacturing is the most significant in any process of structural change. Moreover, the component of the manufacturing sector in India which produced mainly for local use had ceased to be a significant part of that sector even before independence. In post-1980s the sector exhibited a very lacklustre performance on output and employment front. In the case of the other major goods producing sector, namely agriculture, too there had been a process of commercialization during the colonial period. At the time of Independence, the sector was in total ramshackle and the marketed surplus of the sector was palpably low but increased over time after independence even as the use of purchased inputs like chemical fertilizers, pesticides, commercial seeds, diesel, etc. also went up. In relation to the impetus the sector
provided for growth of trade, therefore, these would have partially counteracted the effects of the declining relative significance of agriculture in GDP.

Figure 4 shows that for the period before 1980-81, there clear correlation between the changes in trade and manufacturing shares in GDP. The share was 10.5 and 6 respectively for manufacturing and trade in 1950-51. In 1980-81, it became 16.2 and 10.8 respectively. However, even though the manufacturing sector’s share in GDP remained nearly unchanged after that, the share of trade continued to rise. After 2009-10, the share of trade become higher than that of manufacturing.

Figure 4: Percentage Share of Manufacturing and Trade in GDP (current price)
Source: NAS, CSO.

The picture is slightly different when we look at constant price data (Figure 7). Here, the divergence between the trends of movement between the two shares appears to have happened a little later, from the mid-1990s.

Figure 5: Percentage Share of Manufacturing and Trade in GDP (constant price)
Source: NAS, CSO.
After 2009-10, no significant change is found in manufacturing share. But rise in the share of trade continued. It means trade’s growth must have been induced by some other factors. Furthermore, analysis of change in the share of manufacturing and trade entails more than the fact that the performance of manufacturing determines the performance of trade. Rate of rise of trade share is quite high than the manufacturing. Furthermore, the rise is quite high for current price than the constant price.

Table 1 depicts the manufacturing elasticity of trade sector- responsiveness of trade output to change in manufacturing output – in different periods. It shows, firstly, that elasticity tends to increase in any period of relatively slow industrial growth (both 1965-1980 and 1995-2003 are such periods). Additionally, what is notable is the general rise in the elasticity after 1980, most pronounced in the period 1995-2003, suggesting that in this period the trade sector’s growth became less dependent on manufacturing growth and came to be influenced by other factors.

Table 1: Manufacturing elasticity of Trade

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1950-51</td>
<td>0.79</td>
<td>1.03</td>
<td>0.99</td>
</tr>
<tr>
<td>1964-65</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1979-80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980-81</td>
<td>0.97</td>
<td>1.38</td>
<td>1.02</td>
</tr>
<tr>
<td>1994-95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002-03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003-04</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008-09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012-13</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: calculation based on CSO data.

The broader picture of the growth of trade relative to the goods producing sectors is presented in Figures 8 and 9, which show how the ratio of trade GDP to those of different combinations of goods producing sectors moved over time. Both bears out the fact that trade GDP before 1980 rose faster than that of goods producing sectors as a whole (agriculture, manufacturing and mining) but not relative to industrial GDP. The overall rise therefore could be attributable to the greater penetration of market relationships into an otherwise slow growing agriculture. However, this cannot explain the rising ratio in the period of increased globalization of the Indian economy – by which time the transformation in agriculture was completed and trade grew faster than even industry. Transformation in agriculture has also been witnessed.
The interesting factor that reveals itself as an important factor in driving the growth of the trade sector independent of the growth of goods production is foreign trade in goods or merchandise trade. When this is added to the GDP of goods producing sectors and the ratio of trade GDP to this combined total is seen, the post-1980 rising trend seen in the other ratios completely disappears. At constant prices in fact, the trend is downwards.

If we simply look at the ratio of trade GDP to the value of foreign merchandise trade, a clear reversal of trend can be seen to have taken place in the period between 1970 and the mid-1980s. From Figure 10 it is quite discernible that in 1970-71, the ratio is highest, and then in 1986-87 a second peak (crest) was seen. Since 1986-87 onward, the declining trend in the ratio is palpable. Therefore, it is found that till 1970-71, the role of domestic factors was dominating in setting the contour of trade share in national income. As the role of domestic factors, especially the performance of manufacturing (key factor) subsided, the influence of foreign factors was decisive in determining the share of trade during the period of liberalization.
Figures 9 to 11 show the relation between trade and foreign (international) trade for various period. For 1950 to 1970, the R-square is quite low, but in the subsequent period, the fit of the regression equation much better. These results further fortify the conclusion that the acceleration in growth of the trade sector during liberalization was accompanied by a transition from a scenario where the growth of the sector was mainly influenced by growth of the goods producing sectors in the economy to one where foreign trade became the most dominant factor – and enabled trade to expand faster than the goods producing sectors and contribute to the process of increasing importance of services in Indian growth.

Figure 9: Relation of Percentage share of Trade and Foreign Trade, 1950 to 2012
Source: Calculation based on NAS, CSO.
4.3. **Trade: Output vis-à-vis Employment**

Table 2 shows the patterns of change in the broad structure of output and employment since the early 1980s, and where trade is placed in that process. Looking at the three broad sectors, it can be seen that the structural change in output has taken place without a corresponding structural change in employment, though both have the same direction. In 1983, primary sector accounted for 41% of total output and as much as 69% of total employment. The share of employment was and remained disproportionately higher. As time progressed, the share of primary activities in GDP declined rapidly but decline in the share of employment has not taken place in the same proportion. Secondary sector’s share in GDP on the other hand increased at a slow pace and so did its share of employment was also roughly in the same
proportion. However, historically manufacturing is considered to be job provider. But the middle is missing in our Indian economy in both fronts, output and employment (Mehrotra, 2019).

The greatest increase in GDP share has happened in the case of the tertiary sector. This sector not only had the highest relative product per worker at the beginning, it has also shown no consistent and significant decline like the ones observed in the primary and secondary sector. However, looking at the trends of various sectors, one can see quite clearly that there is heterogeneity underlying the overall picture for services. Further, as can be seen from Table 2, this difference in their employment shares has also been much higher than in their shares in GDP. In the case of trade, its share in both GDP as well as employment have tended to be close to each other.

Table 2: Percentage Share of GDP of Selected Sectors along with Employment Share in Total Employment in parentheses

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<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>40.46</td>
<td>34.62</td>
<td>32.46</td>
<td>27.82</td>
<td>24.77</td>
<td>18.66</td>
<td>19.00</td>
<td>15.62</td>
</tr>
<tr>
<td>Second</td>
<td>25.49</td>
<td>26.67</td>
<td>26.66</td>
<td>27.16</td>
<td>27.74</td>
<td>31.35</td>
<td>30.76</td>
<td>29.90</td>
</tr>
<tr>
<td>Tertiary</td>
<td>34.05</td>
<td>38.71</td>
<td>40.89</td>
<td>45.02</td>
<td>47.49</td>
<td>50.00</td>
<td>50.23</td>
<td>54.48</td>
</tr>
<tr>
<td>Trade</td>
<td>6.98</td>
<td>7.45</td>
<td>7.30</td>
<td>8.65</td>
<td>9.70</td>
<td>9.36</td>
<td>10.04</td>
<td>12.19</td>
</tr>
</tbody>
</table>

Source: Calculation based on India KLEMS database. *data in the parentheses show share of employment.

A slightly longer and more continuous picture is presented in Figure 3 making use of the India KLEMS data with 2011-12 base year. This shows the trends in GDP (both at current as well as constant prices) and employment shares of trade for the period. Thus, in the case of trade, the decade of the 1980s saw its employment share increase faster than its share in GDP but the exact opposite situation marked the last decade of the period till 2018-19.
Table 3 bring out the important turning points. For the entire period from 1980-81 to 2018-19, the share of trade in both output as well as employment has increased. Further, the increase of trade share in employment was greater than in output. However, the larger part of its increase in employment share took place up to 2003-04, though the increase in GDP share after was as much as till then. The further break-up of the periods before and after 2003-04 into two sub-periods each also show how that that process of change gathered strength.

Table 3: Changes in Shares of Trade in Value Added and Employment

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade VA Current</td>
<td>4.46</td>
<td>0.52</td>
<td>1.70</td>
<td>0.65</td>
</tr>
<tr>
<td>Trade VA Constant</td>
<td>5.36</td>
<td>0.45</td>
<td>2.11</td>
<td>0.34</td>
</tr>
<tr>
<td>Trade Employment</td>
<td>5.52</td>
<td>1.22</td>
<td>2.34</td>
<td>0.70</td>
</tr>
</tbody>
</table>

Source: India KLEMS.

Structure of Employment by Type

An examination of the structure of employment by type of the trade shows that self-employment has always been the dominant category of employment, followed by regular salaried. Casual employment on the other hand has been a relatively small portion of employment.
Table 4: Structure of Employment by Type (%)

<table>
<thead>
<tr>
<th>Survey Round</th>
<th>SE Trade</th>
<th>RE</th>
<th>CE</th>
<th>SE Services</th>
<th>RE</th>
<th>CE</th>
</tr>
</thead>
<tbody>
<tr>
<td>38th round</td>
<td>84.19</td>
<td>11.47</td>
<td>4.34</td>
<td>46.39</td>
<td>44.13</td>
<td>9.48</td>
</tr>
<tr>
<td>43rd round</td>
<td>84.62</td>
<td>11.25</td>
<td>4.13</td>
<td>48.01</td>
<td>42.3</td>
<td>9.69</td>
</tr>
<tr>
<td>50th round</td>
<td>83.71</td>
<td>12.22</td>
<td>4.07</td>
<td>49.81</td>
<td>40.86</td>
<td>9.34</td>
</tr>
<tr>
<td>55th round</td>
<td>75.73</td>
<td>16.55</td>
<td>7.72</td>
<td>48.18</td>
<td>40.97</td>
<td>10.85</td>
</tr>
<tr>
<td>61th round</td>
<td>78.16</td>
<td>16.57</td>
<td>5.27</td>
<td>52.04</td>
<td>39.89</td>
<td>8.07</td>
</tr>
<tr>
<td>66th round</td>
<td>78.31</td>
<td>16.64</td>
<td>5.05</td>
<td>49.6</td>
<td>42.11</td>
<td>8.29</td>
</tr>
<tr>
<td>68th round</td>
<td>75.49</td>
<td>19.06</td>
<td>5.44</td>
<td>49.52</td>
<td>43.57</td>
<td>6.9</td>
</tr>
<tr>
<td>PLFS 2017-18</td>
<td>70.64</td>
<td>24.93</td>
<td>4.43</td>
<td>45.84</td>
<td>48.66</td>
<td>5.5</td>
</tr>
<tr>
<td>PLFS 2018-19</td>
<td>70.15</td>
<td>25.53</td>
<td>4.32</td>
<td>44.96</td>
<td>49.6</td>
<td>5.44</td>
</tr>
</tbody>
</table>

Source: NSSO. Note: SE- Self-employed, CE- Casual employed, RE- Regular employed.

Over the long term, a trend is seen of shift from self-employment towards regular employment in the case of trade. It is believed that regular employment is largely created in organized sector, on the contrary, unorganized sector generates self-employed and casual employment. Thus, the dominance of self-employment in trade reflects the fact that trade is unorganized sector dominated, while the trend of increase in regular employment is consistent with the rising share of organized trade. On the other hand, when the share of its unorganized component was very high, it correlates well with the high share of self-employment, and the reversal thereafter indicates the ceasing of that process of increasing importance of unorganized, and rise in the share of organized. However, structural changes in employment have been slower than that of output for trade.

Employment and Output Growth: Employment Elasticity and Productivity Trends

In this section, we looked at the relative trend of the share of trade in output and employment. However, it is worth mentioning that the work-participation rates have been falling in India in the 21st century, beginning precisely when growth rates of GDP accelerated. Therefore, it is important to not only compare shares but also the rates of growth of employment vis-a-vis those of output. This we do in this section along with the two related concepts that are also relevant in this regard — namely, labour productivity and employment elasticity of growth.

Employment Elasticity

The employment elasticity is ratio of percentage change in employment to percentage change in income. In other words, employment elasticity is the responsiveness of employment to change in output. Employment intensity of the service sector is determined by primarily, structural characteristics- technological change, policy intervention, productivity growth, international competition, labour market reforms, economic structure (Pattanaik & Nayak, 2010). Significance of employment elasticity is it depicts the ability of the economy or sector to generate employment due to growth of output. Employment elasticity is not free from deficiencies though. Calculation of employment elasticity is done with the assumption that the technology, government policies, wages are given. The relation between output
production and employment generation is not linear or unidirectional (Misra & Suresh, Estimating Employment Elasticity of Growth for the Indian Economy, 2014).

Table 5: Employment Elasticity of the Indian Economy (CAGR Approach)

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment Growth</th>
<th>GDP Growth</th>
<th>Elasticity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972-73 to 1977-78</td>
<td>2.6</td>
<td>4.6</td>
<td>0.57</td>
</tr>
<tr>
<td>1977-78 to 1983</td>
<td>2.1</td>
<td>3.9</td>
<td>0.54</td>
</tr>
<tr>
<td>1983 to 1987-88</td>
<td>1.7</td>
<td>4.0</td>
<td>0.42</td>
</tr>
<tr>
<td>1993-94 to 1999-2000</td>
<td>1.0</td>
<td>6.8</td>
<td>0.15</td>
</tr>
<tr>
<td>1999-2000 to 2004-05</td>
<td>2.8</td>
<td>5.7</td>
<td>0.50</td>
</tr>
<tr>
<td>2004-05 to 2009-10</td>
<td>0.1</td>
<td>8.7</td>
<td>0.01</td>
</tr>
<tr>
<td>2009-10 to 2011-12</td>
<td>1.4</td>
<td>7.4</td>
<td>0.18</td>
</tr>
<tr>
<td>1999-00 to 2011-12</td>
<td>1.5</td>
<td>7.3</td>
<td>0.20</td>
</tr>
<tr>
<td>1993-94 to 2011-12</td>
<td>1.1</td>
<td>6.0</td>
<td>0.18</td>
</tr>
</tbody>
</table>


A general drift downwards of the employment elasticity of Indian growth is noticeable in Table 5. It declined from 0.57 in the period 1972-73 to 1977-78 to as low as 0.15 in 1993-94 to 1999-2000. However, CAGR of GDP is concerned, it was roughly 4 per cent during 1972-73 to 1987-88. During 1993-94 to 1999-2000, the CAGR of GDP was quite handsome, as high as 6.8 per cent. This is why the period is called ‘jobless growth’. In the very next period, 1999-2000 to 2004-05, the employment elasticity was very high. The reason was high employment growth. Mehrotra et al (2014) has termed this phenomenon as progressive structural change as large amount of job were, for the first time, created in non-agriculture sector. During 1999-2000 to 2004-05, non-farm employment has grown by 7.5 million per year on an average. However, on average 12 million per annum were joining labor force in the same intervening period.

The decline in elasticity of employment has been followed by a concomitant decline in unemployment rate between 1999-2000 and 2009-10. It may be attributes to secular fall in labor force participation rate (LFPR). The decline in LFPR is quite palpable rural, especially females. Part of this is possibly because en masse persons are opting for education or skill enhancement programme. The argument is supported by recent trends in rising Gross Enrolment Ratio (GER). It has risen from 20.5 per cent (1993-4) to 24.3 per cent (2004-5), and further to 26.6 per cent in 2009-10 (Thomas, 2012; Chaudhary, 2011; Himanshu, 2011; Misra & Suresh, 2014). The rise was much faster in rural areas, and especially among females (GoI, 2013). As a result, the unemployment rate went down. However, compared to these numbers, the number of available jobs into which such an educated workforce could be absorbed have not grown anywhere close to the requisite degree.
Table 6: Employment Elasticity of Trade

<table>
<thead>
<tr>
<th></th>
<th>38th-43rd</th>
<th>43rd-50th</th>
<th>50th-55th</th>
<th>55th-61st</th>
<th>61st-66th</th>
<th>66th-68th</th>
<th>50th-68th</th>
<th>38th-68th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade</td>
<td>0.13</td>
<td>0.31</td>
<td>0.26</td>
<td>-0.02</td>
<td>0.00</td>
<td>-3.78</td>
<td>2.72</td>
<td>1.55</td>
</tr>
<tr>
<td>Organized sector</td>
<td>-0.36</td>
<td>0.24</td>
<td>-0.71</td>
<td>0.04</td>
<td>0.01</td>
<td>-4.09</td>
<td>2.38</td>
<td>1.42</td>
</tr>
<tr>
<td>Unorganized sector</td>
<td>0.21</td>
<td>0.31</td>
<td>0.40</td>
<td>-0.02</td>
<td>0.00</td>
<td>-3.77</td>
<td>2.76</td>
<td>1.57</td>
</tr>
</tbody>
</table>

Source: Calculated based on NSSO and CSO data.

Table 6 shows that the employment elasticity of trade has not been very encouraging since 1980s. However, before economic reforms employability of the sector was much greater. In the post-90s, it declined consistently. During 2009-10 and 2011-12, it became negative even. Not just the Organized sector, even the Unorganized sector’s employment elasticity has been poor in the 21st century. Between 1999-2000 and 2004-05, when a progressive structural change was taking place, and 2004-05 has registered highest ever non-farm employment, trade still exhibited poor or negative employment elasticity.

A remarkable transition is palpable in trade sector. The essence of the transition is captured in subsequent Figures 4 and 5. Figure 4 shows that the capital intensity of trade is constantly rising. The rise in capital intensity is quite significant after 2003-04.

Figure 13: Capital Intensity (Capital Stock at 2011-12 Prices per Employed Person) of Trade, 1980-81 to 2018-19
Source: India KLEMS
In fact, as Figure 14 shows, value added per unit of capital in trade has declined. Thus, the return to investment in trading activities became relatively far more attractive, a means of increasing both capital as well as labor productivity. That appears to be the reason why the capital stock in trade, which had tended to grow relatively slower since 1980 saw a huge spurt from 2003-04 onwards.

5. Conclusion

Trade is by far labour-intensive activities. The sector is dominated by unorganized activities. Though, post-1990s, the share of organized sector has been rising but at slow pace without consistency. Till 2003-04, the sector has grown well as a consequence, output has risen and concomitant increase in the share of employment has been noticed. From 2003-04 onwards a significant increase in capital intensity has been noticed which increased the productivity of the sector. Therefore, contribution of the sector in employment generation has decimated. A gap between output and employment share has been noticed. The gap was yawning. The yawning gap has arisen due to poor employment generation, though the output growth was roughly consistent and undeterred. The poor employment, though was a general trend in the economy in post-1990s in the economy, was attributed to rise in capital intensity. Rising capital intensity is attributed to formalisation of the sector and resultant increase in investment by big players.

References:


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