Growth, Employment and Productivity in the Manufacturing Sector-A District-Level Analysis of Tamil Nadu: 2001-06

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Using district-wise data on industrial production for the organised manufacturing sector (OMS) and unorganised manufacturing sector (UMS) in Tamil Nadu the article shows that the relationship between employment and output growth has weakened during 2001–06 in the UMS compared to the OMS. In addition, there are districts where positive output growth has been found to be associated with zero or negative employment growth in both sectors, thus pointing to situations of jobless growth in a literal sense. For a number of districts for which estimates of elasticity of employment with respect to output growth in manufacturing could be found for the study period, the figures for the UMS were found to be lower, thus indicating a decline in the employment intensity of growth in the sector.

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The unorganized manufacturing sector has always been an important contributor to total manufacturing employment in India. This sector has contributed about 70 percent of total manufacturing employment in the first quinquennium of new millennium, i.e., 2001–06 in the state of Tamil Nadu. The organized manufacturing sector had a clear policy bias but due to its capital intensive technology, this sector was never able to absorb ever growing labor force of Indian economy. But increasing employment in an insecure sector (unorganized sector) will mean exposure of increasing masses to uncertainties, insecurities and low standard of living, only those people get themselves adjusted to the unorganized sector who could not find a place in the organized sector.

Jobless growth

It is very difficult to say how and when the term "jobless growth" came into use in the literature on growth and development. The phenomenon was particularly noticeable in the formal sectors of the economies. However, it seems that the term "jobless recovery" was being used in USA in the early 1990s to describe the situation where the economy was emerging from recovery and yet the labor market was not responding by creating sufficient number of new jobs. Rifkin (1996) pointed to the situation where human labor is being systematically eliminated from the economic process.

The term jobless growth can be interpreted in other ways as well, for example, by comparing employment growth with that of labor force growth, and by looking at the overall employment/ unemployment situation of a country in relation to its economic growth rate. Using this approach, Bhorat and Oosthuizen (2006) suggested three different "tests" of jobless growth: (i) positive economic

growth associated with zero or negative employment growth; (ii) positive economic growth associated with employment growth lagging behind labor force growth and hence rising unemployment; and (iii) positive output growth associated with employment growth below a "satisfactory level."

Employment, productivity and growth: theoretical approaches and empirical evidence

There is inverse relationship between employment and labor productivity which implies the possibility of a trade-off between employment growth and labor productivity. However, this trade-off does not have to be very serious. In an accounting framework, both the quantity of labor input and labor productivity contribute to output growth. Depending on the policies pursued, a country may be able to achieve a balanced contribution of both these elements towards output growth.

Okun's law (1962) is concerned with the short-term cyclical relationship between output, employment/ unemployment and productivity growth. Kaldor law describes the long-term relationships between growth of productivity, output and employment, and should, therefore, be considered at a cross-sectional level. A time series, or a panel data exercise, will not be helpful from an economics point of view as that would constitute perhaps more of a test of Okun's law than of Kaldor's law.

Using the data from the ASI and NAS, Kathuria et al (2010) analysed the productivity performance of both the organized and unorganized segments using unit level data for selected Indian states for the period 1994–95 to 2005–06. They found that the growth in GVA was mostly productivity driven, not input driven, in both sectors. In the OMS T.N. contributed heavily to capital formation for the period 1994–2005. Labor productivity in the OMS is nearly 10 times that of the UMS. In 2005–06, T.N. ranked first in capital share in OMS and third in UMS. A turnaround in TFPG (3.25) was in the OMS during the period 2001–05. In 1994–2001 the TFP was –3.11.

Data Base and Methodological Issues

The period of study is confined to the first quinquennium of new millennium i.e. 2001–06 which corresponds to the results of two surveys conducted by NSSO in the years 2001 and 2006. At district level, data for UMS is available only for two time points viz. 2001 and 2006. The data for 2001 is available for 29 districts while that for 2006 for 31 districts, the latter as a result of bifurcation of two districts: Perambalur and Dharmapuri. In order to make the datasets for the two time points comparable, data for the bifurcated districts are merged. This would also make it possible to draw a comparative profile of the structural shift in the relative shares of the OMS and UMS units. In order to compare with the trends in the organized sector, data for OMS for period 2001 to 2006 is drawn from the state's BES (Bureau of Economics & Statistics) which collects them for the Annual Survey of Industries (ASI) of CSO. Data on two variables viz. employment, and gross value added (GVA) are considered. To facilitate temporal analysis, the value based variable (GVA) is deflated (to base 1993–94) by applying the wholesale price index (WPI). The growth rates have been calculated by using the trend method for OMS and compound annual growth rates (CAGR) for UMS. The trends in employment growth have been studied by the computation of employment elasticity (EE) taken as the ratio of growth rate in employment to that in GVA. As the computation of employment elasticity by this approach is sensitive to the signs (+/–) of two respective growth rates, and a suitable framework to distinguish the growth profiles of different districts is needed, a classification based on the observed signs in the growth rates of these two variables is adopted.

In this, the districts are distinguished for their growth path in terms of the following four scenarios:

1. a situation of positive EE by virtue of both growth rates being positive characterised as "productive employment creating growth" ($E > 0$; $GVA > 0$);
2. a situation of employment growth being positive but negative growth in GVA as "employment creating but not productive" ($E > 0$; $GVA < 0$);
3. a situation of employment growth being negative with positive GVA growth characterized as "job displacing growth" ($E < 0$; $GVA > 0$); and
4. a situation of both employment and GVA growth being negative as "stagnating growth" ($E < 0$; $GVA < 0$).

From the point of achieving full employment, it would be important to simultaneously achieve high rates of economic as well as employment growth. The first and third scenarios represent high levels of output growth, second and fourth scenarios represent low/negative rates of output growth. Scenario I represents situations where high growth of employment goes together with high growth of output. This naturally would be the desirable outcome of economic growth in situations where growth is expected to be the means for achieving the goals of full employment.

Table 1: Performance of Districts by Growth in Employment and Gross Value-added in the OMS: 2001-06

Growth in Employment and GVA	Districts (figures within brackets are growth rate in Employment)	No. of Districts
Negative Growth in both Employment and GVA	Tiruvannamalai, Nilgiris,Tiruvarur, Virudhnagar, Tuticorin, Kanyakumari	6
Negative Growth in Employment but Positive Growth in GVA	Namakkal, Cuddalore, Nagapattinam	3
Positive Growth in Employment but Negative Growth in GVA	Dindigul (1.0), Theni (3.0), Thanjavur (13.0), Ramnad (15.2)	4
Positive Growth in both Employment and GVA	Chennai (0.1), Salem (0.5), Trichy (1.2), Perambalur/Ariyalur (2.0), Kancheepuram (3.5), Vellore (3.5), Madurai (4.9), Villupuram (5.7), Tiruvallur (6.3), Erode (7.7), Sivagangai (8.2), Coimbatore (9.8), Pudukkottai (9.9),Dharmpuri (11.2), Karur (14.2), Tirunelveli (19.5)	16
	Total	29
	State's Growth Rate in Employment: 4.6	
	State's Growth Rate in GVA : 8.8	

A conclusive characterisation of industries as 'better performing' has been made by analysing the following "models of growth."

1. extensive (high employment growth n, and low labor productivity growth, q);
2. intensive (high q and low n, even negative in some districts);
3. stagnant (low q and low n); and
4. virtuous (high q and high n).

Employment & GVA Growth

According to the neoclassical theory, output growth is supposed to lead to employment growth. Employment growth without output growth amounts to 'output-less'

Table 2: Performance of Districts by Growth in Employment and Gross Value-added in the UMS: 2001-06

Growth in Employment and GVA	Districts (figures within brackets are growth rate in Employment)	No. of Districts
Negative Growth in both Employment and GVA	Chennai, Kancheepuram, Villupuram, Dindugul, Karur, Perambalur/Ariyalur,Tiruvarur, Ramnad, Kanyakumari.	9
Negative Growth in Employment but Positive Growth in GVA	Tirunelveli (-1.7), Theni (-2.2), Erode (-3.1), Cuddalore (-4.0), Tuticorin (-4.7), Coimbatore (-4.8), Nilgiris (-5.5), Dharmapuri (-10.5), Madurai (-11.0), Sivagangai (-13.5)	10
Positive Growth in Employment but Negative Growth in GVA		0
Positive Growth in both Employment and GVA	Vellore (0.9), Salem (1.1), Trichy (2.5), Thanjavur(3.6), Nagapattinam (7.7), Virudhunagar (9.4), Pudukkottai (9.5), Tiruvallur (13.1), Namakkal (15.2), Tiruvannamalai (26.3).	10
	Total	29
	State's Growth Rate in Employment (-1.3)	
	State's Growth Rate in GVA (3.1)	

growth (Prakash, B.S & Balu, 2011). Table 1 presents the performance of districts by growth in employment and output in the OMS. About 16 districts have registered positive growth rates in both employment and GVA. Further, as many as 9 of these 16 districts have registered higher than the State's average growth rate in employment of 4.6 percent. Evidently, these are the districts which have performed in a manner that is worthy of emulation for best practices. Particular policy focus on industrial performance, however, needs to centre on 6 districts of the State which have registered negative growth rates both in employment and GVA.

Employment in the OMS has increased while UMS employment has decreased during the period 2001 to 2006 (Table 2). One can say that quality of employment in the manufacturing sector has been increasing in the state. Ten districts (viz. Tirunelveli, Theni, Erode, Cuddalore, Tuticorin, Coimbatore, Nilgiris, Dharmapuri, Madurai, Sivagangai) which have registered positive growth in value added but with negative growth in employment come under jobless growth districts in the UMS. Only three districts (viz. Namakkal, Cuddalore, Nagapattinam) in the OMS were under this category (Table 1). Nine districts (viz. Chennai, Kancheepuram, Villupuram, Dindugul, Karur, Perambalur/Ariyalur, Tiruvarur, Ramnad, Kanyakumari) have registered negative growth rate in both employment and GVA. Only 10 districts have registered positive growth rate in both employment and value added (i.e. growth in employment goes together with high growth of output).

Employment Elasticity

It is clear that the pursuit of higher output growth rates is essential, but equally important is the question of how to squeeze more employment out at each rate of growth in output. Table 3 presents the employment elasticity for the districts in the OMS classified into four groups based on the sign or direction of growth in employment and GVA. 16 districts[1] registered vary from a low of 0.06 to a high of 3.76, are classified for their employment creating growth characteristic. This naturally would be the desirable outcome of output growth in situations where growth is expected to be the means for achieving the goals of full employment. Hence, from a policy point of view, the goal would have to be to move a state towards this phase. It is conceivable to find districts where despite low or even negative output growth, employment growth may be high if employment is driven by a supply push and people find jobs in low productivity activities of a residual nature. Such a situation would reflect distress and employment of last resort where the alternative is unemployment and starvation. Four districts which have registered negative output growth with positive employment growth rates are Dindigul, Theni, Thanjavur and Ramnad. About six districts have evidenced stagnating characteristics, having registered negative growth rates in both employment and GVA, the State as a whole has nevertheless registered an aggregate employment elasticity of 0.52 in the OMS. On the basis of these indicators, therefore, the conclusion that there exists enough empirical evidence to non-acceptance the hypothesis of jobless growth for the OMS in general.

Table 3: Employment Elasticity with respect to GVA for Districts Classified for their "Employment Creating/Displacing" and "Other" Characteristics in the OMS

Type of Employment Gain/Loss (A, B, C & D)	Sign (+/-) of Employment (E) and GVA Growth Rates	Districts with EE (within brackets) for Type of Employment Gain/Loss (i.e. Types A, B, C & D)	No. of Districts
A. Employment creating and productive	E > 0; GVA > 0	Salem (0.06), Chennai (0.15), Perambalur/ Ariyalur (0.19), Kancheepuram (0.30), Pudukkottai (0.41), Coimbatore (0.48), Madurai (0.54), Vellore (0.56), Trichy (0.58), Dharmpuri (0.64), Sivagangai (0.65), Karur (0.79), Tiruvallur (0.99), Erode (1.23), Villupuram (3.18), Tirunelveli (3.76)	16
B. Employment creating but not productive	E > 0; GVA < 0	Dindigul (–0.25), Theni (–1.28),Thanjavur (–0.38), Ramnad (–1.63)	4
C Job Displacing	E < 0; GVA > 0	Namakkal (–0.08), Cuddalore (–0.24), Nagapattinam (–1.14)	3
D Stagnating	E < 0; GVA < 0	Tiruvannamalai (0.11), Nilgiris (0.05), Tiruvarur (4.42), Virudhnagar (2.74), Tuticorin (0.48), Kanyakumari (0.02)	6
		EE with respect to GVA for the State is: 4.56/8.76 = 0.52	**29**

[1]Among 16 districts, 3 districts (viz. Erode, Villupuram and Tirunelveli) have registered employment elasticity is above unity.

Table 4: Employment Elasticity with respect to GVA for Districts Classified for their "Employment Creating/Displacing" and "Other" Characteristics in the UMS

Type of Employment Gain/Loss A, B, C & D	Sign (+/-) of Employment (E) and GVA Growth Rates	Districts with EE (within brackets) for Type of Employment Gain/Loss (i.e. Types A, B, C & D)	No. of Districts
A Employment creating and productive	E > 0; GVA > 0	Thanjavur (0.24), Pudukkottai (0.38), Nagapattinam (0.40), Salem (0.48), Vellore (0.56), Tiruvallur (0.75), Tiruvannamalai (0.92), Namakkal (0.94), Virudhunagar (1.4), Trichy (1.56)	10
B Employment creating but not productive	E > 0; GVA < 0		0
C Job Displacing	E < 0; GVA > 0	Nilgiris (–0.28), Theni (–0.61), Erode (–0.74), Coimbatore (–1.02), Dharmapuri (–1.27), Tuticorin (–1.47), Cuddalore (–1.9), Tirunelveli (–3.4), Sivagangai (–13.5), Madurai (–27.5)	10
D Stagnating	E < 0; GVA < 0	Chennai (1.35), Kancheepuram (1.04), Villupuram (1.07), Dindugul (0.85), Karur (0.98), Perambalur/Ariyalur (5.46),Tiruvarur (8.62), Ramnad (1.36), Kanyakumari (1.79).	9
		EE with respect to GVA for the State is: -1.3/3.1 = -0.42	29

The employment elasticity for the UMS is –0.42 (Table 4). This negative employment elasticity reflects an inadequate reabsorption capacity of the labor supply excess. The rate of job creation has been higher in the OMS compare with UMS during 2001–06. Ten districts have registered EE values marked for productive employment growth. On the other hand, ten districts have contributed to "job displacement" while remaining nine are "stagnating." Nearly two-third of the districts in the State falling under the "job displacing" and "stagnating" districts, require focused research/policy attention to improve the industrial development in the state in the UMS. The conclusion that there exists enough empirical evidence to support the hypothesis of jobless growth for the UMS in the state.

Models of growth

The present article points out that it is important to go beyond estimates of employment elasticity and look at the performance of employment growth with labor productivity. This section aims at discerning the different Models of Growth followed by OMS, compared to UMS.

From a policy perspective, employment depends on both economic growth and the labor-absorption capacity of the economy. Policy must target both of these. If the economy is growing as fast as the labor force, then, by definition, jobless growth generally arises when labor productivity increases faster than economic growth. Table 5 reports trends in LP for individual districts in the organized and unorganized sectors, shows that LP grew steadily in most districts in the unorganized sector. It grew at an annual rate of 4.5 during 2001–06. The growth was lower in the same period in the organized sector (4.0). Positive growth in LP is registered by as many as 18 districts in the OMS and 25 districts in the UMS. Labor saving factor affected adversely the employment in the UMS. A low employment rate indicates that only the most productive workers are involved in the production process, because of their skill level or their age; as the employment level rises, less productive workers are hired (Belorgey et al., 2006).

Extensive model followed by 9 districts are in the OMS, in the UMS only 3 districts were under this category. These were the districts registered high employment growth with low LP.

Intensive model had been adopted by thirteen districts in the UMS affected the employment growth in that sector during 2001 to 2006. Contrasts with this only 5 districts in the OMS in this model, i.e., high labor productivity growth accompanied by low/negative

Table 5: Performance of Districts in terms of Growth in Employment and Labor Productivity (LP) in the OMS and UMS: 2001-06

Growth in Employment and LP	Districts (figures within brackets are growth rate in LP in OMS)	No. of Districts	Districts (figures within brackets are growth rate in LP in UMS)	No. of Districts
Extensive (high employment growth and low labor productivity growth)	Tiruvallur (0.1), Vellore (2.7),Perambalur/ Ariyalur (8.1), Erode (-1.4), Villupuram (-5.4), Theni (-5.2), Tirunelveli (-12.0), Ramnad (-34.1), Thanjavur (-41.8)	9	Namakkal (0.8), Tiruvannamalai (1.8), Virudhnagar (-2.5).	3
Intensive (high labor productivity growth and low employment, even negative in some districts)	Namakkal (5.2), Nagapattinam (15.5), Cuddalore (11.9), Tiruvarur (6.4), Salem (12.2)	5	Nilgiris (27.0), Dharmapuri (21.0), Tiruvarur (19.6), Sivagangai (17.9), Madurai (12.8), Perambalur/Ariyalur (12.2), Coimbatore (9.9), Tuticorin (8.2), Erode (7.5), Kanyakumari (6.6), Cuddalore (6.3), Theni (5.9), Ramnad (3.8).	13
Stagnant (low LP growth and low employment growth)	Dindigul (-4.6), Chennai (0.6), Nilgiris (-4.1), Tuticorin (-0.5), Kanyakumari (-12.1), Tiruvannamalai (-21.5), Trichy (0.8), Virudhnagar (1.8).	8	Karur (-0.1) , Trichy (-0.9), Dindigul (-1.5), Kancheepuram (0.5), Villupuram (0.5), Vellore (0.8), Salem (1.1), Chennai (2.0), Tirunelveli (2.3).	9
Virtuous (high LP and high employment growth)	Karur (3.3), Madurai (3.9), Sivagangai (4.1), Dharmapuri (5.6), Kancheepuram (7.9), Coimbatore (9.8), Pudukkottai (12.7).	7	Tiruvallur (3.8), Nagapattinam (10.7)Thanjavur (10.9), Pudukkottai (14.0).	4
	Total	29		29
State's Growth Rate in LP in the OMS (4.0)				
State's Growth Rate in LP in the UMS (4.5)				

employment growth. Two districts (Cuddalore, Tiruvarur) registered high labor productivity growth with negative employment rates in both OMS and UMS.

Stagnant model: 8 districts in the OMS and 9 districts in the UMS were characterised as stagnant. Three districts, namely, Trichy, Dindigul and Chennai registered low LP growth and low employment growth. These three districts and remaining 11 districts under this model, require focused policy attention to improve the industrial development in the state.

Virtuous model was followed by 4 districts (Tiruvallur, Nagapattinam, Thanjavur, Pudukkottai) in the UMS: high LP accompanied by high employment rates. In Pudukkottai high labor productivity growth was associated with high employment growth rate in both OMS and UMS. Pudukkottai district has performed well during the study period in both the sectors.

Labor Productivity

Labor productivity in the OMS was, on an average, 9.4 times higher than that in the UMS over the period 2001–06. (row 30, Table 6). In the OMS labor productivity levels are highest in the districts of Thanjavur, Dharmapuri, Cuddalore, Perambalur/Ariyalur and Kancheepuram while Tiruvarur and Kanyakumari reported the lowest level of labor productivity. Nilgiris, Chennai and Coimbatore are the districts with highest labor productivity in the UMS. Tirunelveli, Vellore, Tiruvannamalai and Tuticorin have lowest levels of labor productivity in the UMS. Surprisingly, in Tiruvarur, labor productivity in UMS is higher than OMS and in Kanyakumari the productivity levels are more or less similar in both sectors. Thanjavur, Dharmapuri and Perambalur are the districts registered wide difference between the two sectors.

Table 6: District-wise Labor Productivity Levels in the Organized and Unorganized Sectors

Sl. No.	Districts	Organized Sector (1)	Unorganized Sector (2)	Ratio of Labor Productivity (1)/(2)
1	Chennai	1,27,491	26,112	4.9
2	Tiruvallur	1,82,988	22,230	8.2
3	Kancheepuram	2,29,233	16,583	14.0
4	Vellore	1,17,900	9,663	12.0
5	Dharmpuri	3,44,693	15,467	22.0
6	Tiruvannamalai	1,37,749	9,745	14.0
7	Villupuram	35,100	14,100	2.5
8	Salem	99,231	14,022	7.1
9	Namakkal	1,02,335	14,242	7.2
10	Erode	1,24,207	14,092	8.8
11	Nilgiris	43399.5	31,117	1.4
12	Coimbatore	1,02,176	22,452	4.6
13	Dindigul	1,26,785	12,877	9.8
14	Karur	1,58,117	11,774	13.0
15	Tiruchy	1,88,520	13,021	14.0
16	Perambalur/Ariyalur	2,42,842	11,850	20.0
17	Cuddalore	2,70,653	16,117	17.0
18	Nagapattinam	29,766	16,244	1.8
19	Tiruvarur	4,163	15,528	0.3
20	Thanjavur	5,25,134	11,781	45.0
21	Pudukkottai	1,05,346	13,580	7.8
22	Sivagangai	77,894	17,842	4.4
23	Madurai	87,547	14,709	6.0
24	Theni	64,259	10,701	6.0
25	Ramnad	1,96,839	13,542	15.0
26	Virudhunagar	46,723	10,536	4.4
27	Tuticorin	1,27,924	9,851	13.0
28	Tirunelveli	1,30,035	8,160	16.0
29	Kanyakumari	15,305	11,764	1.3
	State	1,39,460	14,817	9.4

Share of OMS and UMS in the TMS

The share of UMS employment in total manufacturing was 74 percent in 2001 and 69 percent in 2006 (Table 7). The share of employment in OMS rose from 26 percent in 2001 to 31 percent in 2006. In OMS, 19 districts have increased their employment share during the study period. The remaining 10 districts have experienced increase in employment share in 2006. Pudukkottai has performed well in the manufacturing (OMS and UMS) sector of the state. It has registered high growth rates in all key variables in the two sectors.

Data Problems

Wide Year-to-Year Fluctuations: Due to many reasons year-to-year variations in data collected and published by the government agencies generally prevail. It appears that while they are controlled after due checking for more aggregate level data like national/states, at district level it perhaps is done less meticulously. One is therefore left with the option of either using the data published as it is or make such adjustments as techniques of research methodology may permit sometimes. We point out five such instances of severe data trough for GVA and two for number of persons

Table 7: Employment share of OMS and UMS in TMS

Sl. No.	Districts	OMS share in TMS		UMS share in TMS	
		2001	2006	2001	2006
1	Chennai	0.31	0.35	0.69	0.65
2	Tiruvallur	0.69	0.62	0.31	0.38
3	Kancheepuram	0.36	0.54	0.64	0.46
4	Vellore	0.18	0.20	0.82	0.80
5	Dharmpuri	0.26	0.50	0.74	0.50
6	Tiruvannamalai	0.05	0.02	0.95	0.98
7	Villupuram	0.13	0.23	0.87	0.77
8	Salem	0.17	0.15	0.83	0.85
9	Namakkal	0.24	0.12	0.76	0.88
10	Erode	0.14	0.23	0.86	0.77
11	Nilgiris	0.69	0.67	0.31	0.33
12	Coimbatore	0.31	0.45	0.69	0.55
13	Dindigul	0.37	0.46	0.63	0.54
14	Karur	0.20	0.45	0.80	0.55
15	Trichy	0.27	0.26	0.73	0.74
16	Perambalur/Ariyalur	0.08	0.15	0.92	0.85
17	Cuddalore	0.21	0.23	0.79	0.77
18	Nagapattinam	0.08	0.05	0.92	0.95
19	Tiruvarur	0.10	0.03	0.90	0.97
20	Thanjavur	0.02	0.05	0.98	0.95
21	Pudukkottai	0.33	0.32	0.67	0.68
22	Sivagangai	0.20	0.50	0.80	0.50
23	Madurai	0.16	0.30	0.84	0.70
24	Theni	0.30	0.33	0.70	0.67
25	Ramnad	0.07	0.27	0.93	0.73
26	Virudhunagar	0.48	0.33	0.52	0.67
27	Tuticorin	0.24	0.29	0.76	0.71
28	Tirunelveli	0.06	0.19	0.94	0.81
29	Kanyakumari	0.34	0.53	0.66	0.47
	State	0.26	0.31	0.74	0.69

engaged in the ASI database used for the study[2]. We have proceeded to skirt around the problem by leaving out the negative values. But why such data problems arise do and what can be done about it is relevant for us to consider here. One factor is the major under-reporting by data furnishing establishments to the official survey like ASI. Another reason, as Sastry (2003) terms it, is due to 'agency bias'. Better training to persons engaged in collecting data in the BES particularly on substituting non-responding units would help in this respect.

Conclusion

The term employment intensive growth does not imply employment creation without output growth. Indeed, this term is used to describe a situation where high output growth is associated with high employment growth. By using district-wise data on manufacturing (both OMS and UMS) in T.N., the paper shows that the relationship between employment and output growth has weakened during 2001-06 in the UMS compared to the OMS. In addition, there are districts where positive output growth has been found to be associated with zero or negative employment growth in both sectors, thus pointing to situations of jobless growth in a literal sense. For a number of districts for which estimates of elasticity of employment with respect to output growth in manufacturing could be found for the study period, the figures for the UMS were found to be lower, thus indicating a decline in the employment intensity of growth in the sector. Interestingly, those are the districts where surplus labor continues to exist. However, the informal manufacturing sector has because of its relatively larger size and inefficient activities needs to grow at fast rate to realize productivity gains that percolate to the workers. Moreover, since the informal manufacturing sector is a major employer, policies need to be devised to tap the dynamism in this sector so that it leads to both growth of employment and growth of productivity. Thus, notwithstanding, the jobless growth in unorganized manufacturing in T.N. in the first quinquennium of new millennium i.e. 2001-06 indicates the importance of growth of formal and informal manufacturing and its linkages with all other sectors of the economy. The part of the paper also points out that in an industrialized state, there should be room for growth of both employment and labor productivity, and that it should be possible to avoid a trade-off between the two.

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[2]Data for Villupuram on GVA, expressed in lakhs of rupees, was 10013, 11077, -29846, 9888, 13166 and 13033 for the 6 years during 2001-06. Likewise, for Salem it was -7684, 63749, 86574, 76813, 93581 and 120483; for Tiruvarur it was -368, 307, 390, 573, -347 and 280; for Nagapatinam it was1889,1751, 454, 1192, 3556 and -3098; and for Kanyakumari it was 14850, 14442, 14280, -10230, 11398 and 9585. Data for Tiruvarur on number of persons engaged was 7929, 9310, 9847, 5949, 8696 and 824 and for Tirunelveli it was 21078, 20320, 22551, 21223, 22000 and 70976.

Basically we get confused a bit about what retail is. It is really just buying things, putting them on a floor and selling them.

– Gerry Harvey