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Industry and Informal Sector in the Context of Globalisation

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Introduction

- This paper based on panel data makes an attempt to examine the wage-productivity nexus across different groups of industries in the organized manufacturing in India.
- The second objective is to examine the nature of relationship between industry and the informal sector. This is pursued mainly to assess the indirect effects of the industry on employment in the rest of the economy, (based on cross-sectional data).

2. Wage-Productivity Relationship in Organised Manufacturing

- $\ln WAG = G(\ln GVEM, D\ln GVEM, \ln CAPEM)$
- $LWAG = F(LGVEM, DLGVEM, LCAPEM, LMANW)$
- Wage per worker is taken as a function of productivity and capital-employee ratio.
- To allow for the change in the effect of productivity on wage in the nineties relative to eighties the slope dummy $DLGVEM$ has been introduced.

- As shown in Table 1, productivity is a significant determinant of wages per worker across a large number of two digit industry groups.
- However, the partial elasticity of wage with respect to productivity at the aggregate ASI level turns out to be 0.27 and 0.19 depending upon whether man days per worker is or is not included in the function, suggesting that only a small fraction of productivity gains are transferred to workers in terms of wage benefits.
- Except wool (24), jute (25), textile (26) and basic metal (33) in the rest of the industry groups the effect of productivity on wage rose in the reform period compared to the pre-reform period, as the coefficient of the slope dummy turns out to be significant.

- However, the magnitude of rise is only nominal.
- At the aggregate level, for example, it increased by 0.008 point.
- The fact that the elasticity of wage with respect to productivity did not decline either at the aggregate level or in the case of a large majority of the industry groups, tends to suggest the absence of deterioration in the share of labour in the growth process.

- Capital-employee ratio reveals a mixed picture: it raised wages in a number of industries while it affected wages adversely or remained insignificant in some other, consequently showing an insignificant effect on wages at the aggregate level.
- Corresponding to the following industry groups food (20-21), beverages (22), wool and silk (24), wood (27), paper (28), rubber (31), non-metallic minerals (32), metal (34), machinery (35-36), transport equipment (37) the capital-employee ratio reveals a positive effect on wages.
- Only in cotton textile (23) the effect is seen to be negative and in textile products (26) and basic metal (33) it is positive when man days per worker is included; otherwise it turns out to be negative with the exclusion of this variable.

- In the rest of the industry groups the effect is statistically insignificant.
- On the whole, in a large number of industry groups capital-labour ratio tends to raise wages indicating improved performance of labour with higher levels of capital per head.
- However, in most of the cases the elasticity of wage with respect to capital-labour ratio turns out to be extremely low except wool and silk etc. (24) and machinery (35-36) where it ranges from 0.11 to 0.13; (also in the case of 20-21 it is 0.21 when mandays per worker is dropped).

- Finally, man days per worker turns out to be an important determinant of wages per worker in most of the industry groups - except non-metallic minerals (32) and metal products (34) - , and interestingly the elasticity of wage with respect to man days appears to be around unity except paper (28), leather (29), machinery (35-36) and other manufacturing (38).
- This confirms that man days per worker being a significant determinant of earnings, the decline in the rate of growth of wages in the nineties relative to the eighties could be an outcome of the decline in the rate of growth of man days per worker, which virtually had been stagnant in the nineties.

3. Informal Sector

- It may be further noted that informal sector employment is only a subset of informal employment (see Papola, 1981, Mitra, 1994 and Sastry, 2004).**
- The latter includes informal sector employment as well as those engaged informally in the formal or organized sector.**
- In the recent years both in the organized industry and organized tertiary sector, employment through private contractors has taken place. Though the wage rate of such contract labour in the organized or the formal sector may be higher than the wage rate prevailing in the informal sector,**

- **labour laws and several benefits that apply to regular wage or salaried workers in the organized or formal sector are not applicable to the contract workers.**
- **Hence, in terms of uncertainties relating to loss of pay and jobs, particularly during the time of exigencies, the contract labour in the organized/formal sector is no less vulnerable in comparison to their counterparts in the informal sector.**
- **The estimate of informal employment at the city level turned out to be around 60 per cent several years ago, (Mitra, 1994), and this is expected to have gone up further in the recent years.**

- **Use of contract labour through other labour agencies (labour intermediaries), sub-contracting and outsourcing of activities by the main firm on piece rate basis and casualisation of work force are seen as a part of globalisation process.**
- **Firms in an attempt to avoid strict labour laws and reduce labour cost have taken recourse to these means in the absence of labour market deregulation, and state governments in the fear of losing revenue have extended indirect support to these practices (Tendulkar, 2004 and Uchikawa, 2003).**

- Though employment growth in the organized industry in India has gone up in the reform period, a large part of labour earnings is expropriated by the so called labour intermediaries.
- Amendments of labour laws could have at least reduced such adverse outcomes (Mitra and Bhanumurthy, 2006).

• **Table 3: Employment Size of Informal Sector across States (1999-2000)**

| State | Rural | | Urban | |
|----------------|------------|------------|------------|-----------|
| | Inf. Ent. | Inf. HH | Inf. Ent. | Inf. HH |
| | Workers | Workers | Workers | Workers |
| | as a % of | as a % of | as a % of | as a % of |
| Total Work | Total Work | Total Work | Total Work | |
| Andhra Pradesh | 59.81 | 68.15 | 53.96 | 71.36 |
| Assam | 34.64 | 51.19 | 35.2 | 40.32 |
| Bihar | 57.21 | 53.12 | 44.37 | 48.3 |
| Gujarat | 40.14 | 61.4 | 53.03 | 52.25 |
| Haryana | 30.85 | 54.47 | 48.59 | 56.82 |
| Karnataka | 69.6 | 68.56 | 45.15 | 48.84 |
| Kerala | 37.96 | 64.42 | 41.88 | 54.03 |
| Madhya Pradesh | 58.37 | 59.46 | 39.37 | 53.91 |
| Maharashtra | 51.71 | 56.05 | 44.43 | 54.46 |
| Orissa | 87.58 | 67.41 | 41.18 | 62.22 |
| Punjab | 37.64 | 61.44 | 54.28 | 59.87 |
| Rajasthan | 36.89 | 58.28 | 39.02 | 52.97 |
| Tamilnadu | 51.69 | 74.94 | 44.12 | 55.64 |
| Uttar Pradesh | 68.91 | 70.64 | 57.23 | 69.3 |
| West Bengal | 69.49 | 82.05 | 40.12 | 44.58 |
| All India | 55.2 | 64.74 | 46.84 | 55.27 |

- **As regards the facets of interaction between the informal sector and the organized industrial growth, links may be taken to exist through the following sources: (a) labour market, (b) commodity market and (c) production proces.**
- Papola (1981) argued that the size of the informal sector is large in situations of both limited industrial spread and rapid industrialization.
- In the former case it is mainly a manifestation of residual absorption of labour whereas in the latter case complementary relationship exists between the industrial and informal sectors.
- Also, in this situation the informal sector is described to be no more of a low productivity one by virtue of its close linkage with the industrial sector and income percolating from this sector to

- The forces usually operating on industry and informal sector relationship are :
- (a) direct and indirect complementary,
- (b) direct and indirect substitution and
- (c) autonomous growth of informal sector resulting from natural growth of population

- **Table 6: The Effect of Industry and Urbanization on Informal Sector**

| Exp. Var. | INFR1 | INFR2 | INFU1 | INFU2 |
|---------------------|---------|---------|---------|---------|
| INDUS | 0.34 | -0.55 | 0.44 | -0.19 |
| | -0.38 | (-1.22) | -1.33 | (-0.42) |
| URBAN | -0.81 | 0.45 | -0.16 | 0.005 |
| | (-1.16) | -1.28 | (-0.61) | -0.01 |
| Intercept | 70.43 | 62.52 | 41.77 | 59.62 |
| | (4.78)* | (8.42)* | (7.59)* | (8.22)* |
| Adj. R ² | -0.01 | -0.01 | 0.004 | -0.14 |

Conclusion

the empirical evidence does not seem to be suggesting any further deterioration in the extent of association between labour productivity and wages per worker in the organized manufacturing sector in India.

- Since the share of the informal sector is equally high in the states which are highly industrialized in comparison to the states which are industrially backward sub-contracting and other indirect processes seem to be generating employment in the informal sector in the industrialized states.
- All this tends to suggest that the indirect effects of industry on living standards are beneficial. On the whole, no strong evidence is found to suggest any deterioration in the process of reforms while it will be equally erroneous to conclude that the trickle