Factor Substitution and Factor Demand in Indian Modern Small Enterprise : A Case Study of Metal Products

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This study analyses the possibilities for substitution of labour for other factors namely capital and materials in the modern small scale sector. This is in the light of the notion that small enterprises face a lower labour cost in relation to other factors like capital. A study of metal products industries shows that they are not employment generators in the sense of substituting labour for other inputs. In other words, cheap labour does not guarantee more/ increased employment. There is also a need for firms to have easy access to capital at cheaper interest rates. The result also imply a need for more meaningful policy relating industry-specific factor prices rather than a general one covering all industries.

The development of small enterprises has been mainly emphasized for the generation of employment opportunities in the face of growing unemployment and underemployment. The small enterprises are generally expected to use more labour and hence generate more employment and help in widespread income generation. The underlying premise is that small enterprises face a lower price of labour relative to other factors especially capital. One, therefore, expects a tendency for these enterprises to substitute labour for other factors. In this context, the present study analyses the possibilities for substitution of labour for other factors namely, capital and materials in the modern small scale sector. This is examined in ralation to the three four-digit level industries in the major group of metal products belonging to modern small scale segment.

The study is organised in seven sections. In Section 1, data base and the variables used are described. Methodology of the study is specified in Section 2. Before going to examine the empirical results, we would like to focus on two analytically important points regarding factor substitution. First, the elasticity of substitution, an indicator of factor substitution, is defined as a micro economic concepts. Hence, it is meant to be applied at basic economic unit level like a process/plant. Nevertheless, it is applied in almost all the empirical studies at an highly aggregate level such as industry/major industry groups. In Section 3, an attempt is made to examine the factors responsible for variations in factor proportions across firms and hence provide scope for substitution at the industry level. Secondly, most of the empirical studies on substitution used two input framework with capital and labour. The approach essentially (a) maintains substitution relation between capital and labour and (b) it does not consider other inputs like materials and energy. Some of the recent studies deviated from this traditional approach