Fungsi produksi cobb-douglas pada industri manufaktur di Indonesia

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Abstrak

ABSTRACT
This Study proves that the validity of Cobb-Douglas production function with constant return to scale and Hicks neutral technological change at manufacturing industry in Indonesia during 1985-1990, especially for two-digit ISIC 31, 32, 33. The author found that the output elasticities of capital is much more than its labor in each sub-manufacturing industries. Therefore, industries in Indonesia have been developed with capital intensive and labor saving biases in technological progress. In addition, the empirical results indicated that the Cobb-Douglas production function is decreasing return to scale.

On the other hand, the substitution elasticities for ISIC 31 is inelastic, but others are elastic. This results indirectly linked to the government policy. In the economy as a whole, the capital induce become more expensive with the government policy. Consequently, the ISIC 32, 33 will tend to labor intensive, except for ISIC 31. However, actual rate of return on capital is much more greater than its marginal product, reflecting the higher cost of expansion and development of sub-manufacturing industries in Indonesia from social welfare point of view.

Beside that, actual return to labor is lower than value of its marginal product every year during the observed period. Essentially, for the period observed, the sub-manufacturing industries in Indonesia has not benefited the labor cost comparative advantage which should be enjoyed in the labor market with excess supply of labor. Therefore, the prospect of output of the sub-manufacturing industries do not achieve a satisfactory from the Hecksher-Ohlin theory point of view. However, Indonesia should increase the output of industry in order to lower the fixed cost of production per unit through optimality the utilized capacity.