

The Effects of Nanotechnology Implementation on Production Costs and Employment: An Input-Output Simulation

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Implementation a new technology generally affects on the economy indices such as production costs and employment. Although the implementation of nanotechnology may influence the economy through several ways, this paper focuses on its impact through production process. To do so, it is attempted to measure the effects of implementation the nanotechnology in the manufacturing process of different products on the production costs and labour force employment. A simulation based on the input-output (I-O) analysis is employed. To this end, the latest survey base i-o table of Iran for the year 2001 as well as the related data from official centers is used as databases. It is expected the results of the paper make a forecast for implementation this technology in the economy.