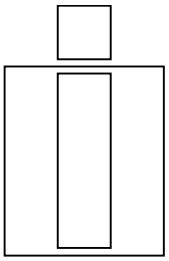

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Sadao Nishimura

Towards Analysis of Vertical Structure of Industries: A Method and its Application to U.S. Industries

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Title: Towards Analysis of Vertical Structure of Industries: A Method and its Application to U.S. Industries

Abstract:
In this paper we present a method to analyse vertical structure of industries. A product of an industry has a hierarchical value structure with layers, each of which consists of value added injected by various production stages (current and previous) of various industries. This vertical structure makes it possible to measure value added (VA) levels (vertical positions) of VA receivers (stages of use industries), while products of supply industries and their value added flow into these stages of industries which have respective VA levels. These flows are value added contributions by supply industries. By calculating each industry's VA contributions and corresponding target VA levels, it is possible to evaluate vertical structure of industries in the whole economy. We applied this method to 1998--2008 U.S. Input-Output Tables. Resulting average VA contribution levels and graphs of VA contributions are displayed.

Keywords: Vertical structure, Value added, Supply, Use

Archives: Structural change; Methods and mathematics

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