Double Filtering Method and Its Application: A Fundamental Economic Structure in the Development of China, Japan and USA

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Author: Xiuli LIU
Co-Authors: Geoffrey J.D. HEWINGS

This paper proposes a Double Filtering Method (DFM) to sketch out a fundamental economic structure. The DFM approach enables an examination of industrial structural change from a detailed interindustry perspective. We show that the leading sectors selected by DFM are necessarily Hirschmann's key sectors. We apply the DFM method to China, Japan and USA to shed light on their joint fundamental economic structure, rules of economic evolution (stages of growth), as well as peculiar characteristics of industrial structure for specific points in history. The results also imply that timely accurate positioning of the leading sectors is key to economic growth. A relaxed environment for innovation and effective industrial policy assists enhancements to industrial structure. We point out that China should follow this path. We also find that in any stage of industrialization, the bilateral conjunctions between Agriculture and Food, Textile, Paper-making and Furniture, between The Other Services and Agriculture and Food, Textile, Paper-making and Furniture are core to the fundamental economic structure. The development of these industries should be coordinated during their upgrading to enable solid growth.