Digital Economy and the Increasing Labor Compensation Share in China: Based on Non-competitive Digital Economic Input-output Table

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The Labor Compensation Share (LS) as a crucial indicator measuring a householdâ€™s share in the primary income allocation has an important influence on both the composition of final demand and household welfare. As a sequence, LS has attracted wide attention from policy-makers and researchers in China. With the development of the digital economy, the factors related to digitalization have become inevitable to participate in the primary income allocation. Whether or not the digitizing economy would reduce LS by replacement effect is worthy of study. This paper distinguishes the digital economy and traditional economy components related to input-output coefficients, composition of final demand matrix, and employee compensation coefficients vector under the digital economy input-output framework. It proposes a structural decomposition analysis to explore the impact of the development of the digital economy on the evolution of overall LS in China. An empirical analysis has been done based on the compiled non-competitive digital economy input-output tables of China for 2012, 2017, and 2020. The results show: (1) Holding all other factors constant, the changes in factors related to the digital economy decreased overall LS by 17.72% between 2012 and 2017; and increased overall LS by 11.69% between 2017 and 2020; (2) Among all factors related to digital economy, the most important driving force of changing LS is production technology changes related to digital economy rather than changes in employee compensation coefficient of digital economy sectors; (3) There exists a small number of key sectors and important coefficients who could determine the contributions of the changes in driving factors on LS changes. This study discovers how the development of the digital economy affects overall Labor Compensation Share in China from the perspectives of comparative static analysis and multi-sector dependency relationships and could provide some implications for the formulation of Income Distribution policies.