

Revisiting the Role of ICT in China's Growth

Topic: Input-Output Modelling: Industrial Policies

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Abstract: Based on the pioneer work on the estimation of China's ICT (information and communication technology) assets by industry in Liang, Wu and Fukao (2022) and the substantial revisions of the CIP (China Industrial Productivity) input-output, capital and labor accounts, we revisit the role of ICT in the Chinese economy since the reform. Methodologically, we follow our earlier growth accounting work to quantify the role of China's ICT (Wu and Liang, 2017) a la Jorgenson (2001). However, the newly available data allows us to investigate ICT-specific industries, identified by the direct measure of ICT intensity, in a framework that is coherently integrated with the CIP capital accounts including the estimated stock of IT and CT assets. Our new results still support our earlier findings that Chinese ICT-producing and intensive-using industries were the key driver to China's productivity growth. We show that over the 40 years investigated since 1978, while providing 34 percent of China's 8.3-percent annual value-added growth, these major ICT players contributed 130 percent to China's 1.1-percent annual TFP growth. We can therefore reiterate the proposition proposed in our 2017 paper that the rapid development of the ICT industries enabled the Chinese economy to compensate for its heavy productivity losses caused by other industries and the policy-induced misallocation of capital resources.

Keywords: ICT making and ICT intensive using; APPF (aggregate production possibility frontier) growth accounting; aggregation by Domar weights; resource reallocation; TFP (total factor productivity)

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