Does Input Digitization Promote the Share of Factor Rewards and Their Embedding Depth in the Global Value Chains? â€"A perspective based on domestic value-added decomposition in export

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This study examines the impact of input digitization on the share of production factor rewards and their embedding depth in global value chains (GVCs) based on the newly constructed indicators of input digitization and factor reward decomposition. We reach the following main results. First, at the country level, input digitization has the potential to significantly improve a country's capital reward share (CRS), labor embedding depth (LED), and capital embedding depth (CED) in GVCs. Second, input digitization has varying effects on labor reward share (LRS) across countries, with positive effects in developed countries but negative effects in developing countries. Third, the empirical findings at the industry-level in China are consistent with those at the country level, which shows industry heterogeneity as well. Input digitization has a positive impact on the LED and CED of China's secondary and tertiary industries, while it negatively impacts the CRS of the primary and secondary industries, as well the LRS of the secondary and tertiary industries. We conclude that promoting the use of digital technology in the production process and creating flexible employment opportunities should be the policy goal for countries seeking to maximize their export trade benefits.