

Data Assetization, Information Asymmetry, and Corporate Investment Efficiency: Evidence from China

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Abstract

As global digital transformation accelerates and data emerges as a key production factor, the process of data assetization has drawn growing scholarly attention for its impact on corporate investment behavior and efficiency. However, the mechanisms through which data assetization affects investment efficiency remain underexplored, especially the mediating role of information asymmetry and the heterogeneous effects across ownership, industry, and region. To fill this gap, we employ a two-way fixed-effects model, mediation tests, and heterogeneity analysis based on a sample of Chinese A-share listed firms from 2013 to 2023. We find that data assetization significantly improves corporate investment efficiency by mitigating information asymmetry and thereby reducing inefficient investment, including both over-investment and under-investment. Mediation analysis confirms that the reduction of information asymmetry is a key channel through which data assetization enhances investment efficiency. This positive effect is more pronounced in non-state-owned enterprises, technology-intensive industries, and the eastern region of China, where market mechanisms and information environments are more favorable to data-driven decision-making. A series of robustness checks, including alternative measures of investment efficiency, sample restrictions, and endogeneity treatments such as lagged variables and instrumental variable estimation, confirm the reliability of our results. This study enriches the literature on the economic consequences of data assetization by revealing its value-enhancing role in corporate investment decisions. It also provides practical implications including that firms should strengthen data governance to reduce information asymmetry, governments should improve data factor market policies and promote differentiated data opening, and policymakers should support balanced regional development to fully leverage data assets for efficient investment.

Keywords

Data Assetization, Investment Efficiency, Information Asymmetry, Corporate Investment