

# Research on the Influence of Science and Technology Finance on the Resilience of New Energy Industry

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## Abstract

Technology finance is an effective channel to break the financing constraints, by applying financial resources to the digital transformation of enterprises, improve the level of enterprise science and technology, so as to improve the resilience of new energy enterprises. This paper takes China's Shanghai and Shenzhen A-share listed new energy enterprises from 2011 to 2023 as research samples to empirically test the influence mechanism, action channel and heterogeneity of the development of science and technology finance on the resilience of new energy enterprises. The study found that a higher level of technological and financial development would significantly improve the resilience of new energy enterprises in the region. The impact of the development of science and technology finance on the resilience of new energy enterprises exists in two ways: promoting the digital transformation of new energy enterprises and easing financing constraints, which play an intermediary role; In further analysis, compared with state-owned enterprises, the improvement of the development level of science and technology finance is more conducive to improving the resilience of private enterprises. At the regional economic development level, big cities with higher economic development level can provide a more superior science and technology financial environment, so as to better promote the improvement of the resilience of local new energy enterprises. Based on the research conclusions, starting from different subjects of science and technology finance and new energy enterprises themselves, countermeasures and suggestions are proposed respectively to better and more effectively allocate science and technology financial resources, so as to have a positive impact on the improvement of resilience of new energy enterprises.

## Keywords

Science and Technology Finance, New Energy Enterprise, Enterprise Toughness, Digital Transformation, Financing Constraint