

Research on the Spillover Effect and Configuration Path between China's Carbon Market and Electricity Market

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Abstract

In recent years, in the process of transformation of the electricity market, it has faced many risk factors such as technology, market and policy. At the same time, it has faced the risks brought about by policy adjustment and carbon price changes in carbon market trading. In order to accurately portray the risk spillover relationship between the carbon market and the electricity market, this paper constructs a TVP-VAR-DY model to explore the spillover time-varying relationship between the two markets, and uses fs QCA to analyze the configuration relationship of spillover influencing factors. The research results show that: (1) there is a significant time-variable overflow relationship between the carbon market and the electricity market. The early carbon market is the net transmitter, and the later carbon market is the net receiver of spillover; (2) There are no necessary conditions to cause a high overflow level between the carbon market and the electricity market, but there are three paths that can cause a high level of overflow between the carbon market and the electricity market. This research is of great significance to build a new power system, manage the risk of the carbon power market, and promote the coordinated development of the carbon power market.

Keywords

Risk Spillover Effect, TVP-VAR-DY, Configuration Path