

## **Does Investment Network Position Affect Innovation?**

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### **Abstract:**

The modern economy is like a complex network integrated with the investments of multinational enterprises. As in every network, the actor's position in the investment network can offer opportunities to the actors or limit their activities through knowledge diffusion. The aim of the paper is to estimate how the position of the foreign direct investment (FDI) network and the portfolio investment network of countries affects innovation. The Coordinated Direct Investment Survey and the Coordinated Portfolio Investment Survey data from 2009-2019 are used to achieve this aim. First, investment network graphs are formed and network metrics are figured out via social network analysis. Second, the effect of the network position on innovation is estimated with panel data analysis. The findings of the study show that degree centrality, which means the number of ties established by the actor with other actors, and closeness centrality, which means the shortest path of the actor to all actors in the network, increase the innovation performance of countries in the FDI network. When portfolio investment networks are examined, in addition to the variables above, it is seen that betweenness centrality, which expresses the level of being a bridge between other actors, increases the innovation performance. It can be said that actors benefit from knowledge sources from different environments and institutions through embedding in the investment network, enabling access to knowledge sources that promote innovation.

**Keywords:** FDI Network, Portfolio Investment Network, Social Network Analysis

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