

## **The energy and telecommunications sectors in the input-output matrix for 2003, 2008 and 2012. A network approach.**

Topic: Input-Output Tables as a Network II

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The Network Theory has shown as a great tool for Input-Output Analysis. In the last years, this theory is becoming more relevant among the economists. This is because it helps to find out which are the dominant sectors in a network, in a group of sectors, in economic circuits, in trade groups, etc. In this paper we are going to analyze the Mexican economic structure from a network theory perspective. The purpose is to study the role of energy and telecommunication sectors, before the government starts with the application of the structural reforms that were approved in 2014. The Networks approach is a qualitative kind of analysis. It is very useful for finding some properties that are hidden in a quantitative analysis of interindustry linkages and key industries. In this way, by taking this theory we can carry out a set of centrality measures such as: InDegree, OutDegree, Betweenness, InCloseness, OutCloseness, OutDegree, Eigenvector centrality, Shortest path, and Influence. For this analysis we are using Mexico's Input-Output tables for the years 2003, 2008, and 2012 all of them are added and homogenized into 250 branches. Thus, we are going to identify the important sectors in the economic system, both the supply side and demand.