عنوان مقاله:

The Electricity Shortage Cost in Iran: An Input-Output Analysis and Linear Programming

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خلاصه مقاله:

The electricity supply security has played a vital role in the economic development of Iran. However, a large number of electricity supply disruptions has happened in recent years, which lead to electricity shortage costs in the level of economic sectors. Using a combination of Input-Output analysis and the Linear Programming method, this study measures the producer price index as average costs of Iranian economic sectors after imposing a unique scenario of a ۳۰% potential electricity shortage supply. In this regard, we employ an Iranian symmetric Input-Output ۱۴ٔ۱۴ industry-by-industry Table for the year ۲۰۱۱. The results of this study indicate that the most shortage cost occurs for the manufacture of wood and paper products, while the services have the lowest cost after electricity supply disruption. Besides, increasing the costs of non-electricity sectors in the Iranian economy after the electricity supply shock is ۱۷۵.۶۳% on average. The quantitative results are useful for policymakers attempting to set strategic plans to reduce the electricity cost in manufacturing sectors and optimal distribution of limited electricity resources to reduce the overall cost of blackouts.

کلمات کلیدی:

electricity, Input-Output Analysis, Linear programming, Shortage Cost, Iran

لینک ثابت مقاله در پایگاه سیویلیکا: