

# Reform of the Coal Sector in an Open Economy: The Case of China

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## Abstract

Cheap, abundant and easy to transport and store, coal has been produced and consumed to meet people's energy needs. The last decade's growth in global coal use has been driven mainly by developing economies like China, whose phenomenal economic growth has been powered by coal-fired electricity and promoted by the export of manufactured goods. A recent reform focus in China's coal sector is on coal taxation. The paper develops a game-theoretic model tailored to the context of China where coal taxation reform takes place against the background of privatisation of coal firms and an open economy. It finds that the adoption of special coal taxes is optimal for social welfare under most circumstances, but may induce coal firms to commit opportunistic behaviour in the process of privatisation. The paper also cautions about potential resistance to the reform from consumers, coal firms and government officials.

**Keywords** Coal taxation, energy, China, open economy, privatisation, game theory.

**JEL Classification** C7, H2, H32, L5, Q38, Q48

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