

Abstract

This thesis aims to measure the potential impacts of the Chinese electric vehicle expansion on the automotive industry of the European union. Firstly it introduces the industry of electric vehicles, its supply chain and the development on the global scene, specifically in China and Europe. The potential effects are further estimated using the Global extraction method as a modification of the original Hypothetical extraction method in the input-output framework. It simulates the scenario in which automotive industry, represented by the sector *Motor vehicles, trailers and semi-trailers*, of all member countries of the European Union are to be replaced by the Chinese automotive industry. This method was applied on the OECD inter-country input-output tables (ICIO) in combination with FIGARO tables provided by Eurostat. The results are then presented in the total output measures and additional component representing the value spent on employees, estimating the most affected sectors and countries in this area, connected with inter-sector linkages. Such estimations point out the industries and countries that could be endangered, in the case the transition to electric vehicles would result in Chinese dominance throughout the global automotive industry.

Keywords

Electric vehicles, motor vehicles, batteries, automotive industry, input-output analysis, Hypothetical extraction method, Global extraction method, supply chain, inter-industry linkages