

## **An Investigation of the Leontief Paradox using Canadian Agriculture and Food Trade: An Input-Output Approach**

Topic: International trade 1

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Empirically testing trade theory emerged after the development of Input-Output model. Leontief found that US was an exporter of labour intensive products and an importer of capital-intensive products, which contradicted with the Heckscher-Ohlin theorem and come to be known as the Leontief Paradox. Since then, attention has been drawn to testify the Leontief Paradox and verification of the trade theory. Canada as an open economy relies heavily on international trade, which contributes 30% to GDP. More specifically, Canada is one of the world largest suppliers of agriculture products. No existed literatures have investigated factor intensities of agricultural products in Canada. In this background, the current study investigated whether the Leontief Paradox existed for Canadian agriculture and processed food trade by using Input-Output table of Canada for 2006. Factor intensities in exports and import replacements of agriculture and processed food products were estimated applying both the Leontief and Leamer approaches. The Leamer approach provided additional information on factor endowment abundance, which gave a direct comparison between factor endowment and factor intensities of trade in Canada. Agriculture and processed food sectors in I-O model were expanded for a better insight of the structure of Canadian agricultural and food products trade. Along with capital and labour, land was included in this study, since natural resources play an important role in Canadian trade. Contrary to Leontief's finding, no evidence of the Leontief Paradox was observed in Canadian agriculture and processed food trade. Canada was found to export capital-intensive products while import labour-intensive products. Even though Canada exported both land- and capital- intensive products, land were found to be relatively more intensive in exports than capital. This finding further affirm the assumption of natural resources as determinant factor on the structure of Canadian agricultural and processed food trade.