

The Impact of the EU CBAM on Thai Exporting Firms: Analysis of Firm-level Data

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Abstract

To mitigate the risk of carbon leakage, the European Union (EU) introduced the Carbon Border Adjustment Mechanism (CBAM) to impose a fair price on the carbon emissions associated with the production of carbon-intensive goods imported into the EU, thereby encouraging cleaner industrial production. The CBAM was first presented to the European Council in 2019, and its implementation was announced by the EU in December 2019 as part of the European Green Deal, becoming effective in October 2023. Under the CBAM, EU importers of goods within the scope of the mechanism are required to declare the emissions embedded in their imports and surrender the corresponding number of CBAM certificates. The price of these certificates is determined based on the weekly average auction price of EU Emissions Trading System (ETS) allowances. This paper examines the impacts of the CBAM on Thai exporting firms, the variability of these effects based on firm characteristics, and the strategies employed by Thai firms to mitigate these effects. Utilizing firm-level export data for the period 2016-2023, along with financial statement data, the primary outcome variables analyzed are total export values and the share of total export values relative to firms' total revenue. A dynamic difference-in-difference approach with panel regression is employed to evaluate the impact of the CBAM on Thai exporting firms. Given the current availability of data on export values and financial statements, our analysis is limited to the announcement effects of the CBAM. Our findings indicate that the announcement of the CBAM has had significantly negative impacts on both total export values and the share of export revenue over total revenue, with these impacts intensifying over time from 2021 onwards. Consequently, it is imperative for Thai exporting firms to adapt promptly by reporting the embedded emissions in exported goods and investing in greening their production processes to maintain their exports of CBAM goods to the EU.

Key words: Carbon Border Adjustment Mechanism (CBAM), Thailand, firm, international trade

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