



## LOYOLA ECON RESEARCH SEMINAR

Wednesday 31, 2023 3:00 pm – 4:00 pm

"Japan's reaction to the EU's carbon pricing policy: an economicenvironmental analysis"

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Room: C2.03 Seville campus Link to join the Seminar: <u>https://loyola.webex.com/meet/ldbeltran</u>





Japan's reaction to the EU's carbon pricing policy: an economicenvironmental analysis

## ABSTRACT

The European Commission's proposal for a Carbon Border Adjustment Mechanism (CBAM) to strengthen the existing Emissions Trading System (ETS) is a policy initiative with the potential to impact carbon emissions outside of the EU. The question is whether CBAM may provide an incentive to third countries to change their production technology or even to strengthen their domestic carbon pricing policy. We develop a theoretical framework and numerical simulation to investigate exactly this question. Japan's ambiguous stance with regards to carbon pricing policy makes the country a logical candidate for an analysis of the knock-on effects of CBAM on third countries. Which response to the EU's CBAM will be most beneficial for Japan? Does Japan stand to gain most from: 1) Cooperating with the EU and introducing its own ETS, 2) Staying neutral with no policy response to CBAM, 3) Contesting CBAM and introducing 'retaliatory tariffs' on certain European imports? We evaluate these three scenarios using a two-country stylized model of Japan and the EU as well as a numerical simulation. This numerical simulation employs the GTAP-E-RD CGE, where we introduce a sophisticated carbon pricing structure to accurately mimic the EU's ETS and the proposed CBAM. We carefully analyse the effects on welfare and CO2 emissions to investigate how each response affects Japan and the EU.

## **KEYWORDS**

Computable General Equilibrium; Climate Policy; Trade Policy; Japan-EU; Carbon Border adjusment.