

## **The Impact of Geographic Shifts in International Sourcing on Global CO2 emissions**

Topic: (5.3) International Trade (2)

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In this paper we simulated the emission cost of geographic shift of international sourcing on global CO2 emissions for the period 1995-2011 by comparing the scenarios with and without geographic shift. Our simulations indicate that in 2011, had the share of trade by sourcing economy remained in the level of 1995, 2000, 2005 and 2008, global CO2 emissions in production processes would have been 2.8 Gt, 2.0 Gt, 1.3 Gt and 540 Mt lower than the actual emissions. Although the outsourcing trend shifted from developed economies to developing economies has been slow down after the international crisis in 2008, the overall emission costs have always been significantly positive. The further investigations by economy and industry show that such geographic shift mainly dominated by developed economies themselves, and occurred in high-tech industries such as productions of ICT goods and machinery, leading to positive emission cost in developing economies especially China. Our results addressed the urgency of eliminating in carbon emission intensity between developing and developed economies.