



17th International Input-Output Conference

TITLE: THE ENVIRONMENTAL PAINS AND ECONOMIC GAINS OF OUTSOURCING TO CHINA

AUTHORS: PEI, Jiansuo ; DIETZENBACHER, ERIK; YANG, CUIHONG

EMAIL: jspei@amss.ac.cn

COUNTRY: CHINA

KEYWORDS: PROCESSING EXPORTS ; CLIMATE CHANGE ; VALUE ADDED ; PAINS AND GAINS ;

PAPER CONFERENCE CODE: 183

FULL PAPER IN CD?: YES

ABSTRACT:

When taking into account the dominant share of processing exports in overall exports volume, for instance 51% in 2007 (55% in 2002), it is crucial to address greenhouse gas emission issue generated in exports by processing type. Contrary to most previous studies, it is found that processing exports have lower pollution coefficient, which implies Chinese exports contribute relatively low to climate change (e.g. CO₂ emissions generated by processing exports account for 2%, and non-processing exports contribute 10% of total emissions). Following these findings, different from ordinary exports, processing exports are especially coherent with "emissions avoided by imports" fashion; in turn, the pollution balance turns out to be much smaller than ordinary ones. On the other hand, a lot of work has been done currently, qualitatively or quantitatively, on the value added or economic benefits for China generated by processing exports, and most people argue that although the volume of processing export are quite large, its economic benefits are relatively small (to give an example, the total domestic value added generated by 1 unit processing exports is about 0.287; however, the benefit gains from 1 unit non-processing exports is roughly 0.633). Needless to say, processing trade will be a most important part in China's trade in a rather long time in the future (though probably with a gradual diminishing share), we argue that processing trade to China is an "environmentally-friendly" export type (compared with similar products in ordinary trade) since it has a much shorter domestic production chain. Meanwhile it could be viewed as climate change (less) harmless behavior, though at the cost of value added, or gains and pains game. Furthermore, it would be highlighted that one of the most important things for China is how to adjust the products share in processing trade, in order to get a trade-off between climate change control and economic benefits.