Plastic Turkey: International Leakages of China's Waste Contamination Policy

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Abstract:

Global trade in plastic waste has increased by over 700 percent since the 1990s. Exports of plastic waste have flowed primarily from developed economies to emerging markets, raising concerns over the environmental and public health consequences of less stringent regulations in importing countries. Following domestic concerns, China tightened restrictions on contamination levels of plastic waste imports in 2017. Being the world's major importer of plastic waste, China's policy led to a dramatic diversion of trade. This paper shows that Turkey emerged as a major importer of plastic waste from more advanced economies. Importers in Turkey got access to cheaper foreign plastic waste and reduced their domestic purchases. Using a unique dataset on waste disposal by domestic firms, we show that firms in Turkey that generated plastic waste became more likely to mismanage it, including through burning or dumping in water bodies. Emissions from waste management increased in Turkish regions that were more specialised in production of the waste products banned by China. We model this channel of environmental degradation in a gravity model of trade and the environment to quantify the global spillovers of environmental externalities through trade and to examine the welfare impacts of the policy.