

# Addressing Northern overconsumption and its impacts in the global South

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## Summary

Overconsumption is a problem that requires to be urgently addressed, especially in high-income countries. These nations, for example, house around 15% of the world's population and account for 75% of global consumption expenditure. One of the greatest symptoms associated with this problem is global warming. Rapid absolute reductions in energy and material use must be achieved to avoid dangerous effects over time. This paper focuses on the case of CO<sub>2</sub> emissions. Its objective is to quantify the trade-offs between achieving cuts in consumption-based emissions in wealthy countries and attaining economic benefits through international trade in developing economies. The analysis relies on Environmentally-Extended Multi-Regional Input-Output analysis. The findings reveal that curbing consumption in the North involves an important trade-off. While reducing Northern consumption can contribute to reduce emissions and free carbon space, they can also curtail the development opportunities available to the global South.

## Abstract

Overconsumption is a problem that requires to be urgently addressed, especially in high-income countries. These nations house around 15% of the world's population and account for 75% of global consumption expenditure. These economies consume 3.2 times more energy and 2.3 times more materials per capita than the rest of the world. The consequences of excessive consumption range from deforestation to abusive labour practices and health issues. The greatest symptom associated with this problem, however, is global warming. It is estimated that wealthy nations are accountable for about 7.5 out of every 10 tonnes of CO<sub>2</sub> that have been emitted since the start of the industrial era. They also generate 3.4 times more emissions per capita than the average person in the rest of the world. Moreover, these countries have progressively become net importers of emissions, given their growing dependence on imported goods produced in other regions of the planet. In other words, wealthy nations import more emissions embodied in the products they consume than the ones they export. Consumer behaviour consequently needs to become more sustainable, either by making the basket of consumer goods more environmentally friendly (weak sustainable consumption) or by reducing consumption in absolute levels (strong sustainable consumption), like suggested by the degrowth movement. Moreover, it is recognised that rapid absolute reductions in energy and material use must be achieved to avoid dangerous effects over time. However, the environmental benefits of lowering consumption in the North could be

offset by negative development impacts in the South via international trade caused by a lower flow of traded goods. This is particularly true in a world that is ever more globalised, and where countries are more and more interdependent through global supply chains. This paper focuses on the case of CO<sub>2</sub> emissions. Its objective is to quantify the trade-offs between achieving cuts in consumption-based emissions in wealthy countries and attaining economic benefits through international trade in developing economies. Variables relevant for promoting economic growth and improving welfare, such as value added and wages paid to skilled and unskilled labour, are used here as proxies for development indicators. The analysis relies on the use of an Environmentally-Extended Multi-Regional Input-Output model based on GTAP 8 data, which covers 129 regions and 57 sectors. This tool allows determining the factor and carbon content of trade flows and specifically the amount of Southern wages associated to Northern emissions. The results describe a patent North-South divide. The North specialises in high capital-, low carbon- and skilled-labour-intensive goods. The South focuses on low capital-, high carbon- and unskilled-labour-intensive products. The findings also reveal that curbing final demand for imports involves an important trade-off. While reducing Northern consumption can contribute to reduce emissions and free carbon space much needed in the developing world, they can also curtail the development opportunities available to the global South. Developing countries, who have adopted free-market policies and export-led models of growth, depend on the revenue and employment generated by their exporting sectors. As a result, their development processes can be affected by a lower volume of trade under the current model of economic development. Least developed nations are on average more sensitive to Northern reductions of agricultural and mining imports. Middle-income countries, like China, are in turn more sensitive to reductions in industrial exports to industrialised countries. For instance, a 1% decline in Northern consumption-based emissions could lead to a fall in GDP of 5.9% on average in medium-income nations, while their total wages to skilled and unskilled labour would drop by 3.7% and 7.7%, respectively. Recognising the potential impacts and the vulnerability of different country groups to lower levels of Northern consumption is important, as it can help to better inform future actions. This examination represents an initial approach to the problem and evidences the challenges involved in the consumption-climate-development nexus. It also highlights the risks that are involved if these actions were to be taken unilaterally without a deeper understanding about their potential consequences. Finally, it represents a stepping stone on which further research can be based.