

Freight and Logistics Working Group ToR for CY22

Co- Leads: UNCTAD and World Bank

Working group on international Transport Costs

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Background

One of the concomitants to the COVID-19 pandemic has been unprecedented disruption to maritime transport, leading to a dramatic increase in shipping freight rates to historically high levels. The soaring freight rates, along with surcharges and fees, have been a challenge especially for smaller and vulnerable economies which have less policy space to address the maritime logistics disruption. Leaders from these economies have raised concerns about increased prices, food security as well as the availability of essential products such as medical supplies, as this could develop into an existential threat if it is not managed properly and as soon as possible. UNCTAD's Review of Maritime Transport 2021 (UNCTAD, 2021a) estimates that – if sustained – the current surge in container freight rates will significantly increase both import and consumer prices. UNCTAD's simulation model suggests that global import price levels will increase on average by 11 per cent as a result of the freight rate increases. Hardest hit will be the small island developing states (SIDS), simulated to face a cumulative increase of 24 per cent with a time lag of about a year.

International freight transport is in the focus not only because of its importance for economic development, but also because of its substantial contributions to global greenhouse gas emissions. Transport represents the end-use category of fossil fuels in which CO₂ emissions have grown fastest over the last decades (Sims R et al., 2014; Rodrigue, 2020). Between 1971 and 2018, CO₂ emissions from international maritime transport doubled, from 353 to 708 Mio. tons, and CO₂ emissions from international aviation more than tripled, from 169 to 604 million tons (IEA, 2020). The Kyoto Protocol therefore calls for countries to limit or reduce emissions of greenhouse gases in the transport sector. As agreed at the climate conference in Paris, 2015 (COP21), many signature countries have developed plans to limit greenhouse gas emissions from over-land transport. The International Civil Airline Organization (ICAO) and the International Maritime Organization (IMO) have set up emissions reduction targets embedded in greenhouse-gas reduction strategies.

The success of those strategies depends, among other factors, on an accurate and realistic assessment of their economic consequences. The COVID-19 pandemic has shown how severe the consequences of sudden and unpredicted increases in transport costs can be, especially for the less developed economies. This underlines the need for a thorough understanding of the linkages between transport costs, economic development, and emissions, and especially for data and analytical tools enabling reliable and comprehensive prediction of the effects of transport costs changes on the economy.

A new dataset on international transport and trade

To build a comprehensive evidence base for the analysis of the linkages between transport costs, international trade, economic development and emissions, UNCTAD, in collaboration with the IMO and with support from the World Bank's Blue Economy Program (PROBLUE), commenced the development of a Global Transport Costs Dataset on International Trade (GTCDIT), based on new data available in UN Comtrade, the main data source for global merchandise trade, that allows inferring transport costs as the difference between the CIF and the FOB value. GTCDIT makes available data on bilateral goods trade, in

value and quantity, by commodity group (at 6-digit HS level), alongside the associated transport costs, broken down by five modes of transport (MoT): air, sea, rail, road, and others. A beta version of the dataset, focusing on the reference year 2016, was launched in December 2020 and is publicly available on UNCTADstat (UNCTAD, 2021b).

The initial work on GTCDIT has already resulted in the estimations mentioned above in respect of current frictions in supply chains and their impact on the economy. The beta version of the dataset has been used in first comparative studies on transport costs, for example to assess the gap between transport costs in intra- and extra-African trade in the context of the new African Continental Free Trade Area (UNCTAD, 2021c). The dataset is considered to provide the basis for new indicators to measure of the impact of international trade on climate change and for assessing the expected impacts of climate change mitigation policies on the trade bill (Barrowclough et al., 2021).

As the new raw data from Comtrade had only recently been made available, and limited time and resources were available for the development of the beta version of GTCDIT, the development team focused on the compilation of data for only one year, 2016. By measuring transport costs in a top-down approach, using UN Comtrade Plus data, UNCTAD and its partners have gone a new way in the measurement of international transport costs that avoids aggregation problems and ensures consistency with published international trade data. This endeavour has of course been faced with challenges, by far not all of which could yet be solved. Further work is needed to transform GTCDIT into a robust and sound basis for reliable impact assessments.

The Scope and Focus of the Working Group

The working group will identify the main areas of improvements needed to make GTCDIT fit for high-quality simulation models to predict the impact of transport cost shocks on the economy and for reliable impact assessment of climate change mitigation policies. It will support the development of the solutions needed to implement these improvements, and it will guide the application of GTCDIT in those models. The work of the group will proceed in two phases:

Phase 1, from March to October 2022, in which the coverage of the GTCDIT dataset is extended, adding years from 2016 to 2020; the quality of the GTCDIT data is improved; and GTCDIT is utilised to estimate, at a strategic level, the cost implications of decarbonization for LDCs and SIDS.

Phase 2, from November 2022 to December 2023: in which the reinforced GTCDIT is utilized for a more granular analysis, as part of the formal impact assessments at the level of individuals countries.

Proposed Partners

UNCTAD and World Bank (confirmed). Open to all SuM4All partners interested in international freight transport, including e.g. ITF, WEF, UN regional commissions et al.

References

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