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Supply Spillovers During the Pandemic:
Evidence from High-Frequency Shipping Data

by Diego A. Cerdeiro and Andras Komaromi

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I N T E R N A T I O N A L M O N E T A R Y F U N D

IMF Working Paper

Asia and Pacific Department and Innovation Lab Unit

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Evidence from High-Frequency Shipping Data*****Prepared by Diego A. Cerdeiro and Andras Komaromi***

Authorized for distribution by Helge Berger and Tristan Walker

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Abstract

World trade contracted dramatically during the global economic crisis induced by the COVID-19 pandemic. Disruptions in international supply chains were widely reported as governments imposed containment measures (lockdowns) to halt the spread of the disease. At the same time, demand declined as households and firms scaled back spending. This paper attempts to disentangle the supply and demand channels in trade by quantifying the causal effect of supply spillovers from lockdowns. We utilize a novel dataset of daily bilateral seaborne trade, and design a shift-share identification strategy that leverages geography-induced cargo delivery lags to track the transmission of supply disruptions across space. We find strong but short-lived supply spillovers of lockdowns through international trade. Moreover, the evidence is suggestive of the downstream propagation of countries' lockdowns through global supply chains.

JEL Classification Numbers: F10, F14, F42, I18, R40**Keywords:** COVID-19, lockdowns, trade, spillovers, supply chains.**Author's E-Mail Address:** dcerdeiro@imf.org; akomaromi@imf.org

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* Diego A. Cerdeiro: IMF, Asia and Pacific Department; Andras Komaromi: IMF, Innovation Lab Unit.