

Health-care preventive measures, logistics challenges and corporate social responsibility during the COVID-19 pandemic: break the ice

Sasmoko, Muhammad Saeed Lodhi, Abdul Rashid Abdul Aziz, Nur Fatihah Abdullah Bandar, Rahimah Embong, Mohd Khata Jabor, Siti Nisrin Mohd Anis and Khalid Zaman

Abstract

Purpose – *The study aims to analyze the role of coronavirus testing capacity to possibly reduce the case fatality ratio (CFR) in a large cross-section of countries. The study controlled health-care expenditures, logistics performance index (LPI), carbon damages, and corporate social responsibility (CSR) to understand the nature of causation between the CFR and stated factors.*

Design/methodology/approach – *The study used a cross-sectional regression apparatus for coefficient estimates and variance decomposition analysis (VDA) for forecasting relationships between the variables over time.*

Findings – *The results confirmed the W-shaped relationship between CFR and case-to-test ratio (CTR) in the presence of a LPI that exacerbates the CFR cases across countries. The VDA estimates suggest that carbon damages, logistics activities, and CSR are likely to influence CFR over time.*

Originality/value – *To the best of the authors' knowledge, the study is believed to be the first study that assesses the W-shaped relationship between the CFR and CTR in the presence of dynamic variables, which helps to formulate long-term sustainable health-care policies worldwide.*

Keywords *Sustainable development, Social responsibility, COVID-19 pandemic, Health-care expenditures, Corporate social responsibility, Logistics performance index, Carbon damages, Cross-sectional regression*

Paper type *Research paper*

1. Introduction

The COVID-19 pandemic mainly affects the global world and spreads out among the masses that damage global health-care infrastructure and economic activities. The supply chain process is particularly disrupted because of strict lockdown measures to contain coronavirus disease. In addition, corporate social responsibility (CSR) also affected the loss of their employees and their clients. Health-care expenditures enormously increase countries' national health-care bills that further effected the countries' economic policies. Carbon damages is another antecedent that causes the low immune system ultimately leads to infection with coronavirus disease. The more downward progress in testing coronavirus cases pulls many new patients who cannot control the spread of the virus among the masses. The study used the case to test ratio, logistics performance, CSR, health-care expenditures, and carbon damages, which were mainly evident during the wake of the COVID-19 pandemic, to understand the causal inferences of the stated factors on increasing case fatality ratio (CFR).

Sasmoko is based at Bina Nusantara University, Jakarta Barat, Indonesia. Muhammad Saeed Lodhi is based at COMSATS University Islamabad, Abbottabad campus, Abbottabad, Pakistan. Abdul Rashid Abdul Aziz is based at Universiti Sains Islam Malaysia, Nilai, Malaysia. Nur Fatihah Abdullah Bandar is based at Universiti Malaysia Sarawak, Kota Samarahan, Malaysia. Rahimah Embong is based at Universiti Sultan Zainal Abidin, Kuala Terengganu, Terengganu, Malaysia. Mohd Khata Jabor and Siti Nisrin Mohd Anis are both based at Universiti Teknologi Malaysia, Skudai, Malaysia. Khalid Zaman is based at Department of Economics, The University of Haripur, Haripur, Pakistan.

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