

Documents

Idris, Z.Z.^a, Ismail, N.W.^b, Ibrahim, S.^b

Comparative Advantage and Competitiveness of COVID-19-Related Medical Products Exporters
(2022) *Journal of Competitiveness*, 14 (1), pp. 61-79.

DOI: 10.7441/joc.2022.01.04

^a International Islamic University Malaysia, Kulliyah of Economics & Management Sciences, Malaysia

^b Universiti Putra Malaysia, School of Business and Economics, Malaysia

Abstract

The coronavirus disease (COVID-19) pandemic generated an upsurge in demand for medical products. Trade policy changes, including export restrictions and import reforms, have led to a shortage of medical products. The World Health Organization has recommended countries to encourage local production and identify various import sources for medical products to ensure sustainable healthcare capacity to combat the COVID-19 pandemic and any similar events in the future. This study aims to examine the comparative advantages and competitiveness in producing medical products among top exporters. The contribution of this study is the ability to identify various import sources specific to developing countries. From the exporter's perspective, this study allows countries to recognize their existing competitive strengths in the medical products trade, allowing them to strategize and compete in the international markets of medical products. Using Balassa's revealed comparative advantage index, this study analyzes 25 primary medical product exporters, identifying several countries with a comparative advantage in producing medical products. Medicines are primarily dominated by high-income countries, including Switzerland and Germany, whereas middle-income countries, such as China and Malaysia, are more specialized in medical supplies, medical equipment, and personal protective products. This finding provides a basis for policy formulation that can facilitate the process of building a sustainable healthcare capacity. © 2022 Tomas Bata University in Zlín. All Rights Reserved.

Author Keywords

comparative advantage; competitiveness; COVID-19; medical devices; medical trade

References

- Abbas, S., Waheed, A.
Trade competitiveness of Pakistan: evidence from the revealed comparative advantage approach
(2017) *Competitiveness Review*, 27 (5), pp. 462-475.
- Achilladelis, B., Antonakis, N.
The dynamics of technological innovation: the case of the pharmaceutical industry
(2001) *Research Policy*, 30 (4), pp. 535-588.
- Ahmed, R. R., Streimikiene, D., Rolle, J. A., Duc, P. A.
The COVID-19 Pandemic and the Antecedents for the Impulse Buying Behavior of US Citizens
(2020) *Journal of Competitiveness*, 12 (3), pp. 5-27.
- Amin, R. M., Hamid, Z.
Towards an Islamic Common Market: Are OIC Countries Heading the Right Direction?
(2009) *International Journal of Economics, Management and Accounting*, 17 (1), pp. 133-176.

- Balassa, B.
Trade liberalization and Revealed Comparative Advantage
(1965) *The Manchester School of Economic and Social Studies*, 33, pp. 92-123.
- Baldwin, R., Evenett, S.J.
(2020) *Covid-19 and Trade Policy: Why turning inward won't work*,
Washington, DC: CEPR Press
- Bown, C. P.
COVID-19: Demand spikes, export restrictions, and quality concerns imperil poor country access to medical supplies
(2020) *COVID-19 and Trade Policy: Why Turning Inward Won't Work*, pp. 31-48.
Baldwin, R. & Evenett, S. J. (Eds). London: CEPR Press
- Chadha, A.
Product cycles, innovation, and exports: A study of Indian pharmaceuticals
(2009) *World Development*, 37 (9), pp. 1478-1483.
- Dudley, L., Moenius, J.
The great realignment: How factor-biased innovation reshaped comparative advantage in the US and Japan, 1970-1992
(2007) *Japan and the World Economy*, 19 (1), pp. 112-132.
- (2020) *The Economist*,
Coronavirus: the impact on global supply chains. Retrieved from
- (2006) *Eurostat indicators on High-tech industry and Knowledgeintensive services Aggregation of products by SITC Rev.4*,
Eurostat. Retrieved from
- Evenett, S. J., Hoekman, B., Rocha, N., Ruta, M.
(2021) *The Covid-19 Vaccine Production Club: Will Value Chains Temper Nationalism?*,
Policy Research Working Paper 9565. World Bank, Washington, DC. Retrieved from
- Evenett, S., Fiorini, M., Fritz, J., Hoekman, B., Lukaszuk, P., Rocha, N., Shingal, A.
Trade Policy Responses to the COVID-19 Pandemic Crisis: Evidence from a New Dataset
(2020) *SSRN Electronic Journal*,
Retrieved from
- Fertő, I., Hubbard, L. J.
Revealed comparative advantage and competitiveness in Hungarian agri-food sectors
(2003) *World Economy*, 26 (2), pp. 247-259.
- Fuchs, A., Kaplan, L. C., Kis-Katos, K., Schmidt, S., Turbanisch, F., Wang, F.
(2020) *Mask wars: China's exports of medical goods in times of COVID-19*,
Working Paper 2161. Kiel: Kiel Institute for the World Economy (IfW)
- Goldar, B.
R&D intensity and exports: a study of Indian pharmaceutical firms
(2013) *Innovation and Development*, 3 (2), pp. 151-167.

- Gopalakrishnan, B. N., Vickers, B., Ali, S.
(2020) *Analysing the Effects of the COVID-19 Pandemic on Medical Supply Chains in Commonwealth Countries*,
International Trade Working Paper 2020/09. Retrieved from
- Grossman, G. M.
(1989) *Explaining Japan's Innovation and Trade: A model of Quality Competition and Dynamic Comparative Advantage (No. w3194)*,
National Bureau of Economic Research
- Hallak, I.
(2020) *EU imports and exports of medical equipment*,
Briefing European parliament. European Parliamentary Research Service. Retrieved from
- Hayakawa, K., Mukunoki, H.
The impact of COVID-19 on international trade: Evidence from the first shock
(2021) *Journal of the Japanese and International Economies*, 60, pp. 1-12.
- Hoekman, B., Shingal, A., Eknath, V., Ereshchenko, V.
COVID-19, public procurement regimes and trade policy
(2020) *The World Economy*, pp. 1-21.
- (2020) *Pharmaceutical Exports from India*,
India Brand Equity Foundation. Retrieved from
- Kiran, R., Mishra, S.
Research and development, exports, and patenting in the Indian pharmaceutical industry: a post TRIPS analysis
(2011) *Eurasian Journal of Business and Economics*, 4 (7), pp. 53-67.
- Kuckertz, A., Brändle, L., Gaudig, A., Hinderer, S., Reyes, C. A. M., Prochotta, A., Steinbrink, K. M., Berger, E. S.
Startups in times of crisis-A rapid response to the COVID-19 pandemic
(2020) *Journal of Business Venturing Insights*, 13, p. e00169.
- Kuriyama, C.
(2020) *Promoting Trade in Medical Goods to Tackle COVID-19 Challenges*,
APEC Policy Support Unit Policy Brie 32. Asia-Pacific Economic Cooperation
- Madhav, N., Oppenheim, B., Gallivan, M., Mulembakani, P., Rubin, E., Wolfe, N.
(2017) *Disease Control Priorities: Improving Health and Reducing Poverty*, pp. 315-346.
3rd edition, Washington (DC): The International Bank for Reconstruction and Development /The World Bank
- Mahajan, V.
Structural changes and trade competitiveness in the Indian pharmaceutical industry in product patent regime
(2018) *International Journal of Pharmaceutical and Healthcare Marketing*, 13 (1), pp. 21-39.
- (2019) *Tracing Excellence: Paving the Way Forward*,
Annual Report 2019. MRPEC

- Mikic, M., Puutio, T. A., Gallagher, J. G.
(2020) *Healthcare products trade and external shocks: The US-China trade war and COVID-19 pandemics*,
(ARTNeT Working Paper Serie 190). UNESCAP
- Park, C. Y., Kim, K., Roth, S., Beck, S., Kang, J. W., Tayag, M. C., Griffin, M.
(2020) *Global Shortage of Personal Protective Equipment amid COVID-19: Supply Chains, Bottlenecks, and Policy Implications*,
ADB Brief 130. Asian Development Bank
- Pradhan, J. P.
Strengthening intellectual property rights globally: impact on India's pharmaceutical exports
(2007) *The Singapore Economic Review*, 52 (2), pp. 233-250.
- Redding, S.
Dynamic comparative advantage and the welfare effects of trade
(1999) *Oxford Economic Papers*, 51 (1), pp. 15-39.
- Ricardo, D.
(1817) *The theory of comparative advantage. On the Principles of Political Economy and Taxation*,
Canada: Batoche Books
- Saki, Z., Moore, M., Kandilov, I., Rothenberg, L., Godfrey, A. B.
Revealed comparative advantage for US textiles and apparel
(2019) *Competitiveness Review*, 29 (4), pp. 462-478.
- Seyoum, B.
Revealed comparative advantage and competitiveness in services: A study with special emphasis on developing countries
(2007) *Journal of Economic Studies*, 34 (5), pp. 376-388.
- Stelling, A., Berglund, I., Isakson, H.
(2020) *How trade can fight the pandemic and contribute to global health. COVID-19 and Trade Policy: Why Turning Inward Won't Work*,
London: CEPR Press
- Tyagi, S., Mahajan, V., Nauriyal, D. K.
Innovations in Indian drug and pharmaceutical industry: have they impacted exports?
(2014) *Journal of Intellectual Property Rights*, 19 (4), pp. 243-252.
- (2020) *UN Comtrade*,
Retrieved from
- (2019) *The Global Competitiveness Report 2019*,
Geneva: World Economic Forum
- (2020) *Investing in and building longer-term health emergency preparedness during COVID-19 pandemic*,
Interim guidance for WHO Member States
- (2021) *WHO Coronavirus (COVID-19) Dashboard*,
Retrieved from

- (2020) *Trade-in Medical Goods in The Context of Tackling Covid-19*,
Retrieved from
- Zarmani, N. F., Ramli, M. A., Saifuddeen, S. M.
Development of halal medical devices in Malaysia: Recommendation and challenges
(2014) *Online Journal of Research in Islamic Studies*, 1 (3), pp. 57-67.

Publisher: Tomas Bata University in Zlín

ISSN: 1804171X

Language of Original Document: English

Abbreviated Source Title: J. Compet.

2-s2.0-85129117695

Document Type: Article

Publication Stage: Final

Source: Scopus

ELSEVIER

Copyright © 2022 Elsevier B.V. All rights reserved. Scopus® is a registered trademark of Elsevier B.V.

 **RELX Group™**