

PAKISTAN’S TRADE IN COVID-19 RELATED MEDICAL PRODUCTS

AADIL NAKHODA¹

INTRODUCTION

Pakistan exported \$1.05 billion worth of medical products to its trading partners in 2018 and imported \$996 million from its trading partners in 2018. The medical products are defined according to seven categories as classified in “Tackling COVID-19 Together: The Trade Policy Dimension” by Global Trade Alert². Pakistan reported a trade surplus in medical products, as its exports were heavily concentrated in two products, indentured ethyl alcohol and medical and surgical instrument. The total value of exports of the two products from Pakistan is \$800 million. The analysis in this paper focuses on the trade in critical COVID-19 related medical products (henceforth stated only as medical products) by Pakistan as well as by other countries.

The aim of this article is to compare trading patterns of Pakistan with that of other countries also struggling with the pandemic such as China, Italy and the US. Although, the US and China trade significantly more than Pakistan in medical products, the perspective on the relative market share indicates the intensity of challenges that are likely to be faced by Pakistan as all major countries scamper for supplies. Export restrictions applied by several major exporters of medical products as they cater to their own markets is likely to exacerbate the current situation. The analysis further includes a discussion on the comparison of the tariffs imposed by Pakistan and regional counterparts such as China, India and Bangladesh. Additionally, a comparison is included on the frequency and coverage ratios of non-tariff measures adopted by Pakistan, indicating the potential proliferation of poor quality and substandard medical equipment.

¹ Aadil Nakhoda is an Assistant Professor at Institute of Business Administration, Karachi

² The seven categories are (i) COVID-19 test kits and related apparatus, (ii) Disinfectants and sterilization products (iii) Thermometers, (iv) Protective garments, (v) Other medical devices, (vi) Medical consumables, (vii) Soap. All categories, except soap, appear in World Customs Organization’s classification of COVID-19 medical supplies.

The data on trade patterns is extracted from UN COMTRADE, the data on trade-weighted average tariff rates is extracted from World Bank's World Integrated Trade Solution and the data on non-tariff measures is extracted from United Nations' NTM Hub³. The products are categorized into medical products as according to the study, "Tackling COVID-19 Together: The Trade Policy Dimension", prepared by Global Trade Alert. The list of HS codes classified according to different medical products is presented in the mentioned research study.

PAKISTAN'S TRADE

Pakistan reported more than \$100 million worth of exports of disinfectants and sterilization products, other medical devices and protective garments in 2018. The exports of COVID-19 testing kits and related products, soap and thermometers were negligible. Two major items exported from Pakistan exports belonging to the medical product categories are un-denatured ethyl alcohol (80% volume or more) and medical and surgical instruments. Pakistan also exported knitted or crocheted gloves as well as medicaments (such as hydrogen peroxide) used as disinfectants and for sterilization. On the other hand, Pakistan imported significant amount of COVID-19 test kits (reagents for diagnostics and testing purposes), disinfectants and sterilization products (such as hydrogen peroxide), medical consumables (such as needles, catheters, cannulae) and other medical devices (such as patient monitoring devices etc.).

The following pie chart in Figure 1 shows the decomposition of exports and imports based on the categories of medical products. Disinfectants and sterilization products and other medical products constitute the largest proportion of both exports from (83%) and imports into (63%). Although, the imports into Pakistan of un-denatured ethyl alcohol is significantly lower relative to the exports from it, Pakistan reports more than \$50 million in both exports and imports for medicaments. Imports of soap, protective garments and thermometers is cumulatively around 6 percent⁴.

³ Data on NTMs for China, European Union and Pakistan was collected in 2016. Data on NTMs for United States was collected in 2014. A small proportion of the NTMs have a start date post 2014 and this share is trivial for more developed regions such as the European Union. A small percentage of all NTMs that have a start date as well as end date post 2018 is dropped from this analysis. We assume that data collected on NTMs in either 2014 or in 2016 is not likely to significantly change in 2018.

⁴ According to the aforementioned report published by Global Trade Alert, disinfectants and sterilization products reported by the far the largest value for global exports at \$308.6 billion, followed by COVID-19 test

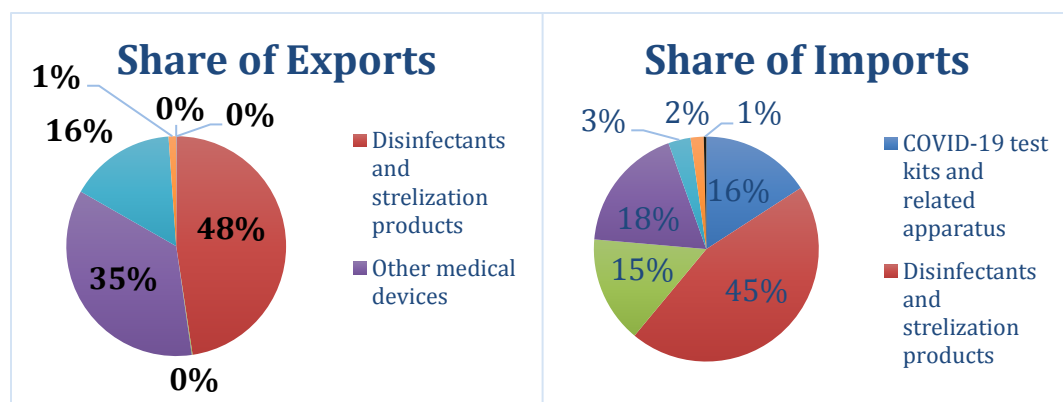


Figure 1: Share of Exports into Pakistan and Imports from Pakistan of Each Medical Product Category as a Percentage of all COVID-19 Related Medical Products in 2018

AN INTERNATIONAL PERSPECTIVE

The three countries that have suffered significantly from the Coronavirus pandemic at the time of writing are China, Italy and the United States. Figure 2 presents their share in demand for global supplies and their contribution to total global exports. These countries, in particular China and the US, can significantly alter the patterns of global trade as a surge in domestic demand increases the need to cater their domestic markets and divert the flow of global imports from other countries. The US has significant shares in the exports of COVID-19 test kits and related apparatus, medical consumables, other medical devices and thermometers. China dominates global exports of protective garments. On the other hand, the US has a significant share in the imports of all medical products. Pakistan's share is negligible in global trade for both imports and exports across all medical products, emphasizing the fact that it is likely to struggle in finding foreign sellers of critical medical products. Local entities in Pakistan will compete against buyers located in other larger markets as they struggle to meet their own domestic demand. Italy's share in both exports and imports is less than that of the US but does exceed China in some cases. With an increase in demand for medical products likely, particularly as several countries report severe shortages, pre-existing trade linkages between countries will play an important role to ensure that medical products reach the health facilities. Interestingly, China is not a major exporter of COVID-19 test kits and related apparatus. However, China has been proactively donating testing kits and other medical

kits and related apparatus at \$185.3 billion. Protective garments, thermometers and soap, with a cumulative value of \$57.8 billion reported the least value of global exports.

equipment to countries desperately in need. The question is whether donations from China will be enough to meet the ever-increasing shortages as the pandemic spreads across countries.

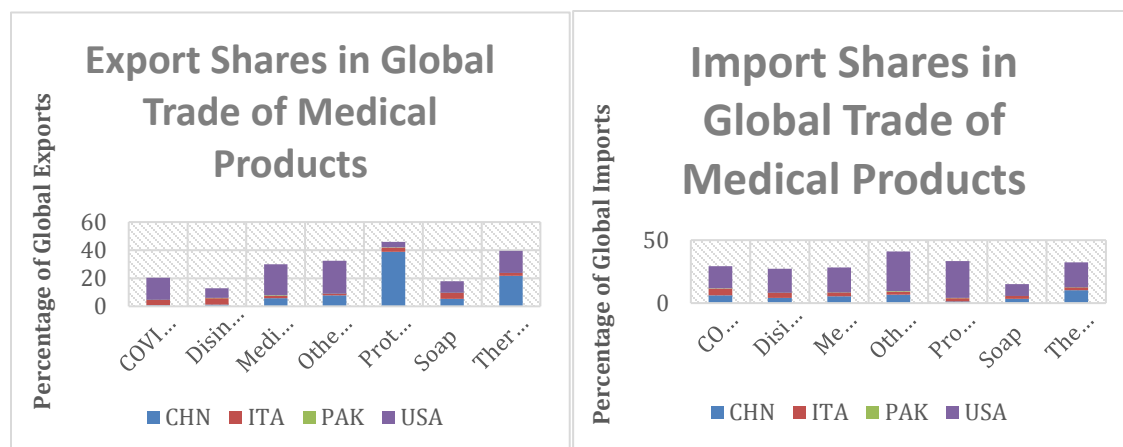


Figure 2: Export Shares and Import Shares in Trade of Medical Products of Selected Countries in 2018

THE ROLE OF TARIFFS

The trade-weighted average import tariff rates are reported for Pakistan and selected regional countries. The trade-weighted average is calculated by multiplying the individual tariffs on each product to its import share within the categories. Figure 3 reports higher tariff rates for Pakistan relative to its neighbors on the imports of COVID-19 testing kits and related apparatus, medical consumables and soap^{5,6}. India reports higher tariffs for disinfectants and sterilization products, while Bangladesh reports higher levels for protective garments. Pakistan has comparatively lower levels of tariffs on other medical devices, making access relatively easier compared to other goods. These include ventilators and patient monitors. However, overall relatively higher rates of tariffs persist on imports of medical products. The import tariffs are often a result of distortionary trade policies that not only protect domestic producers against foreign competition but can also generate government revenue. The cost on the society is often substantial if investments in health sector are discouraged due to such rates. Unfortunately, at the time of national emergency, such policies prior to the crisis may have hurt the ability of health sector to build capacity and purchase necessary equipment during normal times.

⁵ Although, the trade-weighted average tariff rates are likely to be biased by the import values of the goods, lower tariff rates are preferred more than higher tariff rates due to the nature of the medical products imported.

⁶ Although not reported, the pattern for simple average tariff rates on medical products is consistent with that of trade-weighted average tariff rates. Pakistani importers are likely to face reports tariff rates on several products.

ROLE OF NON-TARIFF MEASURES

Non-tariff measures (NTMs) include measures other than tariff rates and tariff-rate quotas that may influence trading patterns. They may affect the price, the quantity or both of imported goods. Non-tariff measures can also play an important role to address market failures and strengthen consumer confidence as they may signal the quality of a product.

Table 1 presents the frequency index of non-tariff measures applied by selected countries. Pakistan does not impose NTMs to the extent reported by China, Italy and USA on any of the medical products⁷. China imposes NTMs on all products within each product classification except protective garments. Italy imposes NTMs on all products within each product classification except COVID-19 test kits and related apparatus. Although, US is relatively relaxed with its NTMs on a few products, it does impose regulations on all imports of COVID-19 test kits and related apparatus, other medical devices, soap and thermometers. Pakistan only imposes NTMs on 1/3rd of products categorized as COVID-19 test kits and related apparatus, disinfectants and sterilization products, medical consumables and other medical devices while does not have NTMs imposed on the imports of protective garments, soap and thermometers.

Table 1: Frequency Index of Non-Tariff Measures Applied by Selected Countries

	CHN	ITA	PAK	USA
COVID-19 test kits and related apparatus	1.00	0.67	0.33	1.00
Disinfectants and sterilization products	1.00	1.00	0.33	0.83
Medical consumables	1.00	1.00	0.33	0.83
Other medical devices	1.00	1.00	0.33	1.00
Protective Garments	0.86	1.00	0.00	0.86
Soap	1.00	1.00	0.00	1.00
Thermometers	1.00	1.00	0.00	1.00

⁷ Although not reported earlier, USA and Italy have almost negligible trade-weighted average tariff rates on the imports of all medical products, except protective garments reporting approximately at 5 percent.

Considering the coverage ratio of NTMs, Table 2 reports that Pakistan imposes NTMs on 97 percent of the imports in disinfectants and sterilization products. Pakistan protects its imports of disinfectants and sterilization products through use of both high tariff rates and non-tariff measures. The NTMs imposed on other products are limited. With only 0.2 percent of the imports of COVID-19 kits and related apparatus reporting NTMs, the regulatory enforcement on the quality of kits is likely to be low. Also, protective garments do not report any NTMs. This should raise questions regarding the proliferation of low quality kits into the country. It is imperative that policymakers review the set of NTMs imposed on the imports of medical products as their demand surges.

Table 2: Coverage Ratio of Non-Tariff Measures Applied by Selected Countries

	CHN	ITA	PAK	USA
COVID-19 test kits and related apparatus	1.00	0.15	0.002	1.00
Disinfectants and sterilization products	1.00	1.00	0.97	1.00
Medical consumables	1.00	1.00	0.38	0.98
Other medical devices	1.00	1.00	0.18	1.00
Protective Garments	0.63	1.00	0.00	0.57
Soap	1.00	1.00	0.00	1.00
Thermometers	1.00	1.00	0.00	1.00

KEY POINTS AND CONCLUSION:

- Un-denatured ethyl alcohol (disinfectant and sterilization products) and medical and surgical instruments account for majority of the exports from Pakistan of COVID-19 medical products.
- Needles, catheters, cannulae, medicaments (such as hydrogen peroxide), and reagents for diagnostic and testing purposes (such as instruments for in vitro diagnostics) each report more than \$100 million in terms of import value into Pakistan in 2018.
- Pakistan constitutes a negligible proportion in total value of both global exports and global imports. Both US and China account for a significant share of trade in both directions in several products. Given their own struggle to fight the pandemic, pre-existing global supply links between the larger markets may influence the distribution of medical products to different countries.

- The trade-weighted average tariff rate on COVID-19 test kits (14.3%) and related apparatus and on soap (19.7%) is the highest for Pakistan relative to that imposed by India, Bangladesh and China. A tariff on disinfectants and sterilization products and protective garments exceeds 13%.
- NTMs imposed by Pakistan on COVID-19 medical products are negligible. Both the frequency index and the coverage ratio suggest that NTMs are not a preferred choice of a trade policy instrument. NTMs are prominent for the imports into US, China and Italy. Unfortunately, the lack of NTMs may result in poor regulation on quality and standards of the medical products imported into Pakistan as it fights COVID-19.