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COVID-19 and Commodities: Assessing the Impact on Exports from Commonwealth Countries

**Salamat
Ali**

Economic Adviser
Trade, Oceans and
Natural Resources
Directorate,
The Commonwealth
Secretariat
s.ali@commonwealth.int

**Marco
Fugazza**

Economic Affairs
Officer
Division on
International Trade,
and
Commodities,
UNCTAD
marco.fugazza@unctad.org

**Brendan
Vickers**

Adviser and Head,
International Trade
Policy Section
Trade, Oceans and
Natural Resources
Directorate,
The Commonwealth
Secretariat
b.vickers@commonwealth.int



Abstract

This study analyses the salience of commodities in Commonwealth members' merchandise trade and estimates the impact of the COVID-19 pandemic-induced trade disruptions on the commodities exports to five main markets: China, the United States of America European Union (EU-27), the United Kingdom and Australia.

The analysis finds that commodities constitute almost half of Commonwealth countries' global merchandise exports but the share for 35 commodity dependent Commonwealth countries is above 80 per cent. The COVID-19 shock has been perceived as a global negative shock hurting all sectors and all markets. Indeed, the estimates presented in this study indicate that compared to business-as-usual, the commodity exports to these five destination markets are expected to fall by between US\$ 98 and 123 billion in 2020. This represents an export loss of 19 to 24 per cent with respect to benchmark estimates. On aggregate, all destinations are characterised by COVID-19 projections below their respective counterfactual. Exports to the United Kingdom, the lowest hit destination market, are expected to stand at between US\$ 352 and 399 million below a business as usual situation. Exports to the United States market are the largest hit (between US\$ –50 and –41 billion) followed by those to the EU-27 (between US\$ –41 and –33 billion) and China (between US\$ –26 and –18 billion).

The picture arising from a more granular analysis on the exporters side shows relatively strong nuances. The results clearly indicate that for the countries dependent on fuel exports, the recent collapse in oil prices and its detrimental effect on their export earnings has been amplified by the pandemic.

Overall, projections and simulation results would suggest that dependency patterns have at best been maintained because of the pandemic shock. At worst, and especially among highly dependent commodity exporters, the pandemic has further accentuated a fragile macroeconomic situation already under pressure due to heightened price fluctuations in several commodity markets.

Key words: Exports, Commodities, Commonwealth, COVID-19

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Introduction

Commodity exports constitute a large share of world merchandise trade for many developing and developed countries. In 2019, the share of commodities in the US\$ 18.9 trillion world merchandise trade was about one third. That share was 25 per cent and 30 per cent for developed and developing countries, respectively. The number of Commodity-Dependent Developing Countries (CDDCs), namely countries that derive at least 60 per cent of their merchandise export earnings from primary commodities, stood at 102 out of 189 countries (UNCTAD, 2019).¹ This included 60 per cent the Commonwealth's membership (31 of 54 member countries).

Globally, Commonwealth countries account for one-fifth of commodities exports. However, the share of commodities in the Commonwealth's total merchandise exports is much higher, 45 per cent against the global average of 30 per cent. Moreover, the share of commodities in the merchandise exports for 35 Commonwealth countries is at about 84 per cent.² The failure to sufficiently diversify exports beyond primary commodities undermines their resilience and accentuates their vulnerability to external shocks such as COVID-19.

During the last few years, commodity prices have been susceptible to the escalating trade tensions between the world's two largest economies, the United States of America and China. However, the recent COVID-19 shock has brought the commodities exports of several Commonwealth countries to a grinding halt. Demand contraction in main export markets along with supply challenges because of disruptions to logistics networks have adversely affected the exports of these countries. This drop in exports led to a collapse in some commodity prices creating several macroeconomic challenges for commodity dependent economies. The immediate repercussions include reduced fiscal space for overall government expenditure, especially healthcare, sourcing of essential medical and food supplies and providing social safety nets to the most vulnerable.

This study analyses the impact of COVID-19 on commodity exports by Commonwealth countries. It estimates the value of lost exports resulting from the Coronavirus outbreak and explores the variation of the impact across countries, regions and commodity type. Besides focusing on the impact of pandemic-induced trade disruptions, it also examines the importance of commodities in the merchandise exports of Commonwealth countries, including historical patterns and structure of commodities exports, and export market concentration.

This paper is structured as follows: Section 2 outlines the data and estimation approach. Section 3 examines the salience of commodities trade for Commonwealth countries along with the structure, composition and direction of exports, including long-term trade patterns. Section 4 explores the impact of the COVID-19 shock and Section 5 concludes with a summary of the findings.

¹ <https://unctad.org/en/pages/PublicationWebflyer.aspx?publicationid=2439>

² Commonwealth secretariat computations based on UNCTADStats data for the 2013-2018 period.

1. Data, descriptive statistics and estimation methodology

Data

The study uses data from UNCTADstat and the International Trade Centre (ITC). We retrieve aggregate information on broader categories of commodities exports from 54 Commonwealth members at a bilateral level from UNCTADstat and use it to generate descriptive statistics on the structure, composition and historical trend of commodities exports from member countries. We employ the ITC dataset for the product level analysis for the recent period after the onset of COVID-19. The projections and simulations are based on monthly trade flow data from the ITC. Use of these two sources enables us to expand the breadth and depth of the analysis and examine commodity trade of Commonwealth countries from multiple macro and micro dimensions.

Table 1: Commodity groups used for projections and simulation exercise

Category	Group	HS codes (4/6 digits)
Food items	Dairy	0401-0403, 0409
	Edible oils	1507-1515
	Fisheries products	0302-0308
	Fruits & Nuts	0801-0810, 0813
	Meat	0201-0210, 0504
	Salt	2501
	Sugars	1701, 1703
	Grains	1001-1008, 1101-1104, 1201, 0701, 0713, 0714
Agricultural products	Cotton	5201
	Paper pulp	4701-4706
	Rubber	4001, 4002
	Wood	4403, 4407
	Wool	5101
Fuels	Crude oil	2709
	Refined oil	2710
	Natural gases	271111, 271121
	Coal & Lignite	2701, 2702
Ores and Minerals	Ores	2601, 2603, 2606
	Ores products	7208-7229, 7301-7307, 7402-7412, 7601-7612
	Diamonds	7102
	Fertilizers	2827, 2834, 3101-3105

Note: HS product groups are based on Chinese customs groups definition.

Data for January-February imports by China have been downloaded from the Chinese customs website. As trade information refers to the January and February months taken together, monthly flows available for other countries and the rest of the years under consideration have been transformed into bi-monthly aggregates to preserve overall coherence. This implies that each year includes six two-month periods. Projections and simulations exercises are run at the 6-digit level of the HS classification in its 2012

version. Included products correspond to those for which Chinese customs released information for the January-February period. Results are presented at a more aggregated level and follow product groups and categories defined in Table 1.

The HS 6-digit level detailed information on commodity imports is available for 52 Commonwealth members³ at a bilateral level except for imports by China in the January-February period. In the latter case, variations observed at the aggregate level were applied to all bilateral trade relationships.

While exploring the impact of COVID-19 on all Commonwealth countries, we specifically investigate the implications for 35 Commodity Dependent Commonwealth Countries (CDCWCs) that have more than 50 per cent share of commodities in their merchandise exports (Table 6). As discussed earlier, commodities constitute around 84 per cent of the merchandise exports of these economies. Overall, these 35 countries account for around two-thirds of the Commonwealth's membership and about a half of the Commonwealth's commodities exports. We mainly focus on exports to five large markets, namely the United States, China, the United Kingdom, Australia and the EU-27. These five markets absorb more than half of Commonwealth countries' global commodities exports (see Section 3.2 for details).

Methodological approach⁴

The study uses a parsimonious computational approach based exclusively on trade flow information. This technique provides a more specialized analysis of up-to-date and disaggregated information. The computational exercise involves comparing potential commodities exports scenarios reflecting the shock imposed by the Coronavirus with an historical business-as usual trend. To construct the baseline, we assume that, in the absence of the COVID-19 pandemic, the commodity exports could have followed the historical growth pattern. We establish this benchmark with bi-monthly trade data for the past three years (2017-19) as discussed above.

Although the nature of the exercise is essentially in line with partial equilibrium estimations, using realized values to define shock-related variations may also encompass some general equilibrium effects. A proper general equilibrium approach would require inter alia information about input-output linkages and would have to rely on a large set of ad-hoc assumptions as, for instance, in the case of simulations. Moreover, shocks would reflect in the first place, variations in production/gross domestic product (GDP) to be translated into import demand shocks via estimated elasticity parameters.

Two shock scenarios reflecting the possible impact of the COVID-19 health crisis with respect to the benchmark set of projections are identified. In both cases, deviation levels from the baseline are defined using import information observed during the first three bi-monthly period (January-February, March-April and May-June) of 2020 for China and during the second and third bi-monthly (March-April and May-June) period for the other destination markets, namely the United States, the EU-27, the United Kingdom and Australia. These COVID-19 scenarios are consistent with the fact that the wave of contamination impacted Eastern Asia in the first place and then gradually propagated towards Europe and North America.

³ No information for Tuvalu and Nauru could be retrieved from imports data for the year 2020. This could indicate an absence of exports from these two members to the five destinations included in the study

⁴ See Fugazza (2020) for a detailed presentation of the approach and discussion.

In scenario 1, deviations from baseline levels are extended until the end of August 2020 for China and the end of October 2020 for other destinations. In scenario 2, deviations from baseline levels are extended until the end of October 2020 for China and the end of December 2020 for other destinations. The second scenario aims at capturing the potentially depressing effects of the second wave of restrictive sanitary measures implemented during the second half of October 2020 in several European countries. At the end of the impact period, convergence with the benchmark scenario is imposed in both scenarios until the end of the calendar year.

Limitations of the study

To construct the baseline, the study assumes that in the absence of the COVID-19 pandemic, commodity exports could have followed the historical growth pattern. It is further postulated that, hopefully, the COVID-19 induced production and trade disruptions would be over by these cut off dates and commodity exports could return to their normal trajectory.

Alongside these implicit modelling assumptions, two limitations of the analysis need to be kept in view of interpreting the results. First, the analysis is based on values rather than volumes as product aggregation becomes complicated due to differences in units of weight across products within the same commodity group. A major limitation while working with values only is the impossibility to disentangle price effects and quantity effects driven by either changing demand and/or supply conditions. A major consequence could be the smoothing out of simulated future variations in import values. It can also be argued that focusing on values scenarios makes the simulation exercise less exposed to extraordinary quantity variations due to unexpected decisions or market behavior. Despite the limitation, the approach serves the primary objective i.e. understanding short-term trends in exports of major commodities groups.

Second, the deviations from projected baseline import values may not be exclusively associated with the outbreak of the pandemic as several other factors might have exacerbated this decline. For instance, the Sino-American trade conflict is certainly affecting commodity prices. The commodity trade follows the twists and turns of political developments. The imposition of tariffs by the United States on Chinese imports and retaliation by China had dampened demand, causing prices to fall with some impact on trade values overall. Nevertheless, the pandemic shock has proved to be predominant, with severe disruptions going far beyond the expected consequences of the trade conflict between two large markets.

2. The state of the Commonwealth's commodities exports

Globally, approximately 20 per cent of commodities originate from Commonwealth countries and this share has been quite stable over time (see Table A1 for details). However, as a share of merchandise exports, Commonwealth countries have a higher dependence on commodities than the world average, at about 45 per cent compared to 29 per cent. This distribution varies widely across countries and regions.

Share of commodities in merchandise exports

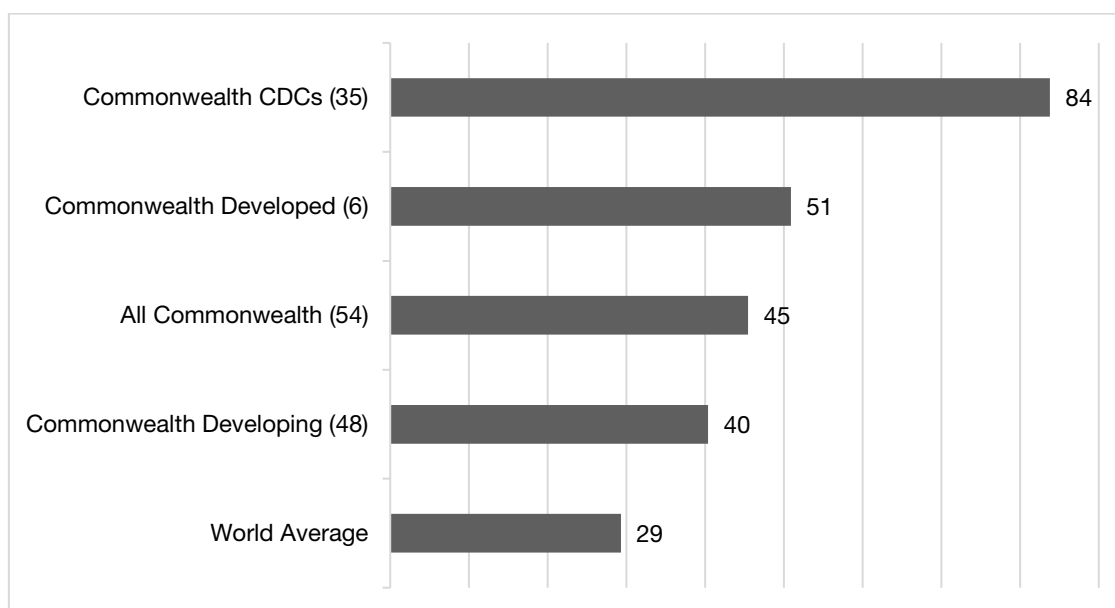
Contrary to commonly held views about the predominance of commodities in developing countries exports, Figure 1 (panel A) shows that six developed

Commonwealth countries have a larger share of commodities in their merchandise exports (51 per cent) than 48 developing member countries (40 per cent). The relatively higher proportion of commodities in merchandise exports of New Zealand (79 per cent), Australia (71 per cent) and Canada (48 per cent) drives this effect. Panel B further indicates that reliance on commodity exports varies across developing countries with Pacific members at 97 per cent followed by African (79 per cent) and Caribbean members (58 per cent).

Overall, 35 Commonwealth member countries are highly dependent on commodities exports with a share of commodities in merchandise exports above 84 per cent.⁵ The share varies from 55 per cent for Grenada to above 98 per cent for Solomon Islands (Table 2). The high level of reliance on commodity export earnings makes these economies extremely vulnerable to price fluctuations in international markets. Of these 35 CDCWCs, two are developed economies – Australia and New Zealand – with shares of commodities at 71 per cent and 79 per cent respectively, while the remaining 33 CDCWCs are developing, of which 16 are located in Africa, two in Asia, eight in the Pacific and seven in the Caribbean.

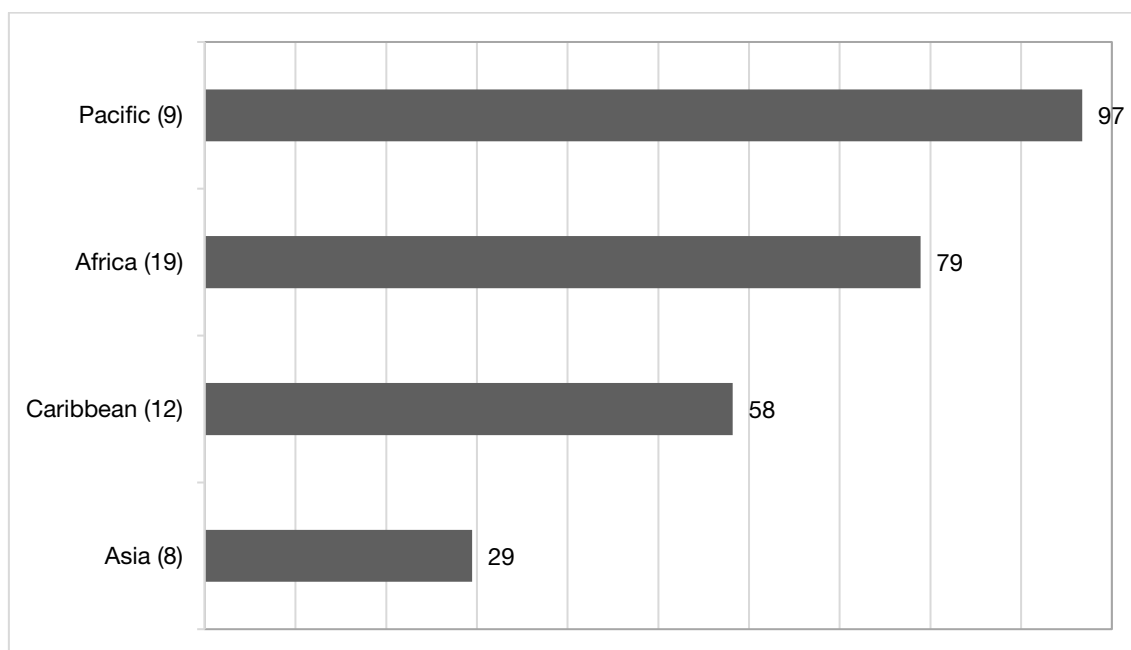
Figure 1: Significance of commodities in merchandise exports (per cent, 2018)

(a) Commonwealth regions/groups



⁵ These CDCWCs have more than 50 per cent share of commodities in their merchandise exports.

(b) of which developing countries



Source: Authors' calculations using UNCTADstat

Note: The chart presents commodities share in merchandise exports. CDCWCs have more than 50 per cent share of commodities in their merchandise exports.

Main export destinations

The five largest export destinations for commodities are China, United States, the European Union, the United Kingdom and Australia. These five markets combined absorb more than half of Commonwealth countries' global commodities exports. China is the largest export destination accounting for 19 per cent, followed by the United States (17 per cent) and the European Union (13 per cent). The share of commodities destined to the United Kingdom and Australia are relatively small, 3 per cent and 2 per cent, respectively (Figure 2, panel A).

The share of Commonwealth countries in the global commodity imports of these five main markets varies greatly, ranging from around 42 per cent for Australia and 40 per cent for the United States, to 25 per cent for China and 11 per cent for the European Union (Figure 2, panel B). This relatively large dependence puts the export earnings at high risk due to the collapse in import demand in any of these countries.

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