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### **Global Trade Analysis Project** https://www.gtap.agecon.purdue.edu/

This paper is from the GTAP Annual Conference on Global Economic Analysis https://www.gtap.agecon.purdue.edu/events/conferences/default.asp

## Does Covid-19 make consumers discriminate Chinese products? – Evidence from Amazon data

#### Alma Cortes Selva and Danyang Zhang

#### 1. Introduction

Covid-19 has tremendously affected all areas of our lives and our online shopping choices have not been immune. Country of origin (COO) is an important characteristic used by global marketers to influence customer decisions (Agrawal and Kamakura, 1999), with the COO being used by the consumers to make "quality judgments of a product". Even though there is no valid reason to avoid Chinese products, our research shows that a significant number of consumers around the world now try to avoid buying products manufactured in China and that there has been a rise in discriminatory online review ratings for Chinese products, especially with regards to personal protective equipment (PPE), specifically facemasks.

According to WHO, the spread of Covid-19 through international products is extremely unlikely<sup>1</sup>. However, given that China was the first country to report cases of Covid-19, it has led many to associate Covid-19 and China. To make matters worse, there have been prominent political leaders that have used language to stigmatize China with blame and fear around Covid-19, including the ex-president of the United States. On March 16<sup>th</sup> and 17<sup>th</sup>, the then U.S. President Donald Trump first called Covid-19 the "Chinese virus", "Wuhan virus", "Kung flu" in posts on Twitter and has used that language ever since in media interviews, at rally speeches, and on social media. Fox news, Newsmax and other fringe networks outlets have continued with this rhetoric. Such language stigmatizes Chinese products with unfounded health concerns and encourages unfair discrimination based on false blame and unwarranted distrust. Discrimination against Chinese products could result in significant shifts in trade patterns, especially in the United States where China is the largest importer of goods. In 2019, China exports to the United States totaled \$451.7 billion.

As such, we wanted to see if there is data showing that consumers are changing their buying behavior toward Chinese products, especially towards personal protective equipment since it is directly correlated with the recent rhetoric against China.

To study this question, we compiled data from Amazon on all facemask products sold on the site between September 10<sup>th</sup> and 24<sup>th</sup>, including the seller, review rating, sales data, price, product features, and every review<sup>2</sup>. We categorized each facemask's product review as to whether it contained derogatory language against China (1 if there were derogatory comments), complaints about equality A patchage buyer reported of the derogatory comments against China (1 if produced in China). Examples of some of the derogatory comments against China we found included the following:

<sup>&</sup>lt;sup>1</sup> https://www.cdc.gov/coronavirus/2019-ncov/faq.html

<sup>&</sup>lt;sup>2</sup> Office of the United States Trade Representative https://ustr.gov/countries-regions/china-mongolia-taiwan/peoples-republic-china#:~:text=U.S.%20goods%20imports%20from%20China,U.S.%20goods%20imports%20in%202019.

"Received this item today. Not made in USA. Chinese writing all over package. It went directly into trash. Shipping to (sic) weeks to get it".

"Masks from China, no, no, no !!!!!!"

"DID NOT know that these masks were from China !!!!!!! In the times that we are living in you are selling masks from China these will go in the trash !!!!!! This will turn me off from buying anything else !!!!!!!!!"

We also performed a DID analysis and chose different points<sup>3</sup> in time to identify the following different questions: a) Do consumers discriminate Chinese products? b) Do consumers give lower ratings for products manufactured in China? c) Do sellers of Chinese products charge lower price?

We find that if the word China is mentioned in an online product review or any other section of the product page, the product gets consistently a lower rating even if it is identical to another one made in a different country. We also find that facemasks manufactured in China are generally priced lower than facemasks made in the United States even with practically identical products.

In future research we will expand to a bigger array of products to see if the results from the face mask holds for a broader spectrum of products.

<sup>&</sup>lt;sup>3</sup> For example, we have tested March 16<sup>th</sup> ,2020, the first time that Covid-19, May 27<sup>th</sup>, 2020 when the U.S. reached 100,000 Covid-19 deaths.

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