

TRADE IN MEDICAL GOODS IN THE CONTEXT OF TACKLING COVID-19: DEVELOPMENTS IN THE FIRST HALF OF 2020

INFORMATION NOTE¹

KEY POINTS:

- While total world trade declined by 14 per cent in the first half of 2020 compared to the same time period in 2019, imports and exports of medical goods increased by 16 per cent, reaching US\$ 1,139 billion in value.²
- Trade played a critical role in meeting skyrocketing demand for products considered critical in the COVID-19 pandemic, with global trade in these products growing by 29 per cent.
- Total imports of face protection products in the first half of 2020 increased by 90 per cent compared to the same period last year. Trade in textile face masks has grown about six-fold.
- China was the top supplier of face masks, accounting for 56 per cent of world exports. To ramp up mask manufacturing, China leaned heavily on imports of intermediate input materials: its imports of non-woven fabric tripled in April 2020 compared with the same month of 2019, with Japan and the United States as the leading suppliers. China was also the sixth-largest importer of face masks in the first half of 2020.
- Among the different types of face masks, textile masks are the most traded despite facing the highest tariffs.
- Leading importers of COVID-19-critical products registered double-digit import growth compared to 2019, including 62 per cent in France and 52 per cent in Italy.
- Chinese exports of COVID-19-critical medical products more than tripled based on year-on-year data for the first half of the year, from US\$ 18 billion to US\$ 55 billion.

1 INTRODUCTION

This report updates the information note "[Trade in medical goods in the context of tackling COVID-19](#)", issued on 3 April 2020. It presents preliminary trade statistics from 97 economies for the first half of 2020. Comparisons are made in terms of year-on-year growth rates for the first half of 2019. This update includes a special case study of face masks, since the most visible symbols of the fight against the pandemic have also been heavily traded.

¹ This document has been prepared under the WTO Secretariat's own responsibility and is without prejudice to the positions of WTO members or to their rights and obligations under the WTO.

² The values of imports and exports in this study are calculated at the [Harmonized System](#) (HS) six-digit subheading level. Those subheadings can cover products that are for non-medical use.

2 DESPITE THE OVERALL TRADE DOWNTURN, MEDICAL GOODS UNDERWENT PHENOMENAL GROWTH IN 2020

The COVID-19 pandemic has taken its toll on the global economy and international trade. Recent statistics³ show that global trade in the first half of 2020 registered a 14 per cent year-on-year decline and was 15 per cent lower than trade in the second half of 2019.

Trade in medical goods, perhaps not surprisingly, has surged,⁴ growing 15.8 per cent year-on-year in the first half of 2020, much higher than the 2 per cent growth registered in the first half of 2019. Preliminary figures for 97 economies registered US\$ 1,139 billion in trade (including exports plus imports) of medical products (Table 1). These figures correspond to a 7.5 per cent share of world trade for the same period and more than the 5.3 per cent share in 2019.

Table 1: Trade in medical products (first half of each year indicated), 2018-20

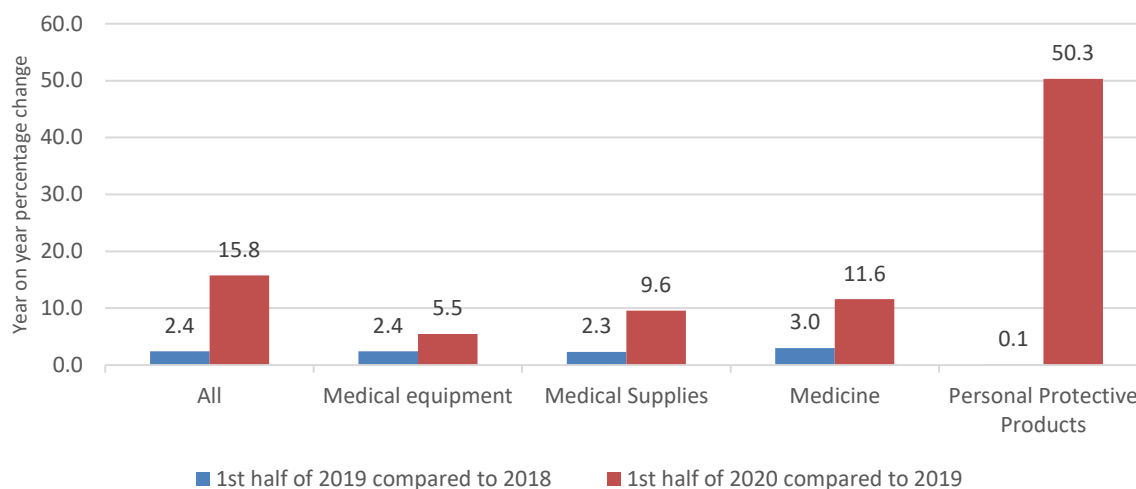
| Product category | Value (US\$ million) | | | Growth rate (%) | |
|-----------------------------------|----------------------|----------------|----------------|-----------------|-------------|
| | 2018 | 2019 | 2020 | 2019/18 | 2020/19 |
| EXPORTS | | | | | |
| All medical products | 480,596 | 489,291 | 564,405 | 1.8 | 15.4 |
| Medical equipment | 66,356 | 67,706 | 70,516 | 2.0 | 4.2 |
| <i>Respirators</i> | 3,573 | 3,870 | 6,055 | 8.3 | 56.5 |
| Medical supplies | 83,579 | 85,425 | 94,062 | 2.2 | 10.1 |
| Medicine | 261,450 | 267,383 | 298,665 | 2.3 | 11.7 |
| Personal protective products | 69,211 | 68,776 | 101,161 | -0.6 | 47.1 |
| <i>Face masks</i> | 37,908 | 37,980 | 70,022 | 0.2 | 84.4 |
| <i>Hand sanitizers</i> | 18,792 | 18,056 | 17,164 | -3.9 | -4.9 |
| <i>Hand soaps</i> | 10,884 | 11,076 | 12,189 | 1.8 | 10.0 |
| <i>Other protective covers</i> | 1,626 | 1,665 | 1,786 | 2.4 | 7.3 |
| COVID-19-critical products | 146,908 | 148,600 | 189,144 | 1.2 | 27.3 |
| IMPORTS | | | | | |
| All medical products | 480,148 | 494,566 | 574,632 | 3.0 | 16.2 |
| Medical equipment | 66,146 | 68,017 | 72,637 | 2.8 | 6.8 |
| <i>Respirators</i> | 3,787 | 4,104 | 6,479 | 8.4 | 57.9 |
| Medical supplies | 81,675 | 83,689 | 91,214 | 2.5 | 9.0 |
| Medicine | 265,333 | 275,274 | 306,996 | 3.7 | 11.5 |
| Personal protective products | 66,995 | 67,586 | 103,784 | 0.9 | 53.6 |
| <i>Face masks</i> | 38,109 | 38,606 | 73,515 | 1.3 | 90.4 |
| <i>Hand sanitizers</i> | 17,281 | 17,059 | 16,879 | -1.3 | -1.1 |
| <i>Hand soaps</i> | 10,140 | 10,385 | 11,593 | 2.4 | 11.6 |
| <i>Other protective covers</i> | 1,465 | 1,536 | 1,798 | 4.9 | 17.0 |
| COVID-19-critical products | 142,977 | 146,611 | 191,725 | 2.5 | 30.8 |

Trade in all categories of medical products increased in the first half of 2020. Trade in personal protective products grew 50.3 per cent, followed by medicines (11.6 per cent), medical supplies (9.6 per cent) and medical equipment (5.5 per cent) (Chart 1).

³ Data sources for all figures cited in this information note are the [Trade Data Monitor](#), the [WTO Integrated Database](#) and the [WTO Data portal](#).

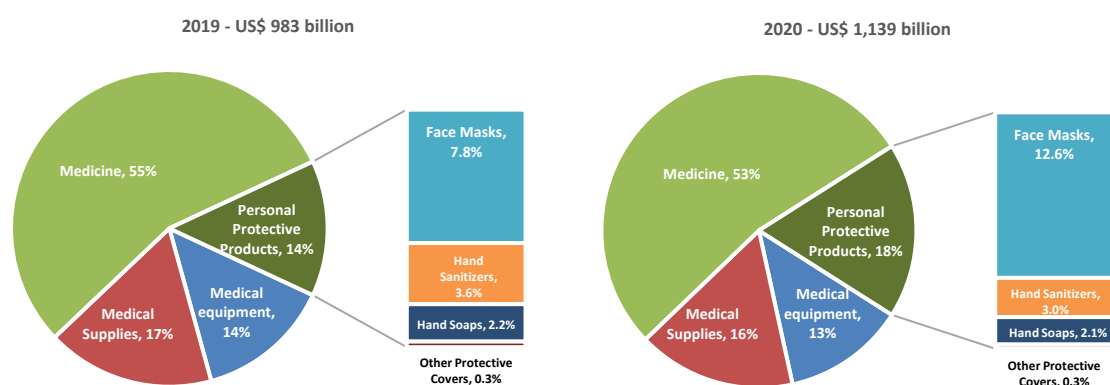
⁴ The list of medical goods and categorization can be consulted in Annex 1 and can also be found in the information note "[Trade in medical goods in the context of tackling COVID-19](#)".

Chart 1: Percentage change of trade in medical goods in the first half of 2019 and the first half of 2020 compared to the same period of previous year



Medicines remain the largest category by value in the first half of 2020, accounting for more than 50 per cent of all traded medical products. Personal protective products became the second-largest category, with an 18 per cent share (Chart 2). This is partly due to the surge of trade of face masks, which is discussed in detail in Section 6 Case Study of this note.

Chart 2: Trade in medical goods in the first half of 2019 and 2020, by product category (percentage share)



3 TRADE IN PRODUCTS CONSIDERED CRITICAL DURING THE COVID-19 PANDEMIC SURGED BY 29 PER CENT

Trade in products considered critical in the COVID-19 pandemic response⁵ grew rapidly in the first half of 2020, with a year-on-year increase of 29 per cent (imports and exports increased by 31 per cent and 27 per cent, respectively). Total trade for these products in the first half of 2020 alone, valued at US\$ 381 billion, was equivalent to 63 per cent of trade in the full year of 2019.

Among these critical products, imports of face masks almost doubled (a 90 per cent year-on-year increase from US\$ 39 billion to US\$ 74 billion) in the first half of 2020, while exports increased by 84 per cent, from US\$ 38 billion to US\$ 70 billion. Total trade of face masks was worth US\$ 140 billion. Trade in respirators also grew rapidly, by 57 per cent, although the value of this

⁵ Critical medical products include: disinfectants/ sterilization products; face masks; gloves; hand soap and hand sanitizer; patient monitors and pulse oximeters; protective spectacles and visors; sterilizers; syringes; thermometers; ultrasonic scanning apparatus; ventilators, oxygen masks; X-ray equipment; and other devices such as computer tomography apparatus.

trade amounted to only US\$ 13 billion, equivalent to just over 1 per cent of trade in all medical goods. Exports of hand sanitizer and hand soap increased by about 2 per cent year-on-year in the first half of 2020, relatively modest growth that may indicate that increased demand was being primarily met by domestic production.

4 CHINA, GERMANY AND THE UNITED STATES ARE THE WORLD'S TOP TRADERS OF COVID-19-CRITICAL PRODUCTS

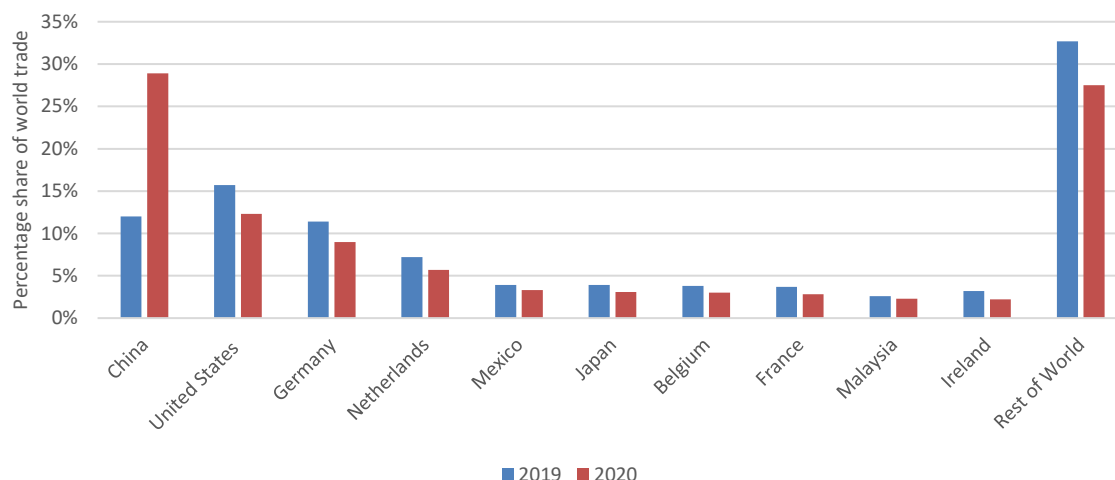
Looking only at products critical to combatting COVID-19, trade was dominated by China, Germany and the United States, which are also the top traders for all goods. Together with Japan, Malaysia, Mexico and four EU countries other than Germany (i.e. Belgium, France, Ireland and the Netherlands), the top 10 countries accounted for more than 72 per cent of world exports – though the respective world shares of the countries ranked 5th to 10th were relatively small, with less than 3.5 per cent each (Table 2 and Chart 3).

The value of Chinese exports of COVID-19-critical products tripled, based on year-on-year first half of the year data, from US\$ 18 billion to US\$ 55 billion. The share in world exports of these products more than doubled, from 12 per cent in the first half of 2019 to 29 per cent in the first half of 2020. As a result, while other exporters in the top ten saw export revenues rise, their share of total global trade decreased.

Table 2: Top 10 exporters and importers of goods critical to combatting COVID-19

| Country (Descending order of 2020 value) | Value (US\$ million) | | Growth rate (%) 2020/19 | Share of all COVID-19 critical goods (%) | |
|--|----------------------|--------|-------------------------------|---|-------------|
| | 2019 | 2020 | | 2019 | 2020 |
| 1. China | 17,813 | 54,643 | 206.8 | 12.0 | 28.9 |
| 2. United States | 23,318 | 23,182 | -0.6 | 15.7 | 12.3 |
| 3. Germany | 16,928 | 16,961 | 0.2 | 11.4 | 9.0 |
| 4. Netherlands | 10,683 | 10,771 | 0.8 | 7.2 | 5.7 |
| 5. Mexico | 5,774 | 6,259 | 8.4 | 3.9 | 3.3 |
| 6. Japan | 5,791 | 5,800 | 0.2 | 3.9 | 3.1 |
| 7. Belgium | 5,665 | 5,596 | -1.2 | 3.8 | 3.0 |
| 8. France | 5,501 | 5,276 | -4.1 | 3.7 | 2.8 |
| 9. Malaysia | 3,816 | 4,440 | 16.3 | 2.6 | 2.3 |
| 10. Ireland | 4,741 | 4,204 | -11.3 | 3.2 | 2.2 |
| Total share of Top 10 | | | | 67.3 | 72.5 |
| 1. United States | 26,801 | 36,151 | 34.9 | 18.3 | 18.9 |
| 2. Germany | 11,918 | 16,753 | 40.6 | 8.1 | 8.7 |
| 3. China | 9,965 | 11,818 | 18.6 | 6.8 | 6.2 |
| 4. France | 6,323 | 10,240 | 61.9 | 4.3 | 5.3 |
| 5. Japan | 7,037 | 9,957 | 41.5 | 4.8 | 5.2 |
| 6. Netherlands | 7,952 | 8,681 | 9.2 | 5.4 | 4.5 |
| 7. United Kingdom | 5,504 | 7,188 | 30.6 | 3.8 | 3.7 |
| 8. Italy | 3,880 | 5,879 | 51.5 | 2.6 | 3.1 |
| 9. Canada | 4,015 | 5,509 | 37.2 | 2.7 | 2.9 |
| 10. Belgium | 4,680 | 5,455 | 16.6 | 3.2 | 2.8 |
| Total share of Top 10 | | | | 60.1 | 61.4 |

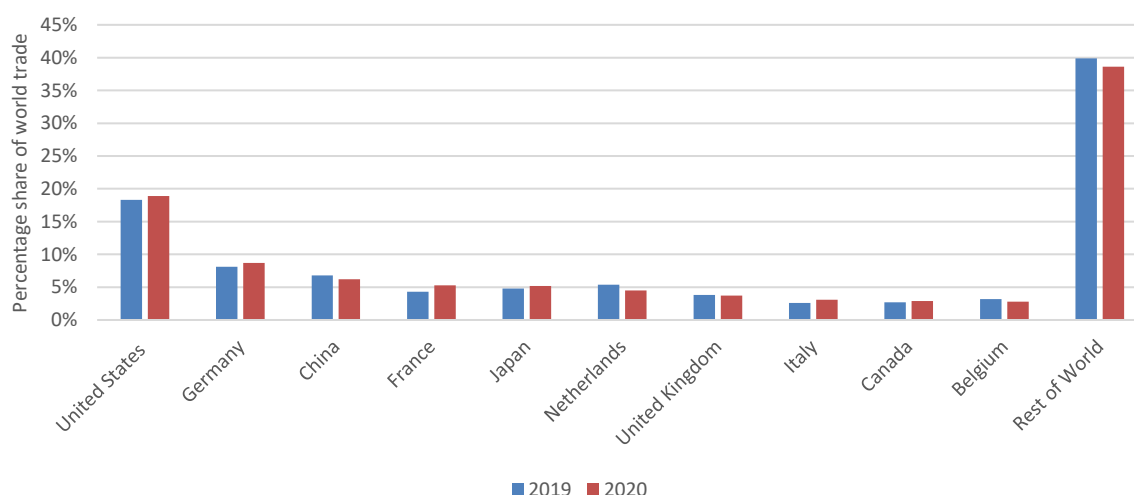
Chart 3: Comparison of share of exports of COVID-19-critical goods in the first half of 2019 and the first half of 2020 (percentage share of world trade)



The United States remained the top importer of COVID-19-critical medical goods, followed by Germany and China. The United States imported US\$ 36 billion worth of products from January to June 2020 and accounted for 19 per cent of the total imports of COVID-19-critical medical goods. Germany was second (US\$ 17 billion, 9 per cent of world imports) followed by China (US\$ 12 billion, 6 per cent of world imports). The top 10 countries accounted for more than 60 per cent of world imports – a lower degree of concentration than for exports, possibly because many countries have limited domestic production capacity for these goods and rely heavily on imports.

Import growth rates for COVID-19-critical products among the leading importers have been high – all in double digits, except for the Netherlands, which grew at 9 per cent. France registered the highest import growth at 62 per cent, followed by Italy at 52 per cent (Table 2 and Chart 4).

Chart 4: Comparison of share of imports of COVID-19-critical goods in the first half of 2019 and the first half of 2020 (percentage share of world trade)



5 THE TOP THREE IMPORTERS ARE ALSO THE TOP SUPPLIERS AND MARKETS OF COVID-19-CRITICAL PRODUCTS FOR EACH OTHER

The United States, which is the top importer for COVID-19-critical products, sources 41 per cent of its imports from China, the world's top supplier (Table 3).

China is also the leading supplier for Germany. On a year-on-year basis, Germany's imports of COVID-19-critical products from China in the first half of 2020 were more than five times higher than in 2019. China's share of German imports of these products also increased from less than 8.6 per cent to 33.1 per cent. China's imports from its three leading suppliers of COVID-19-critical products – the United States, Japan and Germany – also increased during this period, with imports from Japan growing the fastest, at 17.8 per cent.

While the three major markets figure among each other's top partners for trade in COVID-19-critical products, it is noteworthy that for each of them, the other leading source of imports is a geographical neighbour – Mexico for the United States, the Netherlands for Germany, and Japan for China. The value of all bilateral transactions increased in the first half of 2020, except for US imports from Germany, which decreased by 8.5 per cent.

Table 3: Bilateral trade statistics on COVID-19-critical products for the first half of the year

| Importer | Partner | Value of imports from partner (US\$ million) | | Partner's share of total COVID-19-critical goods (%) | | Growth rate (%) 2020/19 |
|------------------|------------------|--|--------|--|------|----------------------------|
| | | 2019 | 2020 | 2019 | 2020 | |
| 1. United States | 1. China | 6,057 | 14,714 | 22.6 | 40.7 | 142.9 |
| | 2. Mexico | 4,977 | 5,247 | 18.6 | 14.5 | 5.4 |
| | 3. Germany | 2,235 | 2,044 | 8.3 | 5.7 | -8.5 |
| 2. Germany | 1. China | 1,026 | 5,553 | 8.6 | 33.1 | 441.4 |
| | 2. Netherlands | 1,625 | 1,746 | 13.6 | 10.4 | 7.4 |
| | 3. United States | 1,072 | 1,253 | 9.0 | 7.5 | 16.8 |
| 3. China | 1. United States | 2,183 | 2,339 | 21.9 | 19.8 | 7.1 |
| | 2. Japan | 1,805 | 2,126 | 18.1 | 18.0 | 17.8 |
| | 3. Germany | 1,303 | 1,348 | 13.1 | 11.4 | 3.5 |

6 CASE STUDY: TRADE IN THE NOW-UBIQUITOUS FACE MASKS

As one of the critical protective measures recommended by the World Health Organization (WHO), wearing face masks has become part of "the new normal". Although seemingly straightforward, the manufacturing of face masks requires several types of inputs and a relatively sophisticated process.⁶ Many countries depend mainly on imports to meet mass demand; this was especially true during the early phase of the pandemic.

Face masks are supplied mainly by China

In the first half of 2020, total imports of face masks reached US\$ 74 billion, a 90 per cent increase from the same period last year.⁷ China is the world's top supplier of face masks, accounting for 56 per cent of the world total export value (US\$ 70 billion) for the first half of 2020. For the top 10 importers of face masks (excluding China itself), China is consistently the top supplier, accounting for more than 50 per cent of imports, except into Mexico, which sources more masks from the United States. China accounts for more than two-thirds of imported face masks in many leading markets, including almost three-quarters of face mask imports in the United States and Italy, and 80 per cent in its Asian neighbour, Japan (Table 4).

⁶ See Organisation for Economic Co-operation and Development (OECD), "[The face mask global value chain in the COVID-19 outbreak: evidence and policy lessons](#)", 4 May 2020.

⁷ US\$ 74 billion was the total import value of HS subheading codes 3926.90, 6307.90 and 9020.00, under which face masks are classified. The total value could cover the imports of products other than face masks, which are also classified under the same HS subheadings.

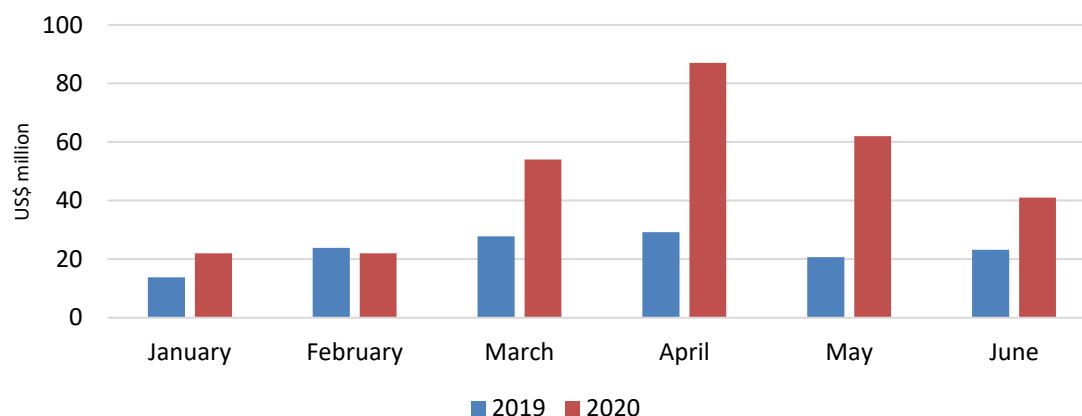
Table 4: China's shares in the top 10 import markets for face masks during the first half of 2020

| Importer | Value of imports from China (US million) | China's share of total imports (%) |
|-------------------|--|------------------------------------|
| 1. United States | 10,659 | 74 |
| 2. Germany | 4,864 | 62 |
| 3. France | 3,617 | 64 |
| 4. Japan | 3,646 | 80 |
| 5. Italy | 2,053 | 74 |
| 6. China | N.A. | N.A. |
| 7. United Kingdom | 1,669 | 65 |
| 8. Mexico | 710 | 31 |
| 9. Canada | 1,350 | 64 |
| 10. Netherlands | 1,144 | 56 |

In the first half of 2020, China was also the sixth largest importer of face masks, registering US\$ 2.5 billion worth of imports, in particular at the beginning of the pandemic and mainly from Germany, Japan, the Republic of Korea, and the United States.

To ramp up face mask production, China sourced intermediate materials from other countries. For instance, China's imports of non-woven fabric, the main material for textile face masks classified under HS subheading codes 5603.11, 5603.12 and 5603.91, surged in March and April 2020, more than doubling in the first half of 2020 compared to 2019 (Chart 5). Half of these products was imported from Japan and the United States.

Chart 5: China's imports of non-woven fabric in the first half of 2019 and the first half of 2020 (US\$ million)



Textile face masks are the most traded type

According to the World Customs Organization (WCO), face protection products, or face masks, are normally classified under three HS subheading codes, specifically HS 3926.90 (for plastic face shields), HS 9020.00 (for gas masks) and HS 6307.90 (for textile face masks).⁸ It should be noted that these HS subheading codes cover not only face masks which are of current interest, but also other products made from similar materials or of similar characters.

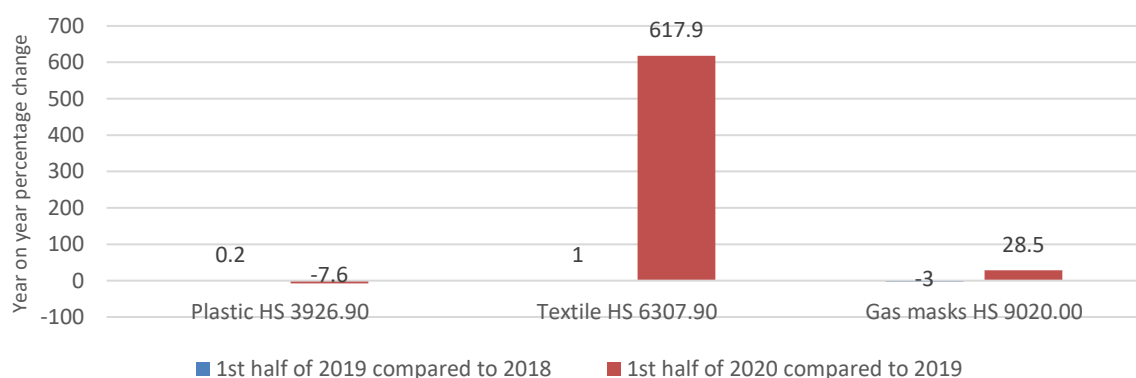
The product description of HS 6307.90, under which textile face masks are classified, is "Other made up articles of textile materials, incl. dress patterns, n.e.s. [i.e. not elsewhere specified]". As the subheading could cover a wide range of textile products, identifying the actual share of textile face masks is not straightforward. Nonetheless, looking at previous statistics, it is highly likely that the

⁸ See the WCO and WHO [HS Classification Reference for COVID-19 medical supplies](#).

exceptional year-on-year growth rates of 618 per cent for exports and 569 per cent for imports during the first half of 2020 were driven by the surge in demand for textile face masks (Chart 6 and Table 5 (in Annex 2)). Such a conclusion is also reinforced by the increase over the previous half-year – in the first half of 2020, exports were 562 per cent higher, and imports 536 per cent higher, than in the second half of 2019 – which was vastly higher than growth rates registered in 2018 and 2019.

No comparable export surge has been found for the other two HS codes. HS 9020.00 showed an increase of 28.5 per cent, which was likely driven by the export of gas masks, but the magnitude was much lower than that of textile masks. Exports under HS 3926.90, where plastic face shields are classified together with other miscellaneous plastics products, actually declined in the first half of 2020. However, this subheading covers a large amount of trade in a wide range of products, and the overall decline could obscure an increase in face shield exports.

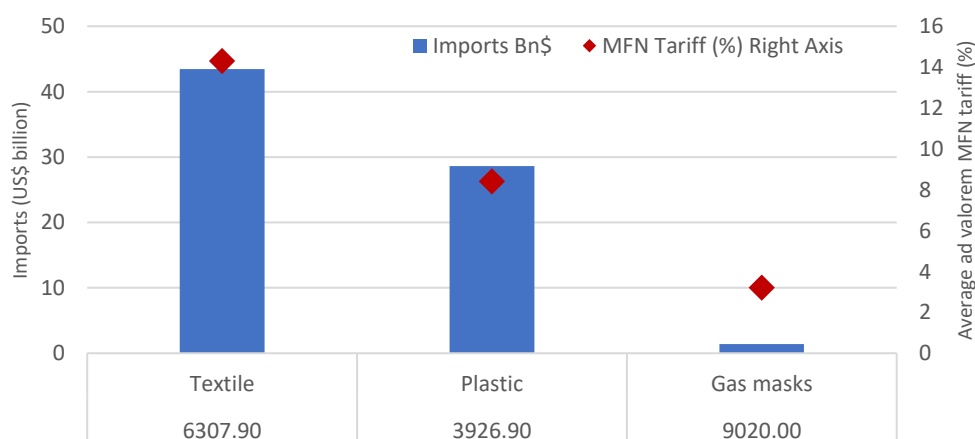
Chart 6: Growth rate of face masks exports, by type (year-on-year percentage change)



Average applied most-favoured-nation tariff for face masks

Most-favoured-nation (MFN) (i.e. non-discriminating) applied tariffs on face masks vary considerably among economies. Using the latest *ad valorem* tariffs, the world average MFN applied tariff was 8.5 per cent.⁹ However, tariffs on masks of different types – plastic face shields, textile face masks and gas masks – vary widely. Textile masks had the highest average at 14.3 per cent, followed by plastics at 8.4 per cent. The lowest tariffs are for gas masks, at 3.2 per cent. However, it is interesting to observe that textile masks are the most traded despite facing the highest tariffs. (Chart 7).

Chart 7: Imports and most-favoured-nation tariffs by type of face mask, first half of 2020 (US\$ billion and percentage)



⁹ Based on the latest 2019 or 2020 data from the [WTO Integrated Database](#) (IDB).

ANNEX 1: LIST OF MEDICAL PRODUCTS¹⁰

Medicines (Pharmaceuticals)

| HS 2017 | Short product description | ITA-E | Pharma | WCO |
|---------|---|-------|--------|-----|
| 300213 | Immunological products, unmixed, ... not for retail sale | | X | |
| 300214 | Immunological products, mixed, ... not for retail sale | | X | |
| 300215 | Immunological products, ... for retail sale | | X | X |
| 300219 | Immunological products, n.e.s. | | X | |
| 300220 | Vaccines for human medicine | | X | |
| 300310 | Medicaments containing penicillins ... not for retail sale | | X | |
| 300320 | Medicaments containing antibiotics, ... not for retail sale | | X | |
| 300331 | Medicaments containing insulin, ... not for retail sale | | X | |
| 300339 | Medicaments containing hormones ... not for retail sale | | X | |
| 300341 | Medicaments containing ephedrine ... not for retail sale | | X | |
| 300342 | Medicaments containing pseudoephedrine "INN" or its salts, ... not for retail sale | | X | |
| 300343 | Medicaments containing norephedrine or its salts, ... not for retail sale | | X | |
| 300349 | Medicaments containing alkaloids or derivatives thereof, ... not for retail sale | | X | |
| 300360 | Medicaments containing any of the following antimalarial active principles: ... not put up for retail sale | | X | |
| 300390 | Medicaments consisting of two or more constituents mixed together for therapeutic or prophylactic uses, not for retail sale | | X | |
| 300410 | Medicaments containing penicillins or derivatives thereof ... for retail sale | | X | |
| 300420 | Medicaments containing antibiotics, ... for retail sale | | X | |
| 300431 | Medicaments containing insulin but not antibiotics, ... for retail sale | | X | |
| 300432 | Medicaments containing corticosteroid hormones, ... for retail sale | | X | |
| 300439 | Medicaments containing hormones or steroids ... for retail sale | | X | |
| 300441 | Medicaments containing ephedrine or its salts, ... for retail sale | | X | |
| 300442 | Medicaments containing pseudoephedrine "INN" or its salts, ... for retail sale | | X | |
| 300443 | Medicaments containing norephedrine or its salts, ... for retail sale | | X | |
| 300449 | Medicaments containing alkaloids or derivatives thereof... for retail sale | | X | |
| 300450 | Medicaments containing provitamins, vitamins,... for retail sale | | X | |
| 300460 | Medicaments containing any of the following antimalarial active principles ... for retail sale | | X | |
| 300490 | Medicaments consisting of mixed or unmixed products ... for retail sale | | X | X |

Medical Supplies

| HS 2017 | Short product description | ITA-E | Pharma | WCO |
|---------|---|-------|--------|-----|
| 220710 | Undenatured ethyl alcohol, of actual alcoholic strength of \geq 80% | | | X |
| 284700 | Hydrogen peroxide, whether or not solidified with urea | | | X |
| 300120 | Extracts of glands or other organs or of their secretions, for organo-therapeutic uses | | X | |
| 300190 | Dried glands and other organs for organo-therapeutic uses; heparin and its salts, ... | | X | |
| 300212 | Antisera and other blood fractions | | X | |
| 300290 | Human blood; animal blood ...; toxins, cultures of micro-organisms and similar products | | X | |
| 300510 | Adhesive dressings and other articles ... put up for retail sale for medical, surgical, dental or veterinary purposes | | X | |
| 300590 | Wadding, gauze, bandages and the like put up for retail sale for medical, surgical, dental or veterinary purposes | | X | X |
| 300610 | Sterile surgical catgut, similar sterile suture materials,... | | X | |

¹⁰ Columns "ITA-Exp", "Pharma", and "WCO" indicate if the HS codes are also part of the ITA Expansion, Pharmaceutical Agreement, or WCO HS Classification reference for Covid-19 medical supplies

| HS 2017 | Short product description | ITA-E | Pharma | WCO |
|---------|---|-------|--------|-----|
| 300620 | Reagents for determining blood groups or blood factors | | X | |
| 300630 | Opacifying preparations for x-ray examinations; diagnostic reagents for administration to patients | | X | |
| 300650 | First-aid boxes and kits | | X | |
| 300670 | Gel preparations designed to be used in human or veterinary medicine ... | | X | |
| 340212 | Cationic organic surface-active agents | | | |
| 340213 | Non-ionic organic surface-active agents | | | |
| 350400 | Peptones and their derivatives; other protein substances and their derivatives, n.e.s.; ... | | | |
| 350790 | Enzymes and prepared enzymes, n.e.s. | | | |
| 370110 | Photographic plates and film in the flat, sensitised, unexposed, for X-ray | | | |
| 370210 | Photographic film in rolls, unexposed, for X-ray | | | |
| 380894 | Disinfectants, put up in forms or packings for retail sale | | | X |
| 382100 | Prepared culture media for the development or maintenance of micro-organisms | | | |
| 382200 | Diagnostic or laboratory reagents on a backing, prepared diagnostic or laboratory reagents and certified reference materials | | | X |
| 392620 | Articles of apparel and clothing accessories produced by the stitching or sticking together of plastic sheeting | | | X |
| 401490 | Hygienic or pharmaceutical articles | | | |
| 401511 | Surgical gloves, of vulcanised rubber | | | X |
| 401519 | Gloves, mittens and mitts, of vulcanised rubber | | | X |
| 701710 | Laboratory, hygienic or pharmaceutical glassware, of fused quartz or other fused silica | | | |
| 701720 | Laboratory, hygienic or pharmaceutical glassware having a linear coefficient of expansion $\leq 5 \times 10^{-6}$ per kelvin within a temperature range of 0°C to 300°C | | | |
| 701790 | Laboratory, hygienic or pharmaceutical glassware n.e.s | | | |
| 901831 | Syringes, with or without needles, used in medical, surgical, dental or veterinary sciences | | | X |
| 901832 | Tubular metal needles and needles for sutures, used in medical, surgical, dental or veterinary sciences | | | X |
| 901839 | Needles, catheters, cannulae and the like, used in medical, surgical, dental or veterinary sciences | | | X |

Medical Equipment

| HS 2017 | Short product description | ITA-E | Pharma | WCO |
|---------|---|-------|--------|-----|
| 841920 | Medical, surgical or laboratory sterilizers | | | X |
| 901050 | Apparatus and equipment; negatoscopes | X | | |
| 901110 | Stereoscopic optical microscopes | X | | |
| 901180 | Optical microscopes | X | | |
| 901811 | Electro-cardiographs | X | | |
| 901812 | Ultrasonic scanning apparatus | X | | |
| 901813 | Magnetic resonance imaging apparatus | X | | |
| 901814 | Scintigraphic apparatus | | | |
| 901819 | Other electro-diagnostic apparatus | X | | X |
| 901820 | Ultraviolet or infra-red ray apparatus used in medical, surgical, dental or veterinary sciences | X | | |
| 901890 | Instruments and appliances used in medical, surgical or veterinary sciences, n.e.s. | X | | X |
| 901920 | Ozone therapy, oxygen therapy, aerosol therapy, artificial respiration or other therapeutic respiration apparatus | | | X |
| 902150 | Pacemakers for stimulating heart muscles | X | | |
| 902212 | Computer tomography apparatus | X | | X |
| 902214 | Apparatus based on the use of X-rays, for medical, surgical or veterinary uses | X | | |
| 902219 | Apparatus based on the use of X-rays | X | | |
| 902221 | Apparatus based on the use of alpha, beta or gamma radiations, for medical, surgical, dental or veterinary uses | X | | |
| 902229 | Apparatus based on the use of alpha, beta or gamma radiations, n.e.s | X | | |
| 902230 | X-ray tubes | X | | |

| HS 2017 | Short product description | ITA-E | Pharma | WCO |
|---------|---|-------|--------|-----|
| 902290 | X-ray generators, high tension generators, control panels and desks, screens, ... | X | | |
| 902511 | Thermometers, liquid-filled, for direct reading, not combined with other instruments | | | X |
| 902519 | Thermometers and pyrometers, not combined with other instruments | X | | X |
| 902780 | Instruments and apparatus for physical or chemical analysis, or for measuring or checking viscosity ... | X | | X |
| 903020 | Oscilloscopes and oscillographs | X | | |
| 940290 | Operating tables, examination tables, and other medical, dental, surgical or veterinary furniture | | | |

Personal Protective Products

| HS 2017 | Short product description | ITA-E | Pharma | WCO |
|---------|----------------------------------|-------|--------|-----|
| 340111 | Hand soap | | | |
| 340130 | Hand soap | | | |
| 340220 | Other cleaning products | | | |
| 382499 | Hand sanitizer | | | |
| 392690 | Face masks | | | |
| 630790 | Face masks | | | X |
| 900490 | Protective spectacles and visors | | | X |
| 902000 | Face masks | | | X |

ANNEX 2: Table 5: World exports and imports of face masks by HS subheading

| HS Subheading and standard description | Value in US\$ million | | | | |
|---|-----------------------|--------|--------|--------|--------|
| | 2018 | | 2019 | | 2020 |
| | S1 | S2 | S1 | S2 | S1 |
| EXPORTS | | | | | |
| 3926.90 – Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s.* | 31,475 | 30,969 | 31,523 | 31,997 | 29,142 |
| 6307.90 – Made-up articles of textile materials, incl. dress patterns, n.e.s. | 5,474 | 5,671 | 5,528 | 5,992 | 39,687 |
| 9020.00 – Breathing appliances and gas masks | 958 | 957 | 929 | 912 | 1,194 |
| IMPORTS | | | | | |
| 3926.90 – Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s. | 31,217 | 30,644 | 31,251 | 31,180 | 28,636 |
| 6307.90 – Made-up articles of textile materials, incl. dress patterns, n.e.s. | 6,038 | 6,466 | 6,499 | 6,830 | 43,453 |
| 9020.00 – Breathing appliances and gas masks | 854 | 846 | 855 | 825 | 1,427 |

| HS Subheading and standard description | Year-on-year semestral growth rate (%) | | |
|--|--|------------|------------|
| | S1 2019/18 | S2 2019/18 | S1 2020/19 |
| EXPORTS | | | |
| 3926.90 – Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s. | 0.2 | 3.3 | -7.6 |
| 6307.90 – Made-up articles of textile materials, incl. dress patterns, n.e.s. | 1.0 | 5.7 | 617.9 |
| 9020.00 – Breathing appliances and gas masks | -3.0 | -4.7 | 28.5 |
| IMPORTS | | | |
| 3926.90 – Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s. | 0.1 | 1.7 | -8.4 |
| 6307.90 – Made-up articles of textile materials, incl. dress patterns, n.e.s. | 7.6 | 5.6 | 568.6 |
| 9020.00 – Breathing appliances and gas masks | 0.1 | -2.5 | 66.9 |

| HS Subheading and standard description | Growth rate over previous half year (%) | | | |
|--|---|-----------------|-----------------|-----------------|
| | S2 18/ S1 18 | S1 19/ S2 18 | S2 19/ S1 19 | S1 20/ S2 19 |
| EXPORTS | | | | |
| 3926.90 – Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s. | -1.6 | 1.8 | 1.5 | -8.9 |
| 6307.90 – Made-up articles of textile materials, incl. dress patterns, n.e.s. | 3.6 | -2.5 | 8.4 | 562.3 |
| 9020.00 – Breathing appliances and gas masks | -0.1 | -2.9 | -1.8 | 30.9 |
| IMPORTS | | | | |
| 3926.90 – Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s. | -1.8 | 2.0 | -0.2 | -8.2 |
| 6307.90 – Made-up articles of textile materials, incl. dress patterns, n.e.s. | 7.1 | 0.5 | 5.1 | 536.2 |
| 9020.00 – Breathing appliances and gas masks | -0.9 | 1.1 | -3.5 | 73.0 |

* n.e.s. is "not elsewhere specified".