

## Thematic Research

### Global PPE Market: Glove Demand Higher Than We Predicted

19 June 2020

#### Key Takeaway

Data released by the U.S. federal government provide positive readthroughs for the global PPE market, as American PPE demand is expected to remain robust through the summer season, supported by possible second wave risks. Of most interest, U.S. glove demand accounts for over 45% of our latest global projections in [China's Health & Road: Demand for PPE Will Stay High Beyond COVID-19](#), which could help support recent price movements in glovemaking stocks.

U.S. government document detailing PPE supply and demand recently made public. Data submitted by the Supply Chain Stabilization Task Force to the Senate Homeland Security and Governmental Affairs Committee were recently [made public](#) at the request of Senator Maggie Hassan, giving investors an important glimpse into U.S. PPE demand. The task force was assembled in March 2020 by a number of U.S. governmental agencies to address the imbalance between supply and demand for PPE and other medical supplies.

Readthrough suggests that the global PPE market is strong. The task force's projections bode well for global PPE demand and indicate that usage will continue to be elevated in the near-term, presumably until a widely distributed vaccine is available or the virus recedes. To put this increased demand into context, U.S. federal consumption of gloves, N95 masks, surgical masks, and surgical gowns are each up roughly 2–4x from pre-pandemic levels. With many countries around the world reopening in some fashion, we believe that [multiple waves of infection are very possible](#), though the risk of countries implementing another lockdown as a response has considerably diminished. Numerous states and cities have seen spikes in infections and hospitalizations in recent weeks, further enforcing the fact that healthcare institutions ought to remain well-equipped and adequately protect medical personnel.

U.S. glove and N95 mask demand is significantly above our latest projections. Our [earlier forecast](#) of the global PPE market seems to have underestimated the size of U.S. PPE consumption in some categories (Exhibit 1). Notably, the task force's figures for glove and N95 mask usage exceeded our highest expectations by roughly 2x and 4x, respectively. On the other hand, demand for surgical masks and gowns by American hospitals appears to be trending towards the lower end of our estimates.

U.S. domestic production of PPE remains limited. With the exception of N95 masks, where domestic production has risen more than 4x, the U.S.'s supply of most PPE items relies heavily on imports, especially in gloves, where there is no U.S. based manufacturing. The task force's data indicates that the U.S. still faces some form of supply shortage across multiple types of PPE, with surgical gowns the most pronounced category. To combat this, the government has turned to alternative solutions including the decontamination of N95 masks and the reuse of gowns.

We highlight key glove manufacturers. We believe that a large portion of gloves used by U.S. hospitals are higher-end nitrile surgical gloves, [where Ansell is a market leader](#). The ongoing need to maintain stock of gloves and other PPE is likely to continue for the foreseeable future. A list of key glove players with combined ~50% of global market share can be found in Exhibit 3.

#### Key glovemakers

Company	Ticker
Top Glove	TOPG MK
Ansell	ANN AU
Hartalega	HART MK
Kossan Rubber	KRI MK
Supermax Corp	SUCB MK
Shandong Blue Sail	002382 CH
Intco Medical	300677 CH

Source: Jefferies

#### Recent related research:

- [COVID-19: Second Wave & Current Pandemic Data](#)
- [The World Post-COVID-19](#)
- [China's Health & Road: Demand for PPE Will Stay High Beyond COVID-19](#)
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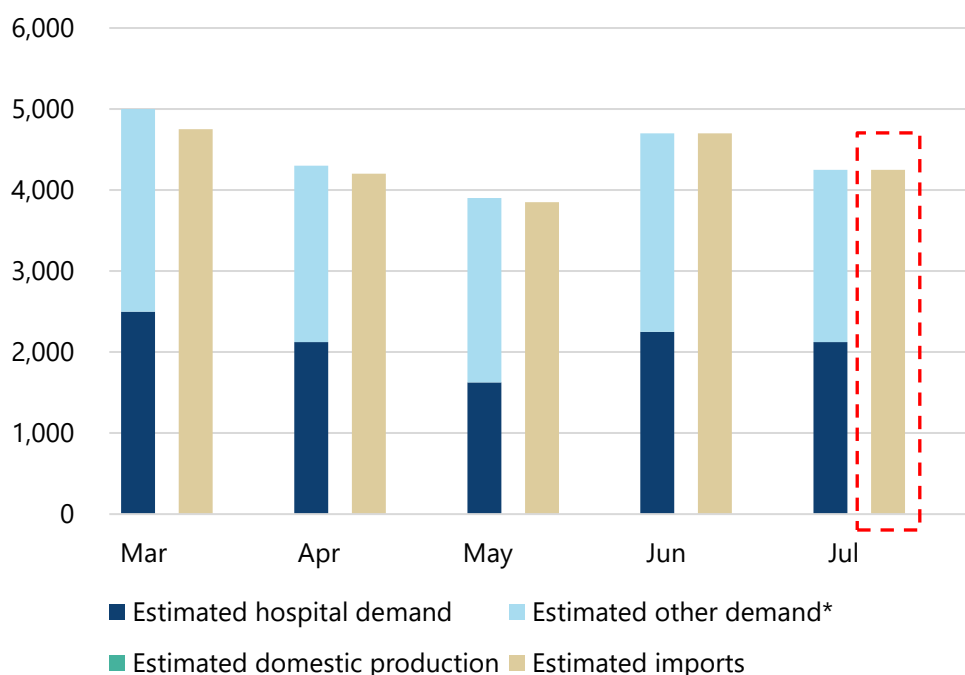
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**Exhibit 1: Jefferies vs. U.S. government estimated monthly U.S. PPE demand by type (millions of units)**

PPE category	Jefferies estimated global demand	Jefferies estimated U.S. demand <i>(assuming U.S. share of global PPE demand is equivalent to)</i>			U.S. government estimates	U.S. share of Jefferies estimated global demand
		U.S. share of global population	U.S. share of global GDP	U.S. share of global COVID-19 cases		
Gloves (pairs)	4,670	201	1,116	1,231	2,125	46%
N95 masks	77	3	18	20	80	104%
Surgical masks	2,298	99	549	606	204	9%
Surgical gowns	1,531	66	366	404	85	6%

Source: Jefferies estimates, U.S. Supply Chain Stabilization Task Force, Johns Hopkins University CSSE, World Bank

**Exhibit 2: U.S. government estimated nitrile glove demand/supply, 2020 (millions of pairs)**



100% of glove demand will continue to be met by imports

Source: U.S. Supply Chain Stabilization Task Force. Note: \*Other demand includes usage in long-term care, first responders, and non-healthcare settings (janitorial services, laboratories, correctional facilities). Does not include demand from the general public.

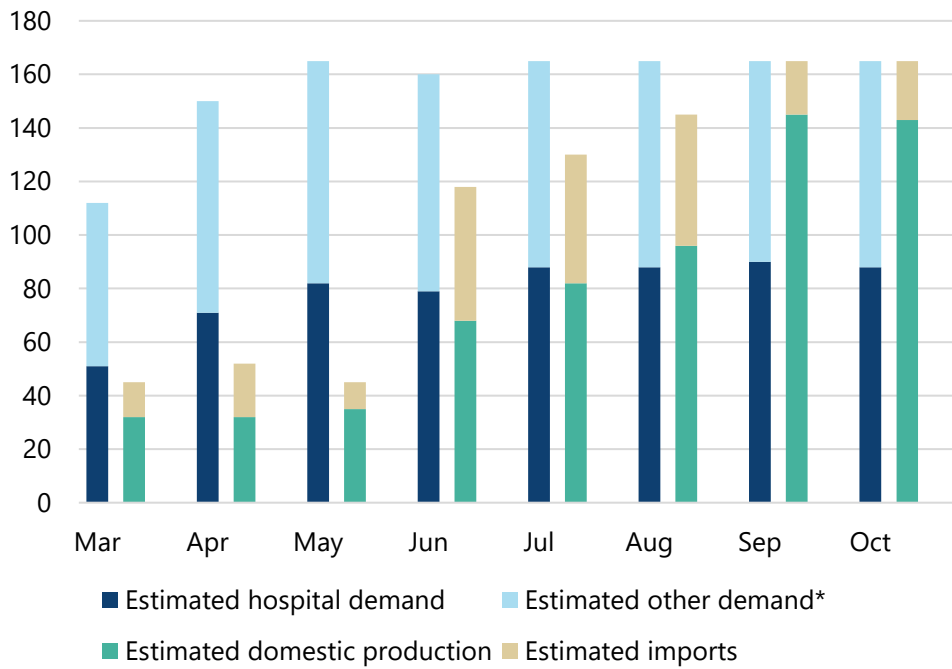
**Exhibit 3: Global key glove manufacturers**

Company	Ticker	Estimated global market share	Estimated production capacity (bn)
Top Glove	TOPG MK	13%	61
Ansell	ANN AU	9%	41
Hartalega	HART MK	7%	33
Kossan Rubber	KRI MK	6%	27
Supermax Corp	SUCB MK	5%	31
Shandong Blue Sail	002382 CH	4%	24
Intco Medical	300677 CH	3%	15

Source: Jefferies estimates, company data, industry experts

U.S. government data suggests that our recent forecast for global glove demand were light

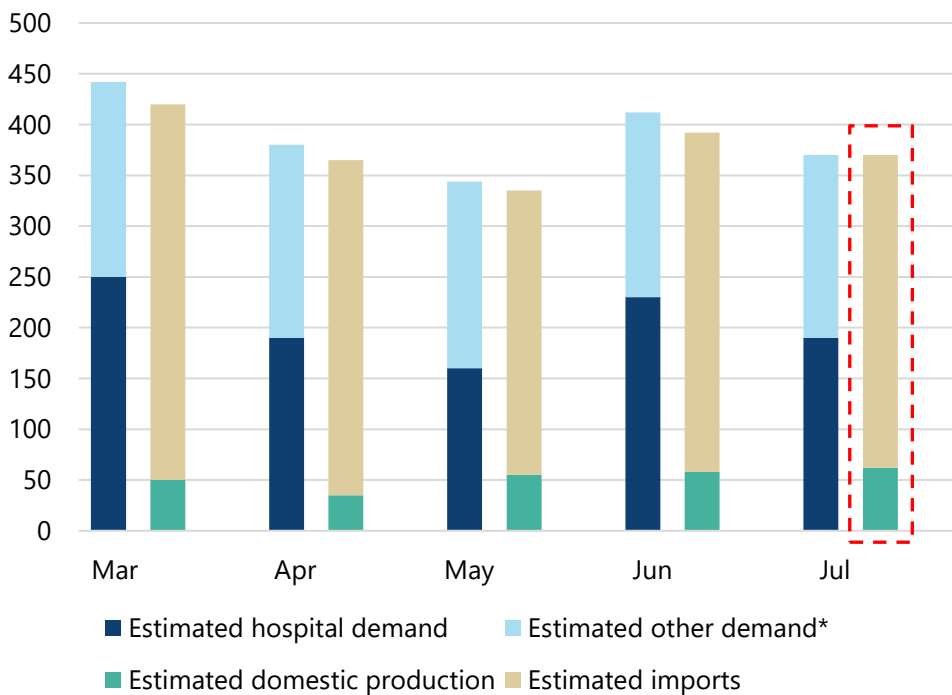
**Exhibit 4: U.S. government estimated N95 mask demand/supply, 2020 (millions of units)**



**N95 masks appear to be the only category of PPE that has seen a significant ramp up in domestic production**

Source: U.S. Supply Chain Stabilization Task Force. Note: \*Other demand includes usage in long-term care, first responders, and non-healthcare settings (janitorial services, laboratories, correctional facilities). Does not include demand from the general public.

**Exhibit 5: U.S. government estimated surgical mask demand/supply, 2020 (millions of units)**



**Over 80% of surgical mask supply comes from imports**

Source: U.S. Supply Chain Stabilization Task Force. Note: \*Other demand includes usage in long-term care, first responders, and non-healthcare settings (janitorial services, laboratories, correctional facilities). Does not include demand from the general public.

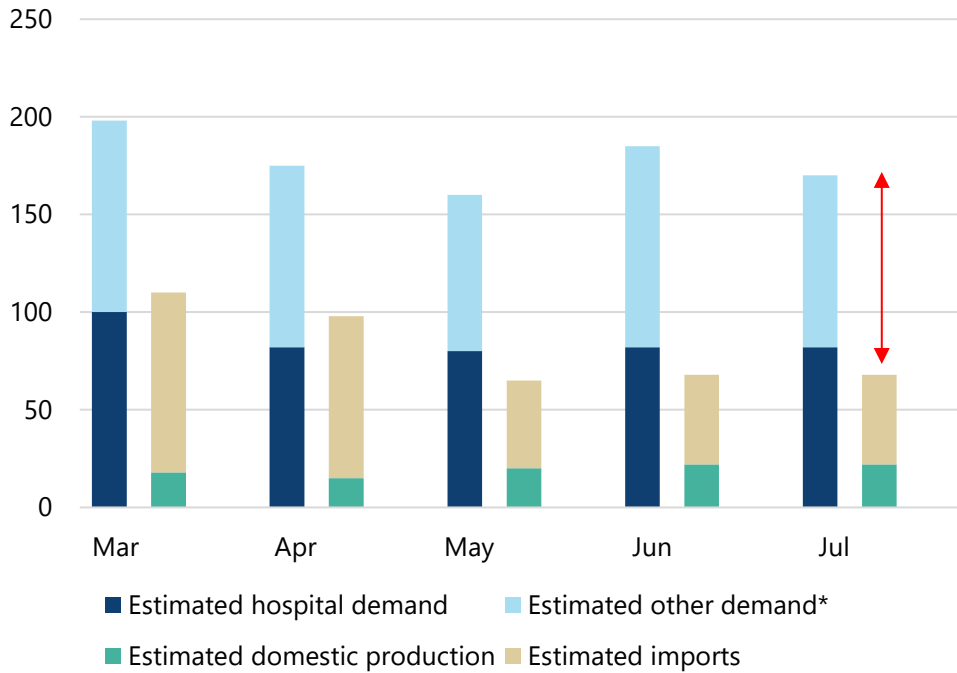
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**Exhibit 6: Global key surgical mask players**

Company	Ticker	Products
Dawn Polymer	002838 CH	Raw material for surgical masks
Allmed Medical	002950 CH	Surgical masks
Zhende Medical	603301 CH	Surgical masks
YanAn Bicon Pharma	002411 CH	Surgical masks

Source: Jefferies

**Exhibit 7: U.S. government estimated surgical gown demand/supply, 2020 (millions of units)**



**There has been a significant shortage in surgical gowns, where demand exceeds 2x of supply**

Source: U.S. Supply Chain Stabilization Task Force. Note: \*Other demand includes usage in long-term care, first responders, and non-healthcare settings (janitorial services, laboratories, correctional facilities). Does not include demand from the general public.

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Rating and Price Target History for: Ansell Limited (ANN AU) as of 06-17-2020



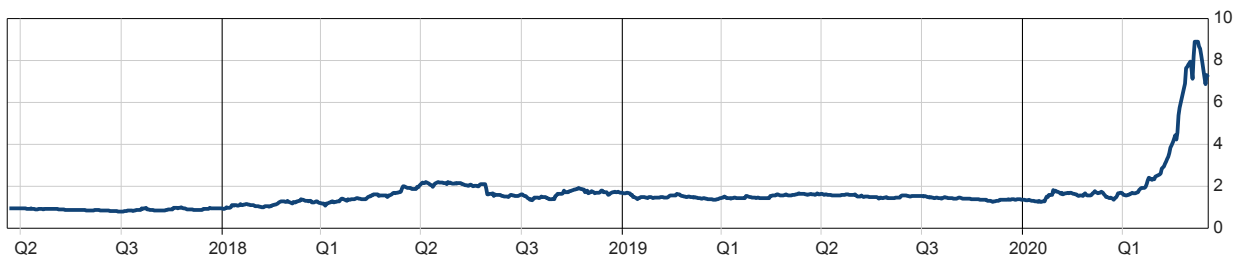
Rating and Price Target History for: Hartalega Holdings Bhd (HART MK) as of 06-17-2020



Rating and Price Target History for: Kossan Rubber Industries (KRI MK) as of 06-17-2020

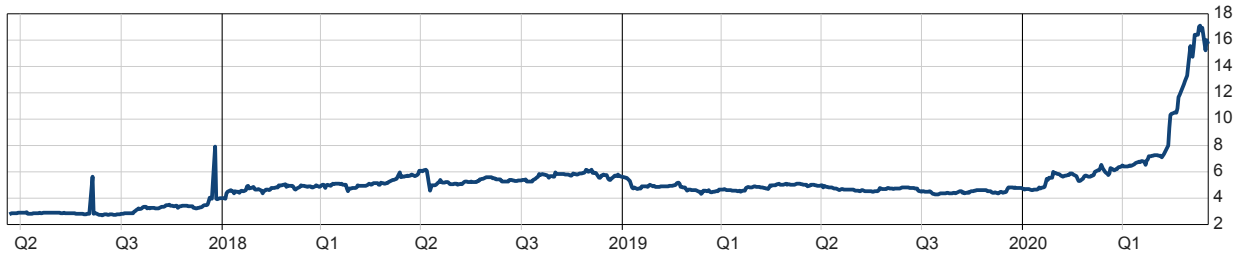


Rating and Price Target History for: Supermax Corporation Bhd (SUCB MK) as of 06-17-2020



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Rating and Price Target History for: Top Glove Corporation Bhd (TOPG MK) as of 06-17-2020



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Distribution of Ratings						
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