

# Trade in vaccines

## A prickly situation

Free to View  
Economics - Global

- ◆ COVID-19 vaccines are in high demand...
- ◆ ...but supply shortages could lead to export restrictions
- ◆ We take stock of vaccine trade patterns in 30 charts

Although they account for less than 0.2% of global goods trade, vaccines are understandably seeing a huge amount of focus at the moment. Economies around the world are scrambling to get their hands on these life-saving jabs. But the pace of rollouts globally has been uneven to date, largely due to two key issues. First, although all economies want vaccines, only a small number of markets actually produce them. For instance, COVID-19 vaccines will mainly be manufactured in the US, India and Europe, although mainland China has been the largest producer so far.

Second, developed markets have snapped up vaccine supplies, leaving less available for developing economies. Canada, for example, has purchased enough jabs to vaccinate its population four times over, and the UK and EU have bought enough to inoculate double their populations. Compare that to the African Union, which has secured enough jabs to vaccinate less than 30% of its population. This imbalance has led some markets – notably India, mainland China and Russia – to step up vaccine exports to the emerging world. India has even sent some free of charge.

But despite the rapid scaling of vaccine manufacturing, there may still not be enough jabs to go around. In fact, analytics company Airfinity estimates that the vaccine shortfall could be around 2bn doses this year. This could give rise to another problem: trade protectionism. There is a risk that the limited availability of vaccines could lead some economies to impose new export controls in order to secure enough supply for the domestic market. For example, EU leaders recently backed the use of export authorisations but stopped short of banning exports entirely, while India has imposed a de facto ban on its vaccine exports. These actions could spiral if other markets implement tit-for-tat measures, such as export restrictions on vaccine ingredients.

Meanwhile, 13 WTO members, including the EU, Japan and Canada, are looking to enhance global trade rules to facilitate flows in essential medical supplies. They have also pledged to exercise restraint in imposing any new export restrictions, including on vaccines. Separately, economies such as India and South Africa are calling on developed WTO members to waive some intellectual property rights for vaccines, to facilitate more production globally. But with pushback from the EU and US, progress on this front could take some time.

Looking ahead, vaccine rollouts should provide support for air cargo volumes. Vaccine demand, and hence trade flows, may also be impacted by the emergence of new COVID-19 variants, which could lead to the ongoing need for jabs, as well as by vaccine uptake across jurisdictions. Given economic growth prospects rely, in part, on access to effective vaccines, economies should brace for more trade challenges to come.

*This is an abridged version of a report by the same title published on 31-Mar-21. Please contact your HSBC representative or email [AskResearch@hsbc.com](mailto:AskResearch@hsbc.com) for more information.*

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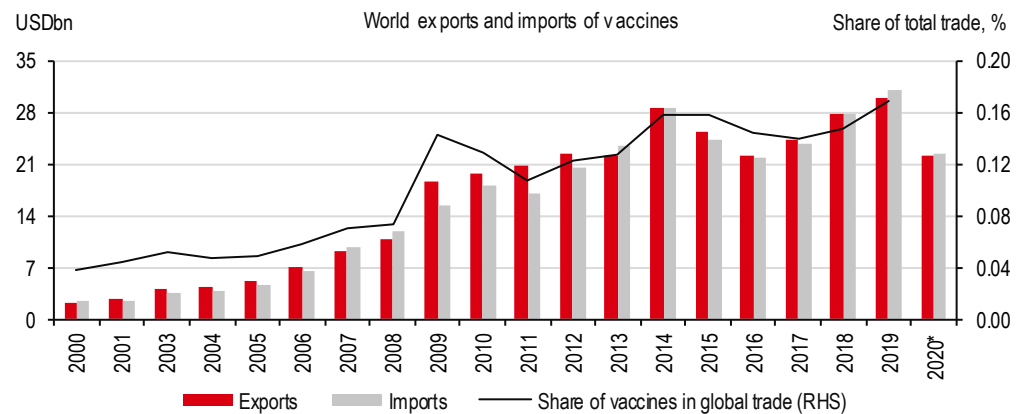
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# Trade in vaccines

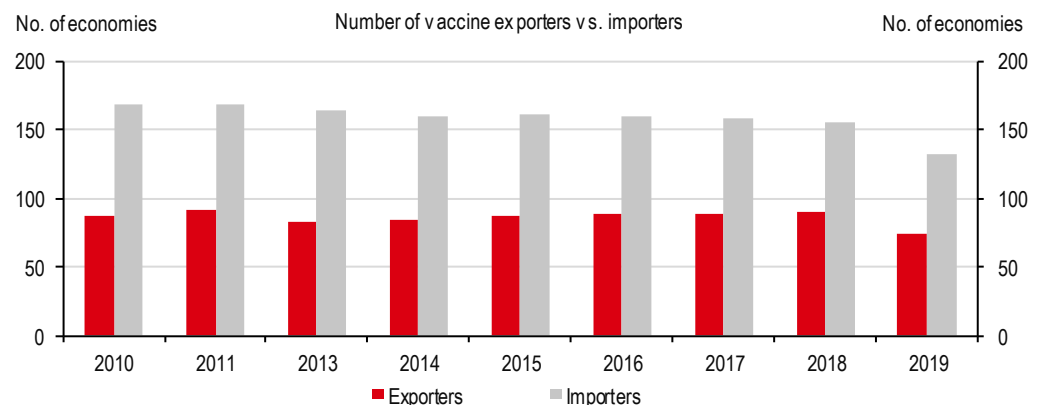
- ◆ COVID-19 vaccines are in high demand...
- ◆ ...but supply shortages could give rise to export restrictions
- ◆ We take stock of vaccine trade patterns in 30 charts

## 1. Even before the pandemic, trade in vaccines was increasing over time...



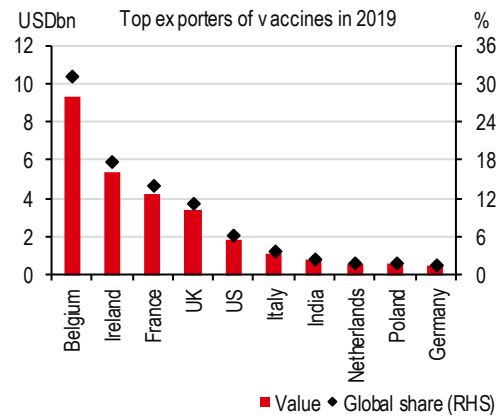
Source: WITS, HSBC. Note: Data for HS300220. \*2020 data are incomplete and based on statistics for 37 vaccine exporters and 53 vaccine importers. These markets comprised over 70% of global vaccine export and import flows in 2019.

## 2. ...but exports remain concentrated in a small number of economies



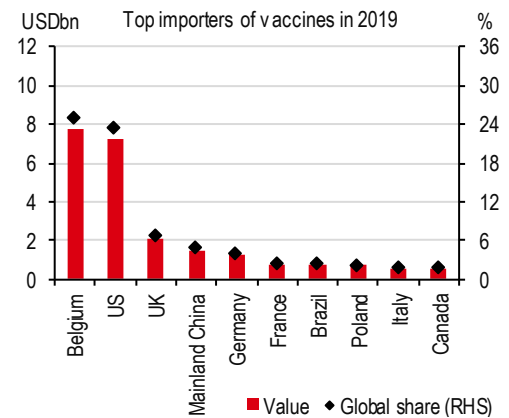
Source: WITS, HSBC. Note: Data for HS300220.

### 3. Europe is a large exporter of vaccines...



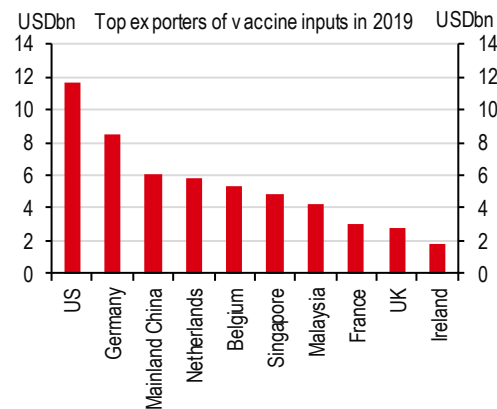
Source: WITS, HSBC

### 4. ...while DMs also dominate import flows



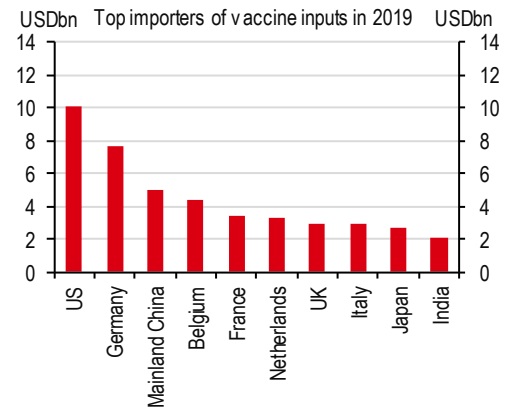
Source: WITS, HSBC

### 5. Europe and Asia are key exporters of vaccine ingredients...



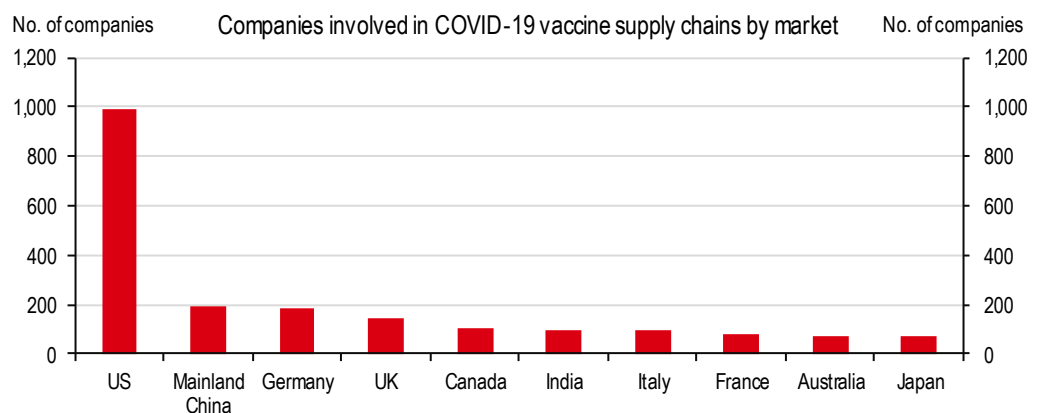
Source: WITS, World Bank, HSBC

### 6. ...and key importers of these inputs



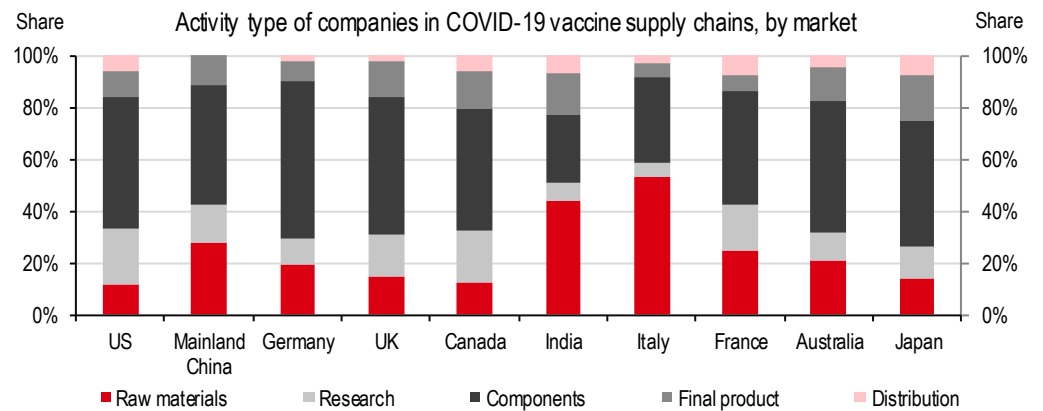
Source: WITS, World Bank, HSBC

### 7. Many companies around the world are involved in producing COVID-19 vaccines...

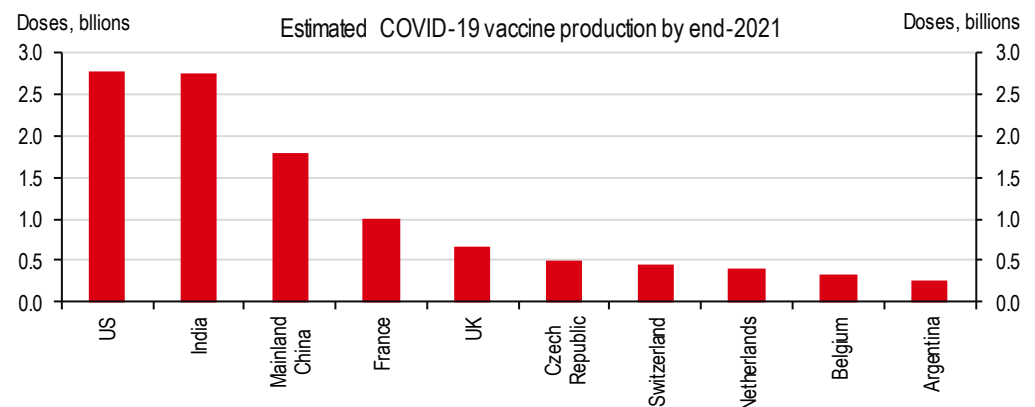


Source: ADB, HSBC. Note: Database accessed on 22 March 2021. Companies that conduct multiple activities in vaccine supply chains are counted only once.

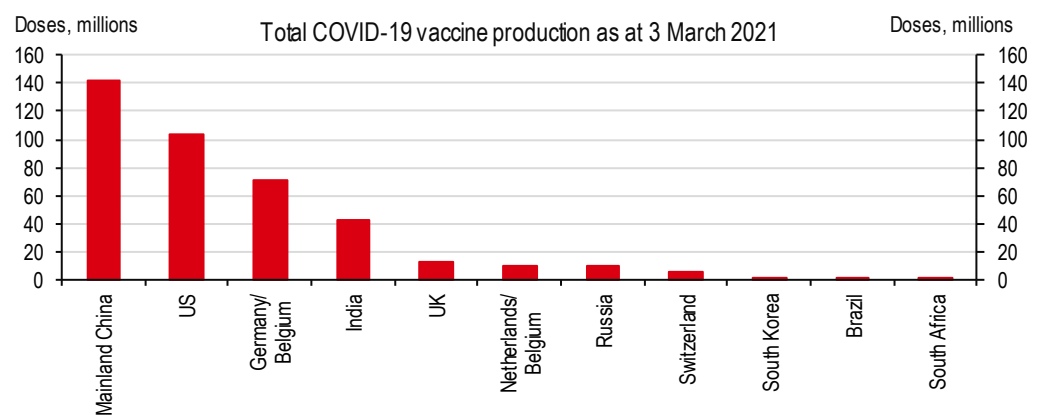
### 8. ...ranging from the provision of raw materials to R&D to production and distribution



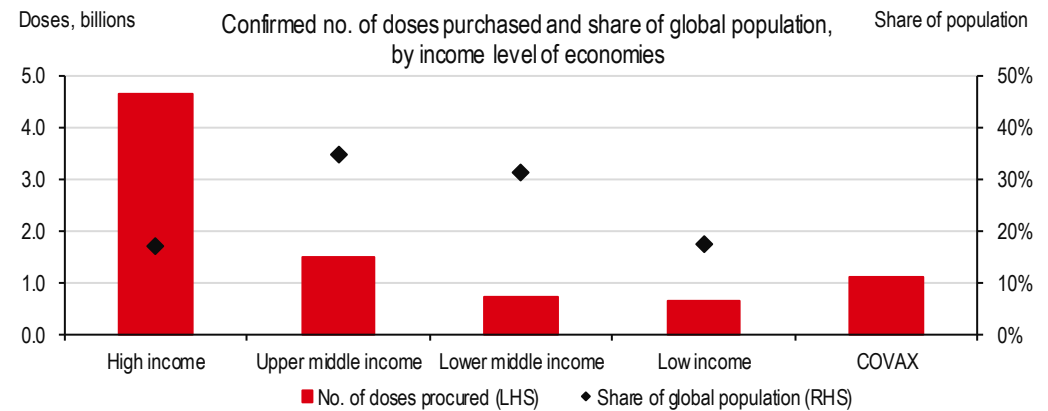
### 9. The US and India will be key producers of COVID-19 jabs...



### 10. ...but mainland China has quickly emerged as the largest producer so far

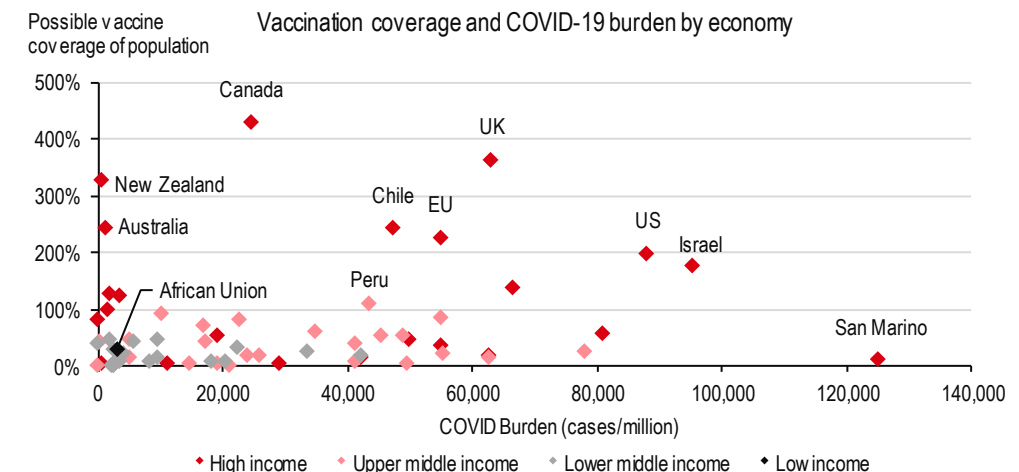


### 11. High-income economies have been quick to secure vaccine supplies...



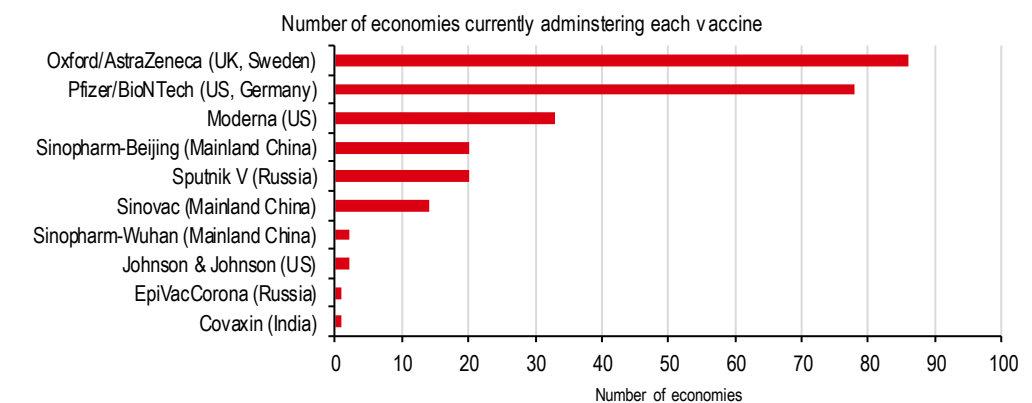
Source: Duke Global Health Innovation Center. Note: Data as at 19 March 2021. High-income economies include Australia, Canada, Chile, Croatia, EU, Germany, Hong Kong, Hungary, Israel, Japan, Kuwait, Macao, New Zealand, Oman, Panama, Qatar, San Marino, Saudi Arabia, Singapore, South Korea, Switzerland, Taiwan, UK, UAE, Uruguay, and US.

### 12. ...while emerging markets lag behind



Source: Duke Global Health Innovation Center, HSBC. Note: Data as at 19 March 2021.

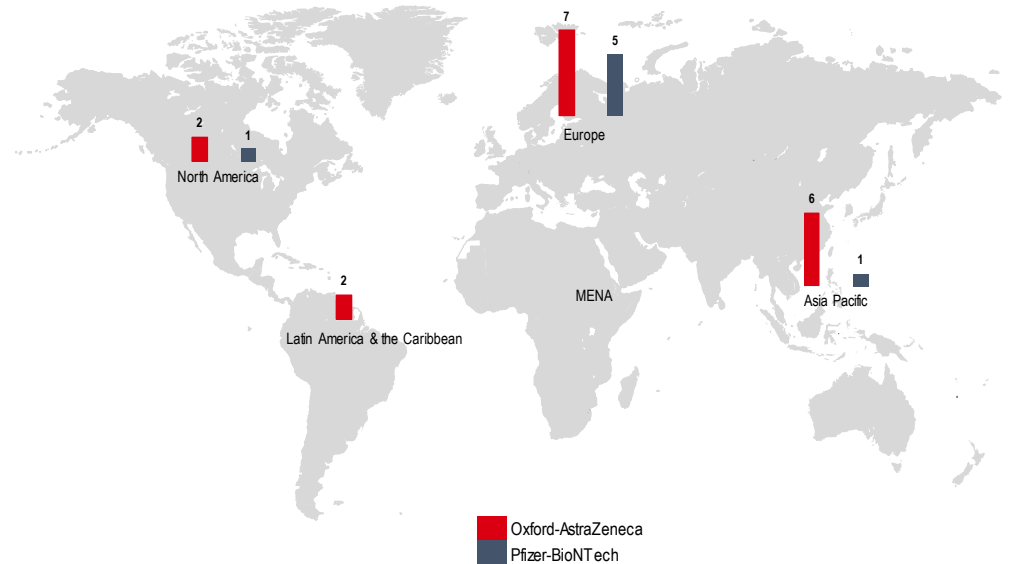
### 13. Most economies are currently administering European and US COVID-19 vaccines...



Source: Our World in Data. Note: Database accessed on 22 March 2021.

#### 14. ...which are produced in a limited number of facilities around the world...

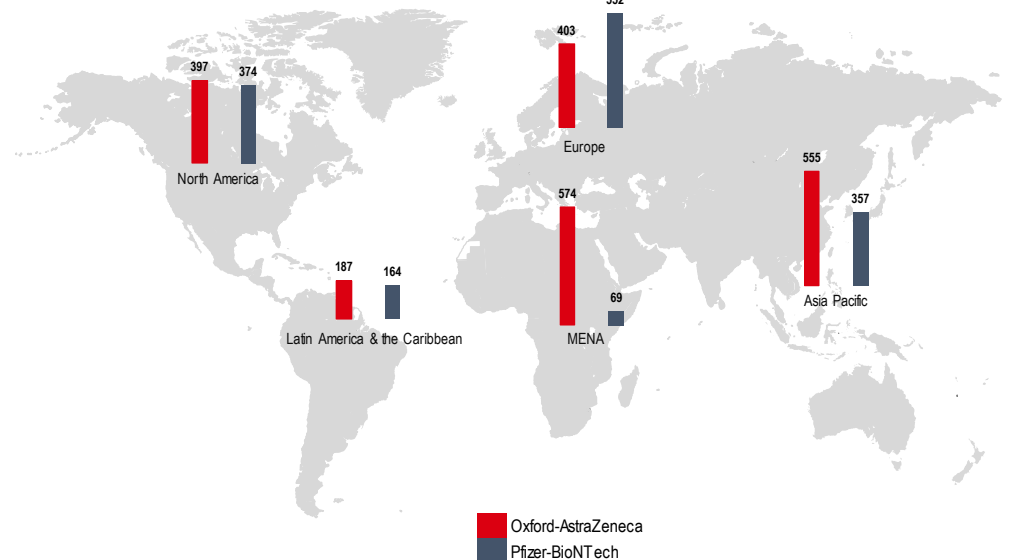
Number of economies manufacturing Oxford-AstraZeneca and Pfizer-BioNTech vaccines



Source: Duke Global Health Innovation Center, HSBC. Note: Data as at 18 March 2021. Refers to count of economies in each region.

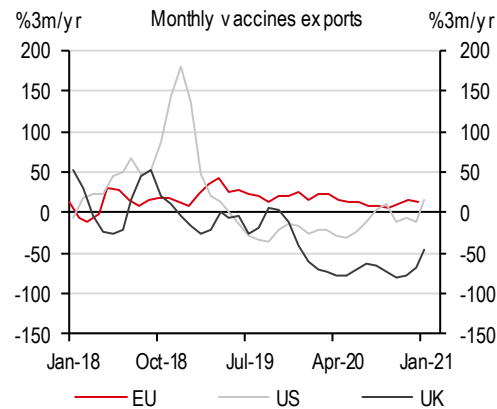
#### 15. ...and distributed globally

Number of doses of Oxford-AstraZeneca and Pfizer-BioNTech vaccines procured (millions)



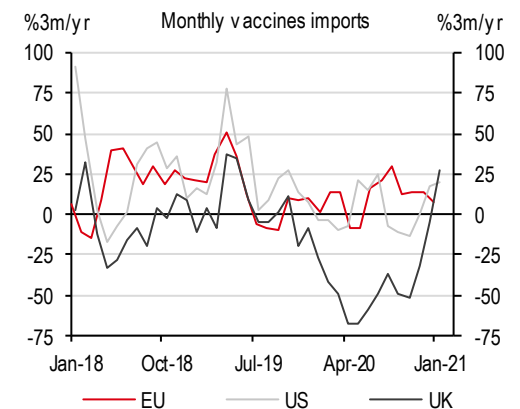
Source: Duke Global Health Innovation Center, HSBC. Note: Data as at 18 March 2021.

### 16. Vaccine exports from some DMs have ticked up in recent months...



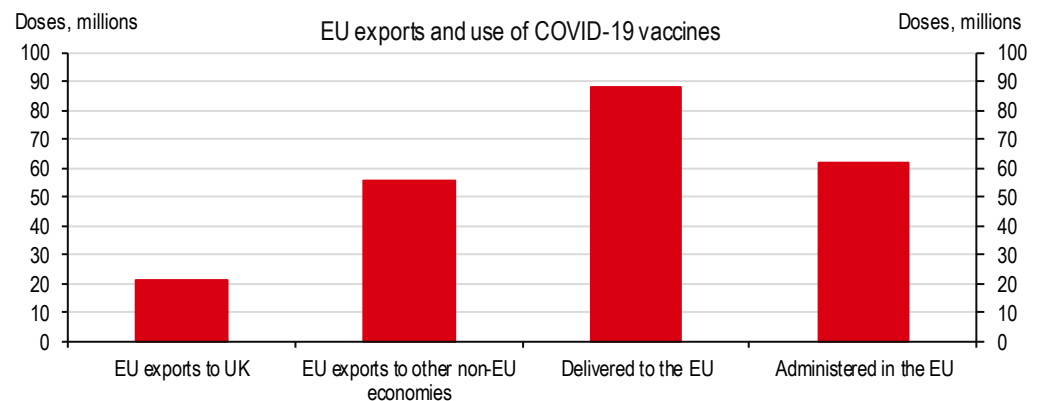
Source: Eurostat, US Census Bureau, HMRC

### 17. ...as have imports



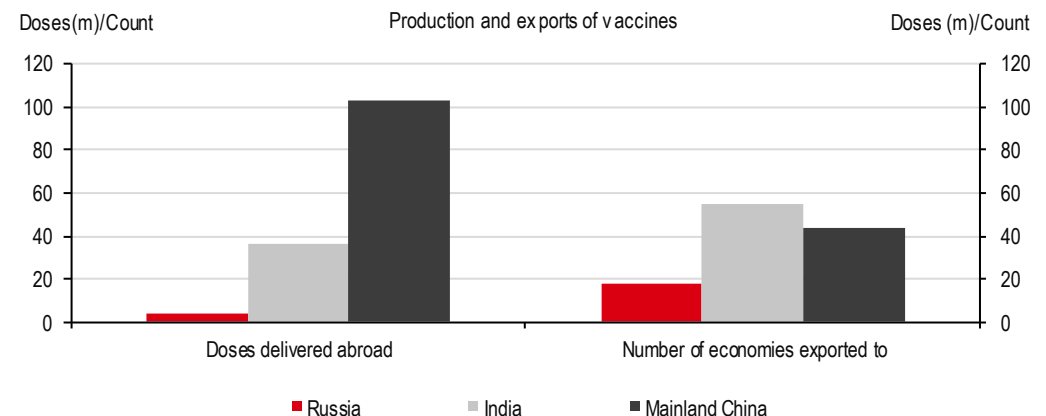
Source: Eurostat, US Census Bureau, HMRC

### 18. The EU is sending COVID-19 vaccines abroad...



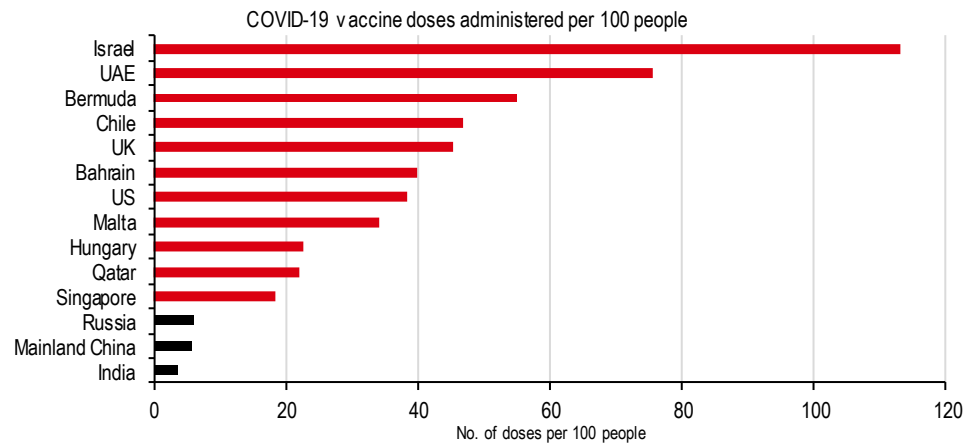
Source: European Commission. Note: Export data for COVID-19 vaccines sent since 1 December 2020. Data as at 25 March 2021.

### 19. ...while Russia, India and mainland China are also exporting a large number of jabs...



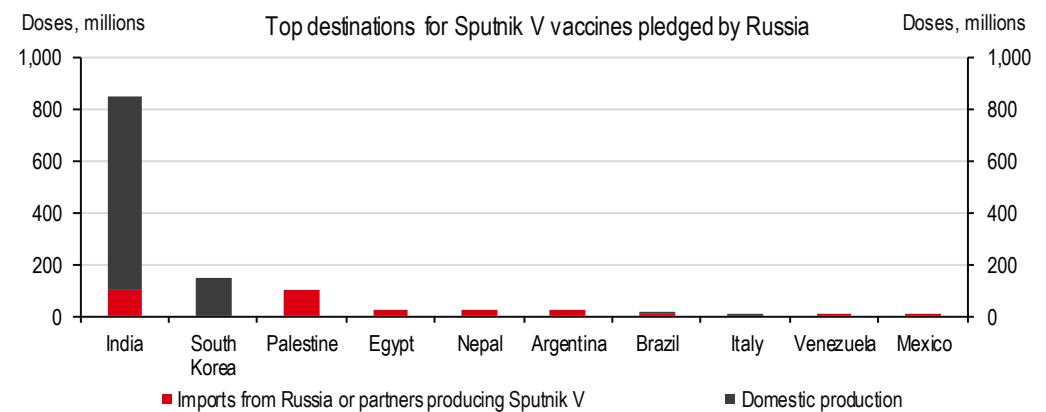
Source: Airfinity. Note: Data accessed on 23 March 2021.

## 20. ...despite being slower to vaccinate their own populations



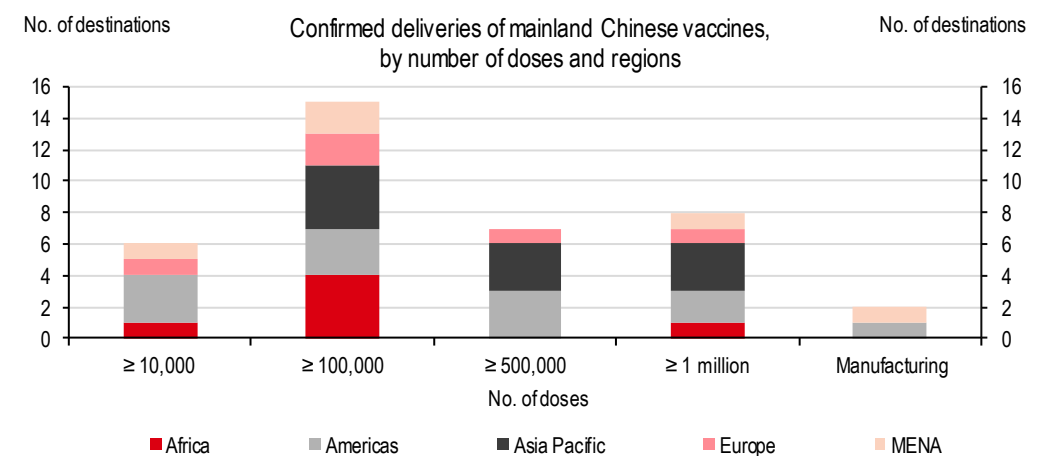
Source: Our World in Data. Note: Data as at 23 March 2021.

## 21. Russian vaccine exports are going mostly to EMs...



Source: Statista. Note: Data as at 22 March 2021.

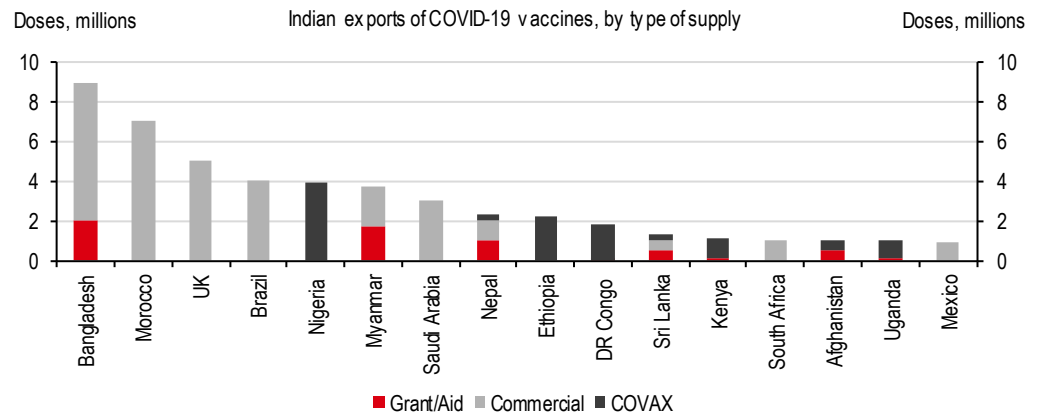
## 22. ...while economies across all regions have purchased mainland China vaccines...



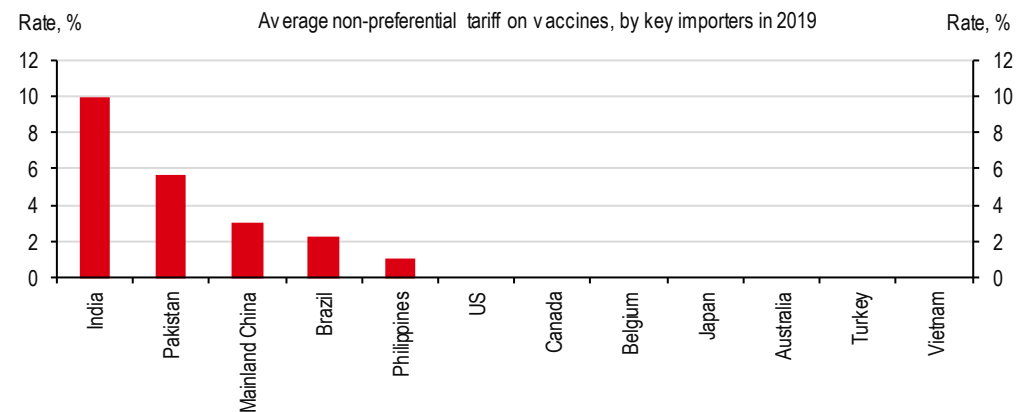
Source: Global Commission for Post-Pandemic Policy. Note: Based on data 18 March 2021 data release.



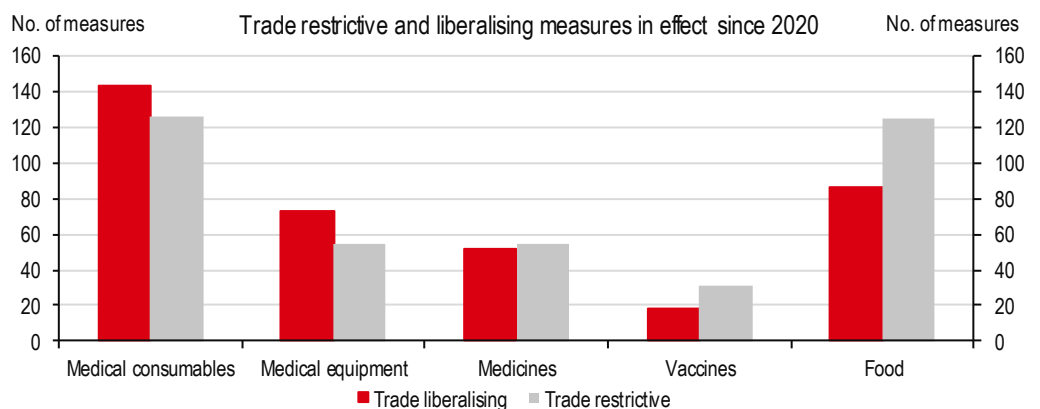
### 23. ...and India is distributing some vaccines to developing markets for free



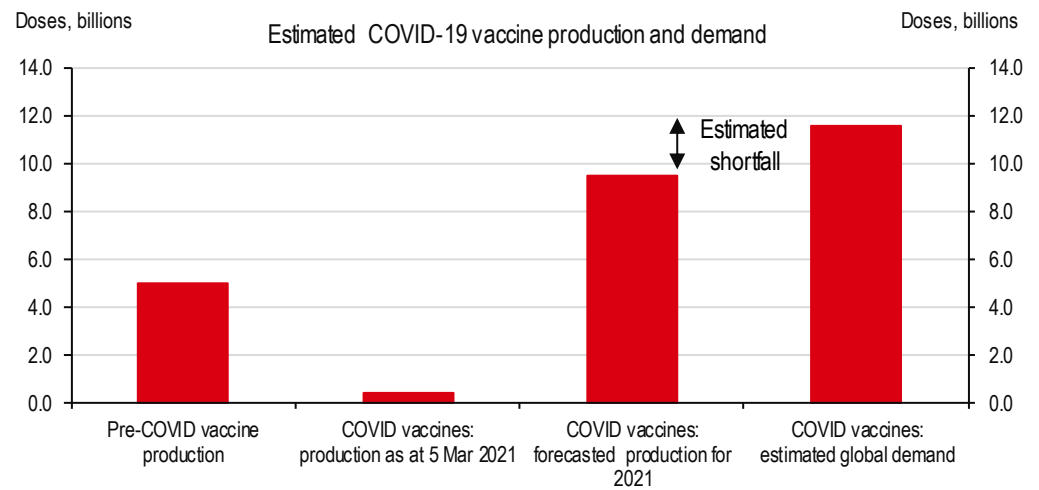
### 24. Tariff barriers on vaccines currently remain relatively low...



### 25. ...as do non-tariff barriers...

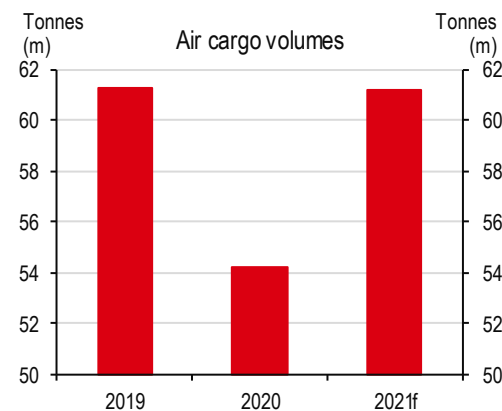


## 26. ...but vaccine shortages risk leading to new export restrictions in some markets



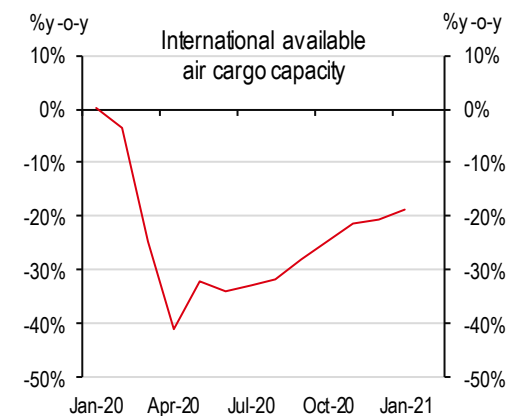
Source: Airfinity

## 27. Vaccine rollouts will help support air cargo volumes this year...



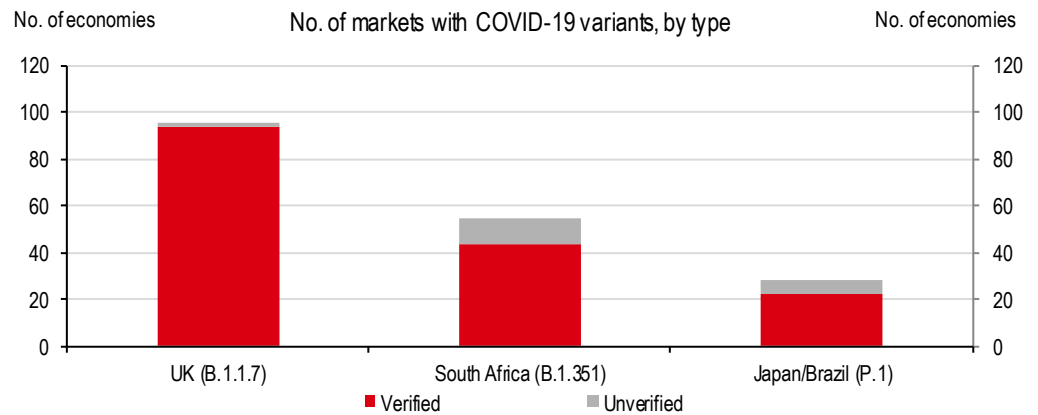
Source: IATA. See also HSBC equity note by Andrew Lobbenberg on Distributing Vaccines (29 November 2020).

## 28. ...although airfreight capacity remains tight



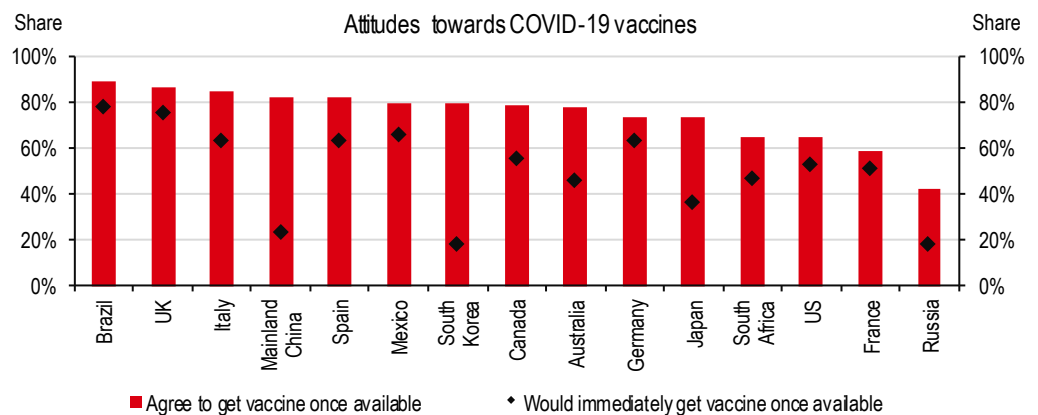
Source: IATA. Note: Measured in available cargo tonne-kilometres (ACTKs).

### 29. Vaccine demand and trade may also depend on the emergence of new variants...



Source: CDC, HSBC. Note: COVID-19 variants could be present in some economies that have not yet reported them. Data as at 9 March 2021.

### 30. ...as well as on the uptake of jabs



Source: Ipsos

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