

## Vaccine Slippage

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It is looking likely that most countries will miss their Covid-19 vaccination targets for 2021. This creates a risk of slower than expected economic growth, especially in Europe where renewed lockdowns have forced the region into a double-dip recession, from which it may start to emerge only around mid-year. Moreover, any activity dependent on international travel or large-scale gatherings will remain severely depressed until well into 2022.

Most developed economies have contracted for more than enough doses of the various vaccines to immunize most or all of their adult populations by the end of this year (see [Darkness Before Dawn: The Covid Vaccine Outlook](#)). So far, however, virtually all of them are lagging their vaccination schedules, thanks to supply bottlenecks and logistical hurdles. At present rates, only the US and UK have a decent chance of immunizing enough of their population (70-80%) to reach herd immunity by the end of 2021.

It is likely that in rich countries the pace of vaccination will pick up in the coming months, as more supply comes on stream and distributions kinks are ironed out. But a quick look at the US—which, despite problems, has had one of the more successful vaccine rollouts—shows this is a non-trivial task. At the current rate of 1.3mn doses per day, it will take nearly seven months to get one dose to 80% of the US population (265mn people), and over a year to get to full immunization for those 80%. These numbers could come down a bit if the single-dose Johnson & Johnson vaccine becomes widely available, but realistically, in 2021 most vaccinations will use the two-dose Pfizer and Moderna vaccines which are already in production.

Immunizing 80% of the US population by late this year, will need vaccinations to rise to about 3mn doses a day (and see children approved for vaccination, for which there is no timeline). At that rate, the project would take six months. How likely is this? Distribution will need to rise fast from the current rate of 1.3mn doses a day. At the present rate of increase, it will be late April or early May before supply crosses 3mn doses a day (see left-hand chart overleaf).

At the current rate of inoculation, it will take about seven months to get one dose of vaccine to 80% of the US population

To fully immunize the US population by late this year will require about 3mn doses being administered a day

### Checking The Boxes

Our short take on the latest news

Fact	Consensus belief	Our reaction
<b>US personal income up 0.6% MoM in Dec vs -1.3% in Nov;</b> spending fell -0.2% vs -0.7%	Above expected -0.1% and -0.4% respectively	Spending fell amid renewed Covid outbreak; expect pickup after infections reduce
<b>Germany GDP rose 0.1% QoQ in 4Q20,</b> vs 8.5% in 3Q	Above expected 0%; Fra at -1.3% vs 18.5% (-4% exp); Spa at 0.4% vs 16.4% (-1.4% exp)	Slow vaccine rollout amid recent surge in infections likely to inhibit EZ recovery
<b>China's manufacturing PMI fell to 51.3 in Jan,</b> from 51.9 in Dec	Below expected 51.6; non-manufacturing PMI fell to 52.4 in Jan from 55.7 in Dec	Fewer workers going home over holidays should help support production in Feb
<b>South Korea exports rose 11.4% YoY in Jan,</b> vs 12.6% in Dec	Above expected 9.8%; imports rose 3.1% YoY in Jan vs 2.2% in Dec	Amid global semiconductor shortage, Korea's exports will likely continue to boom

The UK and US may reach herd immunity by the end of this year—on current trends, few European nations will do so

This is possible, but plenty of things can go wrong in vaccine production (see [Supply-Chain Risks For The Covid Vaccine](#)). Manufacturers have forecast that by the end of 2021 they will be producing at an annualized rate of 11bn doses, more than double the global production of all types of vaccines in any prior year. In reality, pharma firms have no experience in scaling up production of innovative mRNA vaccines, and shortages of everything from vaccine raw materials to glass needed for vials are likely. Even so, the US and the UK have a shot at reaching herd immunity by the end of the year. Most European countries, on present trends, do not; they will need to ramp up the pace of immunization much more rapidly (see right-hand chart below).

These estimates do not take account of other well-advertised risks: that the more transmissible UK variant becomes the [predominant](#) strain in the coming months, thereby raising the proportion of the population that must be vaccinated to achieve herd immunity; or that vaccines prove less effective against new strains such as the one from [South Africa](#), meaning that a third [booster](#) shot will be needed to complete the vaccine regimen.

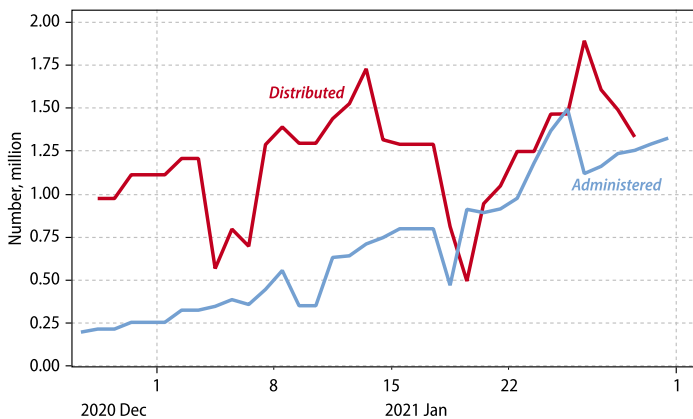
Finally, all these problems will be more acute in emerging economies, which are farther behind the curve in contracting for vaccine doses, and have weaker distribution infrastructure. With the exception of China and Russia which have strong domestic vaccine production and thus have a good shot of reaching herd immunity levels of vaccination by early 2022 (Russia) or mid-2022 (China), much of the emerging world might have to wait until [2023](#), or even later, to get to herd immunity.

The bottom line is that 2021 is shaping up as a very challenging year for Covid control, and there will probably be a see-saw between rising vaccination rates and renewed outbreaks of the disease, driven by more transmissible strains. Individual countries (notably the US and China) could well continue to see strong economic recoveries, but they will keep their borders largely closed. There has so far been little discussion of vaccine certification arrangements that would ease international travel, and agreements will be hard to forge with countries, such as China, whose domestic vaccines appear to have lower effectiveness. A return to pre-pandemic “normal” is still at least a year away.

Major economies will keep their borders closed for most of this year

**Reaching 3mn jabs a day in the US will be a challenge**

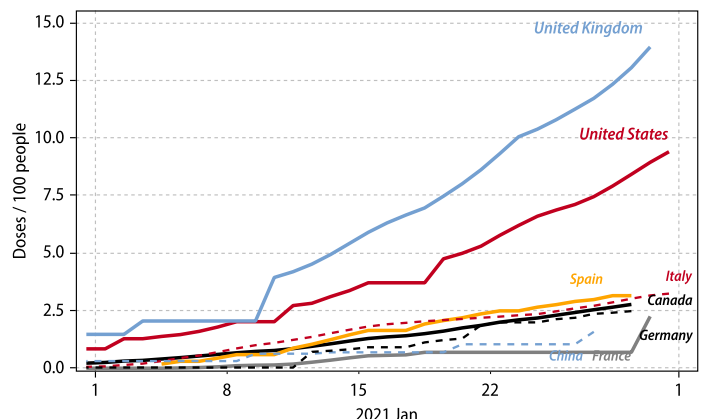
Vaccine doses distributed and administered, mn (daily, 7d ma)



Gavekal Research/Macrobond

**Among major economies, the UK and US lead in vaccination**

Covid vaccine doses administered per 100 people



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