

Vaccines for developing countries: the costs and benefits of waiving patents

*There is much debate about whether the patents on COVID-19 vaccines should be waived to allow low-income countries to produce doses for themselves. The Initiative on Global Markets Forum's survey asked European and US experts to express their views on this issue and the broader challenges of vaccinating the world. **Romesh Vaitilingam** sums up the results of the survey.*

The IGM Forum survey asked experts whether they agree or disagree with two statements, and, if so, how strongly and with what degree of confidence. In the first scenario, rather than waving patent protections, rich countries would pay full price for the vaccines and distribute them for free to developing nations (or license production and support licensees). In the second one, rich countries would pay for 12 billion doses of COVID vaccines at prevailing prices and provide them free for the rest of the world.

Of our 47 [European experts](#), 41 participated in this survey; of our 43 [US experts](#), 41 participated – for a total of 82 expert reactions.

Patent waivers and global vaccine distribution

Statement 1. Reliable COVID-19 vaccines will reach developing countries more quickly if the rich countries pay the pharmaceutical companies at prevailing prices to manufacture and distribute the vaccines (or to license production and support licensees), rather than waiving patent protection.

On this statement, a strong majority (87% of the panellists) agrees that rather than waiving patent protection on COVID-19 vaccines, the rich countries should pay the pharmaceutical companies to manufacture and distribute the vaccines (or to license production and support licensees).

Weighted by each expert's confidence in their response, 30% of the European panel strongly agree, 58% agree, 8% are uncertain, and 4% disagree. Among the US panel (again weighted by each expert's confidence in their response), 33% strongly agree, 52% agree, 10% are uncertain, and 4% disagree (the totals don't always sum to 100 because of rounding).

Overall, across both panels, 32% strongly agree, 55% agree, 9% are uncertain, and 4% disagree.

More nuances in the experts' views come through in the short comments that they are able to include when they participate in the survey. Some focus on the need to overcome constraints on production and distribution of the vaccines to developing countries. For example, Barry Eichengreen at Berkeley says: "Companies currently producing the vaccines can ramp up production most quickly."

Kenneth Judd at Stanford adds: "These firms have experience in manufacturing their vaccines. Others do not." Robert Shimer at Chicago notes: "Moderna and Pfizer have the expertise to produce those vaccines." And Christopher Udry at Northwestern comments: "More quickly is the key. Scaling up is surely faster, even if more expensive."

Others remark on whether patents are a real constraint. Carol Propper at Imperial says: "The problem with waiving patent protection is that the manufacturing components may not be available to low-income countries." Patrick Honohan at Trinity College Dublin adds: "While restricting patent protection could be justified, it is unlikely to speed coverage especially given need for updated booster shots." And Pinelopi Goldberg at Yale explains: "With ten reliable vaccines available, the issue is not patent protection. It is manufacturing and distribution."

Some of the panellists comment on the costs to the rich countries of paying for the vaccines. William Nordhaus at Yale suggests: “A big if when that might mean six billion people at \$100 per year. Can’t see passing political cost-benefit test.” Oliver Blanchard at the Peterson Institute says: “Yes, but more expensive for governments.” Richard Thaler at Chicago points out that: “Prices can be negotiated and reflect prior government investment.” And Christian Leuz at Chicago echoes this idea: “Payments to pharma relative to upfront public investment.”

Several panellists comment on the potential impact of removing intellectual property protection on vaccines. Franklin Allen at Imperial says: “This is a good way to ensure vaccines are distributed to emerging countries. Waiving patent protection may have significant negative effects.” Eric Maskin at Yale adds: “Patent holders have the incentive to supply vaccines if prevailing prices are paid, but not if patent rights are waived.”

Many are concerned about the longer-term effects of patent waivers on innovation: Jan-Pieter Krahn at Goethe University Frankfurt says: “Waiving patent laws this time will weaken patent laws at other times.” Oliver Hart at Yale adds: “I also think that waiving patent protection sets a very bad precedent.” And Steven Kaplan at Chicago states: “A big mistake and terrible precedent to waive patent protection.”

These worries are widely shared, as indicated in an earlier IGM poll ([see below](#)). In the latest survey, David Autor at MIT says: “The US is setting a terrible precedent by voiding patents after successful cooperation with pharma during Warp Speed. It’s a repeated game.” Lubos Pastor at Chicago comments: “In addition, waiving patent protection could cause long-term damage to innovation by failing to protect intellectual property.” Robert Hall at Stanford takes it even further: “In any case, removing patent protection would be a taking in violation of the taking bar in the fifth amendment.”

Among the panellists who say they are uncertain about the statement, Markus Brunnermeier at Princeton fears that: “Such a measure would kill production capacity in some emerging market and developing countries, e.g., in India.” In contrast, Daron Acemoglu at MIT comments: “Forcing pharmaceutical companies into a free licensing agreement with developing countries could be very effective”, a point also made by Christian Leuz: “Licensing possible too – see BNTX [BioNTech, Pfizer’s partner in producing a vaccine].”

Richard Portes at London Business School agrees with the statement but still supports the idea of patent waivers: “I agree with [Joseph] [Stiglitz](#) that patent protection should be waived. But WTO procedures would be much too slow. So, pay – and tax pharma.” Pinelopi Goldberg also provides background reading in a paper on [how to end the pandemic by March 2022](#). She herself has written on the [waiver proposal](#), as has another of our US panellists, [Maurice Obstfeld](#) at Berkeley; and [Abhijit Banerjee](#) at MIT has co-authored with Esther Duflo a *New York Times* piece on global implications of the pandemic in India.

The effects of removing intellectual property protections on COVID-19 vaccines on both immediate vaccine availability in developing countries and future innovation were considered in an earlier IGM poll, which also invited views on the need for an international agreement on vaccine trade. We asked the experts on the [US](#) and [European](#) panels whether they agree or disagree with the following statements: again, over 80 responded and the overall results were as follows:

a) Removing intellectual property protections on COVID-19 vaccines would substantially improve availability of the vaccines in developing countries.

Across both panels, 21% strongly agree, 33% agree, 35% are uncertain, and 11% disagree. This result echoes the uncertainty in the latest survey around patents being the main constraint on getting vaccines to developing countries.

b) Removing intellectual property protections on COVID-19 vaccines would have a negative impact on vaccine development efforts for future variants of SARS-CoV-2 or for the next pandemic.

Across both panels, 22% strongly agree, 55% agree, 14% are uncertain, 6% disagree, and 2% strongly disagree. Thus, more than three-quarters of respondents worry about the future innovation effects of waiving patents today.

c) Without an international agreement that facilitates vaccine trade, countries’ incentives to limit exports of vaccines and/or key production inputs are likely to prolong the adverse effects of the pandemic in advanced countries.

Across both panels, 21% strongly agree, 65% agree, 9% are uncertain, and 5% disagree. Here, there's strong agreement for global cooperation to address the vaccination needs of all countries.

Costs and benefits to rich countries of global vaccine distribution

Statement 2. The benefits to the US, Canada, Europe, Japan and other rich countries of paying for 12 billion doses of COVID vaccines at prevailing prices and providing them for free to the rest of the world exceed the costs that the rich countries would incur.

On the second statement in the latest poll – about the benefits and costs to the rich countries of paying for 12 billion doses of COVID vaccines and providing them for free to the rest of the world – a strong majority (89% of the panellists) considers that the benefits outweigh the costs.

Weighted by each expert's confidence in their response, 36% of the European panel strongly agree, 53% agree, 7% are uncertain, and 5% disagree. Among the US panel (again weighted by each expert's confidence in their response), 46% strongly agree, 42% agree, 11% are uncertain, and 0% disagree.

Overall, across both panels, 41% strongly agree, 48% agree, 9% are uncertain, and 2% disagree.

Among the comments, several panellists point to reasons for the rich countries to pay both out of self-interest and altruism. David Autor is clear: "For both moral and pragmatic reasons, chaos and death in the developing world harm all of us. We should assist immediately and generously." Angus Deaton at Princeton takes a similar view: "I don't agree with the premise that we count in money. We ought to do this. Period. Unlike most foreign aid, this is a good thing to do." So too does Oliver Hart: "More important than this, it's just the right thing to do."

Pinelopi Goldberg comments on the dangers of not acting as the pandemic worsens in some parts of the world: "If the world population is not vaccinated and new variants emerge, the pandemic will never end." Kjetil Storesletten at Oslo adds: "Vaccinating the world has a strong positive externality: it reduces scope for future virus mutations. Gains exceeds costs for rich countries."

Karl Whelan at University College Dublin notes: "The costs are minor relative to GDP. Benefits in terms of boosting the global economy and stopping dangerous new variants emerging are big." And Franklin Allen says: "The cost of the vaccines is a relatively small amount compared to the losses associated with the pandemic and potential future losses."

Other panellists point to potential reputational benefits for the rich countries. Kenneth Judd argues: "This would be a far better way to create goodwill towards the US than any other kind of foreign aid." Abhijit Banerjee concurs: "The rich countries need the rest of the world for COP26 [the upcoming summit on climate change policy in Glasgow in November], but the recent vaccine grab hasn't helped. This will help rebuild credibility."

Some panellists question what underpins the statement but go along with the general view. Bengt Holmstrom at Yale says: "I don't know that 12 billion is the right number, but substantial help from the developed world will benefit all." Jonathan Levin at Stanford comments: "Yes, but I would change premises of question. Don't need close to 12 billion doses, or to pay US prices for ambitious global campaign." Richard Thaler adds another perspective: "Reward the drug companies appropriately for saving us and they will do it again. At \$20, the shots are a huge bargain."

Some of the panellists make rough calculations. Larry Samuelson at Yale estimates: "World vaccination will lead to a healthy world economy, allowing the rich countries to more than recoup the cost of about \$250 billion." Jose Scheinkman at Columbia suggests: "A bargain at a probable cost of less than 0.3% of GDP of wealthy countries." Christopher Udry adds: "The costs are about an order of magnitude lower than the benefits." And Jan-Pieter Krahn comments: "This would be a transfer with very large social rate of return – and with a high economic rate of return as well."

Christian Leuz points us to a study in *Science*, which calculates that the benefits per dose could be in the thousands and that developed countries would only have to capture a small share of it to justify the cost of the vaccine: "[Benefits per dose far outweigh costs](#). Global problem and fraction of net benefits accrue to rich countries. Besides, matter of solidarity." And Richard Portes estimates: "\$1 million per life. Global total COVID deaths around five million so far. Africa just starting, India-Brazil continue. Add economic costs. Simple arithmetic."

Charles Wyplosz at Geneva agrees with the statement but adds a caveat: "Maybe. But evaluating the benefits is effectively impossible, given the uncertainty and dicey when relying on economic value if life." Finally, Robert Shimer says he is uncertain but concludes with an additional point about moral and pragmatic reasons for vaccinating the world: "Global benefits exceed cost, less than \$240 billion, 0.3% of global GDP. Unclear how much accrues to rich countries versus it being the right thing."



Notes:

- All comments made by the experts are in the full survey results, [European Panel](#) and [US Panel](#).
- *The post expresses the views of its author(s), and do not necessarily represent those of LSE Business Review or the London School of Economics.*
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