## "No, Mr. Hollande, waiving patent rights would not result in higher vaccine production"

## In an opinion piece published on 1 October 2021, the former French President urges Germany - and Europe - to support a temporary waiving of patent rights, attributing inequalities in vaccination availability to pressure allegedly imposed by pharmaceutical companies.

Are any vaccine production facilities currently lying idle? Clearly not. Every production facility with the necessary biotech skills is actively making its expertise available. The figures are staggering and prove - if proof were needed - the scale of the efforts now being made. Before the health crisis struck, 4 billion doses of every type of vaccine were produced worldwide every year. In the eight months between January and August 2021, the industry produced more than 6 billion doses of Covid-19 vaccine. Which is an enormous achievement. And it continues to be so! Manufacturers around the world are now producing 1.5 billion doses every month. By the end of this year, production will have reached 12 billion doses, and assuming no major bottlenecks going forward, that number will have doubled to 24 billion by June 2022; a figure likely to exceed global demand. It is therefore completely wrong to believe that there is any shortfall in global production capacity, and that the waiving of patent rights would miraculously result in the immediate creation of a multitude of qualified and operational production facilities.

Pharmaceutical companies have already agreed and structured more than 300 manufacturing partnerships worldwide, and continue to do so wherever and whenever the opportunity arises. Special expertise, appropriate training, state-of-the-art facilities and appropriate accreditation are all essential for achieving assured vaccine quality. And the requirements are even more stringent for a new technology like messenger RNA. It is this commitment to quality that underpins public confidence in Covid-19 vaccines. The information contained in a patent would not be sufficient to reproduce these vaccines; to do so would require the effective transfer of production expertise, a much longer and more complex process to implement.

Intellectual property is a catalyst for progress, since it encourages research, partnership and innovation. *"This achievement is a victory for brilliant scientists and years of public investment in research",* writes François Hollande. There is no question, of course, of denigrating the role of the public sector. But neither should we minimise the role of the private sector. Do we really need to repeat the figures again? BioNTech was set up in 2008 with \$180m in private investment, and when it entered into partnership with Pfizer in 2018, the company raised a further \$1.3bn in private capital in order to develop the vaccine we now have. Moderna was founded in 2010 with \$40m from private investors, since when it has partnered with many different privately-owned pharmaceutical companies. The company raised \$1.4bn in stock market funding between 2015 and 2018. During this period, Moderna received only \$24.5 million in public-sector funding from DARPA and BARDA.

For years, these two companies took huge risks without making any profit whatsoever (in 2007, the company that preceded BioNTech almost closed down), not least because they were confident that their future discoveries would be 'protected' for a period of time by intellectual property rights. The waiving of patents would undermine that protection, and have the effect of discouraging the many vaccine candidates still under development.

Today, there is no monopoly of Covid vaccines, and every production facility worldwide is involved. Neither are there any financial barriers, because pharmaceutical companies have introduced differential pricing precisely to tailor availability to the resources of each country. The suggestion that patents should be waived is a purely ideological debate. Effective resolution of the real issues around inequality in immunisation requires activation of the right levers: ending trade barriers on raw materials exports and stepping up dose sharing through an ambitious policy of donations agreed between the world's wealthiest countries. Of course, simply providing a vaccine is not enough in itself, so for the most disadvantaged countries, vaccination campaigns also require effective support.

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