

We can sustainably end the pandemic with 7.2 billion vaccine courses a year: Chicago Booth's Eric Budish

Synopsis

"Yet, vaccinating everyone as fast as possible is enormously economically valuable. The quantity of dollars that have gone from government to vaccine production and distribution is not commensurate with how valuable it is to have speed and capacity at vaccinating the world. We must spend to produce vaccine capacity and not let supply chain bottlenecks become an excuse, Budish said.



Eric Budish.

Eric Budish teaches economics at Chicago University's Booth School of Business. Speaking to Srijana Mitra Das, Budish discusses the costs and benefits of building swift Covid-19 vaccination capacity:

Q. What is the core of your new research on managing the pandemic most sustainably?

A. My research is with a team of collaborators led by Michael Kremer. Our main point is that Covid-19 vaccine capacity is enormously valuable because it enables the pandemic to be ended much sooner. The economic value of this is in fact

astonishingly large — we estimate that each course of vaccine capacity (which is two doses per person) is actually worth 6,000 dollars on average while it costs just a few dollars.

This is so valuable because the global economy has suffered enormously during the pandemic with costs in four major dimensions — economic, health, human capital and the loss of social happiness and joy.

Vaccination is the way out of this situation. Hence, it is hugely valuable economically.

ET PRIME - TOP TRENDING STORIES



A boring exercise can help you spot multibaggers like Bajaj Finance early



Skipping Suez: A 7,200-km route can make India a leader in global trade



Subscribe to **ETPrime**

Q. Why do you emphasise the capacity to produce and distribute vaccines?

A. We understand vaccine capacity as equalling speed. The more capacity we build, the faster we can end the global pandemic.

Currently, around three billion people annually are being vaccinated but at that rate, we won't be done until 2022 — this allows time for variants to emerge and a resurgence of Covid-19, which is an unsustainable approach.

We recommend building massive vaccine capacity to the order of seven billion courses per year, which is enough for the entire world annually.

Q. How do you estimate the global economy would gain over \$20 trillion if it ramped up vaccine capacity beyond three billion courses?

A. We ran a global model of the pandemic and how vaccination mitigates it. The key element is the assumption that the global monthly harm of the pandemic is about one trillion dollars.

That's based on IMF and World Bank estimates of GDP loss at six billion dollars per year. Conservative estimates find that if you add health, human capital and lost utility, that doubles the loss. Other estimates find these factors even increase the economic loss to one trillion dollars per month.

Global Value of Vaccine Capacity

Global Capacity (Billion Courses)	Global Benefit (Trillion \$)		Time To 70% Vaccination (Months)	
	GDP Alone	Comprehensive	High-Income Countries	World
1	5.3	10.5	31.5	66.0
2	7.5	15.0	16.5	33.7
3	8.7	17.4	11.5	23.0
4	9.4	18.8	9.0	17.6
5	9.8	19.7	7.5	14.4

BCCL

Courtesy: E Budish, 'Market Design to Accelerate Covid-19 Vaccine Supply', Science, 12 March 2021

What we've computed is that the more capacity you build, the faster you can end this. We recommend achieving 7.2 billion courses a year — this will bring global economic benefits of \$21.8 trillion, with vaccination worldwide completed in nine months.

Q. What response is your study receiving?

A. It's got a fair amount of attention from policy makers. Some of the US vaccine diplomacy efforts are apparently drawing from these findings which help by putting dollar figures behind how good an idea it is to vaccinate the world faster.

We've also heard responses like, 'Sure, it's valuable but it's just not possible.' When economists hear 'it's not possible', we understand that to mean, it's not possible at the current price.

Yet, vaccinating everyone as fast as possible is enormously economically valuable. The quantity of dollars that have gone from government to vaccine production and distribution is not commensurate with how valuable it is to have speed and capacity at vaccinating the world. We must spend to produce vaccine capacity and not let supply chain bottlenecks become an excuse.

Q. Why do you suggest it's time to reimagine pharmaceutical contracts now?

A. The core economic issue here is that if we agree on just a price and quantity for a vaccine — say, a billion courses a dollars a course — it would be cheaper for a pharmaceutical company to produce those courses over a longer duration rather than sooner because that requires more manufacturing capacity and paying more fixed costs.

So, if a contract deals with just price and quantity, the firm's rational interest is to deliver that quantity relatively slowly. One response is to mention price, quantity and time in a contract. But that will bump other countries which can't do so to the back of the queue — that becomes a negative externality.

Therefore, we recommend contracts also invest in additional capacity installation. Nations ordering vaccines should say to manufacturers, 'We'll also pay you to build additional capacity to make more vaccines per year.' We must align the interests of the social sector with the private sector on the issue of speed. This matters enormously — we must explicitly contract in ways that are smarter about speed.

Q. You say markets can't deliver this vaccine capacity on their own — why?

A. Market forces cannot deliver vaccines at the speed that's best for the world. This is partly because the prices are severely constrained — no one is paying anything approaching the vaccines' social value.

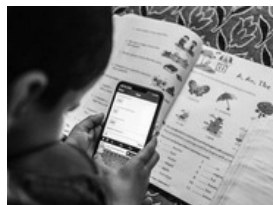
We need interventions that align these values. Governments need to do more here. If we follow this model, the whole world would be fully vaccinated by October 2021, saving trillions of dollars and extremely valuable lives.

Views expressed are personal

(Catch all the **Business News**, **Breaking News** Events and **Latest News** Updates on **The Economic Times**.)

[...more](#)

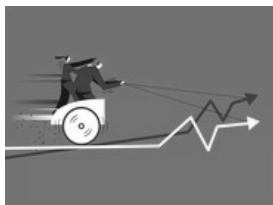
ETPrime stories of the day



RECENT HIT

The conduct certificate: Ed-tech self-regulation code is ready. Test begins now.

11 mins read



INVESTING

Is this the right time to invest in banks? Brokerages are upbeat, albeit with caution.

6 mins read

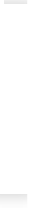


EDUCATION

Who is the Yoda of India's programming yoddhas? Let us C.

11 mins read

Subscribe to **ETPrime**



[BACK TO TOP](#)