
Coronavirus and Inequality: The Rich Get Richer, the Poor Get a Kick in the Behind

by Vincent F. Hendricks, PhD and Daniel J. Dunleavy, PhD

A virus does not make distinctions. It just spreads, it just hits. But the ones who are challenged already are getting challenged even more. The richest countries in the world, making up some 13% of the global population, have ahead of time secured 51% of the COVID-19 vaccine. Like with many other societal inequalities, the Matthew effect kicks in concerning the novel coronavirus: “For to everyone who has will more be given, and he will have an abundance.”

“The rich get richer, the poor get a kick in the behind”—or something to that effect—is a habitual proverb. Used by Jesus on more than one occasion, it’s formal formulation may be found in *The Gospels of Matthew* in *The New Testament*:

“For to everyone who has will more be given, and he will have an abundance. But from the one who has not, even what he has will be taken away.” (Matt. 25:29)

The term “Matthew effect” stems from sociologist, Robert K. Merton in a seminal paper from *Science* in 1968 entitled “The Matthew Effect in Science”. Merton advances the socio-psychological axiom that even in science success generates success and advantages are accumulated. Microscopically it implies that the more prominent researchers in a group tend to receive more recognition for the group’s work independently of how much work they have put in for real. The corresponding macroscopic consequence is that researchers, institutions, and countries most visible and dominant in the scientific debate will receive ever more attention in terms of citations and other bibliometric indicators. The more you have, the more you are going to get is not only prevalent in science, but in many other aspects of life, scientific and otherwise.

The structure governing the Matthew Effect is the principle of accumulated advantage. When a social agent whether an individual, a group or a nation, gets ahead with just a slight advantage over others, this very slight advantage will generally accumulate or aggregate over time and become an even greater advantage. This causal mechanism is responsible for a host of societal phenomena from inequality in income, rise in corruption, the centralization of power, hardened layering of social classes and a spread of other social problems.

The structural problem is that social agents from singular persons to families, corporations, and nations are in the business of maximizing their competitive advantage in terms of profit, influence, or power. If they refrain, they will be gradually washed away by the evolutionary selection mechanism inherent in “Survival of the fittest”. Thus, the most significant competitive advantage is obtained by a self-enforcing feedback mechanism stacking more advantage on top of what is already there as an advantage.

The structural mechanism may carry rather unfortunate slants along. Assume, by way of example, that all societal interactions may be cynically reduced to maximization of competitive advantage directly by exercising power or indirectly by strengthening the feedback loop. Once you have conquered the executive power, the path has been cleared to move on the judicial power, and once there, taking over legislative power is right up the alley. Voila! Perfection of power. Delayed unfavorable side-effects may however eventually surface, like rise in corruption, and such side-effects will be both reproduced and reinforced in the feedback loop as the system self-corrects until everything collapses.

The sustainability problem is buried as a side-effect of the human ambition of maximizing competitive advantage to take another example. Sustainability is in essence the capacity to succor a certain behavior indefinitely whether it relates to environment, finance, or social conditions. The sustainability problem becomes an unwanted and unfortunate side-effect of the constant attempt to maximize competitive advantage in politics, economics, climate, inequality or health related issues which given the self-enforcing effects may end up in a *race to the bottom* rather than the top.

The installment of the democratic rule of government in the Western world may be seen as a measure to obstruct a negative feedback loop and a race to the bottom when it came to the division of power in a nation state. Until the Enlightenment, the wealth and power of the people was accumulated by a ruling class and the democratic model is an answer to autocratic rule and adherent Matthew effects. The same goes for welfare systems, progressive tax models, and other measures to secure that the difference between the haves and have-nots does not go out of bounce.

Despite such measures, Matthew effects are hard to eradicate when say, a systemic shock like a corona pandemic hits high and low, and across multiple parts of life. A virus does not make distinctions, it simply hits, and hits some harder than others. This results in an inverted Matthew effect, where the ones challenged on resources are challenged even more in a race to the bottom. For instance, it is well-known that older adults, and those with pre-existing conditions (e.g. asthma, diabetes, lung diseases, etc.), are at particular risk of severe illness from COVID-19. But less obvious is how different sociodemographic groups are impacted by both the virus and responses to it. In the U.S., for example, minority racial and ethnic groups are estimated to have higher rates of excess death associated with COVID-19 than white Americans and worse mental and behavioral health outcomes. Elsewhere, the economic consequences of the pandemic have left hungry children in India, which is home to one-third of the world's malnourished children, in even more dire conditions. Even deliberate and well-intentioned responses to the pandemic have the potential to amplify existing inequalities. The costs and benefits of preventive measures, such as mandatory lockdowns and social distancing mandates, are not distributed equally. In countries like South Africa, densely populated slums and the need to work in order to survive, prove such efforts to be unrealistic and even harmful.

These types of inverted Matthew effects will likely persist, in spite and as part of the development and distribution of effective treatments and vaccines. Even though there is light at the end of tunnel, OXFAM predicted already back in September 2020, that the richest countries in the world making up 13% of the global population have ahead of time been hoarded 51% of

the COVID-19 vaccines implying that the poor populations of this world will not have the vaccine before 2022. Recent research supports this dilemma. Professor of health economics, Philip Clarke, at University of Oxford elaborates to NBC News in December 2020: “Higher income countries like the U.S. and the U.K. are putting themselves at the front of the line—that’s obviously what’s happening,” ... “The clear failure here is not having stronger international institutions and stronger funding to pay for a vaccine globally.”.

This sort of vaccine “nationalism” should be a clear ethical and epidemiological red flag for those who recognize the interconnectedness of our world. Putting out a fire in one’s kitchen, does not negate the one raging in one’s dining room or bedroom—the house remains in aflame. *Mutatis mutandis*—“The pandemic will not be over anywhere...” observes Tedros Adhanom Ghebreyesus, the Director-General of the World Health Organization (WHO) “...until it is over everywhere”.

And there is only one way out of this has been preached many times before: Cooperation, community spirit, new partnerships and an awakening to the alien idea that one may maximize competitive advantages on values different from monetary value: Trust, responsibility and respect.

The sciences provide but one example. International teams of researchers have worked around the clock in an effort to identify effective treatments and cures. Research support structures, foundations, and governments, have granted emergency funds for COVID-19 research, and publishers and professional societies have opened access to relevant publications to foster rapid knowledge dissemination. This work has largely placed collective health and human flourishing over individual accolades and prestige (e.g. grants, citations, awards).

But changing the behaviors and norms of scientists and researchers is not enough to tackle large-scale social inequities. Dynamic problems will (likely) require dynamic solutions—ones forged in the fires of traditional and novel—perhaps unexpected—partnerships. That is, collaboration between government and industry stakeholders, the scientific community, but also NGOs and non-profits, lay-experts and citizen scientists, community leaders, celebrities, and *everyday* persons will have to “do their part” and work together to acknowledge and rectify the disturbing consequences of Matthew effects—now and after the pandemic.

Authors’ Note: This post was jointly written by Vincent Hendricks and Daniel Dunleavy in February 2021.

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