Freedom and Rational Behavior:

Making Choices and its Consequences amidst COVID-19[[1]](#footnote-1)\*

[Charles Pahud de Mortanges](https://www.amazon.com/kindle-dbs/entity/author/B073T17K9C?_encoding=UTF8&node=283155&offset=0&pageSize=12&searchAlias=stripbooks&sort=author-pages-popularity-rank&page=1&langFilter=default#formatSelectorHeader)

Full Professor Emeritus, University of Liège

*A man has free choice to the extent that he is rational*

 - Thomas Aquinas

*Anything that gives us new knowledge gives us an opportunity to be more rational*  - Herbert Simon

*There are three kinds of lies: lies, damned lies, and statistics* - Mark Twain

**Introduction**

There are periods in every country’s history when personal freedom is severely impaired. Very often this is because of internal or external conflict. Recently we have seen our freedoms curtailed because of a pandemic, COVID-19. People have sometimes resisted the restrictions imposed on them, occasionally in the form of violent protests. Resistance also occurred because of a disbelief regarding the nature and impact of the COVID-19 virus and the response by the respective authorities. Because we live in a democracy, you have every right to believe what you want and act accordingly. But not everything you believe is right, as many discredited conspiracy theories show. Most importantly, what is missing in the argument are the consequences of your beliefs and actions and whether the choices made are rational.

**Free to Choose…[[2]](#footnote-2)\*\***

*The Oxford English Dictionary* defines freedom as: “The state to be able to act without hindrance, or restraint; liberty of action; the power of self-determination”. In other words, the condition or right of being able or allowed to do, say, think, etc. whatever one wants to, without being controlled or limited. As Voltaire wrote: “To be free is to be subject to nothing but the laws”.

Freedom of choice describes an individual's opportunity and autonomy to perform an action selected from at least two available options, unconstrained by external parties. We use our freedom every day to make choices concerning our actions and reactions to current situations. It is also imperative to recognize that with freedom comes responsibility – because our decisions always have consequences.

We believe we are free to choose our education, our career, our partner, our friends, where to live, what goods and services to procure, etc. In a democracy, during elections, we are free to choose our preferred political party and potential candidates.

However, we all know that this is an illusion. We all feign to have those freedoms. In reality, we face serious constraints in our ability to do, say, and think what we want. Our human freedom, although real, is a limited freedom at best. Limited, for example, simply by various laws – including the laws of nature and time. We all must accept, *inter alea*, Newton’s law of gravity and his three laws of motion. After a regrettable decision, we may wish to “turn back the clock” but can’t. We pretend to be able to forecast the future, but can’t. At least not with any meaningful precision.

“The most common qualification of the forecaster is not in knowing, but in not knowing that he does not know. His greatest advantage is that all predictions, right or wrong, are soon forgotten” (John Kenneth Galbraith).

What about our right to vote; our right to elect the party & candidate of our choice? True, but at the end of the day, does it matter? “If our voting made any difference, they wouldn’t let us do it” (Mark Twain). Or, as Jon Elster (2009) put it: “A rational person has no reason to vote. The chance of having an influence on the outcome of the election is considerably less than the risk of dying in a traffic accident on the way to the polling station.” (p.6). We are painfully aware that the eventual outcome of an election is usually the opposite of what we voted for. Still, we happily pretend that “our vote” will make a difference.

Then there are the rules of conduct or procedure established by custom, agreement, or authority – something we typically and commonly know as “the law” and are expected to obey. In the U.S. a person has the freedom to buy one, or more firearms (with a large range of choices); in most European countries there are strict gun laws that make (legal) ownership nearly impossible. With respect to consequences, in 2020, there were 43,469 gun-related deaths in the U.S. Only failed states like Honduras, Venezuela and Guatemala had higher numbers, in both absolute and relative terms.

There is also the question whether the choices we make are truly free and our own. Rene Girard’s “Mimetic Theory” proposes that human beings are essentially mimetic creatures. That is, we frequently imitate what we see in others, meaning that our desires are not actually our own, but desires we have copied from others.

There is, I believe, considerable evidence that Girard’s Mimetic Theory has significant validity. For example, the idea of “must-have gadgets” (e.g. Apple’s latest iPhone) would support this. Also a major aspect of social media is based on imitation; the whole concept of “influencers” has but a single purpose: copying behavior.

Humans have a limited ability to process information. As a consequence, "perception of information is not comprehensive but selective " (Hogarth 1980, p.4). Human decisions are typically made on the basis of a small number of cues, rather than an extensive appraisal of the situation. Further, people rely on information they judge to be relatively certain and on information they believe to be causally important. But at the same time, the mental models people construct to guide their decisions, are often systematically incorrect. (Hogarth, 1980). How many of the COVID-19 protesters are sufficiently familiar with the nature of the virus? Typically, their convictions are not rational, logical, and impartial, based on objective analysis of all the information available.

**Conspiracy Theories and Social Media…**

As a free people, we have the right to believe what we want, but not everything we believe is right. Conspiracy theories are fed by influence and imitation – predominantly through social media. Numerous scientific studies have shown that social media are a key player in the dissemination of conspiracy theories and misinformation – including COVID-19 vaccine safety. (Van Prooyen & Douglas, 2018; Enders et al., 2021).

Confirmation bias, “the tendency to search for, interpret, favor, and recall information in a way that confirms or supports one's prior beliefs or values” plays an important role here. People display this bias when they single out information that supports their beliefs while ignoring contrary evidence. Also, the tendency of people to communicate with others having similar beliefs (homophily), can lead to the formation of so-called “echo chambers”, which reinforce individual beliefs and deepen polarization.

It is very tempting to simply follow the crowd in its thinking and believing. You don’t have to take the time and make the effort to do your own “due diligence” and explore more about a certain issue. But…”if everybody is thinking the same, nobody is thinking”. (General George Patton).

Social media have become one of the main sources of vaccine misinformation. A study by the *U.K. Royal Society for Public Health* (2020) found that half of all parents with young children were exposed to misleading information about vaccines via social media. A recent investigation published in *The Guardian* newspaper found that the top 12 vaccine-related *Facebook* groups were all anti-vaccination; eight of the top-twelve pages returned by *Facebook's* search engine contained anti-vaccine propaganda. *YouTube's* autofill suggestions and recommended videos also routinely steer users to anti-vaccination content. Why is that?

Last year (2020) the medical journal *The Lancet* published an article “The online anti-vaccine movement in the age of COVID-19”. Based on several independent studies and reports, *The Lancet* article noted that 31 million people follow anti-vaccine groups on *Facebook*, with 17 million people subscribing to similar accounts on *YouTube* (Google). It was estimated that the anti-vaccine movement could generate $1 billion in annual revenues for social media firms. As much as $900 million could accrue to *Facebook* and *Instagram* (a *Facebook* app) alone, largely from targeted advertising to the 38.7 million followers with anti-vaccine accounts. Facebook and Google are major public companies, with shareholders; they probably could not afford to lose the advertising revenue by closing all the anti-vaxxers’ accounts. Indeed, during hearings at the European and U.K. parliaments, *Facebook* whistleblower Frances Haugen has flatly stated that the company would always prioritize profit over public good. *Facebook* later denied this.

Similarly, public perception about anthropogenic (human-induced) climate change has remained controversial primarily because of what is posted on social media. A study published in the scientific journal *Nature* by Samantray & Pin (2019) found that in social networks, polarization of beliefs (existence of large groups of people with opposing beliefs) and homophily in communication (communication among people having same beliefs) tend to be highly correlated. No surprise there!

Conspiracy theories can have serious consequences, because they are used and abused in all sorts of circumstances and at different levels of society and by all sorts of people – even by a former president of the United States. In a recent interview general H.R. McMaster (Trump’s former National Security Advisor) stated that: “January 6th was an assault on the first branch of government, and I think that what we must do is recognize that it was conspiracy theories that were used by the President [Trump] and others used to whip up a crowd and incite an assault on the first branch of our government”. Even Senate Majority Leader Mitch McConnell (a Republican!) later admitted in a speech that: "The mob was fed lies. They were provoked by the President and other powerful people."

And of course, this is not only a dilemma for social media. Companies, governments, and indeed individuals, must constantly consider and weigh between economic welfare and public health during a pandemic.

Governments have made heroic efforts to find a balance between both. They pumped trillions into their rapidly failing economies. This massive debt-creation has received much criticism. But what would have been the alternative? A tsunami of defaults, bankruptcies, and foreclosures, resulting in massive unemployment and all the pain, misery and devastation that comes with it. Proponents of “Modern Monetary Theory” (MMT) would argue that a government borrowing in its own sovereign currency cannot default on its debts. Governments can simply print more money to pay off debt – as long as inflation is kept at an acceptable and manageable level (Kelton, 2020).

Admittedly, this would be an entirely separate discussion (or even another essay!) but I would like to say a few words about how I understand the current government debt situation and the role played by central banks. We should remain vigilant, but we are not Zimbabwe, Venezuela, or the Weimar Republic. Here is why I don’t worry too much (yet):

When a central bank buys up government debt, that part of the debt loses its relevance. The interest payments on these government bonds have become an internal “one pocket to another pocket” transaction (“to rob Peter to pay Paul”) within the public sector. Moreover, the remuneration on these bonds is generally higher than the interest paid by the central bank on the reserves created by the support purchases (currently -0.50%). This income is reflected in the profits of the central bank, which – in case of the ECB - pays a large part of it back to the member states. (Boonstra & Koopmans, 2021).

In other words, finance ministers pay interest to their own national central bank and get it refunded later. Therefore, a significant part of this debt can, in fact, be disregarded. Because if that part of the purchased debt remains on a central bank’s own balance sheet, this part no longer constitutes an actual burden on the government budget. Sovereign debt, once bought by the central bank, has become largely irrelevant.

**Unintended Consequences…**

In his seminal work *The Crowd* (1895), Gustave Le Bon argued convincingly that people behave very differently when being part of a crowd then when acting individually.

Le Bon wrote that: “Isolated, he may be a cultivated individual; in a crowd, he is a barbarian. That is, a creature acting by instinct. He possesses the spontaneity, the violence, the ferocity, and also the enthusiasm and heroism of primitive beings, whom he further tends to resemble by the facility with which he allows himself to be impressed by words and images, which would be entirely without action on each of the isolated individuals composing the crowd; and to be induced to commit acts contrary to his most obvious interests and his best-known habits. An individual in a crowd is a grain of sand amid other grains of sand, which the wind stirs up at will”. Any observer of mass protests and demonstrations can attest to this.

From 2020 on, to prevent the spread of the COVID-19 pandemic, governments introduced health measures with varying levels of severity, such as restrictions on people's movements, compulsory wearing of face masks, lockdowns, vaccinations, and other efforts. In response to these restrictive actions, protests and strikes were organized around the world. As of July 2021, according to the *Global Peace Index*, there had been around 50,000 protests linked to the pandemic worldwide. Of which 5,000 can be described as violent! Certainly, it was not the intention of any government to incite protests and violent reactions to its policies – even though these policies were untried and unproven.

One can think of several reasons why there continues to be such severe resistance and animosity towards these restrictive measures. I believe in the notion that the (unintended) consequences emerged because of a lack of sufficient understanding of: The world's inherent complexity (parts of a system responding to changes in the environment); perverse incentives; human incompetence; self-deception; failure to account for human nature; and/or other cognitive or emotional biases.

Herbert Simon (1957) observed that the capacity of the human mind for formulating and solving complex problems is very small compared with the size of the problem whose solution is required. Instead, “Everyone finds it easy to believe what he fears and what he desires” (Jean de La Fontaine).

It is true, that over time, some objections have arisen over the components used to make vaccines, because certain vaccines contain tiny amounts of animal products. These types of ingredients have led to some vegetarian opposition. However, there are no established religions that prohibit vaccination. Indeed, the Vatican has declared COVID-19 vaccines "morally acceptable".

Still, today’s violent reactions (including personal attacks) remain somewhat surprising and bewildering. After all, mandatory vaccinations have been with us for a long time. For example, in the 17th century, Chinese physicians found that when cowpox was applied to a wound, it could lead to immunity against a more dangerous infection, namely smallpox. This technique became accepted worldwide, leading to inoculation mandates, e.g., from George Washington (in 1777). The United States has vaccination mandates in place since 1977. (*Chicago Tribune*, 10/21/2021). And Italy requires all children to be vaccinated against a wide range of pathogens.

As a small child, I received several vaccinations (e.g., polio, diphtheria, pertussis, rubella, chickenpox). These were freely administered through the school I attended at the time. As far as I know, no parent objected; everybody received the “jabs”. Much later, the Hepatitis B virus was detected where I worked. The entire building (100+ employees) was immediately ordered to get vaccinated. Nobody questioned or complained, let alone refused.

So why now? Doubts about vaccinations became more widespread with the publication of an article in *The Lancet* medical journal by a Dr. Andrew Wakefield (1998). Wakefield claimed a link between the Measles, Mumps, Rubella vaccine and autism in a group of 12(!) children. However, it was found that he had falsified the data (2004) and Wakefield's paper was revoked (2010). Moreover, it was discovered that Wakefield had been funded by lawyers engaged by parents in lawsuits against vaccine-producing companies. Consequently, the doctor was “struck off”, i.e., stripped of his license to practice medicine.

Since then, at least a dozen large-scale studies have found no link between vaccines and autism. But the seeds of doubt and resistance were planted, and certain groups of people have become deeply suspicious of science, government, and big pharma. Even Mr. Wakefield, to this day, continues to be a notable anti-vaccination activist and campaigner.

And, as always, there are consequences. What people believe, drives their behavior, including the choices they make. Worryingly, there is one dimension in particular where conspiracy theories are consequential (and usually detrimental!) for “believers”, and that is their health (Van Prooyen & Douglas, 2018). Recent research suggests that anti-vaccine conspiracy theories may have significant and harmful repercussions. Specifically, as they appear to reduce vaccination intentions by causing unjust concern about the dangers of vaccines. Besides, these highly questionable theories bring about growing feelings of powerlessness, disillusionment, and mistrust. (Jolley & Douglas, 2014).

I think it is fair to say, that most people need proof to believe, but little or no proof to disbelieve when presented with new information. When presented with something new, unexpected, and perhaps contrary to previous experiences, the default position for most people is skepticism. If I were to claim, for example, that I had recently reached the top of Mount Everest all by myself, most people would refuse to believe me without some sort of evidence. Even if I were to present the non-believers with a “selfie” of me standing on the summit, it probably would not take long for somebody to point out that the photograph is most likely a fake and thus revert to the default position of disbelief. The allegation that the selfie could be a fake does not “prove” that I did not reach Everest’s top on my own, but it has eliminated the only evidence that led people to believe my rather exaggerated claim in the first place. My only recourse would be to ask: “But can you prove the picture is fake?”

The data and information about COVID-19 that were presented to the people - and indeed the virus itself - were certainly new, unexpected, and contrary to earlier incidents. So, the first reaction for many was doubt and distrust: It’s a China problem; it’s a sinister plot by “Big Pharma”; Bill Gates is behind it; it is caused and spread by 5G networks; COVID-19 doesn’t actually exist but is a conspiracy by the globalist elite to take away our freedoms; etc., etc. Any reasonably enlightened and curious person would ask if there were adequate proof whether any of these claims are true.

Data and data analysis are vital components in assisting and supporting public policy makers, healthcare professionals and other entities to fight the Covid-19 pandemic effectively. But as every data scientist knows, there is often a lack of consistency about what and how data is being collected, measured, and compared between organizations and countries. This uncertainty and disparity of information creates fear and mistrust. But is it sufficient evidence not to believe?

So, who can you believe? The most cited source of COVID-19 pandemic data is the Coronavirus Resource Center (CRC) at Johns Hopkins University in the USA. As of this writing, there were more than 252 million confirmed COVID-19 cases and more than 5 million deaths according to the CRC – worldwide. Even if a quarter of these figures (a huge number!) were incorrect, the totals are still staggering…

I am a strong believer in freedom of choice, including the choice of medical treatment, except when there is clear evidence that our choices may be potentially harmful to ourselves and those around us. It is precisely the consequences of our actions, or inactions, that are all too often excluded from the debate. In addition, the question should be asked: Are the choices made *rational?*

**Reason & Rationality[[3]](#footnote-3)\***

Classical economic theory assumes that all individuals taking part in an activity are behaving rationally (Rational Choice Theory). For a rational person (and indeed a competent investor!) the decision-making process is based on making choices that result in the optimal level of benefit or utility.

The assumption of rational behavior is not limited to the field of economics. Sociological models of interaction between people presumes, rightly or wrongly, rational behavior. Indeed, the creation of values & norms in a society are based on the hypothesis that people within that society behave rationally. In psychology, the concept of rational behavior may be useful to better understand a person's motivation towards a specific objective.

“For a rational actor the information he uses to shape his beliefs is a variable rather than a given. Before deciding how to act he has to make a preliminary decision concerning the quantity of resources he is prepared to invest in looking for the relevant facts”. (Elster, 2009. p.27).

The problem is that most people don’t make a sufficient effort to familiarize themselves with the relevant facts before making decisions. Instead, they tend to rely on secondary, or tertiary sources of information, or simply hearsay. This, in turn, often leads to irrational behavior.

Here is an example of what, in my opinion, is irrational behavior. Congresswoman Marjory Taylor Greene has repeatedly (more than 20 times!) refused to wear a facemask on the floor of the U.S. House of Representatives. Also repeatedly, Taylor Greene was fined; the latest amount was $48,500 (to be deducted from her salary). Although Taylor Greene is obviously making a statement by refusing to obey the house rules. But given the consequences (pecuniary punishment) you may wonder whether her decision and actions make any sense? Are they rational?

She is getting very little benefit and/or utility from her decision not to wear a facemask and in addition is forced to pay a sizeable penalty. Although we may have an idea about her motivation (psychology), her behavior disregarding the values & norms (sociology) of the Congress of the United States is at the very least questionable and more likely counter productive.

Often, rational behavior is referred to as “the best thing to do”, or “what makes sense to do”, or “what one ought to do”. As such, rational behavior is put on par with ethical behavior. Getting vaccinated and (if required) wearing a facemask would seem, to many, as “the right thing to do”. MIT professor emeritus (and well-known political activist & dissident) Noam Chomsky went so far as suggesting that anti-vaxxers should be ostracized from society.

Obviously, that won’t happen, but more and more people are getting perturbed by multiple cancelations of vital surgery, because of a shortage of hospital beds due to a rise in the hospitalization of unvaccinated persons. The government of Austria has “decreed” that all unvaccinated persons should be in lockdown. It is safe to assume that former U.S. Supreme Court Justice Louis Brandeis (1856-1941) would disagree with this measure: "Experience should teach us to be most on our guard to protect liberty when the government's purposes are beneficial. The greater dangers to liberty lurk in insidious encroachment by men of zeal, well-meaning but without understanding."

**On Anger…**

There are two important factors that may seriously disturb rational behavior: passion and anger. “Nothing is easier for passion than to overcome reason, but its greatest triumph is to conquer a man’s own interest.” (La Bruyère).

Seneca’s essay *On Anger*, is constructed around the conflict between reason and passion. Often, passion seek to wrap itself in reason, i.e., passionate people can be very unreasonable. Seneca reminds us that reason wants to decide what is just; anger wants our decision to appear just. (Elster, 2009).

I would argue that much of the resistance against COVID-19 measures are based on (misguided?) passion, but also (mostly?) on anger. People feel passionate about maintaining their freedom to choose a course of action that they feel is in their own best interest. In America, this is very much enshrined in the Constitution and its various amendments. Something that Ms. Taylor Greene keeps loftily and incessantly referring to - which is her right of course.

For most of us, the way we live our life has been dramatically changed because of the COVID-19 pandemic and its repercussions. And to exacerbate things even more, we have no control over the restrictions that are imposed on us. The feeling of powerlessness and helplessness caused frustration, fear, and anger in many people. These negative sentiments found momentous resonance in social media. How do we deal with this anger?

The ancient philosophers offer some aid and comfort. Seneca agrees with Aristotle on defining anger as “the desire to repay suffering”. But whereas Aristotle praises the man who gets angry for the right reasons, Seneca advises us not to give in to anger in the first place, because once it consumes you it is very difficult to return to a normal state of mind. “Because reason goes for nothing when one's passion has been admitted to the mind and has by our own free will been given a certain authority…” he observes.

Seneca also believes that anger is not useful in and by itself. It may result in damage that could never be justified; it causes one to overkill and act unjustly. Instead, he suggests that it is best not to waste our life on this “passion”, for it is madness to do so. Accept life’s trials & tribulations, and endure them with patience and dignity. “The strongest of all warriors are these two: Time and Patience”. (Leo Tolstoy).

It should be said that several aspects of government decision-making around handling COVID-19, were influenced by a sense of panic and potential disaster. Remember, every political decision is entwined with questions of social causality on which very different positions can be justified. But clearly, some decisions made by government ministers were not based on competent leadership skills, but made from a (political) career-saving perspective. Although, admittedly, to develop computer models that reflect the complexity of our interconnected world is a real challenge. Still, scientists and public health officials had no choice but use these models to make somewhat informed decisions about how to respond to COVID-19. But, as the saying goes: “All models are wrong; some are useful”.

It has been suggested that some of the official responses to COVID-19, were unhinged and exaggerated. However, this frenzy was created mainly by the media (in their relentless quest for exposure, acceptance, and profit) and – mostly as a direct result – from the policy makers in government themselves (a self-sustaining feedback loop). On the other hand, the general population has overall remained surprisingly calm, levelheaded and…rational.

The argument that viruses will eventually and naturally disappear is simply not true. And to claim, with confidence, that a virus has become extinct is misleading. Viruses can remain present (and dormant!) in many locations. They linger in people; they can be present in frozen materials; they can lurk in wildlife (e.g., bats) and domestic animals. In other words, it is almost impossible to determine whether a virus has become fully extinct. Apparently, other than Sars, only two other viruses have ever completely disappeared: smallpox and rinderpest. And the latter only affects cattle, not humans. The war against these two viruses was won by using vaccines.

The truth is that viruses are difficult to fight and eliminate. It is, therefore, reasonable to assume and accept that viruses will remain with us for an indefinite period. For example, the most common of viruses, influenza (“the flu”) has been with us for a very long time and does seem to become “extinct” any time soon. Possibly the first influenza epidemic occurred around 6000 BC in China, and possible descriptions of influenza exist in Greek writings from the 5th century BC. The first convincing record of an influenza pandemic was chronicled in 1510; it began in East Asia (sounds familiar?) before spreading to North Africa and then Europe. This, according to an article (2010) co-written by none other than the much maligned and attacked Dr. Anthony Faucci…

Perhaps the best way of dealing rationally with the randomness and risk in our daily lives is a bit of Bayesian thinking - by paying close attention to “prior probabilities”. “Under Bayes' theorem, no theory is perfect. Rather, it is a work in progress, always subject to further refinement and testing.” (Nate Silver, statistician).

**In the end, it’s a question of trust…**

Much of our behavior, and the choices we make, are based on trust. We like to make our decisions with the expectation that someone, or something, is reliable, good, honest, effective, etc. Trust is defined as the firm belief that one can, with confidence, rely on the integrity, ability, or character of someone, or something. Good relationships (personal and professional) will only survive if there is mutual trust.

With respect to COVID-19 vaccinations a major study by Latkin et al. (2021) found that individuals - who reported greater trust in COVID-19 information from the U.S Center for Disease Control & Prevention (CDC), state health departments, mainstream news, and a university well-known for disseminating COVID-19 data (Johns Hopkins) - were also more likely to trust a COVID-19 vaccine. No surprise there!

Conversely, there were also significant levels of vaccine distrust. Namely, because of the improbable speed of vaccine approval, insufficient communication about vaccine development, testing, and approval processes. Besides, the discord and polarization of public health and medical regulatory bodies may have facilitated distrust of COVID-19 vaccines.

There was insufficient awareness and understanding, among governments and health organizations, that trust is the most essential ingredient for effective and efficient communication. What politicians and most media tend to forget is that trust is built on telling the truth, not what they think people want to hear. What individuals and organizations must realize and accept is that trust, honesty, humility, transparency, and accountability are essential for a good reputation.

Sadly, trust and respect in institutions has been declining. Data show that in America people believe those in authority less and less. For example, in 1958, according to *Pew Research Center* (2021) polls, about three-quarters of Americans trusted the federal government to do the right thing almost always, or most of the time. Since 2007, the share saying they can trust the government always, or most of the time, has remained well under 30%. A significant decline! I would expect a similar drop in levels of distrust in Europe and elsewhere.

But again, according to “Rational Choice Theory”, it is quite simple where COVID-19 is concerned. Assuming you trust the data as being more or less reliable, you would consider for example: (1) the number of people who have received a vaccine and experienced serious side-effects; (2) the number of people who received one or more vaccinations and still got COVID-19; (3) the number of unvaccinated people who got COVID-19; and (4) the evolution of the death rate related to COVID-19. Based on your own interpretation and trust of those data you make your free and rational choice. But as Bertrand Russell observed: “It has been said that man is a rational animal. All my life I have been searching for evidence which could support this.”

Freedom to believe, or disbelieve, and the freedom to choose implies that one should take responsibility for one’s actions and be prepared to live with the consequences. But also, a little altruism and solidarity would be welcome. “The idea of reason is intimately connected to that of the common good. To think only of oneself and of the present time is a source of error… To correct this error, we have to consider both other people and the future”. (La Bruyère). It would be the rational thing to do and thus avoid unintended negative consequences.

**References.**

Boonstra, W. & Koopmans, S. (2021). Opgekochte staatsschuld heeft geen relevantie meer. *Financieele Dagblad*, 16/11/2021.

Dyer, C. (2010). Lancet retracts MMR paper after GMC finds Andrew Wakefield guilty of dishonesty. *British Medical Journal*, *340*(7741), 281.

Elster, J. (2008). *Reason and rationality*. Princeton University Press.

Friedman, M., & Friedman, R. (1980). *Free to choose: A personal statement*. Houghton Mifflin Harcourt.

Enders, A. M., Uscinski, J. E., Seelig, M. I., Klofstad, C. A., Wuchty, S., Funchion, J. R., ... & Stoler, J. (2021). The relationship between social media use and beliefs in conspiracy theories and misinformation. *Political behavior*, 1-24.

Hogarth, R. M. (1987). *Judgement and choice: The psychology of decision*. 2nd. Edition. Wiley.

Jolley, D., & Douglas, K. M. (2014). The effects of anti-vaccine conspiracy theories on vaccination intentions. *PloS one*, *9*(2), e89177.

Horton, R. (2004). A statement by the editors of The Lancet. *The Lancet*, *363*(9411), 820-821.

Kelton, S. (2020). *The deficit myth: Modern Monetary Theory and how to build a better economy*. Hachette UK.

Le Bon, G. (1895). The crowd: A study of the popular mind. *London: T. Fisher Unwin*, *18*, 5.

Morens, D. M., Taubenberger, J. K., Folkers, G. K., & Fauci, A. S. (2010). Pandemic influenza's 500th anniversary. *Clinical Infectious Diseases*, *51*(12), 1442-1444.

Pew Research Center (May 17, 2021), Public Trust in Government: 1958-2021. <https://www.pewresearch.org/politics/2021/05/17/public-trust-in-government-1958-2021/>

Roozenbeek, J., Schneider, C. R., Dryhurst, S., Kerr, J., Freeman, A. L., Recchia, G., ... & Van Der Linden, S. (2020). Susceptibility to misinformation about COVID-19 around the world. *Royal Society open science*, *7*(10), 201199.

Samantray, A., & Pin, P. (2019). Credibility of climate change denial in social media. *Palgrave Communications*, *5*(1), 1-8.

Seneca, L. A. (2010). *On anger* (pp. 1-130). University of Chicago Press.

Simon, H. (1957). A behavioral model of rational choice. *Models of man, social and rational: Mathematical essays on rational human behavior in a social setting*, 241-260.

Van Prooijen, J. W., & Douglas, K. M. (2018). Belief in conspiracy theories: Basic principles of an emerging research domain. *European journal of social psychology*, *48*(7), 897-908.

1. \* Disclaimer: The views expressed here are exclusively those of the author in his private capacity. The author remains solely responsible for the content of this essay. [↑](#footnote-ref-1)
2. \*\* This is also the title of a book by economists Milton and Rose Friedman (1980) In it, they explain how our freedom has been eroded and our affluence undermined through the explosion of laws, regulations, agencies, and spending. [↑](#footnote-ref-2)
3. \* This also happens to be the title of a book by the social & political theorist Jon Elster (2009). Some of what I have written here is inspired by Elster’s work. [↑](#footnote-ref-3)