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Revolver Exclusive Study: COVID-19 Lockdowns Over 10 Times More Deadly Than Pandemic Itself - Revolver

24-31 minutes

Revolver Exclusive Study: COVID-19 Lockdowns Over 10 Times More Deadly Than Pandemic Itself



A groundbreaking new study commissioned by *Revolver News* concludes that COVID-19 lockdowns are ten times more deadly than the actual COVID-19 virus in terms of years of life lost by American citizens.

Up until this point there had been no simple, rigorous analysis that accurately and definitively conveys the true costs of the COVID-19 lockdowns. Accordingly, *Revolver News* set out to commission a study to do precisely that: to finally quantify the net damage of the lockdowns in terms of a metric known as “life-years.” Simply put, we have drawn upon existing economic studies on the health effects of unemployment to calculate an estimate of how many

years of life will have been lost due to the lockdowns in the United States, and have weighed this against an estimate of how many years of life will have been saved by the lockdowns. **The results are nothing short of staggering, and suggest that the lockdowns will end up costing Americans over 10 times as many years of life as they will save from the virus itself.**

The COVID-19 lockdown measures that Americans have had to endure for the greater part of 2020 represent one of the most dramatic, consequential, and damaging policy measures undertaken in this nation's history. **For the first time in its history, America has experienced a situation so crippling and perilous that long term financial and social stability have been legitimately threatened.**

As with everything in 2020 America, these lockdown measures have become deeply politicized. President Trump opposes further devastating lockdowns. In his recent Republican National Convention speech, President Trump raised the point that lockdowns have had very real and very devastating effects on the lives of many Americans.

President Trump: "The cost of the Biden shutdown would be measured in increased drug overdoses, depression, alcohol addiction, suicides, heart attacks, economic devastation, job loss and much more. Joe Biden's plan is not a solution to the virus, but, rather, it's a surrender to the virus." [\[Politico\]](#)

Democrat Presidential candidate Joe Biden, by contrast, has suggested that he is willing to impose further lockdowns if "scientists" tell him to do so. It is unclear which scientists Joe Biden would be listening to, as there is no consensus among scientists and experts as to whether or not lockdowns are worth the staggering costs they impose on the common man.

"I would shut it down; I would listen to the scientists," [@JoeBiden](#) told [@davidmuir](#) Friday of the country, to stop the spread of COVID-19, in his first joint interview alongside his running mate, [@KamalaHarris](#).

pic.twitter.com/P6TdzMjJ1t

— Molly Nagle (@MollyNagle3) [August 21, 2020](#)

Revolver News is very proud to present a rigorous study on such an important topic and we hope that this will be spread far and wide both within government and without to assist policymakers. This exclusive study is a collaborative guest contribution to *Revolver News*. Due to the unfortunately politicized nature of the COVID-19 lockdowns, and the associated plausibility of professional repercussions, the authors have chosen for the time being to represent themselves pseudonymously.

Abel Sumner is a Ph.D. candidate in a social sciences field with both private and public sector experience as a policymaker. He is extensively trained in statistics, econometrics, and quantitatively informed public policy.

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CHEAT SHEET: Back-of-the-Envelope Calculations Show COVID-19 “Cure” Is Worse Than Disease

- Standard approaches to evaluating epidemic policy responses, involving the *Value of a Statistical Life*, have conceptual problems and are biased towards the elderly and rich.
- Using a life-years criterion as an alternative shows that the lockdowns cost **an order of magnitude more** life-years than they saved.
- Most of the publicized cost-benefit analyses of COVID-19 lockdowns have used coarse measures like lives as units rather than life-years, which misleads politicians and the general public.

COVID-19 deaths disproportionately impact the oldest members of the population, whereas the economic impacts of lockdowns disproportionately harm the youngest of the working population, who have far greater life expectancies at the time of impact.

- Using prior research on workforce entrants and recent graduates entering into a market marred by an economic recession, empirical estimates of life-years lost can be determined. Extensive research on job displacement can be used to estimate the economic impact in life-years of starkly increased unemployment for mid-to-late career workers.
- **Combining these analyses, we found that an estimated 18.7 million life-years will be lost in the United States due to the COVID-19 lockdowns. Comparative data analysis between nations shows that the lockdowns in the United States likely had a minimal effect in saving life-years. Using two different comparison groups, we estimate that the COVID-19 lockdowns in the U.S. saved between a quarter to three quarters of a million life-years.**
- Every broad age category lost life-years from the lockdowns including those 55 and older.
- The media and state and local governments contributed to the panic by selectively presenting evidence on COVID-19 and shutdowns of dubious benefit.
- Public health researchers and health economists gave poor policy advice and made selective use of the prior research literature. They will likely be rewarded, not punished, by academia for their failure because of academia's biases.
- Public health in general is so biased and vulnerable to motivated cognition that it is not "not yet ready for policy analysis."

Back-of-the-Envelope Calculations Show COVID-19 "Cure" Is Worse Than Disease

On March 11, 2020, the World Health Organization officially

classified COVID-19 as a global pandemic. In the following weeks, the countries of the world began implementing previously unthinkable measures to prevent the spread of the virus. In the United States, some states quickly locked down nearly all physical businesses, venues, and public areas. As a short quarantine rapidly grew into an indefinite lockdown, some lawmakers and economists began asking if the lockdowns would cause more damage than the virus itself. Using empirical research, first-pass estimates can be made about the impact of the unprecedented lockdown in life-years lost. This can then be compared to the number to the estimated life-years lost to COVID-19 in the United States.

Why life-years? It is well-known that socioeconomic status (SES) appears to be linked to life expectancy and some of that association is causal, with higher SESes causing longer life expectancies through a number of channels. Most government policy analysts make decisions using the *Value of a Statistical Life (VSLs)* — which is about \$10 million. If a regulation can save 1 life and costs \$9 million, for instance, then it's worth imposing to save a life. If it costs \$11 million, then it's not worth imposing to save a life. A problem with this approach is how coarse it is. Because SES is linked to life expectancies, actions by the government that do not result in direct loss of life are liable to being simply unaccounted for in this approach. For example, why not set the VSL at \$100 million? Or \$1? If you set the VSL too low, you will fail to impose many very cheap lifesaving regulations. **Something perhaps more subtle is that if you set the VSL too high, then regulations you impose will reduce income so much by retarding economic activity that you will wind up reducing life expectancies through the SES-life expectancy channel.** There are actually more fundamental issues with the use of a single VSL for all citizens (see Sunstein's *Valuing Life* for a good overview), but many find the general equilibrium problems with it very intuitive.

Surprisingly, the COVID-19 conversation among public health analysts, bio-statisticians, economists, and policymakers *who are otherwise sensitive to the problems with VSL* has been

dominated by the standard “coarse” VSL calculation above.

We have seen no full policy analyses utilizing life-year approaches, although various studies have tried to estimate the average life-year losses per COVID-19 death. Controversy over estimating the correct value of a statistical life, problems with actually applying it in analysis as described above, and perhaps a certain odiousness associated with the rendering of human lives in dollar terms have pushed some health economists and public health analysts toward use of a life-years approach. This approach is simple, and in principle, involves no explicit conversion of human lives into money terms — although such a trade-off is implicit in any policy analysis. From the life-years’ perspective, a policymaker can compute the life-years lost and gained if they take a specific action. **For instance, a new airline safety regulation may make users of airlines so safe that they save an average of 0.1 life-years per traveler, but the higher cost of air travel may induce potential passengers to switch to less safe car travel, costing the switchers an average of 0.3 life-years. If enough people switch to car travel, then the airline safety regulation will actually reduce the total life-years lived from the perspective of the transportation system as a whole.**

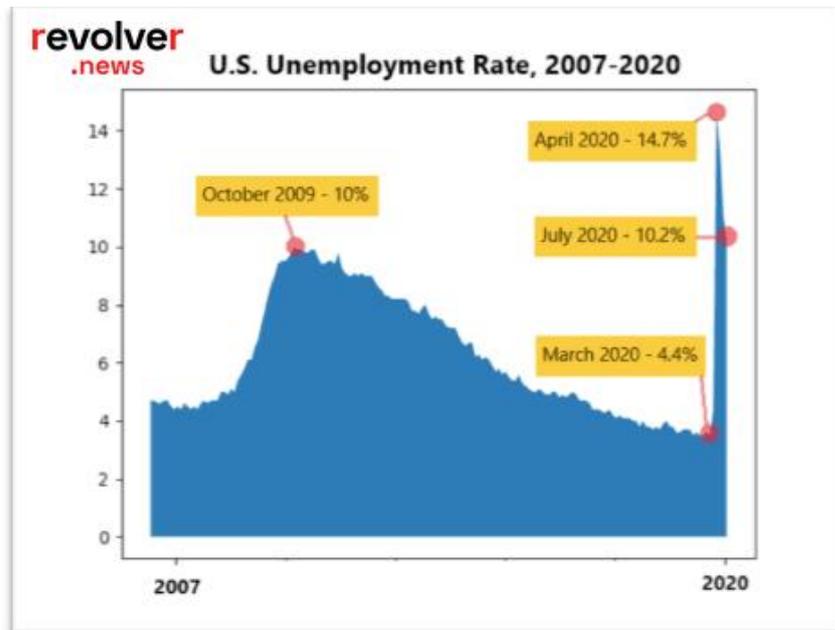
A life-year maximizer would say that the regulation should not be adopted. **An advantage of the life-year approach is that it values all people’s life-years equally in principle. The life-year of an 80 year old is of equal value to that of a 20 year old. The life-year of a poor person is worth the same as the life-year of a rich person.** The VSL method, by incorrectly estimating the amount that heterogenous consumers and workers are willing to pay for safety, may privilege the wealthy (who place a higher premium on safety) and the elderly (who will not have to face the “general equilibrium” costs of more safety regulations) over the poor and the young, who might prefer less safe but much cheaper goods and services or higher paying, but unsafe jobs over lower paying, but safe jobs. With life-years now established as our operational metric, we shall proceed with our analysis of the life-

year impacts of Covid lockdown policies.

The COVID-19 lockdowns have resulted in a massive global recession, which has spared almost no country, firm, or economic sector. Job displacement in America has occurred at a scale nearly rivaling that of the Great Depression in the 1930s, with unemployment as high as 14.7% in April of 2020.

Using a back-of-the envelope calculation, we can lower-bound the medium-term increase in unemployment, which can reasonably be estimated at around 8.5%. It is important to note that even medium-term unemployment will result in permanent job separations, as employees who are unemployed for over a year are unlikely to return to their previous position.

Figure 1



Previous research on job displacement and mortality has found that displaced workers face a significant increase in mortality rates, from which lost years of life can be estimated.^[1] Job losses and permanent job separations have been shown to correlate directly with increases in heart disease, drug overdoses, lung cancer, and liver disease, among other factors of increased mortality risk. Sullivan and Von Watcher’s paper on job displacement and mortality estimated that job separation results in about 1.5 lost life-years per individual.

The Organization for Economic Co-operation and Development

(OECD) estimates that U.S. unemployment in 2021 will range between 8.5% in a single-wave scenario and 11.5% in a double-wave scenario.^[2] Assuming that a single-wave scenario occurs, U.S. unemployment next year will increase by about 5 percentage points over pre-COVID-19 2020 levels. Based on pre-COVID-19 payrolls, total job displacements in 2021 will likely be around 8.2 million. Increases in 2020 unemployment by age group between February and July can be used to estimate the distribution of additional unemployment for each age group. **Taking the 8.2 million job displacements and multiplying them by Sullivan and Von Wachter’s lost life-year coefficients for each age group provides a total estimate of over 8,000,000 life-years lost due to job displacement.**

Beyond direct job displacements, additional research has shown that labor market recessions have significant but lagged effects on the future mortality rates of those entering the labor market.^[3] Based on Hannes Schwandt and Till von Wachter’s linear model of increased mortality due to entering the job market during a recession, a figure of 0.629 life-years are lost per individual in this classification.^[4] This number can be multiplied by 13 million workers in the 16-24 age group in 2020 and then multiplied separately by the 3.9 million college graduates of 2020.^[5] This methodology is also used by Till von Wachter in his working paper on the long-term effects of the Covid-19 crisis on workers.^[6] **By these estimates, long-term life-years lost due to the COVID-19 recession in the U.S. total around 18.7 million.**

Table 1 contains a breakdown of total life-years lost as a result of economic conditions created by the lockdowns by all estimation methods.

Table 1

Group	Estimated life-years lost
2020 Displaced Workers	8,071,000
New Workforce Entrants	8,180,000

Recent Graduates	2,453,000
Total	18,704,000

Having established the amount of life-years lost due to COVID-19 lockdown policies, it remains to consider how many lives these may have saved.

With over 170,000 confirmed COVID-19 deaths at the time of writing, the virus has proven to be a clear public health threat in America. Table 2 (below) contains CDC data for COVID-19 deaths by age group in the United States, and life expectancies of those age groups.

Multiplying the expected years of life remaining by the number of deaths in each age group provides a number for life-years lost by age group. **The total calculated life-years lost from COVID-19 in the United States adds up to 1.88 million. It is important to note that this is a high-end estimate. This calculation assumes that those dying from coronavirus have an average life expectancy and would have otherwise likely lived out the remaining years, had they not contracted the virus. Recent medical research has shown that coronavirus deaths are more likely to occur in patients with underlying health conditions. This implies that an estimate of life-years lost due to COVID-19 may be slightly inflated.**

Table 2

Age Group	US COVID-19 Deaths	Expectation of Life	Estimated Life-Years Lost
Under 1 year	15	78.61	1,179
1-4 years	10	78.61	786
5-14 years	20	74.14	1,483
15-24 years	225	64.23	14,452

25-34 years	1,074	54.66	58,705
35-44 years	2,728	45.32	123,639
45-54 years	7,298	36.11	263,558
55-64 years	17,583	27.36	480,997
65-74 years	29,869	19.40	579,539
75-84 years	37,494	12.26	459,549
85 years and over	45,842	6.58	301,848
Total	142,158		2,285,735

To better contextualize the effect of the lockdown, it is important to estimate COVID-19 deaths in the United States in a scenario where a lockdown was not enacted. While much is still unknown about the virus, data from other countries illustrates the effect of varying degrees of lockdowns.

Sweden faced controversy for not enacting lockdown measures, unlike most other nations. Data from Johns Hopkins University shows that Sweden had a COVID-19 fatality rate of 56.62 per 100,000 people.^[7] The United States, with full lockdown measures, had a COVID-19 fatality rate of 50 per 100,000 people [note all data valid up to the time of writing]. The United Kingdom provides yet another perspective, as it initially took an approach closer to Sweden and then changed course during the pandemic, resulting in a COVID-19 death rate of 70 per 100,000 people. An estimate of U.S. COVID-19 deaths had the lockdowns not been enacted can be estimated by using either Sweden’s per-capita death rate or the United Kingdom’s rate as counterfactual estimates of the “least

economically costly-possible policy.” For simplicity, we hold the distribution of age at death constant. Figure 2 and Table 3 show these estimates by age group. Table 4 shows differences between counterfactual and actual COVID-19 deaths. For simplicity, we assume that the “age structure of death” in the United States for COVID-19 would have continued to apply and apply a simple multiplier (based on the ratio of per capita deaths in the U.S. and UK/Sweden) to construct our counterfactual estimates.

Figure 2

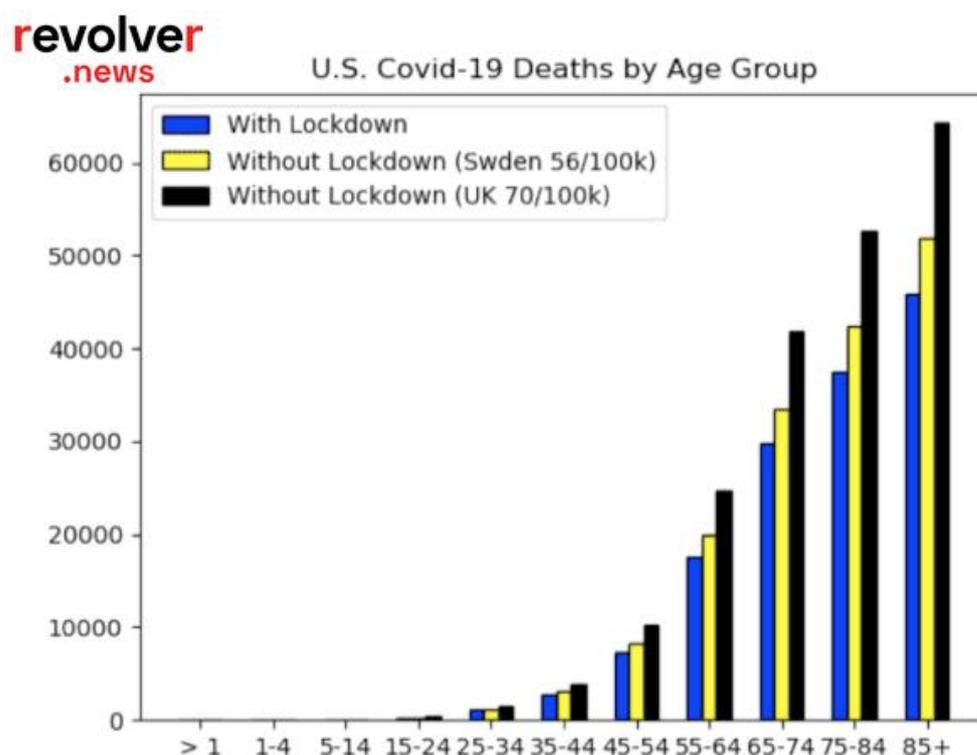


Table 3

Age Group	COVID-19 Deaths		Estimated Life-years lost	
	56/100k	70/100k	56/100k	70/100k
Under 1 year	17	21	1,336	1,653
1-4 years	11	14	865	1,102
5-14 years	23	28	1,614	1,968
15-24 years	255	315	15,393	19,042
25-34 years	1,216	1,506	61,912	76,664

35-44 years	3,089	3,825	128,574	159,194
45-54 years	8,264	10,232	265,366	328,554
55-64 years	19,910	24,651	480,005	594,314
65-74 years	33,500	41,876	551,204	689,027
75-84 years	42,458	52,567	417,063	516,360
85 years and over	51,911	64,270	207,233	256,573
Total	160,654	199,306	2,130,565	2,644,450

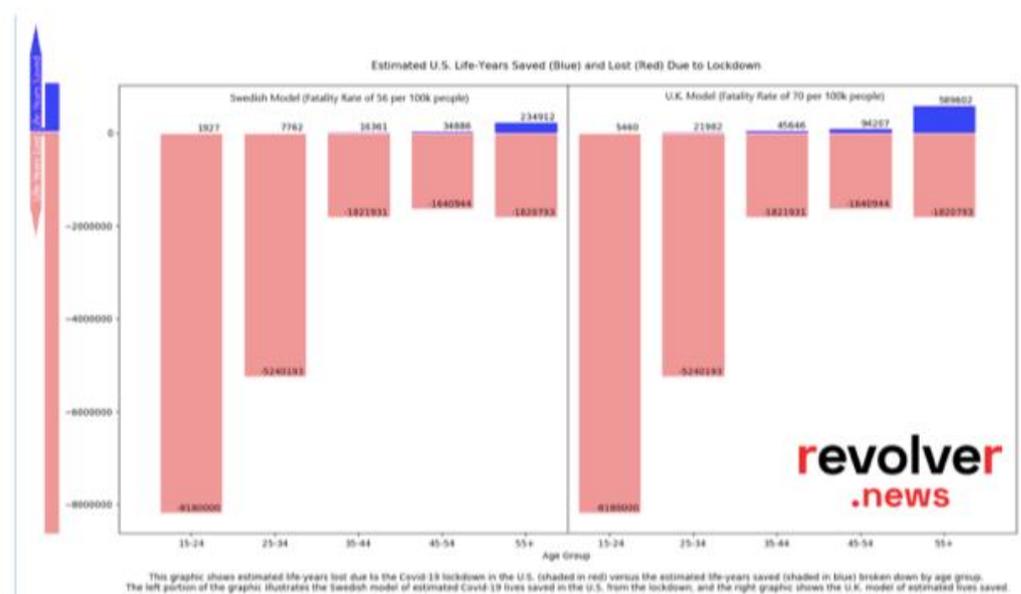
Table 4

Age Group	Excess COVID-19 Deaths		Excess Life-Years Lost	
	56/100k	70/100k	56/100k	70/100k
Under 1 year	2	6	157	474
1-4 years	1	4	865	311
5-14 years	3	8	211	564
15-24 years	30	90	1,811	5,460
25-34 years	142	432	7,230	21,982
35-44 years	361	1,097	15,026	45,646
45-54 years	966	2,934	31,019	94,207
55-64 years	2,327	7,068	56,101	170,410
65-74 years	3,631	12,007	59,744	197,567
75-84 years	4,964	15,073	48,761	148,057
85 years and over	6,069	18,428	24,228	73,568
Total	18,496	57,148	245,153	758,247

Based on the estimations in Table 4 (directly above), the U.S.

lockdowns may have saved anywhere between a quarter of a million to three quarters of a million life-years. This estimate range is staggeringly low compared to the life-years that will be lost as a result of the lockdown.

Figure 3 (below) shows the breakdown with the Swedish and U.K. models. In the Figure, the blue bars represent life-years saved from the lockdown, which are estimated by comparing the U.S.'s performance with Sweden and the U.K. The red bars represent life-years lost from the lockdown, which are estimated using the estimated reductions in life expectancy from unemployment and separations using U.S. data described above.



An intuition policymakers should develop is that that the death of someone aged 20 to 25 will “cost” a little over 50 life-years. Similarly, a permanent employment separation today will “cost” between 0.5 and 1.5 lost life-years, as a small fraction of permanent separations will yield permanently unemployed workers, who have shorter life expectancies in general (think stress-induced increases in cancer, heart attacks, homicide, and deaths of despair [alcohol, suicide, pills]). **On the other hand, a typical COVID-19 death will cost between 7 and 17 years — simply because of the age and comorbidity structure of those typically dying already tilts them towards an early death.**

A second key assumption, more debatable, is that absent the lockdowns unemployment would not have dramatically increased.

Krugman and other economists make the case that the consumption cuts driving unemployment would have happened without the stay-at-home orders based on the experience of contiguous countries e.g. Sweden and Denmark both suffered similar GDP losses. **This logic ignores the fact that huge fractions of the Nordics' collective GDP are linked through trade and so a straightforward difference-in-difference exercise ignores the negative externalities Finnish, Danish, and Norwegian lockdowns imposed on their neighbors.** Even if it was not lockdowns causing the consumption cutbacks, mainstream media did little to push back on catastrophe narratives and, [through selective coverage](#), actively misled citizens' about the actual (small) risks of COVID-19.

The fact of the matter is that once COVID-19 hit, there were going to be economic and life-year losses compared to the world where COVID-19 did not hit. However, the ultimate size of those income and life-year losses, and the geographic and age-allocation of those life-year losses, amount to a policy choice.

Some pedants may quibble that we have constructed our unemployment counterfactual using a time series analysis of U.S. data while we constructed our "no lockdown" COVID-19 life-year losses counterfactual using foreign country experience, effectively mixing two different designs.

We encourage the fair reader to consult the title of this piece. The correct counterfactual is impossible to know. Real results from a country like Sweden or the UK are better than results from an epidemiological model with extremely limited out of sample validity and fundamentally unidentifiable parameters. **The point of this quantitative thought experiment is mostly qualitative and aimed at making the single point to citizens and policymakers: *small* permanent or cohort-level increases in unemployment induced by the lockdowns *easily* wipe out the small documented benefits of lockdowns.**^[8] The actual increases in

unemployment in the United States are massive — exceeding the scale of the Great Recession. The long-run increase in unemployment cannot easily be constructed from contemporaneous cross-country data for the simple reason that those countries long-run employment evolutions haven't happened yet, but it *is* reasonable to assume that COVID-19 has run its course in say, New York or Sweden — which now has around 1-2 COVID-19 deaths per day. *Revolver.news* would be honored if someone stole these insights for Lancet, which has a quick turnaround (recall their Hydroxychloroquine debacle), the CDC's in-house journals, or the NBER working paper series on epidemics/COVID-19.

The economic devastation of the lockdowns will last for decades after the virus is brought under control, and it may lead to far worse ripple effects down the road. **For the first time in its history, America has experienced what could be almost likened to a sudden stop in an emerging nation — a situation so crippling and perilous that long term financial and social stability have been legitimately threatened.**

How did this happen? It is worth reflecting for a moment on the institutional incentives in academia that led to the pandemic pandemonium and the U.S.'s almost assured future fiscal collapse. **Our calculations imply that — from a lost life-years' perspective — the COVID-19 lockdowns in the U.S. objectively caused far more harm than good to every age category.** The life year losses are so large that it is difficult to see any kind of refinement justifying the current American policy combination. **Indeed, one would need to argue that — without elite panic — a disease only about two to four times as virulent as the flu would have induced a depression, which itself would indict the macrofinancial policymaking community.**

Why have the policy trade-offs of COVID-19 *never* been presented to politicians, the media, or the public in terms of life-years? Why did economists and the public health field as a whole, which

popularized linkages between socioeconomic status and life expectancy, suddenly fail to consider these linkages when it came to COVID-19? Why did trade economists ignore the trade spillover impacts of lockdowns when considering COVID-19 policy?

American politicians who enacted these lockdowns were driven by a combination of fear and political incentives. What drove tenured professionals to exaggerate the potential harms of the virus and minimize the costs of lockdowns? Citizens give huge amounts of both money and time to academics with the promise that knowledge can help lead to more rational policymaking. Indeed, a few economists *were* vocal in warning of the damage of potential lockdowns, but most were either silent or fomented panic. Some economists at the FED and MIT Sloan rushed research [to print that actively misled policymakers making life or death decisions](#)

Ridiculously, public health experts encouraged “Black Lives Matter” protests and riots and claimed that they actually reduced COVID-19 infections. **Indeed, in the hyper-politicized atmosphere of academia, it is difficult to imagine any “academic” retaining their position who condemned the protests and riots on common-sense public health grounds.** On the basis of this asymmetry (and similar asymmetries in the treatment of race and mortality, pollution, sexual minorities, and the role of economic analysis in public health), public health must be condemned as “not yet useful for policy analysis”.

COVID-19 shows that the promise of rational social research is a lie. Politicians and citizens would have been better off following common-sense approaches pursued in past plagues: shutting down borders within the United States and between the United States and other countries, isolating the elderly, and simply wearing a mask.

[1] http://www.econ.ucla.edu/tvwachter/papers/sullivan_vonwachter_gje.pdf

[2] <https://data.oecd.org/unemp/unemployment-rate-forecast.htm>

[3] <http://www.econ.ucla.edu/tvwachter/papers>

[/Unlucky_Midlife_Schwandt_vonWachter.pdf](#)

[4] Ibid.

[5] <https://educationdata.org/number-of-college-graduates/#:~:text=To%20illustrate>

[%2C%20the%20estimates%20for,the%202015%2D2016%20academic%20ye](#)

[6] <http://www.econ.ucla.edu/tvwachter/covid19>

[/LT_effects_STC_memo_vonWachter.pdf](#)

[7] <https://coronavirus.jhu.edu/data/mortality>

[8] Because the employment losses primarily affect downscale workers, making less than \$50,000/year, remote-working social and policy elites' do not intuit or *feel* these downscale workers' pain, unless enterprising journalists can derive some racial oppression narrative from the employment losses.

Please be aware that although we do not like to censor comments, we reserve the right to remove any that are uncivil, vulgar, or completely off-topic.