

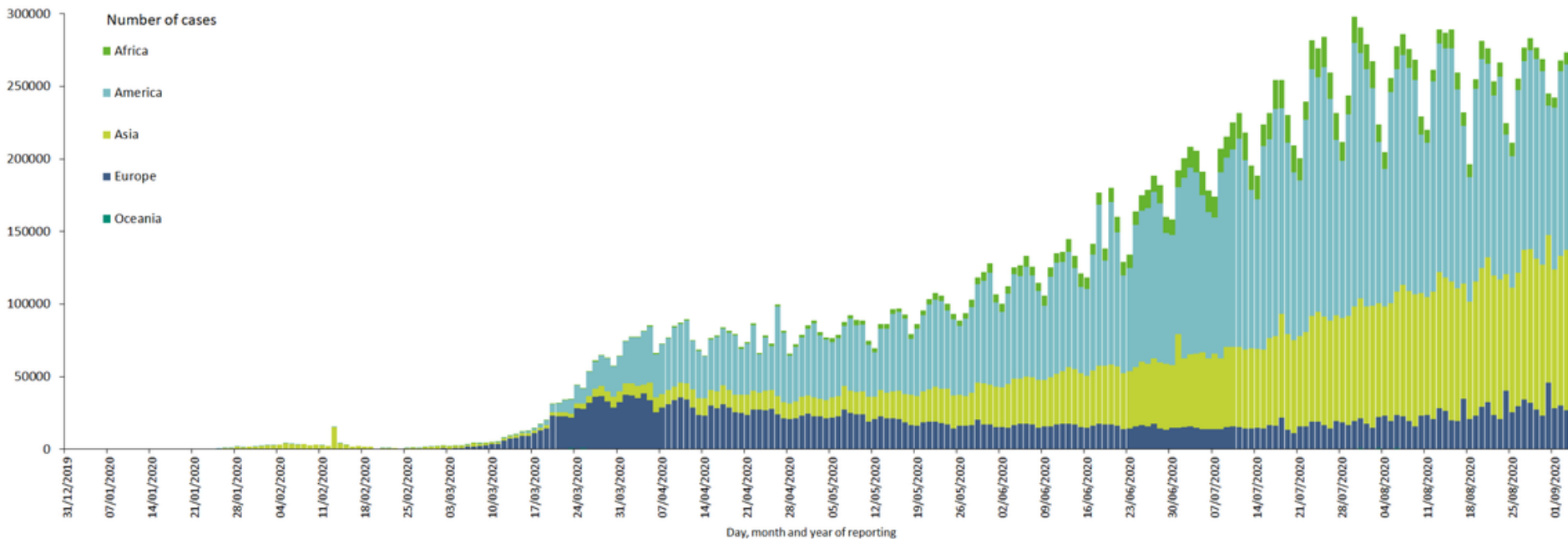
What innovations in medicine?

Covid-19 as an opportunity for
innovation to promote fair access,
safety, and efficacy in health services

What is innovation?



Epidemic curve worldwide (as of Sept 3rd)



Source -> <https://www.ecdc.europa.eu/en/geographical-distribution-2019-ncov-cases>

Amnesia/neglect of priorities known since decades

Measuring universal health coverage based on an index of effective coverage of health services in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019



GBD 2019 Universal Health Coverage Collaborators*

Summary

Background Achieving universal health coverage (UHC) involves all people receiving the health services they need, of high quality, without experiencing financial hardship. Making progress towards UHC is a policy priority for both countries and global institutions, as highlighted by the agenda of the UN Sustainable Development Goals (SDGs) and WHO's Thirteenth General Programme of Work (GPW13). Measuring effective coverage at the health-system level is important for understanding whether health services are aligned with countries' health profiles and are of sufficient quality to produce health gains for populations of all ages.

Methods Based on the Global Burden of Diseases, Injuries, and Risk Factors Study (GBD) 2019, we assessed UHC effective coverage for 204 countries and territories from 1990 to 2019. Drawing from a measurement framework developed through WHO's GPW13 consultation, we mapped 23 effective coverage indicators to a matrix representing health service types (eg, promotion, prevention, and treatment) and five population-age groups spanning from reproductive and newborn to older adults (≥ 65 years). Effective coverage indicators were based on intervention coverage or outcome-based measures such as mortality-to-incidence ratios to approximate access to quality care;



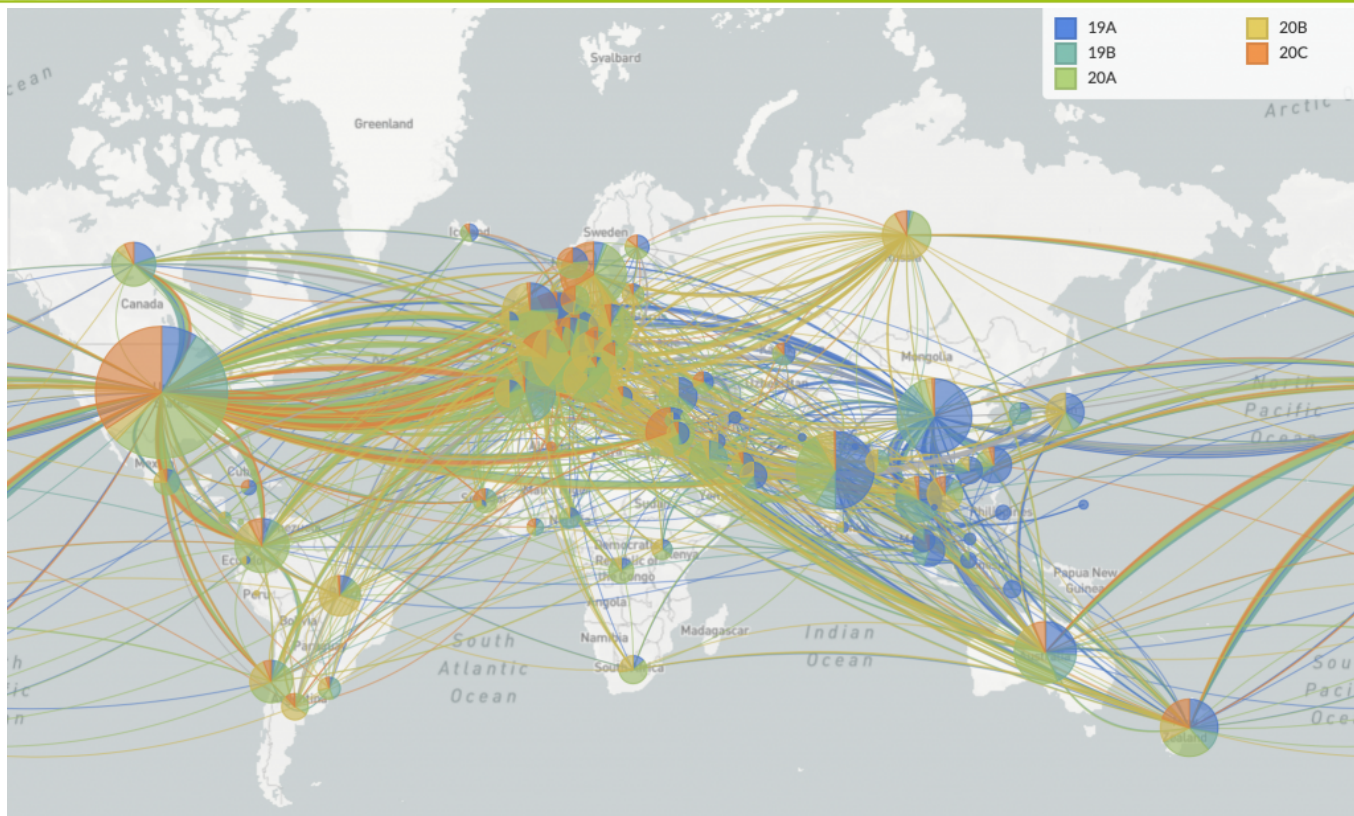
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August 27, 2020
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See Online/Comment
[https://doi.org/10.1016/S0140-6736\(20\)31795-5](https://doi.org/10.1016/S0140-6736(20)31795-5)

*Collaborators are listed at the end of the paper

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Globalization

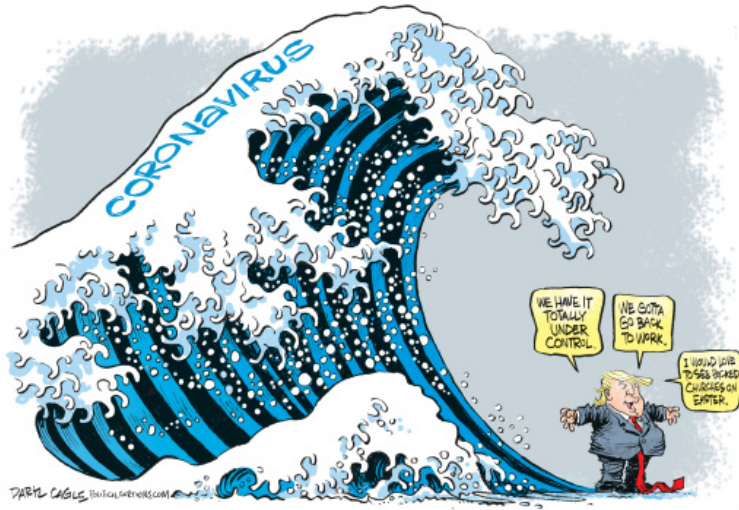


Source: <https://nextstrain.org/>

Changing the value (and meaning) of daily practices



The perception, and fear



TRA RICCHI
E POVERI
AUMENTANO
LE DISTANZE

PER EVITARE
IL CONTAGIO



Willingness to change and tradeoffs



Transparency, timeliness, and engagement

Canadian Public Administration
Administration publique du Canada



Original Article | [Free Access](#)

Beyond COVID-19: Five commentaries on expert knowledge, executive action, and accountability in governance and public administration

Arjen Boin, Kathy Brock, Jonathan Craft, John Halligan, Paul 't Hart, Jeffrey Roy, Geneviève Tellier, Lori Turnbull

First published: 01 September 2020 | <https://doi.org/10.1111/capa.12386>

WIRED

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Tang—a hacking prodigy, trans woman, and Taiwan's youngest-ever cabinet appointee—says digital tools can be effectively used to build stronger, more open, more accountable democracies. PHOTOGRAPH: JOHN YUYI

ANDREW LEONARD

BACKCHANNEL 07.23.2020 07:00 AM

How Taiwan's Unlikely Digital Minister Hacked the Pandemic

Audrey Tang says tech can build trust, tame misinformation, and strengthen democracy. Her plan might even work in the US.

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10-MINUTE CONSULTATION

Covid-19: a remote assessment in primary care

Trisha Greenhalgh,¹ Gerald Choon Huat Koh,² Josip Car^{3,4}

What you need to know

- Most patients with covid-19 can be managed remotely with advice on symptomatic management and self isolation
- Although such consultations can be done by telephone in many cases, video provides additional visual cues and therapeutic presence
- Breathlessness is a concerning symptom, though there is currently no validated tool for assessing it remotely
- Safety-netting advice is crucial because some patients deteriorate in week 2, most commonly with pneumonia

What you should cover

Telephone or video?

The telephone is a familiar and dependable technology, which is adequate for many covid-19 related conversations. Patients who just want general information about covid-19 should be directed to a telephone message or online symptom checker such as NHS 111 online (<https://111.nhs.uk/covid-19>) or other online resources. Those with mild and uncomplicated symptoms and those consulting for administrative reasons can generally be managed by telephone. In the UK, sickness certificates can be downloaded directly from NHS 111 online. However, video can provide additional visual information.

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Additional material is published online only. To view please visit the journal online
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RESEARCH ARTICLE | CORONAVIRUS

Low-cost measurement of face mask efficacy for filtering expelled droplets during speech

 Emma P. Fischer¹,  Martin C. Fischer^{2,3,*},  David Grass²,  Isaac Henrion⁴,  Warren S. Warren^{2,3...}

+ See all authors and affiliations

Science Advances 02 Sep 2020:
Vol. 6, no. 36, eabd3083
DOI: 10.1126/sciadv.abd3083

during regular speech. In proof-of-principle studies, we compared a variety of commonly available mask types and observed that some mask types approach the performance of

Pursuing technological solutions, forgetting the system

There's an old saying in his line of work: "If you've got the odor of manure, don't try and ventilate to get rid of it, get rid of the manure," he says. "That's the exact idea, right? Get rid of the source or manage that source."

"No one I know — even some of the best building modelers in the world — can accurately model a building with open windows," he says. "It's just way too dynamic of a system. We know that, in general, ventilation rate increases. And I'm not going to tell anyone not to open the windows. But really we can't tell you what it's doing to airflow in the space."

"I can't just tell you in good conscience, 'This is the filter you should use to protect against Covid-19 transmission,' because it really depends how you use that filter," Siegel says. "We much more often have an implementation problem than a lack of technology problem."

This is one of the potential pitfalls with ventilation: "Ventilation pathway matters too," Siegel **explained on Twitter**. If a fan meant to increase ventilation ends up blowing virus across people's faces, it's self-defeating.

The other consideration: These higher-quality filters need to be replaced more frequently as they "fill up" with more stuff more quickly and it becomes harder to push air through the filter. Also (this list of caveats and

And finally: Air filters have to be constantly running to work.

Lack of transparency and misinformation 1/2



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Misinformation related to the COVID-19 pandemic



From Wikipedia, the free encyclopedia

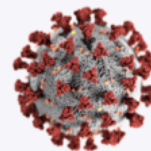


This article **may be too long to read and navigate comfortably**. Please consider [splitting](#) content into sub-articles, [condensing](#) it, or adding [subheadings](#). *(August 2020)*

The **COVID-19 pandemic** has resulted in [misinformation](#) and [conspiracy theories](#) about the scale of the pandemic and the origin, prevention, diagnosis, and treatment of [the disease](#).^{[1][2][3]} False information, including intentional [disinformation](#), has been [spread through social media](#),^{[2][4]} text messaging,^[5] and [mass media](#),^[6] including the [tabloid media](#),^[7] conservative media,^{[8][9]} and [state media](#) of countries such as China,^{[10][11]} Russia,^{[12][13]} Iran,^[14] and Turkmenistan.^{[2][15]} It has also been reportedly spread by covert operations backed by states such as Saudi Arabia, Russia and China to generate panic and sow distrust in other countries.^{[16][17][18][19]} In some countries, such as India,^[20] Bangladesh,^[21] and Ethiopia,^[22] journalists have been arrested for allegedly spreading [fake news](#) about the pandemic.^[23]

^{[24][25]} ^{[26][27]} ^[28]

Part of a series on the
COVID-19 pandemic



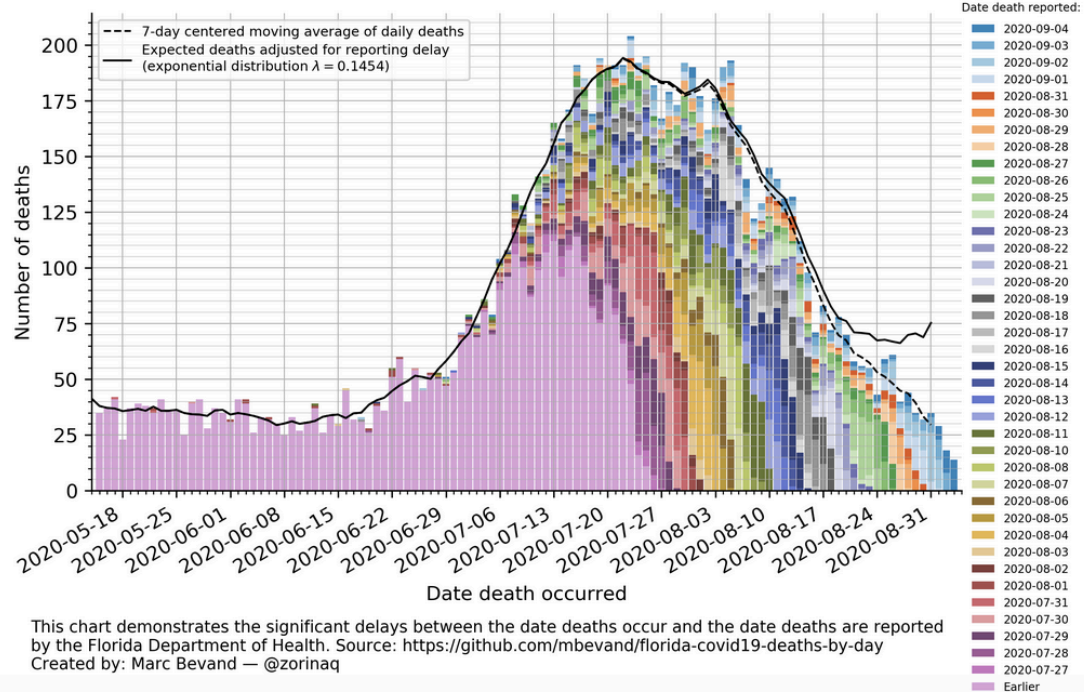
[SARS-CoV-2 \(virus\)](#) · [COVID-19 \(disease\)](#)

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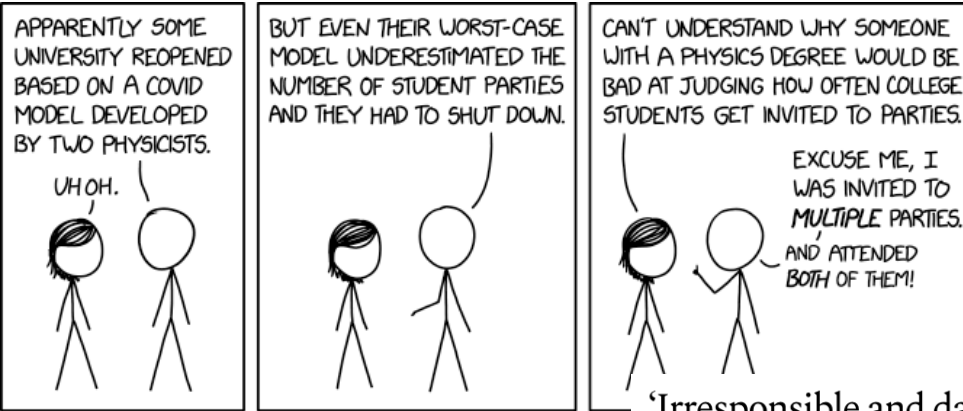
Timeliness of information

Florida COVID-19 deaths
by exact date of death



Source: <https://github.com/mbevand/florida-covid19-deaths-by-day/blob/master/README.md>

Garbage in, garbage out



Source: <https://xkcd.com/2355/>

‘Irresponsible and dangerous’ partying by some students leads University of Illinois to crack down on social activity and warn of suspensions as campus COVID-19 cases near 800

Source: <https://www.chicagotribune.com/coronavirus/ct-covid-19-university-of-illinois-crackdown-social-gatherings-20200902-tyu6hzqilzenfndlrabrbfqi-story.html>

By ELYSSA CHERNEY
CHICAGO TRIBUNE | SEP 02, 2020 AT 7:33 PM



Despite an expansive testing program and models that predicted how many COVID-19 cases would pop up on campus, the University of Illinois at Urbana-Champaign is confronting a grim reality shared by other colleges attempting to stay open: Partying among undergraduate students is leading to hundreds of more infections than anticipated, jeopardizing the in-person experience for everyone.

And neglect of the asymmetric value of circumstantial evidences in risk management

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Original Research | 1 September 2020

Probable Evidence of Fecal Aerosol Transmission of SARS-CoV-2 in a High-Rise Building FREE

Min Kang, MSc,  Jianjian Wei, PhD , Jun Yuan, MSc, Juxuan Guo, MSc, Yingtao Zhang, MSc, ... [View all authors](#) 

[Author, Article and Disclosure Information](#)

<https://doi.org/10.7326/M20-0928>

Eligible for CME Point-of-Care

JAMA Internal Medicine | [Original Investigation](#)

Community Outbreak Investigation of SARS-CoV-2 Transmission Among Bus Riders in Eastern China

Ye Shen, PhD; Changwei Li, PhD; Hongjun Dong, MD; Zhen Wang, MD; Leonardo Martinez, PhD; Zhou Sun, MD; Andreas Handel, PhD; Zhiping Chen, MD; Enfu Chen, MD; Mark H. Ebell, MD, MS; Fan Wang, MA; Bo Yi, MD; Haibin Wang, MD; Xiaoxiao Wang, MD; Aihong Wang, MD; Bingbing Chen, MD; Yanling Qi, PhD; Lirong Liang, MD, PhD; Yang Li, PhD; Feng Ling, MD; Junfang Chen, MD; Guozhang Xu, MD

JAMA Intern Med. doi:10.1001/jamainternmed.2020.5225

Published online September 1, 2020.

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Lack of transparency and misinformation 2/2

COVID-19 | Corruption risks



The **lack of accountability and oversight** mechanisms in the allocation and distribution of economic stimulus packages to **fight Covid-19, increases the risk that corruption and fraud** will weaken the impact of the measures taken and result in a shortfall of desperately needed aid reaching the people that needs it the most.

United Nations Office
on Drugs and Crime (UNODC)



Business Markets World Politics TV More



U.S. LEGAL NEWS JULY 30, 2020 / 3:19 PM / A MONTH AGO

AstraZeneca to be exempt from coronavirus vaccine liability claims in most countries

Ludwig Burger, Pushkala Aripaka

3 MIN READ



(Reuters) - AstraZeneca has been granted protection from future product liability claims related to its COVID-19 vaccine hopeful by most of the countries with which it has struck supply agreements, a senior executive told Reuters.

The costs charade...

Minimizing Economic Costs for COVID-19

Alexander F. Siegenfeld^{1,2} and Yaneer Bar-Yam²

¹*Department of Physics, Massachusetts Institute of Technology, Cambridge, MA and*

²*New England Complex Systems Institute, Cambridge, MA*

(Dated: August 6, 2020)

It is often claimed that there is a trade-off between containing COVID-19 and minimizing disruption to the economy, and that eliminating COVID-19 (by which we mean getting to no community transmission—i.e. no cases from unknown sources) is too costly to be worthwhile. Here, we examine the validity of these claims.

Social distancing laws cause only small losses of economic activity during the COVID-19 pandemic in Scandinavia

Adam Sheridan, Asger Lau Andersen, Emil Toft Hansen, and Niels Johannesen

PNAS August 25, 2020 117 (34) 20468-20473; first published August 3, 2020 <https://doi.org/10.1073/pnas.2010068117>

Edited by Jose A. Scheinkman, Columbia University, New York, NY, and approved July 16, 2020 (received for review May 19, 2020)

Growth rates of GDP in volume (based on seasonally adjusted* data)

	Percentage change compared with the previous quarter				Percentage change compared with the same quarter of the previous year			
	2019Q3	2019Q4	2020Q1	2020Q2	2019Q3	2019Q4	2020Q1	2020Q2
Denmark	0.2	0.6	-2.0	-7.4	2.4	2.1	-0.2	-8.5
Sweden	0.2	0.0	0.1	-8.6	1.7	0.5	0.4	-8.3

Source: <https://ec.europa.eu/eurostat/documents/2995521/10545332/2-14082020-AP-EN.pdf/7f30c3cf-b2c9-98ad-3451-17fed0230b57>

The costs charade... we are not alone

Economics and Climate Emergency

The appallingly bad neoclassical economics of climate change

Steve Keen  

Published online: 01 Sep 2020

 Download citation  <https://doi.org/10.1080/14747731.2020.1807856>



ABSTRACT

Formulae display:  **MathJax** 

Forecasts by economists of the economic damage from climate change have been notably sanguine, compared to warnings by scientists about damage to the biosphere. This is because economists made their own predictions of damages, using three spurious methods: assuming that about 90% of GDP will be unaffected by climate change, because it happens indoors; using the relationship between temperature and GDP today as a proxy for the impact of global warming over time; and using surveys that diluted extreme warnings from scientists with optimistic expectations from economists. Nordhaus has

Inclusion...

Celebrities: Please stay at home,
if I can stay at home so can you

Their home:



Why "governance mechanism design" is an even more important discipline than "auction design"

The lottery sped up the license approval process, but it created a new set of problems. Lottery winners were free to resell their licenses, encouraging thousands of new applicants to apply for licenses and randomly rewarding many with prizes worth many millions of dollars. Lottery winners were often simple speculators with no experience in the telephone industry and no intention of operating a telephone business. Economic resources were wasted on a grand scale, both in processing hundreds of thousands of applications and in the consequent need for real wireless operators to negotiate and buy licenses from these speculators. The lotteries of small licenses contributed to the geographic fragmentation of the cellular industry, delaying the introduction of nationwide mobile telephone services in the United States.

A better process was needed, and in 1993, Congress authorized auctions as the answer. The question of how an auction market for radio spectrum should be designed was left to the Federal Communications Commission (FCC).

Source: Paul Milgrom, Putting Auction Theory to Work, 2004.

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