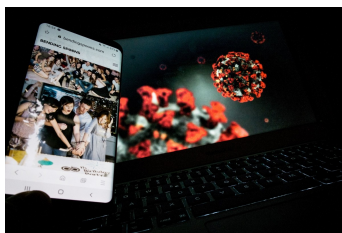


New Horizons Hub: Big data, bigger challenges

Big data could help to target relief in the coronavirus fight, but there are questions about how to use and store that information. In this pick of stories from ING authors and trusted third party suppliers, we also look at the challenges to the existing global economic order where expertise, local communities and social capital all matter too

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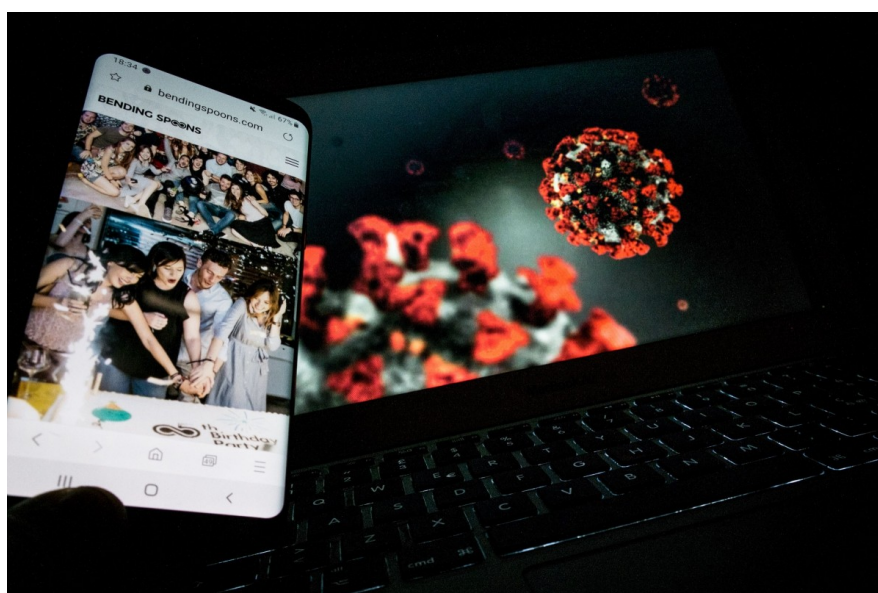


Illustration: Data on the spread of Covid-19 is being collected on smartphones

A virtual conference on Big Data

If you answered "yes" to the above, you would be in agreement with a panel of high-level economic and finance experts brought together virtually on May 7 by the Think Forward Initiative and the Centre for Economic Policy Research. The task was to investigate what selected Big Data -- the mass of information collected and stored through technology -- could do for household welfare.

The overall conclusion was that despite issues of privacy and transparency, having lots of specific information about individual household wealth and liabilities is in the interest of those households, allowing for help when needed.

"We want to understand the vulnerabilities of households," said Martin Flodén, deputy governor of Sweden's Riksbank, explaining the overall need of policymakers for Big Data.

Although the session was not called specifically because of the COVID-19 pandemic, the global

health crisis provided a highly pertinent backdrop. How much better could policymakers' responses be if they had the data to understand the diverse conditions of different households?

"To target relief (in a disaster), we need to know both who suffers an income loss and who lacks emergency funds," Harvard University Professor John Campbell, an early advocate of the economic study of household finance, said in his presentation.

Campbell cited the "crude" approach of the recent U.S. CARES Act, which, among other things, gives \$1,200 to any American adult with adjusted gross income roughly below \$150,000 whether or not they need it because of the pandemic.

Lacking specific household data, the act is scattershot, albeit that it is also supposed to generally lift consumption as well as provide relief.

Having Big Data could make relief more targeted

In a similar vein, Gianluca Violante, professor of economics at Princeton University, said that the pandemic lockdown impacts occupations in highly different ways. A secondary school teacher and a flight attendant may both be earning around \$50,000 a year, for example, but the former currently has virtual work and the latter doesn't.

Again, having Big Data could make relief more targeted.

Looking at past crises, Violante also noted that governments conducted stress tests on banks to see how they would fare in a major shock.

"What is missing from policy is a stress test on the household," he said. "What is needed is high-frequency data on household balance sheets."

Flodén agreed. He said it was hard for a central bank like his to assess risks and come up with calibrated policies without data on household wealth and liabilities.

In fact, the Riksbank was asking lawmakers to resume collecting such data, which was abandoned in 2007 when Sweden's wealth tax was abolished.

What's to be done?

The term Big Data has come to be used to describe the phenomenal gathering of information that has occurred with the advent of digital technology. Back in 2010, then-CEO of Google Eric Schmidt famously pointed out that while five exabytes (or five quintillion bytes) of information was gathered "between the dawn of civilisation through 2003", that much was being gathered every two days.

This is bound to have greatly increased, and how to use this information has become a major preoccupation of governments, policymakers, financial institutions and companies as underlined by the European Union's two-year-old General Data Protection Regulation (GDPR).

How to use this information has become a major preoccupation of governments

ING Global Head of Data, Shiler Khedri, told the session there was now nothing particularly new about the use of data and technology; what was novel was the increasing quality of the data and the subsequent way it could be used.

She said there were numerous benefits -- allowing policy to be adapted in real-time, for example, or allowing for clearer definitions and predictions of risk. But there were also issues, not the least being ethical ones.

"We need to be mindful and very careful about how we bring data together," Khedri said.

The panel acknowledged the transparency and privacy issues inherent in Big Data but was primarily concerned for this session with the positive ways it could be used vis à vis helping and protecting households.

For Princeton's Violante, it was the ability to monitor financial fragility, target policy interventions, and evaluate the effectiveness of those interventions. For Harvard's Campbell, it was to respond to disasters, effectively target consumption in times of economic hardship, and to ensure financial regulation was appropriate for diverse household conditions.

"We should avoid one-size-fits-all regulation," Campbell said, emphasising the heterogeneity of the world's households.

The panel was chaired by Paulo Sodini, director of the Swedish House of Finance National Data Center, and Karolina Ekholm, a former Riksbank deputy governor and Swedish finance ministry official. It was introduced by Mark Cliffe, global head of ING's New Horizons Hub.

Bruegel: How Covid-19 is laying bare inequality

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A child receives a food parcel in India

Introduction

The Covid-19 crisis shows how the more vulnerable socio-economic groups suffer from a greater risk of financial exposure, and also from greater health risks, and worse housing conditions during the lockdown period, potentially exacerbating inequalities.

As governments in Europe start to address the emergency with fiscal measures, understanding how the different socio-economic inequalities intertwine will be of fundamental relevance for policymakers.

A key quote from the article

Depending on their income and whether or not their economic sector is locked-down, workers are exposed to different risks. Some in lower-income percentiles continue to work and receive their salaries. Examples include healthcare workers and workers in critical supply chains (food, pharmaceuticals, deliveries, essential industries and services). They are exempt from lockdowns

but expose themselves to risk of infection by not working from home.

But many other lower-income workers cannot work from home but are also not allowed to go to work. US statistics data shows how the ability to work from home is strongly related to which income percentile an individual is in.

Table 1: Percent of workers able to work from home by income percentile

Table 1: Percent of workers able to work from home by income percentile

Income percentile	Home-workers or potential home-workers (%)
Bottom 25	9.2%
25-50	20.1%
50-75	37.3%
Top 25	61.5%

Source: US Labour Statistics.

Source: US Labour Statistics

The full original article first appeared on Bruegel [here](#).

Building a Post-Pandemic World Will Not Be Easy

Both the COVID-19 crisis and the climate crisis highlight the limits of humanity's power over nature. But while both remind us that the Anthropocene...



Clear blue skies above empty London

Risks posed by climate change and pandemics are not that dissimilar

Die-hard green militants regard it as obvious: the COVID-19 crisis only strengthens the urgent need for climate action. But die-hard industrialists are equally convinced: there should be no higher priority than to repair a ravaged economy, postponing stricter environmental regulations if necessary. The battle has started. Its outcome will define the post-pandemic world.

Both the public health crisis and the climate crisis highlight the limits of humanity's power over nature. Both remind us that the Anthropocene epoch may end badly. And both teach us that benign everyday behaviour can result in catastrophic outcomes.

Defying linear reasoning, the pandemic and climate change both force us to adapt to situations where a little more leeway results in a lot more damage. As the climate economist Gernot Wagner has noted, the pandemic in a sense replicates climate change at warp speed. This may explain why public opinion overwhelmingly considers global warming as serious a threat as COVID-19 and wants governments to emphasize climate action in the recovery.

The pandemic has also provided a crash course on the collective implications of individual behaviour. Each of us has been compelled to recognize that our responsibilities vis-à-vis the community are more profound and cannot be fulfilled merely by paying taxes and making a few donations. This “pay and forget” attitude is clearly inappropriate in a public-health crisis – and in a climate crisis.

Beyond States and markets: communities count too

Moreover, the last few weeks have highlighted the narrowness of the state-versus-markets perspective on the challenge we face. As the economists Samuel Bowles and Wendy Carlin have argued, the solution will not come from some combination of government decrees and market incentives. Communities whose members behave responsibly and gratefully toward one another are an indispensable part of the response. Even though the fundamental contribution of social capital and norms is not recorded in national accounts, we acknowledge it every time we applaud health-care and other essential workers. And, again, this applies to climate change as well.

But while we must recognize these strong commonalities, we must also not overlook the obstacles to a transformation of our economic model created by the COVID-19 crisis. If anything, impediments to climate action will be even more formidable in the post-pandemic era than they were a few weeks ago.

For starters, climate action is inherently global, whereas the fight against a pandemic has a much more local character. To burn a ton of carbon has exactly the same effect on Earth’s temperature wherever it is burned – which is why fighting climate change requires global agreements.

The same does not apply to the pandemic. Prudent individual behaviour benefits relatives more than neighbours, neighbours more than residents of the same city, and compatriots more than foreigners.

Climate protection and public-health protection thus tap fundamentally different impulses. One leads us to regard ourselves as responsible citizens of the world, the other takes us back to our local roots and the (often imaginary) shelter provided by national borders.

For example, some 84% of French citizens nowadays support keeping the country’s borders closed to foreigners. It is by no means certain that after the COVID-19 trauma, people will display more readiness to change their behaviour for the benefit of mankind and future generations. This is a first source of tension.

The second, acute tension will emerge on the economic front. As the lockdown ends, policymakers will increasingly emphasize reviving economic growth and employment. The overriding priority of all governments will understandably be to minimize the socioeconomic scars left by the crisis by ensuring that every business that can restart will restart.

To the great dismay of those who would wish to rebuild rather than repair, this is an indisputable priority. In an emergency, credit guarantees and income support for furloughed workers can be provided only across the board, rather than conditioned on commitments regarding future behaviour. As planes are stranded and passengers have vanished, no government is willing to condition financial support for airlines on fundamental changes by them. Today is for firefighters, not architects.

Green capital does not come for free

The right moment to influence the course of economic development will come later when investment resumes and the horizon lengthens. Companies will presumably be willing to listen to the voice of those who helped them survive.

But a third tension will arise when people realize how much poorer the crisis has made them. Many firms will have failed and many workers will have lost their jobs. More resources will need to be devoted to strengthening health systems and industries, at the expense of current consumption. And public debt – also known as future taxes (or, alternatively, future inflation) – will have increased by 20-30 percentage points of GDP.

Poorer citizens will likely be more reluctant to bear the cost of replacing obsolete “brown” capital embedded in heating systems, cars, and machines with greener but costly capital, because this would destroy even more of the old jobs and leave even less income available for short-term consumption. If anything, the division between those who care about the end of the world and those who care about the end of the month will widen.

The green advocates are right: Once the immediate crisis repair is complete, the opportunity to build on heightened collective awareness to transform our economies and change our way of life should not be missed. But they should neither hide the magnitude of the obstacles on the way nor pretend that some new school of voodoo economics will circumvent trade-offs. It is only by recognizing the significance of the challenge that we will bolster our chances to succeed.

The original article first appeared on Project Syndicate [here](#).

Stand back and deliver!

Covid-19 has made social distancing the norm in many countries. Standing back to receive deliveries is encouraged. Most follow the rules and fines are...



Social distancing at work in Thailand

Laws designed to limit the spread of disease have been passed in many countries and fines can be issued to those who do not comply. Yet, despite the severe disruption to people's lives and normally accepted ideas of freedom, most comply with new laws.

Accurate data is difficult to obtain but it appears fines for breaking these new rules are uncommon. For example, a report from Italy on 20 March noted 53,000 had been fined over the previous eight days for breaking the new laws. Given that Italy has a population of 60m, that represents only 0.1% of the population. Similarly, it is reported that 9,176 fines were issued in Wales and England over the month to 27 April. Wales and England have a combined population of 59m, so fines were issued to only 0.02% of the population. Taken at face value this implies compliance of more than 99%. This is undoubtedly too high as not all rule-breakers are fined and, if reports of complaints to police of non-compliance by others are accurate, many may be bending the rules. Still, explanations for this high level of compliance can be thought of in two ways. First as a balance between the costs and benefits of disobedience. Second, from societal pressure.

Crime and punishment

When rushed for time and needing to be at a meeting, economist, Gary Becker debated with himself whether he should [park illegally](#) to be closer to that meeting. He faced two risks – being late or being fined for illegal parking. Becker did some quick calculations and chose to park illegally and be on time to meet his colleagues.

This hard-headed approach led Becker to write his 1968 essay “Crime and Punishment: An Economic Approach”. Becker, who was awarded the economics Nobel prize in 1992 for extending economic analysis to a wide range of human behaviour, renewed discussion on utilitarian approaches crime discussed by the 18th-century philosopher Jeremy Bentham.

In our Covid-19 affected world, some undoubtedly calculate the possibility of being fined compared with breaking isolation rules. Given the size of the fines in general and the probability of being caught, it feels unlikely that the utilitarian explanation alone explains the high level of compliance. Other factors could play a role.

Society and shame

Compliance can occur because people are generally honest. Psychological, moral and societal factors may explain this. Citing research from 2019, [this article](#) from the University of Sydney argues that not only does our own moral compass contribute to honest behaviour, but how others view us is also important.

However, both our moral compass and how society views us can be swayed in certain circumstances. These include the context in which actions occur, tolerance by ourselves and others of a fudge factor between acceptable and unacceptable behaviour, and how directly related an action is connected to money. Behavioural economist Dan Ariely outlines these and other ideas in amusing fashion in [this 2011 video](#).

This may be why fines are sometimes made public. Bundling the monetary cost of the fine with the prospect of disapproval by society can prove effective. [This 2009 study](#) argued that fines were more effective at changing behaviour when made public.

Relying on strangers

Today's pandemic has laid bare complex relationships within society. This is readily understood when it comes to avoiding being infected by Covid-19. If unknown others behave poorly, we may be individually affected. An implicit understanding of this may be why compliance with new laws is high.

The pandemic provides a metaphor for the way economies operate and our lives in general. It is not sufficient that others merely do their jobs. We must also trust that others will behave responsibly in doing their jobs. This stretches from being confident that the [baby milk formula you buy](#) is safe to the amount of financial risk people are willing to take.

[A 2015 study](#) suggests less trusting individuals are less likely to buy stock. This may be costly. [A 2018 paper](#) found those with higher levels of trust have a lower likelihood of defaulting on household debt and higher net worth. However, you can both trust too little and too much. [This 2014 study](#) found that about 10% of the population has trust beliefs so poorly calibrated that they

lose more than 13% of their income, which is similar to income lost by foregoing a college education. Not trusting enough means missing profitable opportunities. Trusting too much risks being cheated.

Human society is unique in this reliance on trust. No other species co-operate as humans do. This is the key argument behind Paul Seabright's 2010 book "[The Company of Strangers](#)".

Because society requires trust to work effectively and individuals require trust to be prosperous, fines should be thought of as a last resort. They are ineffective if trust does not exist.

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