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The political economy of the next pandemic

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Abstract

In this working paper, I investigate what I see as the major themes for the debate that we need to have to be prepared for the next pandemic. These themes are developed against the background of a more thorough investigation in my monograph *Pandemic Economics* (van Bergeijk 2021) about the history of pandemic research. An addendum to the book is necessary, as the pandemic and recovery constantly unfold. Humanity cannot rely on modern medicine to beat the next ‘disease X’ and the world cannot afford the extortionate health and economic policy interventions during the COVID-19 pandemic again. Therefore, a major global investment project is necessary to reduce the vulnerability to and impact of pandemics. It is important to recognize that inequalities to a large extent determine pandemic vulnerability and hence, adjustment of SDGs is necessary. From the COVID-19 pandemic we learned that the international economic organizations suffered from disaster myopia and that the self-image of the advanced economies is distorted. It also has become apparent that ‘beggar-thy-neighbour’ health care was generally practiced while global health care should have been the norm. A discussion on the related issues of rationing, triage and scarcity of health care during a pandemic is urgently needed.

Keywords

COVID-19, Corona, Economics, Health care, Political economy, Pandemic, Preparation, Pandemic preparedness, Management, Inequality.

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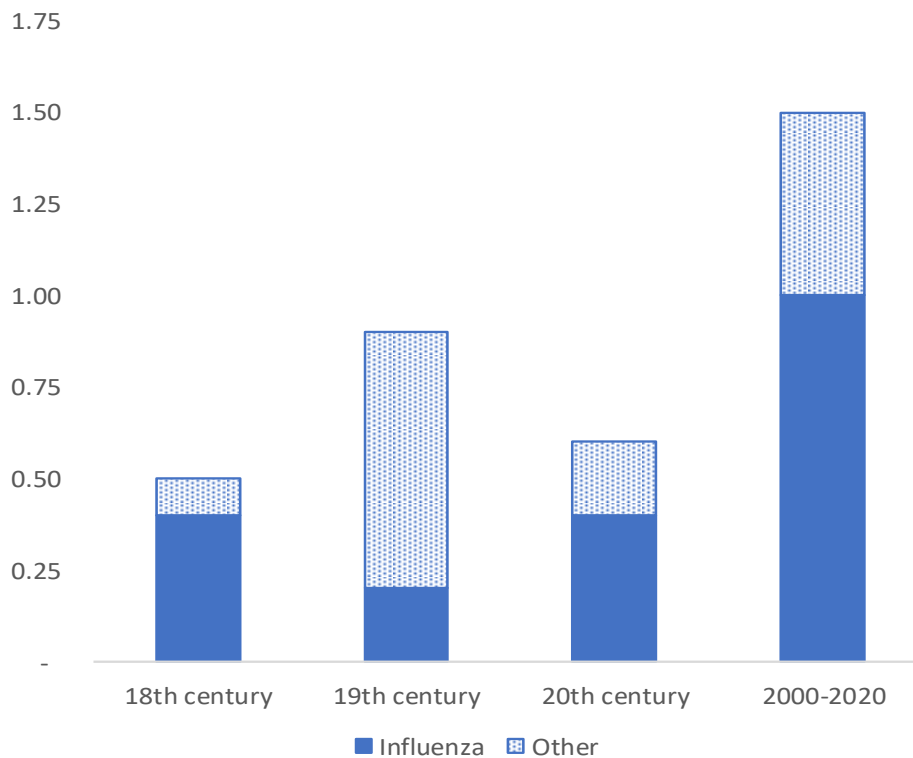
The political economy of the next pandemic

1 Introduction

People all around the world are getting hope again. Quite a few vaccines against the coronavirus have been developed at warp speed in western market economies, Russia and China. This is an unprecedented achievement, and the anticipation of an end to the current pandemic is the light at the end of the tunnel that we hoped for. This is, however, no reason for complacency but rather a moment in time to think about the future after COVID-19. A period that is paradoxically both post-pandemic and pre-pandemic.

COVID-19 is certainly not the last pandemic that humanity will experience: the frequency of pandemics has increased since 1700 despite enormous improvements in housing, hygiene and living standards. The reason is that health care improvements and social development were outpaced by higher pandemic risk. This risk is associated with global travel, human-wildlife interaction, intensification of global food production, and densification of population (Daszak, 2012). The emergence of contagious virus should have come as no surprise, yet 'preparedness' to deal with the emergency was below standard. (Sathyamala, 2021) The next pandemic, likewise is a certainty; only its timing is uncertain.

FIGURE 1
Number of pandemics per decade



The next pandemic is coming, and the frequency of pandemics is increasing (Figure 1), but clear limits exist for the number of well-trained medical staff and space for quality care during pandemics. Since the costs of lockdowns and the toll of prioritization of a new disease over existing diseases are very high, future ‘non-pharmaceutical interventions’ need to be designed more intelligently, helping societies to restructure and support the transition from a basically ignorant and domestically-oriented into a pandemic-aware society.

In this working paper, I investigate what I see as the major themes for the debate that we need to have. These are themes that are developing against the background of a more thorough investigation in my book *Pandemic Economics* (van Bergeijk 2021) about the history of pandemic research, as the pandemic and recovery unfold. Section 2 argues that we cannot rely on modern medicine to beat the next ‘disease X’, and that a major global investment project is necessary to reduce vulnerability to and impact of pandemics. Section 3 delves into pandemic paradoxes that to a large extent explain why the Black Swan of the health and economic policy interventions during the COVID-19 pandemic occurred. Section 4 focuses on inequalities that to a large extent, determine pandemic vulnerability and discusses the relationship with SDGs and development cooperation. Section 5 reveals three inconvenient truths: the international economic organizations suffered from disaster myopia; the self-image of the advanced economies is distorted; during the pandemic beggar-thy-neighbor health care was generally partitioned, while global health care should have been the norm. By way of conclusion, Section 6 addresses the related issues of rationing, triage, and scarcity of health care during a pandemic. A politically painful and morally difficult topic to confront, but a challenge that we cannot avoid.

2 Modern medicine is not the answer to the next pandemic

We cannot rely on a medical cure for the next pandemic despite humanity's success in finding a solution for COVID-19. For one thing, many of the medical interventions, new drugs and vaccines are not nearly as effective as commonly thought. The pandemic has exposed that we can be empty handed if we are hit by a new 'disease X'. Comparing modern pandemic preparedness with the situation during the Spanish Flu in the 1910s, David Morens and Anthony Fauci (2007, p. 1025) concluded a decade ago that 'Almost all "then-versus-now" comparisons are encouraging, in theory'. Their 'in theory' is not an innocent addition: antiviral and antibiotic resistance, medical capacity constraints and the vulnerability of the just-in-time character of the medical supply chain are by now familiar problems. Also, we may not be able to find a vaccine against the next virus attack (Lassa fever is an example of such a disease with pandemic potential; see Salami et al., 2020). More importantly, we know that the key medical inputs (i.e., well-trained staff and access to high quality facilities) cannot be stock piled. During a pandemic these inputs will always be in short supply. A pandemic is, therefore, all about scarcity. And economics, the science of scarcity, is therefore essential for any viable strategy to beat the next pandemic.

Pandemic management

Because of the obvious limits to medical solutions, we need to prepare and find ways to structurally mitigate the impact of a virus on the move. We need to work on 'pandemic management' just as we have developed disaster management. Our main efforts need to develop more intelligent 'non-pharmaceutical interventions' – more intelligent than the short-term measures that we have used in 2020 and 2021. This is the first time in history that we have used lockdowns worldwide and in almost all countries at the same time. The costs of the short-term measures are becoming increasingly aggravated by unacceptable rationing of non-COVID care and a disastrous impact on the economy. The limits to lockdowns that require perseverance and discipline are also becoming increasingly clear. Lockdowns have worked during the first wave, but to maintain such a regime for more than a few months is doubtful if at all possible. We, thus, need to start thinking about the long run.

The five P's: prepare, prepare, prepare, prepare, prepare

Preparation should take place at five relevant levels: individual (households and firms), local, national, international, and global pandemic preparedness. It is important to realize that the strength of the defense against the next pandemic will be determined by the weakest link, and it cannot be stressed enough that all five levels of defense need to be active. Basic hygiene, masks, social distancing, and awareness provide the final line of defense at the individual level, but pandemics also require rethinking of city designs and the proper roles of nations, regional and global cooperation. Global pandemic management will not be

effective if individuals are not prepared. However, individuals and firms can prepare for a pandemic but without human collective action, viruses will always be able to win the battle.

FIGURE 2
Shields of pandemic preparedness



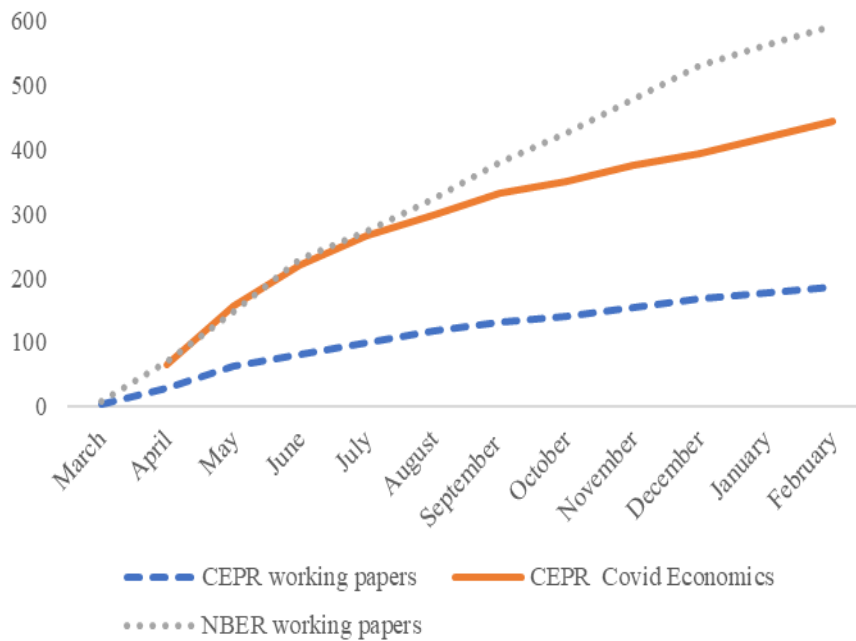
A major global investment project

Pandemic preparedness must cover prevention, detention, delay and mitigation. A major global investment project is necessary to enhance humanity's resilience, and economic analysis of the societal costs and benefits is key to its success. *Pandemic economics* shows how economic analysis can play its role, and how economics can provide new insights for epidemiology. Economics alone cannot solve the pandemic problem, of course. We really need to marry medicine and economics. That requires, perhaps, the biggest investment: a mental investment to understand in a truly multidisciplinary way that pandemics are essentially about behavior and choices that need to be made on a rational basis despite the emotions related to the outbreak of a new disease.

3 Pandemic paradoxes

Economics as a science responded quickly to COVID-19, much quicker and more comprehensively than during the Spanish Flu pandemic (Boianovsky and Erreygers. 2021). Baldwin and Weber di Mauro (2020a,b) organized the profession’s rapid response and an impressive follow up with the launch of *Covid Economics, Vetted and Real-Time Papers* that provides real time analyses of the pandemic impact and ensuing policies. Consequently, as illustrated in Figure 3, the ‘now’ is being covered well by economics.

FIGURE 3
Development of economic work in progress

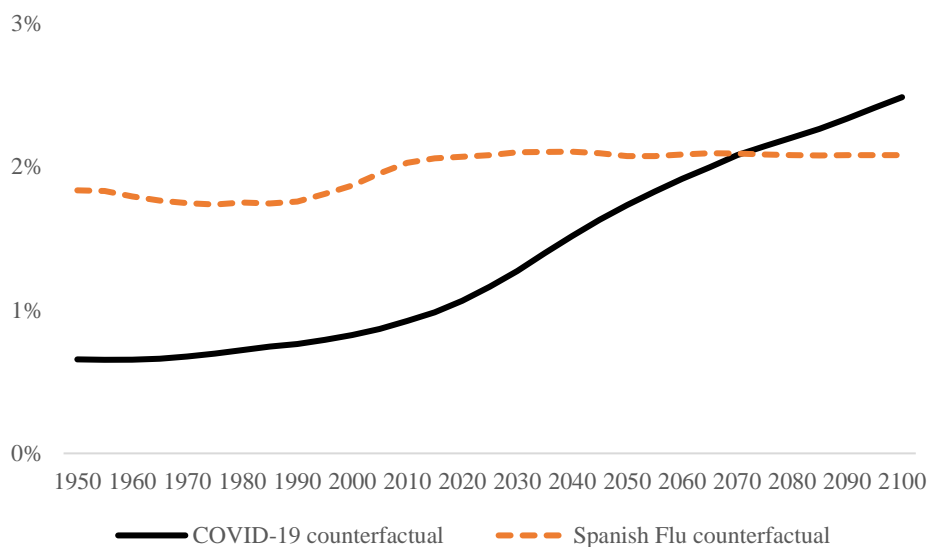


Similarly, the past has a clear imprint of the economists’ work. Before the outbreaks, economists already stressed the risks and dismal consequences of ‘disease X’: ‘Few doubt that major epidemics and pandemics will strike again, and few would argue that the world is adequately prepared’ (Fan, Jamison and Summers 2018, p. 129). Indeed, a substantial pre-COVID-19 literature exists providing detailed analyses and estimates of potential tolls of pandemics (van Bergeijk 2021, Chapter 2). Thus, the ‘past’ was also covered well by many in the field, although institutional preparation was low (Sands, El Turabi, Saynisch, and Dzau, 2016 and International Working Group on Financing Preparedness, 2017).

Paradoxes of achievement

It is now time to start looking to the future. Not the immediate future – economics and epidemiology are already working hard on that. We need, however, to look at society’s preparedness for the *next* pandemic. The reason is the ‘paradox of medical and social achievement’: our impressive worldwide life expectancy increase has amplified our pandemic vulnerability. Figure 4 illustrates this paradox providing a counterfactual for the Spanish Flu and COVID-19 based on mortality rates by age cohort (historic data and forecasts for the world population). In the 1950s, COVID-19 would have hit a younger world population, and like the 1957–1958 Asian flu pandemic, it would have been serious, but from a longer time perspective, relatively mild as the comparison with the Spanish Flu counterfactual shows. By 2070, however, the world’s population – thanks to medical and economic progress – will have aged so much that a coronavirus could ‘beat’ the Spanish Flu.

FIGURE 4
Counterfactual: Hypothetical death rate of Spanish Flu and COVID-19



Source: van Bergeijk (2021), Figure 2.9, p. 31.

Moreover, there is a second paradox: medical performance was so good that the world did not prepare for a medical breakdown, especially in the advanced economies. Here, both the general public and policy makers had difficulty imagining a life-threatening situation that modern medicine could not cure. These paradoxes probably drove the policy response to the pandemic, that ultimately was the true Black Swan of the pandemic: for the first time in history, closing entire economies was used as a medical tool applied concurrently *worldwide*.

Pandonomics

Baldwin and Weber di Mauro already foresaw that COVID-19 is as contagious economically as it is medically. This natural policy experiment (the outburst of what I call ‘pandonomics’) shocks the world with a multifaceted cluster of health policies as well as fiscal and monetary policies.

Textbox 1 What is pandonomics?

Pandonomics /pan'donɒmɪks/

Noun, singular: pandonomics; plural: pandonomics

A multifaceted cluster of inordinate health care and economic policies in reaction to COVID-19.

Origin

The ‘*onomics*’-part reflects the impact of health policies on the economy, as well as the response of economic policymakers to the health policy shock by means of fiscal and monetary policies.

The ‘*pand*’-part reflects that Pandonomics spreads quicker than COVID-19 to the capitals of developed and emerging economies.

Example: Pandonomics enhanced the destruction of the COVID-19 pandemic.

The heterogeneity of the impact of the pandemic on life and livelihoods as well as the diversity of strategies and policies provide a unique data rich environment that will allow detailed answers on what works and what is better to avoid.

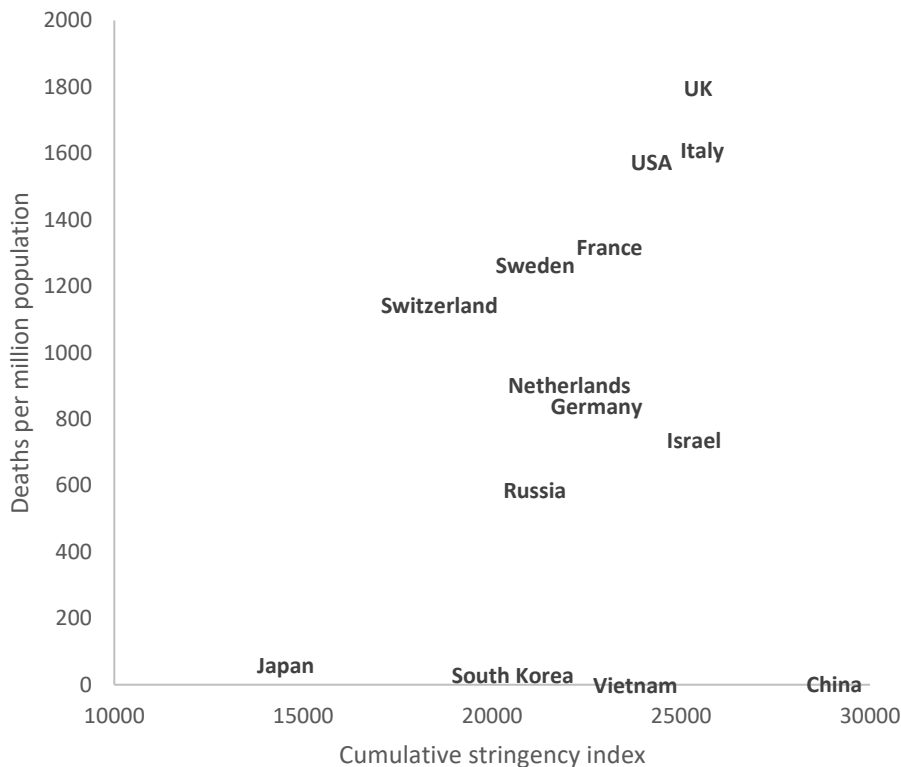
We should, however, take time for this because our statistical apparatus, especially the National Accounts, requires processing time. Indeed, revisions of the current ‘flash’ estimates of economic activity will bring better coverage and understanding of the sectors and activities that expanded during lockdowns, including household production (van Bergeijk 2021, Chapter 4). Moreover, in many areas we are learning that we should not rely too much on ‘nowcasting’ based on data science techniques during periods of significant and fast changes. The data-generating processes constantly change, and machine learning does not pick up these changes on the basis of its training data (Meijerink, Hendriks, van Bergeijk, 2020). On top of this standard procedures for seasonal adjustment break down during a pandemic (Abeln and Jacobs 2021).

What we do know from first principles is that the world cannot afford pandonomics again. Pandonomics is a ruin problem: a high impact event with a high probability of surviving a single event but a low probability of surviving repeated exposures (Norman, Bar-Yam, Taleb 2020). We are also learning that lockdowns require discipline and endurance, both of which are in short supply in modern Western democracies. We discover the opportunity costs of the prioritization of COVID-19: the health toll for the non-COVID sector, the mental and societal costs that ultimately will have an impact on the population’s health, and the purely economic costs of a debt increase *cum* quantitative easing. Estimating the exact costs will take time because some impacts are drawn out, but the implication is already clear: we must develop alternatives to lockdowns. This form of pandemic preparation is an area where economic science and policy can make a significant contribution.

Sub-fields of economics relevant for pandemic preparation

Four sub-fields of economics are relevant for pandemic preparation: political economy, societal cost-benefit analysis, development economics and international economics. From a political economy perspective, the organization of society is key (Wyplosz, 2020; see also Farzanegan, 2021). Figure 5 provides an illustration for a selection of countries and makes four points. First, China still stands out as the country with the most stringent measures and a low death rate. Second, the worst performing G7 countries over time have taken almost as much liberty away from their population as China did, but they have a much higher death rate. Third, the outcomes on the European continent vary widely suggesting that culture, institutions and policies matter. Fourth, a comparison between Asia and Europe likewise underscores the importance of the organization of society. A deeper investigation of different societal settings – from a Darwinian Society via a Big Brother Society to an Autarkic Autocracy – shows that bad institutions and behavior can make us extra vulnerable, but also it illustrates that pandemic-resistant societal organization can delay the spread of a disease (van Bergeijk 2021, Chapter 6). Unfortunately, the idea that we can stop or prevent pandemics is an illusion.

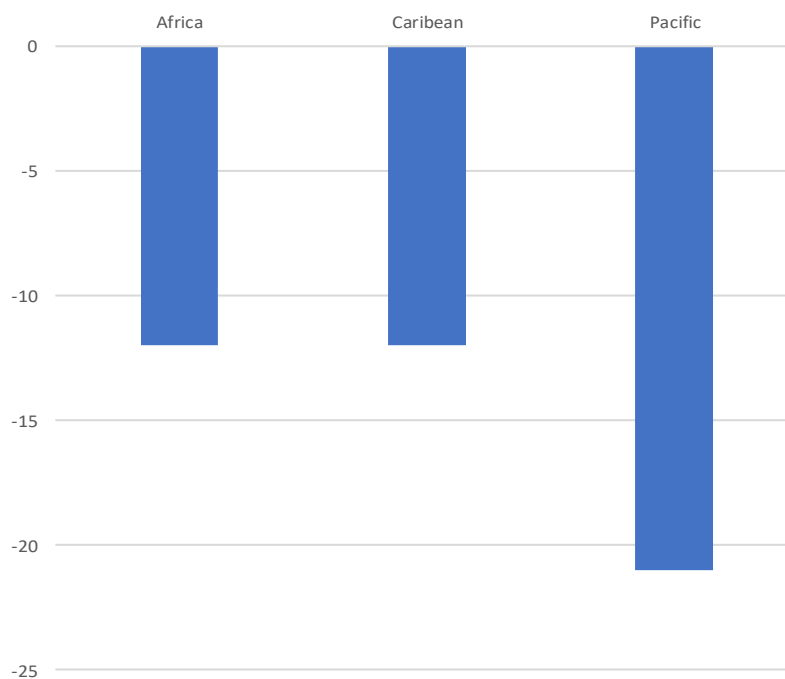
FIGURE 5
Cumulative stringency and COVID-deaths per million population



Source: Calculations based on Oxford COVID-19 Government Response Tracker.

Development economics is also highly relevant (Papyrakis, 2021). The massive use of non-pharmaceutical interventions in the OECD countries, both in health policy and in economic policy, did not consider the external effects on other countries. But the impact of non-pharmaceutical interventions crosses borders just as easily as the Coronavirus, and pandemics strongly affects the Global South. The economic risk of the pandemic is not concentrated where the death rate is highest, but in Sub-Saharan Africa and the Least Developed Countries in South Asia (Noy et al., 2020). The economic impact was felt by those countries before the disease reached developing countries and emerging markets, when the epicenter of the COVID-19 pandemic spread to the Americas by the end of May 2020. The transmission mechanisms are multiple, as shown by the following examples.

FIGURE 6
Real GDP loss in major tourist destinations



Source: Behsudi (2020).

Global tourism stopped overnight (in 2019 the share of tourism in regional GDP had ranged from 6.5% in Sub-Saharan Africa to 13.9% in the Caribbean; see World Travel and Tourism Council, 2020) with dramatic contractions in real GDP (Figure 6).

TABLE 1
FDI inflows by region, 2019 and 2020 (billions of US dollars)

	2019	2020
Africa	46	38
Latin American	160	101
Developing Asia	495	476
Transition economies	58	13
	759	628

Source: UNCTAD (2021)

Capital flows were under pressure with FDI inflows in the Global North reducing by 121 billion US dollars (-12%) and remittances taking a similar turn. Importantly, vaccination and health care programs for HIV/AIDS, tuberculosis, malaria, and other infectious diseases derailed with a catastrophic impact that may be higher than COVID-19's direct impact. A survey, covering 106 countries, found that approximately three-quarters of current programs were impacted negatively – threatening an additional indirect death toll of 1,440,000 in developing countries (Global Fund, 2020).

The point of this incomplete overview is that external effects on the Global South are directly relevant (see also Djankov and Panizza 2020, Swartz and Valeske 2020 and Parashari and Swartz, 2020). Development economics is also important, because the major recent almost-pandemics (or 'international epidemics', in the words of WHO) have been in Africa, namely Ebola and HIV/AIDS. Development economists by the very nature of their specialization are dealing with countries that regularly suffer under the impact of contagious diseases on the economy, and their findings have a lot of direct relevance to the analysis of pandemics. Gallagher et al. (2020) and Griffith-Jones et al. (2020) argue that major changes in the international finance architecture and development cooperation are necessary to develop and strengthen a global financial safety net to meet the fallout of the pandemic.

Finally, international economics will argue that international policy coordination and external effects are key issues. The nation state is not always the optimal health care area and certainly not during pandemics. The EU provides a clear example of highly integrated markets with free movement of people, but national health policies in Europe remain unsynchronized.

One of the basic international economics lessons is that we need global public goods for a well-functioning world economy. The best way forward is to expand the WHO mandate and use existing economic policy structures to manage the economics of delivery of these goods (e.g., country surveillance by IMF, OECD, World Bank, peer-review and best practices exchange). The lesson highlighting that strengthening global governance is an elementary step in pro-active pandemic preparedness, is certainly not new – it has been already made with respect to Ebola, AIDS/HIV, and SARS. However, our response to COVID-19 has shown again that we do need to take that lesson serious.

4 Fighting pandemics = Fighting inequalities

The most important lesson from the COVID-19 pandemic is that inequalities are the Achilles heel of a society that has been hit by an epidemic. This is true for the full range of societal organization as discussed earlier. The spread of disease can be delayed but not stopped. We thus need to prepare for the next pandemic. The advent of a new ‘disease X’ is a certainty; only its timing is uncertain.

Did we learn?

One learns a lot about humanity during a pandemic. Pandemics reveal imbalances, contradictions, and inequalities that we can no longer ignore at the peril of succumbing under the pressure of the next pandemic.

We have learned that access to basic health care is not guaranteed any more during a pandemic and that marginalized groups are the most vulnerable. We have learned that essential workers are at high risk of getting infected and that society cannot survive without the people that continue to provide those essential services. We have learned that working conditions and the organization of workplaces to a large extent determine the speed of transmission of a virus and that especially low-income earners appear to work in places where outbreaks occur frequently. We have learned that marginalized poor and informal sector workers have no access to hygienic facilities and that lockdowns are not a realistic tool since their livelihoods are threatened. We have learned that the most vulnerable clusters in society consist of people that have no opportunity to work from home, need to travel by public transportation, have low incomes and that their housing does not allow much scope for social distancing. We have learned that this is true both for the Global South and the Global North. We have learned... I sincerely hope that we have learned.

A business proposition

The fact that COVID-19 is a pandemic amplifies our current problems, but even for new contagious diseases that do not reach all continents, inequalities are the breeding ground for disease spreading and consequent suffering. Reducing epidemic vulnerabilities requires to reduce the inequalities. But fighting the next pandemic implies that we cannot limit our attention to inequalities at home, because the inequalities around the world – within and between countries – provide hot spots and disease pools from which new variants, viruses, and other contagious diseases emerge. The implication is that reducing inequalities in other countries and continents becomes a business proposition: an investment project with a high rate of return.

‘Wash your hands!’ and the SDGs

One of the least intrusive and most effective measures against any contagious disease is hand and respiratory hygiene. It is extremely important that handwashing is trained at home and at school, and that this discipline is

maintained. What we have learned from COVID-19 is that every Earthling is at risk, so we cannot afford the luxury of focusing only on the groups that are particularly vulnerable to infections. Handwashing, for example, is only possible if clean water, sink facilities and soap are available to everyone. Since a pandemic is global, the approach needs to be global. Provision of handwashing facilities in developing countries is a low-cost but highly-impactful precautionary measure that the advanced economies could finance.

Since handwashing facilities in developing countries are a cheap, significant and necessary precaution for the advanced economies, SDG 6 ‘Ensure access to clean water and sanitation for all’ is an excellent business proposal that reduces pandemic vulnerability. Investing in clean water and sanitation is a very cost-effective tool to alleviate global pandemic vulnerability. Moreover, understanding that poverty is a breeding ground for pandemics implies that income inequality between and within countries is much more important than the Sustainable Development Goals (SDGs) seem to acknowledge (van der Hoeven and van Bergeijk, 2018; van Bergeijk and van der Hoeven, 2017)). From this perspective, reformulation, reconsideration and reprioritization of SDGs may be necessary.

It is the planet stupid!

The scale of preparations cannot be international (i.e., involving many countries) but needs to be global (i.e., involving all countries). This had, of course, to some extent already been recognized before the corona crisis by the move from ‘international health’ to ‘global health’. Pandemics, however, have not yet received the explicit attention they need in the SDGs. The SDGs (and in particular, the SDG 3 ‘Ensure healthy lives and promote wellbeing for all at all ages’) do not mention prevention of pandemics *per se*. Health target 3.3 ‘By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases’ could be easily adjusted. Target 3.d ‘Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks’ looks satisfactory at first sight, but it misses the point that the ‘in particular’ is equally relevant for the advanced countries. In other words, the SDGs are targets for every country independent of its level of development.

This might be the most important lesson for the Global North: the advanced economies are not invulnerable, and they were ill-prepared. The Global North needs to take inequalities seriously in order to survive. Fighting inequalities globally and domestically is the best business proposition that we have for the Global North. It is also a highly profitable proposition.

5 Three inconvenient truths

A myth exists that the COVID-19 pandemic and its impact could not have been foreseen. According to the IMF's Economic Counsellor,

[a] pandemic scenario had been raised as a possibility in previous economic policy discussions, but none of us had a meaningful sense of what it would look like on the ground and what it would mean for the economy (Gopinath, 2020, p. *v*)

Likewise, in a short 'overview article' Rasul (2020, p. 265) characterized the literature on viral outbreaks as a 'nascent literature'.

Economic analysis of epidemics and pandemics and their impact was, however, not embryonic and a significant literature exists (van Bergeijk, 2021, especially Chapter 2). Policy makers at the World Bank were well aware of the devastations of Ebola and HIV/AIDS. The point is that the international organizations ignored the topic. Sands et al. (2016), for example, point out a lack of analyses of the economic impact of pandemics by global and regional institutions analyzing three well-known economic publications regarding fifteen countries that were most severely hit by SARS, MERS, Ebola, and Zika, distinguishing between the two years before the outbreak and the two years after the outbreak. Their findings show complete ignorance of epidemic risk in the IMF Article IV consultations two years before any outbreak.

The self-image of the Western economies

It is no exaggeration that the pre-COVID-19 self-evaluations of the advanced economies in Europe and the United States show that they suffered from disaster myopia and cognitive dissonance. To specify, international organizations had pointed out that the lack of preparedness was mainly a problem of the non-OECD countries. A fairly random example is the 2017 *World Bank study Disease Control Priorities: Improving Health and Reducing Poverty*, that reports:

A geographic analysis of preparedness shows that some areas of high spark risk also are the least prepared. Geographic areas with high spark risk from domesticated animals (including China, North America, and Western Europe) have relatively higher levels of preparedness although China lags behind its counterparts. However, geographic areas with high spark risk from wildlife species (including Central and West Africa) have some of the lowest preparedness scores globally, indicating a potentially dangerous overlap of spark risk and spread risk. (Madhav et al., 2017), pp. 320 – 321)

Even though the fallacy and peril of this perception were acknowledged, no action was undertaken (Commission on a Global Health Risk Framework for the Future 2016, International Working Group on Financing Preparedness, 2017, World Health Organization 2019). The inconvenient truth is that the world has been busy fighting COVID-19, but that no steps have been set to increase pandemic preparedness. The post-COVID-19 world is simply as ill-prepared as the pre-COVID-19 one.

Beggar-thy-neighbour health care

One of the most disturbing facts has been the lack of a truly global approach to the pandemic. To a large extent, that did not come as a surprise: health care policies by and large have remained in the national and state realm even if sovereignty in other government activity areas was transferred to higher federal or supranational levels. (Saltman 2008) The reason is that health care is of direct impact for the franchise: voters care about their health a lot. What came as a surprise is that competition between states for medical emergency supplies was fierce. For instance, in the US, the competition was not only observed between the individual states, but also between the federal government and the states (Polifact, 2020) The inconvenient truth is that health care during a pandemic is one of the few remaining fields where raw and unrestricted beggar-thy-neighbour policies predominantly occur.

6 In conclusion: rationing, triage and scarcity

Ultimately pandemics are all about scarcity. The problem is that everybody gets ill at the same time and needs access to health care. This makes health care workers and facilities extra vulnerable, and it threatens a breakdown of the health care system that would further reduce health care provision and increase scarcity. Universal health care access is impossible during pandemics as we learned from the comparatively mild case of COVID-19. Access is already limited for non-COVID patients and the health consequences of this restriction will only become clear in the longer term. It may be necessary to rethink health care access and prepare dedicated medical facilities for the next ‘disease X’. It may also be necessary to increase the pool of medical staff by means of conscription and mobilization.

The reasons to think outside the box are clear since the usual economic recipe in a (neo)liberal economy is irrelevant: we cannot leave this to the market because supply and demand are price inelastic in this situation. That means that the world is in a second-best scenario and needs to consider rationing rather than universal access to health care. However, many of the key economic insights are still very relevant: the economics of lockdowns is no rocket science, and the tools to analyze short-term and long-term impacts of pandemics are available (van Bergeijk 2021, Chapter 5). Sophisticated analyses exist of repressed inflation and central planning (Davis and Charemza 2012) as well as rationing in a blend of computable equilibrium models, neo-Keynesian models and models for economies with non-market clearing prices.

From such analyses, we can understand what happened on the markets for ventilators, medical masks and vaccines. It also showcases that the ‘the phenomenon of manipulation through demand and supply leads then to a perverse phenomenon of overbidding, and to the non-existence of an equilibrium unless additional constraints are put on demands and supplies’ (Bénassy 2016). The upshot is that rationing needs to be designed and monitored properly in order to be efficient – the most important requirement is that rationing cannot be manipulated by offering or asking quantities above what is necessary.

The big issue is, however, not in the technicalities but in the perceived (im)morality of rationing. Rules to allocate access to health care need to be designed since triage is unavoidable. (Triage is a form of medical rationing that determines access to health care based on the probability for survival after treatment; it is a common practice during disasters and mass accidents.). The claim that every person has the right to being treated at an intensive care facility makes no sense during disasters, and it does not make sense during pandemics either. The debate on triage and the design of efficient rationing schedules cannot be avoided. The next pandemic is coming.

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