The Social Construction of the COVID-19 pandemic: disaster, risk accumulation and public policy[1]

Allan Lavell, Elizabeth Mansilla, Andrew Maskrey and Fernando Ramirez

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Abstract

This document uses concepts developed in the social study of disasters to interpret the social construction of risk to the SARS-coV-2 virus. It examines the construction of three associated risks: to human life; to public health systems and to the economy and argues that, as in other disasters, confusing risk with the virus veils and dissimulates the operation of a range of other underlying risk drivers. It argues that the risk management policies deployed to address the COVID-19 pandemic may lead to a transfer of risk to those who are most exposed and vulnerable to the coronavirus.

1. Introduction

COVID-19, the disease associated with the most recent coronavirus (SARS-coV-2) and product of animal-society interrelationships, has been described as a "disaster" or "catastrophe" on a national, regional and global scale.

Our aim is to examine COVID-19, not from the perspective of epidemiology, but rather as a “disaster” and as an expression of underlying risk, in the light of the knowledge and experience accumulated in several decades of interdisciplinary social studies on disaster risk. This implies an analysis of both the risks that underlie the pandemic as well as an examination of public policy from the perspective of risk management. The document helps to identify to what extent accumulated and evolutionary knowledge on disaster risk management and on the causality of disaster risk can be used to interpret and, where appropriate, manage the multifaceted crisis associated with the SARS-coV-2 virus.

The notes presented here synthesize elements for both debates and are written at a time when the pandemic and its consequences are still evolving. This means that whatever provisional conclusions are reached today may no longer be valid tomorrow

To approach COVID-19 from the perspective of disaster risk and its management is challenging, to say the very least, and internalizes its own risks and contradictions, for various reasons.

First of all, it means adapting tools and conceptual frameworks formulated to interpret disasters associated with physical-natural, socio-natural and technological phenomena to a pandemic associated with a biological vector that in spatial, temporal and semantic terms has radically different characteristics. In other words, the tools in our conceptual armory are not necessarily the most appropriate. But perhaps, using them to interpret the COVID-19 pandemic, may lead to the emergence of new conceptual and interpretive frameworks.

Secondly, any analysis or interpretation made at this point in time is necessarily provisional. The global pandemic continues to expand, and each country and territory is living its own experience in a different moment in the process. Examining a global pandemic is like viewing a cross-section through a living organism, an expression of multiple processes in each country and locality, linked together non synchronically rather than through linear causality.

Given this, the interpretations presented in this document should be understood as questions and hypotheses regarding the evolution of the pandemic, its consequences and the effectiveness of the risk management policies adopted to control it, instead of affirmative statements. It is difficult to reach any generalizable global conclusions, since the evolution of the pandemic in each country or territory is following such a different course.

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[1] Yet another LA RED /RNI production. Deconstructed and remixed from the original Spanish texts by Andrew Maskrey. LA RED (Network for Social Studies on Disaster Prevention in Latin America) www.desenredando.org, RNI (Risk Nexus Initiative). www.risk-nexus.org

Third, the available data on the pandemic itself, and its impacts, and on the causality of risk are for the moment more anecdotal than systematic. In most affected countries, data collection has significant gaps, flaws and inconsistencies, which for the moment precludes any acceptable and definitive quantitative and comparative evaluation. For example, in Guayaquil, Ecuador the additional deaths recorded through death certificates occurring between mid-March and mid-April are greater by at least an order of magnitude than those officially recorded as COVID-19 deaths. And it is likely that Guayaquil is not an isolated case. Only when systematic, credible and comparable data become available will it be possible to really evaluate the veracity of the hypotheses presented in this document. It is hoped, in a second moment, to carry out a more detailed and informed analysis with better data and evidence. For the time being, the document only puts on the table ideas to provoke debate and reflection, without pretending to achieve more than a provisional analysis.

2. A reading of the COVID-19 pandemic as disaster and catastrophe

If we define disaster as a severe disruption in the routine functioning of a society due to the impact of an adverse physical, biological, or anthropic event, then the pandemic as such and the effects of COVID-19 would appear to qualify as a “disaster” and even more, as a “catastrophe”.

The "Sociology of Disasters", a disciplinary construction based on the ideas of Quarantelli, Dynes and others in the sixties and seventies, provided definitions that help to distinguish between accidents, emergencies, disasters and catastrophes. In particular, the term catastrophe is used to categorise situations when the organisations established to deal with emergencies and disasters, (for example, the fire, police, rescue and health services) are themselves overwhelmed or collapse. From that perspective, the COVID-19 pandemic may correctly be designated as a catastrophe, at least in those contexts where public health systems and emergency services have been stressed , and in some cases, tested beyond the limit.

However, categorising the pandemic as disaster or catastrophe implies, at the same time, that it is more than the simple materialization of a virus. The social study of risk construction and accumulation would imply that disasters associated with the virus and the COVID-19 sickness represent the materialization of pre-existing and underlying risk conditions (potential for future negative impact) in the affected societies, related not only to a biological threat (the SARS-coV-2 virus itself), but also to the level of hazard faced by exposed and vulnerable individuals, communities and societies, expressed not only in physical but also in social and economic dimensions.

If the world is currently experiencing an ongoing, socially constructed and transnational disaster, it is necessary to be very careful with concepts, language and interpretation. Perhaps the saying that, when a sage points a finger at the moon, the fool looks at the tip of the finger and not at the moon, has never been more relevant. In the same way that people do not die from earthquakes but from poorly designed and constructed houses that fall when strong earthquakes strike, the disasters and catastrophes currently enveloping the public health systems in many countries and territories, and their social and economic consequences cannot be understood only as a consequence of a virus.

While COVID-19, as a sickness, or the capacity of health systems, can be analysed from the perspective of public health and medical science, from a broader perspective they are the materialization of socially produced risk in time and in space. This risk has accumulated through the interaction of a range of economic, social, territorial and environmental processes that configure the SARS-coV-2 virus as a hazard and the vulnerability of those exposed.

In the case of the COVID-19 pandemic, this risk has both extensive and intensive characteristics. The risk is extensive in the sense that the coronavirus and its social and economic impacts have spread out in expansive territorial waves from the initial outbreak in Wuhan, China, to affect most countries and territories in the world. The pandemic is already global and transnational in character, by manifesting highly heterogeneous risk patterns. In the regions and localities, most exposed and vulnerable to the threat, the risk manifests intensively, affecting a significant part of the population and severely stressing or collapsing public health systems.

The pandemic also has characteristics of sequential and cascading risk. Unlike other disasters, there is no direct damage and destruction to housing, infrastructure, or loss of crops or produced goods. However, three mutually related categories of risk can be identified. The primary risk associated with

the virus materializes, in direct terms, as the COVID-19 sickness with associated rates of human mortality and morbidity. A secondary risk materialises as the stress to and collapse of public health systems, as well as morgues and funeral services, are overwhelmed by sudden increases in COVID-19 cases. However, the risk management policies put in place to address these primary and secondary risks, in turn generate a tertiary risk, that manifests as the interruption or paralysis of economic activity and social services in all areas. We will examine this topic carefully in the third section of this document.

Finally, the risk associated with the coronavirus can generate, magnify and aggravate other risks, for example, if cyclones or earthquakes occur in regions where public health systems are already stressed or collapsed by COVID-19. The interruption or paralysis of economic activity and social services can increase social vulnerability to other hazards. At the same time, the efforts to manage and control the COVID-19 pandemic diverts resources and political capital from efforts to address other critical priorities such as climate change, the fight against poverty, displacement and disaster risk itself. In this sense, new and potential risk scenarios are being generated through the coronavirus, the consequences of which are still largely unforeseeable.

2a. The hazard: SARS-coV-2 and the COVID-19 pandemic

The analysis of SARS-coV-2 and its consequences has so far been predominantly in the field of epidemiology (the analysis of the distribution and spread of diseases in humans, a field which has more to do with demographics and calculations of probability than with medicine) in particular in terms of modelling the evolution of the likely mortality and morbidity in time and space.

In this case, the hazard is associated with the SARS-coV-2 virus. However, the infectious agent (virus) per se is not a hazard, unless it is transported and spread in a way that exposes large numbers of people. Many viruses go from being epidemic to being endemic; in the sense that they become a permanent presence in a territory or in a community, without constituting a disaster: at least for the society as a whole and its health systems, (although not necessarily for those directly affected or exposed on a daily basis). From that perspective, a virus does not necessarily become a hazard that leads to "a severe disruption to the routine functioning of a society" as defined above.

Other recent epidemics and pandemics, such as H1N1, SARS and MERs were associated with significant mortality (the H1N1 case was associated with between 18,000 confirmed and 150,000 calculated deaths). SARS or the MERS were produced by coronaviruses different from the SARS-coV-2 virus but, unlike COVID-19 did not have a global impact.

In this case, the hazard refers to the potential development of an epidemic, caused by a specific virus that has certain characteristics, including the speed of its spread, the way it affects humans, and the terms of incubation, development and disappearance. In this case, the hazard is extremely mobile, and constantly mutating in its intensity, effects, and in the territories and populations affected. For example, in some areas, it has not materialized in a first period, but then has later rapidly evolved.

The hazard therefore is related to the direct and indirect contact of individuals with the virus and consequently between infected individuals or surfaces contaminated by humans. The only way to avoid such contact is by eliminating the exposure of individuals to others or through acts of personal and environmental hygiene including the use of functional masks. In other words, the hazard can be controlled only by totally or partially avoiding exposure to the virus, through effective and massive vaccination or through the development of autoimmunization in the exposed population. The hazard can therefore be modified by both human behaviour as well as through structural measures to neutralise the virus.

To measure the hazard, there are still large knowledge gaps; for example, the possibility of successive waves of infections and their intensity in terms of morbidity and mortality is still unknown. The probability and expression of mutation or other transformations that affect the virus is also unknown. As such, data is still being accumulated to allow an appropriate estimation of the hazard. With the passage of time and the accumulation of scientific knowledge, more will be known about the hazard, its behavior and its history, as well as the possible interactions and concatenations with other hazards and risk vectors. In particular, more will be known about the influence of temperature, humidity, altitude and other environmental variables on the hazard.

But, aside from human behaviour, there are other socially constructed factors that configure the hazard. The extremely rapid territorial expansion of the virus, from China to the rest of the world, cannot be explained without reference to the role played by Wuhan within China and by China within the global economy and by the role of mass air travel, as the thread that weaves together that economy. In the case of this pandemic, the vector that spreads the virus is not a mosquito, but rather global air travel and intercontinental and intranational travel in general.

As a hypothesis, we can state that the rapid spread of the SARS-coV-2 virus first to other parts of China and then to other countries in Asian, Europe, the United States and the Middle East, would not have been possible except through the increasingly dense network of transport corridors and air routes that connect territories, countries and continents and with China at the centre of many global supply and value chains.

If the virus had emerged in a territory peripheral to these chains and only weakly connected to the web of air transport networks, the hazard would have been greatly reduced or at least would have evolved much more slowly. The territorial fluidity, expansion and speed of the hazard, therefore, is frighteningly modern, and is different from any other historical epidemic or pandemic. The Spanish influenza pandemic (1918- 1921) was also global and is the only parallel of a pandemic with similar characteristics in modern times, nevertheless its rhythm of territorial expansion was slower, reflecting a world still dependent on sea and ground travel for the movement of people and goods.

2b. The configuration of exposure to SARS-coV-2

As already noted, the risk of disaster or catastrophe is produced by a concatenation between a hazard and given conditions of exposure and vulnerability. All three of these elements need to be present for a disaster to occur. We prefer the term concatenation in this context given that risk reflects multiple asynchronous causes and relationships between hazard, exposure and vulnerability rather than an expression of simple linear causality.

It is understandable, from an epidemiological perspective, that most analysis so far has focused almost exclusively on the hazard, in this case the territorial spread of the virus by contagion. However, if risk was synonymous with hazard, the impact of the virus ought to be homogeneous across affected countries and populations, and the epidemiological models based on its spread in China, should be valid for other regions and contexts. Given that this is not the case, it is clear that exposure and vulnerability factors are also mediating the level of risk and the evolution of the disaster.

In the case of the SARS-coV-2 virus, people are exposed when they are in contact with or close to people or surfaces through which they can potentially be infected. Direct person-to-person transmission occurs via coughs, sneezes, conversations, and verbal communication, through touching surfaces, including doors, railings and counters or through the exchange of objects including money, bottles and plates. As such, a person is exposed to the extent that their behavior and that of others promotes it. This, of course, assumes that the virus does not spread by other vectors. This means that in territorial terms, exposure is potentially illimited. Where the hazard exists and human behaviour permits, people are exposed to the risk of COVID-19.

But exposure is also mediated through the territorial structure of societies and their social and cultural patterns. A number of hypotheses can be put forward to explain how exposure mediates the level of risk.

First and as already noted, the hazard is associated with the degree of integration of countries and their cities into the global economy, which in turn modulates the flows of people and, as such, the flows of contagion, primarily through air travel. From this perspective, metropolitan cities such as London or New York are more exposed because they are core nodes in the global economy. In contrast, countries, cities or peripheral territories that are weakly articulated to the global economy, should be less exposed. At the present moment, this statement can only be presented as a working hypothesis until there is more evidence from different countries that allow us to measure the weight of this factor.

Secondly, exposure is modified by the organization of urban space and territory. Where people live crowded in small housing units in multi-family buildings in densely populated areas and mostly use public transport, proximity would dramatically magnify exposure to SARS-coV-2, for any given level of hazard In contrast, in other spatial morphologies, for example, in places where people live in single-

family homes, in territorially dispersed areas and travel by car exposure would be reduced. The rates of contagion between densely populated cities such as New York, which typify the first model of territorial organization and areas of California or the mountain states of the United States - with a dispersed spatial organization, that typify the second, would seem to support this hypothesis, though more data and evidence from different countries is required to be able to measure the weight of this factor.

Thirdly, exposure is modified by occupational categories which many times reflect social class considerations. Those whose work increases contact with others, for example delivery drivers, public transport operatives, care workers and in general those in informal sector activities, are clearly more exposed than those who can work remotely from their homes. Given that many of those in exposed occupations also live in crowded conditions in dense urban areas, occupation further magnifies the exposure generated by the kind of habitat.

Fourthly, and as will be examined in the third section of this document, the main strategy to reduce exposure has been social distancing through confinements and quarantines, in addition to reducing direct and indirect contamination with the practice of personal and collective hygiene. The effectiveness of these measures depends on the ability or willingness of the population to abide by or disobey rules and controls, as well as the capacity or willingness of governments to impose them.

Finally, exposure is also conditioned by the underlying cultural and social patterns in each society. For example, in Italy and Spain, countries that have high levels of mortality in Europe, the hazard has been interrupted in social and cultural contexts where interpersonal relationships are characterized by sociability, proximity, physical affection and intergenerational family structures. In contrast, other countries, such as in Scandinavia, are characterized more by isolation and physical distance in their interpersonal relationships and family structures. Exposure, then, may vary dramatically from country to country and between regions and areas of the same country according to their cultural and social patterns.

How exposure is configured in each country, through the confluence of these and other factors should be the subject of future research. However, it seems likely that exposure does influence the risk, and can explain radical differences in contagion and mortality between countries and between regions within the same country. Without taking into account differences in exposure, comparing the number of those infected, interned in intensive care units and mortality rates between countries and territories can be a fool's errand. In fact, if exposure is indeed highly differentiated, it would be surprising if the evolution of the pandemic showed similar parameters in varied social, cultural and territorial contexts.

2c. Vulnerability to SARS-coV-2

Risk is also shaped by the vulnerability of individuals and social groups. While, in the case of the virus, a large part of the vulnerability can be considered intrinsic, there are also aspects that are socially constructed.

Intrinsic vulnerability to the SARS-coV-2 includes aspects such as how genetics influence the level of functioning of the immune system, susceptibility to coronary, liver, or cancer diseases; the presence of chronic digestive, hormonal problems and high blood pressure etc. Blood type and gender, age itself, are other factors that may modify vulnerability. The impact of past surgical interventions and organ removal (for example, the spleen, a lung, kidney, etc.) or the effects of a debilitating disease would also modify vulnerability. They are all vulnerabilities that are intrinsic to an individual's health.

Other vulnerability factors, however, while intrinsic are socially constructed: for example, through dietary habits, regular consumption of substances such as alcohol, tobacco and other drugs, lack of physical exercise and mental equanimity. In particular, when these conditions are combined with the existence of pre-existing chronic diseases, of which the elderly suffer more persistently, the risk increases markedly.

In terms of intrinsic vulnerability, age has not so far been identified as a primary risk factor. But, people over 65, and in particular those over 80, have been identified as the most vulnerable age group and represent a very high percentage of total mortality in many affected countries. Much of this can be explained by the acquired chronic diseases that are more prevalent in older people and factors such as physical fitness and energy levels.

With significant variations from context to context, vulnerability seems to decrease progressively below the age of 65. Globally, this implies that countries with an aging population, such as Italy, are more vulnerable than countries with a younger population, even given similar levels of hazard and vulnerability. However, this may change as the hazard spreads to low-income countries in the South, with younger populations, but with high socially constructed vulnerability due to malnutrition and other poverty related health conditions.

There is already evidence from cities in some countries (especially in the United States) that mortality and morbidity are concentrated in socially and economically disadvantaged groups. There seems, therefore, to be a close relationship between vulnerability to COVID 19 and vectors of daily risk such as unemployment, lack of income, exposure to other illnesses (including psychological ones), addictions, social and personal insecurity, poor housing and habitat, a lack of access to basic services (water or drainage) and an absence of health and social protection. A study indicating that, in normal times, the death rate for homeless people under 65 in the United States and Canada is 5 times higher than the rest of the population of the same age seems to reinforce this hypothesis.

This socially constructed vulnerability to the virus is often concatenated with high levels of exposure, due to living conditions and occupation and as described above. In countries like India, for example, significant segments of the urban population literally live on the streets, with very limited options to practice social distancing or to wash their hands. During the present crisis various reports have come out of water scarcity in urban communities and problems with supply by cisterns.

Social construction of vulnerability is also concatenated with lack of access to and the quality of public health services. Being able to rapidly access good quality and affordable health care can quite dramatically reduce vulnerability. In many low- and middle-income countries, the availability of health care, measured using metrics such as the number of doctors or hospital beds per hundred thousand is far lower than in most high-income countries, implying that vulnerability is higher. However, some middle-income countries, like Costa Rica or Cuba, for example, have world-class public health systems. In contrast, in some high-income countries, such as the United States, there are broad sectors of society that simply do not have access to public or private health services due to lack of insurance and due to not being entitled to paid sick leave. Even in high-income countries, such as the United Kingdom, protection for doctors and nurses has been inadequate; those who have become ill or died further weakening the health systems.

Until now, the data being published does not have the necessary attributes to identify how these vulnerability and exposure factors magnify risk, for example the incidence of COVID-19 by social class and type of employment. As such, for now, their contribution to risk can only be discussed in general terms. But, in the meantime, it is necessary to at least question those political discourses that argue or by omission suggest that risk is only associated with the hazard.

In some European countries, public health suffered drastic cuts as a result of the fiscal and financial crisis of 2008-2009, which has undermined their capacity to respond to the current pandemic. And in many low and middle-income countries, the deterioration of health infrastructure over decades, undermines its capacity. Vulnerability therefore has been socially constructed over time, as part of broader changes and crises in the global economy and of the policies adopted to manage those crises.

3. Risk management: the political and economic imperative and public policies

3 a. On the political and economic imperative

In his 1845 book, “The Situation of the Working Class in England”, Frederick Engels described a situation in which, in cities like Manchester, 57% of working-class children died before the age of 5, compared to 20% of children in the wealthiest classes. Three years later, in 1848, the Government of Great Britain introduced radical new public health legislation (“1848 Public Health Act”) to deal with risks posed by the cholera and typhoid epidemics that were ravaging the cities of the country during this phase of the Industrial Revolution.

It is doubtful, however, that the legislation was a response to the socially constructed risk described by Engels but rather to other political and economic imperatives. Cholera and typhoid threatened not only the workers responsible for industrial production and productivity but also the life and health of the

upper classes. It was this threat and not social inequality that created the political and economic imperative to strengthen public health.

It is possible that the political and economic imperative to manage the COVID-19 pandemic arises from similar motivations and that the geography of the pandemic has motivated the risk management policies adopted. Despite the fact that by April 20, 2.4 million cases and 165,00 deaths had been recorded and that the crisis has yet to reach its peak in Africa, Latin America and South Asia, the numbers are still relatively small compared to other health risks.

For example, there were 219 million cases of malaria in 2019, associated with 435,000 deaths and 10 million cases of tuberculosis associated with 1.5 million deaths. Seasonal flu is associated with 650,000 deaths each year and is the third leading cause of death worldwide. As a hypothesis, we can argue that these diseases have not generated the global response that the COVID-19 pandemic has, probably because their prevalence is concentrated in low- and middle-income countries.

The massive policy response to COVID-19 can be explained because, at least in its first wave, the pandemic has affected principally high-income countries and critical nodes in the world economy and its value chains. Epidemics in low income countries are considered problems of others, and generally do not constitute a political or economic imperative to invest in risk management. Neither hunger nor the effects of climate change, which pose a much greater and permanent threat to human security than COVID-19, nor displacement due to conflicts, violence and wars have provoked such a forceful policy response. It is unlikely that the COVID-19 pandemic would have been given the same priority if the propagation of the SARS-coV-2 had been restricted to low-income social groups in countries peripheral to the global economy, as happened, for example, with the Ebola epidemic in Africa.

3 b. On risk the management policies

Faced with the pandemic, risk management policies, so far, have been characterized by three types of measures.

Firstly, mechanisms of epidemiological control have been implemented in some countries with different degrees of success. These include, for example, testing to detect cases of infection or the presence of antibodies against infection, the isolation of infected or suspected cases of infection and detailed monitoring of each case to identify possible those in contact who may be affected. Other measures to reduce the hazard include recommendations such as frequent hand washing or wearing masks.

These risk management policies are aimed at reducing the hazard, in other words the spread of the pandemic. Their effectiveness has been facilitated by the speed with which the genetic characteristics of the SARS-coV-2 virus were identified and sequenced. And in some countries, such as Singapore, Taiwan or South Korea, these hazard mitigation mechanisms have been the main strategy implemented for risk management. However, in other countries the absence of the necessary equipment, such as test kits, or delays in implementing the measures, have undermined their effectiveness.

Secondly, in most countries affected by the pandemic, policies of confinement and social distancing of the population have been adopted (with great nuances of difference between country and country) with the aim of flattening the pandemic curve and avoiding the collapse of the health services due to high morbidity rates. These risk management policies are aimed at reducing exposure to the virus and are aimed at both the primary risk of becoming ill from COVID-19 as well as the secondary risk of health system stress and collapse. To further reduce exposure, in many countries, all non-essential businesses have been closed (anecdotally, in the United States gun stores are considered essential in certain states and arms sales have grown rapidly during the crisis).

These policies to reduce exposure have been complemented by other policies to reduce the hazard, such as the restriction of air and ground transportation and the closure of frontiers, although their effectiveness has been questioned when introduced long after the first cases are detected in a country.

The third kind of risk management policy introduced has been to strengthen the capacity of public health services, either through creating surge capacity in hospital beds and intensive care units, sourcing equipment, such as ventilators or recruiting additional medical personnel, through measures such as fast-tracking medical students, recalling retired staff or sourcing doctors and nurses from Cuba. A common characteristic among many of the worst affected countries has been that the capacities of their

health systems were quickly overwhelmed, whether in China or New York and including regions, such as Lombardy in Italy, with some world-class health systems. This kind of risk management policy aims at reducing vulnerability and addresses both the primary risk of morbidity and mortality from COVID-19 as well as the secondary risk of health system stress and collapse.

It is still too early to say whether this combination of risk management policies to reduce hazard, exposure and vulnerability will reduce contagion and mortality to a minimum. Nor is it possible to predict the possibilities of a second wave of infections when confinement is lifted (there are cases of discharged patients who have tested positive after recovery).

However, and as a hypothesis, it does seem that those countries that acted quickly to implement risk management policies of this kind, before the contagion curve grew exponentially have managed to control and slow down morbidity and mortality and to avoid the collapse of their health services, compared to the countries that delayed implementation. This is the case of Costa Rica, for example. And there are other countries, like Sweden, that did not impose quarantines to reduce exposure but that have not reported high rates of contagion or mortality. Until the pandemic completes its cycle and better data is available, it will be difficult to benchmark the effectiveness of these risk management policies and how their effectiveness is mediated by the different hazard, vulnerability and exposure factors outlined earlier.

The risk management policies discussed above address the primary risk of morbidity and mortality and the secondary risk of health system collapse. However, the governments of many countries, as well as regional and multilateral organisations, have launched another set of risk management policies, aimed at reducing the tertiary risk mentioned in the introduction to this document: namely the risk of the paralysis of economic activities and social services such as education.

These policies include fiscal and monetary measures to mitigate the impact of other risk management policies such as confinement, the closure of non-essential business and the sealing of frontiers on national and regional economies. They include schemes to defer the payment of taxes, to provide direct or indirect subsidies to companies, the partial payment of the salaries of unemployed workers by governments, the injection of more liquidity into the financial system, and others. Both in Europe and in the United States, these measures are unprecedented in their magnitude, even compared to the financial crisis of 2008-2009. But in many countries, there have already been massive layoffs in companies and moves to other forms of hiring, such as outsourcing, for example, are making it easier to reduce labor liability. As a hypothesis, it is possible that these policies will increase labor inequalities.

As already noted, these policies to reduce risks to the economy are designed to mitigate the impact of those policies put in place to reduce the risk of morbidity and mortality and to reduce the risk of collapse of public health services. This creates an inherent tension and trade off between both imperatives in attempting to find an optimised risk management approach: a trade-off that can only be resolved politically.

Furthermore, while the risks to life and to public health services manifest locally and nationally, risks to the economy are experienced not only locally and nationally but also across borders, given highly integrated regional and global economies. This means that any policy to reopen economies, borders and air and land transport corridors, will have to be coordinated between countries. For example, if a country dependent on receptive tourism opens its borders, that policy will be ineffective, if those countries where tourists originate remain closed.

These trade-offs are experienced very differently in each country and within different social groups. For example, confinement itself has been described as a bourgeois concept (even if necessary in the present circumstances), as it implies the availability of a suitable place in which to be confined and the capability to undertake remote working and care for children at home. For those with these conditions, confinement may not be a significant risk. In contrast, where subsistence depends on leaving the house to work, and where there may be no house to be confined in, the negative impact of this risk management policy may be greater than its benefits in terms of reducing exposure to the virus.

The economic and social risks associated with prolonged confinement are likely to be much greater for social sectors, including informal workers, migrants, homeless people, and prostitutes. For these sectors, with a daily struggle for survival, exposure to and repeated experience of poor health, chronic hunger, crime and other risks, it is possible that reducing the risk of infection from the SARS-coV-2 virus

through confinement ends up being a greater risk than ignoring the recommendations for confinement to ensure income and daily sustenance.

For example, social studies on disaster risk have shown that poor, excluded and informal populations with poor living conditions and incomes have often no other option than to accept both increased every day and disaster risk: including living in hazardous locations, in unsafe houses, without access to basic services and often in unhealthy, overcrowded and insecure conditions. Such populations often accept these trade offs of increased disaster risk in order to improve access to employment, and services and to reduce the risk of poverty. As a result, risk management strategies that rely on relocation to reduce the risk of a flood or landslide disaster are often rejected by those they are supposed to benefit, other risks are increased, especially the risk of increased poverty.

The relevance and effectiveness of risk management policies to reduce exposure, therefore, varies by social group. It is not clear whether such risk management policies have been designed taking into account the priorities of what may be a large proportion of the population, who do not have adequate conditions either to stay at home or to abide by the rules of social distancing within it, either because they do not have a home or the home is small and inhabited by large families.

From this perspective, it could be argued that risk management policies should be examined not only from the perspective of managing the primary, secondary and tertiary risks outlined above but from a broader perspective of social inequality. Risk is not an objective measure but always has a subject. As such, terms such as risk to the economy always needs to be qualified by the question, “whose economy”. The messages that are many times transmitted that this crisis is a crisis for all humans and homogenous in its impacts must be down scaled to take into consideration that not all are equal and that the same effects are not going to be seen in all.

As occurs in other disasters, the supposedly neutral and technocratic management of risk to lives, health systems and the economy may conceal a not-so-hidden transfer of risks from those social and economic sectors that will most benefit from the flattening of the curve and subsequent economic reactivation to those who in the meantime will take more risks and receive less benefits. Large businesses with reserves will be more resilient to the paralysis of economic activity than small businesses and will be quicker to recover.

At the moment, however, and recognising the manifest tensions implicit in the trade offs-mentioned, it does seem that a broad political consensus in favour of the risk management policies adopted is still holding. Whether this is due to civic duty, an atavistic fear of death, messaging by the media, social networks and political leaders regarding the dangers of the virus, or to repressive measures to enforce quarantines will need to be further researched.

In disasters associated with physical phenomena, the earthquake or hurricane is often identified and confused with the cause. In this case, and in most messaging, it is the SARS-coV-2 virus that is portrayed as the enemy. The danger of over emphasizing the virus and its associated hazard is that other risk factors, those that in some contexts have transformed a pandemic into a catastrophe, are hidden or blurred.

4. In conclusion

COVID-19 is a pandemic and, in some countries, it has become a catastrophe, as public health systems have been stressed to the point of collapse. Globally, potentially catastrophic impacts on the global economy are also emerging; impacts that at the time of writing are still playing out. This other catastrophe in motion is a risk that cannot be attributed to the SARS-coV-2 virus per se, but is a consequence of the risk management policies, such as confinement and the closure of borders introduced to avoid the collapse of public health systems and to flatten the curve of the pandemic.

In the first countries that experienced this pandemic, such as China and now in parts of Europe, containment measures are gradually being lifted, which in turn will allow the reactivation of the economy. As noted above, this involves a tradeoff between managing the three kinds of risk that have characterized the pandemic. How this trade-off will be addressed is a political issue that will play out differently in each context. In the case of the 1918-21 Spanish influenza pandemic, cities that were quicker to impose stricter controls not only ended with reduced death counts but also with a faster economic recovery.

Ultimately, any risk management strategy implies defining what is an acceptable level of risk and for who. No risk can be reduced to zero nor, given the trade-offs described above, is it desirable to do so. Even with widespread vaccination, it is possible that the SARS-coV-2 virus becomes endemic and just one more threat with which the world will have to live with.

If the risks revealed by COVID-19 are socially constructed, as this document proposes, it is also pertinent to ask whether the objective of public policies should be to recover the same economic model that shaped the risk in the first place or rather to use those resources to transform the model in such a way that future risk is reduced and that the social inequalities that the pandemic has exposed are addressed.

At the moment, there are few signs that the COVID-19 pandemic is leading to more than superficial changes to the political discourse, the economic model or to individual or collective practices. It may be that, as in other disasters, the window of political and social opportunity that opens to transform the underlying risk factors slams shut equally quickly.

The COVID-19 pandemic reveals what other disasters also reveal. Without reducing inequality, poverty and exclusion, those most affected will see their risk increase and not decrease. The difference between this pandemic and a normal disaster is that it is global in scope. This implies that transforming of the underlying risk factors is a global and not just a national challenge. The pandemic, however, has also starkly revealed the weakness, if not absence, of effective mechanisms for the global governance of risk. Since the pandemic began the United Nations has been largely missing in action and no other multilateral mechanism has risen to the challenge. Without such mechanisms, even a dialogue about what is considered acceptable future risk is impossible.

As discussed in the introduction, the pandemic is still a work in progress. As time goes by, a clearer identification of each of the underlying risk factors and an analysis of the effectiveness of the risk management policies deployed will be possible. It will also be clearer to what extent the pandemic has changed the world: for good, if greater attention is given to addressing the underlying risk drivers, or for bad if it acts as a catalyst for greater authoritarianism, the suppression of individual guarantees and rights, the exacerbation of inequality and the protection entrenched economic and financial interests over and above human security.

Hopefully, the pandemic will provoke a political debate on these choices that goes beyond the search for a vaccine for a virus to address the even greater risks associated with catastrophic climate change that are waiting in the wings.