Pandemics – Liability and Insurance

Senara Eggleton*

1. 'Pandemics – Liability and Insurance'

This is a report of the 19th Joint-Seminar of the International Association for the Study of Insurance Economics (The Geneva Association) and the European Association of Law and Economics (EALE), hosted by the European Centre of Tort and Insurance Law (ECTIL) at the University of Vienna on 24 and 25 June 2022.

The seminar was kindly sponsored by The Geneva Association. A selection of papers presented at the seminar will be published in a special issue of *The Geneva Papers on Risk and Insurance – Issues and Practice* (forthcoming, 2023).

2. Presentations and Papers

2.1. Speakers

Geraint Howells; National University of Ireland, Galway/Manchester University.
Marcus Pilgerstorfer, City University of Hong Kong.
Duncan Fairgrieve; BIICL, London (apologies).

2.2. Summary

The speakers' initial concern at the outset of their research was the use and distribution of ventilators during the Covid-19 pandemic. However, their focus later shifted to Covid-19 vaccines; more specifically, vaccine-induced autoimmune reactions. They noted the side effects of the vaccine and how those who genuinely suffered from severe side effects could be compensated. The speakers focussed on product liability and no-fault compensation schemes in the first instance.

The speakers noted that public liability insurance presents the obvious route but that success in court is unlikely. A number of English cases have looked at the legally relevant circumstances. The speakers focussed on the European Product Liability Directive (PLD)[1] and whether it is a suitable basis for liability. One question raised is whether the development of vaccines in the context of a public health emergency is to be taken into account. The PLD presents three components to consider: the meaning of 'defective', causation and defences.

With regards to what is 'defective', the design of the vaccine is a pressing concern. Regarding the time the vaccine was put into circulation (Art. 6 PLD), did the public's expectations of safety change in the context of a pandemic given that the vaccines were developed with particular speed? Another pertinent question is whether the defect in

* PhD Candidate (Reinsurance Law) and Visiting Lecturer (Tort Law); The Dickson Poon School of Law, King's College London.
[1] Council Directive of 25 July 1985 concerning liability for defective products OJ L 210/29 of 7.8.85 ("PLD"), *see* Duncan Fairgrieve, Geraint Howells and Marcus Pilgerstorfer, 'Vaccines and the Pandemic – Liability and Insurance', The Geneva Papers on Risk and Insurance: Emerging Risks and Liability Insurance in the Time of Pandemic (forthcoming, 2023), 1.

the vaccine was discoverable according to scientific knowledge at the time. The speakers commented that 'discoverable' is an old defence – for example, is the standard 'reasonableness' or is it more exacting?

Noting that establishing a viable product liability claim is a challenge for the claimant given the plentiful arguments in the defendant's favour, the speakers also considered no-fault compensation schemes. The speakers noted that there is a move towards such schemes in Ireland. In particular, the speakers remarked that if a compensation scheme is to attract claimants away from pursuing litigation, the amount of compensation the fund administers needs to be sufficiently high to be considered "fair" compensation. Thus, the schemes cannot judge the merits of a claimant's case as harshly as a court might and, in terms of deterrence, there ought not to be a bar to indemnity. It was remarked that a maximum pay-out of £120,000 is too low.

3. 'English Tort Law and the Pandemic – opportunities and limitations'

3.1. Speaker

David Howard, University of Cambridge.

3.2. Summary

This paper was inspired by the speaker's experience as Head of Department of Land Economy during the Covid-19 pandemic. The paper considers liability in tort for transmitting the Covid-19 virus to others. The speaker noted that the virus disproportionately affected the elderly and that the likeliest instances of transmissions were in the home. As such, it is difficult to establish a basis to sue, particularly as families of elderly victims who died are unlikely to have been financially dependent on their deceased relative, there is no possibility of recovering loss of earnings and they are unlikely to have any incentive to attempt litigation when bereaved. Moreover, there have not been any cases reported in the law or in the media of this kind, nor have there been any personal injury cases. It is impossible to know whether any claims of this kind have been settled. While a three-year limitation period applies which presents a further challenge, the speaker noted that indemnity encourages, rather than discourages, litigation.

The speaker specifically considered the challenges to establishing a claim in tort for transmissions of the virus by medical personnel, in an employment context and while travelling by public transport. The tort of negligence formed the focus, with the speaker noting that equivalent schemes exist for employers and occupiers.

The suggestion was that in the types of cases which take the focus, the answer does not appear to lie in either duty of care or breach. Key to applying the fault principle is understanding the nature of transmission yet uncertainties abound as to what should have been known and when, particularly by public authorities. Indeed, at the beginning of the pandemic, it was not known that the virus could be transmitted and present asymptomatically for which the government would likely be able to raise various defences for perceived policy failures. Moreover, the virus is almost exclusively transmitted by air which means early cases might be excluded; however, once the World Health Organisation (WHO) had issued advice on transmission, the position is clearer.

The speaker focussed on issues of causation in transmission, noting that it is not impossible; however, 'but for' causation appears a difficult test to surmount. There are exceptions to the but for test; nevertheless,

Fairchild v Glenhaven Funeral Services Ltd (t/a GH Dovener & Son[2] is an exception to the general rule, applying to the material increase in the *risk* of injury and *McGhee v National Coal Board*[3] is another exception, which applyies to the material contribution to injury. Whether either of these exceptions might apply is not clear and the answer might not be scientific – it might lie, for example, in contact tracing. Finally, the speaker considered the mass causation wording of *Financial Conduct Authority v Arch Insurance (UK) Ltd*[4] and asked whether this approach to causation could be applied in a tort case?

4. 'Covid-19 off-label uses of medicines: the role of civil liability'

4.1. Speaker

Andrea Parziale, Maastricht University.

4.2. Summary

It is common in medical practice for drugs to be used for "off-label" purposes. In other words, a drug which has been tested and marketed to treat one condition might also be used, generally in a different dosage, to treat or manage a different condition altogether. While the speaker notes that this is widespread and might expand the therapeutic options available to patients, particularly where treatments are in short supply, off-label uses also expose patients to uncertainties regarding their effects because these alternative uses are not studied extensively in pre-authorisation trials. The speaker recently defended their PhD thesis on this subject.

This paper considers the prevalence of a new range of off-label uses in response to Covid-19, whereby physicians attempted to treat Covid-19 patients with drugs authorised for the treatment of other conditions. Examples include Ritonavir/Lopinavir, used to treat HIV, and Chloroquine. The paper's focus is to consider (i) the role of civil or tort liability in this context and (ii) fault, particularly the management of unknown risks and the impact of a public health emergency on liability rules. The speaker comprehensively notes that EU and US regulators have attempted to guide the use of off-label uses by strengthening the monitoring of these alternative uses and also sharing recommendations and guidelines for use. In particular, the speaker examines the French *Mediator* case law[5] and the unknown risk defence in the context of manufacturer liability.

The speaker suggests that first victims deserve recognition because of the sacrifice they have made which ultimately benefits society. The speaker asks whether there is a move towards precautionary reinterpretation of civil liability? The most insidious examples of harm (ie "first victims") are not covered by liability rules: is the common law duty one to research all possible risks? The speaker suggests that "no fault" compensation schemes are not suitable – the Italian Vaccination Fund, for example, does not allow the state to compensate a victim where the latter is at fault.

5. 'Pandemic and Environment. Shall we insure biodiversity?'

[2] [2002] UKHL 22.
[3] [1973] 1 WLR 1.
[4] [2021] UKSC 1.
[5] The Mediator (*benfluorex*) is a medicine manufactured by Servier which first entered the market in 1976.

5.1. Speaker

Francesca Leucci, University of Bologna.

5.2. Summary

This paper asks whether biodiversity ought to be insured because a loss of habitats and biodiversity increases the risk of pandemics occurring.

The speaker began by outlining the 'Biodiversity Strategy to 2030', which came into force 22 July 2022, and biodiversity costs with reference to two case studies – 'Biodiversity "hotspots"' (Myers, 1988) and off-shore wind farms. The key difficulty highlighted is that scientific data about the impacts on biodiversity are only available after many prolonged years of monitoring specific wind farms, for example. Since the drivers of pandemics are the same as climate change, policies ought to focus on prevention of further loss of habitats and biodiversity, rather than exclusive recovery, or to provide compensation for the harms done to biodiversity.

The speaker noted that there is a partial calculation of biodiversity costs in EU law but that the low probability of detection is sharpened by lack of data. The UK is leading in this context by including biodiversity in GDP calculations.

An attendee commented that The Dasgupta Review outlines three economics of biodiversity: (i) mobility, (ii) silent and (iii) invisibility.[6] The challenge is how to make biodiversity "immobile", so that property rights can be established and the consequent standing to sue; "not silent" refers to the challenge that much of nature and its processes are undetectable – how is the state to factor in the value of biodiversity? Through taxation, for example?

6. 'Business Interruption Insurance and Covid-19: Between Embracing Risk and Spreading Loss'

6.1. Speaker

Piotr Tereszkiewicz; Jagiellonian University, Krakow.

6.2. Summary

The speaker began by providing an overview of the responses to business interruption claims in several jurisdictions including the US, which had a total of twenty Bills on the subject as of May 2020.

The presentation considered the recent judgment of the UK Supreme Court, *Financial Conduct Authority v Arch Insurance (UK) Ltd*,[7] in depth.

[6] 'The Economics of Biodiversity: The Dasgupta Review, February 2021 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/962785/The_Economics_of_Biodiversity_The_Dasgupta_Review_Full_Report.pdf <last accessed 16 October 2022>.
[7] [2021] UKSC 1.

The paper focusses on the limits of embracing risks by those harmed, rather than spreading risk in society by means of insurance contracts.

The speaker argues, echoing Lord Briggs, that business interruption policies need to be interpreted with reference to the expectations of business owners.

7. 'Providing Pandemic Business Interruption Coverage with Double Trigger Cat Bonds'

7.1. Speakers

Sandrine Spaeter; Loehrer, University of Strasbourg (apologies).

André Schmitt; University of Strasbourg.

7.2. Summary

This paper considers whether the answer to providing pandemic-related business interruption insurance lies in double trigger catastrophe bonds. The speakers note that these bonds increase capacity by tapping into financial markets. In particular, they highlight that EU GDP was 5.9% in 2020 and 93% of business interruption insurance contracts explicitly excluded pandemic-related business interruption losses because compensation requires physical damage. Such losses do not arise from the virus itself but are a result of political decisions to stem the pandemic; as such, if governments should shift the burden to insurance, moral hazard issues arise.

The speakers propose a numerical model which illustrates how a pandemic business interruption bond can offer fairer coverage and complement standard (re)insurance even though risks are positively correlated; they also use simulations to estimate the measure of coverage.

The first trigger for their proposed double trigger pandemic business interruption cat bonds (PBI bonds) is whether there is a pandemic situation. This is a binary trigger based on whether the World Health Organisation (WHO) declares a Public Health Emergency of International Concern (PHEIC). Since their inception in 2007, there have been six PHEICs and on 30th January 202, the WHO issued a PHEIC for Covid-19.

The second trigger concerns how much the bond will pay, based on the modelized business interruption losses of an industry in a country. The speakers propose a gross margin loss which excludes employee wages as these might be paid by the government. The modelled 'loss trigger' operates similar to reinsurance programmes and is modelled ex-ante, per industry and per country.

The speakers consider whether PBI bonds are attractive to investors, noting that the return of typical cat bonds is correlated to the return of financial markets. Traditional cat bonds provide a high return; a pandemic outbreak is more likely to result in financial market decline. Thus, active portfolio management is needed such as hedging with a world index, for example.

The speakers note that strengths of their proposal are: it limits public debt, it avoids liquidity cash flow problems and bankruptcies, it facilitates the timely payment of compensation, and it fits into health and economic recovery mechanisms to combat pandemics.

8. 'What is the potential of compensation funds for addressing covid-related personal injury?'

8.1. Speakers

Jonas Knetsch; University Paris 1 Panthéon-Sorbonne.
Kim Watts; University of Antwerp (apologies).

8.2. Summary

The focus of the speakers was analysing compensation funds in the context of workplace and non-workplace Covid-related personal injury claims. The speakers began by noting that these losses are absorbed by tort, insurance, Social Security schemes and compensation funds. The latter is often referred to as the "fourth pillar" of compensation law. The speakers considered alternative compensation models in Europe.

The severity of the Covid-19 related personal injury depends upon the individual impact of the Covid-19 infection. Considerations include severe versus light; long Covid cases; direct victims (who incur losses for medical expenses, loss of income, nursing costs, pain suffering and loss of amenity damages) and death costs.

The speakers noted that compensation depends upon the understanding of "New Social Risk". They considered a range of proposals for legislation, none of which have been enacted.

The speakers asked whether there are gaps in the coverage of Covid-19 related personal injuries. They noted that there are three challenges to establishing Covid-19 personal injury recovery: (i) scope, (ii) designing a coherent financial mechanism and (iii) building an efficient fund administration. In respect of the first, key considerations include the categorisation of eligible victims and the available budget. The second considers public funding and funding sources connected to address the risk, and the social perception of Covid-19 losses. The third considers whether the fund administration is public or private in nature and highlights the need for solidarity in a quick response; for this reason, extending existing compensation funds might provide the most expedient solution.

In conclusion, the speakers highlight that compensation funds are only one of many legal instruments and those countries with weak Social Security systems fared worse during the pandemic, particularly in comparison to those with stronger Social Security systems. The key issue is identifying what is the public or private nature of the fund administration.

An attendee asked: what is the precise policy problem? There are two-to-three million people with long-Covid in the UK which impacts loss of future earnings, particularly in working men – to which extent would a compensation fund adequately compensate the victim, particularly in circumstances where a disability is caused by a non-Covid-19 cause?

9. ‘Considerations on the interaction of compensation schemes and tort law in cases of pandemic disease’

9.1. Speaker

Christian Lahnstein, formerly of Munich Re.

9.2. Summary

This presentation considered the interaction of compensation schemes and tort law in the context of pandemic diseases.

The speaker first provided an overview of first party compensation systems, noting that while countries acted simultaneously, they acted in different ways. Short-term measures targeted the labour market and the speaker considered how these short-term measures change the national structures of Social Security systems and the general unwillingness to allocate resources to compensation schemes.

First-party compensation schemes include private direct insurance, health and life insurance, disability support and Social Security schemes. The speaker compared Covid-19 to accidents – eg road traffic accidents – and noted how they are handled differently in each legal system. Some compensation schemes are causal, while others are non-causal. Examples of the former include where medical diagnoses need further investigation; workers’ compensation is also based on causality – the injury needs to have taken place during the course of the employee’s employment. However, it is costly to investigate causation. In non-causation compensation schemes, the occurrence of an illness or death triggers the payment and the cause of loss is not investigated any further.

The speaker noted the social insurance benefit and focussed on the interaction between causal and non-causal liability and compensation schemes; more specifically, between third party schemes and tort law. While compensation funds can be seen as preferential compensation systems for some victims, they raise important political questions such as why some victims are compensated while others are not.

It remains open to question the willingness of governments to spend money ex-post or ad-hoc and to invest in sustainable ex-ante compensation schemes.

10. ‘The role of liability insurance in times of a pandemic’

10.1. Speakers

Stefan Perner; Vienna University of Economics and Business.
Attila Fenyves; University of Vienna (apologies).

10.2. Summary

Multiple lines of business were affected by the Covid-19 pandemic, including event, travel, business interruption and legal expenses insurance.

The state often considers itself responsible to help in any possible way as demonstrated by state responses to floods and earthquakes, for example, in many jurisdictions; consequently, risk exclusions are justified and liability insurance does not play a major role. Indeed, if a tortfeasor is liable to a claimant, neither the policyholder nor third party can approach the insurer for indemnification.

The question posed was what sort of *new* product might be developed for liability insurance which insures against pandemic risks?

For example, if someone refuses to be vaccinated, is this relevant to public liability insurance? Standard liability insurance leaves gaps in protection; yet, if there is no liability there is no need to protect a policyholder with an insurance policy in any case. The speakers noted that while the pandemic has had an impact on the insurance sector as a whole, liability insurance is largely unaffected – liability insurers do not face mass risks in cases of pandemic losses.

11. 'Pandemics: insurance and malpractice'

11.1. Speakers

Attila Menyhárd; Eotvos Lorand University, Budapest.
Ákos Szalai; Pázmány Péter Catholic University, Budapest.

11.2. Summary

This paper focuses on the medical negligence of doctors. The paper considers that solidarity with doctors and those working in a healthcare environment has been articulated as the social value. The speakers consider whether the circumstances during the pandemic ought to have any bearing on the liability of doctors; for example, some doctors may not have had the opportunity to examine patients personally and diagnosed them over the telephone. Other patients had their non-life saving treatments postponed due to overcapacity in healthcare sector. In many cases, patients are treated by a range of doctors who might be self-employed or employed by the healthcare provider. The speakers highlighted the lack of capacity for patients with illnesses other than Covid-19, the overstretched infrastructure and overburdened staff.

The speakers' main aim in this paper is to examine the effects of these changes in the required standard of care. The primary question is whether the relationship between a doctor and a patient (or the health service provider patient) is a contractual one. This is an important question because the prerequisites for exoneration from liability may be different for liability in breach of contract and liability in tort. Their analysis is split between contractual or non-contractual liability.

In particular, if there is a contract, will the patient be allowed to choose the application of a non-contractual regime? Other relevant considerations are whether the doctor is an independent contractor or employed by the health care provider and the effect of any contributory negligence of the patient.

The speakers built a model for economic analysis but highlight that liability scenarios may be quite different. They consider extensively the vicarious liability regime; in particular, the issue of joint and several liability, ex-ante and ex-post considerations and how an 'employment relationship' is defined.

The speakers question whether insurance would replace tort law as a risk allocation regime. They consider the regulation of personal liability with insurance and whether vicarious liability with liability insurance presents a second level moral hazard concern.

12. ‘The Limits of Insurance as Governance in Insuring Pandemics’

12.1. Speakers

Qihao He; China University of Political Science and Law, Beijing (apologies).
Michael Faure; Maastricht University/Erasmus University Rotterdam.
Chengwei Li; China University of Political Science and Law, (apologies).

12.2. Summary

The speaker presented a critical assessment of several different government responses and solutions to Covid-19 and the difficulties in compensating such large scale losses.

The speaker began by outlining the scale of pandemic-related losses, with an emphasis on business interruption insurance. The solutions for these losses are potentially to be found in tort law, Social Security and government compensation. However, insurance is not just a compensation mechanism but also a risk reduction mechanism – insurers therefore need to control the moral hazard risk and impose conditions on the assured for mitigation purposes. Since insurance is a governance mechanism, the insurers are in control of the moral hazard from the moment they step in. The speaker also considered the limitations for insurance as governance and the difficulty in preventing fraud, as well as finding solutions for those who really need them.

The speaker suggested the solution was to regulate insurance wordings in a better fashion since mandatory insurance is not workable.

13. ‘The roles of government and (re)insurers in dealing with pandemics, including the possibilities of public private partnerships between (re)insurers and government’

13.1. Speakers

Özlem Gürses; King’s College London
Senara Eggleton; King’s College London

13.2. Summary

The focus of the paper is on pandemic-related business interruption losses. The paper begins by considering the insurability of pandemic risks with comparison to catastrophic risks by outlining the similarities and differences between the two. It highlights the importance of reinsurance in increasing an insurer’s capacity to underwrite risks which were previously considered to be uninsurable. The paper considers whether pandemic partnership bonds provide a solution and discount them as a possibility, in the UK at least, reasoning that due to the financial effects of the pandemic compounded by the Ukraine war, there may not be the requisite appetite amongst investors given the enormous value of pandemic-related business interruption losses.

The focus of the paper is on considering two specific risks which were considered uninsurable and which have been made insurable with recourse to PPPs. The first is flood risks in the UK which have been made insurable by means of ‘Flood Re’, a publicly accountable, independent scheme which is funded by three sources. The first

includes the policy deductible and the two main sources of funding are a levy and a premium. The levy equates to roughly just under £11 per policy and is paid by every homeowner in the UK irrespective of their property's flood risk. In this respect, those who are at the least risk subsidise those at high risk to ensure that home insurance is affordable for homeowners in the UK. Once the flood risk component of a policy reaches a certain threshold, it may be financially viable for the insurers to cede this risk to Flood Re. The premium is fixed and is set at an artificially low rate, with reference to a sliding scale with based on a properties Council Tax band. In this respect, the speakers propose that Business Rates – the business alternative to Council Tax – might offer a comparable method for setting premiums to cede risks to 'Pandemic Re'; indeed, businesses which received government aid during the coverage pandemic were those in receipt of 100% business rates relief.

The second type of "uninsurable risk" considered is terrorism risks to which solutions appear to have been found in the USA by TRIA 2002 and Pool Re in the UK.

The speakers consider the defensibility of ring-fencing business interruption losses only and reason that not all pandemic losses can be insured: since business interruption losses were the largest in the context of the Covid-19 pandemic, and from these flows a multitude of other losses, including unemployment, homelessness and poverty, it is therefore defensible for 'Pandemic Re' to focus on making business interruption losses insurable.

The Geneva Association had argued, in a report in 2020,[8] that pandemic-related losses were uninsurable; nevertheless, The Geneva Association representative attending the seminar was persuaded by these ideas. They asked how the speakers intend to incentivise the government to consider adopting their proposals in the UK and the speakers will consider this.

[8] The Geneva Association, *An investigation into the insurability of pandemic risk* (2020) https://www.genevaassociation.org/sites/default/files/research-topics-document-type/pdf_public/insurability_report_web.pdf [last accessed 13 April 2023].