# Sharing Risks, on Averages and Why They Matter

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Over the last couple of years, thanks to the impact of the COVID-19 global pandemic, the issue of risk and its management has taken centre stage, like probably never before in history, becoming a central element of the political, social and economic global discourse well beyond the academic ivory tower. Part of this public conversation stems from a long-standing debate on global risk management, mainly the argument that Western societies have become too risk averse and thus incapable of appropriately evaluating risk, something with wide-ranging political and

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societal consequences.[1] This line of argument has been particularly pervasive within the Anglo-American political and economic sphere, as the connection of freedom with the willingness to take risks has fostered a cult of entrepreneurship, which has been elevated to the highest form of individual contribution to society and has become a defining element of the currently hegemonic Anglo-American variety of capitalism.[2]

Though in contemporary popular discourse entrepreneurship is usually connected with risk-taking, in actual practice successful businesses have constantly strived towards managing risk.[3] The maritime world has always been the riskiest of all working environments. Immense technological developments over the last century have not dented this primacy—alas—as it remains the most dangerous type of activity for both individuals and goods.[4] It, therefore, comes as no surprise that the maritime world is also the place where risk management has enjoyed the longest sustained attention, fostering innovation and both private and public institutional solutions for its appropriate management.

General Average (GA) is most likely the oldest of such risk management instruments.[5] One of its most distinctive elements—jettison—can

[1] Interesting analyses in R. V. Ericson and A. Doyle eds., *Risk and Morality* (Toronto 2003); especially the sharp synthetic contributions of David Garland ('The Rise of Risk', 48–86) and Ian Hacking ('Risk and Dirt', 22–47); A. Burgess, A. Alemanno, and J. Zinn eds., *Routledge Handbook of Risk Studies* (Abingdon–New York 2016). For a stimulating analysis of the historical literature on these issues: F. Trivellato, 'Economic and Business History as Cultural History: Pitfalls and Possibilities', *I Tatti Studies in the Italian Renaissance*, 22 (2019): 403–410; on contemporary debates within policy and business: P. De Vincentiis, F. Culasso, and S. A. Cerrato eds., *The Future of Risk Management*, vol. I: *Perspectives on Law, Healthcare, and the Environment* (Cham 2019).

[2] The literature on varieties of capitalism is massive; for the issues raised in this volume, see M. Fusaro, 'The Burden of Risk: Early Modern Maritime Enterprise and Varieties of Capitalism', *Business History Review*, 94 (2020): 179–200, and bibliography therein quoted.

[3] On the interplay of 'risk' and 'uncertainty' in modern economics, and the theory of 'animal spirits' see: G. A. Akerlof and R. J. Shiller, *Animal Spirits: How Human Psychology Drives the Economy and Why It Matters for Global Capitalism* (Princeton 2009); building on J. M. Keynes, *The General Theory of Employment, Interest and Money* (London 1936), 161.

[4] Rose George, 'Worse Things Still Happen at Sea: The Shipping Disasters We Never Hear About', *The Guardian* (10 January 2015), at https://www.theguardian.com/world/2015/jan/10/shipping-disasters-we-never-hear-about.

[5] On the issue of the origin and different etymologies of the word 'average' see the essays of Andrea Addobbati and Hassan Khalilieh in this volume.

claim to be directly referenced already in the Old Testament and in the Acts of the Apostles.[6] The principle of 'deliberate sacrifice for common benefit' which is at the root of GA is, in and of itself, a relatively simple concept and was generally agreed upon across the centuries and in different legal traditions. But its practical operation, both in terms of applicability and apportioning procedures, was articulated in rather different ways across time and space. These differences—and consequent disagreements, hence litigation—have been at the basis of commercial disputes and jurisdictional battles for centuries.

> There is a general average act when, and only when, any extraordinary sacrifice or expenditure is intentionally and reasonably made or incurred for the common safety for the purpose of preserving from peril the property involved in a common maritime adventure.[7]

This is the formal contemporary definition, as spelled out in Rule A1 of the 'York/Antwerp Rules' (YAR), the contractual regime governing the ascertainment of General Average contributions under the aegis of the *Comité Maritime International*. It is striking how this contemporary formulation mirrors that provided in the sixteenth century by Quintin Weytsen, author of the first learned legal treatise on Averages: "Average is the common contribution of the things found in the ship in order to make good the damage voluntarily inflicted upon items, whether belonging to merchants or the ship, so that lives, ship, and the remaining goods may escape unscathed".[8]

[6] *Jonah*, 1: 5 and *Acts of the Apostles*, 27: 14/14–19 both references from the Bible New International Version. See also: E. Kleiman, 'Externalities and Public Goods in the Talmud', in A. Levine ed., *Oxford Handbook of Judaism and Economics* (Oxford 2010), 107–126; E. Mataix Ferrándiz, 'Will the Circle Be Unbroken? Continuity and Change of the *Lex Rhodia*'s Jettison Principles in Roman and Medieval Mediterranean Rulings', *Al Masāq*, 29/1 (2017): 41–59.

[7] The official text of YAR 2016 is available at: https://comitemaritime.org/work/york-antwerp-rules-yar/ (last accessed 20 December 2021). See also: R. R. Cornah, R. C. G. Sarl, and J. B. Shead eds., *Lowndes & Rudolf: General Average and York-Antwerp Rules*, 15th ed. (London 2018). For a detailed and critical analysis of current practices see: F. Siccardi, *Avaria comune e le regole di York e Anversa* (Turin 2019).

[8] Q. Weitsen [Weytsen], *Tractatus de Avariis.Cum observationibus Simonis a Leeuwen et Matthei de Vicq* (Amsterdam: H. & T. Boom 1672 [1617]), 1: "Avaria est communis contributio rerum in navi repertarum, ad sarciendum damnum bonis quorundam mercatorum sive nauclerorum eum in finem sponte illatum, ut vita, navis, & reliqua bona salva

This continuity forces us to confront immediately two fundamental problems in the analysis of GA: its longevity and its apparent immutability. Scholarly literature on GA is scant, particularly so from the historical perspective, as the strength of the 'immutability' paradigm has hindered the analysis of how theoretical definitions and practical applications changed across time. The most active area of historical investigation has been the technical-juridical one connected with the earliest origins of this contribution and its reception by Roman law. However, this literature displays a more active interest in tracing continuities than in discussing differences and their development.[9]

General Average is just the best known among the many varieties of Averages which supported medieval and early modern European maritime trade. In very general terms, it is possible to divide them into two major groups: 'simple or common averages' applied to expenses due to damages to ship and cargo after accidents in navigation, and to some of those costs which today we would define as transaction costs; and 'gross or common averages'—what today is known as GA—which applied instead to extraordinary expenses regarding ship or cargo which were 'voluntarily'—and successfully—undertaken during the voyage with the aim of saving the venture.[10] Still in the most general of terms, whilst damages and expenses for the former fell on their owner/s, in the case of the latter—as the 'act' had been done to save the common venture—expenses were instead proportionally shared among all participants in the venture for reasons of equity. Within the scope of this essay, it is not possible to give a detailed analysis of all these variants, but for the moment it will suffice to say that, under the two major categories just mentioned, there

evadant", I wish to thank Jake Dyble and Andrea Addobbati for our stimulating conversations on translating Latin into English. On Weytsen see G. P. Dreijer and O. Vervaart, 'Een Tractaet van Avarien – 1617', *Pro Memorie*, 21/2 (2019): 38–41.

[9] On the contextualization of the *Lex Rhodia* within Roman law a good starting point is: J.-J. Aubert, 'Dealing with the Abyss: The Nature and Purpose of the Rhodian Sea-law on Jettison (*Lex Rhodia De Iactu*, D 14.2) and the Making of Justinian's Digest', in J. W. Cairns and P. J. du Plessis eds., *Beyond Dogmatics: Law and Society in the Roman World* (Edinburgh 2007), 157–172; see also the considerations of A. Cordes, 'Lex Maritima? Local, Regional and Universal Maritime Law in the Middle Ages', in W. Blockmans, M. Krom, J. Wubs-Mrozewicz eds., *The Routledge Handbook of Maritime Trade Around Europe, 1300–1600* (Abingdon–New York 2017), 69–85, 75–76.

[10] For a classic description see: Carlo Targa, *Ponderationi sopra la Contrattatione Marittima* (Genoa: A. M. Scionico 1692), 255–260.

were several other types of Averages, and their distribution across different regions and jurisdictions was rather uneven, with the Iberian world probably displaying the widest variety.[11] As a side note, a further challenge in unpacking the complex polysemic universe of Averages lies precisely in the practical difficulty of providing clear and effective English translations of this varied nomenclature, as it appears in different languages in the original documents.[12]

The scope of this volume is to provide an analytical synthesis of the multifaceted developments of Averages in Europe across the medieval and early modern period, though the focus will be primarily on those which today we know as GA. Given the relative obscurity of this risk management tool outside a small group of specialists, it was essential for us to provide a 'mapping of the terrain', which would provide solid grounding for further analyses within our project and beyond.[13] Throughout the volume, the contributions discuss Averages from three intersecting perspectives: their intellectual and philosophical conceptualizations, their normative developments across Europe and the Mediterranean, and their practical operations in the wider Mediterranean and Iberian Atlantic.[14] One of the principal concerns has been to provide a detailed analysis of their technical elements, both in terms of the variety of normative solutions, and in terms of the complexities of the apportioning procedures and calculations.[15] This complexity has been a daunting but essential challenge, being one of the main reasons why scholars have shied away from approaching the study of Averages, which has resulted in mistakes and misunderstandings in the secondary literature.

However, beyond an erudite analysis of minute normative and operational differences—which certainly enriches the field, but can also verge

[11] On the Iberian varieties of Averages, see the contributions of Ana María Rivera Medina, Gijs Dreijer and Marta García Garralón in this volume.

[12] To help with this, the *AveTransRisk* project is producing a detailed historical glossary. Worth noting how the confusion in the nomenclature of different types of 'averages' was already lamented within the English language, on this see G. Rossi, *Insurance in Elizabethan England: The London Code* (Cambridge 2016), 142.

[13] *Average-Transaction Costs and Risk Management During the First Globalization (Sixteenth-Eighteenth Centuries)*, see: http://humanities.exeter.ac.uk/history/research/centres/maritime/research/avetransrisk/.

[14] On the Iberian Atlantic see Ana María Rivera Medina and Marta García Garralón in this volume.

[15] On this see the contribution of Sabine Go in this volume.

on the pedantic—the real purpose behind this volume is to provide an analytical discussion of why Averages do matter, and what we can learn from the long-term historical development of this ancient legal institution.

Over the past decade, scholarship has fully acknowledged the importance of the maritime sector as an engine of European economic growth and institutional innovation during the early modern period.[16] Its expansion, quantitatively in terms of tonnage, and qualitatively in terms of geographical range, stimulated profound structural changes across Europe which had important consequences on the global scale. The intensification of maritime activities led to closer and more frequent contacts among countries and legal systems, which led to exchanges and hybridizations in usages and customs, and increasingly also in enacted law. These changes on the ground and on water also stimulated a re-conceptualization of the maritime space, which in the seventeenth century became the protagonist of a real renaissance of intellectual and legal reasoning. This culminated in a famous war of books, which set the foundations of the debate between *mare clausum* and *mare liberum* which still reverberates today in claims of island nations, and in the constant renegotiations on the limits of territorial waters, from fishing rights to managing environmental risks.[17] As Ron Harris argues in his contribution to this volume, in the early modern period "maritime trade is where the institutional cutting-edge could be

[16] R. W. Unger ed., *Shipping and Economic Growth 1350–1850* (Leiden–Boston 2011).

[17] H. de G, *Mare Liberum, sive de jure quod Batavis competit ad Indicana commercia dissertatio* (Leiden: Ludovici Elzeviri 1609); for a recent critical edition: H. Grotius, *The Free Sea*, translated by R. Hakluyt with W. Welwod's critique and Grotius' reply, edited and with an introduction by David Armitage (Indianapolis 2004); J. Selden, *Mare Clausum seu de Dominio Maris libri duo* (London: W. Stansby for R. Meighen 1635). For some recent analyses and critical syntheses: M. van Ittersum, *Profit and Principle: Hugo Grotius, Natural Rights Theories and the Rise of Dutch Power in the East Indies, 1595–1615* (Leiden 2006); R. Morieux, *The Channel: England, France and the Construction of a Maritime Border in the Eighteenth Century* (Cambridge 2016); P. Emmer, '*Mare Liberum*, *Mare Clausum*: Oceanic Shipping and Trade in the History of Economic Thought', in C. Buchet, G. Le Bouëdec eds., *The Sea in History—The Early Modern World* (Woodbridge 2017), 671–678; G. Calafat, *Une mer jalousée: Contribution à l'histoire de la souveraineté (Méditerranée, XVII$^{e}$ siècle)* (Paris 2019). On contemporary debates: J. A. Black, 'A New Custom Thickens: Increased Coastal State Jurisdiction within Sovereign Waters', *Boston University International Law Journal*, 37/2 (2019): 355–394; it needs to be mentioned that the latter's historical overview contains mistakes, like a lot of the literature centred on contemporary issues related to GA.

found. This is where new and innovative organizational solutions were designed".

Historical and economic scholars have been especially interested in the Atlantic system, focussing on those northern European countries which took best advantage of these changes to expand their colonial possessions across the globe's oceans.[18] For a long time, the Mediterranean was left out of these important debates, as it was perceived to be a spent force, destined to spend a few centuries in a state of managed decline at best, whilst innovation and modernity moved on to other oceans. However, scholarly attention is slowly shifting back to the Mediterranean, as it is precisely within this particular sea that the interaction between different economic and legal systems has been longest and consistently more intense.[19] There, maritime operational solutions to overcome political, legal and cultural differences benefitted for the longest time from the active engagement of political entities which, quite apart from their confrontations and economic competition, granted each other full mutual recognition. This focus on the Mediterranean, therefore, descends directly from the fact that, regardless of which legal system they 'belonged' to, seafarers and merchants were in agreement on the essential nature of jurisdictions. It is thus possible to trace these interactions across multiple societal layers, from arbitrated dockside disagreements to litigation in municipal courts, to international diplomatic missions.[20]

[18] This literature is immense, for an entry point: D. Armitage, A. Bashford, and S. Sivasundaram eds., *Oceanic Histories* (Cambridge 2017), and bibliographies therein quoted; also L. A. Benton, 'The Legal Regime of the South Atlantic World, 1400–1750: Jurisdictional Complexity as Institutional Order', *Journal of World History*, 11 (2000): 27–56.

[19] A project dedicated specifically to these issues was *ConfigMed* (ERC Advanced Grant n° 295868, PI Wolfgang Kaiser), see: W. Kaiser and J. Petitjean eds., *Litigation and the Elements of Proof in the Mediterranean (16th-19th C.)*, special issue of *Quaderni Storici*, 153 (2016); further outputs of this project are in the Brill series *Mediterranean Reconfigurations*, see: https://brill.com/view/serial/CMED.

[20] On this see: M. Fusaro and A. Addobbati, 'The Grand Tour of Mercantilism: Lord Fauconberg's Italian Mission (1669–1671)', *The English Historical Review*, 137 (2022): 692–727. https://doi.org/10.1093/ehr/ceac116; A. Addobbati and J. Dyble, 'One Hundred Barrels of Gunpowder. General Average, Maritime Law, and International Diplomacy between Tuscany and England in the Second Half of the 17th Century', *Quaderni Storici*, 168/3 (2021): 823–854. https://doi.org/10.1408/104536.

## Risk-Sharing and Risk-Shifting

Pre-modern European trade was supported and fostered by a variety of risk management tools. A variety of commercial associations and capital-raising solutions were developed to this end. The great protagonist among risk management tools is undoubtedly premium insurance, its birth and development firmly established as one of the classic topics of European economic history and one of the major outcomes of the Italian medieval commercial revolution.[21]

Over the last few decades, the growing interest in 'insurance', across different subfields and national historiographies, owes a lot to the powerful and multifaceted intellectual impact of New Institutional Economics (NIE), which brought a tight focus on the role of institutions in fostering economic growth.[22] The historical development of insurance took centre stage in these analyses, from both the perspectives of risk management and transaction costs analysis, as insurance came to be considered as a fundamental tool supporting European pre-modern economic development and growth.[23] Most recent studies concentrate on the development of insurance markets across the continent, a development connected with the speculative element increasingly present in

[21] Rossi, *Insurance in Elizabethan England*; A. Tenenti and B. Tenenti, *Il prezzo del rischio. L'assicurazione mediterranea vista da Ragusa (1563–1591)* (Rome 1985); A. Tenenti, *Naufrages, corsaires et assurances maritimes à Venise 1592–1609* (Paris 1959); F. Edler de Roover, 'Early Examples of Marine Insurance', *The Journal of Economic History*, 5 (1945): 172–200.

[22] Several works by Douglass North are crucial here: D. C. North, 'Beyond the New Economic History', *The Journal of Economic History*, 34 (1974): 1–7; *Institutions, Institutional Change and Economic Performance* (Cambridge 1990); 'Institutions', *The Journal of Economic Perspectives*, 5 (1991): 97–112.

[23] On transaction costs, some selected classics: D. C. North, 'Transaction Costs, Institutions and Economic Performance', *International Center for Economic Growth*, Occasional Paper Series, 30 (1992); O. E. Williamson, 'The Economics of Organization: The Transaction Costs Approach', *American Journal of Sociology*, 87/3 (1981): 549–577; Idem, 'Transaction-Cost Economics: The Governance of Contractual Relations', *Journal of Law and Economics*, 22 (1979): 233–262; R. H. Coase, 'The Nature of the Firm', *Economica*, 16/4 (1937): 386–405. On their connection with insurances: A. L. Leonard, 'Contingent Commitment: the Development of English Marine Insurance in the Context of New Institutional Economics, 1577–1720', in D'Maris Coffman, A. L. Leonard, L. Neal eds., *Questioning Credible Commitment: Perspectives on the Rise of Financial Capitalism* (Cambridge 2013), 48–75 and bibliography therein quoted.

insurance contracts.[24] Furthermore, insurance as an innovative speculative instrument played an important role in raising working capital for European commercial expansion across the globe, and in widening the pool of investors in such enterprises. Created to protect maritime trade, insurance also developed as a veritable instrument of financial risk-hedging beyond the maritime sector.[25]

One of the side effects of the wholesale adoption of NIE was the general assumption that risk management tools experienced a rather linear development, with more modern and rational instruments simply replacing older ones. Only recently have scholars arrived at an appreciation of the variety and resilience of older instruments—such as Averages and sea loans—in providing flexible risk management.[26] Seen in this light, Averages fall squarely within this present reappraisal of the European historical variety, as opposed to development, of risk management and profit-sharing instruments and institutions.[27]

Scholarly literature acknowledges that Averages were a precursor of insurance,[28] and from this descends a general assumption that insurance's massive success and global expansion transformed Averages into the poor

[24] G. Ceccarelli, *Risky Markets: Marine Insurance in Renaissance Florence* (Leiden 2020); A. L. Leonard ed., *Marine Insurance: Origins and Institutions: 1300–1850* (Basingstoke 2015); A. Addobbati, *Commercio, rischio, guerra. Il mercato delle assicurazioni marittime di Livorno (1694–1795)* (Rome 2007). Early awareness of the speculative element in: H. Van der Wee, *The Growth of the Antwerp Market and the European Economy, Fourteenth-Sixteenth Centuries*, 3 vols (The Hague 1963), II: 327–328; U. Tucci, 'Gli investimenti assicurativi a Venezia nella seconda metà del Cinquecento', in his *Navi, mercanti e monete nel Cinquecento veneziano* (Bologna 1981), 145–160.

[25] Examples of this transformation into proper financial instruments in: O. Gelderblom, A. de Jong, J. Jonker, 'Learning How to Manage Risk by Hedging: The VOC Insurance Contract of 1613', *European Review of Economic History*, 24 (2020): 332–355; H. Casado Alonso, 'Insuring Life, Insuring Debt: Life Insurance in Sixteenth-Century Spain', *Pedralbes*, 40 (2020): 75–95; P. Hellwege ed., *The Past, Present, and Future of Tontines: A Seventeenth Century Financial Product and the Development of Life Insurance* (Berlin 2018).

[26] P. Hellwege and G. Rossi eds., *Maritime Risk Management: Essays on the History of Marine Insurance, General Average and Sea Loan* (Berlin 2021); on the continuing relevance of sea loans see the contribution of Andrea Zanini in this volume.

[27] On this see: S. F. Mansell and A. J. G. Sison, 'Medieval Corporations, Membership and the Common Good: Rethinking the Critique of Shareholder Primacy', *Journal of Institutional Economics*, 16 (2020): 579–595.

[28] Starting with E. Bensa, *Il contratto di assicurazione nel Medio Evo: studi e ricerche* (Genoa: Tipografia marittima editrice 1884); K. Nehlsen – von Stryk, *L'assicurazione*

man's solution, or a simply obsolete risk management tool. Furthermore, in some sections of the maritime sector, there have been recurrent debates about GA's role and relevance within contemporary shipping.[29] One of the issues hinges on the operational complexities of GA as an instrument, even now that they are regulated under the aegis of the YAR rules.[30] Another focuses on their supposed irrelevance, given the existence of increasingly complex systems of reinsurance to further spread the risk of maritime ventures and their associated costs. The underlying assumption is that this is a recent development, which makes GA an unnecessary relic of the past.[31]

However, the intertwining of Averages and insurance dates back to fourteenth-century Italy. Early Florentine policies, and the rich material extant in the Datini archive, provide ample evidence of how fully comprehensive coverage—that is to say, including expenses related to Averages—was already part of Italian medieval insurance policies.[32] Exclusionary clauses increased with the passing of time, mostly determining limits below which it was not worth activating the policy.[33] The only exception to this appears to be Venice, where insurance policies explicitly excluded Averages with the formula 'free of Average' ('*franche d'avaria*'), this exclusion becoming the defining characteristic of Venetian policies.[34]

*marittima a Venezia nel XV secolo* (Rome 1988); J. P. Van Niekerk, *The Development of the Principles of Insurance Law in the Netherlands from 1500 to 1800* (Hilversum 1998).

[29] For a synthesis of the debate see: P. Mukherjee, 'The Anachronism in Maritime Law That Is General Average', *WMU Journal of Maritime Affairs*, 4/2 (2005): 195–209, and bibliography therein quoted.

[30] On these issues are essential: J. Kruit, *General Average, Legal Basis and Applicable Law: The Overrated Significance of the York-Antwerp Rules* (Zutphen 2017); and her 'General Average—General Principle Plus Varying Practical Applications Equals Uniformity?', *Journal of International Maritime Law*, 21 (2015): 190–202, and bibliography therein quoted.

[31] Mukherjee, 'The Anachronism in Maritime Law'.

[32] Ceccarelli, *Risky Market*, Chapter 1; Nehlsen – von Stryk, *L'assicurazione marittima*.

[33] Addobbati, *Commercio, rischio, guerra*, 133–134 and bibliograhy therein. On exclusionary clauses regarding Averages see Bensa, *Il contratto di assicurazione*, 75–76; A. Baldasseroni, *Delle Assicurazioni Marittime, Trattato*, 4 vols (Florence: Stamperia Bonducciana 1786), III: 100–130. On the Tuscan debate on these issues: Addobbati, *Commercio, rischio, guerra*, 190–191, 224–230.

[34] Nehlsen – von Stryk, *L'assicurazione marittima*, 216–228.

These early Italian usages would take some time to be properly formalized in legislation, which happened only in the sixteenth century: in Florence in 1523 and 1529, and in Genoa in 1589.[35] On the normative side, Iberians were quicker to legislate on the insurability of Averages, starting with the *Ordenanzas* promulgated in Barcelona (1435–1484).[36] It is worth noting how a particularly active debate on these issues took place in the following century in the Iberian-ruled Low Countries, where the constant interaction of Iberian commercial practice and local rules is proving to be a most stimulating laboratory for legal borrowing.[37] The importance of these transplanted Iberian legal concepts goes well beyond their contribution to the economic development of the Low Countries; they triggered a profound institutional transformation of the whole maritime sector in Northern Europe, with long-term consequences on commercial organizational development.[38]

Even from such a brief sketch it is clear how complex, both theoretically and operationally, the relationship between insurance and Averages was, and this remains a matter of debate even in contemporary practice.

During the early modern period, jurisprudential treatises and compilations of legislation usually dealt with insurance and Averages in close proximity.[39] They were both instruments of risk management; however,

[35] For Florence: Addobbati, *Commercio, rischio, guerra*, 118–119, and the contribution of Jake Dyble in this volume. For Genoa see the contributions of Luisa Piccinno and Antonio Iodice in this volume, and A. Iodice, *Averages and Seaborne Trade in Early Modern Genoa, 1590–1700* (Unpublished PhD thesis, University of Exeter and Università di Genova, 2021).

[36] M. J. Palaez, 'El seguro marítimo en el Derecho histórico Catalán', in his *Historia del Derecho de la navigación*, vol.I: *Trabajos de teoría e historia de derecho marítimo y de derecho aeronáutico* (Barcelona 1994), 138–160; F. Mansutti, 'La più antica disciplina del contratto di assicurazione: le Ordinanze sulle sicurtà marittime', *Assicurazioni: rivista di diritto, economia e finanza delle assicurazioni private*, LXXIV (2008): 683–692.

[37] On these issues see the contribution of Gijs Dreijer in this volume, and his *The Power and Pains of Polysemy: General Average, Maritime Trade and Normative Practice in the Southern Low Countries (Fifteenth-Sixteenth Centuries)* (Unpublished PhD thesis, University of Exeter-VUB, 2021).

[38] G. Dreijer, 'Maritime Averages and the Complexity of Risk Management in Sixteenth-Century Antwerp', *TSEG/ Low Countries Journal of Social and Economic History*, 17/2 (2020): 31–54.

[39] G. M. Casaregi ed., *Libro del Consolato del Mare* (Lucca: Cappuri & Santini 1720); A. Verwer, *Nederlants See-Rechten: Avaryen en Bodemeryen Begrepen in de Gemeene Costuimen vander See; de Placcaten van Keiser Karel den Vijfden 1551 en Koning Filips den*

Averages were—and still are—structurally and substantially different, as they have remained a strictly *mutualistic* form of protection and, unlike insurance, did not develop into a speculative instrument. This makes them a most interesting example of a non-market phenomenon, whose rich quantitative data is providing us with a wealth of evidence related to transaction and protection costs.

The novelty of insurance has been seen in its being an instrument which allowed economic activities to move from the *sharing* of risk between partners, to the *shifting* of risk onto third parties not directly involved in the enterprise. Scholarship is now acknowledging that this shift was not as quick—or, indeed, as linear—as argued by the classic historical and economic literature.[40] Especially within the maritime sector the element of risk sharing remained particularly strong, as evidenced by the continuing successes of the little investigated 'Protection and Indemnity Clubs' (known as 'P&I Clubs') through which ship-owners associations take care of their insurance needs internally.[41]

It also can be argued that Averages could be defined as a type of mutualistic insurance.[42] Outside of the maritime world, insurance developed another strong tradition of mutuality, especially within the Northern European social welfare sector, and this has also remained somewhat on the margin of mainstream debates on risk management.[43] Whilst mutual insurance retains a strong connection with market phenomena, if nothing

*II 1563't Tractaet van Mr Quintyn Weitsen van de Nederlantsche Avaryen* (Amsterdam: Jan Boom 1711); Targa, *Ponderationi*; E. Cleirac, *Us et coustumes de la mer, divisées en trois parties: I. De la navigation. II. Du commerce naval & contracts maritimes. III. De la iurisdiction de la marine. Avec un traicté des termes de marine & reglemens de la nauigation des fleuves & rivieres* (Bordeaux: Guillaume Millanges 1647); W. Welwood, *An Abridgement of all Sea-Lawes; gathered forth of all Writings and Monuments, which are to be found among any People or Nation, upon the Coasts of the Great Ocean and Mediterranean Sea: And specially Ordered and Disposed for the Use and Benefit of all Benevolent Sea-Farers, within his Maiesties Dominions of Great Britanne, Ireland, and the Adiacent Isles thereof* (London: Humfrey Lownes, for Thomas Man 1613).

[40] An issue discussed in Giovanni Ceccarelli contribution in this volume.

[41] P&I Club usually provide cover for Protection and Indemnity (P&I), but also 'Freight, Demurrage and Defence' (FD&D) and War Risks; further details on one of the most globally important ones, the London Pandi, at: https://www.londonpandi.com/documents/150th-history/ (last accessed 20 December 2021).

[42] See Addobbati, *Commercio, rischio, guerra*, 224–230.

[43] M. H. D. van Leeuwen, *Mutual Insurance 1550–2015: From Guild Welfare and Friendly Societies to Contemporary Micro-Insurers* (London 2016), 3.

else because it needs to keep premiums competitive in relation to the open insurance market, Averages are a purer non-market phenomenon, making them particularly useful for economic historians especially for the analysis of commodities prices. The quantitative data produced during GA procedures generally provides very stable and reliable historical prices and costs, as their evaluation is necessarily closer to the 'real' ones—that is to say, the values perceived to be 'real' by all involved—simply because all who were involved in GAs were active participants in the business venture, and therefore, over/underestimation of costs and commodity prices would affect all parties, each with substantially different interests within the venture. Frauds of course did take place, but our project's quantitative results are supporting the reliability of the quantitative data.[44]

## The Theory and Practice of Risk Management: Silent Partnerships, Moral Hazards and (the Impossibility of) Correct Procedures

The mutual element which underpins GA was a constitutive element of European and Islamic legal traditions.[45] In the *Lex Rhodia de Jactu*, as reported in Justinian's *Digest*,[46] the presence of a common danger was the decisive criterion for the sharing of damages by all stakeholders in the venture. In the more capacious rules described in the later Rhodian Sea Laws, which extended the applicability of Averages well beyond those cases described in the *Lex Rhodia*, the criteria remain the same: avoidance

[44] http://humanities-research.exeter.ac.uk/avetransrisk/. The statistical analysis of Sicilian wheat prices on the basis of GA documentation provides rich evidence in this regard, see: L. Piccinno and A. Iodice, 'Whatever the cost: Grain trade and the Genoese dominating minority in Sicily and Tabarka (16th-18th Centuries)', *Business History*, (2022) https://doi.org/10.1080/00076791/2021.1924686. For the analysis of a questionable claim see: Addobbati and Dyble, 'One Hundred Barrels of Gunpowder'.

[45] For extra European equitable risk sharing solutions see: D. Attard, M. Fitzmaurice, I. Arroyo, N. Martinez, E. Belja eds., *The IMLI* (International Maritime Law Institute) *Manual on International Maritime Law*, vol. II: *Shipping Law* (Oxford 2016), 580; A. Reid, 'The Hybrid Maritime Actors of Southeast Asia', in Buchet and Le Bouëdec eds., *The Sea in History—The Early Modern World*, 112–122.

[46] D. 14,2; A. Watson ed., *The Digest of Justinian* (transl. Mommsen, ed. maior), 4 vols (Philadelphia 1985).

of common dangers brings about a proportional sharing of associated costs.[47]

The forcibly shared nature of any maritime venture—via the unit of the ship, which includes both crew and cargo—means that the maritime venture is a single entity during its travels and everyone involved shares all dangers and costs. This created a form of silent partnership between all interested parties. The same principle is evident across all European legal traditions and also in Islamic regulations on General Average. In the words of Abraham Udovitch:

> this incipient on-board relationship is transformed into a more explicit connection. The loss of commercial merchandise belonging to any one owner, creates an involuntary partnership among all the owners of a cargo on a ship.[48]

In commenting on Islamic rules on jettison, Udovitch wrote,

> in practical terms, the notion of partnership does not appreciably change how matters were settled in a post-jettison situation. Nevertheless, it is interesting and, I believe, quite significant that the principle of 'general average' that is formulated in the Rhodian Sea-Laws in terms of a broad principle that is then applied to numerous specific instances, is, in the context of Islamic law, transformed and translated into the associational framework of a partnership.[49]

Easy to intuitively grasp, this idea proved rather complex to translate into precise and accurate legal terms. This complexity only increased in the early modern period when the rise of learned jurists, who played a growing role not only in universities but also in state bureaucracy and courts all across the European continent, stimulated a continent-wide push towards squeezing mercantile customs into precise categories

[47] W. Ashburner, *The Rhodian Sea-Law* (Oxford 1909); and M. Humphreys ed., *The Laws of the Isaurian Era: The Ecloga and Its Appendices* (Liverpool 2017), 113–128. On these issues see the contribution of Daphne Penna in this volume.

[48] A. L. Udovitch, 'An Eleventh Century Islamic Treatise on the Law of the Sea', *Annales Islamologique*, 27 (1993): 37–54, 51.

[49] Udovitch, 'An Eleventh Century Islamic Treatise', 51–52. Issues further developed in H. S. Khalilieh, 'Islamic Laws of General Average', *Journal of Maritime Law and Commerce*, 50/3 (2019): 353–378, and in his contribution to this volume.

derived from Roman law (*ius commune*).[50] The result was the creation of ex post formal categories and definitions that fitted within the overarching structure of jurisprudential learned law. This phenomenon accelerated during the seventeenth century, when maritime legislation effectively became a laboratory of proto-codification in response to states' attempts to expand and strengthen their jurisdictional reach.[51]

Johan van Niekerk, in his analysis of the legal development of GA within Roman-Dutch law, argued for the existence of a strong agreement in the early modern Dutch jurisprudential literature that "a tacit maritime partnership (*navalis societas*, or *societas et communio tacita*)" is the legal basis for GA, and concludes that "this partnership arose automatically because of the factual (and non-consensual) community of risk (*communio periculis*) existing between the interests on board a ship".[52] However, van Niekerk's pragmatic view was (and is) not universally shared, as from a technical jurisprudential perspective the whole issue of whether GA was effectively supported by a 'tacit' partnership remains contested.[53] Trying to solve this conundrum, an intriguing concept emerged—the

[50] A sharp synthesis of these issues from a cultural perspective in: P. Burke, *Hybrid Renaissance: Culture, Language Architecture* (Budapest–New York 2016), 144; from a more legal perspective: E. Kadens, 'Convergence and the Colonization of Custom in Pre-Modern Europe', in O. Moréteau, A. Masferrer and K. A. Modéer eds., *Comparative Legal History* (Cheltenham 2019), 167–185; D. De ruysscher, 'Maxims, Principles and Legal Change: Maritime Law in Merchant and Legal Culture (Low Countries, 16th Century)', *Zeitschrift der Savigny-Stiftung für Rechtgeschichte*, *Ger.Abt.* 138 (2021), and their bibliographies.

[51] F. Trivellato, '"Amphibious Power": The Law of Wreck, Maritime Customs, and Sovereignty in Richelieu's France', *Law and History Review*, 33 (2015): 915–944; and her '"Usages and Customs of the Sea": Étienne Cleirac and the Making of Maritime Law in Seventeenth-Century France', *Tijdschrift voor Rechtsgeschiedenis / Revue d'histoire du droit / Legal History Review*, 84/2 (2016): 193–224; D. De ruysscher, 'Maxims, Principles'; M. Fusaro, *The Making of a Global Labour Market, 1573–1729: Maritime Law and the Political Economy of the Early Modern Mediterranean*, forthcoming with Cambridge University Press.

[52] Van Niekerk, *The Development of the Principles*, 1: 76, discussion of the relevant texts at 74–76.

[53] For a contemporary analysis of GA as an 'implied contract' see the considerations of G. M. Gauci, 'Of Piracy and General Average: Contribution in General Average for Ransom Payment Occasioned by Piratical Activity', *Journal of Maritime Law and Commerce*, 50/2 (2019): 235–255.

*germinamento*—which allows us to glimpse the border between operational customs and their formalization in learned legal scholarship.[54] The seventeenth-century Genoese jurist Carlo Targa described the *germinamento* as a deliberation made by the shipmaster, with the agreement of the merchants if present, otherwise of the majority of the crew, to voluntarily sacrifice part of the ship or cargo to avoid a bigger danger which would threaten the entire venture.[55] This pretty obscure legal *escamotage* was probably devised for the purpose of reassuring university-trained legal professionals who could be sitting in those courts which certified the whole GA process, and who were less familiar with, when not downright sceptical towards, maritime usages and customs.

The schizophrenia between the jurisprudential and operational realities continued to plague GA practices. Having created a new legal category to formally constitute the ship's risk community, it remained the fact that acts leading to GAs were necessarily performed under extremely difficult circumstances. In other words, if an event (*casus fortuitus*) leads to actions to save the venture, thus creating the conditions for a GA, there is an unavoidable clash between formal legal procedures and the acutely time-sensitive emergency of impeding danger at sea.

The essays in this volume describe all manner of different formal procedures. How frequently they were followed in practice is unclear, although common sense leads us to believe that they were rarely. Targa, on the basis of his long service in the Genoese court of the *Conservatori del Mare*, was of the opinion that GA cases in which all such formalities were observed were precisely those which should have been examined with particular attention, as most likely their formal perfection concealed fraud. One can easily visualize his sarcastic look when he wrote:

[54] L. Goldschmidt, '*Lex Rhodia und Agermanament*: Der Schiffsrath – Studie zur Geschichte und Dogmatik des Europäischen Seerechts', *ZHR* (*Zeitschrift für das gesamte Handelsrecht*), 35 (1888): 37–90, 321–395; for an analysis and the relevant bibliography see the contribution of Andrea Addobbati in this volume.

[55] Targa, *Ponderationi*, Chapter LXXVI 'Di Germinamento', 316–317: "Questa non è altro che una deliberatione fatta dal Capitano di Nave, ò dal Patron di Barca, approvata da Mercanti se vi sono, ò non essendovene, dalla maggior parte della gente di Nave di volere volontariamente arrischiarsi, incontrando un pericolo remoto, o danno minore, per schivarne un maggiore più prossimo, per doversi poi ripartire il danno del perso, ò Guasto sopra il salvato […]".

> when great danger looms, juridical acts do not naturally come to mind, and amongst the great quantity I have seen in more than sixty years of maritime judicial practice, I can remember no more than four or five declarations which recounted all correct juridical forms, and in each of these there were reasons for criticism as they appeared too premeditated.[56]

The category of 'moral hazard' has been well investigated with regard to insurance, both historically and in contemporary practice. In David Garland's words, "'moral hazard' describes the temptations to bad behaviour (false claims, carelessness, wilful damage, etc.) that the promise of compensation can produce for an insured party".[57] The mutualistic basis of GA goes a long way in limiting moral hazard, founded as it is on proportional sharing among stakeholders who have different interests in the venture. Additionally, because it is an instrument not subject to speculation, it is more likely that it does actually produce reliable price and costs data, as sharing mechanisms disincentivized the over- or under-valuing of damages. However, a formally perfect GA procedure could hide many ills, and given both the complexity and the varieties of GA regulations, the responsibility of the ship master in handling the whole process was at the forefront of jurisprudential debates and the daily practice of the courts.[58]

[56] Targa, *Ponderationi*, Chapter LIX 'Di annotatione sopra il Gettito', 253: "[…] sopraggiungendo un grande pericolo, poco vengono a memoria li atti giuridici, et io in anni sessanta di pratiche maritime che n'havrò veduto gran quantità non mi ricordo haver veduto Consolati á pena quattro in cinque fatti per gettito notato giuridicamente alla forma prenarrata, et in ogn'un di questi vi è stato da criticare per esser parsi troppo premeditati".

[57] Garland, 'The Rise of Risk', 54. For moral hazard in insurance, see C. Kingston, 'Governance and Institutional Change in Marine Insurance, 1350–1850', *European Review of Economic History*, 18 (2013): 1–18 and bibliography therein quoted; I thank Gijs Dreijer for bringing to my attention the further distinction made between "moral and morale hazard, the former denoting an increased chance that some person intentionally causes a loss or is unwilling to pay to prevent losses, the latter as an act that causes someone to be less careful than they would otherwise be", in A. C. Williams and R. M. Heins, *Risk Management and Insurance* (New York 1964), 51.

[58] See the comprehensive analyses of Guido Rossi, 'The Liability of the Shipmaster in Early Modern Law: Comparative (and Practice-Oriented) Remarks', *Historia et ius*, 12 (2017), available at: http://www.historiaetius.eu/uploads/5/9/4/8/5948821/rossi_guido_12.pdf (last accessed 12 October 2021); 'The Barratry of the Shipmaster in Early Modern Law: polysemy and *mos italicus*', *Tijdschrift voor Rechtsgeschiedenis*, 87/1 (2019):

Another important issue that needs to be acknowledged is that the nature of GA produces somewhat of a structural bias favouring ships' interests above merchants'. There are several factors to take into account in this regard. The initial declaration and the subsequent paperwork were produced by the master, and the witnesses were usually crew members. Cargo interest was (and is) far more fragmented among different stakeholders who were not usually present on the vessel during the event itself. The value of the cargo was also usually higher than that of the vessel, and ship interests commonly contributed a small fraction of its total value.

Furthermore, whilst in the early modern period it was becoming common for cargo to be insured, the same was not true for ships (what today we would call 'hull insurance'). All these factors skewed the process, and fraud remained a possibility especially from the ship side, as GA could provide a convenient mechanism for defraying ships' maintenance and refurbishment costs, and also cover for human mistakes.[59]

The bottom line is that in handling GA there was no alternative to cooperation without trust.[60] No single actor—be it an individual or state authority—had the capacity or the legal infrastructure to control the whole process, so there was no alternative to trusting one's counterparts. And in practical real-life terms, a ship master could cheat once or maybe twice, but not much more as information circulated between merchants and ports, and masters' reputation was a matter of commercial knowledge.[61] If he did not act professionally, eventually merchants would not trust him; in the Mediterranean maritime world, reputations travelled quickly, and the importance of individuals' reputation emerge strongly

65–85; 'The Barratry of the Shipmaster in Early Modern Law: The Approach of Italian and English Law Courts', *Tijdschrift voor Rechtsgeschiedenis*, 87/4 (2019): 504–574.

[59] Issues discussed at length in J. A. Dyble, *General Average in the Free Port of Livorno, 1600–1700* (Unpublished PhD thesis, University of Exeter and Università di Pisa, 2021).

[60] J. Wubs-Mrozewicz, 'The Concept of Language of Trust and Trustworthiness: (Why) History Matters', *Journal of Trust Research*, 10 (2019): 91–107; on its importance in long-distance trade: F. Trivellato, *The Familiarity of Strangers: The Sephardic Diaspora, Livorno, and Cross-Cultural Trade in the Early Modern Period* (New Haven–London 2009). For a more sociological analysis, see K. S. Cook, R. Hardin, and M. Levi, *Cooperation Without Trust?* (New York 2002).

[61] For actual examples of the preference (even competition) among merchants for specific ships, because of their reputation for seaworthiness, and the concomitant avoidance of others, see: S. D. Goitein, *A Mediterranean Society*, 6 vols (Berkeley–London 1967–1993), I: 313.

from the documentation.[62] Reputation remained a crucial element of pre-modern credit-worthiness, especially within a mutualistic environment where reciprocity was embedded.

Considering all these factors, it is clear that we are, therefore, confronted with a perfect example of the type of obscure professional knowledge and language which can easily engender scepticism in non-experts. Not a lot has changed in the intervening centuries. Reviewing the most recent edition of *Lowndes & Rudolf*, the 'bible' of GA contemporary legal management, Angus Glennie comments that "even for the professional lawyer, the law of general average is particularly esoteric and abstruse".[63] And it is precisely this esoteric element which is at the root of a particularly intriguing issue in the long life of GA, namely that its operation and procedures have been put into question whenever new players have entered the system; this happened with the English and Armenians in the seventeenth-century Mediterranean, and it is happening with the Chinese on the global scale today, making GA a sensitive bellwether of structural changes within maritime trade. Periodic attempts to discuss or reform the mechanisms underpinning mutual cost redistribution reveal the cultural specificities of risk analysis, and further point to the crucial importance of trust, both in the pre-modern period and today.[64]

[62] On the issue of masters' reputation: M. Fusaro, 'Public Service and Private Trade: Northern Seamen in Seventeenth Century Venetian Courts of Justice', *The International Journal of Maritime History*, 27 (2015): 3–25.

[63] A. Glennie, 'Review of Lowndes & Rudolf: General Average and York-Antwerp Rules', *Edinburgh Law Review*, 23/3 (2019): 461–462.

[64] G. Alfani and V. Gourdon, 'Entrepreneurs, Formalization of Social Ties, and Trust-building in Europe (Fourteenth to Twentieth Centuries)', *The Economic History Review*, 65 (2012): 1005–1028; Wubs-Mrozewicz, 'The Concept of Language of Trust'; Fusaro and Addobbati, 'The Grand Tour of Mercantilism'. On the diversity of risk perception and management: J.-P. Platteau, 'Mutual Insurance as an Elusive Concept in Traditional Rural Communities', *Journal of Development Studies*, 33 (1997): 764–796.

## Lex Maritima, Lex Mercatoria and Early Modern States

The international nature of Averages allows us to see the interaction of operational convergence and legal pluralism across Europe, providing an alternative perspective on the vexed issue of *lex mercatoria*.[65]

Maritime legislation across Europe was characterized by a general agreement on the underlying principles, which is especially evident when operational elements were concerned, paired with an extreme variety of legal and contractual solutions. Thus, arguably since the time of the *Digest* in late Antiquity, the Mediterranean was characterized both by variant local practices and a common underlying set of principles, much in the same way as these issues developed later in the Baltic and North Seas.[66] The commonalities were indeed many, and this, paired with the wealth of normative evidence characterizing the European maritime legal world since the Middle Ages, has led Albrecht Cordes to argue that "the *lex maritima* thereby functions as a 'key witness' for the *lex mercatoria* because its sources are more tangible than the sources of the *lex mercatoria* and thus should provide documentary evidence".[67] Using Cordes' image, thanks to their longevity Averages can thus be considered as 'expert witnesses' on these issues. And their testimony is unambiguous, as the procedural framework, and the actual legal practice which embodied and enacted this common principle, differed greatly across the continent.

The general agreement on principles was at the heart of GA, and some elements of operational convergence were necessary. Across time, all jurisdictions agree that GA events should be reported in a timely fashion, so the damage report had to be completed in the first port encountered after

[65] A lively synthesis of the contemporary debate on a 'new *lex mercatoria*', in N. E. Hatzimihail, 'The Many Lives—and Faces—of *Lex Mercatoria*: History as Genealogy in International Business Law', *Law and Contemporary Problems*, 71/3 (2008): 169–190.

[66] O. R. Constable, 'The Problem of Jettison in Medieval Mediterranean Maritime Law', *Journal of Medieval History*, 20 (1994): 207–220; for the Baltic and North Sea: E. Frankot, *'Of Laws of Ships and Shipmen'. Medieval Maritime Law and Its Practice in the Towns of Northern Europe* (Edinburgh 2012); and her 'Medieval Maritime Law from Oléron to Wisby: Jurisdictions in the Law of the Sea', in J. Pan-Montojo and F. Pedersen eds., *Communities in European History: Representations, Jurisdictions, Conflicts* (Pisa 2007), 151–172.

[67] Cordes, *Lex Maritima*? 70–71; also Udovitch, 'An Eleventh Century Islamic Treatise', 43.

the accident—normally with the support of local experts, who evaluated the extent and cost of the damages suffered—and then certified by local authorities, and this report had then to be accepted by the authorities of the destination port; hence the embedded transnationality of these legal instruments.[68] The actual apportioning of costs was usually done in the venture's intended final destination, frequently (but not always) where the majority of the cargo receivers were based.

At this stage, the differences between different jurisdictions emerged. In most countries, courts with jurisdiction on maritime matters checked, approved and certified Averages' documentation.[69] Courts, therefore, performed an essential role in overseeing the process; the need to ensure correctness in the paperwork, and propriety and due process in the whole procedure was particularly important given the transnational element, as documentation produced in one jurisdiction needed to be valid in all others. Carlo Targa underlined this element arguing that

> it is not possible in one part of the world to deal with maritime matters in one way, and differently somewhere else, because of the shared interests than many different people can have in the same event.[70]

However, if there was almost universal procedural convergence regarding the opening acts of a GA procedure, from that moment onwards differences started to emerge. The original reports were checked for consistency, especially regarding the narrative of the event; then the bill of lading, and—crucially—the list of expenses which were a direct consequence of the GA act were examined. Then a list of the damages was prepared and, cross-referencing the financial documentation, the approved costs were apportioned among all parties. Which type of expenses were claimable through GA differed between jurisdictions; other

[68] The report was called in Italian '*consolato*', and in English 'sea protest', due to the historical peculiarities of the usage of this term, in this essay I am using instead the more neutral term 'report'.

[69] The exception here is England, where the process was overseen by notaries; on these issues see: G. Pizzoni, 'British Power in the Mediterranean: Sea Protests and Notarial Practice in Nineteenth-century Malta', *The Journal of Imperial and Commonwealth History* (2022), https://doi.org/10.1080/03086534.2022.2086206

[70] Targa, *Ponderationi*, 323–324: "[…] non potendosi, in una parte del mondo, circa la contrattatione maritima operare in un modo e in altra in diverso, per l'interesse comune che tanta gente diversa puonno haver in un istesso fatto".

important differences had to do with the modalities of cargo evaluation and with the percentages of the contributions owed by each party.

The whole system was accustomed to these differences, which were an accepted reality of maritime trade. Litigation of course did happen, but this was a relatively rare occurrence, probably due to the problem of coordinating different parties who could be very distant from each other. When litigation took place, it was generally handled by those same courts which had dealt with the certification stage, and the evidence shows clear awareness by these courts that rules would differ in other places.[71]

The involvement of courts in certifying GA procedures is evidence of how the management of the maritime sector in general, and that of Averages in particular, is a particularly fruitful field for investigating the interaction of state (or municipal) legislative activities—government—and private rules and regulations—governance—as procedures regulating Averages straddled these two sets of rules.[72]

Indeed, it can further be argued that handling and managing risk exposure was a way to buttress the state and gain entry into the corridors of power, as late seventeenth-century French developments clearly exemplify.[73] However, it should also be underlined that states' claims to sovereignty always contained an aspirational element, even more so when applied to merchants and seafarers, the most mobile and slippery of all economic actors.[74]

The current regime under which GA are regulated and settled provides telling evidence of both the unifying aspirations and practical impossibility of a proper *lex mercatoria*.

[71] For example, the Kampen *Gulden Boeck* mentioned that rules on contribution could be different in other ports, on this see the analysis of Dreijer, *The Power and Pains of Polysemy*, 143.

[72] On the intertwinement of mercantile practice and official law: D. De ruysscher, 'Maxims, Principles'.

[73] On these issues is dedicated the essay of Lewis Wade in this volume; see also his *Privilege at a Premium: Insurance, Maritime Law and Political Economy in Early Modern France, 1664-c. 1710* (Unpublished PhD thesis, University of Exeter, 2021); and his article: 'Royal Companies, Risk Management and Sovereignty in Old Regime France', forthcoming in *The English Historical Review*.

[74] A synthetic view of the complexity of states' jurisdictions in contemporary shipping in: J. A. Black, 'A New Custom Thickens: Increased Coastal State Jurisdiction Within Sovereign Waters', *Boston University International Law Journal*, 37/2 (2019): 355–394.

The existence of such divergence in the handling of GA was at the root of the long and complex negotiations among states which occupied the better part of the nineteenth century, leading to a series of international conferences culminating in 1890 with the creation of the first York-Antwerp Rules (YAR). Since then, YARs have been regularly revised, with the most recent edition issued in 2016. These 'rules' (note that these are not 'laws') are managed by the *Comité Maritime International* (CMI), which declares itself to be the oldest organization in the world exclusively concerned with the unification of maritime law and related commercial practices. Article 1 of the CMI Constitution states:

> It is a not-for-profit international organization established in Antwerp in 1897, the object of which is to contribute by all appropriate means and activities to the unification of maritime law in all its aspects. To this end it shall promote the establishment of national associations of maritime law and shall cooperate with other international organizations.[75]

Let us go back to Albrecht Cordes, whose succinct conclusions on the supposed medieval and early modern *lex maritima* well serve as a comment on Averages and their application:

> To encounter a great degree of continuity and uniformity on the side of the challenges must not be confused with the variety of responses tried out in the attempt to face that challenge. The bottom line remains the same: not a single example of a uniform legal response to a specific challenge of maritime trade law has ever been found.[76]

[75] https://comitemaritime.org/about-us/; some short official, histories of the *Comité* are available at: https://comitemaritime.org/about-us/history/ (last accessed 18 December 2021).

[76] Cordes, 'Lex Maritima?', 80; also A. Cordes, 'The Search for a Medieval *Lex mercatoria*', *Oxford U Comparative L Forum* 5 (2003), at: https://ouclf.law.ox.ac.uk/category/authors/albrecht-cordes/ (last accessed 18 December 2021); E. Kadens, 'The Myth of the Customary Law Merchant', *Texas Law Review*, 90 (2012): 1153–1206; D. De ruysscher, 'Conceptualizing *Lex Mercatoria*: Malynes, Schmitthoff and Goldman Compared', *Maastricht Journal of European and Comparative Law*, 27/4 (2020): 465–483.

## Conclusion

Storms at sea were a popular subject for Baroque music, and the pieces' compositional structure would usually concentrate on the naturalistic element. Central was the developmental arc of the storm itself, the composer's focus tightly directed at replicating the relentless strength of natural phenomena from their slow build-up into frenzied fury, followed by their winding down, heralding the return of calm. Baroque music's passion for the tempest—both as metaphor and as representational challenge—was always matched to a tight formal frame, as if unruliness could come to the fore and preserve its aesthetic power only when mediated by order.[77] This fascination with the tempest did not abate entirely, even with the advent of the classical style. Joseph Haydn's Symphony no. 39 (known as the '*Tempesta di mare*') has a slightly different structure; the storm is indeed there and develops along traditional musicological structures, but the piece has puzzled critics, as the highly kinetic storm depiction alternates with movements with formalized balletic elements, a precise and even precious minuet form which somehow does not seem to fit.[78] For me it embodies a perfect representation of General Average, a complex and messy event punctuated and resolved by moments of high procedural formality.

The utter dominance of the force of nature in maritime trade is a constant over time, its taming a perennial aspiration, careful managing of its consequences a necessity. In the early modern period maritime disasters

[77] I warmly thank Alessandra Campana for our conversations sharing her expertise on Baroque music forms and storm representations.

[78] The peculiar structure of the piece is usually attributed to "Haydn's search for new narrative strategies for a genre caught up in the tensions between the boisterous concert opener, courtly representation, the bourgeois concert hall and the demands of "connoisseurs"", see: F. Diegarten, 'Time Out of Joint—Time Set Right: Principles of Form in Haydn's Symphony No. 39', *Studia Musicologica*, 51/1–2 (2010): 109–126, 109.

affected not just trade in and of itself; rather, their consequences reverberated across the economy.[79] Risk in all its multifaceted expressions is a constituent element of human activities, its economic repercussions a constant societal concern through time and space.

I started this essay noting how the centrality of risk reduction is strongly embedded in every aspect of the maritime enterprise, as any seaborne activity entails high levels of exposure to danger. Risk has also been central to the complex relationship between (maritime) commercial enterprise and its ethical and moral dimensions. During the Middle Ages, in Giacomo Todeschini's words, "it was precisely the constant risks to which [merchants] were exposed that legalised, in the eyes of canonists and theologians, especially Franciscan ones, [merchants'] economic virtue".[80] Francesca Trivellato recently reminded us how "modern scholars of commercial and maritime law are accustomed to thinking that by the seventeenth century, this field of inquiry had entered the sphere of politics and left that of theology",[81] whilst in actual practice the ethical framing of economic activities has been a most active

[79] On the effect of maritime disasters in money supply shocks see: A. Brzezinski, Y. Chen, N. Palma, and F. Ward, 'The Vagaries of the Sea: Evidence on the Real Effects of Money from Maritime Disasters in the Spanish Empire', Working paper No. 170, European Economic History Society, available at: https://econpapers.repec.org/paper/heswpaper/0170.htm (last accessed 30 December 2021).

[80] G. Todeschini, *Ricchezza francescana. Dalla povertà volontaria alla società di mercato* (Bologna 2004), 133; also his *I mercanti e il tempio. La società cristiana e il circolo virtuoso della ricchezza fra Medioevo ed Età Moderna* (Bologna 2002). Particularly important are the works of Giovanni Ceccarelli: 'Le logiche del rischio economico fra XIII e XV secolo', in A. De Vincentiis ed., *Il moderno nel medioevo* (Rome 2010), 201–212; 'Quando rischiare è lecito. Il credito finalizzato al commercio marittimo nella riflessione scolastica tardomedievale', in S. Cavaciocchi ed., *Ricchezza del mare, ricchezza dal mare* (Florence 2006), 1187–1200; 'Risky Business: Theological and Canonical Thought on Insurance from the Thirteenth to the Seventeenth Century', *Journal of Medieval and Early Modern Studies*, 31/3 (2001): 607–658, the latter especially for its analysis of how 'risk' came to assume a 'price'.

[81] F. Trivellato, *The Promise and Peril of Credit: What a Forgotten Legend About Jews and Finance Tells Us About the Making of Commercial Society* (Princeton 2019), 56. An issue also raised by W. Decock, 'In Defense of Commercial Capitalism: Lessius, Partnerships and the *Contractus Trinus*', Max Planck Institute for European Legal History Research Paper available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2162908&download=yes (last accessed 20 December 2021).

of area of debate throughout the history of economic thought, as it is in contemporary politics and policy. In the middle of the twentieth century, for what will most likely prove to be a short period, the paradigm of *homo oeconomicus* triumphed in the developed world, and consequently in its scholarship.[82] Single-minded concentration on the rational pursuit of economic success, through strategies and policies aimed at the maximization of economic profit, was the hegemonic paradigm.

Contemporary societies are now confronted with truly global risks, from climate change and its effects to increasing societal destabilization resulting from growing inequalities. Confronted with the systemic financial crisis afflicting the current hegemonic variety of capitalism, and with increasing concerns especially about global inequality, the classic separation between 'economics' and 'morality and ethics' is blurring again.[83] Once considered one of the pillars of rational modernity, this separation is now increasingly seen as a problematic fissure with potentially dangerous societal consequences. Risk and profit have always been privileged stages where societal ethical values are at the forefront of both economic and political debates. The way in which the associated ethical questions are posited and solved provides an additional dimension. This reframing of the discourse has advanced since the 2008 financial crisis, with its critique of unbridled capitalism, leading to a new impetus in the search for more ethical investments which would lead to more sustainable and equitable economic and social development.[84]

I mentioned earlier how GA has its critics within the maritime sector. However, it is possibly more important to note how the equitable principle behind contemporary GA is also finding new support precisely

[82] The literature on this concept is daunting large, for a recent critical synthesis: D. A. Urbina and A. Ruiz-Villaverde, 'A Critical Review of *Homo Economicus* from Five Approaches', *The American Journal of Economics and Sociology*, 79/1 (2019): 63–93 and bibliography therein quoted.

[83] On rising inequality, just one example which had a massive impact well beyond academia: T. Piketty, *Capital in the Twenty-First Century* (Cambridge, MA 2014) and his *Capital and Ideology* (Cambridge, MA 2019).

[84] M. Mazzucato, *The Value of Everything: Making and Taking in the Global Economy* (London 2018); and her *Mission Economy: A Moonshot Guide to Changing Capitalism* (London 2021).

because of its ethical implications. Gotthard Mark Gauci, one of the critical voices regarding GA, has recently admitted that

> whilst cumbersome and a cause of delay, general average is intended to avoid an advantage for one party at the expense of another; indeed there is a strong argument that a general average contribution to a general average sacrifice can be justified as an operation of the gain-based principle that a legal remedy should be available for *unjustified enrichment*.[85]

*Mutatis mutandis*, the principle of *aequitas* is re-entering contemporary economic policy discourse, from the growing interest in equity-based investments inspired by traditional Islamic law investment instruments, to the search for new ways of sharing profits and losses.[86] Beyond the maritime sector, and within the wider area of transport law, more sustainable transport solutions are drawing inspiration from the mutuality of GA sharing, and the peculiarities of its risk community, to find ways to allocate costs in a more equitable and sustainable manner.[87] Within present discussions on reforms in bankruptcy regulations in the US, the GA principle is being proposed as an example, as it would dictate that stakeholders share costs and losses in proportion to the value of their holdings.[88]

It should be clear now that the history of Averages has much to contribute not just to the historiography of risk management, but also to its future developments, above and beyond the maritime sector. Maritime history for a long time has been a self-contained field, and its relatively recent entry into the mainstream should remind us how embedded it

[85] Gauci, 'Of Piracy and General Average', 249; Italics mine.

[86] S. Nazim Ali, W. Tariq and B. Al Quradaghi eds., *The Edinburgh Companion to Shari'Ah Governance in Islamic Finance* (Edinburgh 2020); N. Mazuin Sapuan, 'An Evolution of *Mudarabah* Contract: A Viewpoint from Classical and Contemporary Islamic Scholars', *Procedia Economics and Finance*, 35 (2016): 349–358; N. H. D. Foster, 'Islamic Perspectives on the Law of Business Organisations I: An Overview of the Classical Sharia and a Brief Comparison of the Sharia Regimes with Western-Style Law', *European Business Organization Law Review*, 11 (2010): 3–34.

[87] Julia Hörnig (Erasmus Universiteit Rotterdam) is currently preparing a project on these issues.

[88] A. J. Casey, 'Chapter 11's Renegotiation Framework and the Purpose of Corporate Bankruptcy', *Columbia Law Review*, 120/7 (2020): 1709–1770.

has always been in European historiography. It is no coincidence that since the times of Plato, the 'ship of state' is the arch-metaphor for good management and respect for reciprocal obligations and needs within human societies.[89]

[89] Plato, *The Republic*, Edited and translated by C. Emlyn-Jones, W. Preddy (Cambridge, MA 2013), 6: 488a–89a.