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Venetian Averages between East and West. Risk Management and Transaction Costs in the Early Modern Mediterranean

(doi: 10.1408/108117)

Quaderni storici (ISSN 0301-6307)

Fascicolo 3, dicembre 2022

Ente di afferenza:

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VENETIAN «AVERAGES» BETWEEN EAST AND WEST

RISK MANAGEMENT AND TRANSACTION COSTS IN THE EARLY MODERN MEDITERRANEAN

Between the thirteenth and seventeenth centuries, Averages played an important (and neglected) role within Venetian maritime trade and shipping, as they functioned both as risk management tools and as a mechanism for the absorption of transaction costs. The essay will trace these normative developments across the phase of economic growth in the Middle Ages, and analyse how these were structurally transformed in the seventeenth century under the pressure of new maritime operators which contributed to the early modern crisis of the Venetian maritime sector. This touches on several elements of the shifting Venetian economy about which we still know very little: the internal balance of interests between different economic sectors; and within the maritime sector itself – shipowners, merchants, investors; and presents a novel interpretation of the resilience of Venetian maritime working capital well into the eighteenth century.

Keywords: Republic of Venice, Mediterranean, Maritime trade, Risk management, Transaction costs, Averages, Armenian Commercial networks.

On the 10th of December 1671 a petition landed on the desk of the Venetian *Collegio*. It was presented collectively by «Armenian merchants», as frequently happened in such cases, no individual names were mentioned. The petition highlighted a series of abuses in the handling of Averages in Venice¹. The text opened with an acknowledgement of the particularly wide usage of Averages in Venice, stating the Armenian merchants had no problem with this. However, referring directly to shipping and trade with the Eastern Mediterranean, the Arme-

The research for this article was conducted thanks to funding from the European Research Council: ERC Grant agreement No. 724544: AveTransRisk – Average – Transaction Costs and Risk Management during the First Globalization (Sixteenth–Eighteenth Centuries). I wish to thank the whole team of the project for 5 years of scientific dialogue and close collaboration, I also wish to thank Anna Pizzati for help in accessing documents during difficult times for archival access, and Isabella Cecchini for our many conversations on these issues, and for her sharp comments on a previous version of this essay.

nians complained that too many types of expenses were accepted into Averages, and their amounts were too high, especially as most of these expenses should have been covered by the shipping freights «which are considerable». Amongst the expenses listed were: donations to Ottoman officers, various bribes to allow the departure of ships, miscellaneous expenses in ports, costs related to the change of flags, consular duties and «infinite other expenses». Then came the alleged abuses, as the Armenians argued that the clerks in charge of the early parts of the procedure – the *Capi delle Varee* – were shipowners themselves and frequently acted out of their own self-interest and greed, not properly applying the Republic's laws. Two points are worth remarking about this opening statement: it started with the traditional appeal to the wisdom of the Republic's legislation – an essential rhetorical element in petitions – and the blame for the problems was (as always) apportioned to the clerks and those in cahoots with them, who did not apply rules properly. Secondly, the accusations against these clerks amounted to what today we would define as a conflict of interest, namely that their actions «in office» were not for the public good, but driven by their private interests and financial greed.

Whilst acknowledging that the Venetian courts of justice fought these abuses and tried to appropriately enforce the extant legislation, the Armenians highlighted how this did not free them from the stress and expenses of litigation, something which cost them time and money, causing a general slowing down of commercial operations, and was also keeping trade away as «many Armenian merchants avoid loading for Venice because of these costs». Once these additional expenses – redistributed amongst all participants in the venture through Averages – were added to the cost of freight, trading through (and with) Venice was simply unprofitable. Their argument was that most of these expenses were simply part and parcel of being a shipowner and therefore should have been already covered by the freight. They therefore concluded their petition by asking that the existing Venetian legislation regarding what was legitimate to put into Averages should be enforced, and these abuses curbed.

Petitions were commonplace in Venice as the swiftest way for subjects and stakeholders to alert the government about their concerns. In contemporary terms, petitions can be defined as an institutional lobbying mechanism². A few words of caution are needed, as tools of political pressure, petitions were dramatic in tone and this one is no exception, phrased as it is with the customary oscillation between humility («Your Serenity's most humble servants» being the usual form of self-address) and veiled threats regarding the Republic's income, associated with

these adverse business conditions. English merchants in this period ended their petitions with the threat that, unless something was done about the issue under consideration, they would pack and take their business to Livorno, it's worth highlighting that the Armenians did not directly employ this threat.

The number of petitions regarding economic matters had been steadily increasing over the previous century. The *Collegio* did its job by relaying the petition to the relevant magistracies, who would then provide their own opinion on the matter and revert back to the *Collegio* – which basically meant to the Senate as the *Collegio* set its agenda – where the real executive power lay in Venice. This specific petition was duly forwarded to the *Cinque Savi* (the Venetian Board of Trade), tasked with providing their opinion on economic matters³.

The *Savi* gave their formal reply to the *Collegio* at the end of January. They reiterated the validity of the existing legislation, reminded the *Collegio* and Senate that they had already tightened Averages' rules a dozen years before, and ended their report supporting the Armenian requests, as some of the cited unfair expenses were indeed the responsibility of the shipowners and, by paying freight, merchants should have fully satisfied their duties in this regard. As per the conflict of interest, the *Capi di Varea* had only recently been reinstated with a supervisory role to check the validity of Average reports and the amounts requested, and then to pass the paperwork to the appropriate Magistrate (the *Giudici del Forestier*) for approval, thus starting the procedure of apportioning and payment itself. The *Savi* acknowledged that the Armenians might have had a point about the conflict of interest posited by the election of shipowners to these posts, and therefore they would make sure that future elections would have appropriate candidates, cognisant of the tasks but without direct interests in ship ownership. To this end they recommended the addition of a clause to their own 1658 *terminazione*⁴, specifying that those standing as *Capi di Varea* «could not own vessels or shares thereof»⁵. At the beginning of February the *Senato* approved the *Savi*'s proposals⁶.

The petition had achieved its aim. Extant legislation was confirmed and further tightened, and rules were tweaked to resolve the raised issues. Over the next few months, the work of the Venetian magistrates continued behind the scenes, by the beginning of August the new rules had been defined, approved and published, and the new *Capi delle Varea* had started their two years' term in office⁷. By the following September though, cracks were appearing in this settlement, with the *Cinque Savi* complaining to the *Collegio* that the reforms were not being

properly implemented and the authority of the newly elected *Capi* was being contested⁸.

Why did I choose this particular episode to introduce the analysis of Averages in Venice? On the surface it is just a run of the mill complaint about excessive charges and lobbying for the correct application of existing laws. But many other elements emerge with closer observation, which are crucial for a correct understanding of the commercial and political dynamics behind Venetian Averages, their peculiarities and evolution over time. To properly understand the importance of this controversy, and the reasons for such continued institutional attention to it, it is necessary step back in time and analyse the complex and long history of Averages within the Venetian maritime world.

The essay will start by defining Averages and tracing their medieval roots in Venice, then it shall discuss their application and peculiar relationship with insurance, contextualising this within the political, military and economic background of the seventeenth century. The essay will conclude with some considerations on how the analysis of Averages allows a novel appraisal of how Venice approached risk management, transaction costs and jurisdictional problems within the maritime sector pointing to the need of further analyses of these issues.

The Roots of Averages in Venice

By far the best known type of Average is «General Average» (hereafter GA), which is still today an essential element of the shipping business. Its contemporary definition – as given in the 2016 version of the York-Antwerp rules which regulate it – is that «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»⁹. GA's most distinctive element – jet-tison – is already referenced in the Bible¹⁰, and its earliest legal evidence is the *Lex Rhodia de Jactu*, whose establishment is traced back to pre-classical times, and whose text became part of Justinian's *Digest*¹¹. Its basic and central principle of «deliberate sacrifice for common benefit» was agreed upon across the centuries and in different legal traditions, however its practical implementation – regarding its applicability and apportioning – varied across different jurisdictions in Europe. General Average reports had to be completed and certified in the first port encountered after the event which generated the exceptional expenses, and the apportioning usually happened in the intended destination of

the venture, hence they have always been eminently transnational legal instruments, and historically handled in a flexible way across all jurisdictions, as there is an operational need to complete them in a timely manner so as to minimise their cost and impact on the flow of trade¹².

However, it is important to keep in mind that in the pre-modern period there were many varieties of Averages, and GA was just one of many¹³. Medieval and early modern documentation does not always distinguish between these different types, and this has frequently confused contemporary scholars who generally assume that all Averages they encounter in the premodern primary evidence were GA when, frequently, they were not.

Extant documentary evidence clearly shows that Averages had a far wider application in Venice than elsewhere, exceeding what was described in the legal literature and associated scholarship, as for the latter it is important to note that it discusses the eighteenth-century situation when reforms across Europe had limited their application¹⁴.

Rules and regulations regarding Averages in Venice are present in the earliest legislation, including the Civil Statutes of Doge Jacopo Tiepolo (1242). The first mention of the word Average (*varea*) appears in the 1255 *Statuta et Ordinamenta Super Navibus*, promulgated under the aegis of Doge Ranier Zeno. This can be defined as a proper code of shipping laws and regulations, in the words of Albrecht Cordes, «Venice regulated all aspects of navigation in such a precise and rigorous manner that the *Statuta navium* could be easily mistaken for the product of Early Modern jurists»¹⁵.

These *Statuta* gave extensive attention to Averages¹⁶, and from their provisions it clearly emerges how the Venetian normative tradition was shaped not just by the *Lex Rhodia*, as received by the *Digest* and thence in *ius commune*, but even more so by Byzantine regulations. This descends from the influence of Byzantine laws and rules not just in Venice, but all across the Adriatic region, due to the uninterrupted maritime traffic throughout the Middle Ages¹⁷. The crucial text in this regard is the ninth-century legal collection known as the «pseudo-Rhodian compilation» (*Νόμος Ροδίων Ναυτικός*)¹⁸. The major differences between Averages' rules as described in the pseudo-Rhodian compilation and those in the *Lex Rhodia de lactu* concern precisely the extension of the situations in which Averages contributions could be applied¹⁹.

In his detailed, and still unsurpassed, analysis of medieval maritime laws around the Adriatic, Guido Bonolis argued that the Pseudo-Rhodian rules imply the existence of a stronger and wider community of risk amongst the participants in the maritime venture, to the point of creating a form of mutual insurance²⁰. Bonolis even argued that the rules

contained in the *Nóμος* admit the option of a shared contribution in all fortuitous accidents where there is no liability of the ship master²¹. This extension of the cases when damages are shared, regardless of whether these extraordinary expenses are the result of a deliberate action, eliminates a crucial element which underpins the institute of General Average as we know it today, and points to the importance of taking into account the variety of Averages, a point to which I shall return later on.

In line with all scholars dealing with these issues, Bonolis' focus and attention was on Averages as a tool of risk management, and thus he convincingly argued that widening the risk community was an efficient response towards the dangers of early medieval shipping, and especially functional to the Venetian setting as the diffused ownership of vessels and goods facilitated the adoption of this usage²². During the following centuries, the Venetian government continued to regularly issue legislation on maritime matters to accommodate the changes in its political, military and economic status²³. Averages' rules were part of these developments, and their regulation shows a rhythmic widening and narrowing of their applicability, reflecting the dangers due to piracy and corsairing²⁴.

Risk management was certainly an important issue for Venetian legislators, as evidenced by the many provisions for the protection of commercial shipping that characterised their legislative actions. One element of this focused on the increase of military protection, another was the introduction of state-controlled shipping – the famous state galleys system²⁵. With the increase and widening of private commercial shipping came also a growing attention towards the quality and maintenance of the ships themselves²⁶. It appears coherent with the corporate nature of the Venetian state, to assume that this was also a way to make all stakeholders in the maritime enterprise directly involved in making sure the ship was seaworthy, and the cargo appropriately stowed. From the primary evidence emerges also a clear awareness that a wide application of Averages could facilitate abuses, as it could provide a way to deflect the costs of poor maintenance and old ships away from shipowners and onto merchants²⁷.

In June 1428 the Senate promulgated an important law, severely restricting the applicability of Averages to cases of jettison concerning cargo (only if properly registered and correctly stored), and to damages which resulted from piracy. This law clearly stated that these rules were being issued to combat abuses on part of shipowners who, «under the colour of Averages», were shifting costs and expenses on merchants²⁸. It is worth noting that already the following year, their applicability was again extended to cover other expenses such as those connected with

pilotage²⁹, but the 1428 law remained a watershed in formally limiting Averages' applicability, and this law was specifically referenced in the *Savi's* response to the Armenian petition.

Two and a half centuries had passed since, but the issue of the divergent interests between merchants and shipowners – «cargo» and «hull» in contemporary parlance – was at the forefront of both the Armenian petition and the Venetian government response.

Averages in Seventeenth Century Venetian Trade and Navigation

At the time of the Armenians' petition in 1671, the Republic was just emerging from the War of Candia, a long conflict (1645-1669) which ended with the loss of Crete, one of the most important Venetian colonies ever since its acquisition at the time of the Fourth Crusade, and its last major holding in the Eastern Mediterranean. The support of foreign shipping had been essential during this conflict by providing logistic support for the navy, and shipping services for merchants in the Eastern Mediterranean³⁰. Since the beginning of the seventeenth century Northern ships had also been purchased by Venetians in increasing numbers, once naturalised these could take full advantage of the customs benefits in place for Venetian ships, alleviating the effects of the shipbuilding crisis³¹.

Venice had seen a sharp increase in defence costs and a diminution of maritime traffic since the 1570s, when the previous war with the Ottomans had resulted in the loss of Cyprus. The situation had been compounded by the difficulties in the maritime trade with the Levant throughout the Candia conflict, as it had not been possible for Venetian shipping to trade on Ottoman shores. Traffic did continue, but on neutral vectors and through intermediaries, thus incurring higher costs and lower profit margins³².

In Venice, customs and duties remained higher for foreign merchants, further contributing to the overall decline in maritime traffic, of which the main beneficiary was Livorno. As a measure to encourage maritime trade, Venice attempted the establishment of a sort of *portofranco*, granting customs exemption for goods arriving in Venice via sea, an experiment lasting between 1662 and 1684, which was ultimately deemed a failure. It is difficult not to agree with Massimo Costantini's assessment that Venice's geographical position alone made it unsuited for a *portofranco*, which is designed to attract transit trade³³.

If Venice was in crisis, the Armenians were instead experiencing a period of economic ascendancy. The death of Shāh Abbās (1629) and

the decline of the Safavid dynasty had acted as a stimulus to expand their activities on the global scale, beyond their well-established strength in the silk trade³⁴. During the second half of the seventeenth century, they were expanding their networks by forging new links and diversifying their commercial investments³⁵. Venice was one of those European centres where their presence and activities were steadily growing³⁶. Their complaint on Averages was just one example of the increasing number of petitions which they were submitting to the Venetian government³⁷.

In early 1672 the Armenians had also petitioned for the exemption of silk from the land entry customs. The *Cinque Savi* had firmly opposed this petition, arguing that the whole point of the *porto franco* was to incentivise maritime trade, and allowing custom-free entry to silk arriving via land would have meant both damaging maritime traffic in Venice and favouring Livorno. They argued that «the Armenians, who have this Persian trade [silks] in their own hands» would ship these from Smyrna to Livorno instead of Venice, with the result that most Armenian capital would have been employed in Livorno, something to be avoided at all costs³⁸.

In October 1672, just one month after the *Savi* had expressed their concerns on the application of the new regulations, Venetian shipowners entered into the fray by submitting their own petition. The *Cinque Savi* had been scathing in attributing the Armenians' complaints to the «greediness of very many ship owners» who «submit such [expensive] Averages as to absorb all expenses due to the ship, and not to the cargo»³⁹. In this context it is also worth noting that, given their specialism in small volume/high value merchandise, the Armenians were particularly heavily hit by Average partitioning.

The shipowners opened their petition with a reminder of the deep crisis of Venetian shipping: low demand did not allow to raise freights and high running expenses could obliterate all profits. They stressed how the wide application of Averages in Venice – «uninterrupted for centuries» – had been supported precisely to protect the sector.

Unlike the Armenians, Venetian shipowners knew the subtle internal politics of the government, and the wording of their petition described in detail how jurisdiction over Averages was shared among many governmental bodies. Since the mid-fifteenth century, Average declarations needed to be first checked and approved by the *Capi di Piazza*, formally authenticated by the *Giudici del Forestier*, then calculations and payments passed onto the *Giudici dell'Estraordinario*, whilst any disagreement and litigation came in front of the *Forestier*. By this point the *Capi di Piazza* had been substituted by the *Capi di Varea*, but the detailed description of the overlapping competencies of these

magistracies showcased the practical cooperation of different governmental bodies in supporting this long held usage and procedure. The reforms introduced to limit the recourse to Averages were defined by the shipowners as «against the universal opinion» of commercial operators active in Venice⁴⁰. Freight was barely sufficient to cover shipping costs, and sharing additional expenses between cargo and ship through Averages (2/3 cargo; 1/3 ship) was the only way to keep traffic viable⁴¹.

Within the papers of the *Cinque Savi* is preserved another petition that, although not signed or dated, builds on the arguments brought forward by the shipowners⁴². This document is more detailed in spelling out the importance of Averages, and it candidly tackles the issues at the core of not just Averages, but maritime rules and regulations in general. It opens by stating that Averages were essential to shipping, then refers to the many laws promulgated by the Senate, also declaring how continued «usage has made them into inveterate law»⁴³. The petition argued that it was crucial to continue to allow a wide usage of Averages:

as many fortuitous cases happen [during navigation] which is not possible to predict or imagine, therefore they cannot be mentioned in the rules, even though they can have massively relevant [financial] consequences⁴⁴.

How would the Venetian mercantile community deal with such cases, when the costs of the unexpected event could easily be more than freight, and these additional costs could not be apportioned between merchants and shipowners? The petitioners mentioned the very recent case of the ship *Rosa Moceniga*, whose specific type of damages were not listed amongst those admissible for apportioning through Averages, but had been accepted nonetheless by the *Capi di varea* «convinced by the correctness of this case, thus requiring equity»⁴⁵ with all parties satisfied of this outcome⁴⁶. As such cases, which did not fall exactly within the letter of the law, happened all the time, the shipowners petitioned for the abolition of the new rules.

The text was at pains to emphasise how all loyal Venetian subjects, and those used to do business in the *Piazza*, had no problems with the old regulations, and complaints came just from newcomers. They argued that to pacify the Armenians, authorities were running the risk of alienating shipowners, who were essential to the maintenance of Venetian trade as «without shipping trade dies»⁴⁷. The concluding passage made clear that the issue was not that of a simple opposition – locals v. foreigners – but between those who knew local usages and newcomers who rejected them:

it should not be permitted that where the will of subjects and foreigners coincides, the [will of] the Armenian Nation with universal prejudice can unjustly refuse to cover those expenses which are done for the benefit of their trade⁴⁸.

In response to this petition, the *Collegio* duly asked all three magistrates for their replies, thus starting a toing and froing on jurisdictional matters which was the blueprint of early modern Venice governmental action⁴⁹.

The *Cinque Savi* replied summarising the issues at play, praising the *Rosa Moceniga* settlement, but also expressing their concern that changing the rules might open the door to endless litigation⁵⁰. The *Giudici del Forestier*, after forcefully stating their jurisdictional role in the evaluation of Averages, underlined how much legislative effort had been dedicated to the matter, which in their view meant that a modicum of pragmatism should be part and parcel of dealing with Averages⁵¹. The third response came from the *Giudici dell'Estraordinario*, who were in charge of the actual financial settlement⁵². They also supported the wide usage of Averages, aligning their evaluation and suggestions with those expressed by the *Forestier*. In short, from these responses emerge a consensus that apportioning extraordinary expenses through Averages was positive for both trade and transport, and that the Armenian's complaints were not representative of the commercial operators active in Venice. To summarise, the Venetian usage of Averages was an active form of market manipulation to keep both freight and insurance costs lower, and in this way help the government's strategic objective of supporting trade and shipping to the Ottoman Levant.

Averages, Insurance and Transaction Costs: the Venetian peculiarities

In discussing Averages from both the economic and the legal perspective, attention is usually given to their role as a risk management tool. It is striking to note instead how, throughout the documentary trail generated by the Armenian petition, the central issue discussed by all stakeholders – merchants, shipowners, governmental magistrates and officers – is more on their role in managing transaction costs. It is also interesting to note how, throughout these exchanges, there is no mention of insurance, which is rather peculiar given the constant pairing of Average and insurance from the early modern classic treatises on maritime law⁵³, to the economic literature, which treats Averages as a precursor of insurance proper⁵⁴.

In Venice, Averages and insurance were separate, the major peculiarity of the Venetian insurance contract – as opposed to the Genoese or Florentine templates – laid precisely in being «free of averages»⁵⁵. In practice this meant that, for those contracts underwritten in Venice, most of the unexpected costs of maritime trade were apportioned through Averages, and insurers covered just about only total loss⁵⁶. This separation was clear also jurisdictionally, I have sketched above the magistracies overseeing Averages during the early modern period – principally the *Giudici del Forestier* that certified their reports⁵⁷, and the *Giudici dell'Estraordinario* that took care of the actual financial side of apportioning costs. Jurisdiction over insurance fell instead within the remit of the *Consoli dei Mercanti* and the *Cinque Savi alla Mercanzia*⁵⁸. In Venice we are thus confronted with a unique situation as for centuries there was no overlap between Averages and insurance, whilst in the rest of the Italian peninsula since the Middle Ages it had been common for insurance to provide fully comprehensive coverage – that is to say, including expenses related to Averages⁵⁹.

The expression «free of averages» covered a variety of different solutions and was articulated in different ways across different jurisdictions. This was at the root of misunderstandings and litigations which stimulated a lot of jurisprudential reasoning and discussions on the topic⁶⁰. By the beginning of the nineteenth century there were still different applications of this clause across Europe and Italian states, but in general it was interpreted as freeing insurers from all Averages, with the exception of General Average⁶¹. In this way insurers were protected against small claims, which were time consuming and sometimes of lesser value than the administrative costs⁶².

And here we come to an issue which is at the root of much confusion in the secondary literature, as much of it treats all historical Averages as if it were cases of General Average. However in Venice, as across the rest of Europe, during the Middle Ages and in the Early Modern period there were several different types. Over time many fell into disuse, when Domenico Azuni wrote his famous *Dizionario Universale ragionato della giurisprudenza mercantile* at the end of the eighteenth century he listed just two main types: «general» and «particular»⁶³. The former corresponding to General Average, the second type – also referred to as «simple or common averages» – applied instead to all those expenses due to damages to ship and cargo resulting from accidents in navigation. These costs fell on their owners and generally were not to be proportionally shared amongst all participants in the venture. However, just one century earlier, Carlo Targa had listed many more varieties: «ordinary», «extraordinary», «mixed», «extraordinary-voluntary», «Indian

or Portuguese», «English or Dutch», and finally «gross»⁶⁴. An equally dazzling variety appears in the early modern Iberian world, where the *avería* was also a type of tax to cover protection costs⁶⁵, and in the sixteenth century Low Countries where creative legal hybridity characterised their development⁶⁶.

Different varieties of Averages formally existed also in Venice: *grossa o comune* was used to indicate extraordinary expenses for damages to the ship or to the freight; *semplice* described damages caused by natural defects of the merchandise; *ordinaria* included the expenses of packing, loading and insuring; the documentation occasionally also mentioned the *estraordinaria*, which appears to be used regarding extraordinary expenses for the continuation of the venture⁶⁷. Unfortunately these distinctions are not clearly stated in the primary evidence, where they are all described as Averages – *varee* (sing. *varea*). It is also clear from the shipowners' petition how the contested expenses were a mix of General and Particular ones:

with usage which has been continuous and uninterrupted for centuries, in this City [Venice] have been put into Average those expenses done for leaving harbours, and for being [forcibly] kept there, and others which extraordinary accidents brought, for the benefit of merchant and ship, as those expenses done in this City necessary for the unloading and safety of the merchandise, and of these only 2/3 were charged to the merchandise, and 1/3 to the ship⁶⁸.

Those certified by the *Forestier* include many cases that would be considered as General Average, and many more which were clearly not compliant with GA requirements. Azuni would have defined most of these Averages as «particular», hence their expenses should have been falling on the individual owner of the goods/ship, however in Venice many of these were also apportioned amongst all the stakeholders in the venture, much to the Armenians' chagrin. Today we would categorise many of these Averages as «transactions costs», Douglass North's comment on their capacity to «erode, or eradicate entirely, anticipated profit margins» is particularly apt in this context, because this was exactly the reason why Venetian shipowners were so keen on them⁶⁹.

Even though not mentioned in the documents, insurance played an important role in these developments. Since the last quarter of the sixteenth century the piratical activities connected with the Anglo-Spanish conflict and then the growing activities of North African corsairs had made Mediterranean waters very dangerous⁷⁰. One of the major economic consequences of this had been the rise of insurance premiums on the Venetian market as, in the words of Alberto Tenenti, «maritime

insurance was the only defence which individual merchants had against the risks of navigation»⁷¹. The rise of premiums had put Venetian shipping and trade at a comparative disadvantage vis-à-vis her competitors, and this was made worse by the concomitant crisis of Venetian ship-building⁷². However, it is also important to note that the crisis in ship-building does not appear to be exactly mirrored in ship owning, which shows some resilience in the late sixteenth and seventeenth century, once vessels purchased abroad by Venetian citizens and subjects, and those built in the *Stato da Mar* are considered⁷³.

When all these elements are considered, the widespread usage of Averages on the Venetian *piazza* appears to be not just a mechanism for risk management, and a measure against rising insurances premiums. I would further argue that the extension of pro rata apportioning to other types of Averages, was a mechanism actively employed to support the shipping sector by shifting shipping transaction costs away from shipowners and onto merchants. What emerges then is that insurance was *not* the only defence against navigation risks, but that the extension of Averages was another tool available to manage these risks.

The Armenians in 1671 had complained about abuses, but not really put into question the wide use of Average in Venice; their commercial fortunes were rising, but their negotiating power was affected both by their reliance on Venetian shipping and by the fact they did not have the backing of a state to argue in terms of jurisdictional reach.

At the beginning of August 1680, John Hobson, the English consul in Venice, submitted a petition on Averages, and the debate started again⁷⁴. The English came to the issue from a very different perspective as Averages were regulated in a rather different way in England, and their application both in Venice and Livorno had already been a matter of negotiation in the 1670 extraordinary embassy of Lord Fauconberg, although, amongst the many issues of that mission, this one had fallen by the wayside⁷⁵.

Hobson's petition, short and to the point, claimed that English merchants and ships were being forced by the *Capi di Varee* to put into Averages some expenses – such as those related to quarantine – even though English shipowners and merchants did not want to do so, hence he was asking for a quick redress of the situation. Both the *Forestier* and the *Cinque Savi* replied that there was no compulsion to use Averages, and that the *Capi* were abusing their role. The Senate acted swiftly and by the end of September decreed that English ships should not be obliged to submit Averages reports⁷⁶.

Buoyed by his swift success, Hobson presented another petition the following month related to Averages, this time contesting the compulsory requirement to hire a pilot in Istria. That of the *pedotti d'Istria* was one of those expenses customarily apportioned through Averages that had been directly addressed in the 1429 amendment to the 1428 restrictions to Average partitioning, and reconfirmed as legitimate. It was clearly not an «extraordinary» expense as, since «time immemorial», all ships had been compelled to stop in Istria and pick up a pilot to cross the Adriatic and enter the lagoon⁷⁷. This was argued to be a necessary safety measure, although one cannot avoid thinking that there was a strong element of control of maritime traffic behind it⁷⁸. There are many interesting elements in the connection between Averages and *pedotti* and no space to discuss them in this essay, but what is important to note here is that this petition was presented also in the name of Flemish merchants and shipowners, and that the Senate once more responded positively to the petition, and granted only the English and Flemish (the «Northerners») the freedom to choose whether to pick up pilots in Istria or not, as long as they continued to pay the relevant fees⁷⁹.

Conclusion

The Armenian's perspective behind their 1671 petition on Averages had been that of merchants, evidence of their dependence on third party shipping, in this case Venetian, and of the relative strength of the Venetian demands for those Persian silks whose traffic they controlled. It can also be seen as indirect evidence of a relative resilience of the Venetian shipping sector in the late seventeenth century which is worthy of further investigation.

If the Venetian government's response had been positive towards the petition on Averages, it is worth noting how these measures had been opposed by both Venetian shipowners and by those governmental magistracies involved in the consultation process. These two elements point towards an increasing distance between governmental authorities and those active on the *Piazza*, which would be in line with the traditional interpretation of the growing distance between the ruling class and Venetian commercial operators in this period. On the other hand, these decisions also show how the Republic's major governmental bodies were ready to implement change in response to the demands of those commercial operators – even if foreigners – whose presence was deemed strategic for the success of that same *Piazza*⁸⁰. There is impeccable economic rationale in the Venetian's granting the Armenians'

requests regarding Averages whilst denying that regarding the exemption from land duties on silk imports. The former supported the arrival of ships in Venice, the other would have indirectly helped Livorno, the alternative outlet of Persian silk in the Italian peninsula, where Armenians instead relied on the ships of Venetian competitors, be they English, Dutch or French.

The English (and the Flemish) in 1680 came instead into the debate from the perspective of both merchants and shipowners, their role in intra-Mediterranean shipping already well secured after a century of steadily increasing engagement there. Unlike the Armenians they did not rely on Venetian shipping, indeed since the beginning of the seventeenth century they had usually provided shipping services to Venetians and sold them their ships⁸¹. They were so deeply embedded into Venetian maritime trade to have acquired the self-confidence, and effective power, to challenge its traditional workings.

Their problem was not so much with General Average, but with those Particular ones which Venetian operators were still expecting to be apportioned. Northern ships were in high demand in the seventeenth century Mediterranean, as they were cheaper to insure and could demand higher freights than Venetians could, thanks to their superior technology and heavier armament. Diplomatic and consular presence supported Northern merchants' interests more than those of the many independent English and Dutch shipowners which sailed in the Mediterranean. Under these circumstances it is not surprising that they were less interested in supporting the wide use of Averages which characterised Venetian shipping.

In 1693 rules further tightening Averages procedure were issued⁸². Once again the *Savi* openly lamented the lack of cooperation of other governmental bodies in enforcing the rules, as they stated the need for the *Capi di Varea* to stop allowing into Averages cases not listed in the 1672 regulations. By 1710 the Senate approved a *Cinque Savi* ruling which brought forward a further tightening of the rules. The limits originally set in 1428 and tightened in 1672 were confirmed, and further rules were set requiring specific certified receipts to be produced before costs could be shared through Averages⁸³. The reforms set into motion by the Armenians' petition were important and wide-ranging, and the result was indeed to bring back the whole concept of Average within a format more in line with general European usage and which in practice restricted them to General Average.

Within the Venetian maritime sector, Averages played a central role for centuries and evolved into a full-ranging system not just for risk management, but also for the apportionment of transaction costs. The

success and resilience of Venetian maritime trade during the Middle Ages had been underpinned by collective action and, notwithstanding some tensions, by the cooperation of public and private enterprise⁸⁴. For centuries this system had been both efficient and effective within a somewhat restricted community of economic players, but this was put under strain from the sixteenth century by the arrival of external players. As much as the handling of General Average was a truly transnational affair, when it came to other types of Averages, their usage was very localised, and this generated both diplomatic negotiations, and local lobbying⁸⁵.

Newcomers to the Venetian maritime system – be they English, Flemish or Armenians – brought with them new technologies and commercial techniques, and their actions were governed by economic interests that were shaped by different approaches to the political and legal underpinnings of commerce and shipping. Being actively involved in the local maritime sector forced them to find a compromise between local usages and jurisdictions and their own interests, however they were not invested in supporting Venetian shipping, as its crisis was benefitting them by stimulating demand for their ships and services.

Notwithstanding strong opposition by local operators, the Venetian government response to these complaints was swift, and willing to implement reforms – so much for the traditional image of a fossilised Republic. Between the end of the seventeenth and the beginning of the eighteenth centuries these reforms aligned the Venetian use of Averages to the rest of Europe. However, if the upper echelons of the governmental magistracies appeared willing to reform, local commercial operators were resistant to change, and the magistracies in charge of operationally applying and enforcing legislation sided with them, practically resisting the enforcement of reforms. The ways these reforms were – or were not – implemented, should give scholars pause for thought and stimulate further research work on several elements of the shifting Venetian economy about which very little is known, such as the internal balance of interests between different elements of the maritime sector – namely trade and shipping – and how these interplayed in the actual functioning of the *Piazza* during the seventeenth and eighteenth century. No one denies its decline in this period, however the central focus of the Venetian political economy discussions and legislative effort remained concentrated on the ‘sea facing’ side of the economy. Until its very end, the ruling bodies of the Republic continued to give priority to the discussion and legislation on maritime matters, and the reasons behind this attitude need a thorough reconsideration. The comparative analysis of risk management and transaction costs within the Venetian

maritime world is a field which can provide answers to both the crisis and the resilience of the Republic's maritime vocation.

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Notes

¹ Archivio di Stato di Venezia [hereafter ASV], *Collegio, Risposte di dentro*, filza [hereafter f.] 77, carte non numerate [hereafter cc.n.n.], *sine data* [hereafter s.d.] (10 December 1671).

² On Venetian petitioning see R.C. DAVIS, *Shipbuilders of the Venetian Arsenal: Workers and Workplace in the Preindustrial City*, Baltimore-London 1991, pp. 183-97.

³ M. FUSARO, *Political Economies of Empire in the Early Modern Mediterranean: The Decline of Venice and the Rise of England, 1450-1700*, Cambridge 2015, pp. 52, 179-80 and bibliography therein quoted.

⁴ A copy of this *terminazione* is in: ASV, *Compilazione delle leggi*, prima serie, busta [hereafter b.] 63, (11 July 1658), carte [hereafter cc.] 115r-v (modern numbering in pencil). On the reinstatement after a long period of absence, they refer to «con terminazione de Pregadi di noi Cinque Savi di Mercantia di 11 luglio 1658».

⁵ Ivi, *Cinque Savi alla Mercanzia, Risposte*, registro [hereafter reg.] 157, cc. 10r-v (27 January 1671mv). In Venice the year started on 1 March; for dates between 1 January and the end of February, the abbreviation mv [*more Veneto*] shows that it is a date following the Venetian-style calendar, and therefore it is necessary to add a unit to the figure of the year.

⁶ Ivi, *Compilazione delle leggi*, prima serie, b. 63, printed copy at cc.119r-v (6 February 1671mv).

⁷ Ivi, *Cinque Savi alla Mercanzia, Risposte*, reg. 157, c. 50v (19 July 1672), the text of the *terminazione* is at: ivi, c. 51r (13 July 1672); another copy in ASV, *Compilazione delle Leggi*, prima serie, b. 63, c. 121r; the Senate approval is in ivi, *Senato, Deliberazioni, Mar*, reg. 138, c. 125 (3 August 1672); another copy in ivi, *Cinque Savi alla Mercanzia, Risposte*, reg. 157, c. 53v; unfortunately there is no additional material in the relevant *filza* of the Senate.

⁸ Ivi, *Cinque Savi alla Mercanzia, Risposte*, reg. 157, cc. 65v-6v (13 September 1672).

⁹ «York-Antwerp Rules» (YAR) Comité Maritime International (CMI), 2016, Rule A: at <https://comitemaritime.org/work/york-antwerp-rules-yar/> [last accessed 8 March 2023]. *Italic mine*.

¹⁰ *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, pp. 107-26; E. MATAIX FERRÁNDIZ, *Will the Circle Be Unbroken? Continuity and Change of the Lex Rhodia's Jettison Principles in Roman and Medieval Mediterranean Rulings*, in «Al Masāq», 29/1 (2017), pp. 41-59.

¹¹ On the origin of the *Lex Rhodia* and its tradition within Roman law and the *Digest* see the contributions of Daphne Penna (*General Average in Byzantium*) and Andrea Addobbati (*Principles and Developments of General Average: Statutory and Contractual Loss Allowances from the Lex Rhodia to the Early Modern Mediterranean*) in M. FUSARO, A. ADDOBBATI, L. PICCINNO (eds), *General Average and Risk Management in Medieval and Early Modern European Maritime Business*, Cham 2023, pp. 95-119 and pp. 145-66.

¹² For the different ways in which this flexibility was implemented see the contributions in *General Average and Risk Management* cit. For a comparative view of Averages development in the Islamic Mediterranean see: H.S. KHALILIEH, *Admiralty and Maritime Laws in the Mediterranean*

Sea (ca. 800-1050): the Kitāb Akriyat al Sufun vis-à-vis the Nomos Rhodion Nautikos, Leiden 2006, and ID., *Islamic Maritime Law: An Introduction*, Leiden 1998, ch. 3.

¹³ *General Average and Risk Management* cit.

¹⁴ D.F.N. [Filippo NANI], *Prattica Civile delle Corti del Palazzo Veneto*, Venezia, Leonardo Pittoni 1694, pp. 115-8; M. FERRO, *Dizionario del diritto comune e veneto*, 2 vols., Venezia 1845, I, pp. 199-205; W. PANCIERA, *Navigazioni, piloti, testimoniali e naufragi nell'Istria del Settecento*, in «Mediterranea», 11 (2014), pp. 83-106; ID., *Testimoniali veneziani di avaria marittima (1735-1764)*, in «Mediterranea», 13 (2016), pp. 517-68.

¹⁵ A. CORDES, *Conflicts in 13th Century Maritime Law: A Comparison between five European Ports* (2020), in Oxford U Comparative L Forum 2 at oucll.law.ox.ac.uk, after footnote 20 [last accessed 8 March 2023]. A synthetic analysis of the interconnection between commercial and maritime normative development is in G. RÖSCH, *Le strutture commerciali*, in G. CRACCO, G. ORTALLI (a cura di), *Storia di Venezia dalle origini alla caduta della Serenissima*, vol. 2: *L'età del comune*, Roma 1995, pp. 437-60.

¹⁶ R. PREDELLI, A. SACERDOTI (a cura di), *Gli statuti marittimi veneziani fino al 1255*, Venezia 1903, see ch. 74-9, at pp. 138-43, and ch. 95-96, at pp. 151-2. See also J.-M. PARDESSUS (dir.), *Collection des lois maritimes antérieures au XVIII^e siècle*, 6 vols., Paris 1828-1845, vol. 5, pp. 20-59. It is worth mentioning that the *Statuta* chapters edited by Predelli and Sacerdoti have a different numbering from those in the Pardessus' edition (on this CORDES, *Conflicts in 13th Century Maritime Law* cit., footnote 21 [last accessed 8 March 2023]).

¹⁷ N. BOGOJEVIC-GLUSCEVIC, *The Law and Practice of Average in Medieval Towns of the Eastern Adriatic*, in «Journal of Maritime Law & Commerce», 36/1 (2005), pp. 21-59.

¹⁸ This is also (unhelpfully) known as the *Rhodian Sea Law*, causing some confusion in the literature, hence in this essay I shall refer to it as «pseudo-Rhodian». See: G. BONOLIS, *Il diritto marittimo medievale dell'Adriatico*, Pisa 1921, pp. 57-69; PENNA, *General Average in Byzantium* cit.

¹⁹ BONOLIS, *Il diritto marittimo medievale* cit., p. 60.

²⁰ Ivi, p. 66.

²¹ «Si può pertanto concludere che il Νόμος si allontana dal Diritto Romano nel concetto fondamentale della contribuzione, ammessa per qualunque sinistro non derivante da colpa»: ivi, p. 414; see also p. 404 for an excellent synthesis of why the pseudo Rhodian rules are more capacious than those of the *Lex Rhodia*. Also: A. LEFEBVRE D'OVIDIO, *La contribuzione alle avarie comuni dal diritto romano all'ordinanza marittima del 1681*, in «Rivista del diritto della navigazione», 1/1 (1935), pp. 36-140, pp. 63-4; and W. ASHBURNER (ed.), *Νόμος Ροδίων Ναυτικός. The Rhodian Sea-Law*, Oxford 1909.

²² BONOLIS, *Il diritto marittimo medievale* cit., p. 404.

²³ See ivi, pp. 415-27; F.C. LANE, *Maritime Law and Administration, 1250-1350*, in his *Venice and History: The Collected Papers of Frederic C. Lane*, Baltimore 1966, pp. 227-52, pp. 227-8.

²⁴ I.B. KATELE, *Piracy and the Venetian State: The Dilemma of Maritime Defense in the Fourteenth Century*, in «Speculum», 63/ 4 (1988), pp. 865-89; C.W. BRACEWELL, *The Uskoks of Senj: Piracy, Banditry, and Holy War in the Sixteenth-Century Adriatic*, Ithaca [NY] 1992.

²⁵ F.C. LANE, *Profits from Power: Readings in Protection Rent and Violence Controlling Enterprise*, Albany 1979; D. STÖCKLY, *Le système de l'incanto des galées du marché à Venise (fin du XIII^e-milieu du XV^e siècle)*, Paris 1992; C. JUDE DE LARIVIÈRE, *Naviguer, commercer, gouverner: économie maritime et pouvoirs à Venise (XV^e-XVI^e siècles)*, Leiden 2008.

²⁶ Worth mentioning that the appropriate storing of the cargo was the responsibility of a specialised officer on board – the *pennese* – a specialist role which seem to have existed only in Italy and (less frequently) in the Low Countries (*kommis*): <https://history.exeter.ac.uk/research/centres/maritime/research/modernity/roles/> [last accessed 8 March 2023]. On the quality of the ships being the most important factor in determining insurance premiums in the middle ages see B. SCHELLER, *Risiko-Kontingenz, Semantik und Fernhandel im Mittelmeerraum des*

Hochund Spätmittelalters, in F. BECKER, B. SCHELLER, U. SCHNEIDER (hg.), *Die Ungewissheit des Zukünftigen: Kontingenz in der Geschichte*, Frankfurt 2016, pp. 185-210, pp. 200-1; G. CECCARELLI, *Stime senza probabilità: assicurazione e rischio nella Firenze rinascimentale*, in «Quaderni storici», 135 (2010), pp. 651-701, pp. 659-61.

27 BONOLIS, *Il diritto marittimo medievale* cit., p. 421 footnote.

28 «Cum sit dignum dare omnem possibilem largitatem et beneficium mercature ubi cum honestate fieri possit et prout est omnibus manifestum per patronos navium et navigiorum nostrorum de tempore in tempore dantur infinite gravedines et expense mercature sub colore varearum et sit utile et necessarium modificare et limitare dictas vereas sic que omnes sciant se intelligere»: ASV, *Senato, Deliberazioni, Misti*, reg. 57, c. 6 (9 June 1428); also in PARDESSUS (dir.), *Collection des lois maritimes* cit., vol. 5, pp. 64-5; and discussed in BONOLIS, *Il diritto marittimo medievale* cit., pp. 335-6, pp. 424-5.

29 «l'anderà parte che la dita parte prexa in 1428 zugno sia reformada in tanto che de cetero el sia licito ai diti patroni meter a varia tuto quello che i averà veramente spexo in pedoti, barche per remurchio e libamenti chome i podeva avanti el prender de la dita parte, intendando di pedoti di luogi dei qual è consueto esser tolto e messo a varia»: ASV, *Senato, Deliberazioni, Misti*, reg. 57, c. 85v (29 March 1429).

30 M. FUSARO, *Public Service and Private Trade: Northern Seamen in Seventeenth-Century Venetian Courts of Justice*, in «The International Journal of Maritime History», 27 (2015), pp. 3-25; EAD., *Political Economies of Empire* cit., pp. 192-5.

31 EAD., *Political Economies of Empire* cit., pp. 60-1, 190-1.

32 *Ibid.*

33 More research is needed to properly evaluate the *porto franco* experiment, see: M. COSTANTINI, *La regolazione dei dazi marittimi e l'esperienza del «porto franco» a Venezia tra il 1662 e il 1684*, in A. DI VITTORIO (a cura di), *La finanza pubblica in età di crisi*, Bari 1993, pp. 77-88; ID., *Dal porto franco al porto industriale*, in A. TENENTI, U. TUCCI (a cura di), *Storia di Venezia*, vol. 12, *Il mare*, Roma 1991, pp. 879-914.

34 R.W. FERRIER, *The Armenians and the East India Company in Persia in the Seventeenth and Early Eighteenth Centuries*, in «Economic History Review», 26/1 (1973), pp. 38-62, pp. 41-4; S. ASLANIAN, *From the Indian Ocean to the Mediterranean: The Global Trade Networks of Armenian Merchants from New Julfa*, Berkeley 2011.

35 ID., *Julfan Merchants and European East India Companies: Overland Trade, Protection Costs and the Limits of Collective Self-Representation in Early Modern Safavid Iran*, in N. KONDO (ed.), *Mapping Safavid Iran*, Tokio 2016, pp. 189-221; see also ASLANIAN, *From the Indian Ocean to the Mediterranean* cit.; I. BAGHDIAZT MCCABE, *Small Town Merchants, Global Ventures: The Maritime Trade of the New Julfan Armenians in the Seventeenth and Eighteenth Centuries*, in M. FUSARO, A. POLÓNIA (eds), *Maritime History as Global History*, Liverpool 2010, pp. 125-58.

36 E. KORSCH, *The Sceriman between Venice and New Julfa: An Armenian Trading Network and its Sociocultural Impacts (Seventeenth and Eighteenth Centuries)*, in G. CHRIST, F.-J. MORCHE, R. ZAUGG, W. KAISER, S. BURKHARDT, A.D. BEIHAMMER (eds), *Union in Separation: Diasporic Groups and Identities in the Eastern Mediterranean (1100-1800)*, Roma 2015, pp. 363-78. Worth mentioning that Venice was the major centre of Armenian publishing: S. ASLANIAN, *Port Cities and Printers: Reflections on Early Modern Global Armenian Print Culture*, in «Book History», 17 (2014), pp. 51-93; J.A. LANE, *Diaspora of Armenian Printing 1512-2012*, Amsterdam-Yerevan 2012, and bibliography therein quoted.

37 ASV, *Collegio, Risposte di dentro*, ff. 79 and 80.

38 Ivi, *Cinque Savi alla Mercanzia, Risposte*, reg. 157, cc.8v-9r (27 gennaio 1671 m.v.). I thank Isabella Cecchini for bringing this document to my attention.

39 «procedeva questo dalla rapacità di moltissimi Parcenevoli de Vasselli», «facevano gettare tale varea, che assorbiva tutte le spese aspettanti alla sola Nave, e non alle Merci»: ivi, cc. 65v-6v (13 September 1672).

⁴⁰ Ivi, «contro l'opinione universale della Piazza».

⁴¹ Ivi, *Collegio, Risposte di dentro*, f. 79, cc.n.n. (10 October 1672). On the usage of the word *piazza* to indicate both the location of commercial business and the community of those practising in it, see I. CECCHINI, *Facilitare gli affari: la piazza di Rialto e il ruolo del governo attorno al 1669*, in «Mediterranea», 56 (2022), pp. 565-90.

⁴² ASV, *Cinque Savi alla Mercanzia*, nuova serie, b. 191, II fasc., [s.d., but inserted between the dates of July 1672 and March 1673] this is anonymous and unsigned, but clearly written from the perspective of shipowners. It makes reference to an accident recently occurred to the ship *Rosa Moceniga* which makes it coeval to the previously mentioned petition.

⁴³ Ivi, «aprobate dall'uso divenuto inveterata Legge».

⁴⁴ Ivi, «Accadono con tutto ciò casi fortuiti, i quali si come alla medesima Legge non ponno esser precorsi, et imaginati, così ne meno n'e alcuna mentione d'essi quantunque siano di gran conseguenza per i rilevanti discapiti».

⁴⁵ Ivi, «così persuadendo il giusto, e così richiedendo l'equità».

⁴⁶ The *Rosa Moceniga* was owned by the Flemish merchants Gio Vanneste, one of the major operators in the Venetian *Piazza* at the time; this case dragged in the courts and we can see that the payment of her crew was still pending in the spring of 1674, see: ivi, *Giudici del Forestier, Sentenze*, reg. 100, cc.25r-v (24 April 1674).

⁴⁷ Ivi, «quando la Navigatione è destrutta in conseguenza il Negotio vien à perire».

⁴⁸ Ivi, «non dovendosi permettere che dove concorre la volontà de sudditi e de foresti la Nazione Armena con pregiudizio universal possa ingiustamente ricusare di soccomber à quelle spese, che sono fatte per la conservation delle loro merci».

⁴⁹ This petition does not appear to have been officially received by the *Collegio*, a copy of it is extant in the files of the *Cinque Savi*, but it does not appear amongst those officially recorded. I would venture the hypothesis that it might be a first draft of the October 1672 shipowners' petition discussed above. See also: ASV, *Cinque Savi alla Mercanzia, Risposte*, reg. 157, cc. 96v-7r (9 March 1673); the *Straordinario* and *Forestier* answers are both in ivi, *Senato, Deliberazioni, Mar*, f. 593, cc. n.n. (28 October 1673), which contains the material associated with the Senate *parte* of the same date, the latter is in: ivi, reg. 139, cc. 146r-v (28 October 1673).

⁵⁰ Ivi, *Cinque Savi alla Mercanzia, Risposte*, reg. 157, cc. 96v-97r (9 March 1673).

⁵¹ Ivi, *Senato, Deliberazioni, Mar*, f. 593 (s.d. but inserted with material related to the *parte* 28 October 1673).

⁵² Also known as *Ufficiali all'Estraordinario*, for a brief description of their jurisdiction see M.F. TIEPOLO et al. (a cura di), *Archivio di Stato di Venezia*, vol. IV, *Guida Generale degli Archivi di Stato Italiani*, Roma 1994, p. 937.

⁵³ Giuseppe Lorenzo Maria CASAREGI, *Il Consolato del Mare*, Cappuri & Santini, Lucca 1720 [or. ed. Firenze 1719]; Adriaan 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 II 1563't Tractaet van Mr Quintyn Weitsen van de Nederlantsche Avaryen*, tip. Jan Boom, Amsterdam 1711; Carlo TARGA, *Ponderationi sopra la Contrattatione Marittima*, A.M. Scionico, Genova 1692; Estienne CLEIRAC, *Us et coutumes 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 traité des termes de marine & reglemens de la nauigation des fleuves & rivières*, Guillaume Millanges, Bordeaux 1647; William 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 Maesties Dominions of Great Brittanne, Ireland, and the Adiacent Isles thereof*, Humfrey Lownes for Thomas Man, London 1613.

⁵⁴ Starting with E. Bensa, *Il contratto di assicurazione nel Medio Evo: studi e ricerche*, Genova 1884; K. NEHLSSEN-VON STRYK, *L'assicurazione marittima a Venezia nel XV secolo*, Roma

1988; J.P. VAN NIEKERK, *The Development of the Principles of Insurance Law in the Netherlands from 1500 to 1800*, Hilversum 1998.

⁵⁵ «Franco d'avaria», Guido Bonolis even argued that the wide usage of Averages delayed the adoption of insurance in Venice: BONOLIS, *Il diritto marittimo medievale* cit., p. 571.

⁵⁶ NEHLSSEN VON STRYK, *L'assicurazione marittima* cit., pp. 216-28; A. ADDOBATI, *Commercio, rischio e guerra: il mercato delle assicurazioni marittime di Livorno (1694-1795)*, Roma 2007, pp. 133-4. For the Venetian usage about insurance coverage see also: FERRO, *Dizionario del diritto comune e veneto* cit., vol. 1, p. 163: «quattro perciò si dicono essere i casi ne' quali gli assicuratori non sono obbligati; cioè avaria, guasto, calo e getto». On the divergent opinions – both in jurisprudence and in actual practice – about the exact coverage of policies «franche d'avaria», see A. ADDOBATI, *Tra consuetudine e codice. L'assicurazione Marittima a Livorno negli anni francesi (1808-1813)*, in C. BARCIOLA LÓPEZ, A. DI VITTORIO, N. OSTUNI (a cura di), *Le assicurazioni. Sicurezza e gestione dei rischi in Italia e Spagna tra età moderna e contemporanea*, Milano 2016, pp. 137-55, pp. 150-1.

⁵⁷ This was in line with the *Forestier's* jurisdiction over maritime civil matters, see: M. FUSARO, *Politics of justice/Politics of trade: foreign merchants and the administration of justice from the records of Venice's Giudici del Forestier*, in «Mélanges de l'École française de Rome», 126/1 (2014), available at: <https://journals.openedition.org/mefrim/1665> [last accessed 8 March 2023].

⁵⁸ TIEPOLO *et al.* (a cura di), *Archivio di Stato di Venezia* cit., pp. 979-80 on the *Consoli*, pp. 980-1 on the *Cinque Savi*. Similar jurisdictional differences are also present in the Republic of Genoa, where the *Conservatori del Mare* had jurisdiction (civil and criminal) over all maritime litigation, with the exception of those related to insurance and controversies amongst shipowners, that fell instead within the jurisdiction of the *Ufficio di Mercanzia*: G. FORCHERI, *Doge, Governatori Procuratori Consigli e Magistrati della Repubblica di Genova*, Genova 1968, pp. 147-50.

⁵⁹ G. CECCARELLI, *Risky Markets: Marine Insurance in Renaissance Florence*, Leiden 2020, ch. 1; NEHLSSEN-VON STRYK, *L'assicurazione marittima* cit.; FUSARO, *Sharing Risks, on Averages and Why They Matter*, in EAD. *et al.* (eds), *General Average and Risk Management* cit., pp. 3-31, p. 12.

⁶⁰ Ascanio BALDASSERONI, *Trattato delle assicurazioni marittime*, Stamperia Bonducciana, Firenze 1786, tomo 3, pp. 1-276 is the section dedicated to *avarie*; on the issues raised by the clause *franco d'avaria* at pp. 117-30.

⁶¹ D.A. AZUNI, *Dizionario Universale ragionato della giurisprudenza mercantile*, 4 ed. *Nella quale è fusa la Nuova Giurisprudenza dall'Avvocato Giuliano Ricci*, Livorno 1838, pp. 530-3.

⁶² On how this affected the reforms of insurance in eighteenth century Livorno see: ADDOBATI, *Commercio, rischio e Guerra* cit., pp. 133-4.

⁶³ AZUNI, *Dizionario Universale ragionato* cit., pp. 192-4, Azuni's text also provides an abundance of references to local legislation and legal treatises.

⁶⁴ TARGA, *Ponderationi* cit., p. 252.

⁶⁵ On the Iberian case: M. GARCÍA GARRALÓN, *The Nautical Republic of the Carrera de Indias: Commerce, Navigation, Fortuitous Mishaps, and Avería Gruesa in the Sixteenth Century*, in FUSARO *et al.* (eds), *General Average and Risk Management* cit., pp. 215-56 and bibliography therein quoted.

⁶⁶ G.P. DREIJER, *The Power and Pains of Polysemy: General Average, Maritime Trade and Normative Practice in the Low Countries (15th-16th Centuries)*, Leiden 2023.

⁶⁷ G. BOERIO, *Dizionario del dialetto veneziano*, Firenze 1993 (or. ed. 1856), pp. 779-80; FERRO, *Dizionario del diritto comune e veneto* cit., vol. 1, pp. 199, 205. For an example of the *straordinaria*, not described in the normative literature, see: ASV, *Giudici del Forestier, Terminazion d'avaree*, reg. 4, c.38v (19 June 1692).

⁶⁸ «con continuato ne per secoli interrotto si è praticato gettar à Varea in questa Città le spese, che si facevano tanto nell'espeditione nelle Scale, quanto de trattenimenti, et altro che la straordinaria disgratia portava, per beneficio delle Mercantie e navi, come le spese che si

facevano in questa Città necessarie per il discarico, e salvezza della Mercantia, e di queste due soli terzi restavano aggravate le Merci, et un Terzo la Nave»: ivi, *Senato, Deliberazioni, Mar*, f. 593 (10 October 1672 but inserted under the date 28 October 1673); also in ivi, *Collegio, Risposte di dentro*, filza 79, cc.n.n. (10 October 1672).

⁶⁹ D. NORTH, *Institutions, Transaction Costs, and the Rise of Merchant Empires*, in J. TRACY (ed.), *The Political Economy of Merchant Empires*, Cambridge 1991, pp. 22-40, p. 24.

⁷⁰ A. TENENTI, *Naufrages, corsaires et assurances maritimes à Venise (1592-1609)*, Paris 1959; ID., *Venezia e i corsari (1580-1615)*, Bari-Roma 1961; ID., B. TENENTI, *Il prezzo del rischio. L'assicurazione mediterranea vista da Ragusa (1563-1591)*, Roma 1985.

⁷¹ «Les assurances maritimes sont la seule défense que les particuliers possèdent encore contre les risques de la navigation»: cfr. TENENTI, *Naufrages, corsaires et assurances maritimes* cit., p. 59.

⁷² R. GLUZMAN, *Venetian Shipping: From the Days of Glory to Decline, 1453-1571*, Leiden 2021; F.C. LANE, *Venetian Ships and Shipbuilders in the Renaissance*, Baltimore 1934.

⁷³ Mauro Bondioli is working on providing accurate numbers on the total of vessels across the whole of the Venetian territories for the sixteenth and seventeenth century.

⁷⁴ ASV, *Collegio, Risposte di dentro*, reg. 93, cc. n.n. (7 August 1680); the original petition is in: ivi, *Senato mar*, filza 635, in the preparatory material related of the relative *parte* (28 September 1680).

⁷⁵ Further details on this: M. FUSARO, A. ADDOBATTI, *The Grand Tour of Mercantilism: Lord Fauconberg and his Italian Mission (1669-1671)*, in «The English Historical Review», 137 (2022), pp. 692-727; and A. ADDOBATTI, J. DYBLE, *One Hundred Barrels of Gunpowder: General Average, Maritime Law, and International Diplomacy between Tuscany and England in the Second Half of the Seventeenth Century*, in «Quaderni storici», 168 (2021), pp. 823-54. See also Jake Dyble's contribution in this issue (Lex Mercatoria, Private 'Order', and Commercial 'Confusion': A View from Seventeenth-Century Livorno).

⁷⁶ ASV, *Senato Mar*, reg. 146, cc. 99r-v (28 September 1680); another copy in: ivi, *Compilazione delle Leggi*, prima serie, b.139, cc. 210r-v. See also the preparatory material in: ivi, *Senato Mar*, f. 635 (Sept-Oct-Nov 1680), s.d., which contains the responses of the *Cinque Savi* and the *Forestier*. The corresponding *Cinque Savi, Risposte* register is missing; there is no gap in the series numbering, but reg. 160 covers the period until April 1680, and reg. 161 begins with January 1681.

⁷⁷ A. BUONO, *The Construction of a Professional Minority: Istrian Pilots in Early Modern Venice (15th-18th Centuries)*, in Ö. ÇAYKENT, L. ZAVAGNO (eds), *People and Goods on the Move. Merchants, Networks and Communication Routes in the Medieval and early Modern Mediterranean*, Fisciano 2016, pp. 93-110; for their role in the eighteenth century see: W. PANCIERA, «L'acqua giusta». Il sistema portuale veneziano nel XVIII secolo, Roma 2021.

⁷⁸ Entrance into the lagoon was indeed dangerous, although we have reliable quantitative data only for an earlier period (1393-1482). Specialised pilots had the knowledge and experience of the area deemed necessary to avoid shipwrecks: B. SCHELLER, (Un-)sichere Häfen. Häfen als Hotspots maritimer Risiken und Risikokommunikation im Mittelmeerraum des 15. Jahrhunderts, in «Historische Anthropologie», 26 (2018), pp. 43-65, especially p. 59.

⁷⁹ ASV, *Senato, Deliberazioni, Mar*, reg. 146, cc. 135v-136 (19 December 1680).

⁸⁰ An important privilege for foreign communities active in Venice was being able to have their commercial litigation judged by the *Cinque Savi*, using summary procedure; this was granted to the Armenians in 1676 and to the English only in 1698, see: FUSARO, *Politics of justice/Politics of trade* cit.

⁸¹ EAD., *Political Economies of Empire* cit.

⁸² ASV, *Compilazione delle leggi*, prima serie, b. 63, cc. 132r-v, {modern numbering in pencil} *terminazione* of the *Cinque Savi* (27 July 1693).

⁸³ Ivi, cc. 135r-v, modern numbering in pencil, (20 March 1710) *terminazione* of the *Cinque Savi*; a copy of the Senate decree approving it is in: ivi, *Cinque Savi alla Mercanzia*, nuova serie, b. 191, fasc. I, cc. n.n (29 March 1710).

⁸⁴ A recent analytical synthesis of this vast literature in: B. DOUMERC, *Flottes publiques, flottes privées à Venise (XII^e-XV^e siècles)*, in C. BUCHET, M. BALARD (eds), *The Sea in History. The Medieval World*, Woodbridge, 2017, pp. 138-47.

⁸⁵ FUSARO *et al.* (eds), *General Average and Risk Management* cit.

