

War, Risks, and Speculation: The Accounts of a Small Livorno Insurer (1743–1748)

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A. The firm

In 1774, a young court clerk, Pietro Ubaldo Boasi, died from illness in Pisa, leaving all his possessions to the city hospital of Santa Chiara. The meagre legacy consisted of a suburban vegetable garden in the plain of Livorno, which the Boasi family leased from the Cathedral of Pisa.¹ Its income of just a dozen pieces of eight a month had not spared Pietro Ubaldo, perhaps unable to work, the humiliation of beseeching the Grand Duke for a subsidy.² As usual, the hospital on that occasion also acquired the family papers. This way, the accounts and correspondence of the commercial activity of Pietro Ubaldo's father have come down to us. The father, Captain Jacopo Antonio, died in 1759, also in a state of indigence because of his 'many maritime misfortunes'. In order to pay his debts, 'several of his stuff and his home furniture have been sold'.³

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¹ Moreover, it was a right encumbered by a mortgage. In 1737 Pietro Ubaldo's uncle, Giovanbattista, had tied a third of the garden in guaranteeing the dowry credit of his wife Teresa Amelio, a credit that later passed on to Francesca, the couple's only daughter and a cousin of Pietro Ubaldo: State Archives of Pisa (ASPi), Ospedali Riuniti di S. Chiara, Boasi, 1872.

² *Pietro Leopoldo d'Asburgo Lorena*, Relazioni sul governo della Toscana, vol. 2 (ed. Arnaldo Salvestrini, 1969), 299.

³ In 1752 Jacopo Antonio Boasi was brought to trial at the Florentine court of the Pupilli by his niece Francesca, who complained about the non-payment of the mother's

The papers acquired by the hospital document the activity of the Boasi firm from 1726 to 1751. These have already been investigated by Marcello Berti, who a few years ago published a study on the nature of the commercial transactions and the network of correspondents of Jacopo Antonio, defined on the occasion as a ‘French merchant’,⁴ although his affiliation with the French nation of Livorno is not so obvious. The family’s original surname may have been Boissy, but the Italian surname Boasi, although rare, exists and is attested in east Liguria.⁵ In any case, Jacopo Antonio lived for a very long time away from Livorno, having started his career at sea while still young, in accordance with the family tradition. He sailed under the French flag and became a captain in 1717, having purchased eight shares of *Le Mercure Volant* for 1,500 piastres.⁶ Registered in the maritime compartment of Marseille, he sailed until the last years of the War of the Polish Succession, during which he was involved in the wheat trade between the Baltic and the Mediterranean. When he had passed the milestone of 50 years, having spent ‘about thirty-six [...] crossing the sea eastward and westward’, the good captain decided to settle down in Livorno and spend his last years with his wife, who soon thereafter gave him a son, baptized Pietro Ubaldo like his grandfather.⁷ He could not retire, however, since his resources would not have permitted it. So, although he lacked sufficient funds, he opened his own firm and devoted himself mainly to trading on behalf of thirds, and to profit from the network of relationships he had woven together over years of sailing on all the sea routes of Europe and the Levant.

dowry income. The ‘more than seventy-year-old’ Jacopo Antonio (born in 1680) had to plead with the Grand Duke so that the case could be transferred to the court of Livorno, for the avoidance of expenses, with the backing of the auditor of that court, Donato Redi, who certified ‘the pitiable state’ to which the supplicant had been reduced: State Archives of Livorno (ASLi), Governatore e Auditore, 958, n. 390, J.A. Boasi v. F. Boasi, Report 24 July 1752.

⁴ *Marcello Berti*, Jacopo Antonio Boasi, un mercante francese nella Livorno della prima metà del Settecento, in: idem, *Nel Mediterraneo ed oltre: temi di storia e storiografia marittima toscana (secoli XIII–XVIII)* (2000), 309–333.

⁵ In any case, Jacopo Antonio’s mother was Tuscan, a circumstance that according to a sovereign edict of 1716 should have resulted in her son’s loss of French nationality: *Jean Pierre Filippini*, *Il porto di Livorno e la Toscana (1676–1814)*, vol. 2 (1998), 408. His uncle, also named Jacopo Antonio, had acquired the citizenship of Livorno in 1657, and the same applies to his brother Giovanbattista, who became a citizen in 1692: ASLi, Comunità, 1684. Jacopo Antonio was born on 12 May 1680, ‘at one o’clock at night’, to Pietro Ubaldo Boasi and Maria Maddalena of a Lorenzo Romoli. Already a widow of a certain Luigi Ubaldi, Maria Maddalena married Pietro Ubaldo in the 1670s. She was born around 1649, and died on 6 January 1719 ‘70 years of age’: Baptism and death certificates in ASLi, Governatore e Auditore, 948, n. 899, J.A. Boasi v. J. Attias.

⁶ ASPI, Ospedali Riuniti di S. Chiara, Boasi, 1872.

⁷ ASLi, Governatore e Auditore, 948, n. 899, J.A. Boasi v. J. Attias.

As is well-known, the port of Livorno arose in the second half of the sixteenth century at the behest of the Medici, who at the time intended to provide a maritime outlet for Tuscan products. Over the time, however, the Florentine manufacturing system ended up succumbing to Northern European competition, while the port discovered its true vocation. Due to its fortunate geographical position, halfway between Northern Europe and the Ottoman Levant, and thanks to its famous exemptions and privileges, Livorno essentially became a service node for foreign trade, a warehouse and sorting port, specialized in import and re-export traffic.⁸ Therefore, the positioning of Boasi on the Livorno market was hardly original. He was a new operator joining the already large number of city commercial firms, about 200, most of which were undercapitalized and dependent on foreign orders.⁹

Like the majority of his Livorno colleagues, Boasi's main activity was commission trade. Without a marked specialization, Captain Boasi invested his funds in speculative buying and selling, and was also a shipowner, dispatcher, foreign-exchange agent, insurer, and an intermediary for all kinds of business. As Berti notes, his was an old and very traditional merchant profile, whose strengths lay in a particularly dense network of correspondence throughout the Italian peninsula, from Genoa to Sicily, from Venice to the manufacturing centres of the Po Valley area, and in his links with three different merchant supply chains for long-distance trade. The first was a Florentine supply chain, centred on a solid business relationship with the exporter Zanobi Ubaldini, and with Alessandro Quaratesi, who, operating from Cadiz, provided Boasi with a bridgehead for American trade. The second, a French chain, consisted of the Marseille firms of Etienne L'Espiau, and Jean Louis Ploiar, but also the Villet brothers of Tunis. Finally, the last important chain was made up of Dutch and German partners: Willem van Inghen in Amsterdam, David Klugh in Hamburg and Frederick Hibsch in Constantinople. Boasi had more casual collaborative relationships with the London firm Sanderson & Toivors, with the Meratti of Smyrna, and with the two Jewish houses Dias and Sacchi of Thessaloniki.

⁸ On the port of Livorno there is a vast bibliography. Beyond the classic *Fernand Braudel* and *Ruggiero Romano*, *Navires et Marchandises à l'entrée du Port de Livourne (1547–1611)* (1951), see, in general, *Filippini* (n. 5); *Adriano Prosperi* (ed.), *Livorno, 1606–1806: luogo di incontro tra popoli e culture* (2009); and *Lucia Frattarelli Fischer*, *L'Arcano del mare. Un porto nella prima età globale* (2018).

⁹ *Massimo Sanacore*, *La relazione del governatore Filippo Bourbon del Monte nel 1765*, in: *Lucia Frattarelli Fischer and Carlo Mangio* (eds.), *Fonti per la storia di Livorno fra Seicento e Settecento* (2006), 45–71. According to the Governor, in Livorno there were between 150 and 180 active trading houses, to which at least 50 wholesale stores should be added.

B. Facing the insurance market

For an analytical description of all the firm's business, I unreservedly refer the reader to the work of Marcello Berti.¹⁰ What I want to focus on in this contribution is Boasi's role as an insurer. The documentation kept today at the State Archives of Pisa, in addition to the ledger, the journals, the accounts, the letter book and several series of receipts, also includes three registers and some loose papers related to the insurance activity that Boasi started in 1738, first occasionally and without conviction, but later, from 1743, more regularly and apparently with method.¹¹ His growing commitment to the insurance sector is immediately evident from the very nature of the records, which over time become more and more accurate and ordered. In fact, for the first few years of his insurance activity only a few double-entry current accounts have survived: they were on loose papers drawn up by the brokers and handed over to their customers at the time of the balance settlement. But in 1743 Boasi realized that continuing to leave the accounting to intermediaries could be dangerous, and therefore he began to draw up his own register, which structurally looks like the collation of various current accounts, even if here it is open accounting, meaning that the recording is done daily. Indeed, the register for the years 1743–1746 bears the title of *Giornaletto delle sicurtà che si tocono* ('the Journal of the insurances underwritten'). In correct Italian it would be *tòccano*, from the noun *tòcco*, that is, 'stock' or 'piece'. Therefore, *tòccare le sicurtà* essentially means breaking up the risk, dividing it into small portions so that a large number of underwriters can guarantee them. Keeping the accounts himself in order to have an instrument of feedback and control over the work of the brokers was a very wise decision, all the more so given the circumstances, which saw threatening clouds gathering on the horizon: the War of the Austrian Succession was upsetting the lazy routine of the insurance market, not only in Livorno, but all over Europe. The dangers to navigation increased exponentially, and so did premium rates. This meant that the maritime insurance business was definitely tempting, with a promise of rapid enrichment, but at the same time it became an extremely dangerous path. In 1747, while on the Livorno risk market, there was a paroxysmal surge in underwritings, Boasi's accounting took another leap in quality, in order as much as in clarity. Our insurer decided to keep not one, but two registers. The first is a journal in which he diligently took notes until 1748, detailing the underwritten portions or quotas and the insurance premiums of which he was the creditor, while the second was the usual register of current accounts with brokers, which in the 'giving' section records the credit of the premiums, and in the 'having' section the debts for damage and expenses.

¹⁰ Berti (n. 4).

¹¹ ASPi, Ospedali Riuniti di S. Chiara, Boasi, 1881, 1882, 1883.

It is important to point out that such accounting documentation has rarely been preserved, and that the three Boasi registers are also of interest because they refer to a crucial phase in the evolution of the insurance market, whose traditional structures could not withstand the turbulences of the war-time situation, highlighting a rigidity that could be circumvented at that moment only by manoeuvres of pure speculation, and of doubtful legality. The limitations that emerged during that difficult transition led to a radical restructuring of the post-war risk market, with the widespread appearance at continental level of large joint-stock companies, and the overcoming of the traditional model, based on informal networks of independent underwriters, coordinated at the technical and managerial level by brokers.

At this point, it would be appropriate to say a few words about both the Livorno market, which had peculiar characteristics, and the figure of the independent underwriter, as Boasi was in his own small way. First, it should be noted that, on the demand side, the Livorno risk market largely reflected the traffic structure of a free port, which, as mentioned above, was mainly an emporium enlivened by foreign orders.¹² Commissioners received purchase and shipping orders, or sale mandates, most of the time being asked to anticipate expenses (including insurance coverage costs) in exchange for a commission fee. In the same way, the first time Boasi was forced to put his signature at the bottom of a policy it was in order to fulfil a commission received from Carlo Fossati, one of his Genoese correspondents, who asked him to provide a cover of 1,300 pieces on a load of grain that had to be brought from Ancona to Genoa. In such cases, Boasi would simply place the risk on the market through a broker, vouching for the solvency of the underwriters; a form of co-insurance known as the *star del credere* (to stand in the place of the creditor).¹³ This allowed the commissioner to earn a 1% commission on the sum insured. However, on that occasion, the broker only found underwriters for 1,000 pieces. The market was weak, and therefore Boasi had to personally ensure the uncovered quota of risk ‘having set the premium at 4.5%, a very meagre premium for the risk one runs in this period,’ Boasi wrote to Fossati, ‘there was no one who wanted to finish filling the said policy’.¹⁴

The policies to be filled in were printed forms, which reproduced the model prescribed by the Florentine *Statuti di Sicurtà* (‘Insurance Statutes’) of 1523–1529, the main Tuscan legislation on insurance.¹⁵ From 1685 these forms were distributed to the various brokers who had applied for them through a special

¹² *Andrea Addobbati*, *Commercio rischio guerra. Il mercato delle assicurazioni marittime di Livorno (1694–1795)* (2007), 113–146.

¹³ *Pompeo Baldasseroni*, *Leggi e costume del cambio* (Firenze 1786), 93–97.

¹⁴ *Berti* (n. 4), 317.

¹⁵ *Giovanni Ceccarelli*, *Un mercato del rischio: assicurare e farsi assicurare nella Firenze rinascimentale* (2012).

office in charge of the public register of policies and the related tax collection.¹⁶ Having received a request, the broker would get a form, and then had eight days to fill in the blank parts, indicating every element relevant to the risk assessment (the insured good(s), the person asking to be insured, the journey, the ship, the flag, the identity of the master, etc.). He had to go around the merchants' desks to ask for signatures and return to the office to register the contract. Usually, there were many signatures at the bottom of the policies, each of which guaranteed for a quota (i.e., a *tôcco*) of the total risk. Sometimes eight days were not enough to complete the form, so the risk was divided into more policies. There was a bargaining custom typical of the market of Livorno, and more in general of European markets with a lively bargaining culture. In contravention of the law, it was customary to delegate the collection of the premiums to the broker, and to postpone this until the final settlement. In practice, the broker operated as a clearing bank, keeping current accounts with each of his clients, who could use his services both as an insured who owed the premium and as an insurer who was owed it. This way, the whole deal was managed with the minimum use of specie, and periodically the broker would proceed to set off debts and credits, liquidating the surplus once having deducted what was owed to him for his brokerage. It was a system based on account money that suited the structure of the traditional insurance market, whose actors never played a fixed role. None of them was solely an insurer, but rather they dealt in various mercantile affairs without any particular specializations. They could therefore play both parts; sometimes insured, sometimes insurers. Entrusting the broker with collecting the premiums and, if necessary, with the adjustment of averages or even the settlement of claims, made it easier to bargain – but entailed risks. The broker who carried out the function of cashier, earning a 3% commission fee for the cash flow, could be tempted to take on a co-interest, contravening the deontological imperative of impartiality. Moreover, he remained exposed to the risk of bankruptcy, with serious repercussions for the clients.¹⁷

On the other hand, the old-fashioned merchants were more than happy to delegate the administration of the premium cash to the brokers, limiting themselves to keeping an eye on their work, partly because none of them seriously thought of becoming rich by underwriting policies. The profits of the insurance business were usually very low; if there were profits at all. Only during wartime spells, which pushed the rate up to anomalous levels, up to 30%, 40% and 50%, was it possible to make significant profits, provided that one was lucky and avoided the

¹⁶ Addobbati (n. 12), 146–154.

¹⁷ Addobbati (n. 12), 134–146, 195–208.

most ruinous losses.¹⁸ But it was, after all, a question of phases – if not exceptional, at least transitory – during which new operators would burst on to the market. While in times of peace such operators would have been careful not to get involved, when the market turned into a sort of gambling house, they were ready to improvise as insurers.¹⁹

The traditional merchant, on the other hand, was usually much more cautious. For him, insurance was above all a ‘handmaiden’ for trade, a guarantee for the future and at the same time a lubricant that facilitated traffic, spreading trust among all operators. The main purpose for his participation in the insurance market was to be able to pass his personal risk onto others, and to take up a share of collective risk that was comparable to the risk given. Therefore, rather than the remuneration of a risk voluntarily assumed, the premium fulfilled – at least originally – a compensatory function, since nothing could guarantee that an exchange would take place between equivalent quantities: there would always be a difference, in one way or another, between the entire personal risk that was transferred and the fractionalized collective risk of which liability was accepted. It would therefore be wrong to imagine the traditional insurance market as a sum of bilateral relations; in its original functioning it was more like a chain of circular solidarity, managed by intermediaries and which included all the recognized members of the same mercantile community. It was a model built on the paradigm of reciprocity, and we can still see its features, almost intact, in early sixteenth-century Florence.²⁰ It was, however, a model that incubated the contradictory germs of its own dissolution, and that would not have been able to withstand the development of trade on commission, easy market access for outsiders, and the integration of the insurance market at a continental level on a competitive basis.

At the time of Captain Boasi the opening of the market to foreign demand was an undisputed fact. No one could doubt that most of the risk placed on the Livorno market was on behalf of foreigners. After all, there were very few local firms that traded with their own funds (or, as Tuscan merchants would have it,

¹⁸ *Frank Spooner*, *Risks at sea: Amsterdam insurance and maritime Europe, 1766–1780* (1980), 3–13.

¹⁹ *Spooner* (n. 18), 19, 25; *Christopher Kingston*, *Marine Insurance in Britain and America, 1720–1844: A Comparative Institutional Analysis*, (2007) 67 *The Journal of Economic History* 379–409, 386.

²⁰ *Giovanni Ceccarelli*, *Dalla Compagnia medievale alle Compagnie assicuratrici: famiglie mercantili e mercati assicurativi in una prospettiva europea (secc. XV–XVIII)*, in: *Simonetta Cavaciovchi* (ed.), *La famiglia nell’economia europea, secoli XIII–XVIII. The economic role of the family in the European economy from the 13th to the 18th centuries* (2009), 389–408; *idem*, *Tutti gli assicuratori sono uguali, ma alcuni sono più uguali degli altri: Cittadinanza e mercato nella Firenze rinascimentale*, (2013) 125 *Mélanges de l’École française de Rome – Moyen Âge*, <https://doi.org/10.4000/mefrm.1356> (last accessed 24 May 2020).

‘in arbitrio e speculazione’). Nevertheless, the institutional architecture of the market remained the traditional one, and the dynamics of underwriting could continue to function on the community assumption, that is, on closed-circuit trust thanks to the legal constraint that made the merchant agent co-holder of the commitments undertaken for the foreign principal, and so responsible towards his colleagues in Livorno.²¹ The growth of demand for insurance, which in the long run would have highlighted the structural limits of the traditional model and led to the revolution of the joint-stock companies, had not changed the approach of the operators like Captain Boasi. If anything, it had raised awareness of the advantages that could arise from an active foreign insurance balance. The first and foremost of such advantages was providing new payment instruments to the operators, making up for the structural shortage of specie. Since the end of the seventeenth century the *Stanze dei cassieri* had sprung up in Livorno, a permanent exchange that allowed debts and mutual credits to be settled by clearing, with a stroke of the pen, reserving the metal for the settlement of the surplus.²² The same happened on the side of the insurance business run by the brokers, to whom – as already said – a credit line for the premiums was granted, and who by acting as cashiers were able to issue warrants of payment, with local circulation, on the order of the their clients. Thus, beyond actual gain (which, deducting payments and expenses, was rather limited), what prompted the Livorno merchants to increase their insurance underwriting was also the possibility of creating money to be used occasionally when payments were due.

C. The dangers of an open market

Before examining the registers, it would be appropriate to specify their documentary limits. As has been said, for a general trading house the insurance commitment was a branch of collateral activity and complementary to the core business, with its own separate accounting. One would expect, however, that revenue and expenditure of the separate account would flow into – and find at least a summary confirmation in – the general accounts, that is, in the firm’s ledger, as was usually the case for the buying and selling journal, or for the shipping accounts. Boasi’s ledger instead records at most the periodic collections of the premiums, and any disbursements as compensation, without bothering to put the outstanding accounts with the brokers on the balance sheet, of which the only remaining evidence is in the appropriate registers. Moreover, despite the efforts

²¹ In addition, the anonymity was usually guaranteed to foreign policyholder by the ‘to whomsoever it may belong’ clause (in Italian, ‘per conto di chi spetta’).

²² *Angelo Albani*, *Le stanze dei pubblici pagamenti* (1921); *Luigi Lang*, *Le origini a Livorno delle Stanze di compensazione* (unpublished PhD dissertation, Università L. Bocconi, Milano, 1963–1964, available in the Biblioteca Labronica F.D. Guerrazzi, Livorno).

made over time to keep the accounts in order, Captain Boasi's insurance accounting remains rather confused when compared to the general accounts. The impression is that for Boasi insurance underwriting, although gaining importance and consistency, remained in the end a subsidiary and complementary activity, one of secondary importance, as if that account did not have the same significance or status as the others, at least until it was liquidated. Something similar has been observed by Alberto and Branislava Tenenti in their study of Ragusa insurances in the second half of the sixteenth century. The premium credit does not seem to have been perceived by the Ragusa insurers as a solid purchase to rely on. After all, the undertaking of risk was felt as a temporary transfer of ownership, which a loss would have made permanent with the transfer of the asset and of the damage. It is understandable how the same shadow of precariousness was projected onto the premium which, until earned, remained only a conditional and uncertain credit: 'a two-faced pledge, a salary of the mutual fear of the insured and of the insurers in the face of the unknown dangers of the journey'.²³ On the other hand, it should also be noted that this feeling of precariousness with regard to the premium did not prevent, at least in Boasi's days, payment orders being issued and accepted on that 'two-faced pledge'.

Above and beyond feelings and perceptions, the fact remains that it is not easy to integrate the insurance accounting into the general accounting, and therefore to understand what exactly the importance of the insurance business for the performance of Boasi's firm was. The first thing to note is that there is no discernable ratio between the purchase and the sale of insurance coverage. In the exchange between entire personal risk and fractioned collective risk, which represented the main reason for the original and localized formation of the market, the balance broke down. This was driven by the growth and internationalization of demand, but also by the financial needs of the traditional trading firm. While they were certainly exceptional years, between 1743 and 1748 Boasi, as insured, spent in premiums just 3.4% of what he obtained as an insurer of others' risks. When Berti states that Boasi was 'a medieval and Renaissance merchant', he is right – but only to a certain extent. It is not possible to see in his activity any marked specialization, but such an unbalanced commitment to underwriting foreshadowed the moment when the insurance business would end up breaking the institutional framework of the local market and emancipating itself from its ancillary role with respect to commercial investment. The war situation only accelerated

²³ Alberto and Branislava Tenenti, *Il prezzo del rischio. L'assicurazione mediterranea vista da Ragusa (1563–1591)* (1985), 124. On feelings and subjective perceptions, see Jean Halpérin, *La notion de sécurité dans l'histoire économique et sociale*, (1952) 30 *Revue d'histoire économique et sociale* 7–25, Lucien Fabvre, *Pour l'histoire d'un sentiment: le besoin de sécurité*, (1956) 11 *Annales ESC* 244–247, Louis-Augustin Boiteaux, *La fortune de mer, le besoin de sécurité et les débuts de l'assurance maritime* (1968).

the effects of a long-term process, which went beyond the case in question, and which had started at least two centuries earlier.

The appearance, as early as in the sixteenth century, of the first laws on insurance indicate that something was beginning to destabilize the mutualistic chain founded on the bonds of kinship, proximity, and citizenship.²⁴ A Tuscan government official, commenting in 1785 on a proposal to reform the old Statutes of 1524–1529, observed that no law would have been necessary if the merchants had not changed their customs at some point, disavowing their ancient ‘mercantile candour’. According to Giuliano de Ricci, who at the end of the sixteenth century was one of the magistrates liable for settling insurance disputes in Florence, that regrettable change occurred at the very moment when foreigners burst onto the insurance market: the promulgation of the Statutes was undertaken ‘to overcome the fraudulent offences committed by foreigners and particularly the Genoese’.²⁵ It was the opening up of the market that weakened mutual trust and exacerbated some crucial problems in the insurance business, the same problems that Boasi had to face. In the first place, the problem of informational asymmetries: all the particular circumstances of a given maritime enterprise were much better known by the insured than by Boasi. Boasi could, where possible, use other sources of information to assess the risk factors, in addition to the statements of the insured, but he could never be sure that his client was not hiding from him some prejudicial element which, if known, would have increased the amount of the premium.²⁶ In a closed market, characterized by relationships of familiarity, mutual dependence and interchangeability of roles, information asymmetry is a relatively minor problem. It becomes crucial with the opening of the market to foreign demand: if Boasi and his colleagues who underwrote policies were not careful, they could fall victim of adverse selection. Indeed, guaranteeing the damage lent itself to an infinite series of moral hazards, from the overestimation of the assets insured to the use of insecure vessels, from the insurance of a ship already lost to the multiplication of insurance policies on the same risk. Here, the

²⁴ *Christopher Kingston*, Governance and institutional change in marine insurance, 1350–1850, (2014) 71 *European Review of Economic History* 1–18. On the emergence of courts specifically responsible for settling insurance disputes: *Ceccarelli* (n. 15); *Dave De ruysscher and Jeroen Puttevils*, The Art of Compromise. Legislative Talks for Marine Insurance Institutions in Antwerp (c. 1550–c. 1570), (2015) 130 *Low Countries Historical Review* 25–49, *Sabine Go*, The Amsterdam Chamber of Insurance and Average: A New Phase in Formal Contract Enforcement (Late Sixteenth and Seventeenth Centuries), (2013) 14 *Enterprise and Society* 511–543.

²⁵ *Giuliano De Ricci*, *Cronaca* (1532–1606) (ed. Giuliana Saporì, 1972), 441.

²⁶ *Kingston* (n. 19), 379–409.

inventiveness of swindlers knew no limits.²⁷ On the other hand, the policyholders could not be sure that the insurers would fulfil the agreements, liquidating damages without resorting to any form of resistance, such as delaying payments or trying to renegotiate the damages. Basically, the problem was structural: individual underwriters, like Captain Boasi, had rather limited resources, and being merchants themselves they were exposed to the normal setbacks of trade.

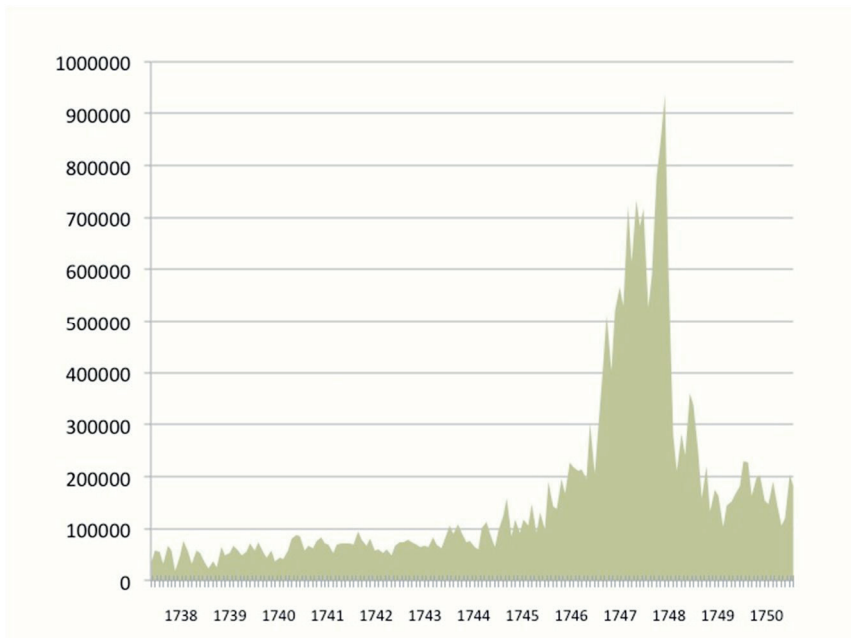
All the critical aspects of the insurance business – the asymmetry of information, the moral hazard, and the financial fragility of the firm – were exacerbated during wartime, when the demand for security grew excessively, despite the contraction of trade. The upward trend of insurance rates meant that they were three, four or five times higher than the ordinary rate in peacetime, attracting to the market many makeshift insurers willing to underwrite any policy to earn the premium.²⁸ Boasi himself, an occasional underwriter until 1742, was apparently seduced by the siren of speculation. The Livorno insurance market, which was not very active while Europe remained at peace, suddenly became a rather attractive investment. The annual volume of insured risks rose from an average of 500,000 pieces of eight in 1739–1740, to 800,000 pieces in the three-year period 1741–1743, and soared dramatically after France entered the war. The market exceeded 1 million pieces in 1744, became 1.3 million in 1745, finally reaching 2.4 million in 1746, 6.4 million in 1747, and 5.7 million in the last

²⁷ Robin Pearson, *Moral Hazard and the Assessment of Insurance Risk in Eighteenth- and Early-Nineteenth-Century Britain*, (2002) 76 *The Business History Review* 1–35; David Rowell and Luke B. Connolly, *A History of the Term ‘Moral Hazard’*, (2012) 79 *The Journal of Risk and Insurance* 1–25.

²⁸ The lack of technical know-how among the many improvised insurers was long felt, even in London: ‘many Persons,’ wrote John Weskett, ‘become Underwriters and Insurance Brokers, especially in Time of War, or Hostilities, without any previous Knowledge whatever of the Kind that is requisite to qualify them [...]. We see not a few Instances even of Tradesmen, Shopkeepers, &c. lured by the golden, but delusive Bait of Premiums, especially in Time of War, drawn like Gudgeons, into the Vortex of this perilous Abyss, Insurance; from which they can, rarely, afterwards extricate themselves; for, engaging as Underwriters, with an intire Deprivation of that Sort of Skill, and general Intelligence of commercial and maritime Affairs which, besides what peculiarly belongs to Insurance, are requisite to form a judicious Insurer; They, in particular, must at all Times be, inevitably, exposed to every Danger, every Artifice, and every Imposition; if not devoted to certain Destruction. To such of them, however, who are already engaged, and who are resolved to persist in Underwriting, the instructing themselves in the general Principles of Insurance must be serviceable: – to those who are not, it is adviseable, by all Means, to keep out of the Way of almost infallible Hurt to themselves and Families.’ *John Weskett, A Complete Digest of Theory, Laws and Practice of Insurance* (London 1781), xxii–xxxiii.

year of the war.²⁹ Despite being a neophyte, between 1743 and 1745 Boasi underwrote an average of 70,000 pieces a year, corresponding to about 6–7% of all the risks traded on the market. This was not an insignificant share, especially bearing in mind that at the time there were approximately 40 underwriters active on the Livorno market. In the following two years, on the other hand, the activity of our insurer recorded a marked slowdown (52,000 and 26,000 pieces a year respectively), in contrast with the general trend of the market, to return to the levels of his first period of activity (67,000 pieces) in 1748.³⁰

Graph 1. Monthly underwriting in the Livorno market (1738–1750)³¹



D. Navigating without a compass

It is difficult to say whether our insurer had a method in choosing which risks to underwrite. Throughout the period considered, Boasi used 13 different brokers, some of whom were specialists. Insurance brokerage was not yet reserved

²⁹ For a quantitative analysis of the Livorno market from 1694 to 1795, based on the records of the Ufficio di Scurtà (Insurance Office) and on other complementary sources, cf. *Addobbati* (n. 12).

³⁰ ASPi, Ospedali Riuniti di S. Chiara, Boasi, 1881, 1882, 1883.

³¹ Source: ASLi, Governatore e Auditore, 2311, n. 103. Currency: pieces of eight.

by law to a limited number of authorized operators, as it would be from 1759 onwards.³² In theory, each of the 200 or so trading brokers could handle any kind of business, including insurance. On the other hand, in the years under examination, the public registry office of policies attests the insurance activity of just under 30 brokers, most of whom, however, also dealt with other things, such as the brothers Moisè and Graziadio Leone, who imported batches of tobacco from Thessaloniki. In fact, there were very few real specialists in the field, and it was these who did most of the insurance business. Boasi kept his accounts open with the Jewish brokers, Raffael Munis and Joseph Sacchi, the Christians Giovan Pietro Baudowin and the company Lorenzo Sorbi & Matteo Salvini;³³ he would at times deal with one and sometimes with another. If anything, the accounts show a certain progressive disengagement with the most accredited brokers, offset by the entry onto the scene of more marginal ones. In any case, for Boasi it was a matter of spreading the risk over different sea routes, limiting the amount for each ship. In general, we can say that until 1746 our insurer, most willingly, underwrote risk shares that ranged between 200 and 300 pieces, deciding then to halve his participation in each policy in 1747, when the market experienced the greatest increase, driven by an average premium rate on all destinations which had risen from 6% to 10%. Finally, in 1748, although there was no significant decrease in the average rate, Captain Boasi returned to underwriting quotas of 200 pieces, at a pace similar to that of his first years of activity.

At the time, refined statistical tools to assess risk factors and establish a safe course of action did not exist.³⁴ For Jacques Accarias de Serionne, the author of the famous *Les intérêts des nations de l'Europe*, the only sure method was trying to select risks as equivalent with each other as possible. In his opinion, it was legitimate to suppose that there was a loss for every 100 ships insured, including damages due to averages in this ratio. 'Starting from this principle,' he wrote, 'an insurer who manages to obtain a hundred risks of 4,000 *livres* at 4% each, is morally sure to earn three quarters of his premiums'. On such optimistic assumptions, it could be argued that the key to the insurer's success only consisted in maintaining the 'equality of risks': 'only the diversity and inequality of risks,' stated Accarias, 'can make the insurance business unprofitable for insurers'.³⁵

³² *Andrea Addobbati*, *Le molte teste dell'Idra: i sensali livornesi nell'età delle riforme*, (2015) 127 *Mélanges de l'École française de Rome – Italie et Méditerranée modernes et contemporaines*: <https://doi.org/10.4000/mefrim.2181> (last accessed 24 May 2020).

³³ *Addobbati* (n. 12), 146.

³⁴ *Lorraine Daston*, *Classical Probability in the Enlightenment* (1988); *Steven Haberman* and *Trevor A. Sibbett*, *History of actuarial science* (1995); *Pierre Charles Pradier*, *L'actuariat au siècle des Lumières. Risque et décision économiques et statistiques*, (2003) 54 *Revue économique* 139–156.

³⁵ *Jacques Accarias de Serionne*, *Les intérêts des nations de l'Europe, développés relativement au commerce*, vol. 2 (Leiden 1766), 40. Forbonnais, who was writing in 1754,

Unfortunately, maritime business was still too disorganized to be mastered with any statistical model. Some improvements had been made in foreseeing certain risks: the international treaties and the discipline imposed on armed conflicts during the eighteenth century had contributed to making war risks less unpredictable. There had also been progress in shipbuilding, in nautical skill, and in the dissemination of information, but the level of abstraction of the probabilistic calculation and the scarce statistical series available at the time did not permit the development of any really effective actuarial method. Nicholas Magens, who, unlike the French publicist mentioned above, had a practical knowledge of the insurance business, doubted that one could profit from the calculation of the probabilities: ‘all that can be known is, that those alone have reason to promise themselves advantage from insurance, who, in proportion as the premiums rise and fall, and the circumstances are more or less dangerous, underwrite, or do not underwrite, greater or lesser sums.’³⁶ But the analysis of the circumstances, and the discretionary assessment of the many risk factors looming over each maritime enterprise were never particularly accurate, and in themselves were blunt weapons in the face of the reticence and the bad faith of the insured. All in all, it seemed obvious that the insurer would still have to rely on the strength of large numbers, rather than on the premium, especially in a context of international competition. We find some interesting indications about best practice from a memorandum of the merchants of the English nation of Livorno, a practice that Boasi should have been familiar with and observed himself. This memorandum was drawn up in 1748, when even the Tuscan government began to entertain the idea of authorizing the foundation a great monopolistic company to try to restore order in the insurance market.³⁷ The merchants of the ‘British Factory’ of Livorno opposed the plan with the same arguments that in 1720 had been employed – to no effect – to counter the incorporation of the Royal Exchange and the London Assurance, the two leading London companies.³⁸ In their view, the individual enterprise had numerous advantages over a joint-stock company, the

agreed: it should not have been very difficult to identify the frequency of maritime accidents, at least in peacetime: ‘Par un dépouillement des registres de la marine, on a évalué pendant dix-huit années de paix, la perte par an à un vaisseau sur chaque nombre de cent quatre-vingt. On peut évaluer les avaries à deux pertes sur ce nombre, et le risque général de notre navigation à 1 $\frac{2}{3}$ % en tems de paix.’ *François Véron Duverger de Forbonnais*, *Elémens du Commerce*, vol. 2 (Leiden 1754), 10.

³⁶ *Nicolas Magens*, *An Essay on Insurances*, vol. 1 (London 1755), vii.

³⁷ *Addobbati* (n. 12), 170–176.

³⁸ *Kingston* (n. 19). For a more general overview of the two companies and the London market: *Frederick Martin*, *The History of Lloyd’s and of Marine Insurances in Great-Britain* (1876; new edn., 2004); *David Eric Wilson Gibb*, *Lloyd’s of London: A Study in Individualism* (1957); *Arthur H. John*, *The London Assurance Company and the Marine Insurance Market of the Eighteenth Century*, (1958) 25 *Economica* 126–141, *Barry Supple*, *The Royal Exchange Assurance. A History of British Insurance* (1970).

most significant of which derived from its specific management criteria, which did not require the, probably unproductive, immobilization of share capital. Instead of keeping:

‘any of their capital employed in this business, [the individual underwriters] all have more or less considerable sums in their premiums account, which are daily taken in proportion to their signatures and it is certain in this time of war in which the aforementioned premiums are high, that they will often have in this respect in their account 1,000 pieces in proportion to each 100 piece that they underwrite; if therefore this calculation is right, as in fact it is judged to be and can be proved; each one whose signature gives, and assures 1,000 pieces, comparing different times, will have 10,000 pieces in his account, of which sum combined with the capital it is clear that it can also be used for other cases which might occur.’³⁹

Thus, individual firms did not set up guarantee funds. The whole ability of the good insurer consisted in trying to maintain a balance between the extent of the risks underwritten and the total amount of premiums receivable on the brokers’ current accounts. In their memorandum, the English merchants recommended to maintain a 1:10 ratio – at least in time of war. Instead, for Ascanio Baldasseroni, a maritime lawyer and the author of a famous treatise on insurance, there was no fixed ratio. By inviting the insurers to reckon a reasonable proportion of the underwritings for averages, the Livorno lawyer insisted on the danger of partial damages which, however small, if too numerous could threaten the ‘right proportion that any considerate trader can find between the collection of premiums and the payment of claims [...] and once the balance has been lost [...] it is very difficult to find it again’.⁴⁰ In short, the undertaking of the individual underwriter was a balancing act. Baldasseroni introduced the other two fundamental variables that should be taken into account: claims and averages. And Boasi? How considerate was our insurer? Is there a balancing act in his accounting that gives stability to the whole house of cards?

E. Boasi’s insurance accounts

Before putting Boasi’s current accounts under the microscope in order to identify his *modus operandi*, it should be pointed out that some fundamental parameters elude us, mainly regarding the outgoings. Boasi could use the brokers as liquidators, but he was not obliged to do so. Therefore, it is possible, and indeed very probable, that various damages, mostly the major claims, were settled with the commercial firm’s funds. Moreover, the current accounts were not closed: the firm’s activity ceased (after a protracted struggle), without a formal bankruptcy procedure, which could have given us more precise indications on the debt

³⁹ASF, Segreteria di Finanze ant. 1788, 800, Memoria della nazione Britannica.

⁴⁰ *Ascanio Baldasseroni, Trattato delle assicurazioni marittime*, vol. 3 (Firenze 1786), 116.

position. The creditors, considering the depth of his insolvency, agreed to renegotiate the debt and to liquidate it in full settlement and discharge of all claims. Thus, it is not possible to know how many pending risks turned into losses. A rough sketch of the available data gives the impression of an extremely lucrative business. In his first four years of activity, the outgoings for compensation, write-offs and transaction costs decreased the income from the premiums by between 29% and 46%.⁴¹ The best years would seem to have been the last two, with losses that decreased revenues by just 13% and 19%, respectively. Nevertheless, 1747 and 1748 were the years of the market explosion, due partly to a speculative bubble which, as we shall see, ended up exposing the great difficulties faced by the operators. In the above-mentioned memorandum, the English nation put forward the tendentious thesis that in ‘no other Market’ were claims settled so rapidly and the insurers were in a very solid position, as demonstrated by the fact that during the past 40 years, ‘no insurer has become insolvent; and if there has been any mishap, that person has not failed as insurer, but he has been subject to other causes and misfortunes’.⁴² Indeed, Berti’s study showed that there were some ill-advised purchases and the closure of the outlet markets that created difficulties for Boasi. However, there remains the strong suspicion, supported by many clues, that the current accounts of the brokers do not give us an exact representation of Boasi’s losses.

Table 1. Boasi’s insurance losses⁴³

	1743		1744		1745	
Claims	1	237.15.06 ⁴⁴	2	244.00.00	6	1164.00.00
Averages	23	258.04.09	22	523.08.10	28	412.14.03
Returns and Write off	17	128.10.00	15	212.07.00	20	253.15.00
Gifts		2.06.06		46.10.05		38.15.10
Losses		626.16.09		1026.06.03		1869.05.01

⁴¹ ASPi, Ospedali Riuniti di S. Chiara, Boasi, 1881, 1882, 1883.

⁴² ASFi, Segreteria di Finanze ant. 1788, 800. Memoria della nazione Britannica.

⁴³ Source: ASPi, Ospedali Riuniti di S.Chiera, Boasi, 1881, 1882, 1883. Currency: pieces of eight, schillings, and dinars.

⁴⁴ Deduction of 53.4.6 for rescue at sea.

	1746		1747		1748	
Claims	2	685.00.00			3	776.00.00
Averages	7	120.01.01	11	94.18.02	14	175.16.11
Returns and Write off	6	136.00.00	6	199.00.00	10	157.00.00
Gifts		19.05.03		33.02.10		30.12.05
Losses		960.06.04		327.01.00		1139.09.04

In the entire period under consideration, the claims settled by the brokers were 14 and the averages 105, for a respective cost of 3,100, and 1,600 pieces. The worst year was 1745, with six claims and 28 averages, which could partly explain the decrease in underwritings in the following two years: in 1745 Boasi signed 286 policies, but only 172 and 101 in 1746 and 1747, respectively. It should be borne in mind that all the claims, except for one renegotiated at 25%, were liquidated with a 3% discount, that is obtaining the rebate that was granted by the policyholder for prompt payment, and it is definitely very strange that Captain Boasi never countered the claims of an insured party in court. From 1746 onwards there was also a noticeable reduction in averages, which suggests a more prudent negotiation, with a more extensive use of the exemption clauses.

There are not so many doubts on the revenue side – which, even detracting the losses paid out by the brokers, would still yield significant margins of profit every year. Boasi could issue warrants of payment on the brokers' accounts, which he used to buy a consignment of tobacco and one of cotton, to insure his own trade, and also to pay the fees of lawyers and attorneys, a clear sign that at least sometimes he had to go to court. Furthermore, every year Boasi was able to collect part of his revenues; the brokers paid him in gold *zecchini*, sometimes they transferred to him the promissory notes of their debtors, but always at irregular intervals and, if we give credence to the most common complaints about them, not before Boasi had claimed payment with some insistence.⁴⁵ In any case, insurance underwriting represented a source of finance for the commercial firm that on average brought 1,200 pieces a year in cash. The collection, relatively large (perhaps even too high), never exhausted the credit, because at the end of each year Boasi left an amount to the brokers that over time should have accumulated, since the uncollected sums passed from 231 pieces in 1743, to 6,332 in 1748. I say it should, because the failure to close the accounts leads to uncertainty even on this point. According to what the British Factory in Livorno maintained in its memorandum, it was normal to give the brokers credit, and make sure to increase it, for that credit was needed to keep on underwriting on the risk market. Rather, in

⁴⁵ *Baldasseroni*, vol. 1 (n. 40), 44, 73 f. He had the same kind of problems with London brokers: *Weskett* (n. 28), 61–68.

the case of Boasi, the inadequacy of the amount of such credit is noteworthy. The Englishmen claimed that in wartime proper management should have a ratio of 1:10, and that for every 100 pieces of risk there should be 1,000 in the premium account. It is understood that the right proportion depends on time ('given a time commensurate with another', wrote the Englishmen), and that only the pending risks should be placed in the numerator. Nevertheless, even though it is impossible to make such a delimitation in the current accounts, because Boasi never notes the termination of the risks (which at the most could be deduced from the payment mandates and collections), the highest level of credit he was able to reserve, in 1748, remained very far from providing the desired guarantee: with 6,000 pieces in his reserve, Boasi could only have guaranteed 600 pieces at sea. Certainly, the Englishmen exaggerated; and they necessarily did so since they had to demonstrate the superiority of the individual enterprise over the joint-stock company. However, it seems quite clear to me that the bases on which Boasi started his insurance activity were too fragile, and that instead of consolidating them, he drew more than he should have from his accounts to meet the firm's liquidity requirements.

Table 2. Boasi's current accounts balance⁴⁶

	1743	1744	1745
Premiums	1340.01.04	3281.18.06	4797.11.03
Losses	626.16.09	1026.06.03	1869.05.01
Payments	205.04.02	67.04.00	708.18.06
Collections	602.07.09	1423.03.09	1579.00.07
Reserves	⁴⁷ 231.15.02	996.19.08	1637.07.07

	1746	1747	1748
Premiums	3296.03.06	2463.02.00	5760.14.10
Losses	960.06.04	327.01.00	1139.09.04
Payments	301.07.06	232.00.00	43.06.00
Collections	863.15.01	1371.01.02	1596.13.00
Reserves	2807.14.02	3340.14.00	6322.00.06

In 1746 and 1747, which coincided with the violent expansion of the market, Boasi's accounts show a decided reduction in his underwriting activity, and one

⁴⁶ Source: ASPi, Ospedali Riuniti di S.Chiera, Boasi, 1881, 1882, 1883. Currency: pieces of eight, schillings, and dinars.

⁴⁷ Previous reserves of 326.2.6 included.

might think that our insurer, frightened by the increase in losses in 1745, had rethought his approach to the insurance business, perhaps considering a progressive disengagement – but it is not so. Boasi reduced the number and the size of shares but increased the risk. In 1747 Boasi underwrote just 101 policies, but 41 of these, for almost a third of the risk, at a rate higher than 10%. Above all, Boasi accepted a large number of cross-risks, that is to say, he insured ships that did not depart from Livorno, nor arrived there, and of which he could not have direct knowledge: he underwrote returns from Fort St George (Madras) to London, *in quovis*,⁴⁸ at 10%, presumably on vessels of the East India Company; several Atlantic passages, from Rotterdam to Newfoundland at 19%, from Cadiz to Vera Cruz at 24%, returning from Havana at 25%, and from June 1747 up to the entire spring of the following year, he insured many French ships on the Caribbean routes: the *Roi David*, the *Diligent* of Captain Clemenceau, the *St Dominique* of Captain Maije, the *Comtesse of Valemille* of Captain Louis Curet, the *Grand Alexandre* of Captain Beltran, the *St Pierre* of Captain Pierre Touron, and so on. The overall risk on the French Caribbean trade was 8,400 pieces, divided into 41 policies (including two reinsurances at 40%), obtaining, at least on paper, an average premium of 27.4%.

The decrease in the number of underwritings is not a symptom of discouragement. On the contrary, Captain Boasi accepts high, even reckless, risks, because most of the policies on the Franco-Caribbean trade bear the *interest or not interest* clause since April 1747: that is to say they are wager policies, sheer wagers.⁴⁹ The clause, in fact, has the effect of waiving any proof about the interest of the insured in the safety of the thing at risk. Therefore, the policyholder is no longer required to show the bill of lading or any other title that ascertains his interest in the insured ship; now he solely commits himself to paying the premium on a presumed risk, which more often than not is a fictitious risk. The first foreign client to propose a similar contract in Livorno was the Bordeaux shipowner and dealer Jean Baptiste La Mothe, who used the commissioner Robert Perryman to place 4,000 pieces of risk, ‘fund or not fund in the form of a bet on the ship *Galliard*’, of Captain Vigaud, departing from Bordeaux bound for Louisiana and Cap Français.⁵⁰ Boasi underwrote a policy of this kind for the first time in June

⁴⁸ The ‘in quovis’ clause allowed the ship name to be omitted on the contract, and therefore to insure the wares on whatever ship was despatched: *Johan Petrus Van Niekerk*, *The Development of Principles of Insurance Law in Netherlands from 1500 to 1800*, vol. 1 (1998), 514–520.

⁴⁹ *Andrea Addobbati*, *Assicurazioni e gioco d’azzardo tra Bordeaux, Londra e Livorno. Le polizze speculative sul commercio Franco-caraibico durante la guerra di Successione austriaca* (2013), 48, 441–465.

⁵⁰ *Sommario per gli signori Roberto Perryman e Compagni e signori Francesco Della Rive e Rilliet ne NN. etc. contro gli signori assicuratori (Pisa 1749)*, 1 f. and 13, in: ASLi, *Raccolta giurisprudenziale Pachò*, 13/02.

of the same year (400 pieces on the *Roi David* from Guadeloupe bound for Bordeaux at 17%).⁵¹ The underwriting was proposed to Boasi through the broker Giovanni Boudowin, by the firm François De La Rive & Rilliet, the Livorno branch of the powerful Geneva Bank De La Rive, which acted on behalf of Peyre L'Ainé, another Bordeaux merchant.⁵² Subsequently, Boasi underwrote another 18 shares for De La Rive on the Franco-Caribbean trade, all the others were proposed by various other Livorno merchants, who did not necessarily have to have correspondents in France's Atlantic ports, because from August 1747 they found a way to wage freely, even without commission, both on the safe arrival and on the mishap: the broker Giacomo Jaume introduced into the policies a second derogation clause, which exempted the insured from presenting the order letter.⁵³

F. The *interest or not interest* clause and the Bubble of 1747

The wager policies fever was overflowing from London, where, since 1744, public opinion and Parliament were heatedly discussing their validity. In 1746, Parliament finally passed a new law, 'the most important and most extensive,' James Allan Park would write, 'in the whole code of statute law, with regard to

⁵¹ The average premium paid by the Bordeaux shipowners in peacetime was around 3.25% to 3.5% for the straight crossing to Martinique, and around 7.25% to 7.5% for a voyage stopping at Guinea to take on board slaves. See *Éric Saugera*, *Bordeaux port négrier: chronologie, économie, idéologie XVIIe–XIXe siècles* (1995), 270. Until recently, Perryman had been operating in Genoa, but was forced to move to the Tuscan port when the imperial troops occupied the Ligurian city, bringing to a halt its economic life. The military occupation of Genoa contributed significantly to the economic growth of Livorno, and the attempt by the Grand Duchy to retain the Genoese merchant fleet (which had moved to the Tuscan port) was the source of a fierce trade war in the subsequent decade of peace. *Carlo Mangio*, *Commercio marittimo e Reggenza lorenese in Toscana (provvedimenti legislativi e dibattiti)*, (1978) 90 *Rivista Storica Italiana* 898–937; *Daniele Edigati*, *The Tuscan Edict of 1748 and ancien régime maritime legislation*, in: Antonella Alimento (ed.), *War, Trade and Neutrality. Europe and the Mediterranean in Seventeenth and Eighteenth Centuries* (2001), 68–81; *Daniilo Pedemonte*, 'Operando in pregiudizio della piazza di Livorno'. *Pubblica salute e privati interessi nella guerra sanitaria degli Stati italiani alle paci imperiali con i barbareschi*, in: Andrea Addobbati and Marcella Aglietti (eds.), *La città delle nazioni: Livorno e i limiti del cosmopolitismo (1566–1834)* (2016), 293–308.

⁵² *Herbert Lüthy*, *La banque protestante en France de la révocation de l'édit de Nantes à la Révolution*, 2 vols. (1959). On the Livorno firm in particular: *ibid.*, vol. 2, 285. The firm consisted of François de La Rive-André and the brothers Louis, François-Robert and Jean Jacques Rilliet, the sons of Jean François, previously a banker in Paris who later retired in Geneva. He anticipated substantial sums, in a limited partnership, for launching the business in Livorno. After the death of de La Rive, the company name became Louis et Jean Jacques Rilliet.

⁵³ *Addobbati* (n. 49), 458.

insurances'.⁵⁴ The prohibition of wager policies, however, was limited to national trade. The insurance lobbies were allowed to continue insuring all trade of foreign countries, privateers, and British goods destined to all the Iberian markets, whether in Europe or in America, without proof of risk. The logic in providing such sweeping exceptions to the rule was not very clear, and the controversy continued.⁵⁵ Geoffrey W. Clark has suggested that the decision to allow bets on foreign ships must have been purely for military reasons. The *interest or not interest* clause had potentially destructive effects: it increased adverse selection and encouraged frauds. Therefore, it was reasonable to ban it on national trade, while it could be convenient to allow it on enemy trade, so as to push the latter to destroy his merchant fleet. In the dire situation of French shipping, frustrated by overwhelming British naval superiority, wager policies could be an opportunity for French shipowners, and an advantage for the British military.⁵⁶ I believe that this is only a partial explanation, because it does not take into account the pressure exerted by insurance circles to obtain such exemptions, and the great difficulties that worried the whole sector. As we have seen, the insurance business as a whole, especially with regard to individual operators, represented a fragile set of account currency, and its solvency was highly dependent upon a skilful balancing of risk underwritings and the amount of premium to collect, according to a ratio that could never be established with certainty, and that in any case remained exposed to the sudden changes in the international situation. The outbreak of a conflict and all its unpredictable consequences imposed continuous changes of pace in establishing both the premium rates and the extent and frequency of the underwritings, in order to avoid a cash-flow fall and the ensuing bankruptcy. Of the two levers on which to act, the first, the rate variation, offered limited room for manoeuvre: the premium became part of the goods' price, and if it was too high with respect to the markets' absorption capacity, it ended up eroding, and even nullifying, the commercial profit, with the result of discouraging navigation and stopping trade. Moreover, in a context of international integration, it was necessary to keep the rates' trend under control in order not to give in to foreign competition. Thus, once the compensatory capacity of the rate variation had been exhausted, all that remained was to act on the other lever, that

⁵⁴ James Allan Park, *A system of the law of marine insurances* (London 1787), 299.

⁵⁵ See, for example, the pamphlets by *Corbyn Morris*, and in particular: *An Essay towards deciding the Important Question, whether it be a national advantage to Britain to insure the Ships of her Enemies?* (London 1747). The second edition (London 1758) is reprinted in: David Jenkins and Takau Yoneyama (eds.), *History of Insurance*, vol. 7 (2000), 207–282. Magens also discussed the question at length in his famous treatise: *Magens* (n. 36), i–xv, 24–31.

⁵⁶ Geoffrey Clark, *Insurance as an Instrument of War in the 18th Century*, (2004) 29 *The Geneva Papers on Risk* 247–257; *idem*, *Waging War with Insurance in Eighteenth-Century Britain*, in: Christian Thomann and Johann-Matthias Graf von der Schulenburg (eds.), *War, Terrorism and Insurance in Europe after September 11*, vol 1 (2004), 7–32.

of broadening the allocation base: relatively moderate rates, but frequent underwritings; and the involvement in the market of a series of new underwriters, in order to increase their overall number. But, even so, it was not possible to expand the amount of premiums underwritten at will: an adequate expansion of the number of risks would have been necessary; instead, in wartime the risk increased but maritime traffic contracted. However, there was a last resort in broadening the allocation base, keeping up the cash flow, and to thus withstand the impact of the war situation: the fuel of speculation. Creating fictitious risks made it possible to inflate the number of premiums on the accounting ledgers, increasing the solvency of the insurers in the short term.

Whatever the considerations behind the exemptions, it did not take long for their negative effects to emerge. In 1747, the London insurers opposed the compensation of the *Heureux*, a French ship that had set sail from Bayonne towards Martinique, which was captured by English corsairs on the second day of navigation. The commission agent Mendes da Costa, who was acting on behalf of the shipowners, had insured it with the *interest or not interest* clause in various policies for a total value of £3,340 – more than four times its real value. It did not take long to realize that the law, by authorizing the wager policies on the trade of foreign nations, left a door open for the fraudulent designs of the French, and that the case of the *Heureux* was only the tip of the iceberg: the many pending risks insured in London, with the *interest or not interest* clause, amounted to a total that according to some estimates had to be around £100,000.⁵⁷ After all, there were not many possibilities left to the French shipowners: the fleet was in danger of rotting in the ports, and domestic insurers were all but bankrupt, so they had to look for insurance coverage in the foreign markets, starting from London, where they had discovered that a loophole in the law would have allowed them to get out of trouble and to launch the entire fleet on the ocean routes in a desperate way. The French Minister of the Navy, Count de Maurepas, denounced the abuses without being able to do anything about them, while the Parliament of London fixed the shortcomings of the law, prohibiting any insurance on enemy's assets in January 1748.

Towards the end of 1747 the Livorno insurers were also informed of the dangers of the wager policies. There had already been the first notifications of mishaps, concerning four ships on the Caribbean routes, the *Marie Immacolate*, the *Alexandre*, the *Concorde*, and the *Royal Dauphine*. Some insurers had begun to liquidate the shares, when the Jackson & Hurt firm was warned by the head of the firm in London: 'these risks are a bad business. Not long ago,' wrote George Hurt, '5 or 7 ships, according to the information I have been given, were sent

⁵⁷ Clark, *Instrument of War* (n. 56), 255–257. On Benjamin Mendes da Costa (1704–1764), one of the most eminent merchants of the Sephardic community of London, see the biographical entry by Todd M. Endelman, *Oxford Dictionary of National Biography* (2004).

from a French port with bricks, on purpose, to go and perish, and a considerable sum was underwritten here for these vessels'. The French had insured 'the weakest ships [...] as it is [...] their custom to put themselves in the hands of their enemy [...] as well as to insure a ship for twice its value. You cannot conceive,' concluded the Londoner, 'the deceits which the insurers have suffered here'.⁵⁸ Jackson & Hurt, who had 800 pieces of eight on the *Royal Dauphine*, refused to pay, being soon imitated by other insurers, including Captain Boasi who had 300 pieces on the same ship.⁵⁹ It was the beginning of a long and intricate legal dispute, which would only be concluded in 1753, after having passed through various appeals and degrees of judgment. The different lawsuits before the Livorno court were all brought together in a single proceeding and were brought to the *Consulta*, the highest court of the state, which began drawing up a financial report of all disputes. In the second half of 1747, at least 48 policies were underwritten with the ill-famed clause, relating to 27 different French ships on the routes of the West Indies, for a total risk of 204,750 pieces. The premiums had been agreed at 18%, 20% and 25%, for a total premium of 44,226 pieces. Of the 27 ships, 13 were captured by the British or wrecked.⁶⁰ In order to refuse payment, the insurers pretended not to have understood the nature of their obligation and accused the policyholders of ambiguity. The latter replied that it was impossible to misunderstand in cases where the omission of the risk's proof was stipulated, and they were right: everyone was aware that those contracts were not real insurances, but wagers. It was a comedy in which all the players were involved as interchangeable characters, both as insured, when they had wagered on a mishap, and as insurers, when instead they had bet on the ships' safe arrival. In the end, all of them decided to take sides after having properly checked their accounts. However, they had the foresight never to accuse their counterparties of fraud in order not to risk criminal charges. Thus, the whole discussion focused on the effects of the *interest or not interest* clause. The *Consulta* eventually recognized its lawfulness but limited its effects to the drawing up of the contract. In other words, the clause was intended to relieve the insured party from the burden of proof when asking for the insurer's signature, in order to facilitate the negotiation, but if a mishap occurred, the clause could not exempt him from proving his interest in insuring during the ensuing claim. The consequence was that all

⁵⁸ Sommario per gli assicuratori contro gli signori Roberto Perryman e compagni e signori Francesco Della Rive e Rilliet assicurati coll'osservazioni (Pisa 1749), in: ASLi, Raccolta giurisprudenziale Pachò, 13/07.

⁵⁹ Sommario per gli signori Roberto Perryman e Compagni (n. 50).

⁶⁰ *Addobbati* (n. 49), 455 f. The insurers involved were 46, including many Jews and English firms, like Jackson & Hurt and John Becher, who appeared to be the most exposed, having underwritten 1,000 and more pieces on each ship; ASLi, Governatore e Auditore, 894, nn. 79–81, 93–95; 896, nn. 312, 418, 455; 2311, n. 103.

the wagers were avoided.⁶¹ A different verdict would probably have had devastating effects. The contracts brought to court, as can be seen from Boasi's current accounts, were only part of all the wager policies negotiated in Livorno.⁶²

G. Conclusion: from individuals to companies

The 'famous case of American insurance' – as formulated in a polemical dialogue printed in 1750⁶³ – had the effect of freezing the insurers' position (as to both credits and debts) up to the final sentence, a circumstance that may explain why Boasi did not close his accounts. He continued underwriting until the end of the war, without refraining from putting his signature on some other high-risk policies relating to Franco-Caribbean trade. In his last year of activity, our insurer even increased the volume of underwritings, perhaps envisaging that part of his premiums would have been uncollectible. The signing of the peace preliminaries in April 1748, according to Boasi's correspondence, opened up a phase of uncertainty and an unnerving wait for political developments. Boasi, who hoped to 'see the poor trade to take a deep breath after a long distress' to get rid of his warehouse's unsold stock by selling it to South America, was soon disappointed. After the war, trading could not resume its ordinary course at once: 'This sudden peace,' Captain Boasi wrote to his friend Quaratesi at the beginning of 1749, 'brought about endless confusion on trade and I, in my own small way, have suffered no small damage'. And, some time later, once again to Quaratesi: 'everything remains stranded and nothing is sold, and I [...] find myself with

⁶¹ Decisione degl'illustrissimi signori Pier Francesco Mormorai primo auditore di Consulta e Ferdinando Soldani Benzi auditore di Ruota, nella causa liburnensis assicuratio-num. Del dì 16 maggio 1753 (Firenze 1754). One of the three judges disagreed in part with his colleagues, by issuing a minority report: Voto decisivo dell'illustrissimo Signor Giuseppe Bizzarrini auditore della Ruota Fiorentina, nella causa liburnensis assicuratio-num seu sponsionum. Del dì 16 maggio 1753 (Firenze 1753), in: ASLi, Raccolta giuri-sprudenziale Pachò, 21/f, 24/c respectively.

⁶² Several discrepancies emerge from the comparison between the trial papers and the documentation of the public policy register. Furthermore, from a quick examination of the claims filed in the court of Livorno by François De La Rive & Louis Rilliet, we learn that this firm alone, albeit an important one, in the two-year period 1747–1748 asked for compensation of 107,800 pieces (32,380 for reinsurances). The Geneva-based firm was acting on behalf of clients in Bordeaux and Marseille, and the 36 ships involved were all French. Only two were captured on the routes of the Levant, all the others while they were sailing in the Atlantic, between the sugar islands and France, but of these only seven appear in the dispute debated before the Consulta: ASLi, Governatore e Auditore, 882, nn. 564, 565; 883, nn. 653–655; 887, nn. 799, 802, 804, 864–869; 888, nn. 1020–1027, 1032; 889, nn. 1152–1154; 890, nn. 1181, 1209–1211, 1214; 892, nn. 1503–1509; 894, nn. 12, 13; 897, nn. 509, 556, 563, 562; 898, n. 605; 901, nn. 1002, 1003, 1050–1052; 902, nn. 1157, 1157 bis, 1158, 1164.

⁶³ Dialogo nella celebre causa delle sicurtà d'America fra un dottor di legge ed un mercante (Pisa 1750), in: ASLi, Raccolta giurisprudenziale Pachò, 18/m.

many kinds of stock and always new ones arriving from the Levant, without being able to sell any garment for lack of demand, so now I am trying to do my best as I wait for business to improve'.⁶⁴ The insurance market, after the deflation of the speculative bubble, also grew weak, and was even unable to keep up with the demand. Boasi, who had a batch of incense to ship to Cadiz, could not find any Livornese willing to take the risk, so he had to call on his Amsterdam correspondent Van Inghen: 'after the news of peace the number of insurers in this market has decreased a great deal and as each one of them has his full quota on this ship, it is better for me [...] to turn to you for this insurance'.⁶⁵ In a short time, the network of correspondents that he could so far rely upon ceased to provide the usual support. A bill of exchange issued on his friend David Klugh of Hamburg, payable in Amsterdam, was not accepted by the drawee,⁶⁶ and even Etienne Lespiau of Marseille, who was in debt to Boasi, refused to pay him.⁶⁷ Finally, when in July 1749 he learned that his Florentine silk goods sent to Cadiz simply could not find a buyer,⁶⁸ Captain Boasi decided to withdraw from business and pay his outstanding accounts with the creditors before being forced to file for insolvency.⁶⁹ Boasi's disengagement from the insurance market preceded his withdrawal from business by nine months, and coincided with the ratification of the Treaty of Aachen. In the meantime, premiums had returned to ordinary levels. Our insurer placed his signature for the last time on a policy on 30 October 1748: 300 pieces on wheat from Ancona to Livorno on the polacre *Madonna del Lauro* of the Neapolitan Captain Giacarino at 8%.⁷⁰

Along with Jacopo Antonio Boasi, many other underwriters left the market, and it was at this juncture that discussions began in Livorno, as well as elsewhere, as to the need to give the insurance business a new framework. The war had exposed the serious limitations of the traditional insurance business: the underwriters' lack of professionalism, aggravated by the habit of delegating the technical functions and the management of funds to the brokers (who, at least in Livorno, were prevented by the law from having a business interest in partnership with their clients), and the inelastic structure of the offer (that is to say, the market's inability to adapt beyond a certain limit to the continuous fluctuations in

⁶⁴ Berti (n. 4), 324.

⁶⁵ Berti (n. 4), 330 f.

⁶⁶ ASPi, Ospedali Riuniti di S. Chiara, Boasi, 1880 (15 November 1748). The promissory note, worth 640.17 pieces, was issued in favour of Jackson Hurt & Rocherford.

⁶⁷ Ibid. (25 April 1749). Two promissory notes of 380 and 160 pieces, in favour of Luigi de Lamar, came back.

⁶⁸ Ibid. (8 July 1749).

⁶⁹ Ibid. The settlement with the creditors begins on 13 August 1749, with the lawyers, and goes on with the apothecary and the correspondents Van Inghen and Etienne Lespiau (April 1750), Quaratesi (November 1750) and Ubaldini (January 1750/December 1751).

⁷⁰ ASPi, Ospedali Riuniti di S. Chiara, Boasi, 1883.

demand). A traditional market made up of individual underwriters could only try to make up for its shortcomings by entrusting the brokers with the task of recruiting new forces, usually inexperienced people who were more easily persuaded in time of war, when the high rate of premiums dangled extraordinary speculative opportunities, and who after experiencing the thrill of gambling, quickly returned from where they had come, sometimes a little richer, but more often to escape from creditors.⁷¹ The instrument that would have given more stability and reactivity to the market was the joint-stock company; not an occasional working relationship of individual underwriters coordinated by the brokers, but a concentration of capital managed by an expert management co-interested in the company's objectives. There were few such companies before the war of 1744–1748: a couple in London, and one in Copenhagen, Rotterdam and Genoa respectively.⁷² It was the experience of war that led governments to sponsor the creation of consortia and companies, whether in a monopolistic or in a free competition system. In 1750 the *Chambre d'Assurances Générales et Grosses Aventures* of

⁷¹ The edict that established the Neapolitan Real Company in 1751 insisted in the preamble on the disorders and scandals that the company would have remedied. Those who had made themselves responsible 'in all the markets of Europe' were those 'many Particular persons, even non-traders, and those without capital lured by the prospect of making a profit with a simple signature on the known insurance sheets, [which] undermine this branch of business, and upset good faith, and the flow of trade, while when an accident happens, and they fail to satisfy their clients, they raise affected pretexts, and exceptions to give rise to expensive and very long quarrels, and with this tyranny of the poor insured clients they try either not to pay, or after months, and years to extract from them certain dishonest adjustments'. Cited in *Baldasseroni*, vol. 3 (n. 40), 639.

⁷² It should be pointed out that the results of these first incorporations were not always satisfactory. In Great Britain, the Bubble Act of 1720 prevented the creation of new companies beyond the two approved ones, which, moreover, could not exclude from the market the individual underwriters organized by Lloyd's. Kingston believes that the London Assurance and the Royal Exchange remained more exposed to the problem of information asymmetry, while Aldous and Condorelli blame their failure on the lack of limitation of shareholders liability and the excessively prudent conduct imposed on directors. *Kingston* (n. 19); *Michael Aldous and Stefano Condorelli*, *An Incomplete Revolution: Corporate Governance Challenges of the London Assurance Company and the Limitations of the Joint-Stock Form, 1720–1725*, (2019) 20 *Enterprise and Society* 239–270. On the *Maatschappij van Assurantie* of Rotterdam: *Sabine Go*, *Marine insurance in the Netherlands 1600–1870: A Comparative Institutional approach* (2009), 216–223. On the first Danish company: *Christian Thorsen*, *Det Kongelig Oktroierede Sø-Assurance Kompagni, 1726–1926* (1926). On the Genoese company, founded in 1742: *Giulio Giaccherio*, *Storia delle assicurazioni marittime: l'esperienza genovese dal Medioevo all'età Contemporanea* (1984), 139–156. On the wave of stock market speculation in 1720 the *Assecuranz-Compagnie* of Hamburg was founded, which, however, had a very short life, and it took until 1763 to be able to successfully replicate the initiative: *Caesar Amsinck*, *Die ersten Hamburgischen Assecuranz-Compagnien und der Aktienhandel im Jahre 1720*, (1894) 9 *Zeitschrift des Vereins für hamburgische Geschichte* 465–494; *Marcus A. Denzel*, *The Price of Minimalizing the Risks at Sea: The Hamburg Marine Insurance Rates in the 18th and Early 19th Century*, in: *Giampiero Nigro* (ed.), *I prezzi delle cose nell'età preindustriale: selezione di ricerche* (2017), 367–383.

Paris was created,⁷³ and consortia of this kind arose in all the most important French ports, beginning with Saint Malò. ‘Rouen has seven of them, Nantes three; Bordeaux, Dunkirk, La Rochelle have some too; but it was only since the last peace,’ noted Forbonnais, ‘that they were formed’.⁷⁴ Many Italian port cities followed the same path. A company was founded in Naples in 1751, one in Ancona in 1754, another one in Trieste in 1764.⁷⁵ Livorno, on the other hand, remained faithful to the traditional model until 1787. The Tuscan government was invited to consider at least two company projects, in 1748 and 1751, but neither was approved, because the British Factory of Livorno made it known that it would not welcome any changes.⁷⁶ In the opinion of the English merchants, everything was going in the best way, as it was ‘well known to everyone that in no other Market, accidents, averages etc. are more easily recovered and paid, and so soon adjusted and remedied as in Livorno’. The insurers were solid, very solid in fact, because ‘not only during the course of the present war, but also during the last long peace and the war that preceded it, in all for about forty years, no insurer has become insolvent in this place; and if an accident has happened, that person has not failed as insurer, but he had fall by other causes and misfortunes – an excellence that perhaps cannot be found in any other Market in Europe’.⁷⁷ And it should be borne in mind that while the British expressed such a flattering opinion, the threat of the wager policies was still hanging over the head of the insurers. Had the courts failed to freeze the problem first, and then defuse it, it would have been very difficult to remain so optimistic.

⁷³ *John F. Bosher*, *The Paris Business World and the Seaports Under Louis XV. Speculators in Marine Insurance, Naval Finances and Trade*, (1979) 12 *Histoire sociale/Social history* 281–297.

⁷⁴ *Forbonnais* (n. 35), 70 f. Despite the strengthening of the supply capacity, the joint-stock companies of the second half of the eighteenth century could not yet act in a framework of impersonal relations. Shareholders generally consisted of pre-existing relational networks, as has rightly been pointed out by *Arnaud Bartolomei*, *Les compagnies par actions à Cadix: les limites d’une exploitation rationnelle du risque maritime (1778–1808)*, in: Gérard Chastagneret et al. (eds.), *Les sociétés méditerranéennes face au risque* (2012), 75–96.

⁷⁵ *Franca Assante*, *Il mercato delle assicurazioni marittime a Napoli nel Settecento: Storia della ‘Real Compagnia’ 1751–1802* (1976), *Alberto Caracciolo*, *Le port franc d’Ancône: croissance et impasse d’un milieu marchand au XVIIIe siècle* (1965), 256–258; *Loredana Panariti*, *Assicurazione e banca. Il sistema finanziario triestino (secc. XVIII–XIX)*, in: Roberto Finzi et al. (eds.), *Storia economica e sociale di Trieste*, vol. 2 (1719–1918) (2003).

⁷⁶ *Addobbati* (n. 12), 170–175.

⁷⁷ ASFi, Segreteria di Finanze ant. 1788, 800: Memoria della nazione Britannica.

