

# Marine Insurance in Philadelphia during the Quasi-War with France, 1795-1801

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## Abstract

Until 1792, marine insurance in America was entirely in the hands of private underwriters (although American merchants also obtained some insurance in London). By 1810, the business had shifted into the hands of joint-stock corporations (and much less was being done in London). This paper investigates this rapid transition between institutional forms, focusing on a pivotal period when newly-formed corporations existed side-by-side with private underwriters, and when the risks to American shipping increased substantially as a result of French privateering during the Quasi-War between the US and France. I use data from a private underwriter and a marine insurance corporation to examine the Quasi-War's effect on insurance rates, the volume of business, and the institutional structure of the marine insurance industry. I also contrast the American experience with that of Britain, where a similar transition to corporate underwriting did not occur at this time despite the stimulus of the Napoleonic wars, and with France and Holland, where a more gradual transition occurred.

## 1 Introduction

Around 20 June 1797, the prominent Philadelphia merchant George Latimer insured \$400 worth of goods from Philadelphia to the island of Hispaniola in the West Indies on board the snow *Boston*. He obtained his insurance through the brokerage firm of Wharton & Lewis, following a long-established practice familiar to merchants everywhere. In consultation with the broker, a policy was drawn up specifying the details of the risk; the rate of premium was set; and the policy then lay in the broker's office for several days, during which time, wealthy private individuals (often merchants themselves) stopped by and, if they considered the premium acceptable, wrote their names on the policy (hence becoming "underwriters") along with the amount of the risk they were willing to cover. A typical policy was subscribed by several private underwriters. For the *Boston's* voyage to Hispaniola, the

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rate of premium was set at 15%, reflecting the danger of capture by French privateers then active in the Caribbean.

Several other merchants were also shipping goods on the *Boston*. On June 26, William and Samuel Keith insured \$480 worth of goods from Philadelphia to Port au Prince (in Hispaniola) at 15%; and the next day, Boys & McCallmont insured goods worth \$800 to Cape Nichola Mole and one other port in Hispaniola, also at 15% (though if the risk ended at Cape Nichola Mole,  $2\frac{1}{2}\%$  of the premium was to be returned). But instead of visiting a private brokerage, these merchants obtained their insurance from the Insurance Company of North America, the first joint-stock marine insurance corporation in America, which by this time was nearly five years old.

At this time, France and Britain were at war. Therefore, as was usual, the assured in all cases warranted that the vessel carried the documents required to establish that the goods were neutral under US law. Nevertheless, the *Boston* never made it to Hispaniola. On 25 July 1797, it was captured by the French privateer *Fine*, and later condemned at a French prize court in the French port of Jean-Rabel in Hispaniola. This was unfortunate, but not unusual; during the 1790s and early 1800s, hundreds of American merchant vessels suffered similar fates.

Marine insurance was at this time a centuries-old practice widely used by merchants throughout the Atlantic world as a means of spreading risk. Up to the eighteenth century, underwriting was carried out entirely by private individuals, many of whom were themselves active or retired merchants. By limiting their exposure on any single risk, and spreading their underwriting judiciously across a variety of voyages, underwriters attempted to make a profit while minimizing the likelihood of heavy losses. This system of private underwriting ultimately attained its most developed form in Britain, where Lloyd's coffee house in London emerged in the early eighteenth century as a gathering place for merchants, brokers and underwriters, and by the end of the Napoleonic wars had developed into a sophisticated marine insurance marketplace (Kingston 2007).

However, during the eighteenth century, joint-stock marine insurance corporations emerged to compete with the private underwriters. Corporations had several important advantages. They could raise capital even from those with no knowledge of trade or insurance, in effect enabling wealthy individuals without underwriting expertise to underwrite by entrusting their capital to experts. They could provide greater security to the assured, because their underwriting was backed by a large capital fund. They also avoided the inconvenience and transaction costs involved in

finding a new set of private underwriters for each new policy. As a result, in France and Holland, corporations gradually eclipsed private underwriting during the eighteenth century. In Britain, for reasons we will discuss later, private underwriting survived and flourished despite competition from corporations.

In America, the transition from private to corporate underwriting was especially rapid. In the early eighteenth century, the trade and capital of the American colonies had been too small to support an indigenous marine insurance industry, and American merchants therefore generally obtained insurance in London. A local marine insurance industry based on private underwriting emerged in the middle of the century, as the volume of trade grew. By the 1790s, private underwriting was widely practiced in America. Beginning in 1792, however, marine insurance corporations began to emerge, and they rapidly took over the market. Within little more than a decade, private underwriting had been virtually extinguished.

This paper investigates the rapid transition between institutional forms in the American marine insurance industry: what happened, and why? I also compare the American experience with events in France and Holland (where, as in America, corporations came out on top) and in Britain (where private underwriting remained dominant), in an attempt to shed light on the forces which drove these institutional changes. To investigate these questions, I focus on a pivotal moment in this transition (1795-1801), when private underwriters existed side-by-side with newly-formed marine insurance corporations, and the risks to American shipping fluctuated severely as a result of the Quasi-War between America and France. I compare data from a private underwriter and a marine insurance corporation in Philadelphia (America's leading port at the time) to examine the Quasi-War's effect on insurance rates and on the pace and direction of institutional change in the American marine insurance industry.

The paper proceeds as follows. The next section describes how the practice of marine insurance evolved in Philadelphia up to the 1790s. Section 3 provides an outline history of the Quasi-War and its effects on American trade. Section 4 investigates how the marine insurance business in Philadelphia was affected by the Quasi-war. Section 5 compares the changes in the institutional structure of the American marine insurance industry with the experiences of France, Holland and Britain. Section 6 concludes.

## 2 Marine insurance in eighteenth-century Philadelphia

In a marine insurance contract, a merchant pays a premium to an underwriter in exchange for a promise that the underwriter will reimburse the merchant for losses incurred at sea (and sometimes also in port). By the eighteenth century, contractual forms were fairly standardized, though the exact contractual details might still vary; in particular, the voyages insured ranged from simple one-way trips between two ports to more complicated voyages allowing for flexibility as to route and cargo depending on circumstances. The risks covered also varied from “sea risk” only (dangers of wind and weather) to (more usually) broader coverage including the possibility of enemy capture.

During the colonial period, many American merchants obtained insurance through their correspondents in London.<sup>1</sup> But insuring in London created considerable inconvenience. American underwriters had better information on local risks, and their proximity enabled quick payment in case of loss, facilitated resolution of disputes, and avoided the necessity for merchants to rely on foreign agents to make insurance on their behalf and represent their interests when making claims. They also had greater experience, and more up-to-date information, on the important West Indian routes, enabling them to cover these risks at considerably lower premia than Lloyd’s. This informational advantage was particularly important in wartime, when premia could change rapidly. For example, in December 1775, the *Minerva* was insured from Jamaica to Philadelphia at 3% by private underwriters in Philadelphia; but three months later, with the threat of war with Britain looming, a similar voyage from St. Eustatius was insured at 40% (Fowler 1888: 28-9).

Accordingly, an insurance brokerage was operating in Philadelphia by the late 1740s (Gillingham 1933: 18), and during the course of the century, at least 21 firms are recorded as having functioned as insurance brokers at some point (Gillingham 1933: 42-51), though only a few were active at any given time. Similar brokerages operated in Boston, New York and elsewhere. These firms were for the most part merchants or shopkeepers who acted as brokers on the side. They “kept an insurance office”, where merchants would stop by periodically either to insure their own ventures or to underwrite those of others.

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<sup>1</sup>London had two chartered marine insurance corporations, but they provided only a small fraction of the overall market, because of a lemons problem which prevented them from competing effectively with the private underwriters at Lloyd’s (Kingston 2007). The corporations were particularly reluctant to cover “cross-risks” between two foreign ports, such as voyages between the United States and the West Indies, so American merchants dealt mainly with Lloyd’s.

For the most part, both the underwriters and insurers were local and known to each other, although merchants also frequently procured insurance on behalf of their correspondents in other ports. In the 1750s, for example, Philadelphia merchant and broker Thomas Wharton regularly procured insurance on behalf of correspondents in New York and elsewhere, including New York merchant Gerard Beekman, who often obtained insurance in Philadelphia, because he generally found the premia lower than he could obtain in New York.<sup>2</sup> Yet, even in Philadelphia, (which was the largest port in America) the extent of the market was sufficiently limited that a broker might sometimes be unable to find a sufficient number of underwriters to cover large policies. In 1787, Philadelphia broker Benjamin Fuller was only able to obtain 34 underwriters on a large policy, “All the underwriters in the City (except 2 or 3) having Subscrib’d”, and had to write to brokers in New York to obtain additional underwriters.<sup>3</sup> Despite the development of marine insurance in the colonies, colonial merchants continued to obtain a substantial amount of insurance through their agents in London. This practice continued even after American Independence, particularly when insuring trade with Britain.

As will be shown below, war created an impetus for increased organization. Prior to Independence, Britain’s Bubble Act of 1720 prevented American merchants from setting up joint-stock insurance corporations, so the underwriters improvised. For example, in 1757, during the Seven Years (or “French and Indian”) war, Thomas Willing and five other prominent merchants organized a “company”, in which each undertook to assume one-sixth of the total risks underwritten by Willing for a period of one year, and not to underwrite separately in their own names (Gillingham 1933: 31-3). Because they did not formally assume joint liability (which would have been illegal under the Bubble Act), this “company” was in reality a syndicate of individual underwriters, but it would nevertheless have reduced transactions costs and increased merchants’ confidence in the security of the policy. Nonetheless, the arrangement appears to have been terminated within a few years.

With Independence, American shipping lost the protection of the Royal Navy, and access to the British West Indies. Further restrictions on trans-Atlantic trade, and a British Order in Council (1783) forbidding the purchase of American-built vessels created a depression in the American

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<sup>2</sup>Gerard Beekman to Townsend White, 6 October 1754 (White 1956); Thomas Wharton letterbook, HSP ms 708A series 3 vol 24.

<sup>3</sup>Historical Society of Pennsylvania ms AMB 3485, Benjamin Fuller to Herbert and Potts, 9 August 1787.

shipping industry (Palmer 1981). With the advent of the European war in 1793, however, prospects brightened considerably. Both Britain and France loosened their mercantilist restrictions on trade with their West Indian colonies, and the French, in particular, began to rely heavily on neutral vessels to carry on this trade.

Independence also freed American underwriters from the Bubble Act's restrictions on the founding of joint-stock corporations. The ensuing chartering of numerous corporations, including banks and insurance companies, was one component of a set of institutional innovations in the early 1790s described by Sylla (2006) as the "U.S. Financial Revolution". The first marine insurance corporation in America, the Insurance Company of North American (INA) was formed in Philadelphia in 1792 and began petitioning the state legislature for a charter. Initially, many of the private underwriters and merchants opposed the charter, but when it became clear that the company was operating successfully, the opposition concentrated instead on gaining an additional charter for a company of their own. Accordingly, in 1794, two corporations were chartered: the INA, and the Insurance Company of the State of Pennsylvania (ISP). Many more corporations were formed in Philadelphia and other US cities over the ensuing decade (see Kingston 2007 for a fuller account).

### **3 The Quasi-War between America and France**

In the eighteenth century, many private vessels were suitable for conversion to military use - indeed, many merchant vessels were armed as a matter of course. During wartime, it was common for belligerent nations to commission private vessels as privateers to prey on enemy commerce. Privateering provided a free, straightforward and incentive-compatible way for the state to increase its naval strength and harass enemy commerce, and should not be confused with piracy. At least in theory, privateers were subject to strict rules governing the treatment of both enemy and neutral vessels. If the vessels or goods they captured were legally condemned in prize courts, they became property of the captor (sometimes, the state also took a cut of the profits). If, on the other hand, the privateers were unable to show that the vessel or goods were legitimate captures ("good prize"), they were released, sometimes with payment of compensation. In practice, however, nations differed over the conditions governing the neutrality of vessels and cargoes, and inevitably, because a lot of money was at stake, the system was sometimes abused.

The maritime risks on most voyages were by and large moderate and knowable to those

involved in trade. Peacetime rates on one-way voyages from America to either the West Indies to Europe were usually on the order of  $2\frac{1}{2} - 3\%$ , with some variations depending on the vessel, captain, time of year, destination, details of the voyage, and so forth. Because of the risk of capture, however, war could lead to substantial increases in premia, often to 20–30% or more. Furthermore, the uncertainty associated with the risks also increased, leading to large and sometimes sudden fluctuations in premia on particular routes, as news of political developments or enemy naval movements arrived.

This created both problems and opportunities for merchants and underwriters. On the one hand, wartime trade could be highly profitable as shortages caused by the interruption of commerce drove up the prices of goods; yet, rapidly changing political and military circumstances, and the slow speed of communication meant that unskilful or unlucky merchants could easily find themselves facing ruin. In seeking to exploit such opportunities, insurance became more necessary than ever. Similarly, high wartime premia meant that underwriting could be highly profitable if carried out judiciously; yet it could prove disastrous if some unexpected political or military development, such as the capture of a convoy or the seizure of a large number of vessels in port, caused a string of losses.

Britain and France were at war from February 1793 until March 1802. Throughout this period, the United States remained officially neutral. In fact, however, the US almost went to war on several occasions. In the Spring of 1794, war with Britain for a time seemed imminent as a result of a British Order in Council issued on 6 November 1793, which amounted to a total blockade of the French West Indies (to coincide with a military campaign to conquer French colonies). By the time news of the order reached the US, the British had already captured over 250 American vessels in the Caribbean. The British, however, revoked the Order in January 1794, and in November 1794, the two countries signed a treaty. The objective of Jay's treaty, from the American point of view, was to avoid war with Britain, and to put an end to British captures of American merchant vessels. In addition, American merchant vessels obtained limited access to the British West Indies. In return, however, Jay (the American negotiator) made several concessions to Britain which were unfavorable to France and which violated the spirit of treaties which had been made between the US and France in 1778 and 1788. Among these, the treaty adopted a broad definition of contraband (goods which neutrals could not legally trade with belligerents), by including provisions; accepted

the British right to seize non-contraband goods as long as they were paid for; and accepted the “Rule of 1756”, whereby neutral vessels could not in wartime enter into a trade which had been closed to them in peacetime. These provisions were injurious to the French, who hoped to use the Americans as neutral carriers to obtain provisions, and to carry on trade with their colonies in the West Indies. Indeed, it was to preserve American neutrality for this purpose that the French had not insisted on enforcing the provisions of their earlier treaties, which in theory obligated the Americans to defend French colonies in the West Indies from the British (Allen 1909: 18).

The French were naturally unhappy with Jay’s treaty, and its final implementation was delayed until April 1796 by pro-French opposition in the House of Representatives. Once it became known that these efforts to derail the treaty had failed, France retaliated by issuing a series of increasingly restrictive decrees which led to captures of American shipping by French privateers. The first, dated 2 July 1796, was vague as to the terms under which American vessels would be “good prize” (that is, subject to seizure by privateers and condemnation in prize courts), but nevertheless served as a pretext for over 300 French captures in less than a year. A second French proclamation on 2 March 1797 stated that American ships without a properly printed *rôle d’équipage* (crew list) would be good prize, a requirement which had no basis in international law, but served as a pretext for further French captures of vessels which had had no warning of the new requirement.<sup>4</sup> A third decree on 18 January 1798 provided that all neutral vessels which carried any item of British manufacture would be good prize (Allen 1909: 298-9). Since it was virtually impossible to ensure that no item of British manufacture would be found on a ship, this amounted to virtually open season on American shipping. President Adams called it “an unequivocal act of war on the commerce of the nations it attacks.”<sup>5</sup>

The tensions with France were exacerbated by the European wars, the distance, and the political instability in France, all of which impeded diplomatic efforts at finding a solution, and by the political chaos in the West Indies, which made it difficult for the French government to control the actions of their agents there. Some of the judges who condemned American vessels

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<sup>4</sup>For example, the sloop *Townsend* left Massachusetts on August 28 1798, and in October was captured by a French privateer en route to the British port of Antigua, and condemned in Guadeloupe for not having a *rôle d’équipage* and invoice of cargo, though all her documents were in proper order to prove the neutrality of the cargo under U.S. and international law. The case became one of the many involved in the “French Spoliations” claims, and it was more than a century before compensation was received by the owners’ heirs (US Court of Claims, 1908).

<sup>5</sup>Second Annual message of John Adams, 8 Dec 1798. Accessed via the Avalon project.



in French colonial prize courts were at the same time shareholders in the privateers making the captures. Even a Frenchman described the situation in the West Indies in 1798 as “A system of piracy almost general, sustained by a commercial tribunal which condemns without reserve and without exception neutral and allied ships on the most frivolous pretexts” (Palmer p.78).

Meanwhile, an American diplomatic mission in 1797 not only failed to produce peace, but gave rise to the “XYZ” scandal which moved American opinion sharply in favor of war, so that during 1798, there was constant uncertainty about whether war would be declared. Because war constantly threatened to erupt during this period, but was never officially declared or fully engaged, the conflict “placed the Adams administration and the American people in a state of almost perpetual crisis” (DeConde 1966: 328) and is referred to as a “Quasi-War”. The French were unwilling to formally declare war - in fact, ostensibly, France’s goal was to force the United States away from an alignment with Britain and back into an alignment with France (though the effect of her actions was exactly the opposite). However, the American administration would have preferred a French declaration of war, which would have united America behind the war effort, to an American declaration of war, to which many Americans were opposed.

In the summer of 1798, the US took steps to build an army and navy in preparation for a war. By late 1798, the newly-created American navy had become active, capturing their first French privateer in July 1798. By winter 1798, the coast of the American mainland had been largely cleared of privateers, and the French had fallen back to the West Indies, where hostilities continued. The war was limited, in the sense that American vessels were not authorized to attack unarmed French vessels or to attack the French on land, but only to attack vessels which posed a threat to American shipping; but already by December 1798, President Adams could claim that “Perhaps no country ever experienced more sudden and remarkable advantages from any measure of policy than we have derived from the arming for our maritime protection and defense.”<sup>6</sup> Most notably, in February 1799, the French frigate *Insurgente* was captured by the US frigate *Constellation*. In all, the American navy captured three vessels in 1798, 27 in 1799, and 59 in 1800.

These events led to sharp fluctuations in insurance rates as rumors of war waxed and waned (Figure 1). There was some uncertainty about French intentions as early as October of 1795. By early 1796, the French had begun to capture American vessels, and by late 1796, lists of captured

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<sup>6</sup>Second Annual Message of John Adams. Accessed via the Avalon project.

vessels were appearing in American newspapers, and the usual rate of a premium on a one-way voyage to the West Indies was 5 – 6%, already well above the usual peacetime rate of 2 – 3%. By early 1797, it had risen to 10-15%, and 25% was paid in January 1798. These averages disguise considerable variation across ships, depending on the details of the policy, the character of the captain and crew, the sailing qualities of the vessel, and so on, as well as fluctuations over time in response to news of political developments. The secretary of one of the corporations remarked in 1797 that “Circumstances varying as they do We are obliged to vary premiums very often.”<sup>7</sup>

In 1799, France experienced two coups d’etat (the second by Napoleon Bonaparte), and through various channels it became clear that the new French government wanted peace. Accordingly, a second American diplomatic mission left for France in November 1799. After protracted negotiations, a peace agreement (the Mortefontaine Convention) was finally signed on 3 October 1800, the first news of which reached the US the following month. Although this agreement was not widely popular, it was very favorable to US shipping: “all the great points concerning navigation are settled to our advantage; they are extremely liberal and contain all we could require” (quoted by DeConde 1966: 288), and pressure from merchants helped to ensure its approval in the senate in February 1801 (DeConde 1966, ch.8).<sup>8</sup>

## 4 Marine Insurance in Philadelphia during the Quasi-War

This paper compares data from two manuscript sources which record marine insurance underwriting in Philadelphia during the Quasi-War. The first is a record of 1,054 policies insured through the Philadelphia insurance brokerage of Wharton & Lewis, between 13 April 1795 and March 30 1801 (Historical Society of Pennsylvania Ms AMB 95591). I also use data on 8,330 policies insured during the same period by the Insurance Company of North America (INA) (Marine Blotters, ACE INA archive, Philadelphia). The INA was the first joint-stock marine insurance corporation in America, having begun business in December 1792.

In the Wharton & Lewis record, the following information is recorded for each voyage: the

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<sup>7</sup>Historical Society of Pennsylvania Ms 2001 (ISP letterbook), 11 Mar 1797

<sup>8</sup>In one respect, however, the treaty appeared unfavorable to American merchants. In exchange for releasing the US from its obligations under the treaties of 1778 and 1788, the US gave up all claims for compensation for the “French spoliations”. The merchants (and underwriters) who had suffered these losses argued that by giving up these claims, the US government had, in effect, appropriated their private property for public use without compensation, which was forbidden by the Constitution of the US. The resulting “spoliation claims” took over a century to resolve (Causten 1871; Allen 1904).

date the insurance was effected; the type of vessel (schooner, brig, ship, etc.); the name of the vessel and of her captain; the origin and destination; the name of the merchant for whose account the insurance was made; the sum insured; the nature of the property insured (goods, vessel, or occasionally, specie); the percentage rate of premium; the total amount of premium; and in most cases, “Fate” (arrived, lost, or taken). The sums insured recorded in this account book do not reflect the total sums assured on vessels,<sup>9</sup> and some voyages known to be insured through Wharton & Lewis’s office do not appear in this record, so the record appears to reflect the underwriting of a single substantial underwriter, or possibly some kind of syndicate, acting through the brokerage.<sup>10</sup>

Wharton & Lewis was certainly the most established insurance brokerage operating in Philadelphia at this time. Thomas Wharton had begun brokering policies in the 1750s.<sup>11</sup> His son Isaac had joined the business in 1765 (Montgomery, p.20), as a sideline to their main business as merchants, and David Lewis had joined the business in the 1780s (Gillingham 1933: 46-7). Therefore, the Wharton & Lewis register of policies is an incomplete, but substantial and probably quite representative, record of the most important locus of private underwriting activity in Philadelphia during this period.

About half of the voyages in the Wharton & Lewis record are single or return voyages to or from the West Indies or South America. Another third were (mostly one-way) voyages to or from Europe. The remainder included coastal voyages to other American ports, and voyages to Asia, Africa, New Orleans, and a small number of cross-voyages (voyages between two foreign ports, such as from Europe to the Far East). Most of the voyages either originate or terminate in Philadelphia, but voyages to or from New York and Baltimore are also quite common. Because of the increased uncertainty, insurance on round-trip voyages became less common during the Quasi-war (in 1795,

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<sup>9</sup>In December 1795, for example, the prominent Philadelphia merchant Stephen Girard insured the ship *Voltaire* from Philadelphia to Hamburg and back for £8000 in London, and subsequently added \$10,000 insurance through Wharton & Lewis and another \$10,000 through the Insurance Company of the State of Pennsylvania (Gillingham 1933: 100). However, the entry in the account book records a sum assured of only \$800, at 8% premium.

<sup>10</sup>The Historical Society of Pennsylvania also has a smaller record (Ms Am 3680) of 166 policies insured through the brokerage firm of Shoemaker and Berrett between June 1796 and February 1798. The format and handwriting in this record are identical to that of the Wharton & Lewis record, and both arrived at the HSP from the same source, so it is safe to assume they reflect the underwriting of the same underwriter. One of the policies recorded in this record is the *Ceres*, insured for \$700 from Aux Cayes to Philadelphia at 7½% in June 1797. The policy on the *Ceres* is in the ACE INA archive, and only one underwriter subscribed for \$700: John Savage, named in the 1791 Philadelphia Directory as a grocer located at 326 South Front Street. It would appear, therefore, that these records record Savage’s underwriting, possibly along with that of others (Philadelphia Directory compiled by Richard E. Stevens, downloaded from <http://www.math.udel.edu/~rstevens/datasets.html>).

<sup>11</sup>See Thomas Wharton letterbook 1752-59, Historical Society of Pennsylvania ms 708A series 3 vol 24.

there are more return than one-way voyages to the Caribbean; in 1797, much fewer). There are several idiosyncratic entries, such as insurance on cash carried on board the *Crescent*, the 32-gun frigate presented by the US government to the Dey of Algiers in 1797 as part of a bribe to stop attacks on US shipping by the Barbary corsairs. In September-October 1797, there is only a single entry: Ship Sickness, Captain Disease, on a voyage from Earth to Heaven with a cargo of “7500 souls” - a reference to the outbreak of Yellow Fever during which many Philadelphia residents left the city. As a result of the fever, both the INA offices and Wharton & Lewis’s office were temporarily moved (Montgomery 1885: 83; Fowler 1888: 60), but because many of the private underwriters had fled to the countryside, it seems likely that the business of the private underwriters would have been more severely disrupted than that of the corporation. The following year, the Wharton & Lewis record is again blank between early August and mid-November for the same reason.

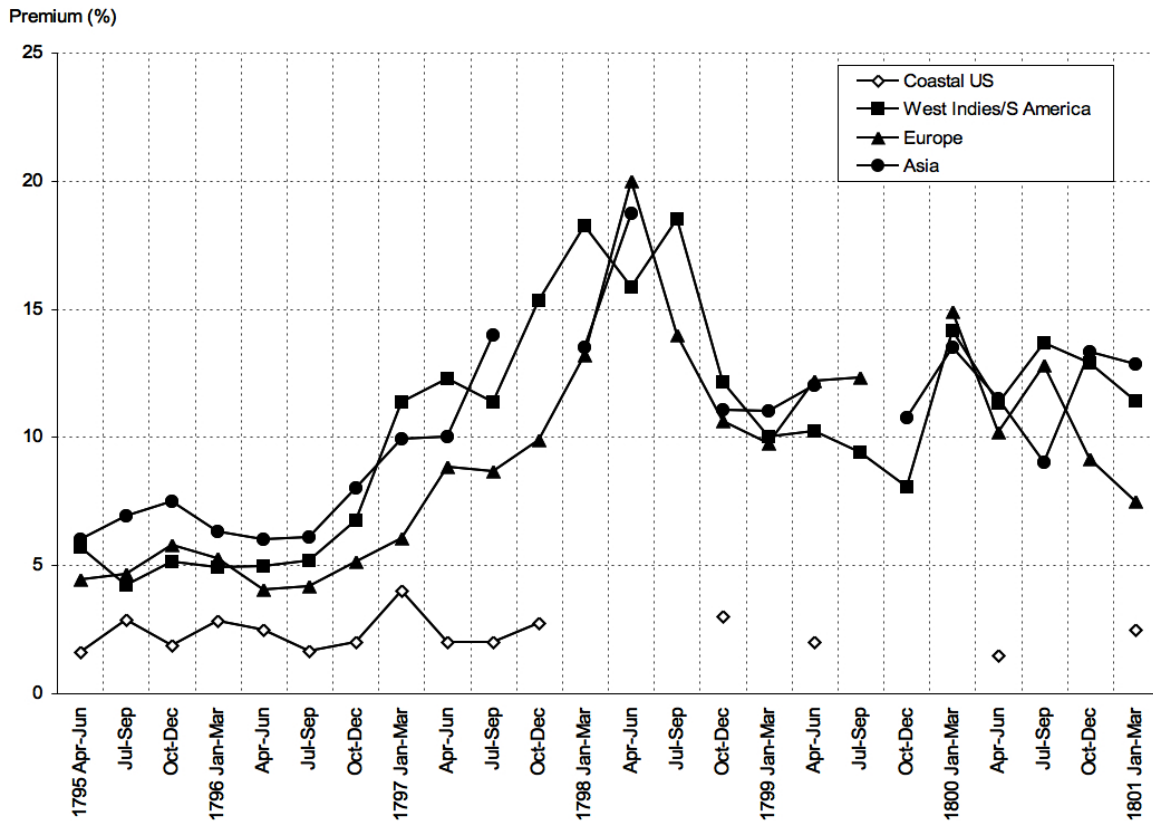


Figure 1: 3-month averages of premia for one-way voyages on different routes insured through Wharton & Lewis, April 1795 - March 1801. Source: Historical Society of Pennsylvania, MS AMB 95591.

Figure 1 shows 3-monthly average rates for the main classes of one-way voyages insured through Wharton & Lewis. Return voyages were also frequently insured, and this data has been included, assuming that the rate for a single voyage was 60% of the rate for a return voyage.<sup>12</sup>

Although the Wharton & Lewis register of policies records the origin and destination for each voyage, there is some residual noise in that some of the policies underwritten may have contained unusual clauses or conditions. For example, on May 26 1797, the schooner *Illinois* was insured at and from Philadelphia to Jeremie, and thence to any other British port in Hispaniola, at a rate of 25%, with  $2\frac{1}{2}\%$  to be returned in case the vessel went only to Jeremie. On August 4th, the policy was amended to the effect that for an additional  $2\frac{1}{2}\%$ , the *Illinois* would be permitted to visit Jeremie a second time on the way back to Philadelphia from Port au Prince (Fowler 1888: 59). The entry in the register of policies reads simply “May 26, schooner Illionois, captain Nesbit, Philad-Jeremie & b (ie., &back), (for account of) William Bell, \$800 on Vessel and Goods, 25%, Amount of Premium 200, A (Arrived)”. Other entries read, for example, “Jeremie &c”, indicating that the policy was for Jeremie but contained additional provisions for travel to other ports.

Policies may also have contained provisions exempting the underwriters from certain kinds of risks. At some times, the risk of seizure in port was commonly refused by underwriters on vessels traveling to French ports. A small number of policies were insured against sea risk only. For example, on 6 March 1797, the Brig *Defiance* was insured from Jamaica to Philadelphia. The vessel was insured for  $4\frac{1}{2}\%$  against sea risk only, but goods on board were covered against all risks at 15%.

The INA record is larger and more detailed than the Wharton & Lewis record. So far I have not collected premium data for all these voyages. I have, however, looked at premium rates on the subset of 246 voyages which were insured both by the private underwriter and by the INA. In some cases, this occurred as a single merchant insured large consignments of goods with multiple policies; in others, several merchants separately insured goods carried on the same vessel. In the vast majority of cases, the premia charged by the corporation and the private underwriter are the same; the occasional small differences are not systematic, and may be largely due to the arrival of new information between the signing of the policies, or to idiosyncratic and unobservable differences in the terms and conditions on particular policies.

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<sup>12</sup>Chew (2005: 592) has a figure with insurance rates for 18 months in 1796-1797, based on data from the Baltimore Insurance Company, which shows a similar sharp increase in premia on West Indies voyages.

Figure 2 compares the volume of business done by the corporation and the private underwriter in each month from 13 April 1795 - 30 March 1801. This figure reveals a striking shift in business

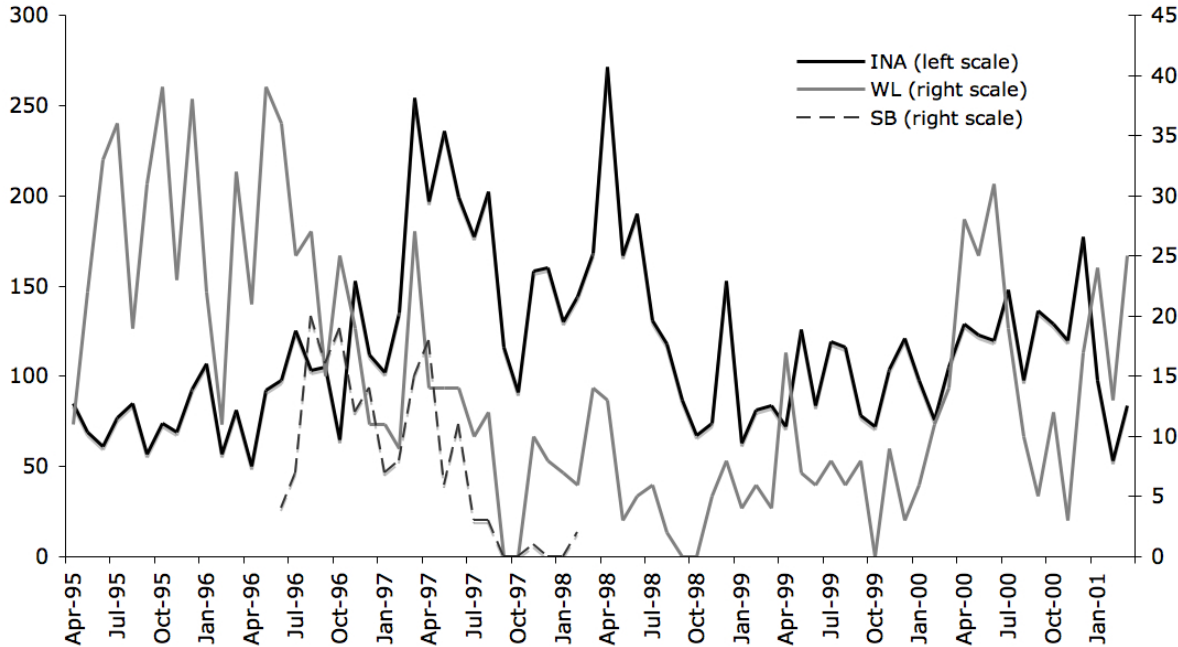


Figure 2: Number of policies by month, April 1795 - March 1801. WL: policies privately underwritten through Wharton & Lewis; SB: policies privately underwritten through the brokerage of Shoemaker and Berrett (see footnote 10); INA: Policies underwritten by the Insurance Company of North America. Sources: WL: HSP MS AMB 95591; SB: HSP MS AM 3680; INA Marine Blotters and (for 1798-9) Journals, ACE INA Archives.

out of the hands of the private underwriters and into those of the corporation beginning in early 1797, at around the time that French captures began, and lasting until the threat receded around 1800. Figure 3 shows the same data, consolidated by year, as well as the total number of vessels entering Philadelphia from foreign ports, which may be taken as a rough indication of the overall size of the market (although the goods on a single vessel, and the vessel itself, might be covered under several policies; and underwriters insured both inbound and outbound voyages, as well as “cross risks” between foreign ports). Still, the overall pattern is clear: the private underwriter insured 286 voyages in 1796, which collapsed to only 69 in 1798 before recovering to 186 in 1800. The number of vessels entering Philadelphia from foreign ports also fell somewhat, but only from

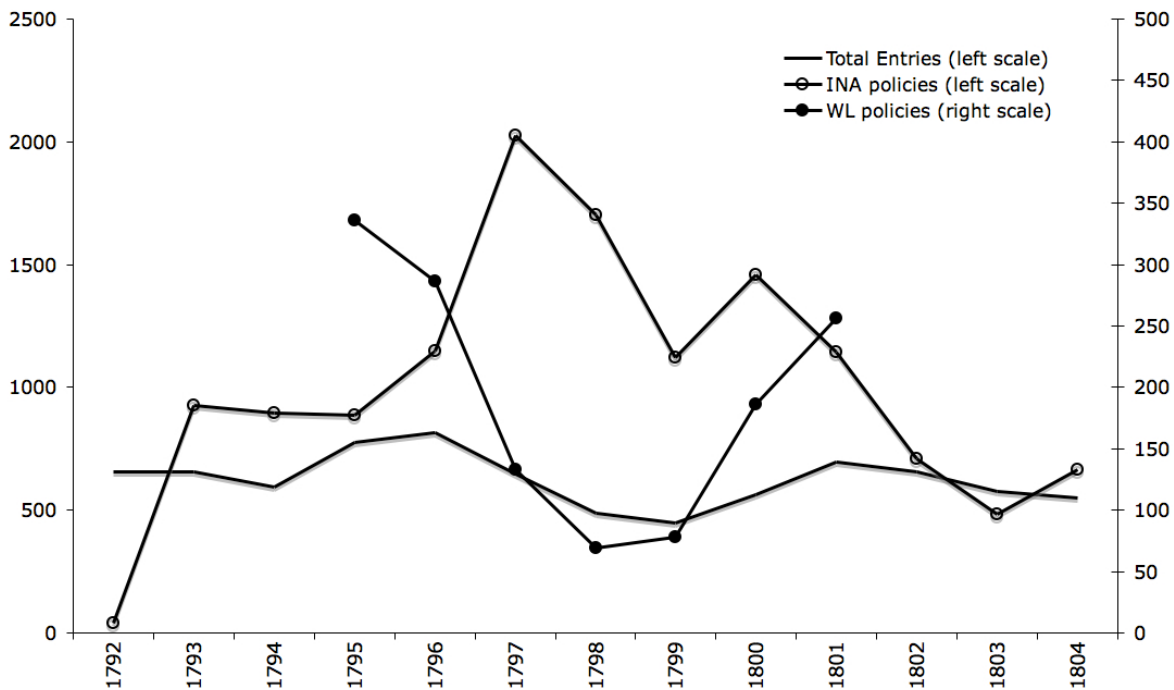


Figure 3: Number of policies by year, 1792 - 1804, and the total number of vessels entering Philadelphia from foreign ports. Sources: HSP MS AMB 95591; ACE INA archives; Entries: Dun (2006).

817 in 1796 to 487 in 1798, and 565 in 1800.<sup>13</sup> The number of policies insured by the INA, however, actually increased from 1148 in 1796 to 1547 in 1798, and was 1459 in 1800. Of course, there were many more private underwriters (and one other corporation) in the market, so it is not possible to gauge market share precisely. However, the Quasi-war appears to have coincided with a substantial shift of the marine insurance business out of the hands of private underwriters and into those of the corporations. The system of private underwriting had its own advantages, however (see below); and when the threat of war receded, the private underwriters appear to have made something of a comeback.

The shift of business to the corporations during the Quasi-war is equally evident if we look at total premium revenue (Figure 4). The private underwriter's total premium income fell slightly from \$14,642 in 1796 to \$13,251 in 1797 (the higher premiums almost compensating for the falling

<sup>13</sup>Similarly, the official value of exports from Pennsylvania fell from a high of about \$17.5 million in October 1795-Sept 1796 to \$8.9 million in the year to September 1798, before recovering to \$17.4 million in the year to September 1801, and then plummeting to only \$7.5 million in the year to September 1803 as a result of the Peace of Amiens (American State Papers, Commerce and Navigation, 12th Congress (1812) No.173, p. 926-929).

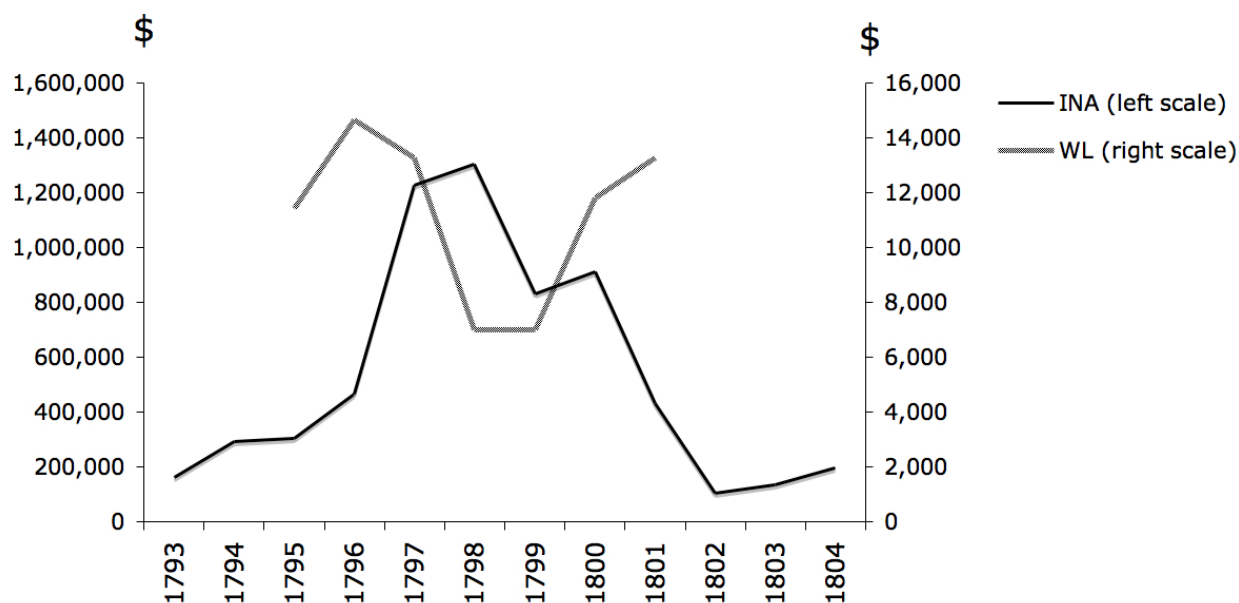


Figure 4: Total premium income by year, INA and Wharton & Lewis. For 1795 and 1801, Wharton & Lewis premium income is extrapolated based on part-year data. The unit of account in the Wharton & Lewis data changed from Pennsylvania pounds to U.S. dollars in September 1795. Data prior to September 1795 has been converted into dollars at the exchange rate £3 = \$8.

volume of business), and then collapsed to only \$7,007 in 1798. In contrast, the total premia earned by the INA climbed from \$467,122 in 1796 to \$1,178,932 in 1797 and \$1,304,218 in 1798. As the risks began to fall in 1799 and 1800, the position began to become reversed, but in 1801, the private underwriter's record becomes disjointed - some policies are entered in non-chronological order - and there are no policies entered after the end of March 1801, suggesting that this private underwriter may have ceased to underwrite. Isaac Wharton and David Lewis did not cease the insurance business in 1801 - they were still brokering policies in 1802 (Gillingham 1933: 47) - but shortly thereafter they reconstituted their business as a chartered corporation, becoming the first president and vice-president of the Phoenix Insurance company, which was organized in 1803 and chartered in 1804 with a capital stock of \$600,000 (Gillingham 1933: 123). By this time, the dominance of corporate underwriting was assured, although private underwriting continued for several more years.<sup>14</sup>

<sup>14</sup>In the Historical Society of Pennsylvania there is an underwriter's subscription book covering the period April 1804 - January 1807 (HSP, insurance papers #1552, Vol 2 and Box 7); and an extensive record of policies insured between 1803-1815 through various insurance companies and brokerages (Ms Am 36802). Most of the policies are underwritten by corporations; but several private brokerage firms appear, the most prominent being that of Nalbro



The formation and chartering of the two Philadelphia marine insurance corporations must have been a huge blow to the business of the private underwriters. As shown in Figure 2, the corporations did a substantial business right from the start. Early on (in March 1793), the INA board decided not to allow the private brokers to do business through the company (and thereby obtain a 2.5% commission) (Montgomery p.49). As noted above, when it became clear that the INA was likely to obtain a charter, many of those who had initially opposed the INA charter later became involved in forming the rival ISP. Isaac Wharton was among the approximately 150 founding shareholders of the ISP in 1794.

Nevertheless, it would seem that there were no hard feelings between Wharton & Lewis and the INA. Wharton & Lewis's office, at 115 south Front Street, was just a few doors from the offices of the INA at 107 south Front Street (Montgomery 1885: 77, 81). Those involved in the INA did not abandon or oppose the ancient and familiar practice of private underwriting; indeed, they continued to engage in it themselves. In July 1793, when the board of the INA decided to refuse to take a 12-month "time" policy on the brig *Nancy* (following a rule that restricted time policies to a maximum of 6 months), several members of the board nevertheless offered to cover the risk privately.<sup>15</sup> John Nesbitt, a prominent merchant who was the first president of the INA (and its first customer in December 1792), continued to obtain some insurance through Wharton & Lewis at least until 1798 (HSP MS AMB 95591), as did other INA board members, such as merchant John Leamy. In 1794, when a question arose as to the proper practice in a case of inadvertent over-insurance, the secretary of the INA naturally turned to Wharton & Lewis, as the most experienced insurers in the city, for their opinion and advice.<sup>16</sup>

Although they were in competition, the corporate and private underwriters also had many interests in common. As the number of captures mounted, the private and corporate underwriters increasingly had a common interest in attempting to free or obtain compensation for vessels which had been detained by either the English or French, and in obtaining information about the practices prevailing at the prize courts, which might change without warning. This was especially true of the French, of course, but there was also intermittent uncertainty about the intentions of the English. In 1800, for example, the INA complained to their agents in Halifax that "The late Captures made

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Frazier. These entries become progressively less common, and the last record of a privately underwritten policy appears in February 1811, though the record continues to 1815.

<sup>15</sup>INA letterbook, ACE INA archives, 22-24 July 1794.

<sup>16</sup>INA letterbook, letter to Stephen Girard, 6 Aug 1794.

by the British Ships are truly alarming and none more so that those made by the Halifax Squadron, as we cannot discern the principles or pretences on which some of them are made, & of course know not by what precautions to guard against them. They seem to imply some new rule of conduct of which we are uninformed, either of late adoption, or by new construction of former regulations.”<sup>17</sup> Wharton & Lewis also joined with the corporations to form committees to investigate fraud and to communicate with the government about political developments (Montgomery 1885:54; ISP letterbook, HSP Ms 2001, Dec 1795).

War could be highly profitable for underwriters, and just as the Napoleonic wars led to boom years in marine insurance in Britain (Kingston 2007), the Quasi-war created tremendous profit opportunities for Philadelphia underwriters. What Figures 2-4 show is that the corporations were far more successful than private underwriters in taking advantage of these opportunities.

Why did the war give such an advantage to corporate underwriters? First, the financial security of the private underwriters who insured their ventures was always a concern for merchants; Private underwriters might abscond, die, or go bankrupt before a claim could be paid. But the security of the privately-subscribed policy, always somewhat suspect, became more so in wartime. Most private underwriters were merchants, and while war provided many opportunities for gain, it also increased the probability of bankruptcy if the merchant’s ventures were to suffer a run of bad luck. Thus, for example, during the War of Jenkins’ Ear in 1748, one merchant informed his correspondent that “I wrote thee lately that divers insurers were become bankrupts, and that more we looked upon as doubtful, It appears our suspicions were too well founded for more are in the same situation, who were men of large capitals, tis very difficult to know who to accept of” (Gillingham 1933: 19). The private underwriters’ security was also rendered more precarious by the fact that the risks they subscribed to became more correlated in wartime: whereas an accident at sea might lead to a claim, an unexpected political or military development, such as a change of policy regarding neutral rights, a declaration of war, or the capture of a convoy of merchantmen, might cause multiple claims which could bankrupt even a careful underwriter. Thus, the increased insecurity on the part of private underwriters would lower the premium a merchant would be willing to pay to private underwriters, and increase the perceived difference in security between a privately-insured policy and one insured by a corporation.

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<sup>17</sup>INA letterbook, letter to Forsyth Smith &Co., 20 August 1800.

At the same time, private underwriters insuring a smaller number of vessels at higher premia might obtain a high expected return (if they underwrote judiciously), but at the cost of a high variance in their overall return. Thus because of the reduced ability to spread risks, and increased uncertainty as to the actuarially fair rate of premium, risk-averse private underwriters may have become more conservative in their underwriting (leading them to demand higher premia). A corporation, being more risk-neutral, might be less concerned with the desire to spread risk and better equipped to weather a run of bad luck. In April 1797, one merchant wrote that “The underwriters that are substantial will not take a risk to the West Indies and back under  $33\frac{1}{2}$  to 40% against all risks. I say substantial because many of our underwriters circumstances are such [that they are experiencing financial difficulties]” (David Spears, quoted by Ruwell 1993 p.89).

War also reduced the private underwriters’ natural advantages over corporations in evaluating risks. As merchants involved in trade, private underwriters had intimate knowledge of the people, vessels and routes they underwrote. They interacted with other merchants in ongoing, multi-faceted and mutually beneficial business and social relationships, and in peacetime, they therefore naturally tended to insure each others ventures, since insurance could be profitable if judiciously practiced. Thus, insurance became part of the complex web of trusting personal interactions which characterized business in the eighteenth century (and is hardly irrelevant today). However, war reduced the relative value of this idiosyncratic knowledge about individual risks, overwhelming it with fluctuating but systematic risks which affected all vessels relatively more equally.

Three other developments are worthy of mention. First, the success of the two pioneering corporations in Philadelphia led within a few years to similar incorporations in other American cities. Corporations were formed in Maryland in 1795, in Connecticut in 1797, in New York and Virginia in 1798, in Massachusetts and Rhode Island in 1799, and in Maine in 1800.<sup>18</sup> This may help to account for the fall in business experienced by the INA in the years following the Quasi-War (Figures 3 and 4), although market entry in Philadelphia came a little later: four marine insurance corporations were chartered in Philadelphia in 1804, another in 1806 and another in 1810 (Fowler 1888: 69, 78, 86).

Second, the volume of American business insured in London fell sharply; one American merchant in London argued that the increased security afforded by corporations in America had

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<sup>18</sup>See Roelker and Collins (1949) on Rhode Island; Fowler (1997) on Massachusetts; Woodward (1897) on Connecticut; Crothers (2004) on Virginia; Davis (1917) on New York and Maryland.

led to a sharp decrease in the amount of insurance done in London by American merchants, so that by 1810, “nineteen twentieths” of his consignments from America were insured in America.<sup>19</sup>

Finally, the yellow fever outbreaks clearly affected the business of the private underwriters. 1797 was not the first time this had happened: in September 1793, Philadelphia merchant Stephen Girard informed a correspondent in Baltimore that he had been unable to procure insurance according to their request because “nearly all the underwriters have left town and the few that remain are afraid of the epidemic which has made fresh ravages” (McMaster 1918: 214). But during the yellow fever outbreaks in 1797 and 1798, while many businessmen fled the city, the INA stayed open for business. This likely reinforced the effect of the Quasi-war in hastening the demise of private underwriting.

## 5 Comparison with Britain, France and Holland

In France and Holland, as elsewhere, most underwriting was initially done by individual underwriters in the ports, primarily as a means for the merchants to spread risk among themselves. In both, as in the US, individual underwriting ultimately gave way to joint-stock companies.

France, like the US, lacked a single dominant port. Insurance on a single voyage was often effected at several ports, and some insurance was also obtained abroad in Britain and Holland.<sup>20</sup> As the business grew, insurance companies (*chambres*) were formed in the ports, whose members were jointly and severally liable for policies they underwrote (Miquelon, 1978, p.123-5). In the 1750s, two large corporations were chartered in Paris, but these were primarily run by non-merchants (Bosher, 1979), and may have been at a disadvantage in evaluating risks:

In the seaports a company of merchants gathers together to underwrite insurance. They know their work and inform each other; they know whether the ship they are insuring is good or bad, whether the crew is good or bad, whether the captain is experienced and wise or ignorant and confused, whether the shippers are suspect, of good reputation or likely to be dishonest, whether the voyage is to be long, whether the season is beginning well or not; they know everything because everyone makes it his business to find out. In

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<sup>19</sup>Select Committee on Marine Insurance (1810), evidence of S. Williams.

<sup>20</sup>For example, in 1745 Robert Dugard of Rouen obtained insurance for a return voyage from Martinique at London, Marseilles, Bayonne, La Rochelle, Nantes, St. Malo, Amsterdam, Cadiz, and Pantaleo, Italy (Miquelon, 1978, p.123).

Paris they know nothing and for the Company to know all that, it would lose as much in the cost of postal charges and correspondence as it would earn in premiums.”<sup>21</sup>

For a time, the regional companies and the Paris corporations (operating through local agents in the ports) shared the market with individual underwriters. As late as the 1780s, individual underwriters still did about half the marine insurance in the medium-sized French port of La Rochelle. However, as in the US, the increased risks during wartime tended over time to drive the individual underwriters from the market (Clark 1978; Dawson 1931).

In Holland, too, the long-term trend was towards corporations. A company began writing marine insurance in Rotterdam in 1720, but in Amsterdam, which was the main center for marine insurance in Holland, the first joint-stock corporation was not formed until 1771. Heavy wartime losses in 1780-1 drove many private underwriters from the market, and corporations increasingly began to dominate. In 1786, political instability drove a third of Amsterdam’s private underwriters out of business within a year (Spooner 1983: 29). As late as 1851, there were still some private underwriters in Amsterdam, but by then there were as many as 70 Amsterdam-based companies writing marine insurance, besides which many companies based elsewhere also had agencies in Amsterdam (Spooner 1983, ch. 2).

In Britain, although joint-stock corporations were present in the marine insurance market from 1720, private underwriting did not disappear (though when the corporations were formed, many had expected that it might). Instead, an informal association of private individual underwriters, centered on Lloyd’s coffee house, became the dominant force in the marine insurance industry. I have told this story in detail elsewhere (Kingston 2007). In summary, the Bubble Act of 1720 created two chartered joint-stock marine insurance corporations; but the bursting of the bubble temporarily inhibited those corporations from expanding their business and taking over the market from private underwriters. In the interim, Lloyd’s coffee house developed as a center for private underwriting, becoming a hub for information about ships and their crews, political and economic developments, and the many other factors affecting the risk of a voyage, and also a “community” of sorts, governed by a reputation mechanism which constrained opportunism. I argue that this created a lemons problem for the corporations: because of their inferior access to information, they were not able to take over the market despite their advantages in offering security

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<sup>21</sup>The Bordeaux magistrate Montesquieu in 1750, quoted by Boshier (1979).

and convenience to the assured. However, the market was characterized by multiple equilibria: if Lloyd's had not existed, the corporations would have suffered no lemons problem, and given the advantages of corporations, private underwriters could not have invaded the market.

The organization of Lloyd's remained almost entirely informal for decades. However, the extended period of heightened risk during the Revolutionary and Napoleonic wars (1793-1815) led to boom years in the British marine insurance industry. The resulting growth in business led to a period of accelerated institutional development which turned Lloyd's into an increasingly formal marine insurance marketplace, and reinforced the dominance of the system of private underwriting. By the time (in 1824) that the relevant sections of the Bubble Act were repealed, enabling an influx of new marine insurance corporations, the system of private underwriting was sufficiently established that it could withstand the competition, and a substantial part of the British marine insurance industry subsequently remained in the hands of private underwriters.

This provides a marked contrast to the French and Dutch experience, and especially to the American experience documented above. How could war lead to such a rapid decline in private underwriting in the US, while ultimately strengthening private underwriting in Britain?

To investigate this question, I focus on how the latter part of the Napoleonic wars affected the British marine insurance industry. Data are scarce; but although Lloyd's itself kept no records of the volume of business done by the private underwriters who met there, it is possible to roughly gauge the corporations' share of the market by comparing the amounts of Stamp Duty paid on policies by private underwriters in London and by the two corporations active in London.<sup>22</sup> Premium data were also not collected systematically at Lloyd's, but one source of data is available, based on the accounts of a single private underwriter (George Hobson), collected and analyzed by Danson (1894).

Comparing these data reveals that in Britain, as elsewhere, war appears to have given the corporations a temporary advantage. By the Milan decree of 1807, Napoleon had proclaimed a blockade on the whole of the British Isles, in effect forbidding any trade with Britain. The French navy was powerless to enforce the blockade at sea, but the idea was to close continental ports and markets to British trade. For several years, however, the decree was laxly enforced, and British

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<sup>22</sup>This data is only meaningful after 1807, however; before that date, evasion of Stamp Duty was rampant. See Guildhall Library, MS 31571 (Minutes of the Committee of Lloyd's), May-June 1807. Stamp Duty was 2/6 per £100 insured on foreign voyages, where the premium was 20% or less; and 5 shillings per £100 insured when the premium was over 20%. (Rates for coasting voyages were half as much). (Wright and Fayle 1928: 289)

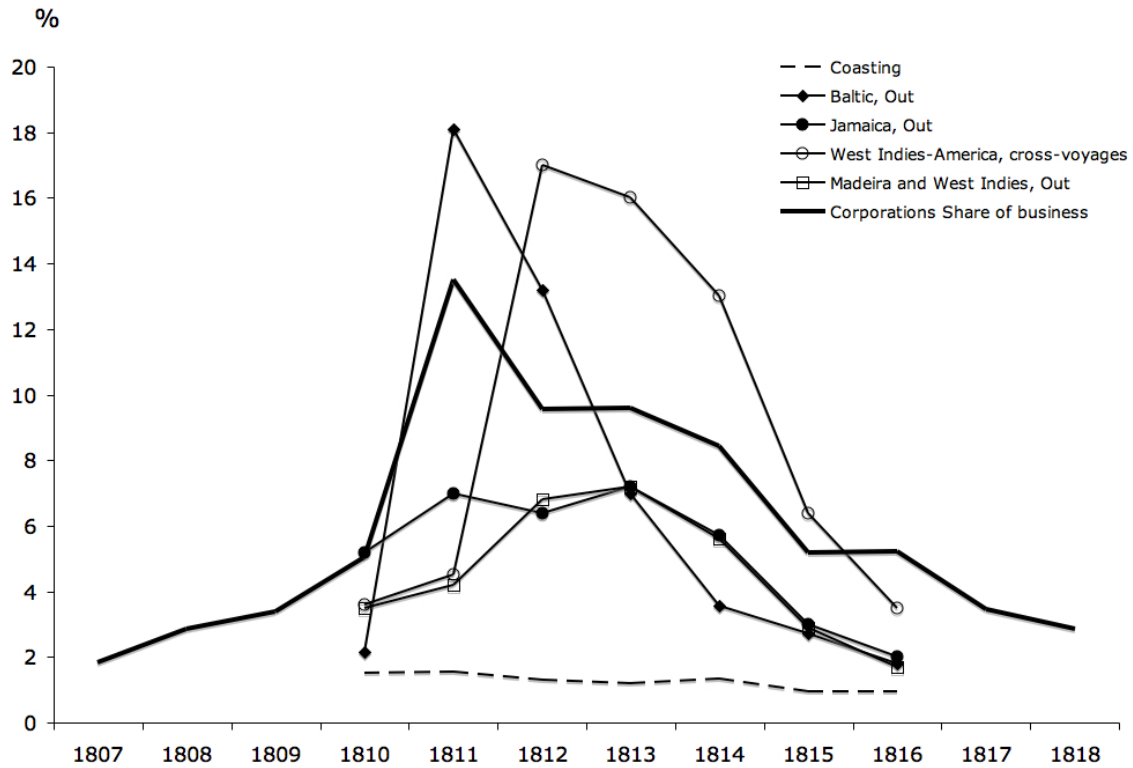


Figure 5: British corporations' share of the British marine insurance market, and premia on selected routes, 1810-16. Source: British Parliamentary Papers 1824(316) XVII.501; Danson (1894: 90-1)

ships continued to trade with the Baltic. But in 1810, under pressure from Napoleon, the Russian, Swedish and Prussian authorities suddenly and unexpectedly seized hundreds of British ships in Baltic ports, causing millions of pounds in losses to Lloyd's underwriters (Rose 1903, Wright and Fayle 1928). As a result, premia on Baltic voyages rose sharply (Figure 5). And the corporations' share of the market appears also to have increased substantially in 1811, possibly as a result of the Baltic seizures, reaching 13.5% of the British market (18.4% of the London market) in 1811. This increase, however, was apparently not enough to seriously disrupt the prevailing equilibrium and threaten the dominance of Lloyd's, even after the war of 1812 drove up premia on West Indian routes (Figure 5). Accordingly, as the threat of capture faded and rates declined, the corporations' share of business also steadily declined, falling as low as 1.7% of the British market (2.2% of the London market) by 1821.

Thus, although the turmoil of the Napoleonic wars may have led to a temporary increase in the corporations' share of business, their impact was not sufficient to dislodge the prevailing

equilibrium dominated by private underwriting. Instead, as described in Kingston (2007), the ultimate impact was to strengthen the institutions of private underwriting at Lloyd's.

## 6 Conclusion

At first glance, the transition from private to corporate underwriting in America might appear to have been inevitable, given the advantages of corporations. But the story is not so simple; in particular, such a transition did not occur in Britain either in 1720, or 1824 or 1844, when successive waves of marine insurance corporations entered the market, most of which failed within a few years. However, the timing of events (exogenous shocks) may have played a key role in equilibrium selection. The Quasi-war with France arrived at a crucial juncture for American marine insurance, providing a boon to the newly-formed corporations and hastening the demise of individual private underwriting by highlighting the advantages of the corporate form, before private underwriting in America had had a chance to develop to the level of sophistication it had reached in Britain. Because of the small scale of the market, and because many of the most prominent merchants quickly became involved in the corporations, the corporations likely suffered little or no information disadvantage relative to private underwriters, so the lemons problem which developed for the British corporations did not develop in America. At the same time, the war drove business out of the hands of the private underwriters and into those of the corporations. As a result, the system of private underwriting rapidly disappeared.

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