A Broker and his Network: Marine Insurance in Philadelphia during the French and Indian War, 1755-1759

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This is a preliminary first draft. All comments and suggestions are very welcome.

Abstract

The marine insurance industry in Philadelphia developed rapidly during the French and Indian War (1754-1763). This paper describes this development, and argues that it was accelerated by the disruption caused by the war. It focuses particularly on the business of the Philadelphia broker Thomas Wharton in 1755-9, based on his ledgers and other archival sources. At this point the paper is mainly a descriptive piece of business history, but I would welcome feedback on what direction to go with this data.

1 Introduction

"Tis a Custom in all places where Insurances are made, that Offices for that purpose are set up. The Persons who keep those offices are stiled Brokers, & are middle Persons to keep records, & conduct matters regularly between the Insurer and Insured", wrote Philadelphia merchant Thomas Clifford in 1766.[1] By this time, Philadelphia had been a "place where Insurances are made" for over twenty years, and was home to about half a dozen marine insurance brokers.

Marine insurance played a crucial role in supporting the rapidly expanding trade of the American colonies throughout the eighteenth century. In the early years of the century, American merchants had generally obtained their insurance in London. But, as discussed below, this entailed considerable inconvenience, which encouraged the development of a local marine insurance industry. Marine insurance emerged in Philadelphia in the 1740s, but it was during the French and Indian War (1754-63) that the industry really took off. Perhaps the key figure in this expansion was Thomas Wharton (1730/1-1784).

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[1] T. Clifford to J. Rockett, July 1766, quoted by Larsen (1955: 193-4).

This paper studies how Wharton's marine insurance business worked, how it was affected by the French and Indian War, and sets it in the context of the long-term evolution of marine insurance institutions in Britain and America during the eighteenth century. I use data on over 4,000 marine insurance transactions contained in three remarkable ledgers, which contain a complete record of Wharton's accounts with the underwriters on policies issued through his brokerage during three distinct phases of the war. I also use contemporary merchants' correspondence to explore how the insurance business was organized and the motivations and methods of market participants.

The next section describes the practice of marine insurance in the eighteenth century. Section 3 describes how marine insurance emerged in colonial Philadelphia, including a description of the data contained in Wharton's ledgers and a discussion of his business methods. Section 4 discusses the Seven Years' War and its effect on Wharton's marine insurance business. Section 5 argues that the war stimulated the growth of Wharton's business by disrupting channels of communication with Britain. Section 6 concludes.

2 Eighteenth century marine insurance

Marine insurance originated in the medieval Italian city-states during the middle ages (de Roover 1945), and by 1700 was a common practice in the most important trading nations (Britain, France, Holland, and Spain). A merchant wishing to insure a ship or goods, or both, generally employed a broker to draw up a policy and seek out private underwriters to cover the risk. Anyone could legally underwrite a policy as long as the merchant (or broker acting on his behalf) was willing to accept him as an underwriter; but in fact, many of the underwriters were active or retired merchants. If the parties agreed on a premium, the underwriter wrote his name on the policy along with the amount he was willing to cover. Large policies might have many names each covering a fixed amount of the total risk. During the period we are interested in here, the vast majority of underwriting was still carried out by private individuals. There had been two joint-stock marine insurance corporations in London since 1720, but they had failed to capture much of the market, which instead was dominated by the private underwriters at Lloyd's coffee house (Kingston 2007a). In America, marine insurance corporations did not emerge until the 1790s (Kingston 2007b).

Marine insurance transactions were plagued by various informational asymmetries and agency problems. Adverse selection problems arose because merchants often had better information than underwriters about the quality of the ship and crew, and other factors affecting the risk, and had strong incentives to conceal negative information in order to try to keep the premium low. As one London underwriter complained,

> Concealment of circumstances, in matters of insurance, especially in time of war, is ... constantly practiced; the temptations to it are so great; and the impositions, indeed the robberies, to which insurers, in England, are thereby daily subject, are ... various and enormous (Weskett 1781: 113)

There were also moral hazard problems: merchants might fraudulently attempt to insure ships which they already knew to have been lost, deliberately sink insured vessels; or take risks secure in the knowledge that they were insured.

> The grand, and most essential point to be guarded against, in all matters of insurance, is fraud ... more especially in Time of War, or Hostilities, [which] afford but too constant temptations, and too frequent opportunities ... for taking, in some shape or other, undue advantages of insurers (Weskett 1781: xxvi)

Furthermore, according to Weskett,

> "In almost all controversial cases between insurers and insureds, the latter have always greatly the advantage of the former, with respect to the power of bringing forth evidence; because generally all the facts, intelligence, papers, &c. which in any wise relate to such cases, and the several persons who may be able to prove those facts, &c. are in the knowledge and reach of the insureds or their agents, to produce or suppress, as may best suit their purpose (Weskett 1781: 211).

But agency problems were equally present on the other side of the market. The financial stability of private underwriters was frequently uncertain, especially in wartime. In addition, insurance contracts were necessarily incomplete. Deviations from a planned voyage were sometimes unavoidable; and captains were often granted some discretion because many aspects of a voyage were inevitably unpredictable. So, even if the underwriters proved solvent, they frequently had opportunities to contest claims.

> "if [the underwriters] are punctual Men, and value their Reputations, they will presently pay you; if not they will shuffle you off, and endeavor to find out flaws . . . and sometimes will keep you a Year or two out of your Mony, and many times never pay . . . Be careful therefore to deal with Honest Men; that value their Reputation when you have any thing to be Insured" (Leybourn 1693: 39)

All of these agency problems were exacerbated in wartime. Regular channels of trade were disrupted by embargoes and blockades, and insurance rates increased and flucuated because of the danger of seizure by enemy privateers. The high premia encouraged people to underwrite, but it also became harder to accurately judge risks, and inexperienced or unlucky underwriters often sustained heavy losses.[2] Premia fluctuated constantly in response to new information and rumors.[3]

But war also created opportunities for profit - gluts in one market, shortages in another, and new opportunities in conquered territories. Smuggling was also rampant. Some merchants made a killing even as others went bankrupt. One London merchant informed a Philadelphia correspondent that "I shall be Glad to Render thee any Service should the present times Open a prospect for Busyness, which in Many places they do, more so, than in time of peace".[4]

Brokers played a central role in reducing the transactions costs in this market. Their basic function was to reduce the search costs involved in finding suitable underwriters willing to subscribe policies; to channel, record and monitor the flow of information between transacting parties; and to act as trustworthy intermediaries to mitigate some of the agency problems between merchants and underwriters (Kingston 2006). In London, the brokers' role became particularly important in the late eighteenth century as they as they became the center of a complex web of credit relationships which enhanced the security of privately-underwritten policies at Lloyd's (Kingston 2007a).

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[2] "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" (Weskett 1781: xxiii).

[3] "From the very Great Uncertainty of the times Insurance Even upon the Same Ship is often Varying" (Robert Plumsted to Hugh Roberts, 17 March 1757. Plumsted letterbook).

[4] Robert Plumsted to Thomas Penrose, 31 May 1756. Plumsted letterbook.

3 Marine Insurance in Colonial Philadelphia

Philadelphia was America's leading port in the mid-eighteenth century, and its trade, along with that of the other American colonies, was expanding rapidly. In the early years of the century, tobacco and furs were exported to Britain. Later, an increasing amount of Philadelphia's trade was with the West Indies, where wheat, flour, corn, meat, and lumber could be exchanged for rum, sugar, and fine hardwoods, and Bills of Exchange drawn on London, which were then exported to Britain in order to obtain "dry goods" - manufactured articles, tools, and textiles - for the colonies' consumption (Jensen 1963; Doerflinger 1986).

Throughout the eighteenth century, Philadelphia's merchants obtained much of their insurance in Britain, mainly at Lloyd's of London, which was developing from coffee-house origins into a sophisticated marine insurance marketplace. However, insuring in London created considerable inconvenience, for reasons discussed further in section 5. An attempt to establish a brokerage in Philadelphia in 1721 failed (Fowler 1888: 11), perhaps because the amount of capital available for underwriting was insufficient to sustain it.[5] However, insurance was being done in Philadelphia by 1743,[6] and Joseph Saunders was operating a brokerage in the late 1740s.[7] In 1752, aged 21, Thomas Wharton opened a second brokerage in Philadelphia.[8] His decision to do so may have been to some extent a result of a fortuitous circumstance: Saunders had recently moved from Carpenter's Wharf to Water Street, and Wharton's store was in the space that Saunders had recently vacated, enabling him to advertise that "the insurance office is there kept as formerly" (Gillingham 1933: 46).

Three of Wharton's ledgers form the primary data source for this study. The ledgers record all Wharton's transactions with underwriters from 26 May 1755 to 4 Dec 1755; 18 Nov 1756 to 17 Sept 1757; and 13 Feb 1759 to 15 Oct 1759. The ledgers are part of the Leonard T. Beale collection in the Historical Society of Pennsylvania.[9] Thomas Wharton does not appear to have previously been identified as the owner of these accounts, but a number of circumstances demonstrate that

[5] A brokerage was, however, successfully established in Boston in 1724 (Hardy 1901: 34).

[6] William Till letterbook, HSP MS 660. Till to L. Williams, 5 Aug 1743.

[7] Based mainly on newspaper advertisements, Gillingham (1933: 52) lists twenty two firms which brokered marine insurance in Philadelphia at some point during the second half of the eighteenth century (many appear to have been short-lived; five of the twenty two are Wharton and his successors). Most, perhaps all of these were merchants or shopkeepers who conducted marine insurance as a sideline to their main business.

[8] Anderson (1977) provides some biographical information on Wharton.

[9] HSP collection (PHi) 1735. Leonard Beale donated the ledgers to the HSP in 1955.

they are his. First, only two brokers (Wharton and Saunders) are known to have been insuring policies in Philadelphia as early as 1755 (Gillingham 1933: 52), and it is implausible that such a large business as that reflected in these accounts would be unrecorded elsewhere. Second, one of Wharton's policies from 1757 survives in the HSP archives, and the details match the entry in the corresponding ledger.[10] Finally, correspondence from Wharton's letterbook regarding unusual policy conditions also matches the conditions found in the ledgers.[11]

Three major types of transactions are recorded: underwriting transactions in which underwriters were credited with premia in exchange for assuming some portion of a risk; payments of losses (debited to underwriters and credited to the insured); and charges to the insured for policies placed. For example, a typical entry in the account with underwriter William Moore reads:

1757 June 22nd	On Brig^{t} Penelope Hugh Young M^{r} from Dublin to Philadelphia with liberty to touch at either Hallifax or New York to return 4 pC^{t} if s^{d} Brig^{t} doth not touch at either Hallifax or New York £100 Vessell at 18 pC^{t} for Henry Lisle	166	£18

indicating that the policy was entered on page 166 of Wharton's policy register (which does not survive, but seems to have typically had several policies to a page). Similar entries in other underwriters' accounts reveal that the *Penelope* was insured for a total of £400, and covered by four underwriters for £100 each.

Taken together, these accounts provide a rich and detailed record of Wharton's underwriting network during three distinct phases of the French and Indian War. The way the business operated was similar to that used in London and elsewhere, and the printed policies used followed the familiar and well-established form. First, the merchant enquired of the broker what the premium would be on a voyage; the broker consulted with the underwriters and informed the merchant of the premium (it appears the underwriters "marked" the proposal with the amounts they were willing to underwrite at). If the merchant agreed, the policy was opened and underwriters subscribed.

[10] 12 July 1757, the *William Relief*, William Place master, insured for £50 by Thomas Riche from Philadelphia to Barbados at 15%, registered in book B folio 182 by Thomas Wharton, and underwritten by Reese Meredith. The policy is in a bundle (misleadingly) titled "Marine Insurance policies 1759-1762" in HSP MS 1552 Box 6/8.

[11] For example, in December 1755, Wharton, "being indisposed", wrote to one of his underwriters (rather than simply going to see him directly) to ask that he accept a clause on a policy, which the other underwriter on the policy had already accepted, granting a return of premium in case the ship (the *Nancy*) were lost before a declaration of war with France. See Wharton to William Moore, 2 Dec 1755, Wharton letterbook, HSP MS 708A series 3 vol 24, and compare with ledger entries for Charles Jones (p.45) and W. Moore (p.42). For other examples, see Wharton's letter to Richard McWilliam, 19 May 1757 (£400 on the *Peggy* at $12\frac{1}{2}$%), and compare ledger entries for underwriters R. Meredith, H. Harrison and J. Meas; and Wharton's letter to John Waddell, 26 Feb 1759 (policies on the *Swan* and the *Chance*) and corresponding ledger entries.

Sometimes, the premium needed to be increased to obtain sufficient underwriters to fill the policy, so there are several instances in which different underwriters subscribed the same policy at different rates. Most policies appear to have been filled within a day or two. The office was open every day except Sunday.

Usually, separate policies were used to cover the vessel and goods. Thus, there were often several policies on the same vessel, because several merchants owned shares of the vessel, or because several merchants were sending goods on the same vessel. Occasionally, insurance was made on cash, "a bottomrie bond", or other sundry items. Policies often had some flexibility built in. For example, many specified that some of the premium would be returned if the vessel sailed with convoy and arrived safely. Many gave the vessel "liberty to touch" at several ports, often specifying some return of premium if the vessel instead proceeded directly to its final destination. Vessels sailing to the British Isles and northern Europe sometimes received a partial return of premium for going "North about" and thereby avoiding the English channel, where French privateers were more likely to be concentrated. Claims for return of premium were supported by an attested copy of the captain's sailing orders, and in case of convoy, a letter from the captain of the warship; and so on.

Wharton's basic function was to sell the policies and keep a record of who had underwritten for whom. He received a fee of five shillings for each policy, paid by the merchant making the insurance. When losses occurred, he collected the sums due from the underwriters, in return for which he received a commission of $\frac{1}{2}$% of the amount collected. In some cases, the underwriters received a 2% discount on the payment of losses in exchange for prompt payment.

Table 1 provides summary statistics for the three Wharton ledgers. About half of the policies were placed by local correspondents on behalf of other parties - often merchants in other ports, but also sometimes on behalf of the masters of the vessel to cover small personal trading ventures as well as personal effects. In return for this service, Philadelphia merchants charged their correspondents a commission, usually 5% of the premium.[12] This practice of charging commissions was simply one aspect of the system of factorage which was the universal basis for trade in the eighteenth century (Jensen 1963: 17). Merchants cultivated repeated relationships with correspondents in other ports,

[12]This was the amount charged by the Quaker merchant John Reynell (Romanek 1969: 26), and by James & Drinker (JD Letterbook, HSP MS (PHi) 176: eg., letter to D. Palmer, 4 March 1757). When Wharton placed policies on behalf of correspondents in other ports, he gave them the option of paying either a 5% commission on the premium, or $\frac{1}{2}$% of the sum assured, in addition to his usual brokerage fee (eg., Wharton to S. Simpson, 5 Feb 1756, Wharton letterbook, HSP MS 708A series 3 vol 24).

Ledger Dates	26 May 1755 - 4 Dec 1755	12 Nov 1756 - 17 Sept 1757	13 Feb 1759 - 15 Oct 1759
Number of days	192	310	244
Number of voyages	106	355	319
Number of policies	187	677	611
Policies per day	0.98	2.19	2.50
# underwriting transactions	403	1,666	2,261
Transactions per day	2.10	5.37	9.27
Total premia paid	£2,630 ≡ £96/wk	£19,780 ≡ £447/wk	£22,808 ≡ £654/wk
Average sum assured	£277	£240	£440
Total number of underwriters	17	30	35
of whom $\geq$ 1 transaction/week	7	13	24
Avg. #underwriters per policy	2.16	2.46	3.70
Max. sum assured	£1,600	£1,995	£2,600
Max. #underwriters on policy	10	14	20

Notes: Where appropriate, figures are rounded to the nearest pound. Premia on time policies (of which there are few) are estimated assuming risks lasted 3 months.

Table 1: Summary Statistics

acting as agents in the sale, purchase and handling of each others' goods, with customary rates of commission for each service agreed between the parties, as well as a constant flow of information about prices, political developments, the reputation of other merchants, accounts of vessels lost, and so on. In insurance, as in other aspects of trade, merchants assured (and constantly reassured) their correspondents that they would earn their commissions by handling the business as if it were their own. When placing insurance, this meant doing all they could to have the policies underwritten at low premia by sound underwriters. Often, they underwrote themselves on the policies they placed for correspondents. For example, James & Drinker informed one correspondent that they had found it difficult to find underwriters to cover a voyage to Hamburg but "as we had a good Opinion of the Vessels (Especially of the Sloop) and the Masters we ordered the Policies out and a Friend of Ours with Ourselves began them which Led others to follow till they were Completed".[13]

Underwriters could disagree about the appropriate rate of premium, and in some cases, new information may have shifted the premium between the times when different underwriters underwrote. There are several instances in which different policies on the same vessel are insured

[13] JD to John Lawrence, 21 Feb 1757. JD letterbook, HSP MS (PHi) 176. The total amount insured was £1600 in three policies, of which James & Drinker covered £200 (Wharton ledgers).

at (slightly) different rates; and some cases in which different underwriters apparently underwrote at different rates of premium on the same policy. Frequently the premium on a vessel increased over time as a vessel became overdue, or new information arrived which increased the perceived risk. For example, in December 1756, the *Sally* was insured by Thomas Clifford from Philadelphia to St. Kitts at 9% (in four policies for a total of £550). On 22 February, John Meas underwrote an additional £100 at a premium of 25%.

There are several instances of reinsurance, despite its having been made illegal in 1747 (Fowler 1888: 17). For example, on 29 June 1757, Scott & McMichael insured £600 worth of goods on the *Fanny* from Philadelphia to Barbados at 15%. Six underwriters underwrote for £100 each. An unconfirmed report of the *Fanny*'s capture led one of these, John Meas, to seek to reinsure his interest, and he paid Thomas Yorke a premium of 75% on 25 July to relieve himself of his portion of the risk.

Only one slave-trading vessel appears, the *Wheel of Fortune*, insured for £400 at 28% in March 1759 by Tench Francis on behalf of Obadiah Brown of Newport, Rhode Island, on a voyage to Africa and back to Providence.[14] There are several possible explanations for the lack of slaving voyages. Although some Philadelphia Quakers still owned slaves in the 1750s, many refused to participate in the slave trade,[15] and it may be that given Philadelphia merchants' Quaker scruples, the business of insuring slaves may have gone to underwriters in other ports. It can also be argued that, at least in terms of the number of voyages, trade with Africa was "insignificant" (Walton 1968: 367-9) for the commerce of both New England and the middle colonies. For example, even from Rhode Island, where the slave trade was concentrated, an average of fewer than ten vessels per year sailed for Africa in the 1750s (Hawes 1999, Appendix, Table I). Finally, the rates of premium may have been prohibitive.[16]

There are, however, several instances of insurance on the lives of individual slaves. On 15 August 1757, James Childs underwrote £50 at $17\frac{1}{2}$% "upon a Negro Man nam'd Cudjo, ye property

[14] Tench Francis underwrote for £100 and Thomas Willing & Co. covered £300. The vessel was taken by the French. See "Insurance Book", part of the records of the voyage of the slave ship *Sally*, Brown University steering committee on slavery and justice (online), page 18; and Hedges (1968: 72).

[15] eg., John Reynell (Romanek: 52).

[16] In 1758, Wharton informed a correspondent in New York that "I have enquired among our Underwriters relative to the Africa risque and cannot find any of them that will take under 35 to 40 pCt. If thou should order any Insurance on that risque please send an account of her Gunns & Men as its possible may be a means of getting the Insurance the lower" (Wharton to John Waddell, 9 Feb 1758, Wharton letterbook, HSP 708A series 3 vol 24).

of [Hugh Bowes, the captain of the vessel] & with him, on this Voyage" in the *Margarett* from Philadelphia to Barbados. This was probably not Cudjo's first trip; in November 1755, Captain Bowes had insured £300 on "Goods and a Negro Man" from Philadelphia to Barbados at 4%; and in February 1757, he had insured a negro man at 8% on a voyage inbound from Lisbon.

Under Britain's Bubble Act of 1720, it would have been illegal for Philadelphia underwriters to form any sort of partnership or company with a joint stock or with joint liability for losses. However, in October 1757, six underwriters led by Thomas Willing formed a "Company for insuring Ships, Vessels, Goods and Merchandize". Each partner was liable for one sixth of the risks underwritten by Willing, who was limited to insuring £600 on any one risk. The agreement was renewed for another year in October 1758 (Fowler 1888: 20-1). This company became an important underwriter through Wharton's brokerage, covering 104 risks for a total of £41,284 in the 1759 ledger. Whereas most other underwriters usually confined themselves to £100 on any policy, Willing &Co. regularly covered £600, and sometimes even more. By entrusting Willing with the ability to underwrite on behalf of the other members, this company reduced the transactions costs of spreading risks; however, their agreement did not involve any assumption of joint liability or the raising of a capital fund, so it was in essence merely a syndicate designed to reduce the transaction costs of individual underwriting. The company has therefore been treated as six separate underwriters in Table 1.

Underwriting was not an impersonal business. On 8 July 1755, William Griffiths underwrote for £150 on the *Sally* to Jamaica and back at $7\frac{1}{2}$%, on a policy for Joseph Richardson. The same day, Richardson underwrote £150 on a policy for Griffiths. It was the first time either of them appeared in these ledgers, and Griffiths went on to become an occasional underwriter until April 1757, when for unknown reasons, his underwriting abruptly ceased. Whether Richardson and Griffiths went to the broker together intending to underwrite on each others' policies, or chanced to meet there, it seems likely that that their reciprocal subscriptions reflected a mutual confidence, perhaps arising from their both being Quakers (as was Wharton himself) (Brobeck 1973: 304).[17] Occasionally, a merchant may have refused to accept underwriters whom he did not view as trustworthy. In 1796, Stephen Girard wrote to his broker requesting that the subscriptions of three underwriters be cancelled, "being desirous to have my property insured by underwriters who in case of loss will pay in due time the amount of their subscription" (Gillingham 1933: 63).

[17] There are other instances of this sort. For example, J. J. Mifflin and John Baynton traded subscriptions on each others' policies on 17 Sept 1755.

4 The Seven Years' War

Although the Seven Years' War was not officially declared in Europe until 1756, its opening shots in America (where it became known as the "French and Indian" War) were fired in Ohio in May 1754, igniting a brutal struggle between the French, the British, and their Indian allies for control of the North American interior.[18] At first, the war went very badly for the British. A substantial force dispatched to attack Fort Duquesne at the forks of the Ohio (modern-day Pittsburgh) was ambushed and defeated by the French and their Indian allies in July 1755, and this was followed by a string of further defeats including the losses of Fort Oswego in 1756 and Fort William Henry in 1757. Then, after William Pitt came to power in London, the British poured resources into the American war effort and the tide turned. In 1758, the British captured Fort Duquesne, and the strategic French fortress at Louisbourg, Nova Scotia; and the following year they captured Québec City. In 1760, Amherst's capture of Montréal completed the conquest of New France and effectively ended the war in continental North America, although peace in Europe was not concluded until 1763. British Naval superiority played a crucial role in this change of fortunes (Anderson 2000: 257), but was not sufficient to prevent French privateers from posing a substantial danger to British merchant vessels throughout the war.

The war affected Philadelphia's commerce in many ways. From 1755 to 1757, Indian raids on backcountry farmers reduced the supply of provisions and the demand for imported manufactures. In both 1756 and 1757, embargoes halted exports for months at a time and drove down the prices of exports. In 1758, however, conditions improved sharply as the increased war effort created demand for foodstuffs from the British forces stationed in America (Egnal 1974, Chapter V). Indian raids ceased and new land was brought under cultivation; the harvests of 1758 and 1759 were good; and demand from the Caribbean was exceptionally strong in 1758-9 (Egnal: 159). The capture of the French West Indian island of Guadeloupe in May 1759 opened new opportunities for trade, and in 1759 a substantial commerce with French ports opened up under "flags of truce", vessels which traded under the guise of exchanging prisoners of war (Egnal: 197-9; Larsen 1955: 323-).

Figure 1 shows the average rates of premium paid by Philadelphia merchants insuring through Wharton's brokerage, for the three most important categories of destinations: the West Indies (mainly Antigua, Barbados, Jamaica, and St. Kitts); Europe (the British Isles, Amsterdam, Ham-

[18] The following section relies substantially on Anderson (2000).

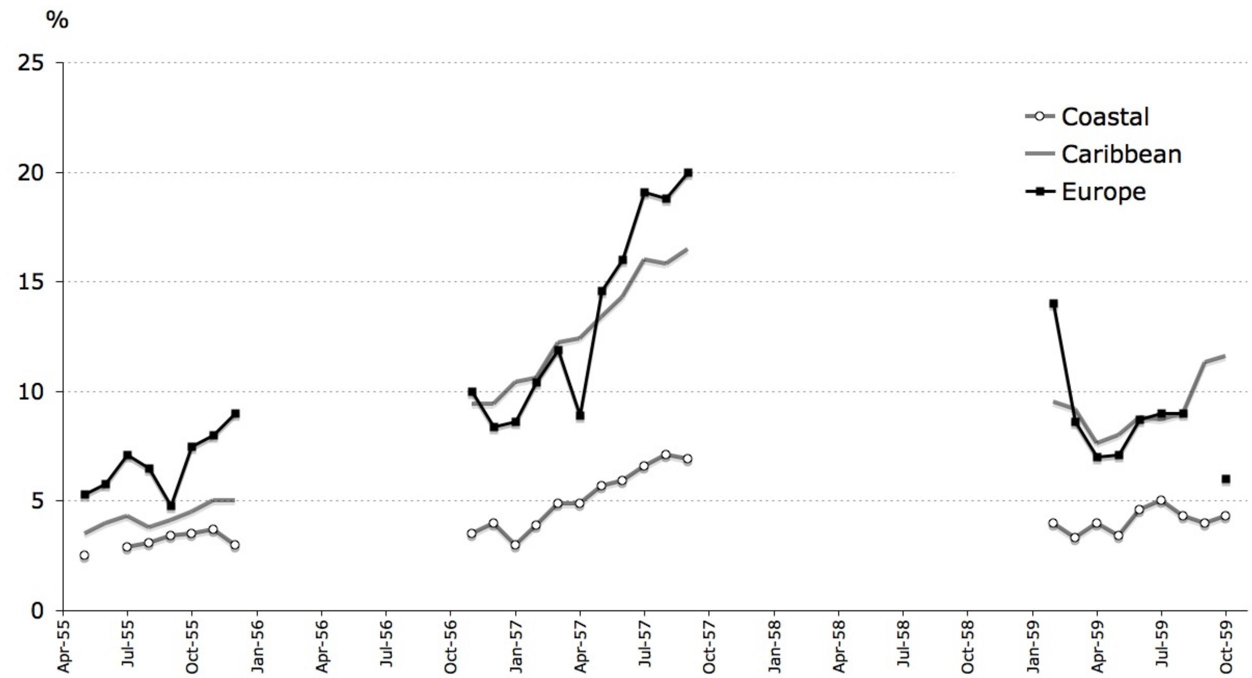

Figure 1: Monthly averages of one-way premia on major categories of routes, excluding reinsurances. Notes: Caribbean includes Surinam and the Bay of Honduras. Europe includes Madeira and Tenerife.

burg, Lisbon); and other North American colonies (New York, Boston, North Carolina, Virginia, and later, Halifax, Louisbourg, and Newfoundland). Although a European war had not yet been declared, the looming threat of war caused rates to rise during 1755, particularly on European voyages (Figure 1). Usually, the probability of war was taken into account in the premium. In a few cases, the rate of premium was to be made retrospectively contingent on the outbreak of war. Samuel Howell took out £200 insurance on goods on the *Nancy* from Philadelphia to London in November 1755, at a premium of 15%, but 11% was to be returned if war with France had not been declared before the ship arrived (the usual peacetime rate was $2\frac{1}{2} - 3\%$).

Premia to the West Indies rose throughout 1756. Philadelphia merchants James & Drinker paid 6% on shipments to Jamaica in May; 8% in August; and hoped to do it at 10% in October.[19] Coastal risks were less affected as "We have not yet had any French privateers on our coast nor do we think there will be any until early next Spring".[20] By February 1757, the premium on West

[19] JD letterbook, HSP MS (PHi) 176, letters to R. Field, 19 May, 18 August, 29 October 1756.
[20] JD letterbook, HSP MS (PHi) 176, 28 Oct 1756.

Indies risks was from $10 - 12\frac{1}{2}\%$ "and will rise we fear, as we daily hear of Captures".[21] In August 1757, they paid 18% on a voyage to St. Kitts, noting that "Premiums are already high and if the French should continue as successful as they have been in taking English Vessels about the Leeward Islands they will still more discourage our Underwriters, and of Consequence Premiums will rise higher".[22] The increasing rates can also be traced in the Wharton ledgers for individual ships, such as the *Muggy*, William Allison master, insured from Antigua to Philadelphia in November 1756 for 9%; from Philadelphia to Antigua in January 1757 for 9 and 10%, from Antigua to Philadelphia in April for $12\frac{1}{2}\%$, and in June from Philadelphia back to Antigua at 15%.

5 Growth of Philadelphia Underwriting

It is clear from Table 1 that Thomas Wharton's marine insurance business grew rapidly during the French and Indian War. Joseph Saunders, who had had the business to himself in the 1740s, found himself in competition with Wharton after 1752, so it seems likely that some of the increase in Wharton's business may have come at Saunders' expense; but the competition increased still further in 1757, Walter Shee opened Philadelphia's third brokerage in February 1757 (Gillingham 1933: 42,3), and several more brokerages were opened in the early 1760s, some of which were short-lived (Gillingham 1933: 52). This suggests that the market as a whole was growing. Part of this increase may have been a result of a growth in the volume of trade, particularly trade with the West Indies. The total tonnage clearing for the West Indies rose from 9,100 to 10,000 tons in 1757 and 14,400 tons in 1759 (Egnal 1974: 329),[23] while the official sterling value of imports from Britain to Pennsylvania increased from £146,457 in 1755 to £269,067 in 1757 and £502,787 in 1759 (Price 1975, Appendix IIB). Philadelphia merchants were more likely to be insuring outbound than inbound cargoes to Britain, however, and the value of exports to Britain fell from £37,188 in 1755 to £15,366 in 1757 and £23,988 in 1759 (*ibid.*). It is also likely that a greater proportion of trade was insured during the war. Wharton himself asked his London supplier to "make full Insurance on the Goods thou may send me as I would not chuse these times to run any risque."[24]

All of these were possible contributing factors; but perhaps the most important explanation

[21] James & Drinker Letterbook, HSP MS (PHi) 176, 26 Feb 1757 to J. Clitherall.

[22] James & Drinker Letterbook, HSP MS (PHi) 176, 11 Aug and 26 Aug 1757 to J. Parkinson.

[23] The tonnage clearing Philadelphia for southern Europe fell from 2,200 tons in 1755 to 600 tons in 1757 and 300 tons in 1759 (Egnal 1974: 329).

[24] Wharton to Christopher Rawson, London, 21 Nov 1757. Wharton letterbook, HSP MS 708A series 3 vol 24.

for the growth of Wharton's business was American merchants' increasing propensity to insure locally rather than in Britain, particularly as a consequence of the war. Throughout the eighteenth century, and even after the American Revolution, a substantial share of American insurance was obtained in Britain, particularly in London. As the center of the British empire, London, and in particular Lloyd's of London, had advantages both in the amount of capital available for underwriting and in the information available to underwriters (Kingston 2007a), which made it the center of the marine insurance industry. But for Philadelphia merchants, insuring in London was inconvenient for several reasons. It was necessary to pay their London correspondents to effect insurance on their behalf, and to be able to trust them to do it on the best possible terms, and with sound underwriters. Sometimes, orders for insurance failed to arrive, or London agents failed to effect the insurance, before news was received of the vessels' loss, leaving the merchant uninsured. When losses occurred, the process of settling claims was slow, because of the need to send documentation to support a claim.

War greatly magnified this inconvenience. The usual practice, once a vessel's destination had been decided, was to send orders for insurance ahead to London. As with all letters, several copies were sent by different conveyances. At the best of times, this was somewhat precarious, but war made it especially so, as the ships carrying the orders were themselves at risk of capture. In November 1756, Philadelphia merchants James & Drinker informed their London correspondents that

> As the Packets from New York have of late saild so very irregular ... we thought it imprudent to depend upon them to carry a Letter for Insurance as that would have left us at a great Uncertainty whether it would be timely made in England or not, [which] determind Us upon getting all that we could done here".[25]

In several cases, this uncertainty led anxious merchants to obtain insurance through Wharton with provisions that it was to be void if insurance had already been obtained in London.[26] For similar reasons, it became harder to settle losses, because of the difficulty of getting and sending proper documentation to support a claim. For example, London merchant Robert Plumsted warned his cousin William in Philadelphia that

[25] JD letterbook, HSP MS (PHi) 176, letter to Neate & Deave, 6 November 1756

[26] For example, the *Swanzey* (3 November 1755); the *Schemer* (21 January 1757), Wharton ledgers.

> "As proofs of Interest in time of War are very difficult to be Got, I should be Glad in future to know the shares of Ships, Cargoes & Freights thou Insures upon ... that I may value the policys Accordingly, as it often prevents Great delays In Settling Losses, though in particular Cases, the Insurers have a Right to Require proofs."[27]

The war also made it much harder for Philadelphia merchants to exert any control over the rates of premium paid (placing limits on the premium was risky; it could mean foregoing insurance altogether just when things became most dangerous). Robert Plumsted wrote in 1756 that "from the Great Uncertainty of the times the price [of insurance] Varys almost daily",[28] and this exacerbated the agency problems between correspondents. When Plumsted procured £600 insurance for his cousin William on the *Molly*, from Jamaica to the Bay of Honduras and back to Philadelphia, at 21%, he considered it "very Moderate Considering the Risque".[29] William, evidently, complained that he could have gotten a better deal in Philadelphia, to which Robert replied

> "At thy Request I Show'd the Underwriters upon the Molly what thou says upon the premium Given for that Voyage (though I expected they would Laugh at me for so doing) - One of them had Twenty five Guineas at the same time for the same Adventure. They pay no Regard to what is done with you, As they say you are not Acquainted with the Circumstances of these Voyages, so well as wee are, who are almost every day Furnish'd with Intelligence whereby to Form a proper Judgment of the Risque - therefore to Expect any Return of premium is quite out of the Question."[30]

Robert assured William that "thou may allways depend on having what Insurances thou Commits to my Care done upon as Moderate Terms as anything Can be here with Good Men", but the following summer, William insured several West Indies ventures through Wharton's brokerage.[31]

The establishment of marine insurance in Philadelphia added a further layer of complexity. It made it all the harder for correspondents in London to guess whether or not they should obtain

[27] R. Plumsted to W. Plumsted, 12 Feb 1757. Plumsted letterbook.
[28] Plumsted to J. Foulke, 12 March 1756, Plumsted letterbook.
[29] R. Plumsted to W. Plumsted, 12 March 1756.
[30] R. Plumsted to W. Plumsted, 3 August 1756.
[31] Ledger entries for the *Good Intent*, *Prince William*, and *St. Andrew* (20 June 1757), the *Elizabeth* (11 July 1757), and *Molly* (19 August 1757), Wharton ledgers.

insurance for their Philadelphia correspondents without specific orders. Uncertain as to whether William had insured in Philadelphia, Robert Plumsted obtained partial coverage on some voyages in London, but complained: "if thou has made no Insurance upon the Vessel & Freight with you I think I shall hardly be justify'd as this Sum is not sufficient fully to cover thy interest. I wish thou would always say whether any Insurance is made with you upon any Vessel thou orders to be done here.[32]

The availability of insurance in Philadelphia also probably made London underwriters more cautious about insuring Philadelphia risks, particularly on West Indies routes, for which the Philadelphia underwriters were more familiar with the vessels and captains involved, and had more up-to-date information about local conditions. Philadelphia merchant William Till worried as early as 1743 that this perception that "the most dangerous Policys may fall to their share" would make London underwriters reluctant to insure Philadelphia vessels,[33] and probably with some justification. In March 1757, for example, James & Drinker informed a correspondent in Barbados that they would "duly observe thy Orders respecting Insurance on the *Batchelor* & Cargo to Barbados, and if not to be done here, as our Underwriters have but a poor Opinion of her sailing, shall write to London or Liverpool to effect the same". They shipped some of their own goods in the vessel in an effort to "obviate the Prejudice against her", but were ultimately forced to write to Liverpool for the insurance, neglecting to mention the "Prejudice against her", and instead informing their correspondents that the vessel was"well Sheathd here, and well fitted, an Able and Experienced Master", and planned to travel under convoy of a privateer.[34]

This stopped short of outright fraud, but the British underwriters were understandably nervous. Robert Plumsted wrote in 1757:

> "[In settling a loss] proofs are Requir'd, especially as you have taken to make Insurances among yourselves, as between both, more than the Value may sometimes be Cover'd. I know thou would scorn to do any such thing, but It may be a Just pretence to delay settling a loss here, therefore please to be explicit in this respect."[35]

[32] R. Plumsted to W. Plumsted, Plumsted letterbook, 6 Dec 1757.
[33] William Till letterbook, HSP MS 660. Till to L. Williams, 5 Aug 1743.
[34] James & Drinker letterbook, HSP MS (PHi) 176, to T. Millerson, 1 Mar 1757; to Scott & Hillary (Liverpool), 28 June 1757; to Benson & Fletcher, 30 June 1757.
[35] Robert Plumsted to William Blair, 12 Nov 1757, Plumsted letterbook.

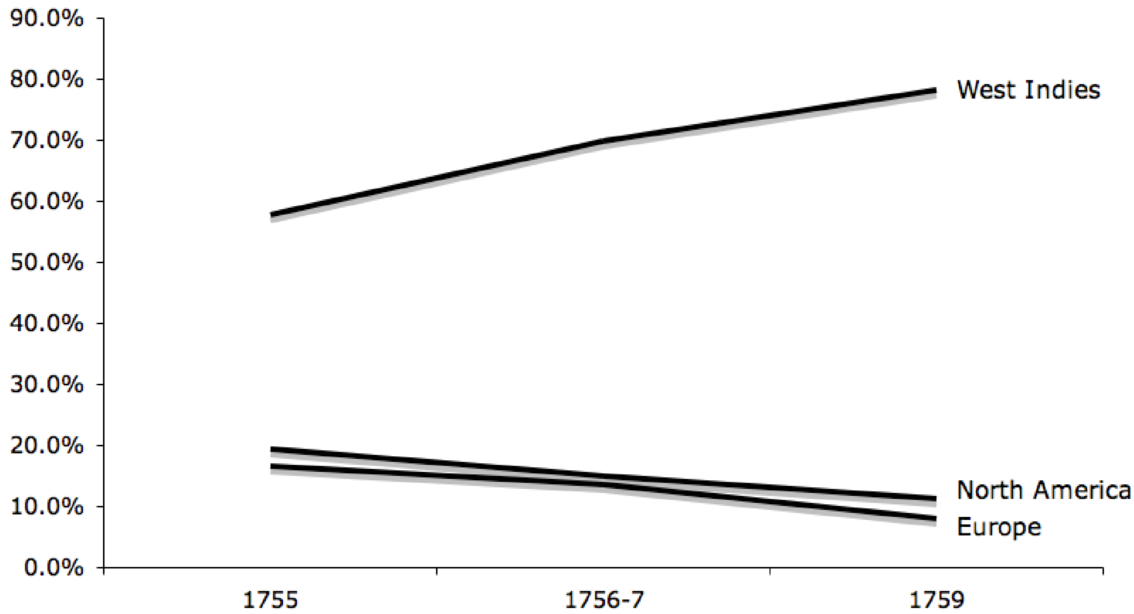

Figure 2: Fraction of policies on major categories of routes, Wharton ledgers.

The London underwriters' caution was likely reflected in higher premiums, which in turn further encouraged Philadelphia merchants to insure at home, particularly on West Indies and coastal risks, for which the London underwriters' disadvantage was particularly acute (Figure 2). Thomas Clifford, for example, continued to instruct correspondents sending him goods from England to obtain insurance there, but arranged insurance in Philadelphia on his ventures to the West Indies (Larsen 1955: 192-3). Robert Plumsted was forced to constantly defend the insurances he had made in London against charges of excessive premiums. He told his cousin William that "while you Continue doing Insurance amongst yourselves, at premiums very unequal to the Risques, you will think our price high, but a few losses, some of which have already happened may perhaps advance your prices, for they are not Calculated to hold long",[36] and tersely informed another correpsondent that "as to thy saving money by doing this Busyness with you, I believe your Underwriters will soon have enough, for give me leave to say, they don't know what they are about."[37]

[36] 12 Nov 1757 to W. Plumsted, Plumsted letterbook.
[37] R. Plumsted to Daniel Curry, 6 Dec 1757, Plumsted letterbook.

6 Conclusion

By 1759, the marine insurance business in Philadelphia was well-established and attracted orders from insurance from merchants in other American cities and the West Indies. “Our underwriters, we think, are in general men of fortune, and pay their losses with great punctuality, for which we have the preference of any on the continent”, one Philadelphia merchant wrote in 1759.[38] Wharton's brokerage business had developed substantially during the French and Indian war, and survived for many years thereafter. Eventually, it passed into the hands of his younger brother Isaac, who carried it on until 1803, when it was reconstituted as a joint-stock corporation (Kingston 2007b).

The Seven Years' War appears to have accelerated the development of an American marine insurance industry by disrupting established patterns of interaction with London. I have argued that 40 years later, the Quasi-War with France (1796-9) accelerated the transition from private to corporate underwriting in the United States (Kingston 2007b); and that the Napoleonic Wars, together with the constraints created by Britain's Bubble Act, provided the stimulus for Lloyd's of London to develop into a formal marketplace for private underwriting (Kingston 2007a). Thus, this papers' argument fits the overall pattern of institutional change in eighteenth century marine insurance. In each episode, by raising premiums, disrupting information flows, and endangering underwriters' security, war provided the impetus for institutional change.

In comparison with London, of course, Philadelphia was a backwater. In 1759, there were three insurance brokers in Philadelphia but 40 in London (Sutherland 1933: 61). From all that activity, however, very few records survive. Sutherland (1933) describes the career of a single underwriter in mid-century London; Danson (1894) uses the accounts of a single underwriter to chart premium movements in 1810-16; and contemporary sources such as Weskett (1781) and the Report of the Select Committee on Marine Insurance (1810) describe the workings of Lloyd's in general terms. But nothing as rich and detailed as the Wharton ledgers exists for private underwriting in eighteenth-century Britain. They are a remarkable resource for the history of marine insurance in this period.

[38] James & Drinker to David Chollet, 8 May 1759, quoted by Egnal (1974: 81). The proportion of policies insured for correspondents through Wharton's brokerage increased from 42.8% in 1755 to 49% in 1756-7 and 59.1% in 1759.

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