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## Price-fixing in interwar naval contracts

*Abstract: This post presents extracts from a price agreement between a group of shipbuilding firms during the 1930s. The downturn in naval orders starting 1922 with the Washington Treaty sent shockwaves through the armaments industry, starting with the collapse of the Coventry Ordnance Works in 1925, but eventually toppling industrial giants like Beardmore and Palmer's. How the industry reacted and adapted to this change is still understudied. The extracts presented represent one of the most novel, but also shocking, attempts to do so in the 1920s and 1930s: by fixing prices for Admiralty contracts through the formation of a cartel. By examining two cases from the years preceding rearmament, it shows both the costs and benefits of such a scheme to the British state.*

For most of the interwar (1918-1939) period, British shipbuilding had been in a dire state. A short-lived boom in the immediate post-war period aside, the over-expanded and bloated industry, comprising some 200 extra berths in 1919 compared with 1914, struggled in the face of international – and often subsidised – competition, and a general agreement between the great powers to limit future expansion in the size of naval fleets, better known as the Washington Naval Treat(ies). It was this latter area that caused much Admiralty consternation, as despite the bloating, only a relatively small number of firms had the technical capabilities to construct complex naval vessels. The problem, thus, was that without the ‘expansion valve’ provided by specialist private manufacturers (including in the crucial areas of armour, guns and engines) over and above what capacity existed in the Royal Dockyards, any future ability to rearm efficiently could be badly curtailed, and pose a security risk to the entire British Empire.

However, preservation of industrial capacity ultimately cost money in terms of either direct subsidies or the placing of orders – even where these orders did not contravene the Washington agreements. Money that, in an era of large British debt, disarmament, and tight Treasury control, was extremely hard to come by. What limited assistance had been offered had failed to arrest decline in key areas: a limited armour subsidy had been abandoned in 1925, and major manufacturers, including the Coventry Ordnance Works, Beardmore in Glasgow and Armstrong-Whitworth in Newcastle, had wholly or partly collapsed or been merged into other concerns by 1930.

It was against this backdrop that the industry, or what remained of it, began to take matters somewhat into their own hands. From 1926, an agreement was struck by more than a dozen of the large, specialist, naval manufacturers to enter into a ‘rota’ and share out what meagre orders existed – mainly for small destroyers – between themselves. This had the immediate advantage of not only preserving crucial capacity, but ending or limiting the cut-throat competition that had taken place between firms for all kinds of vessel naval or otherwise, competition which had led to bids frequently well below break-even prices. This rationale, that any contract was better than no contract at all, had done much to push firms, and precious capacity in specialised areas, near to the brink.

On the other hand, such a rota sat in a grey area between competition and cartelisation. Bids for Admiralty contracts, at least notionally, were secret and offered to the lowest bidder, albeit from a group of ‘invited’ firms that the Admiralty believed were capable of meeting the technical demands of the project. While there is no solid evidence either way, it

is likely that a rota of this sort for *destroyers* – usually built in large classes to a standard design with relatively small deviations in prices – suited both the private industry and Admiralty well in the 1920s, and may even have occurred with tacit Admiralty support of its existence.

This group of firms was thereafter called the Warshipbuilders' Committee. It was, and is, a little-known and understood organisation in the history of the Royal Navy. No formal or organised records survive – and what does only exists in fragmentary (sometimes quite literally – the Glasgow collection is partly fire damaged) and tantalising glimpses in company-level correspondence or files in a small handful of business archives, and yet tell an astonishing story of an attempt to fix the price paid on naval contracts. The reasons for this unquestionably concern its members' concerted attempts to conceal their tracks. Indeed, early objection by some firms to even joining the rota suggests all knew the dubious legality – or at least likely blowback should the scheme be uncovered – but proceeded regardless, though at times referring to members only by code name. This was evidently successful, as by the end of the 1920s, the rota had been operating without attracting attention or controversy for more than three years.

These documents come however from 1934-5. Though the worst ravages of the depression were over – shipbuilding was still in a slump, the Washington Treaties had been renewed until 1936, and, while the situation in Germany and Japan was increasingly alarming, rearmament spending was nowhere near political (or public) acceptance. Realising the persistent precarity of their collective position, the Warshipbuilders' Committee had thus expanded their initial rota, and had encompassed not only what few other naval ships were being ordered (including larger cruisers), but orders for refitting ships in cases where these were being undertaken outside of the Royal Dockyards.

The first extract, for the work to re-engine HMS *Warspite* shows, quite clearly, how such price fixing was to work. Each firm, in the first column, would submit what was their 'true' price for the work. In this case, John Brown and Co had the lowest price - £387,000. Yet, the committee instructed them to submit a bid of £459,000, some £11,000 **higher** than Parsons, which was to 'win' with a low bid of £448,000 – though still some £43,000 higher than its 'true' estimate.

The maths, in fact, is fairly simple. The firms capable of bidding for the *Warspite* contract did so, just to each other, rather than to the Admiralty. With the cards face up on the table, their bids were averaged out – coming to almost £408,000, and 10% was added to this mean, giving the final 'winning' price, going to Parsons, whose turn it was in the rota to share out the Admiralty work. The firms were fully aware that this contravened tendering practices. Indeed, handwritten in the margins of the agreement is an instruction to 'add hundreds' to the 'losing' quotations, lest seven suspiciously round numbers arrive on the Admiralty contracts department's desk and give the game away.

**An example of a price agreement between firms  
for *Warspite* machinery tender**

<b>Firm</b>	<b>Estimate</b>	<b>Price to be quoted</b>
Parsons*	£405,000	£448,700
Brown	£387,600	£459,000
Scott	£406,300	£472,000
Cammell Laird	£460,800	£480,000
Wallsend*	£402,000	£467,000
Fairfield	£388,500	£463,000
Vickers	£408,000	£471,000
Hawthorn Leslie	£405,200	£465,000
<b><i>Mean of estimates</i></b>	<b><i>£407,920</i></b>	

\*Engine manufacturer only

*Source: Machinery for HMS Warspite (Secret) GUAS: GD319 12/7/6* (the rounded numbers for the “losing” bids were instructed to “add hundreds” to the final estimate, presumably to give the quotes the appearance of authenticity).

The second extract, to fix the price to be quoted for a (then) unspecified aircraft carrier in 1935, similarly instructed firms to hide extra costs between machinery and hull, so as not to make one appear unduly expensive to their would-be paymasters. This time, the margin had grown modestly – exactly 5% on machinery, but now 18% on the hull. This ship would become, in 1937, HMS *Ark Royal*, and Cammell Laird was the successful bidder. What these documents strongly suggest then, is that despite good reasons for possible Admiralty support of a destroyer rota, by the 1930s the cartel had expanded to take on a life of its own, and profiteering on Admiralty contracts was now widespread and carefully managed.

**WSBC tendering practices for aircraft carrier order, 1935**

Firm	Estimates			Order of tenders	Price to be quoted		
	Hull	Machinery	Total		Hull	Machinery	Total
Cammell Laird	1,395,000	543,000	1,938,000	1	1,487,850	563,125	2,050,975
Hawthorn Leslie	1,238,000	530,000	1,768,000	4	1,551,000	579,000	2,130,000
Fairfield	1,210,000	520,000	1,730,000	2	1,527,000	573,000	2,100,000
Harland & Wolff	1,280,000	535,000	1,815,000	3	1,539,000	578,000	2,117,000
Swan Hunter	1,208,000	525,000	1,733,000	5	1,574,000	571,000	2,145,000
John Brown	1,274,000	540,000	1,814,000	7	1,601,000	574,000	2,175,000
Vickers-Armstrong	1,250,000	540,000	1,790,000	5	1,623,000	575,000	2,198,000
Scotts	1,240,000	556,000	1,790,000	6	1,593,000	572,000	2,165,000
Mean of estimates	1,261,850	536,125					

*Source: WSBC Tendering Practices, Aircraft Carrier, January 1935. (Secret) GUAS: GD319 12/7/5.*

Such a scheme, however dubious, arguably saved Britain from the worst side-effects of depression and disarmament. Though the scheme was eventually uncovered in 1941, it was only in the later years of rearmament that profit margins grew to 25% or more. In the interim, it provided a price floor which below which bids could not fall, preserving critical capacity and ensuring modest profits in an era where losses on merchant ships were still routinely recorded. Though until recently almost entirely unknown, the operation and existence of the Warshipbuilders' Committee was a crucial part of the management of British dis- and re-armament, and unquestionably helped to keep the backbone of Britain's naval war machine afloat.

*The original documents are held in the Scottish Business Archive, University of Glasgow, at GUAS: GD319 12/7/5-6. For more on these documents and a fuller discussion on the Warshipbuilders' Committee, please see C.W. Miller (2018) *Planning and Profits: Planning and Profits: British Naval Armaments Manufacture and the Military Industrial Complex, 1918-1941*, out now with Liverpool University Press.*

About the author: Christopher Miller is a graduate of Balliol College, Oxford and the University of Glasgow, where is currently lecturer within the Centre for Business History. His book, 'Planning and Profits: British Naval Armaments Manufacture and the Military Industrial Complex, is out now with Liverpool University Press