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# Planning and Profits: The Political Economy of Private Naval Armaments Manufacture and Supply Organisation in Britain, 1918-41

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## Abstract

This thesis examines the relationship between the private naval armaments industry, businessmen and the British Government's supply planning framework between 1918 and 1941. More specifically, it reassesses the concept of the Military-Industrial Complex by examining the impact of disarmament upon private industry, the role of leading industrialists within supply and procurement policy, and the successes and failings of the Government's supply organisation. This work blends together political, naval and business history in new ways, and, by situating the business activities of industrialists alongside their work as government advisors, it sheds new light on the operation of the British state.

This thesis argues that there was a small coterie of influential businessmen, led by Lord Weir, who, in a time of great need for Britain, first gained access to secret information on industrial mobilisation as advisers to the Supply Board and Principal Supply Officers Committee (PSOC), and later were able to directly influence policy. This made Lord Weir and Sir James Lithgow among the most influential industrial figures in Britain. This was a relationship which cut both ways: Weir and others provided the state with honest, thoughtful advice and policies, but, as 'insiders' utilised their access to information to build a business empire at a fraction of the normal costs. Outsiders, by way of contrast, lacked influence and were forced together into a defensive 'ring' – or cartel – and effectively fixed prices for British warships in the lean 1920s. However, by the 1930s, the cartel grew into one of the most sophisticated profiteering groups of its day, before being shut down by the Admiralty in 1941.

More generally, this work argues that the Japanese invasion of Manchuria was a turning point for supply organisation, and that between 1931 and 1935, the PSOC and its component bodies were governed by necessity. Powerful constraints on finance and political manoeuvre explain the nature of industrial involvement. Thus, it is argued that the PSOC did a broadly effective job at organising industry with the tools it was given, and the failings were down to the top levels of policymaking – the Cabinet – not acting upon advice to ease procurement bottlenecks early enough, to the extent that British warship construction was more expensive and slower than it could have been. In sum, this group of industrialists, the Admiralty and a few key figures in the PSOC such as Sir Harold Brown, effectively saved MacDonald, Baldwin and Chamberlain's National Government from itself.

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All errors in this work are entirely my own responsibility.

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### List of abbreviations

ADM: Admiralty papers (The National Archives, Kew, London)

BIDC: Bankers' Industrial Development Company

BLH: Basil Liddell Hart Centre for Military Archives, King's College London

BOE: Bank of England

CAB: Cabinet Papers (The National Archives)

CID: Committee of Imperial Defence

CCC: Churchill College Archives Centre, University of Cambridge

CoS: Chiefs of Staff Sub-Committee

CUL: Cambridge University Library, Manuscripts Room

DBFP: Documents on British Foreign Policy

DNC: Director of Naval Construction

DPR: Defence and Policy Requirements Sub-Committee

DRC: Defence Requirements Committee

GCC: Glasgow City Council Archives (Mitchell Library)

GUAS: Glasgow University Archives (includes the Scottish Business Archive)

MFCD: Minister for the Coordination of Defence

NMM: National Maritime Museum, Greenwich

NSS: National Shipbuilders' Security

PSOC: Principal Supply Officers' Committee

RAF: Royal Air Force

SCI, II, III etc.: Supply Committee I, II, III (see Figure 2.1 for CID organisational structure)

SEF: Shipbuilding Employers' Federation

SMT: Securities Management Trust

SUPP: Ministry of Supply Papers (in the National Archives)

TNA: The National Archives, London

WSBC: Warshipbuilders' Committee

## A Note on Definitions

Although it is true that a great many firms made support vessels for the Royal Navy, some definition of ‘warships’ is useful in drawing boundaries between the private naval armaments industry and the smaller classes of vessels which were typically made in non-specialist shipbuilding yards. Where grey areas occur, they mainly concern ships smaller than destroyers (i.e. under 1,200 tons), which were most commonly sloops-of-war, minesweepers, frigates and corvettes. Confusingly, the Royal Navy frequently dropped and resurrected terminology, leading some classes such as the *Black Swan* to be popularly known as a ‘sloop’ while officially designated a ‘frigate’.<sup>1</sup> Fortunately, the years between the wars are largely free from most of these problems, as it was not until the final months before war broke out that mercantile shipbuilders took over the task of building very small escort and support ships to free up space for more demanding tasks elsewhere – in some instances adding armour and guns to conventional fishing boats.<sup>2</sup> Until that point it was the recognised warship manufacturers – those that feature in this thesis – that undertook such orders, constructing even the smaller ships to a high specification unsuitable for mass production. Therefore, when general statements about warships and naval shipbuilding are made hereafter they can be safely applied to almost every ship fitted with weaponry launched for the Royal Navy during these years. The same can also be said for the various submarine classes of the period.<sup>3</sup>

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<sup>1</sup> A. Hague, *Sloops: A History of the 71 Sloops Built in Britain and Australia for the British, Indian and Australian Navies 1926-46* (Kendal: World Ship Society, 1993), p. 59.

<sup>2</sup> See section 10.2

<sup>3</sup> See J. J. Colledge, *Fighting Ships of the Royal Navy* (Newton Abbot: David and Charles, 1969).

# Part One: Literature, Sources and Organisational Framework

## Introduction: ‘Guilty Men’, Complexes, and Legends.

When Winston Churchill published the first of his six-volume history of the Second World War, *The Gathering Storm*, in 1948, he held clear views on how Britain had ended up in the midst of such an awful conflict so soon after the Great War of 1914-18. ‘*How the English-Speaking peoples through their unwisdom, carelessness, and good nature allowed the wicked to rearm*’ was the theme – and the subtitle – he chose for the book.<sup>4</sup> The Second World War had, like the first, cost the British Empire scarcely countable lives and had driven it to the brink of bankruptcy. In Churchill’s mind, the blame lay squarely at the feet of ‘guilty men’ of Baldwin and Chamberlain for not stamping out Adolf Hitler’s plans when the chance arose, and with the National Governments of 1931-5 and 1935-9 for their failure to adequately prepare British defences for a major war despite adequate warning of impending crisis.<sup>5</sup> That Churchill had been marginalised by these administrations and had an axe to grind is part of the tale: less subjective histories written in more recent decades have come to view the actions of the appeasers in a more sympathetic light, or at the least pointed to the severe political and financial constraints under which policymakers operated, including – but not limited to – the economy, industry, and public opinion.<sup>6</sup>

However, despite immense and near-constant attention some crucial questions regarding how these factors affected policy and affected the shape of Britain’s defences before 1939 still remain unanswered over sixty years after Churchill’s work. This thesis aims to examine two particular aspects of this: the role of industrialists and private manufacturers of naval arms in British supply planning, and the successes and failures of the supply planning framework for national defence. Through an analysis of some key figures from business, the workings of the Committee for Imperial Defence (CID), and finance; and their interactions with the top levels

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<sup>4</sup> W. Churchill, *The Second World War, Volume 1: The Gathering Storm* (Boston: Houghton Mifflin, 1948), p. xvii.

<sup>5</sup> Churchill, *The Gathering Storm*, p. 103.

<sup>6</sup> J. P. Levy, *Appeasement and Rearmament* (London: Rowman and Littlefield, 2006), p. x.

of Government and with each other, this work attempts to describe in greater depth the role industry and planning played in British defence, and who the winners and losers were. This is a story set, in a large part, deep within the machinery of the British government. It concerns the planners and organisers in the CID, and how the private industry interacted with them. Although far away from newspaper headlines, the cogs that turned there were directly connected to the very top echelons of the Cabinet, industry and the Admiralty. It is not, however, merely a story of procurement and the role of industry within it. This work also considers the effect the CID and its subcommittees had on the naval debate more generally, and how successful it was in articulating defence requirements to Cabinet in the 1920s and 1930s. By examining the workings of the state in this way, it is shown that both contemporary and historical accounts of British war preparation have missed out on some important factors and events which deserve a much greater degree of attention.

For instance, historians still have not addressed these specific and fundamental issues, which constitute the key research questions addressed in this thesis: how were decisions reached about allocation of orders to individual firms? How was productive capacity for British defence conceptualised and utilised? What role did private industrialists play in all of this, in particular with regard to their impact (if any) on the final allocation of orders for ships? More broadly, what was the relationship between state and industry like during disarmament and rearmament, and what were the consequences of a poor (or, indeed overly close) relationship? These research questions form the foundations of this thesis.

The answers to these questions have far-reaching consequences. The outcome of the bids for contracts could, at least in theory, make the winners rich or see established firms fail, as indeed they did in significant numbers during the 1920s and 30s.<sup>7</sup> State industry might have meant greater efficiency and thus have been of net benefit to the rearmament effort; equally it might have meant sacrificing competition in favour of supporting existing relationships, and therefore have been damaging to the state of British defences. Ultimately, whatever decisions were made, they had a direct effect on the composition of the British fleet – and indeed on British defences in general – when war was declared. In sum, it is the aim of this research to

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<sup>7</sup> L. Johnman and H. Murphy, *British Shipbuilding and the State since 1918: A Political Economy of Decline* (Exeter: University of Exeter Press, 2002), p. 25.

ascertain: how effectively did this machinery work, who had the greatest impact on it, and, what were the implications of all this for British defence?

### 1.1 The Military-Industrial Complex

In most prior discussions of industry-state collaboration on issues of defence, there are two overused phrases which are invariably central to the narrative. The concept of ‘Merchants of Death’, and the perhaps even more frequently deployed concept of the ‘Military-Industrial Complex’ have promoted great interest in the question of how governments and industry interact. They have also, however, clouded and obscured thorough analysis of the relationship, by reducing a complex set of circumstances to popular conspiracy theories. It is therefore useful to gain some handle on the intended meanings of the terms used, in order to be able to better understand their implications for this research.

The idea of a military-industrial complex has grown directly from President Eisenhower’s famous farewell speech as U.S. President in 1961. In addition to coining the term, Eisenhower warned of the ‘unwarranted influence’ of such a complex, which policymakers should guard against. Since this point, there has been a great deal of attention given to the state’s procurement of weaponry and the companies who provide it, usually with attempts to search for such ‘unwarranted influence’. This said, several similar ideas of the interdependence between state and industry existed in print in the 1940s and 1950s, and taken together perhaps help explain the particular resonance of Eisenhower’s words with the public in the 1960s.<sup>8</sup>

Though the military-industrial complex has meant different things to different people at different times, there are some common elements. The term is almost always used pejoratively, assumes a vast and pervasive element of business, including lobbyists, with tentacles spread throughout policymaking, and is thus predicated upon the idea that such a complex creates extra (and unnecessary) military spending which leads to the enrichment of the industrialists – and even politicians – involved through preferential treatment and *quid pro quo* arrangements around lucrative armament contracts. In short, the characterisation of state-industry relations by those using the military-industrial complex concept is almost wholly negative. Though there has been some debate as to whether such a complex exists or even ever has existed, it

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<sup>8</sup> For an overview of these see J. Ledbetter, *Unwarranted Influence: Dwight D. Eisenhower and the Military Industrial Complex* (New Haven: Yale University Press, 2011) pp. 15-18.

has nevertheless typically been this pejorative definition which has been used as the yardstick for any test of the existence of operation of the Military-Industrial Complex.<sup>9</sup>

Similarly, the 'Merchants of Death' legend, although usually credited to a book by Engelbrecht and Hanighen published in 1934<sup>10</sup>, has existed in one form or another since long before the First World War. In its most common form the legend tells of shadowy arms dealers stoking the fire between rival factions or nations and then selling guns to both sides in a battle in order to maximise profits, though the term has been extended to include any organisation or individual who made profit from selling weapons of war.<sup>11</sup> The fascination with the term reached its apogee among the wider British public in the 1930s during a phase of heightened international tension and when the public looked to the League of Nations, rather than armies and navies, to guarantee security. As a result, it spawned numerous publications, protests and petitions, most notably the 'Peace Ballot' of 1934-5 which gathered more than ten million signatures declaring that the sale of arms for private profit should be abolished.<sup>12</sup>

However, these theories do not sit well with each other. One asserts that the state and industry had an uncomfortably close relationship, while the other argues that arms manufacturers caused wars through playing nations and sides off against one another. Nevertheless, such has been the power of these ideas that they are still popular in the 21<sup>st</sup> century.<sup>13</sup> Moreover, while both the notions of merchants of death and that of a military-industrial complex have been the subject of investigation and research, such investigations have tended to 'test' whether or not such a complex, or legend, existed by applying the existing definitions to historical cases in the search for 'proof'.<sup>14</sup> Thus, research has often been constrained within the narrow bounds of what a complex *should* look like, and has failed to properly understand how relationships between industry and state unfolded.

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<sup>9</sup> Again, the best overview is in Ledbetter, *Unwarranted Influence*, especially pp. 6-12. See also: T. Hayden and M. Pilisuk, 'Is There a Military-Industrial Complex Which Prevents Peace?: Consensus and Countervailing Power in Pluralistic Systems', *Journal of Social Issues*, 21/3 (1965), 67-117.

<sup>10</sup> H.C. Engelbrecht and F.C. Hanighen, *Merchants of Death: A Study of the International Armaments Industry* (New York: Dodd Mead, 1934).

<sup>11</sup> C. Trebilcock, 'Legends of the British Armaments Industry, 1890-1914', *Journal of Contemporary History*, V (1970), p. 4.

<sup>12</sup> P. Kyba, *Covenants without the Sword: British Public Opinion and Defence Policy, 1931-35*, (Waterloo: Wilfrid Laurier University Press, 1983), 'results of the Peace Ballot', p. 149.

<sup>13</sup> See the review of literature, which follows below.

<sup>14</sup> Hayden and Pilisuk, 'Is There a Military-Industrial Complex Which Prevents Peace?', pp. 67-117.

This work does not aim to ‘test’ whether a military-industrial complex existed along these lines, or look for specific cases of fraud from the outset. Rather it attempts to better understand the role of armaments manufacturers within defence planning and, from that vantage point, offer conclusions about the nature of the relationship. Thus, it takes naval arms and supply planning as a case study for how the state and industry interacted, and aims to begin answering some of the aforementioned unanswered questions surrounding procurement and policy.

Naval arms offer an avenue for exploration precisely because the British naval arms industry before WWII had a number of distinctive characteristics that set it apart from the rest of arms production. Warships were being built in Britain for decades before 1918, and the industry was and remained integral parts of port and river cities like Glasgow, Liverpool, London, Newcastle and Portsmouth between the wars. Unlike artillery, optical munitions or even aircraft, which while complex were produced in the hundreds or thousands, a major warship was an expensive, often one-off item that consisted of thousands of bespoke components, took several years to build, cost several million pounds, and provided work for whole towns and communities. Even when a class of several ships were built to the same designs, they were usually constructed in yards many miles apart in order to be completed as quickly as possible, meaning mass production techniques could never be utilised. As such, the firms that made them were relatively few in number, and were controlled by a small group of individuals, typically with long histories of supplying the British Admiralty. The Empire relied heavily on fighting ships to protect trade and ensure security, meaning the navy and its related industries were never far from the thoughts of Westminster and Whitehall. The private naval arms manufacturers stand as a rare example of an industry which was central to British defence in the years before the Great War, and still existed on the eve of the Second World War.

This thesis argues that, in the 1920s, industry was isolated from government and the planning machinery, with the result that it was forced to form a cartel in order for firms in the industry to survive the severe downturn in orders in the aftermath of the Great War. Then, following the Japanese invasion of Manchuria and the formation of a coalition ‘Government of National Interest’ (commonly known as the ‘National Government’) within a few weeks of each other in 1931, there arose a unique set of circumstances which allowed a select few industry representatives into the supply machinery to advise matters of national security. This



occurred because of there was a pressing need for cooperation following the decade-long industrial malaise which had reduced British capacity to manufacture arms, and had been exacerbated by the Great Depression and the National Shipbuilders Security (NSS) scheme. Unable to defend herself to the level which might be necessary in the near or distant future, Britain also faced strong constraints on policy and expenditure while lacking a definite threat – which could have at various points come from a combination of Japan, Germany and/or Italy. The years between 1931 and 1935 thus formed a period where planning and organisation, if not spending and building, were of paramount importance. The very process of thinking about what might be needed to conduct a war meant industry and the government – specifically the Committee for Imperial Defence and its subcommittees – cooperated in a highly secretive way which was unique in peacetime. This set of circumstances and need for cooperation allowed a small group of men, most prominent among them Lord Weir and Sir James Lithgow, to partake in discussions the like of which their business peers knew nothing of. Nevertheless, this was not a negative development, or a vast, pervasive network of men lobbying the government. Nor was it about bribes or secret deals. It was a military-industrial complex, but not one that fits most of the well-known pejorative descriptions.

Given the seminal events of the interwar period – the peace conferences and disarmament treaties, the Great Depression and latterly the belligerent actions of Italy, Japan and Germany, the twenty years from 1918 have on the whole been well studied. Similarly, the real and perceived interaction between arms industries and the state remains more than just of historical interest. As will be shown, it also preoccupied the minds of the public and policymakers in the 1930s to such an extent that it prompted Royal Enquiries, and millions of signatures in a petition from the League of Nations. However, these questions – even within a well-studied area – are complex and not well understood, so it is useful to first survey the existing literature, before setting out a framework of state and industry interactions within which this thesis will operate. This is the focus of the first and second chapters respectively.. Once it has been set out how a better understanding of the machinery of defence planning can be achieved, attention is turned to the individuals involved, and to understanding the political economy of naval armaments manufacture.

## 1.2 Literature

Scholarship on the Royal Navy, the shipbuilding industry, the private manufacture of arms, industrial relations, and British domestic and foreign policy in these years constitutes a substantial body of work. Yet, work on the *political economy* of state and industrialists on naval matters is rather less substantial, although, as discussed in section 1.3, some authors have tackled important topics associated with it. With this in mind, the following review takes each strand of the relevant literature (naval, business, and political) in turn in order to examine the strengths and limitations of existing scholarship.

Firstly, there is the research on the Navy itself. The stand-out work on the interwar period is Stephen Roskill's two-volume, thousand page study *Naval Policy Between the Wars, 1919-1939*. Published over the course of eight years in the 1960s and 1970s, Roskill's book delves deep into the workings of the Admiralty, and its leading figures. Nevertheless, while Admiralty conflict with the Cabinet and Treasury is examined at length, the role of the private manufacture of naval materiel at the various major companies around Britain is limited to passing comment.<sup>15</sup> The effect of this is a focused, but rather one sided history where the debates over ship orders and defence policy are presented and analysed in isolation from the inextricably connected private industry that would stand to profit from orders or lose out from cancellations.

The former naval officer Captain Roskill is far from the only historian of the Navy whose focus precludes attention to the private sector. Paul Kennedy's *Rise and Fall of British Naval Mastery* from 1983 achieves a tremendous amount for a single volume study, although one of the side effects of this is that the role of industry between the wars is condensed to just one paragraph in over four-hundred pages.<sup>16</sup> Eric Groves' *Royal Navy since 1815* and Ben Wilson's *Empire of the Deep* are other notable examples among the broader histories of the Navy with similar emphases.<sup>17</sup> The main issue is that in attempts to stress the importance and position of the Royal Navy, such narratives have largely omitted the role of those capable of

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<sup>15</sup> S. W. Roskill, *Naval Policy Between the Wars 1919-39* [2 vols.] (London: Collins, 1968 & 1976), while the new building programmes are discussed, nothing of any of the major firms – including Vickers – is mentioned.

<sup>16</sup> P. M. Kennedy, *The Rise and Fall of British Naval Mastery* (London: Allen Lane, 1976) p. 268.

<sup>17</sup> E. Grove, *The Royal Navy Since 1815: A New Short History* (London: Palgrave Macmillan, 2005) & B. Wilson *The Empire of the Deep: The Rise and Fall of the British Navy* (London: Allen Lane, 2013).

turning ships from drawings to fighting vessels. Given the vast level of expenditure involved in warshipbuilding and other defence provision, and the intense and heated competition between the Air Force, Navy and Army for funds that Roskill, Kennedy and others all detail, this is an important omission. The role of industry in the decision-making process is thus worthy of investigation: the winners and losers in such a contest defined not only the industrial makeup of Britain in the 1930s and beyond, but also the very shape of her fighting forces.

Christopher M. Bell's *The Royal Navy, Seapower and Strategy between the Wars* and *Churchill and Seapower* can be classed as important examples of this genre. Both involve splendid discussions of the interaction between the navy and policy, but once more, the arms industry is given short shrift. Although Bell's chapter on 'Deterrence and the Naval Armaments Industry' in *Seapower and Strategy* is enlightening, it is both short (twenty-two pages) and mainly concerned with the 'strategy' aspect referred to in his title, namely how men like Churchill and Eden believed the movement of warships would deter aggressors like Japan.<sup>18</sup> Moreover, rather than discussing industry itself between the wars, Bell focuses on the role of the Admiralty in assisting the industry by sending ships to places like South America as a kind of 'floating advert' for securing orders. His analysis of the industrialists' position is limited to noting that 'By the mid-1920s, the need to keep British armaments firms busy was seen to outweigh the benefits of secrecy [of Admiralty designs]'.<sup>19</sup> Similarly, in *Churchill and Seapower*, Churchill's stint in the political wilderness during the critical rearmament years means Bell's focus is elsewhere for most of his analysis.<sup>20</sup> Quite simply, Churchill was not part of this decision-making machinery during those critical years, so his work, for all its merits, does not help answer the questions posed in this thesis.

One possible hypothesis for the failure of historians of the interwar British navy to cover industry's role is that a number of business and company histories that tackle the issue. Frustratingly however, this is not the case. Histories of the major private industrial concerns do exist in great numbers, and many of them have been published from the time of Roskill's writing onwards but they are often micro-histories concerned with little other than the corporation itself. Many do not attempt to go beyond the fortunes of a particular firm in

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<sup>18</sup> C. M. Bell, *The Royal Navy, Seapower and Strategy Between the Wars* (London: Macmillan, 2000), p. 144.

<sup>19</sup> C. M. Bell, *The Royal Navy, Seapower and Strategy*, p. 158.

<sup>20</sup> C.M. Bell, *Churchill and Seapower*, (Oxford: Oxford University Press, 2013), pp 135-60 relates to the 1930s.

understanding their interaction with the Admiralty and government when the decisions about the composition and size of a future fleet was being discussed, as it frequently was between the wars. Instead, the main purpose is, rather understandably, to explain the companies' successes and, where applicable, their demise. Notable examples from this genre are Hume and Moss's *Beardmore* and J.D. Scott's *Vickers*.<sup>21</sup> Given that these were two of a small number of firms capable of fulfilling warship orders and as such played a significant part in preparing British defences before and during the Great War, their place in policymaking and their interactions with the state might be expected to be discussed fully in these volumes. But they are not. As company histories, of course, they are very satisfactory. For the purpose of understanding the industry's role in supply planning, however, they are less so. Beardmore's demise in 1930, for instance, was noted with concern by a government committee which expressed concern at Britain's capability to prepare for war in its absence, but this crucial part of the story is often omitted from company histories.<sup>22</sup>

Publications on the shipbuilding industry more broadly also exist, of course, the best and most recent of which is Anthony Slaven's *British Shipbuilding: A History 1500-2000*, but the peculiarity of *naval* shipbuilding and the aforementioned fact that only a select few organisations could undertake naval orders means that these too do not address the questions posed in this thesis. The difference between those who made only simple cargo vessels and those involved in the construction of HMS *Hood* was vast. The same is true of the otherwise highly useful *Battleship Builders* by Ian Buxton and Ian Johnston, which focuses explicitly on the builders of the largest and most complex of vessels, which formed an important subset (but subset nonetheless) of the industry.<sup>23</sup> Then there is the enlightening *Warshipbuilding on the Clyde 1889-1939* by Hugh Peebles.<sup>24</sup> Still, Peebles focuses exclusively on costs and profits of the various firms, and while it serves as an exceptional reference work for showing the value of contracts from the Royal Navy and foreign governments for the Clyde yards, it omits any discussion of policy and how the industry dealt with the lean years of disarmament for much

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<sup>21</sup> J. R. Hume and M.S. Moss, *Beardmore: The History of a Scottish Industrial Giant* (London: Heinemann, 1979) & Scott, *Vickers: A History* (London: Weidenfeld and Nicolson, 1962).

<sup>22</sup> See Table 2.1 below.

<sup>23</sup> I. Johnston and I. Buxton, *The Battleship Builders: Constructing and Arming British Capital Ships* (York: Seaforth, 2013).

<sup>24</sup> H. Peebles, *Warshipbuilding on the Clyde, Naval Orders and the Prosperity of the Clyde Shipbuilding Industry, 1889-1939* (Edinburgh: John Donald, 1987).

of the interwar period. Indeed, Peebles treats the Clyde as a separate entity not tied into the larger geopolitical picture.

Johnman and Murphy's *British Shipbuilding and the State since 1918* offers a broader study, although in this particular case their conceptualisation of the state frequently does not include defence. Instead, the focus is on the industry broadly and explaining the long roots of decline, rather than on the Royal Navy and naval arms.<sup>25</sup> Moreover, the question of naval supply organisation is not one of their focuses. In sum, naval histories and business histories address half of the story under consideration here but often without exploring the interactions between the two.

A number of (mainly political and military) historians focus on rearmament, seeing it as a critical phase in British history which dictated British fighting ability in the early stages of the war. Examples from this genre include James Levy's *Appeasement and Rearmament*, which notes that 'rearmament took place at differing rates and under different sets of assumptions in each of the three branches of the service, but often for political rather than strategic reasons'.<sup>26</sup> However, Levy's is like other histories of rearmament, in that rearmament is usually treated it as a single entity or project encompassing the navy, army and military. While it is true that one cannot fully understand rearmament by thinking only of one strand of the defence services, since the three shared resources and finances, and the improving fortunes of one typically came at the expense of another (in the 1930s, usually the army),<sup>27</sup> it is nevertheless the case that such studies lose the nuances of the naval peculiarities that made the rearmament experience markedly different for them than those in the Air Ministry. This encouraging start is not fully developed; those interested in state-industry collaborations are left with only a discussion of Lord Chatfield's (First Lord of the Admiralty) ideas and not a thorough examination of framework of supply planning which the Admiralty fitted in to, or the role private industry (arguably the main constraint on the speed of rearmament) had in the rearmament process. Moreover, Levy fails to explore the relationship between financial

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<sup>25</sup> Johnman and Murphy, *British Shipbuilding and the State*, p. 11-5.

<sup>26</sup> Levy, *Appeasement and Rearmament*. 59.

<sup>27</sup> B. Bond, *British Military Policy Between the Two World Wars* (Oxford: Clarendon Press, 1980), pp. 191-2.

reserves and the pace of rearmament, instead stating that it was constrained by Gold Standard Economics.<sup>28</sup>

Intertwined with the study of rearmament is the study of high politics and foreign policy between the wars. Much political and diplomatic history has been written from top-level Cabinet minutes, and that source base necessarily entails omitting an examination of the complex machinery of the lower echelons of governments of the time where much of the basis of policy was laid. With regards to the outbreak of the Second World War, the most relevant studies for this thesis are R.P. Shay's *British Rearmament in the Thirties: Politics and Profits* and Zara Steiner's *Triumph of the Dark: European International History 1933-1939*. Shay's research successfully bridges the rearmament literature with the history of political decision-making, although it still treats the process as a single entity and thus at times leaves the reader with glimpses of parts of the picture rather than the whole. For example, some industrialists who are undoubtedly central to the story are omitted altogether – only Lord Weir gets more than the briefest of mentions – and a decision-making body like the Committee for Imperial Defence (CID), which undertook the bulk of war planning, is mentioned only in passing.<sup>29</sup>

Moreover, other archives, namely those of prominent businesses, do not often fall into the domain of political historians, and are therefore generally not used in studies of rearmament policy, despite having an impact upon them. Thus, Steiner offers great insight into the minds of the various political leaders of great powers during the period before major conflict, but she is understandably less focused on understanding the role of smaller cogs in the machine, though, despite wielding much less 'power' in its traditional sense, still are of significance to the questions posed in this thesis, for they played a vital part in war planning, including, but not limited to, providing expert advice for the men at the top.

Finally, the literature on arms reduction, limitation and disarmament has something to offer for the issues pursued in this thesis. Much of the output here has been from authors in the United States, and as a consequence, has had a strong American focus. America was also alive to the issues over arms limitation which preoccupied Britain in the 1920s and 1930s, so much

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<sup>28</sup> Levy, *Appeasement and Rearmament*, pp. 27-30.

<sup>29</sup> R. P. Shay, *British Rearmament in the Thirties: Politics and Profits* (Princeton: Princeton University Press, 1977), CID is mentioned on pp. 22, 24, 28, 93 and 264-66.

so that the American government held a special Senate Committee on Investigation of the Munitions Industry (known at the Nye Committee) in 1935. This has been the focus of several fascinating accounts, discussed below, which are regrettably few and far between. The work of these commissions, perhaps largely due to international events afterwards rendering their conclusions practically meaningless, has often been overlooked. As a result, the volume of work on these areas is far smaller than that of the 'rise' of Nazi Germany and Fascist Italy more generally, although this should not be taken to mean that it is of negligible relevance to this study.

Some of the best and more prominent books in this field include Matthew Coulter's *The Senate Munitions Inquiry of the 1930s: Beyond the Merchants of Death*, as well as Paul Koistinen's broader *Planning War, Pursuing Peace: The Political Economy of American Warfare, 1920–1939*.<sup>30</sup> These both offer excellent insights into the workings of the committee, although arguably their greatest service is to highlight the evidence given by, and motives of, those for and against the preservation of private armaments manufacture. However, the United States Senate was not unique in its approach: the British Government followed suit with the Royal Commission on the private manufacture of, and trade in, armaments in 1936.<sup>31</sup> David Anderson's work in *The Journal of Contemporary History* entitled 'British Rearmament and the Merchants of Death: The 1935-6 Royal Commission on the Private Manufacture of and Trade in Armaments' (1994)<sup>32</sup> remains one of the only pieces to consider the British version of the Senate enquiry. The aims of Anderson and the others are, and remain, different from my own. All three seek to explain the activities of the committee they are examining and to judge whether or not they were the (quoting Coulter) 'wrong-minded cranks' as they have come to be viewed by in some quarters.<sup>33</sup> Certainly, some of the harshest critics of the committees are in part, being ahistorical: it is hardly fair in light of future events which few foresaw to brand the committees as unpatriotic in 1936 for linking armaments manufacturers with war. However, seeking to revive the reputation of the work of the committees in exposing

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<sup>30</sup> M. W. Coulter, *The Senate Munitions Enquiry: Beyond the Merchants of Death* (Westport: Greenwood Press, 1997) and P. Koistinen, *Planning War, Pursuing Peace: The Political Economy of American Warfare 1920-39* (Lawrence: University of Kansas Press, 1996).

<sup>31</sup> D. G. Anderson, 'British rearmament and the Merchants of Death: The 1935-6 Royal Commission on the Private Manufacture of and Trading in Arms', *Journal of Contemporary History* 29 (I) (1994), pp. 5-37.

<sup>32</sup> Anderson, 'Merchants of Death', pp. 5-37.

<sup>33</sup> Coulter, *Senate Munitions Enquiry*, 'preface'.

malpractice in the arms industry is a different track from one which seeks to understand whether or not the committees *themselves* were asking the right questions and/or looking in the right places, and most importantly, whether some arms manufacturers really were guilty of conspiring to promote armed conflict.

The review of the literature thus far has primarily stressed the gaps that exist in currently available research. In sum, there is something of a pattern. Most works in naval, political and diplomatic history are too broad to properly understand the details and subtleties of the area considered in this thesis, while others focus too heavily on the individual company on the one hand or role of a few policymakers on the other to capture the connections between the two. As noted above, there are however a few pieces whose relevance to this research extends beyond their broad topics, and possess central arguments and ideas which either share common ground with this thesis, or whose conclusions will be directly challenged by it. Thus, they are of particular importance to this work and must be engaged with separately.

### 1.3 Key Texts

The first professional history of armaments manufacture was arguably M.M. Postan's *British War Production*. Published seven years after the war ended, Postan's work forms the first volume of the official 'civil' history of the Second World War series, and examines, in his own words, the 'supply and control of raw materials... the supply and utilisation of labour in the munitions industry [and] the provision of factories, plant and machine tools' from the end of the Great War until 1945.<sup>34</sup> Despite Postan having relatively limited access to secret sources, his book has become a standard text in the history of war manufacture, and has also been widely cited for evidence on rearmament production. However, Postan's analysis of the 'lean years' before 1934 is very short indeed: 1919-34 covers just nine pages, while everything up to and including 1938 is covered in an additional forty-two. Similarly, the official history of manufacturing facilities, William Hornby's *Factories and Plant*, discusses the development of shipyards at length, but is almost entirely focused on the war itself.<sup>35</sup> This thesis builds substantially on some aspects of Postan and Hornby's interwar work, but it also focuses more

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<sup>34</sup> M. M. Postan, *British War Production* (London: HMSO, 1952), p. xiii.

<sup>35</sup> W. Hornby, *Factories and Plant* (London: HMSO, 1958), pp. 36-54, although a substantial portion of these eighteen pages are devoted to developments during the war.



heavily on the experience of private industry and industrialists, and, as shown below, revises some of their assertions.

Along with Postan, the other seminal book in this area is N.H. Gibbs' *Grand Strategy, Volume 1: Rearmament Policy*. This work serves as the opening – although it was published last – volume of the official ‘military’ history of the Second World War (another self-contained collection which complements the ‘civil’, ‘intelligence’, and other series), and runs to some 800 pages.<sup>36</sup> Gibbs's research is epic in both scope and detail, and covers many aspects and details of both disarmament and rearmament, including related events in Italy, China, Abyssinia and Germany. Like Postan, most of the work is concerned with later developments: some ninety percent of it is concerned with the years after 1933. Moreover, the role of industry and the impact of policy upon it do not form a focus for Gibbs. For instance, one of the government's most senior industrial advisers, Lord Weir, is mentioned once, in a footnote, nearly 600 pages into the volume, while another, Sir James Lithgow is not mentioned at all (Weir and Lithgow are also absent from Postan's work).<sup>37</sup> This is not a criticism of Gibbs; his research is primarily concerned with ‘explaining Grand Strategy’ – of which only one part is supply organisation – ‘from the point of view of Cabinet’, while ‘what went on behind the scenes’ (i.e. in departments and minor committees) is not subject to examination.<sup>38</sup> However, the problem remains that as histories of war production do not focus sufficiently on rearmament strategy within the Committee for Imperial Defence, and the literature on rearmament strategy omits industry from the story it tells, the question of the interrelationship between governmental and military supply organization and private industry falls between the stools. This thesis attempts to augment Gibbs in three ways: by focusing more on industry itself, on the impact of disarmament and on the years before 1933. It also seeks to incorporate examination of the lower levels of the organisation which, despite being ‘behind the scenes’, undertook the bulk of supply planning.

Contemporaneous with Gibbs is Clive Trebilcock's ‘Legends of the British Armaments Industry, 1890-1914’. In this important article, Trebilcock sought to explode the ‘Merchants of Death myth’ which, to his mind, had pervaded discussions of weapons manufacture for

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<sup>36</sup> N. H. Gibbs, *Grand Strategy V.1: Rearmament Policy* (London: HMSO, 1976).

<sup>37</sup> Gibbs, *Grand Strategy*, p. 582n.

<sup>38</sup> Gibbs, *Grand Strategy*, p. xx.

decades up until that point.<sup>39</sup> So successful has Trebilcock been in this aim that his work has been cited by Roskill, Anderson and others who have used it as ‘proof’ of the absence of widespread malpractice in the industry during the interwar.<sup>40</sup> In a way, this is quite surprising in that Trebilcock does not deal with the interwar period at all, concluding his study with the outbreak of the Great War. This becomes especially problematic when considering some of Trebilcock’s central contentions as applied to the post-Great War period.

First, he shows that war was costly to arms firms through loss of markets abroad and the side-effect of a degree of state control over the industry. Thus they had no reason for wishing for war.<sup>41</sup> While this may have been true for the period up to 1914, in theory at least it was rather less so two decades later. By the mid-1930s, the industry had been in a depressed state for almost fifteen years, and had very little if anything in the way of substantial foreign orders. There were thus, in contrast to 1890-1914, very few foreign markets to lose, and greater state control would have become a much more palatable alternative to continued economic downturn. Moreover, too much is made of the possibility of lost markets being a deterrent to armament manufacturers. It is perfectly plausible that real and perceived threats which required a large navy – but did not necessarily mean armed conflict against another power – could have been the aim of any industrial agitation. Preparing or retooling the Navy could certainly have meant substantial orders, but not necessarily have meant firms desired war. This was true even in Trebilcock’s study of the years before 1914: warships were ordered to stay ahead of rival navies, and then placed on standby. New ships continually replaced old, but this was not an inexorable march towards the Great War.

Trebilcock’s second assumption is that industry existed outside of the political machinery of the day, and as such could not exert leverage upon it. He argues the groups of MPs that propagandists claimed had ties to armaments firms were ‘in reality extremely small and could have wielded little power in either House’.<sup>42</sup> However, in limiting his scope to MPs and Peers, Trebilcock both looks for influence in the wrong places and omits the role of professional civil

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<sup>39</sup> Trebilcock, ‘Legends of the British Armaments Industry’, p. 2.

<sup>40</sup> Roskill, *Naval Policy Between the Wars v.2: The Period of Reluctant Rearmament 1930-9* (London: Collins, 1976) and Anderson ‘Merchants of Death’ pp. 6-7. Interestingly, Anderson puts his finger on the problems with using Trebilcock’s work in the interwar years, but then leaves the matter to one side.

<sup>41</sup> Trebilcock, ‘Legends of the British Armaments Industry’, p. 5.

<sup>42</sup> Trebilcock, ‘Legends of the British Armaments Industry’, p. 9.

servants and military figures. When one instead studies organisations like the CID and its subcommittees, and includes senior civil servants like Maurice Hankey in the analysis, a different picture emerges of a closer intertwining of business and government. As following chapters show, Trebilcock's arguments – through no fault of his own – cannot be well applied to the 1920s or 1930s, and Roskill, Anderson and others have applied Trebilcock's reasoning too hastily to their own areas.

A fourth key body of work with direct relevance to this thesis involves a series of articles by George Peden and one of his books, *British Rearmament and the Treasury*. This research was partially updated in 2007 in the form of Peden's *Arms, Economics and British Strategy: From Dreadnoughts to Hydrogen Bombs* (which has an important chapter on retrenchment and rearmament<sup>43</sup>) but it is the more specialised focus of the former monograph which more relevant to this study, for the relationship between the Treasury and the Admiralty was a constant theme in supply planning, and indeed explains the process of industrial co-operation, official or otherwise, that was followed from 1926.

One of Peden's aims is to show how the Treasury, the so-called 'Fourth Arm of Defence', was able to influence defence policy in the years preceding World War Two by curbing or modifying demands on the public purse from fighting services and from the CID.<sup>44</sup> This in itself is very worthy of note, and his other contribution of placing chief Treasury civil servant Sir Warren Fisher (1879-1948) at the centre of defence planning has been invaluable in understanding the workings of the CID and other bodies.<sup>45</sup> Finally, Peden's short chapter on 'Arms, Government and Businessmen, 1935-45' in John Turner's *Businessmen and Politics* stands as one of the few works to properly assess the interaction between the arms industry and government during rearmament (including the role of Lord Weir), albeit for just a few pages.<sup>46</sup> This thesis aims to build upon Peden's research, by adding more detail and colour to

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<sup>43</sup> G. C. Peden, *Arms, Economics and British Strategy: From Dreadnoughts to Hydrogen Bombs* (Cambridge: Cambridge University Press, 2007), pp. 98-163.

<sup>44</sup> G. C. Peden, *British Rearmament and the Treasury, 1932-1939* (Edinburgh: Scottish Academic Press, 1979), pp. 12-13.

<sup>45</sup> G. C. Peden, 'Sir Warren Fisher and British Rearmament Against Germany', *English Historical Review* XCIV (370) (1979), pp. 29-47.

<sup>46</sup> G. C. Peden, 'Arms, Government and Businessmen', in J. Turner, *Businessmen and Politics: Studies of Business Activity in British Politics, 1900-45* (London: Heinemann, 1984) pp. 130-45.

the story, not only from supply committees, but from the industry that had to cope with expenditure curbs. As chapter three shows, the naval armaments industry formed itself into a kind of cartel in order to try to cope with these challenges.

G.A.H. Gordon's *British Seapower and Procurement between the Wars* is another work of central relevance to this thesis, not least because he attempts to 'penetrate the supply origins of seapower'.<sup>47</sup> Gordon's work was a ground-breaking evaluation of the procurement methods of the British state, and successfully untangled some complex questions of procurement policy. His book, however, is primarily a naval history, not an industrial history. While Gordon, to his credit, does not omit leading businessmen like Weir and Lithgow from his narrative, they are rarely the focus of it either, and for the most part remain on the periphery of a story that is primarily about defence policy, and the role of the Admiralty within it. This work contains rather less about the political history of the Ministry of Supply 'project' or the Defence Loan, and far less on the successes and failures of senior Admiralty figures.<sup>48</sup> It does, however, attempt to shift the focus towards industry and industrialists, to treat them as a vital part of Supply Organisation between the wars, and to understand how the naval armaments industry, rather than the Admiralty, reacted to the political events of the interwar years. As shown in the pages that follow, Gordon and I draw similar conclusions about the effect of disarmament and subsequent geopolitical events on the Admiralty; although as a result of the evidence presented here we draw very different conclusions about who were the primary architects of rearmament planning.

Next there is research on the 'decline' of the Royal Navy as a fighting force in the 1920s. Among the most notable works in this area is a chapter by John Ferris on the 'Last decade of British maritime supremacy, 1919-29'.<sup>49</sup> Ferris presents a rather different view of navy, and argues that the 'conventional view' of the navy being allowed to 'wither to dangerously low levels' is 'blinkered'. Rather than looking for weakness, Ferris suggests historians should think about British strength, including possessing 'the largest and most modern fleet in the world'

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<sup>47</sup> G. A. H. Gordon, *British Sea Power and Procurement Between Wars: A Reappraisal of Rearmament* (Hong Kong: Naval Institute, 1988), p. 5.

<sup>48</sup> For more on this, see Gordon, *British Sea Power and Procurement Between Wars*, pp. 19-33, pp. 176-84.

<sup>49</sup> J. Ferris 'It is our business in the Navy to command the Seas: The last decade of British maritime supremacy, 1919-29' in K. Neilson and G. Kennedy (eds.), *Far Flung Lines: Studies in Imperial Defence in Honour of Donald Mackenzie Schurman* (London: Frank Cass, 1996), pp. 124-70.

and a ‘unique network of overseas bases’. Ferris does not necessarily challenge the central idea that British naval supremacy was lost – but instead points to the 1930s, not disarmament in the 1920s, as the decade in which the change occurred. From possessing the most modern fleet in 1920, by 1935 it was among the oldest. Far from maintaining the ‘two power’ standard of being able to simultaneously engage the next two largest navies before WWI, in 1935 Britain could scarcely engage *any* two naval powers. However, Ferris does point to a ‘thorough and effective rearmament’ before 1939 that healed at least some of these ‘self-inflicted wounds’.<sup>50</sup>

Secondly, Ferris argues that Britain’s capacity for naval manufacture was always going to be greater than what was required for meeting the perceived dangers in the 1920s and early 1930s. In this sense, Britain ‘could not calibrate its navy and construction to the scale of existing threats’,<sup>51</sup> and thus, the only way to preserve supremacy would be a far greater diet of contracts than was rational in the circumstances. These are significant and nuanced arguments, and make important revisions to some earlier texts on the decline of British sea power between the wars.

This thesis shares some of the same ground and arguments as Ferris’ work, not least that self-inflicted wounds were made upon naval strength. It however contests the idea that British naval rearmament was wholly effective, and does so by examining the government’s supply organisation framework. Secondly, it was not the case that in order to preserve supremacy the Admiralty needed a far larger construction programme than was practical. As later chapters show, in most respects the problems were the bottlenecks around guns, armour and skilled labour, which could have been more effectively managed through education and stockpiling in the 1920s and 1930s, and with relatively limited investment and contracts. Moreover, while it was certainly the case that the Royal Navy remained immensely powerful into the early 1930s, and Britain possessed a large armaments industry before 1929, the aging of the fleet that Ferris describes points to a withering of the armaments industry that took place during the 1920s through a lack of investment and contract, and in turn created the supply problems that were experienced after 1935.

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<sup>50</sup> Ferris ‘last decade of British maritime supremacy’, pp. 124-5.

<sup>51</sup> Ferris ‘last decade of British maritime supremacy’ p. 162.

One of the most recent published studies of particular note is David Edgerton's *Warfare State: Britain 1920-70*. Edgerton extends the argument presented by Ferris and criticises the belief in Britain as a 'Welfare State' that has been growing since the end of the Great War, insisting instead that Britain has maintained a strong and influential military sector throughout the period since 1918 that has consumed a significant chunk of the British budget and never been far from the thoughts of policy makers.<sup>52</sup> While most of his two studies concern the period after 1939, Edgerton nonetheless takes great care to debunk the myth that Britain disarmed following 1918. He argues against Gordon's view of decline, and points out that a comparison with 1913 is unfair, because 1913 was 'not typical' of average levels of shipbuilding, for the country was engaged in a major naval arms race with Germany.<sup>53</sup> Instead, Edgerton argues Britain built just as much or more naval tonnage and aircraft than any of her rivals, including Nazi Germany and the United States, up to 1939. Far from rolling back her ambitions, the UK actually launched one million tons of Admiralty ships between 1928 and 1941, a figure greater than that of any other nation, and one which preserved Britain's status as having the largest navy in the world. In this sense, Edgerton actually disagrees with the view of later decline presented by Ferris. To do this, Edgerton points out every single capital ship from the older Great War generation underwent an extensive – and expensive – refit to extend their capabilities and lifespan. Furthermore, Britain's ships were no less modern or capable than German or American ships, and the aircraft that could be launched from them or from the ground were also of at least an equal standard.<sup>54</sup> Edgerton thus makes a highly compelling and forthright case for a reassessment of the British state. However, in making his case, he is prone to skimming over facts and detail which contradict some of his central points.

First, the million tons of vessels launched in the thirteen years starting in 1928 sound impressive, but this was still, in absolute terms, a vast reduction from the level of production witnessed in the quarter century before 1914. In total, private manufacturers in Britain launched 1.8m tons of warships in the five years to 1919.<sup>55</sup> A relatively small number of businesses had clearly done very well and been on an upward curve in the years until 1921, and compared to this, the naval orders the Admiralty placed during the years between 1921

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<sup>52</sup> D. Edgerton, *Warfare State: Britain 1920-70* (Cambridge: Cambridge University Press, 2005), p. 7.

<sup>53</sup> Edgerton, *Warfare State: Britain 1920-70*, p. 36.

<sup>54</sup> Edgerton, *Warfare State: Britain 1920-70*, p. 27-29, 42.

<sup>55</sup> Slaven, *British Shipbuilding*, Table 4.1.

and 1936 were minute in comparison. Indeed, comparing like for like, as Edgerton encourages us to do, is revealing: while the 1908-1913 may not have been typical of British naval shipbuilding, private naval yards in Britain still launched 820,000 tons in the ten years before the naval race, an average of 82,000 per year. In the period before rearmament began in earnest in 1937, it averaged less than 28,000 tons per year.<sup>56</sup> Thus, coupled with the downturn in demand for new merchant ships after the short re-tooling boom of 1919 and 1920, and the fact that naval refits did not provide the same level of activity or employment opportunities as new orders did (not to mention that they were usually undertaken in the government owned Royal Dockyards and not through private contracts), it is clear that from a purely business point of view, the fortunes of those who benefitted most during the Great War are not captured by the claim of the million tons launched.

Second, the figures presented by Edgerton on launched tonnages need to be scrutinised. It tells us little about whether the ship was converted from its original purpose (important in the case of aircraft carriers converted from merchant ships), whether production was halted for extended periods, or whether the ship kept the yard fully occupied for one year or three. Moreover, a figure in tons offers little insight into the composition of output – it could be one battleship or twenty minor escort ships – or the level of technological advancement (and thus cost) of the vessel. It offers no useful information about Britain's ability to wage war. Finally, one needs to consider both how well specifically British interests – as an island nation with a far-flung Empire – were defended and not just a mathematical comparison of how strong Britain was relative to her rivals. In other words, we should consider the 'fitness for purpose' of the British fleet. If British naval strategy required her navy to be more than marginally larger than her nearest rival, then remaining the world's largest navy is less important than the distance between her and her competitors. This is not addressed in *Warfare State*. Despite Edgerton's assertion that Britain remained a strong warfare-orientated state, it was demonstrably clear that industry and defence planners thought otherwise for most of the 1930s.

Most recent of all is Joseph Maiolo's *Cry Havoc: How the Arms Race Drove the World to War*. Like Edgerton, Maiolo rejects the premise that nations disarmed too quickly following

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<sup>56</sup> Derived from Slaven, *British Shipbuilding*, p. 63; Johnman and Murphy, *British Shipbuilding and the State*, Table 5.

WWI, and instead argues that countries responded in kind to advances in weaponry and construction elsewhere in order to deter others from war-making, from arming further, and to prevent rivals from holding an advantage should war break out. *Cry Havoc* argues that the arms race itself was a ‘vast maelstrom’, ‘an independent, self-perpetuating and often overriding impersonal force’ that led the world to an ‘inevitable climax’. Despite this contention, his book does not discuss the role of the producer of such weaponry, private industry, mentioning key figures and organisations only in passing if at all. Maiolo’s arguments about the arms race’s ‘impersonal’ nature are perhaps only sustained here because the discussion of key personalities is omitted. This thesis seeks to build upon and revise the central themes of *Cry Havoc* by giving industry a more central role in the narrative. As such, this thesis in part contests Maiolo’s conclusions by showing that in Britain at least, rearmament was characterised by a measured, planned and thought-out approach that, if anything, failed to act quickly enough rather than an ‘impersonal’ force that sucked unwilling participants into it.<sup>57</sup>

Finally, attention must be given to an unpublished doctoral thesis on this topic: Edward Packard’s London School of Economics thesis ‘Whitehall, industrial mobilisation and the private manufacture of armaments: British state-industry relations, 1918-1936.’<sup>58</sup> While there have been several studies at doctoral level, including Richard Davenport-Hines work on the armaments industry during disarmament,<sup>59</sup> Packard’s study deserves special attention for it is in parts comprehensive and enlightening, and indeed shares some of the same ground as this thesis. His central argument is strongly Edgertonian: He writes that contrary to the post-war histories that stressed how ruinous the interwar policy had been to British defences, British industry did not decline to such a disastrous level and thus the capacity to construct weapons was not nearly as badly affected as has been imagined. He thus criticises the ‘orthodoxy’ that

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<sup>57</sup> J. Maiolo, *Cry Havoc: How the Arms Race Drove the World to War, 1931-1941* (London: John Murray, 2010). Quotation from pp. 2-3.

<sup>58</sup> E. F. Packard, ‘Whitehall, Industrial Mobilisation and the Private Manufacture of Armament: British State-Industry Relations’ (unpublished PhD thesis, London School of Economics and Political Science, 2009).

<sup>59</sup> R. P. T. Davenport-Hines, ‘The British Armaments Industry during Disarmament, 1918-36’ (unpublished PhD thesis, University of Cambridge, 1979).



Edgerton ‘convincingly’ challenged, citing Peden’s revisions of his own declinist views as evidence of the weakness of that particular strand of thought.<sup>60</sup>

Packard, by taking Vickers as a proxy for the rest of the armaments industry, argues that the government did not care much for the plight of arms manufacturers, but it was this indifference that led to an internal reorganisation in the case of Vickers, which was supported only very hesitantly by the Bank of England. As a result, it was only during the rearmament phase from 1935 that a ‘cautious renewal of state-industry relations’ occurred. However, while Packard mentions some key industrial figures – most notably Lord Weir and Sir James Lithgow – he condenses his study of the role of industrialists in supply organisation into a few pages, and does not attempt to describe the successes, failings and side-effects of such work. Nevertheless, Packard’s thesis is a successful and relevant contribution to the literature, and while the starting points of both his study and this are similar in many respects, the focus and interpretations are very different.<sup>61</sup>

In sum, the focus of industry is often confined too heavily to Vickers. In previous studies Trebilcock, Davenport-Hines and others have, along with Packard used Vickers as a firm from which to draw more general conclusions about private industry.<sup>62</sup> This is perhaps understandable given Vickers gigantic size, history and expertise, but it is misleading in the contexts of the navy and of rearmament; as will be shown the picture of Vickers’ centrality within in the industry often does not tally with the discussions over armaments policy occurring within the CID’s lower orders.

The special nature of private naval arms manufacture suggest there is scope for considering them a special case: intertwined with the other aspects of defence but, due to their size, history and products, distinct from them. Their role in defence and the circumstances faced between the wars means that scope also exists for a more detailed study of industry’s relationship with the planning and procurement machinery, and not solely Whitehall’s relationship with industry. This is the underlying aim of the chapters which follow. With this in

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<sup>60</sup> Packard, ‘British State-Industry Relations’, pp. 28-31.

<sup>61</sup> Packard, ‘British State-Industry Relations’. Quotations from p. 3, pp. 92-108.

<sup>62</sup> Trebilcock, ‘Legends of the British Armaments Industry’ mentions Vickers forty-one times. The Brown, Scott, Fairfield, Beardmore, Palmer, Armstrong-Whitworth and Coventry-Ordnance works are mentioned a total of eleven times. Similarly, Packard (p.34) talks of the other companies ‘which struggled next to Vickers’. See also Davenport-Hines ‘The British Armaments Industry during Disarmament’.

mind, the focus of the next chapter is to describe and define the structure of industry, the supply organisation framework that existed within the British Government, how both of these changed in the years following the great war, and the links between state and industry.

## Chapter Two: Structural Changes, from the Ministry of Munitions to the Principal Supply Officers' Committee, 1918-27

Along with being a study of the private naval arms industry between the wars, this thesis at its heart aims to describe *who* the key actors and figures were in British supply organisation (in both state and industry), how they interacted with each other, and the successes and failures of that organisation. Thus far, studies of disarmament and rearmament have focused upon senior politicians and civil servants, while much less much less attention has been devoted to the committees and machinery that undertook the bulk of the organisational work, or indeed the role of the industry itself. With this in mind, it is instructive to first set out and discuss the structure of both industry and government in the post-war years, as from here the key figures in the industry can be highlighted so that their roles in later years can be examined. For, although the planning machinery of the British state was not a major feature of the 1920s, it would later become crucial to the rearmament effort, and the structures put in place here would inform and shape later events. As such, it is clear we need to go further than just the Cabinet. Therefore, attention must now be turned first to the defence planning organs of the government so that the roles of and links between the state on one side and the industry on the other can be drawn out more clearly.

### 2.1 Framework and Structure of Industry

Despite the centrality of the Navy to British defence before 1939, the story of the years between the wars is not of government and industry striving to maintain a world-leading fighting fleet at all costs. Indeed, apart from the years in the immediate aftermath of hostilities when order books were full to replace vessels lost in the war, the period up to 1935 was very dark for the private industry. The experience of the naval race with Germany between 1908 and 1914 had created a set of expectations that could not last forever and certainly could not be matched in peacetime. The Clyde alone launched one quarter of the world's tonnage of ships in 1913, a figure which owed much to its strong warship sector.<sup>63</sup> After the war, the Royal Navy found itself with a large, relatively new, and expensive fleet, despite having no obvious enemies following the collapse of Germany. The British people had been badly

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<sup>63</sup> C. A. Oakley, *The Second City, Glasgow* (Glasgow: Blackie, 1967), p. 170.

shocked by the horrors of the Great War, and now turned their attention to pursuing arms limitation and international treaties to ensure there would be no repeat. A continuation of the vast expenditure on the Royal Navy did not feature in the plans of the British (and other) governments; having formulated the 'Ten Year Rule' meant to keep Britain out of future wars for at least a decade (renewed annually thereafter until 1932), the industry was left with only a fraction of the orders that it had previously enjoyed for generations.

Within just five years of the Rule's cancellation, however, events in Japan and Germany had set in motion the largest armaments drive in British history, of which construction for the Royal Navy was a major part. The problems were now very different for the National Government and the yards. After a period of uncertainty where the government feared the political and financial consequences of rearmament, it soon found that it could not move quickly enough: shortages of skills and plant were holding up the effort to put the country's defences in a state of readiness, while severe bottlenecks – large guns were a particular problem, armour plate another – persisted. When viewed together, there was a clear shift in fortunes from peak to trough and back to peak again unmatched elsewhere in British history. The stress put on a small planning organisation – and small number of firms central to national defence – was certainly tremendous during rearmament, but it should not be forgotten that the foundations of rearmament were laid out during the phase which preceded it, where businessmen, civil servants and commissioned officers interacted in secret to organise industry and preserve capacity. The successes and failings of later years should not be separated from these earlier ones.

However, to analyse how industry and the state machinery worked, a set of definitions is needed to set the boundaries of research. First among them is to understand what components comprised the private naval armaments industry. Despite appearing straightforward, this is a deceptively complex question. David Edgerton has recently shown that it was by no means clear what the 'arms industry' looked like,<sup>64</sup> while Edward Packard has defined it as everything from a '£4 revolver to warships...worth several millions'.<sup>65</sup> This point was not lost on contemporaries either. In a letter to *The Times* in November 1933, J.E. Thornycroft, owner of a shipyard of the same name and maker of various smaller vessels for the Admiralty, argued

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<sup>64</sup> Edgerton, *Warfare State*, p. 33.

<sup>65</sup> Packard, 'British State-Industry Relations', p. 220.

that every industrial company in the United Kingdom could be considered a 'potential armaments works'. Using his own yard as an example, he noted that it was the drive to make 'safer and faster boats' that led him to develop the 'water tube' boiler, and it was the 'efficiency of this development [that] led to its implementation in naval vessels'. In his eyes everything from steel to chemicals and even the boots on soldiers' feet could and should be considered weapons of war.<sup>66</sup> The following week, Lord Weir, chairman of the giant engineering firm G&J Weir, echoed Thornycroft's opinions and described how mercantile and naval ship developments had benefitted the other on numerous occasions, and that to compile a list of 'armament works' would be to 'catalogu[e] the larger proportion of British industrial units'.<sup>67</sup> Less than three years later 1936, Sir Maurice Hankey made broadly the same point while giving evidence before the Royal Commission on the Private Manufacture of Armaments, but he viewed it from the other end of the lens. Hankey, who was by 1936 a colleague of Weir, was one of the longest serving and most senior civil servants in Whitehall and secretary to the Committee for Imperial Defence (CID). His opinion was that since no firm was wholly dedicated to the manufacture of war materiel, there were therefore 'no purely armament firms' operating in Britain.<sup>68</sup>

All three men had a point with arms industries generally, but the task facing the historian is further complicated and becomes even more daunting when one attempts to split the 'naval' components apart from the private arms 'industry' as a whole. One of the reasons that the years from 1918 to 1939 (and particularly those of rearmament) are so complex lies in the story of how the British arms industries evolved around the time of the Great War. From around 1880 until 1914, private arms manufacturers in Britain consisted primarily of a handful of large, family owned, industrial firms involved mainly in the development of warships and heavy artillery while retaining the ability to construct passenger and merchant vessels. There were also government-owned Royal Dockyards, the largest of which was in Portsmouth, but also included Chatham, Deptford, Rosyth and other smaller yards (being government owned and maintained, these for the most part do not feature in this discussion of state-industry

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<sup>66</sup> 'Industrial Mobilisation: Note of letters to *The Times*', PSO(SB)387, 30 November 1933, TNA: CAB60/40.

<sup>67</sup> 'Industrial Mobilisation', PSO(SB)387.

<sup>68</sup> 'Industrial Mobilisation', PSO(SB)387.

relations).<sup>69</sup> With regards to private yards however, it was still, relatively speaking, easy to distinguish between which firms made their money from selling weapons and those which did not. Owing to a rapid technological progression starting in 1914 with the invention, development and proliferation of tanks, bombers and fighters, the defence picture was very different by 1933.

During the Great War many firms made components for more than one of the defence service departments. Some obvious examples here include steel forges, such as Beardmore's in Glasgow, which made anything from armour plate for the Navy's 40,000 ton heavy battleships to the army's five ton light tanks, as well as the ball bearings manufacturers whose products were vital both in gun turrets and on ships weighing several hundred tons. In the post-Great War world, ball bearings produced by the company were also used in much smaller aircraft fighter or bomber engines. Less obvious cases would include firms that, although engaged ordinarily in work for one service, might turn over capacity excess or otherwise to another occasionally in response to certain problems, as the Weir's firm did in the Second World War for field artillery (they were ordinarily employed in pumps manufacture for, among other things, warship boilers). It is as a result of factors such as these that any separation of the strictly 'naval' components of the industry will be, to an extent, arbitrary. This does not mean one cannot or should not make such an attempt; rather that such a separation should be general and broad enough to allow the subsequent analysis to remain meaningful. It is to this task that the thesis now turns.

## 2.2 Constructing the Naval Armaments Industry & Sources

One potential way to 'pare down' the sector to just the key private naval armaments firms is to concentrate on those which had a high concentration of armament orders. This is not a new approach: Vickers – in terms of capital by far the largest armaments firm<sup>70</sup> – has been used as a proxy for the behaviour of industry before, although taking only the largest and most successful firm is not particularly useful for understanding how the rest of industry reacted to challenges. Indeed, even at Vickers lowest post-war ebb, it still recorded a yearly profit of over

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<sup>69</sup> D. K. Brown, *A Century of Naval Construction: A History of the Royal Corps of Naval Constructors* (London: Conway Maritime Press, 1983), pp. 140-52.

<sup>70</sup> A. Slaven, *British Shipbuilding 1500-2000* (Lancaster: Carnegie, 2013), p. 58.

£400,000 and, for all bar three years between the wars, paid a dividend on its shares of four percent or more.<sup>71</sup> Moreover, even looking for only high concentrations of armament work can be problematic: while naval contracts composed just one sixth of the tonnage John Brown of Clydebank launched between the Wars, it made up half of its profits (although unevenly spread) in the same period, so a low concentration of Admiralty orders does not mean a firm was not an important armaments manufacturer for the Admiralty.<sup>72</sup>

A more instructive definition would be to use the construction ‘bottlenecks’ as mentioned above. These existed because certain items were sufficiently difficult and/or expensive to produce that only a select few could make them. Virtually any shipyard in the merchant or passenger sector could make a hull, but only a small number could produce or attach the armour, high-powered engines, turrets, fire control devices, and other material that set a warship apart from everything else afloat. Indeed, Clive Trebilcock has suggested that before 1914 the ability to make a revolving gun turret for such a battleship was about as rare as those with the ability to make spacecraft seventy years later.<sup>73</sup> Quite apart from the technology, very few had labour with the skills to fit out such a ship. As G.A.H. Gordon has noted, a typical 8,000 ton cruiser, not large by battleship standards, had a labour cost around twenty times that of an equivalently sized cargo vessel.<sup>74</sup> An example that illustrates the point is the *Town*-class of cruisers, where HMS *Southampton* cost a little over £2,000,000 from John Brown<sup>75</sup> in 1935, while a similar sized cargo ship from the same yard cost £83,500 in 1936.<sup>76</sup>

It was these bottlenecks that dictated much of the financial cost of warships too. Some 40% of the cost of a warship could be in the turrets and guns.<sup>77</sup> Moreover, unlike the building

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<sup>71</sup> J. D. Scott, *Vickers: A History* (London: Weidenfield and Nicolson, 1962), pp. 390-1.

<sup>72</sup> A. Slaven, ‘A Shipyard in Depression: John Brown’s of Clydebank 1919-38’, *Business History* XIX (2) (1977) p. 192, p. 202 ;; Tender Books, John Brown and Co, Clydebank, Scottish Business Archives, University of Glasgow Archive Services [Hereafter GUAS]: UCS 1/74/7-11 and UCS 1/5/19.

<sup>73</sup> C. Trebilcock, ‘Science, Technology and the Armaments Industry in the UK and Europe, With Special Reference to the Period 1880-1914’, *Journal of European Economic History*, 22 (3) (1993), pp. 569-70.

<sup>74</sup> Gordon, *British Seapower*, pp. 188-9.

<sup>75</sup> Papers of John Brown and Company, Cost Books, GUAS: UGD 75/10. While the total finished cost of the ship was around 2.14m, the portion Brown’s constructed comprised 1.07 of final total – just 50%. The rest of the cost was in guns, armour, engines etc. ordered from and built elsewhere. This figure thus highlights the need to not concentrate on a yard or company alone, but the industry more widely.

<sup>76</sup> ‘Memorandum on Conditions now existing in the Shipbuilding Industry, December 1938’, GUAS: UCS1/9/79.

<sup>77</sup> F. E. McMurtie (ed.), *Jane’s Fighting Ships of WWII* (London: Random House, 1997), p. 25.

of cargo vessels, where doubling the size had a comparatively small effect on the final cost, a massive battleship such as those in the *King George V*-class was, at around 40,000 tons, between four and five times larger than a cruiser, but – owing to the complexity of components – cost, at £7.5m, almost four times as much too.<sup>78</sup> Even simple escort vessels required five times as many work hours as their mercantile equivalents.<sup>79</sup> Owing to the depressed market conditions after 1918 and the business failures and consolidations that followed in their wake, even fewer firms in 1933 could attempt such a task as could two decades previously (see Table 2.1 and 2.2, below). Therefore, if there are areas where one can assess influence and the important firms, it is through those problems and issues most critical to the production and maintenance of Britain's capacity to wage war and protect her trade routes, which were concentrated in a small number of firms. The areas with the greatest need – and highest degree of technical difficulty – were the areas which preoccupied the Supply Committees, and where industrial collaboration was most beneficial to the state – and most profitable to industry.

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<sup>78</sup> D. Edgerton, *Britain's War Machine: Weapons, Resources and Experts in the Second World War* (London: Allen Lane, 2011), p. 212.

<sup>79</sup> Gordon, *British Seapower*, p. 188.



**Table 2.1: Report on the Condition of the Private Armaments Industry**

<b>Company in 1914</b>	<b>Situation in 1933</b>
Coventry Ordnance Works	Out of business
Birmingham Small Arms	Not engaged on armament work
London Small Arms Co.	Out of business
Armstrong Whitworth	Absorbed by Vickers
Cammell Laird	Vastly reduced capacity
Beardmore	Reduced to nucleus. Small orders for naval guns only
Firth	Only small orders for shell. No other arms work
Hadfield	Only small orders for shell. No other arms work
Projectile Co. Ltd	Practically no orders
Darlington Forge Co.	Out of business
John Brown & Co.	No longer do gun forgings
Vickers	Only firm left capable of large orders of all kinds

Source: 'PSOC Report: Private Armaments Industry', PSO1109, 31 March 1933, TNA: CAB4/22

**Table 2.2: Report on the Position of Private Armaments in Imperial Defence**

<b>Warships (Hull)</b>	J. Brown & Co.
	Fairfield S. & R. Co. Ltd.
	Scott S. & K. Co. Ltd.
	Yarrow & Co. Ltd.
	Hawthorn Leslie & Co.
	Palmer S. & I. Co. Ltd.
	Swan Hunter
	Vickers-Armstrong Ltd.
	Cammell Laird & Co. Ltd.
	J. I. Thornycroft & Co. Ltd.
	J. S. White & Co.
<b>Warships (Engines)</b>	Wm. Beardmore & Co.
	J. Brown & Co. Ltd.
	Fairfield S. & R. Co. Ltd.
	Scott S. & K. Co. Ltd.
	Yarrow & Co. Ltd.
	Hawthorn Leslie & Co.
	Palmer S. & I. Co. Ltd.
	Parsons Marine S. T. Co. Ltd.
	Wallsend S. & E. Co.
	Cammell Laird & Co. Ltd.
	J. I. Thornycroft & Co. Ltd.
	Vickers-Armstrong Ltd.
	J. S. White & Co.
<b>Warships (Armour)</b>	Wm. Beardmore & Co.
	Firth-Brown (Part of J. Brown)
	English Steel Corporation (Subsidiary of Cammell Laird & Vickers-Armstrong)
<b>Guns</b>	Vickers-Armstrong Ltd.
	Wm. Beardmore & Co.
<b>Gun mountings (Turret)</b>	Vickers-Armstrong Ltd.
<b>Gun mountings (Transferable)</b>	Vickers-Armstrong Ltd.
	Harland & Wolff, Scotstoun

Source: 'The Position of Private Armaments in Imperial Defence', PSO359, 10 March 1933, TNA: CAB60/13

The above tables are excerpts from CID and PSOC research papers. These highlight firms that were 'mainly engaged' in armament orders during the Great War, or had appeared on a list of Admiralty contractors in 1933. Taken together, they illustrated the point about bottlenecks and offer an outline of some – but not all – of the key firms which comprised the naval armaments sector in Britain. As the latter table shows, in some cases the Admiralty were

relying on one or two firms for the entire production of a particular component. In sum, the fundamental point here is that supply bottlenecks dominated official thinking on capacity.

Thus, applying these bottlenecks and lists to naval arms leaves us with a rather smaller subset of shipbuilders. Indeed, if one looks at the location of successful Admiralty tenders between 1918 and 1939, there were only around fifteen shipyards in Britain which built vessels larger than 1,000 tons (the size of a small destroyer) for the Admiralty or foreign navies. One highly secretive organisation dating from 1926 and styled as the ‘Warshipbuilders’ Committee’ (or occasionally ‘Group’), comprised such yards, and as a result lends itself as an obvious candidate for study. Members of the group were drawn from a self-selecting circle of firms typically engaged in both the highest volume and concentration of domestic and foreign naval orders between the wars, while also ordinarily engaged in merchant or passenger work. By the time the committee formed in the mid-1920s Beardmore was in severe trouble – it collapsed and was bought by the Bank of England in 1930 – and Palmer was in scarcely better shape (part of it would be acquired by Vickers-Armstrong in 1933), leaving the group comprised for most of its existence of thirteen member companies: Vickers-Armstrong, John Brown, Cammell Laird, Denny, Fairfield, Harland & Wolff, Hawthorn Leslie, Scott, Stephen, Swan Hunter, Thornycroft, White and Yarow.<sup>80</sup> In other words, the CID, Admiralty and membership of the WSBC point in the same direction, and to the same small subset of firms. The WSBC’s actions from the second half of the 1920s onwards comprises a central theme of this thesis, and forms the basis of the analysis of the behaviour of the private naval arms industry.

The second group of interest here consisted of firms which, although not builders of ships, benefitted from and relied upon Admiralty orders. Here, the definition of ‘benefit’ needs to be narrower than J.E. Thornycroft’s view that all firms that benefitted from arms manufacture were a part of the ‘arms industry’, for this could reasonably include carpenters and outfitters in shipyard towns like Clydebanks. Instead, the most useful approach involves looking once again at the high-value items which ships needed but only a small number of firms could make. Certainly the Supply Committees of the PSOC were organised in this way. So, for instance, the Weir’s products were essential not only for marine engines during the Great War, but also

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<sup>80</sup> D. K. Brown, *A Century of Naval Construction: A History of the Royal Corps of Naval Constructors* (London: Conway Maritime Press, 1983), pp. 23-4.

later in aircraft and artillery, although the group did not produce ships.<sup>81</sup> While any selection will inevitably involve the exclusion of firms which ultimately assisted and/or benefitted in some way from the rearmament and subsequent war effort, keeping the focus on the companies and individuals that either dominated their own markets or were involved in producing the goods most difficult to obtain, will allow the best assessment of the political economy of industry-government-military interaction.

To this end, too, there is one other additional set of actors worth bringing into the picture: the role of finance through the Treasury and major banks. As noted above, finance has often been called the ‘fourth arm of defence’, and its role in supporting rearmament and defence planning was undeniably crucial. But, the operations of banking and financial systems during the interwar period have been covered well by Peden, Bowden, Collins, Pugh<sup>82</sup> and others, and this thesis will instead focus on instances where the Treasury and Bank of England’s interacted with planning and industrial experts. In particular, for example, the way in which Sir James Lithgow gained financial backing for his exploits in the National Shipbuilders Security scheme is discussed at length in chapters four and five.

The manuscript collections related to the themes of this thesis are vast. The research that underpins this thesis has taken in the surviving catalogued collections of all of the above firms, as well as the personal papers of some of the owners and directors of those firms. The latter is important, for in many cases the political activities of the companies’ leaderships were kept separate from the day-to-day activities of the firms themselves. To give one example, Sir James Lithgow’s involvement on the government’s ‘advisory panel of industrialists’ or his work with the National Shipbuilders’ Security in the 1930s are very scarcely mentioned at all in the collections of Lithgows Limited, his shipbuilding company. Nor did he often talk of the NSS’s business while on governmental advisory duty and vice versa.<sup>83</sup> The same is broadly true of others, including Lord Weir. Therefore, in order to go some way to obtaining a holistic

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<sup>81</sup> W. J. Reader, *The Weir Group: A Centenary History* (London: Weidenfeld and Nicolson, 1971), p. 75.

<sup>82</sup> In addition to Peden, see S. Bowen and M. Collins, ‘The Bank of England, Industrial Regeneration and Hire Purchase Between the Wars’, *Economic History Review*, 45 (I) (1992), pp. 120-36 ;; P. Pugh, *The Cost of Seapower: The Influence of Money on Naval Affairs from 1815 to the Present Day* (Cambridge: Conway Press, 1986).

<sup>83</sup> See, for example ‘Papers of Lithgow’s Limited, Board Papers 1914-42’, GUAS: UGD223/2 and ‘Weir, Lithgow and Balfour Notes’, PSO 1138, 13 February 1934, The National Archives (hereafter TNA): CAB4/22/.

evaluation of the activities of men like Lithgow and Weir, private correspondence, memoirs, diaries and personal collections have to be pieced together with the company records and official policy documents. Indeed, one can sometimes learn as much about Lithgow's business activities in the minutes of official (and usually secret) government meetings as can be obtained from his company papers or commissioned company histories. One must therefore not assume that the lines between business and politics or arms and civilian manufacture can be neatly drawn.

The archival collections pertaining to business are spread across Britain, and are often fragmentary in nature. This thesis has utilised the majority of these, but has come to rely upon the collections at the University of Glasgow archival services, the Glasgow City Council archives, the University of Cambridge manuscripts room and the Churchill College archive. These contain the records of some of the largest armaments manufacturers of the time, including Vickers, Armstrong-Whitworth, Fairfield, John Brown and Beardmore. In addition, they hold the personal collections of Lord Weir and Sir James Lithgow. Where necessary, other smaller business archives were consulted, though, for reasons that become obvious later in the thesis, what is *not* preserved in the collections can be as important as what is. Businesses, unlike the government, have far looser practices with regards the retention of records. For this reason, an element of triangulation between firms has been undertaken. It is not uncommon to encounter incomplete files, damaged boxes, glimpses of correspondence between board members, or records which span only a small part of the years under review. Perhaps because of these difficulties, the nature of the relationship between state and industry has not, thus far, been afforded enough attention in the existing literature.

The industry side is, of course, not the entire picture. Alongside the archival resources of the firms mentioned, one must also analyse and interrogate the extensive government collections pertaining to the organisation of armament supply. Here, the problem is quite different. The collections pertaining to the Committee for Imperial Defence<sup>84</sup>, or CID, is held in the National Archives and encompasses dozens of committees and subcommittees. It is therefore a gargantuan task to make sense of the myriad bodies and to understand which of them are of the most importance to this research. To add to the confusion, it was common to

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<sup>84</sup> See the immediately following section for a discussion of the CID and supply organisation.

circulate memoranda relatively widely among committees, and thus it is not unusual to find the same letter or report with a different internal reference number appearing at different times in different places. In the main however, it was the work of the Principal Supply Officers' Committee (PSOC) and its subcommittees that proved the most use within the Cabinet's CID collection. However, in order to understand the importance of the PSOC, one must first understand how the machinery of government looked and worked, and how this developed between its inception before the Great War and the second-half of the 1920s. This is the focus of the next section.

### 2.3 War and Post-War

In 1902, the Committee of Imperial Defence (CID) was founded. This was intended to replace the previous Defence Committee – usually only convened in times of crisis – and to be a small and permanent advisory committee to the Prime Minister and Cabinet. Initially devised to define the future strategic priorities of the navy and army, the CID soon took on new duties and powers in the years before the Great War.<sup>85</sup> Under Maurice Hankey, the Cabinet Secretary, the CID gained importance and had moved away by 1914 from just advising the Cabinet – although authority at all times still rested with ministers – to planning and conceptualising defence in its own right for Britain and the wider empire.

During the Great War, responsibility for coordinating armaments manufacture rested with the Ministry of Munitions, which was officially separate from the CID. Hastily created and given enormous power in 1915 in response to a severe shortage of shells for the front line, the organisation grew to the largest government department ever witnessed with an expenditure by 1918 three times higher than the entire government's budget in 1913.<sup>86</sup> David Lloyd George (1915-6) and Winston Churchill (1917-9), both future Prime Ministers, were amongst those who headed up the ministry during its short life – it was disbanded in 1921, and its functions taken over by new and expanded functions of the CID's peacetime organisation. The Ministry was for its time a nexus where government and industry could cooperate on industrial planning. Crucially, its staff was drawn from a wide and diverse range of sources: civil

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<sup>85</sup> F. A. Johnson, *Defence by Committee: The British Committee of Imperial Defence 1885-1959* (Oxford: Oxford University Press, 1960), p. 88.

<sup>86</sup> S. Marriner, 'The Ministry of Munitions 1915-19 and government accounting procedures', *Accounting and Business Research* 5 (I) (1980), p. 130.

servants from the War Office and other government departments, judges, accountants and academics were thrown together in a necessarily great hurry and ordered to work *under* a top-level drawn from business elites. Indeed, the inaugural minister, Lloyd George, claimed from the outset that the Ministry must be ‘from first to last a business-man organisation’ and that he intended to ‘utilis[e], as far as possible, the business brains of the community...some of them at my elbow... to advice, to counsel, to guide, to inform, to instruct, and to direct’.<sup>87</sup>

Within a matter of weeks in 1915, Lloyd George had secured the service of dozens of ‘distinguished captains of industry’ to assist his cause, to which he ‘entrusted the first position in every department. He gave personal support and authority to these men to break through much of what he called the ‘aloofness’ which characterised the normal administration of government contracts.’<sup>88</sup> One of his most senior appointments was William Weir, then the 37 year-old chairman of the eponymous Glasgow-based pumps manufacturing firm that he had inherited from his father in 1910, and which in wartime was known for supplying boilers to the Admiralty. Weir was made Director of Munitions in Scotland, the first appointment in what would be an extremely close thirty year relationship between Weir and the government.<sup>89</sup> By the conclusion of hostilities in 1918 Weir had been first knighted and then elevated to a Baronetcy. Owing to his service and experience within the Ministry, it was he who was chosen in 1922 to head up a committee, known thereafter as the Weir committee, to report on the ‘Amalgamation of Services Common to the Navy, Army and Air Force’, whose work might form foundations to base an enquiry into the ‘Supply of Munitions and Armaments in a Future War’.<sup>90</sup>

Owing to the size, cost and purpose of the Ministry of Munitions, it was without a natural role in peacetime, and was soon rendered absolutely obsolete. Weir’s task was, in its simplest terms, to recommend a way forward towards a system that would be suitable in peace while

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<sup>87</sup> D. Lloyd George, *War Memoirs*, Volume I. (London: Odhams, 1933), pp. 148-9.

<sup>88</sup> D. Lloyd George, *War Memoirs* I, pp. 148-50. Lloyd George claims this speech was made in the House of Commons on 14<sup>th</sup> June 1915, but the author can find no record of this. Most likely it was made the previous week on the 4<sup>th</sup> or 5<sup>th</sup> of June in Liverpool or Manchester town hall to an audience comprising of local employers and workmen.

<sup>89</sup> Reader, *The Weir Group*, p. 75.

<sup>90</sup> ‘Supply of Munitions etc.’, memo by Maurice Hankey, Contracts Coordinating Committee, 28 January 1921, TNA: CAB15/20. The second part of the question on the supply of munitions was actually a pre-existing committee headed by Sir W. Graham Greene, but it was suspended pending the outcome of Weir’s report.

being able to plan effectively for war without some of the unwieldy size or bureaucracy of the defunct ministry, and without most of the cost. He did not have an absolutely free hand; at this point there was significant vocal parliamentary support for a new centralised 'Ministry of Defence' that would take over the supply arrangements of the three services. The opposition to these ideas was equally vociferous, and spearheaded by the Admiralty, which, as the most powerful of the fighting services, wanted a committee comprised of all three bodies to coordinate supply.<sup>91</sup> While the finer details of this debate are not relevant to the main thrust of this research, it suffices to say that in his report Weir broadly took the Admiralty view, and argued strongly against amalgamation of, and instead for coordination between, the common aspects of the three service departments.<sup>92</sup> Two further committees by the Marquess of Salisbury and Sir Laming Worthington-Evans followed Weir's, drew similar conclusions, and built upon his recommendations.<sup>93</sup>

What they advocated was ratified and would become in 1924 the Principal Supply Officer's Committee (PSOC), which would later be responsible for the important task of supply planning throughout the rearmament phase. The PSOC was initially part of the Board of Trade, but was, in 1927, reconstituted to be one 'half' of the CID (see Table 3.1), dealing with the supply side, while the other half – the Chiefs of Staff (CoS) another body comprising of the three services, was responsible for assessing and defining threats. The operation of the CoS 'side' of the CID is of lesser relevance to this thesis, but broadly speaking it suffices to say that the PSOC's work was guided by the views of the CoS. The three chiefs – Army, Navy, Air Force – essentially decided upon the nature of any external threats to Britain (including location, type of conflict and the time-frame involved), and instructed the PSOC to organise industry and materials on the basis of what would be needed to counter it. In short, the PSOC only really gained momentum as an organising body once the Chiefs of Staff believed a future armed conflict was likely, and could convince Cabinet to share their views.<sup>94</sup>

As far as the 1920s are concerned however, the important point is that a group with the responsibility over the planning of Britain's defence and supply planning machinery had a

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<sup>91</sup> F. A. Johnson, *Defence by Committee: The British Committee of Imperial Defence, 1885-1959* (Oxford: Oxford University Press, 1960), p. 176.

<sup>92</sup> Gordon, *British Seapower*, pp. 35-36. For a fuller analysis of these discussions, see Gordon chapters 3-5.

<sup>93</sup> Gordon, *British Seapower*, p. 35-7.

<sup>94</sup> This did not occur – as is discussed below – until Manchuria in 1931.



civilian businessman, albeit one in a way connected to the Admiralty and with rather extensive experience of wartime industrial governance, as one of its forefathers and first architects. Moreover, Weir would, during the 1930s, become one of its chief advisors.<sup>95</sup> The new PSOC, broadly speaking, aimed to alleviate procurement tension between the service departments by bringing together some of the most senior officers from all services to hold regular forums on future supply needs. It has been argued elsewhere that this arrangement, perhaps not surprisingly, suited the Admiralty best and the Army least, and the nature of Weir's recommendations may have had something to do with the alliances he forged during the war.<sup>96</sup> Regardless, the new committee was to sit atop several sections and sub-committees covering everything from shipbuilding to machine tools and foodstuffs, and was to report upwards to the CID's executive body, which acted as an the umbrella organisation over the CoS and PSOC.

The PSOC – both before and after its reconstitution in 1927 – was chaired by the President of the Board of Trade, another of the positions that Lloyd George and Churchill had both held before 1918. The key figure here however was the government's most senior civil servant, Maurice Hankey. Hankey, a staunch supporter of the navy and seapower, served as both secretary to the CID and the Cabinet – a job so great that it was split into two upon his retirement in 1938 – and has been credited by historians as the 'high priest of coordination' and a man of 'great significance throughout the two brooding [interwar] decades'.<sup>97</sup> His seniority within the government machinery led his biographer to call him a 'man of secrets', such was the level of trust he was held in by successive Prime Ministers and other senior politicians.<sup>98</sup> He oversaw and managed the CID framework in which the PSOC operated, and both consulted and was consulted by the Cabinet on any major piece of work that emanated from either side of the organisation.

Within the PSOC, there were two major supply planning organisations: the Supply Board and the Board of Trade Supply Organisation. The former dealt with finding manufacturing capacity for the fighting services (i.e. the navy, air force and army), was comprised mainly of

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<sup>95</sup> See chapter four, below.

<sup>96</sup> Gordon, *British Seapower*, p. 36.

<sup>97</sup> Gordon, *British Seapower*, p. 36 and Johnson, *Defence by Committee*, pp. 166-9.

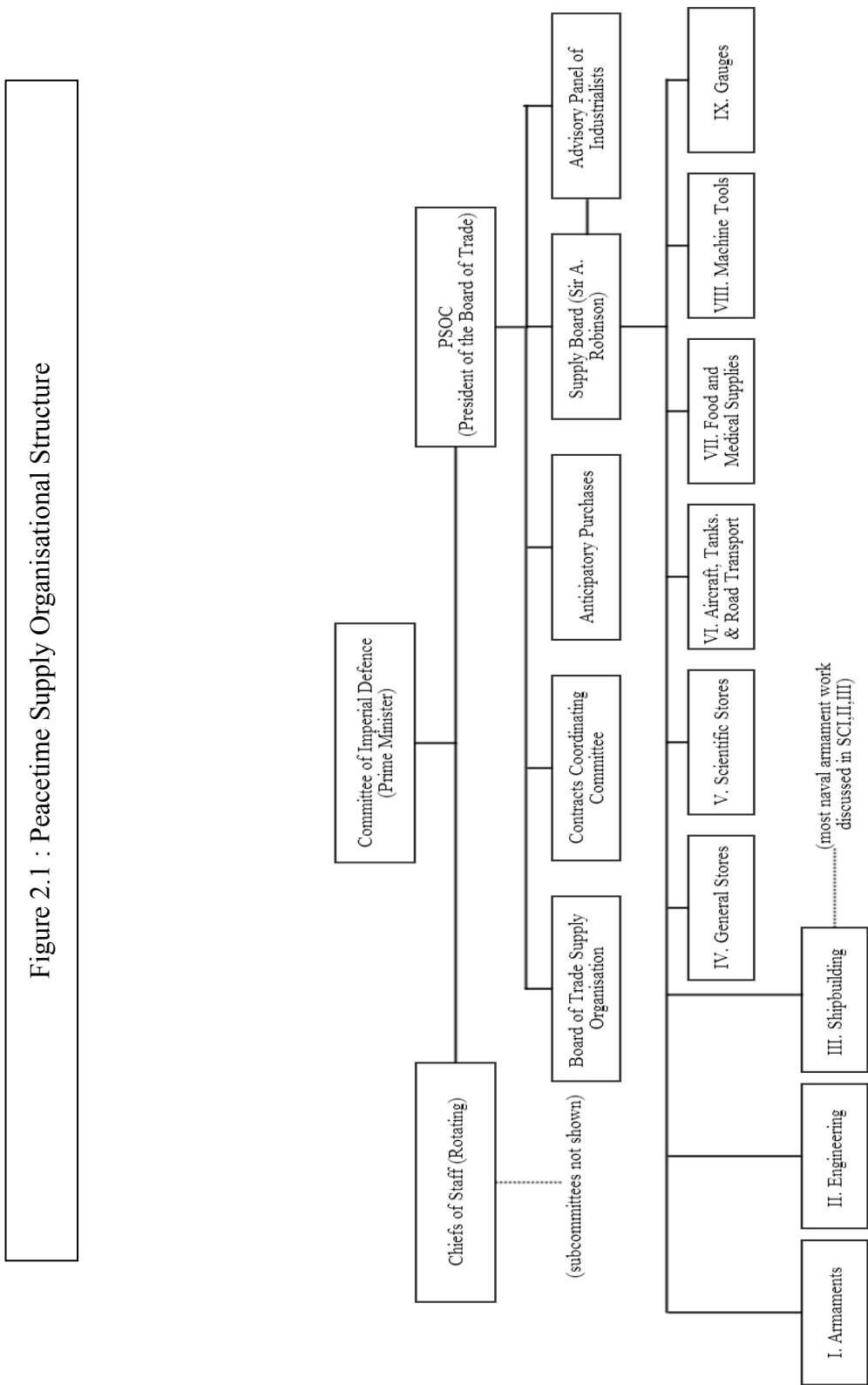
<sup>98</sup> S. W. Roskill, *Hankey, Man of Secrets. Volume III: 1931-1963* (London: Collins, 1974), p. 22.

serving officers and received first call on resources, while the latter dealt with the needs of civilians. The primary difference – at least as far as this research is concerned – between the PSOC and its subordinate Supply Board was that the latter had a narrower focus, and was not tasked with considering questions of contracts or anticipatory purchases of raw materials, which were handled in separate subcommittees, which also reported upwards to the PSOC (see Figure 2.1, below). The only exception to the civil-military divide was shipbuilding, where both civil and defence requirements were both handled by the Supply Board, under Supply Committee III, which was chaired by the Admiralty's chief engineer.<sup>99</sup> It was here within the individual supply committees that the bulk of later industrial planning for defence in peacetime was undertaken, and where much of what follows takes place. . Thus, the bulk of the archival research pertaining to government records was undertaken in the collections of the PSOC and its related committees, and the personal collections of some of its leading members.

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<sup>99</sup> Gordon, *British Seapower*, p. 128.

Figure 2.1: 'Organisation for the Coordination of War Supply', PSO(SB)570, February 1936, TNA: CAB60/15



In sum, the PSOC was formed along the lines of powerful Admiralty interests in the early 1920s, while a large part of the Supply Board's work in later years was related the navy and shipbuilding. This research therefore assesses two organisations, often moving independently of one another. From the defence planning side the framework above is the focus of this thesis, and considers the supply question right from the individual supply committees to the very top levels of government, and attempts to understand how well supply was organised in Britain. Thus, broad questions of public opinion, finance and security at Cabinet level (and the competing claims of the Admiralty, CID, Treasury and others) are tackled along with the much more specific work of the Supply Committees, to show the pressures and constraints on national-level policy during disarmament and the effects the decisions had on later British defence preparations during rearmament. On the 'industry' side, the fortunes of a small group of private manufacturers – struggling to survive in disarmament, thriving in rearmament – are discussed, along with the role of the select few industrialists who penetrated the British defence planning framework.

With regards to this framework, critics of the CID and its subcommittees have alleged that it had serious failings, and have usually characterised it as a scarcely relevant, overly bureaucratic talking shop (it is, for example, cited that in 1928 – not an atypical year – the CID and its subcommittees in the CoS and PSOC met almost six hundred times in all).<sup>100</sup> For the PSOC, chief among these alleged failings is the claim that despite talking and planning almost endlessly for years, it did not actually achieve anything tangible during the years of peace, and Britain remained dangerously underprepared on the eve of war. This interpretation of the CID will be opened up to scrutiny in this thesis.

Putting these claims to one side for a moment, it is worth emphasising that for a question such as defence planning and industry, there was no 'interwar' period. The years are a historical construct based on knowing with hindsight that one war relatively quickly followed another, and have too often been used as a unit of measurement to assess against artificial boundaries the successes and failures of everything from government to business. In matters of defence planning, as much as another war was feared in the 1930s, it was never fully known, nor could it be known who the enemy would be, whether the battle would range over

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<sup>100</sup> Johnson, *Defence by Committee*, p. 221.

continental Europe or the British Empire; whether it would take place on land, sea, air or a combination of the three; whether it would be a limited war or a general conflict that would engulf nations. Planning and hypothesising therefore were of paramount importance. The criticism the CID's bodies have drawn in the historiography, stemming from a PSOC admission in the mid-1930s that the 'constantly changing technology and character of armaments production' meant that its work was often quickly outdated<sup>101</sup> is unfair. That technology and the geopolitical landscape could shift quickly is hardly surprising. The more pertinent questions – along with how successful the planning framework was – concern how supply planning changed and developed in rearmament, what role industrialists played within this process, and who benefitted and lost out from it.

The answers here are primarily to be found in the post-Manchurian period, but this does not mean the decade before it does not warrant study, for the roots of both the PSOC and industrial collaboration were sown here, and structures put in place which would guide planning during the critical years between the end of 1931 and the beginning of 1936. During its early existence prior to 1931 the PSOC had little scope for supply planning, while the future defence implications of industrial problems were not fully appreciated – perhaps with the Admiralty excepted – at any level of the British state. The most important planning phase occurred in the period immediately after the Japanese invasion of Manchuria and the election of a National Government in Britain, two events which overlapped with one another in September and October 1931. This stirred Britain – slowly – into action, although powerful constraints on manoeuvre prohibited the increased level planning becoming policy for several years afterwards. It was these constraints that brought industry into the PSOC framework, as both had a shared desire to help the armaments industry recover from the effects of the 1920s. While the debates over when and how to rearm that followed Manchuria were coloured by the financial and political pressures stemming from the Great War and Great Depression, it is hard to arrive at the conclusion that the slow stagnation of armaments until that point would have been shaken in quite the same way had it not been for a new form of government and peril in the Far East.

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<sup>101</sup> For criticism see Packard, 'British State-Industry Relations', pp. 94-6. For the statement see PSOC Report, 6 December 1933, PSO 1120, TNA: CAB4/22.

## 2.4 Related Later PSOC Developments

As an organisation broadly interested in supply planning and bottlenecks, the PSOC was, broadly speaking, underworked between its formation in 1924 and Manchuria. While conscious of (usually Admiralty-led) warnings of a loss of skills and capacity through a prolonged lack of orders – and especially so following the onset of severe recession from 1929, the committee was not in a position to influence policy; its remit was to tackle the supply question in preparation for a future conflict, which relied on, in one way or another, Cabinet and the Chiefs of Staff agreeing that a threat existed. In that regard, nothing changed substantially until Manchuria prompted the Ten Year Rule to be revoked in 1932.<sup>102</sup> While it would be wrong to say there were no geopolitical tensions during the 1920s – most of them concerned, in one way or another, German reparations or arms limitation treaties between the victorious powers – from the procurement perspective the present strength of British defences was deemed broadly adequate for present needs by the successive Conservative and Labour governments.

In comparison with later years, the size and scope of the PSOC's work before Manchuria was limited. For example, it was not until five years after the PSOC's formation, in March 1929, that they produced their first tentative report of an 'approximate estimate of the total war requirements of the nation in respect of materials'.<sup>103</sup> Even this was rudimentary: the document was only concerned with the largest shipyards, and admitted the capacity of many minor firms was not known, and merely proposed to investigate those questions further at an undetermined later date. The work was suitably titled 'A Rough Estimate'. If one compares this with discussions taking place five years later, the difference in what was achieved in a similar length of time is striking. This did not, however, mean nothing was achieved – from 1929 to 1932 there were a few useful reports which helped form the basis of future investigations into industrial capacity, prompted by the severe economic depression and London Naval Treaty of 1930.<sup>104</sup> It is nevertheless fair to say that the content, detail and pace of the planning moved to a new level following the revocation of the Ten Year Rule. From a

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<sup>102</sup> Gibbs, *Grand Strategy*, p. 75.

<sup>103</sup> 'Rough Estimate of quantities of materials required by Supply Committee III', PSO(SB)53, 5 March 1929, TNA: CAB60/35.

<sup>104</sup> See chapter five, below.

starting position of knowing little apart from the capacities of the largest firms, by 1935 the organisational structures, manufacturing processes, supply chains and just about everything else one might conceivably need to know about a company had been documented.<sup>105</sup> This knowledge was extended not just to smaller shipyards, but automobile and light engineering firms, the chemical industry, and electronics. There was one more striking difference: the PSOC now had a three leading civilian industrialists assisting with its otherwise top-secret planning work.

The invitation extended to the industrialists to aid supply organisation is an overlooked but highly important development in defence planning in the early 1930s. This occurred in late 1933, although the roots of the decision can be traced to the naval threat the Japanese posed by their actions in South East Asia some fifteen months previously. This group owed its existence in some way to the unique domestic political situation created in the wake of the October 1931 general election, for what followed was a period where planning was finally taken seriously, but was still to be kept secret, for outwardly the National Government was still committed to peace. This creation of this ‘advisory panel of industrialists’ which – at least initially – reported to the Supply Board and PSOC, played a major role in supply planning thereafter and represented a peace-time first for state-industry collaboration of this kind. Astonishingly however, its existence has been omitted from the standard history of the CID.<sup>106</sup>

Instead, the official history of the CID focuses on another committee, the Defence Requirements Committee (DRC). The DRC was a committee of Treasury, Foreign Office and fighting services members that advised the Cabinet on defence, but was concerned with Britain’s defensive priorities, not the supply bottlenecks that pre-occupied the lower orders of the PSOC. Formed within a month of the Advisory Panel, the DRC has been called the ‘beginning of rearmament’, although conceptualising it in this way omits consideration of the planning – discussed in chapter five – that took place in the two years between Manchuria and its formation, and the role industry played in it. Moreover, in terms of industrial bottlenecks, only focusing on top-level policy from the starting point of late 1933 neglects the changes, acquisitions and problems in industry during disarmament and rearmament, and thus ignores

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<sup>105</sup> See, for example ‘Memorandum by Chairman, Supply Committee III, Appendix 1-3’, PSO(SB)591, 28 April 1935, TNA: CAB60/44.

<sup>106</sup> Johnson, *Defence by Committee*. Lord Weir is also completely omitted from the narrative.

the story of how industry and industrialists responded to the challenges of disarmament in the 1920s, and how the PSOC organised naval supply in the 1930s, and with what success.

Both the DRC and the Advisory Panel initially had a strong naval focus; the Advisory Panel was comprised of three men – Lord Weir, Sir James Lithgow and Sir Arthur Balfour<sup>107</sup> – who directly and indirectly benefitted greatly during and since the Great War from Admiralty contracts, while the DRC's first report explicitly prioritised naval defence. It was the latter that represented the important step closer in cooperation between state and industry, so long as 'industry' is defined as these select few industrialists who enjoyed privileges and access to information beyond the reach of the vast majority of their peers. As shown below, there was extreme reticence, even after Manchuria, to approach industry and cooperate over matters of defence in peacetime. As a result, these three were almost unique within the CID until rearmament was well in the public eye after 1936. The PSOC was, as already noted, officially a secret organisation, so the men approached were to be entrusted with an extraordinary level of inside information, a position highly uncommon for civilian experts, and as such had to already be trusted implicitly by the CID. The three men picked were therefore, perhaps unsurprisingly, veterans of the Great War-era Ministry of Munitions. How and why they were selected, and the implications of their selection, are key questions explored in this thesis.

The deliberations and workings of these committees and the connections made (and used) by these men in the 1930s are the focus of the later chapters. For now, attention must be turned back to industry and the Admiralty in the 1920s, as it provides the context for the later concerns expressed by the PSOC about the ability of the naval arms manufactures to meet demand, and introduces the industrial element which has often been overlooked in studies of this kind. The decisions made in the 1920s, and their impact on British capacity for naval construction, were part of the reason there was a need for businessmen to tackle the question of efficiency after Manchuria. As a result, the 1920s cannot go unmentioned.

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<sup>107</sup> 'Memorandum by Lord Weir, Sir James Lithgow and Sir Arthur Balfour', PSO 415, 20<sup>th</sup> February 1934, TNA: CAB60/14, p. 1.



## Part Two: Industry and the Navy before Manchuria, and the Establishment of the Warshipbuilders Committee 1919-1931

### Chapter Three: From Boom to Bust – The private naval arms industry and the Admiralty, 1919-26

The 1920s began for industry with a wave of business optimism over the future prospects for global trade, and a construction boom as markets reopened and ships of all kinds lost to the war were replaced. The Admiralty too had reason to be optimistic: Britain still possessed the world's largest navy, it was preparing to celebrate the launch of its new flagship and largest ever vessel, *HMS Hood*, and had awarded a small – but significant – number of new construction contracts, including four new large battlecruisers. This naval work, coupled with the boom in merchant and passenger construction, amply filled the gap left by the conclusion of emergency wartime programmes. Indeed even in the absence of wartime orders, the naval arms manufactures managed to post near-record levels of profit, output and employment well into the second half of 1921.<sup>108</sup> This prosperity was short lived. Thereafter, the outlook changed dramatically: For industry, global trade failed to live up to the wildly optimistic forecasts, causing significant overcapacity in supply of merchant marine and the subsequent drying up of further ship orders. For the Admiralty, the Treasury's will to cut costs was forcefully imposed upon them: the desire for a tightening of the government purse strings led to international agreements towards arms limitation which abruptly cancelled even the modest naval replacement work in hand.

This part (Part II) of the thesis examines the relative fortunes of the British naval arms industry and the Admiralty from 1920 until the formation of the National Government and Japanese invasion of Manchuria in the second half of 1931. Within it are chapters three and four: three concerns on the problems faced by the industry and Admiralty before 1926, and four focuses on the schemes developed afterwards. The overriding theme is one of decline:

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<sup>108</sup> Johnman and Murphy, *British Shipbuilding and the State*, p. 11.

declining financial resources brought upon initially by war debts and later by the disastrous return to the Gold Standard led to strict financial controls upon expenditure and, as a result, the declining health and resources of the private naval arms industry. The core argument is that the main developments in the relationship between, and relative statuses of, the Admiralty and industry in this period can be viewed in a large part as a series of responses to crises, either the Treasury's financial controls or the collapse of global trade. These responses were not uniform, and not uniformly successful. Nor were they always in the 'public' sphere – a large part of what followed after Manchuria did so because of the layers of secrecy built up in the second half of the 1920s by the State and industry acting independently of one another.

The narrative of these responses is also necessarily non-linear: there is some chronological and thematic overlap with the post-Manchurian period, especially in the case of the National Shipbuilders Security (NSS) scheme, which ran from 1930. For this reason, the role of NSS and other developments after 1931 is dealt with in the next section, while the background to it is covered here. Similarly, the development of the CID and PSOC – including Lord Weir's role in it – has already been discussed in section one, while the story after Manchuria follows in section three. As far as the 1920s are concerned however, the PSOC is not a major part of the history of private manufacture – the structure of supply planning developed in these years, but the two did not overlap until Manchuria made a future naval conflict seem far more likely. Instead, it was the Admiralty that spent the 1920s arguing for more attention to be paid to the health of private manufacture.

Most fundamentally, it will be shown below that it was the industry and the Admiralty's shared experiences of 'failure' – failure to adapt, failure to convince the Cabinet and Treasury of their views – in the first half of the decade that explains the plans that were hatched in the second. Indeed, one of these plans in particular, a scheme which came to be known as the Warshipbuilders' committee, was a stunning example of the private naval arms industry's ingenuity. What started as a defensive reaction to a crisis grew into one of the most successful price-fixing cartels in the history of armaments manufacture, and was one of the most astonishing groups to emerge from the disarmament period before 1931.

### 3.1 Structural problems in industry, 1920-23

To understand the changes that both the British Admiralty and private industry had to make in the 1920s, it is first important to understand the nature of the industry and the nature of the challenges faced. At the conclusion of hostilities in 1918, the private naval arms 'sector' was comprised of fifteen major firms which between them constructed the overwhelming majority of wartime contracts for the Admiralty, from hulls to guns, engines and armour. All could, and did, make other types of vessel or other products for use outside of the naval sphere in peacetime (in the same way that smaller builders assisted the specialist armament manufacturers in wartime), but for the reasons outlined below this was not always a profitable or viable avenue.

In 1918, these firms – which all predated the war – were Vickers, Armstrong-Whitworth, Palmer, Hawthorn Leslie, Swan-Hunter (based in the North East of England); John Brown, Fairfield, Beardmore, Scott, Stephen, Yarrow (on the Clyde), Cammell Laird (of Birkenhead), White (East Cowes), Thornycroft (Hampshire) and the Coventry Ordnance Works (Coventry). The latter made artillery and guns, while the other fourteen constructed ships of various sizes and specifications. Not every yard could make every kind of warship or indeed even an entire ship. Thornycroft, White and Stephen specialised in smaller vessels (destroyers, corvettes and frigates), while only Beardmore, Armstrong-Whitworth and Vickers among the shipbuilders had in-house gun making facilities.<sup>109</sup> However, for ease of description and to avoid unnecessary complexities, when the 'private industry' is discussed in the pages which follow it is these firms which are being referred to.<sup>110</sup>

In the first two and a half years of peace after 1918, the broader shipbuilding industry experienced 'boom' conditions which had been sparked by the rush to replace ships lost during the war, and had been further enhanced with the reopening of trade routes and tourist destinations closed off since 1914. Builders and ship owners alike anticipated placing orders for new vessels to meet demand for some time to come. The resulting strong demand for

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<sup>109</sup> I. Johnston and I. Buxton, *The Battleship Builders: Constructing and Arming British Capital Ships* (York: Seaforth, 2013), pp. 174-6.

<sup>110</sup> See section 3.1 for more information – the one remaining caveat is that some of these firms collapsed, merged or changed form in the years between the wars, so the list of constituent firms is not always constant. This said, Harland and Wolff of Belfast was the only addition to an otherwise shrinking list before 1939.

merchant vessels amply compensated for the gap left by the cancellation of wartime naval orders.<sup>111</sup>

Merchant orders and naval orders were not the same thing, however, and the Admiralty refused to be overly optimistic. By 1922 numerous prominent Admiralty figures had expressed their grave concerns at the future health of the warship builders should the current conditions be left unchecked. Two particularly notable voices in this regard were David Beatty, the First Lord of the Admiralty, and Eustace Tennyson D'Eyncourt, the Director of Naval Construction (DNC). In 1920 Beatty warned that 'specially skilled labour, accustomed to special warship work, is being dispersed [and] the longer warship construction is put off, the more difficult it will be to find suitable labour', while D'Eyncourt, DNC from 1912 to 1924 and the man responsible for overseeing warship design, made the same point and argued that 'the total cessation of [naval] construction would involve us in a serious deficiency of trained shipbuilding staff and mechanics'.<sup>112</sup>

Outwardly however there appeared to be good reason for the government to take such prophesies of doom with a pinch of salt. Some significant Admiralty construction and modernisation work remained in hand until the end of 1921: HMS Hood, the navy's largest vessel and new flagship, had just completed the fitting out process at John Brown<sup>113</sup>, and some modest replacement and repair work was being undertaken by private yards in Birkenhead, Clydeside and the North East of England. Furthermore, Brown, Beardmore, Swan Hunter and Fairfield (all future members of what would become the Warshipbuilders' Committee) received contracts for large battlecruisers in 1920.<sup>114</sup> Moreover, the geopolitical outlook – with the German navy removed as a threat – appeared stable, thus lessening the requirement to sustain a fleet (and by extension, industry) at 1918 levels.

However, by early 1922, clear signs were beginning to emerge that a long-term boom in production would not occur. The growth in international trade necessary to sustain new construction did not materialise, and enthusiasm evaporated. The effect was a nine-fold increase in unemployment in less than three years, with almost a third of shipyard workers out

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<sup>111</sup> Slaven, *British Shipbuilding*, p. 71.

<sup>112</sup> Gordon, *British Seapower*, pp. 76-7.

<sup>113</sup> Buxton and Johnston, *The Battleship Builders*, pp. 25-7.

<sup>114</sup> Johnman and Murphy, *British Shipbuilding and the State*, p. 18.

of work by the end of 1923, compared with near full-employment in 1920.<sup>115</sup> The roots of these problems are not difficult to pick out. Financially, Britain was in a precarious position. 40% of total government spending for the entire decade to 1929 was swallowed up on financing the interest payments on the war debt alone, while the level of reparations – initially intended to help the Allies meet the cost of the war – that could be extracted from defeated Germany fell far below even the more pessimistic estimates.<sup>116</sup>

This had a considerable effect on the defence budget. Although the navy's share of spending remained relatively constant before 1931 when compared with the Army and Royal Air Force (see Table 4.1), following the war it was practically cut in half between 1920 and 1921, with another one-third reduction the following year, leading to the cancellation of several classes of ship. Moreover, wages and thus expendable income were either not rising fast or falling on both sides of the Atlantic. This hit purchasing power in two of the world's largest economies (and trading partners), slowed consumption, and stagnated trading. All of this had a knock-on effect on the demand for passenger liners and cargo vessels. Thus, when the British government tightened its belt, the private sector was unable to fill the gap left behind.

Exacerbating the problem of fewer orders after 1923 was the relative increase in shipyard capacity. Compared with 1913 British industry had around 200 extra slipways – and almost thirty new firms had been established since the beginning of hostilities.<sup>117</sup> At its wartime peak, naval orders accounted for an estimated 40% of workload, and without these many more slipways had become unoccupied in the first two years of peace. In addition, the specialist naval manufacturers were, in the absence of Admiralty contracts, forced to compete with firms exclusively engaged in the construction of merchant and passenger ships for orders, which served to compound the problem further. Moreover, while exporting British-built ships to foreign owners had accounted for around a quarter of pre-war sales, by 1923 the industries in

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<sup>115</sup> Johnman and Murphy, *British Shipbuilding and the State*, Table 3; Slaven, *British Shipbuilding*, p. 85.

<sup>116</sup> The reliance of the British economy on Germany prosperity and the effect of the Ruhr Crisis is best expressed in D. G. Williamson, 'The Ruhr Crisis 1923-4', *British Journal of International Studies* vol. 3 (I) (1977), pp. 70-91.

<sup>117</sup> Slaven, *British Shipbuilding*, p. 67.

Sweden, Japan, Denmark, Norway, Holland, France and the United States had all developed and expanded significantly compared with 1913, cutting off an important income stream.<sup>118</sup>

**Table 3.1: Naval expenditure, 1919-30: The figures for 1919 and 1920 are skewed because of the costs of army demobilisation, which accounted for £395m and £292m respectively.**

Year	Naval Expenditure (£m)	Share of total defence expenditure
1919/20	156.5	22.6% *
1920/1	88.4	30.3% *
1921/2	80.8	42.6%
1922/3	56.2	45.5%
1923/4	52.6	42.4%
1924/5	53.6	44.8%
1925/6	59.7	46.9%
1926/7	57.6	46.4%
1927/8	58.1	46.4%
1928/9	56.9	47.7%
1929/30	55.8	47.0%
1930/1	52.6	45.0%

Source: Derived<sup>119</sup> from B.R. Mitchell *British Historical Statistics* (Cambridge University Press, 1988)

The effect of this was dramatic. Not only was worldwide production lower in 1923, but Britain's share of it was just two-thirds of its pre-war level.<sup>120</sup> Put another way, the British shipbuilding industry faced fiercer competition at home (from new or expanded yards and firms re-entering the merchant and passenger market after years of mainly naval work), and new competition abroad, all in a climate of weak global trade. The result was a blend of a massive worldwide fleet of almost brand new merchant vessels but comparatively little to fill

<sup>118</sup> Derived from figures in Slaven, *British Shipbuilding*, pp. 69-71.

<sup>119</sup> For a further note on the usage of figures in this thesis, see table 7.2. Mitchell is somewhat odd in counting from the end of each financial year, not the beginning. Therefore, for the purposes of consistency I have moved Mitchell's figures into the more conventional method used by Shay and others of denoting the financial year of 1919 (for instance) as 1.4.19 – 31.3.20, and so on.

<sup>120</sup> Slaven, *British Shipbuilding*, pp. 69-71.

them with; as a result, there were very limited prospect of orders for new vessels for the foreseeable future.

These events seemed to support the fears that Beatty and D'Eyncourt's had articulated. It is, however, important to emphasise that the issues at the heart of both men's arguments went beyond this. For what Beatty and D'Eyncourt were doing was highlighting the profound differences between, and nuances of, specialist naval manufacture when compared with the work of yards ordinarily engaged in only passenger and merchant ship construction. Here, Beatty's use of the term 'specially skilled' was important: he was not alone in the 1920s in being highly sceptical, if naval yards collapsed or were forced into liquidating some of their assets, of the ability of the remaining non-specialist yards to ever adapt in future years to the demands of a sudden flurry of naval orders. It was a scenario that Britain had not faced before, certainly not in the preceding several decades, but would guide Admiralty thinking on industrial policy for the rest of the decade. Since the 1880s Britain had been committed to the 'Two Power Standard', whereby it would sustain a navy as large as her next two nearest rivals. This policy prompted a flurry of spending, construction, and research and development, culminating in the launch of the *Dreadnought* – then the most powerful ship afloat – in 1905. Then, in an attempt to win a new and intense naval arms race with Germany, British naval construction had continued apace towards and then throughout, the Great War from 1914-18.<sup>121</sup>

Therefore, private yards had been able to secure contracts with a frequency that allowed the retention of labour and the renewal of machinery for more than a third of a century before 1923. This did not mean there were no industrial recessions during this time – market cycles continued – but they were short and comparatively mild, in the main because the armaments manufacturers were less reliant on merchant work.<sup>122</sup> There had been no prolonged period where the specialist naval yards had been faced with the possibility of survival based almost solely on a diet of merchant and passenger work – assuming of course that any work of this kind existed. Specialist skills that had been sharpened in the latest technological developments

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<sup>121</sup> Buxton and Johnston, *Battleship Builders*, p. 8.

<sup>122</sup> H. Peebles, 'Warshipbuilding on the Clyde, 1889-1939. A Financial Study' (unpublished PhD thesis, The University of Stirling, 1986), pp. 72-3. Peebles thesis forms the basis of a book with a similar title. Nevertheless, the thesis contains some extra detail in places, and has been cited separately.

in the context of a more or less regular flow of work ran a real risk from in the post-war world of being lost altogether.

The first part of Beatty and D'Eyncourt's problem was technology. In order to be fast, manoeuvrable and well defended from the latest generation of sea and air threats, battleships required the highest power engines of any ship afloat, heavy armour, and guns capable of firing the largest calibre shells distances of more than twenty miles.<sup>123</sup> Building these vessels and sustaining these capabilities required constant investment in types of plant unlike that seen in other yards. They also required skilled manpower and research expenditure to maintain steel forges, engine factories and huge gun-mounting pits. Merchant and passenger ships had rather obviously no need for these facilities or skills, which meant that large parts of naval firms could become obsolete even during otherwise prosperous years of merchant and passenger work. Without the capability to make these specific components a warship was essentially useless, and naval construction would be heavily constrained even if the general 'health' of the industry was otherwise good. Neither Beatty nor D'Eyncourt (nor anyone else) had any firm idea of what the full extent of the damage to skills and facilities might be, of course, but both men had good reason to suspect the lack of naval orders would not pass quickly.

The second part of D'Eyncourt and Beatty's industrial problem was that unlike the casual observer, both of these senior Navy figures had been conditioned by the preparations for – and subsequent outcome of – the Washington Naval Conference of 1921-1922, which set out the ground rules for naval construction throughout the 1920s.<sup>124</sup> Moreover, while the state of the market and the competition at home and abroad was a grave concern to the shipbuilding industry as a whole, Beatty and D'Eyncourt's concerns were valid regardless of the conditions in the wider market, and applied explicitly to a much smaller subset of firms which had been previously engaged in supplying a very special kind of ship to one customer – the Admiralty.

### 3.2 The Five Power Treaty and British Naval Construction 1920-23

To understand the Admiralty's concerns and to understand the unique picture for warship manufacturers in the 1920s, one needs to examine briefly the Washington agreement – or Five

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<sup>123</sup> Buxton and Johnston, *Battleship Builders*, pp. 154, 168, and 211.

<sup>124</sup> D. Richardson, *The Evolution of Disarmament Policy in the 1920s* (London: St Martin's, 1989), pp. 13-14, p. 26.



Power Treaty – which set out international agreements between the major naval powers for future construction. It was conceived during a period in the immediate aftermath of the Paris peace conference in 1919 where, despite a lack of credible threats in the wake of the Great War, a naval arms race like that between Britain and Germany before 1914 seemed likely to recur. The two potential belligerents at this time were the United States and Japan, behind Britain the second and third largest sea powers respectively. The U.S. Navy was in the midst of an extensive fleet modernisation plan, started in 1916, while the Japanese had begun its response to American expansion with its own programme of eight large ships.<sup>125</sup> Both dwarfed Britain's modest construction plans, and, taken together, also threatened British ability to defend itself at a future date in the Pacific and Far East, and even threatened the supremacy of the Royal Navy itself.

On the other hand, the Treasury argued that Britain could ill-afford to pay for a more extensive fleet modernisation like that of the United States or Japan. In 1914 British debt had stood at around one quarter of gross domestic product (GDP). The cost of waging the war meant that by 1919 it was nearly six times higher than the pre-war level – and three times higher than the comparable 1919 figure in the United States – and rising.<sup>126</sup> Along with the increase in debt, the demand for steel during the war had pushed its cost per ton up to three and a half times the 1914 level, which vastly increased the cost of all kinds of ships.<sup>127</sup> With Britain struggling to maintain its lead over its rivals, both the British Government and the Admiralty had a strong desire to curb the level of construction abroad, and sought talks for future arms limitation.

A conference on the naval question was called for late 1921, and an agreement was reached three months later after many rounds of intense negotiations between the November of that year and the following February. The conduct of the conference and the deliberations themselves are of limited importance to this narrative, although the ultimate conclusions reached must be borne in mind, for they influenced naval construction until the second half of the 1930s: the agreement, crucially, allowed parity in capital ships for the first time between the Royal Navy and the United States Navy. Furthermore, the size of the Japanese navy was

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<sup>125</sup> C. M. Bell, *Royal Navy, Seapower and Strategy* p. 8.

<sup>126</sup> B. R. Mitchell, *British Historical Statistics* (Cambridge: Cambridge University Press, 1988), pp. 601-3.

<sup>127</sup> Slaven, *British Shipbuilding*, p. 70.

formally set at 60% of the British or American level (in other words in a 5:5:3 ratio), with the Italian and French navies much smaller again – each around 60% again of the Japanese total, or just over one third of the British and American levels. Smaller ships were capped at 10,000 tons each, but not subject to the same restrictions.<sup>128</sup> In theory this preserved Britain's place as an unsurpassed naval power and also curbed unrestricted construction of large vessels, two key British aims. However, while the Admiralty wanted limitations in principle, Britain ended up sacrificing a great deal to get it, including a ten year 'pause' in the construction of new capital ships (excepting *Nelson* and *Rodney*, which were to be allowed under the terms of the Treaty – see p.72, below). Moreover, in practice this meant a significant real-terms reduction in the gap between Britain and her principal rivals, the United States and Japan. The Treaty remained in force until the end of 1936.<sup>129</sup>

Until this point, there had been a scarcely challenged belief in politics and industry alike that despite financial pressures Britain would not concede parity to the United States, and indeed might even consider further construction to maintain supremacy on the seas through the building of even larger battleships.<sup>130</sup> More significantly for private naval manufacturers, Britain's pre-conference position as the world's largest navy meant that she had, to all intents, already reached the agreed limit. Thus, while the United States and Japan would be allowed to continue to build up their navies to the agreed ceiling, Britain had to call a halt to construction and wait upon her rivals reaching the Treaty's levels, and closing the gap. As a result, a near-total stop to warship orders was called.<sup>131</sup> Although this served the Admiralty's goal of capping American construction before the US Navy overtook Britain as the world's largest force, which Beatty and D'Eyncourt knew would happen and had accepted, concerns remained over the lack of replacement and refit work – essentially scrapping or refurbishing existing ships before the end of their useful lives – to keep industry in a state of readiness. With the 'pause' in construction of new battleships, and relatively few older ships needing imminent

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<sup>128</sup> Gordon, *British Seapower and Procurement*, p. 70.

<sup>129</sup> E. H. W. Tennyson D'Eyncourt, *A Shipbuilder's Yarn: the Record of a Naval Constructor* (London: Hutchison, 1948), pp. 140-1. Peden, *British Rearmament and Treasury*, p. 9.

<sup>130</sup> These were known as the 'G3' class of battlecruiser. See N. J. M. Campbell 'Washington's Cherrytrees: The Evolution of the British 1921-22 Capital Ships', *Warship* 1 (III) (1985), p. 44.

<sup>131</sup> Johnman and Murphy, *British Shipbuilding and the State*, p. 18.

refits, this left only smaller vessels such as cruisers and destroyers to fill the gap for the next decade.

In financial terms, the Treaty was certainly good news for the Treasury. The large battlecruiser contracts were an immediate casualty, followed soon after by cancellations or heavy modifications to almost every other class of ship on order. The value of the remaining outstanding orders in hand in British yards six months after the signature of the Treaty stood at £721,000. Before negotiations began, it was nearly £12,000,000. In other words, 94% of orders by value had been struck from the balance sheet.<sup>132</sup> Even this figure under represents the scale of cancellations, for many more contracts had been discussed but not yet commenced, and as such were not classified as work 'in hand'.<sup>133</sup> The result of this was that rather than even the trickle of contracts that the previous modernisation programme would have provided and which were necessary to keep even a few of the private yards actively engaged in construction dried up, a situation exacerbated by the fact that any capital ship order placed in 1922 would have provided work for one yard until 1926. For the warshipbuilding sector, the Washington agreement was like the turning off of a tap.

There are two particularly important questions which rise from the outcome of the Treaty. The first is why the leading industrialists in the private naval arms sector had not foreseen such a scenario on the horizon in the way Beatty, D'Eyncourt and others had? In this case, it should be remembered that naval arms manufacturers had plenty of previous experience with (and indeed had come to expect) cyclical market fluctuations. The nature of naval procurement was that a glut of orders might materialise in a short space of time, as was the case in the first half of the 1890s or during the naval race with Germany after 1908, and then be followed by leaner times. Similarly, the cancellation or modification of orders part-way through a contract in response to changing political, strategic and financial situations was not unheard of either, and had been a feature of naval construction for decades before 1918.<sup>134</sup>

For these reasons, there was certainly a broad acceptance in industry that the unprecedented Admiralty construction programme of 1908-18 would not be repeated, and

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<sup>132</sup> Johnman and Murphy, *British Shipbuilding and the State*, p. 19.

<sup>133</sup> Campbell, 'Washington's Cherrytrees', p. 43.

<sup>134</sup> Peebles, *Warshipbuilding on the Clyde*, pp. 68-9; K. Warren, *Steel, Ships and Men: Cammell Laird 1824-1993* (Liverpool: Liverpool University Press, 1998), p. 163.

leaner times would indeed be following.<sup>135</sup> Indeed, the so-called ‘Ten Year Rule’, adopted in 1919, made the presumption that no major war was likely within the next decade, and thus a major construction programme would not occur.<sup>136</sup> The industry was, however, still guided by the belief that Britain’s history as the pre-eminent naval power would ensure it remain ahead of its rivals, especially the United States, and there would be a *general* continuance of post-war construction to this end, even if only through ship replacements rather than a fleet expansion.<sup>137</sup> Moreover, few industrialists on the eve of Washington expected a decade-long strangling of naval orders to follow and for this to be swiftly followed by a slump in both the merchant and passenger markets.<sup>138</sup>

It was these beliefs which had to be quickly revised in the immediate aftermath of Washington. However, it was nevertheless the case that since very few courses of action to revive business activity existed, at least for the naval firms with more specialist product portfolios, it was thus not wholly irrational in the circumstances for this section of industry to pin its belief collectively upon securing some naval orders in the medium-term future. As an aside, the experience of being caught cold supports, on one level, Roskill’s conclusion that industrial influence did not penetrate the political machinery for making decisions on what materiel should be ordered, for had it done so, or had any information made its way out of Whitehall either to the private manufacturers before the conclusion of the Washington Treaty, then the speed and scale of the cancellations in 1922 ought to have been better anticipated.<sup>139</sup>

The aftermath of Washington shows that information sharing between private manufacture and either the Admiralty or Government did not occur in the first-half of the 1920s for the major yards like Vickers, Armstrong Whitworth, John Brown or Fairfield. The possibility of orders being almost completely wiped out for many years does not seem to have been seriously considered at board level of the major shipbuilding companies almost until the ink was dry on the Washington agreement, and not fully accepted for some years after that. Indeed many were still anticipating at least the completion of the orders which had been

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<sup>135</sup> D’Eyncourt, *Shipbuilder’s Yarn*, p. 129.

<sup>136</sup> Richardson, *The Evolution of Disarmament Policy*, p. 11.

<sup>137</sup> Johnman and Murphy, *British Shipbuilding and the State*, p. 19.

<sup>138</sup> Allan Grant, *Steel and Ships: A History of John Brown’s* (London: Michael Joseph, 1950), pp. 71-5.

<sup>139</sup> D’Eyncourt, *Shipbuilder’s Yarn*, pp. 129-30.

placed for the *Hood*-sized 'G3' battlecruisers in 1921, and still put faith in replacement programmes afterwards.<sup>140</sup>

This notion is further reinforced when the Admiralty's own role is considered, for it is also apparent that it had been well aware of the possibility of order cancellations for some time before the conclusion of the treaty.<sup>141</sup> For instance, the debate with the Treasury over future expenditure had been raging in private since 1920 – before further orders were placed – and it was only brought to a conclusion in 1922 after a committee chaired by Winston Churchill had been formed to discuss the subject.<sup>142</sup> Thus, it appears that communication links between the Admiralty and industry were weak, for there was little attempt – despite ostensible concern of the effects the loss of orders might have – to keep the private armaments industry abreast of possible developments.. This meant that industry was left to deal with the consequences. This is certainly odd, because there were relatively close personnel links between the Admiralty and private industry. Before taking up his role as DNC, D'Eyncourt had worked for a long time at both Fairfield and Armstrong's, and a transfer of staff in both directions between Admiralty and private business was not an unusual occurrence before, and during, the Great War.<sup>143</sup> Indeed, pacifist critics later alleged that this showed an unhealthy relationship that was *too* close, and put Britain on the path to war.<sup>144</sup> In this case at least, there appears to be little evidence of such closeness.

Why this was allowed to occur is, therefore, not fully clear. The answer lies in some small part in the post-war political and economic landscape and the post-Ministry of Munitions structure. The new and developing supply framework within the CID – with the PSOC not coming under its remit until 1927 – cannot be readily mapped onto the ordering process during the Great War, when, as D'Eyncourt put it, 'anything could be called for, anything ordered, and all [had] to be ready in the shortest time possible'<sup>145</sup> or indeed the naval race before it. The last time there was anything like a 'normal' pattern of peacetime ship replacement was the pre-

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<sup>140</sup> Campbell, 'Washington's Cherrytrees', p. 43; H. Peebles, 'Warshipbuilding on the Clyde, 1889-1939. A Financial Study' (unpublished PhD thesis, The University of Stirling, 1986), p. 182.

<sup>141</sup> D'Eyncourt, *Shipbuilder's Yarn*, pp. 129-30.

<sup>142</sup> C. M. Bell, *Royal Navy, Seapower and Strategy*, p. 21; *Churchill and Seapower* p. 97.

<sup>143</sup> D'Eyncourt, *Shipbuilder's Yarn*, p. 59.

<sup>144</sup> Anderson, 'Merchants of Death', pp. 19-20.

<sup>145</sup> D'Eyncourt, *Shipbuilder's Yarn*, p. 129.

*Dreadnought* era, which bore little resemblance to Britain's strategic and financial position in the early 1920s. However, by far the larger part of the problem is that the Admiralty, like industry, was both naïve and in denial in the years before and after the Washington Treaty.

To understand fully why shipbuilders were left to react without warning to such major changes, one needs to understand that the Admiralty, like industry, had failed to plan seriously for a world without a regular ship replacement programme. It was not until three years after Washington – when it was abundantly clear that merchant and passenger work had not rebounded and when it was clear that the warshipbuilding sector had failed to diversify into other lines of business, that the Admiralty sought to assist industry directly. Thus, as the section below shows, the experience of Washington had a significant impact on the relationship between the two.

The second unanswered question concerns why the Government were so quick to ignore the warnings of senior figures at the Admiralty – and support Treasury proposals for curbing expenditure – and not continue with even a modest replacement scheme to assist industry. At this juncture, one should focus on the immediate aftermath of Washington and particularly, the Admiralty-Treasury debate over expenditure on the Navy, which would be a recurring theme for the next fifteen years. In 1921, the Liberal-Conservative coalition government, was, as already discussed, highly desirous of concluding an arms-limitation deal with the United States and Japan as quickly as possible to curb spending on an arms race that might otherwise get out of control and potentially lead to another global conflict. This was compounded by the German situation and debt repayment more generally. On top of the war's vast expense, there appeared only a remote chance by this point of extracting substantial war reparations from the Weimar government, or indeed negotiating any substantial reductions in Britain's war debts from the United States in the medium-term.<sup>146</sup> In short, Britain's ability to pay for fleet renewal was heavily constrained in the early 1920s.

As long as this medium-term outlook contained no imminent military or naval threats, the British government's decision to concentrate upon cutting its own cloth on the assumption that

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<sup>146</sup> N. Ferguson, *The Pity of War* (London: Allen Lane, 1998), p. 231. Ferguson, somewhat controversially, argues that Britain could have taken a tougher line and forced Germany to pay more than Germany claimed it was able to pay, but failed to collect on the money owed.

there would be no increased income or a reduction in debt repayments seemed a financially prudent move. By the same token, if future expenditure was not to be made available for defence, both the Admiralty and the Government believed that it should not be done so without at least extracting guarantees from the United States that the opportunity to surpass British supremacy on the seas would not be exploited. Thus, from a financial and strategic point of view, the case for settling the question with the United States was obvious. As a result, the Admiralty had little bargaining power for spending within a general foreign policy that was moving in a very different direction than it had been before the Great War.

It is in part for these reasons that Roskill has called the period from 1919-29 the British navy's 'decade of Anglo-American antagonism'.<sup>147</sup> The fear of being unable to keep pace with the US Navy's spending and thus wishing to agree upon 'parity' against the alternative of being surpassed altogether in the face of extensive US fleet modernisation is not, however, the entire story when it comes to the Admiralty's relationship with the Treasury, with whom it negotiated the finer costs and details of its proposed expenditure schemes. This relationship, which grew more fractious as the 1920s progressed, had a knock-on effect on industry, and helps explain why private manufacturers were forced together (along with, at times, the Admiralty), and why the PSOC's early attempts at supply planning did not yield tangible results before Manchuria.

Financial considerations had not always been so highly prioritised. The Admiralty had essentially gotten its wishes during the war and in the re-tooling boom that followed it. In 1920, for example, (when it was still hoped that the world trade would rebound strongly), the British government had made a public commitment in Parliament to ensuring that her Navy 'would not be inferior in strength to the Navy of any other Power'.<sup>148</sup> This basic fact did not change with Washington. In theory, this was a downwards revision of the 'two power' standard employed before the Great War, where the British Navy was to be sustained at a level capable of engaging the next two largest navies simultaneously, to a 'one power' standard. In reality though, formally consenting to keep pace with a fleet (in this case, the United States) that was, along with Britain's own, far and away ahead of every other on earth, and the one

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<sup>147</sup> S. W. Roskill, *British Naval Policy Between the Wars v.1: The Period of Anglo-American Antagonism, 1919-29* (London: Walker, 1968), p. 3.

<sup>148</sup> Hansard, House of Commons Debate [hereafter HC Deb] 17 March 1920, vol. 126, c1210.

they were least likely to ever face in battle, gave the Admiralty considerable authority – and by extension grounds for seeking increased spending allocations – to construct warships in response to any movement from across the Atlantic. In a world where the fleet was by any measures large, relatively new, and defended an island nation relatively free from external threats, testing the commitment of Parliament to match Britain's Atlantic neighbour could have been a very expensive undertaking for the British purse.

The balance of power in the relationship shifted as the Treasury sought to reaffirm control over spending. Parity alone was therefore not enough, it argued for definite limits on construction. The motivation was thus as much about the Government and Treasury wresting control of policy and spending from the Admiralty as it was about rivalry with the United States. As a result, a clause in the treaty that agreed not only on parity, but to a fixed tonnage (of a little more than half a million tons of capital ships) for the fleet and a defined total number of ships to be maintained, was inserted.<sup>149</sup> It effectively, as C.M. Bell has argued, 'negated any earlier victories the Admiralty had won' on matters of construction over the Treasury between the end of the war and the conclusion of the conference in February.<sup>150</sup> At a stroke, it removed much of the authority the Admiralty had on matters of naval construction. The outcome of the Treaty in 1922 therefore marks a watershed involving among other things an important power shift from the Admiralty to the Treasury, and served as one half of a vicious double blow for the private arms manufacturers. Not only were future prospects for naval construction badly hampered, but it was occurring against a backdrop of weak global growth and weak demand for merchant and passenger vessels.

With the exception of two new ships (*Nelson* and *Rodney*, there was to be a ten year 'pause' on new construction.<sup>151</sup> On one hand given the relative youth of the fleet in the 1920s, with the bulk of the larger ships (in the *Queen Elizabeth* and *Revenge* classes of battleship and the *Renown* and *Courageous* classes of battlecruisers) having only entered service between 1915 and 1917, it was unlikely – and both the Admiralty and industry were aware of this – that they would have been replaced before the 1930s even in the absence of an agreement or an upturn in financial fortunes. However, it could have, in the absence of the clause, offered a

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<sup>149</sup> C. M. Bell, *Royal Navy, Seapower and Strategy*, p. 13

<sup>150</sup> C. M. Bell, *Royal Navy, Seapower and Strategy*, p. 13.

<sup>151</sup> C. M. Bell, *Royal Navy, Seapower and Strategy*, p. 13.



solution to the problems faced. Thus, there was no prospect of such a course of action before 1932 at the earliest, and despite the Admiralty's loud protestations over the policy's likely effect on private industry, the treaty and clause were ratified.<sup>152</sup> Taken together, these were the foundation blocks of a different approach from both the Admiralty and private industry to the problems they collectively faced.

### 3.3 Impact on Industry – Post-Treaty construction, 1922-31

The Washington Treaty was a disaster for the private naval arms industry. Although it cannot be said with any certainty what might have been built in the absence of a treaty in the later 1920s, what *was* built in the following decade was a miniscule amount compared by previous standards. When denoted in terms of the large, expensive (and most profitable) orders for battleships, battlecruisers or aircraft carriers, just two major ships were laid down (at Armstrong's and Cammell Laird respectively), between the signing of the treaty and the Japanese invasion of Manchuria five months short of a decade later.<sup>153</sup> These were *HMS Nelson* and *HMS Rodney*, and both were limited to 35,000 tons – 11,000 tons lighter than the older *HMS Hood* – by the restrictions agreed at the Washington Treaty. While construction of the 'medium sized' (light or heavy cruisers) was initially left unrestricted by the treaty (although this loophole was soon closed) providing they were no more than 10,000 tons in displacement, comparatively few – nineteen – were actually built during from 1922 to 1931.<sup>154</sup> Of those completed, all ranged in size downwards to 6,000 tons and cost between £1.25 million and £1.75m pounds – a fifth of the cost of the *Hood*. Of this number, more than half were built by the Royal Dockyards, leaving just nine orders for the entirety of private manufacture. John Brown and Fairfield received two each, while Vickers, Palmer, Cammell Laird, Beardmore and Hawthorn Leslie received one, and the rest none at all.<sup>155</sup>

The private industry, comprised of little more than a dozen separate firms until 1930, was otherwise fed mainly on a diet of destroyers (nineteen), submarines (fifteen, of which twelve were built by Vickers) and small support ships, none more than a twentieth the size or cost of the *Hood* for the rest of the decade. To put it another way, the *King George V* class of five

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<sup>152</sup> Roskill, *Naval Policy Between the Wars* v.2, p. 22.

<sup>153</sup> Scott, *Vickers*, p. 216.

<sup>154</sup> McMurtie (ed), *Jane's Fighting Ships*, p. 202.

<sup>155</sup> McMurtie (ed), *Jane's Fighting Ships*, p. 202.

battleships, ordered in the space of twelve months under the rearmament programme which started in 1936, was alone worth almost as much to the private naval arms industry as the total income from the entire naval programme between February 1922 and September 1931.<sup>156</sup> The comparison with war conditions is even less favourable; the main class of light cruiser – the ‘C’ class – comprised twenty-eight ships (twenty-one privately manufactured), while the last destroyer scheme before 1918 led to so many orders from the private industry (sixty seven) that six had to subsequently be transferred to the Royal Dockyards for completion.<sup>157</sup> In all, Britain launched around 300,000 tons of naval vessels between 1920 and the beginning of rearmament sixteen years later, an average output of less than 20,000 tons per year. By comparison, in the five years before the First World War the figure was seven times higher, at 135,000.<sup>158</sup>

### 3.4 Industry responses 1922-26: Price cutting, foreign orders & diversification

Faced with the prospect of a long period with limited armament orders, the initial response from some naval arms manufacturers was two-fold. The first was to attempt to undercut rivals, and the second was to diversify into other sectors or into other activities in the shipbuilding sector. In normal circumstances, price cuts could help to stimulate demand and offer a path back to profits. In the 1920s, this was not the case. The unique set of circumstances – namely that shipping lines already had a young fleet of post-war ships following the short construction boom, meant that cutting prices (e.g. a typical cargo ship costing over £250,000 in 1920 was on offer for under £60,000 by 1926<sup>159</sup>) only hurt the firms that were competing against each other for the few contracts that were available without attracting any new orders.<sup>160</sup>

Another option was to attempt to sell more naval vessels to foreign navies. This had the advantage of utilising idle plant and skills in a better way than could be achieved through merchant orders. Not surprisingly, the Admiralty (if not always the Treasury) saw some merit

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<sup>156</sup> For a fuller breakdown of costs, see Peebles, *Warshipbuilding*, pp. 105-117.

<sup>157</sup> McMurtie (ed), *Jane's Fighting Ships*, p. 202, p. 211.

<sup>158</sup> Derived from figures in Slaven, *British Shipbuilding*, p. 63, 73. Indeed, in the ten years before that (1899-1908), it was still more than four times higher, at 82,000.

<sup>159</sup> Slaven, *British Shipbuilding*, p. 72.

<sup>160</sup> Slaven, *British Shipbuilding*, p. 103.

in this scheme.<sup>161</sup> However, while foreign contracts were a part of 1920s (and 1930s) business that should not be overlooked, they did not form a consistent or reliable line of work. Every large naval power possessed its own and often well-developed industry, and those without a large industry were not usually in possession of a large fleet, and so were usually not in the market to place massive orders with British firms. Moreover, despite the British belief in the superiority of their own industry, such foreign customers had the luxury after 1919 of approaching experienced constructors on both sides of the Atlantic, as well as in the Far East. The effects of the Washington were also felt here, too, for although some navies had some space before reaching their construction 'cap', the British industry was competing with the rest of the world for orders. As a result, private British industry still had to rely overwhelmingly upon the Admiralty for contracts, which by extension, put it at the behest of its paymaster, the British Treasury. The Treasury, for its part, was either naïve or overly optimistic in its belief in the 1920s that foreign orders would make up for some of what was lost in cancelled British contracts.

However, while passenger and merchant shipbuilding had similar problems of chronic overcapacity that severely limited the demand for new ships, some firms did have pre-war experience in other sectors, allowing for the possibility of these avenues to be reopened. William Beardmore of Dalmuir was perhaps the most active in this regard: by 1925 the firm made cars, motorcycles, diesel engines, locomotives and even aircraft.<sup>162</sup> Armstrong Whitworth – with some pre-war experience in cars and aircraft – was not far behind, adding locomotives to its portfolio in 1920. The same was also true for Vickers. Cammell Laird, which only had significant pre-war experience in manufacturing railway wheels, had by 1925 expanded its portfolio to make entire carriages, with some notable success.<sup>163</sup> Others were slower to adjust or failed to adjust at all: Brown, Denny and Fairfield are among a number that stuck rather more rigidly to the manufacture of ships.

Diversification was not however a panacea for the structural problems of the naval arms manufacturers. Having the experience and plant capable of manufacturing locomotives or diesel engines gave firms some natural strengths and advantages, but it took much more to

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<sup>161</sup> C. M. Bell, *Royal Navy*, pp. 159-161.

<sup>162</sup> See Hume and Moss, *Beardmore*, pp. 180-198 for an overview.

<sup>163</sup> Warren, *Steel, Ships and Men*, pp. 210-55.

turn around the fortunes of an entire company. For example, even with a stream of orders for locomotives, aircraft and some merchant shipbuilding work after 1922, the Beardmore yard was losing significant sums of money by 1924.<sup>164</sup> Locomotives or engines were undoubtedly useful stop-gaps to bolster other income or additions to shipbuilding and engineering firms in times of need, but these were ultimately still shipbuilding and engineering firms first and foremost, and were large firms that relied on the largest and most expensive orders – naval vessels – to keep their engine plant, slipways, forge and research arms at a minimum level of activity at all times.<sup>165</sup>

Without these orders, diversification was unable to turn the tide, and there was a distinctly downward trend towards collapse for Beardmore, which duly arrived in 1930. Armstrong-Whitworth fared only marginally better. After some years of poor results, it was involved in an unequal merger with the largest firm of its kind, Vickers, in 1926. Members of the larger firm ended up comprising the vast majority of a newly constituted Board of Management, and the firm formally came into existence in October the following year.<sup>166</sup> Cammell Laird's rolling stock business was at least a moderately successful case, and merged this part of their enterprise with Vickers equivalent to form the new Metropolitan Cammell Carriage Company in 1929. However, even the profits and shared costs realised here were not enough to turn around the fortunes of the parent Cammell Laird Company.<sup>167</sup>

### 3.5 Admiralty Responses I: Renewed Treasury battles 1924-1926

The inescapable conclusion is therefore that the naval arms industry suffered badly in the 1920s. It was ill-prepared and ill-equipped to diversify production to other sectors, held little recent experience in much except wartime defence work, and owned over-expanded and expensive plant in peacetime. However, it was not only industry which suffered. The Treasury's wish to cut expenditure overruled the Admiralty desire to preserve industrial capacity, but this was only part of a larger narrative of Treasury attempts to curb the power and influence of the Admiralty with regards to spending. This story did not start and finish at

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<sup>164</sup> Hume and Moss, *Beardmore*, p. 181.

<sup>165</sup> Hume and Moss, *Beardmore*, p. 182-3.

<sup>166</sup> Scott, *Vickers*, p. 166.

<sup>167</sup> Warren, *Steel, Ships and Men*, p. 215.

Washington; this was only the first blow. Treasury dominance grew even more pronounced throughout the decade and until the middle of the 1930s.

The ‘normal’ process in peacetime was for the Admiralty to negotiate directly with the Treasury over the funds allocated to it, and for a great deal of haggling to go on before the final figure was settled – normally lower than the Admiralty’s first ‘estimates’ of needs, but higher than the first figure proposed by the Treasury.<sup>168</sup> In the event of an impasse being reached, the First Lord of the Admiralty held the ‘constitutional right to take disputes with the Chancellor of the Exchequer to the Cabinet’, although here he was just one of many men – and below the Chancellor in the pecking order.<sup>169</sup> Thus, a complete breakdown in discussions to the extent that Cabinet involvement was necessary was a rare occurrence, and when they happened, it usually suggested fundamental differences of opinion. Insofar as the post-war post-Washington years were ‘normal’ for naval procurement, this was the system that was expected to work between the Admiralty and Treasury.

However, evidence of the primacy of the Treasury in this period is not hard to find. The Admiralty tried two public schemes to assist private manufacturers, with the aim of providing a steady stream of work within the terms of the Washington Treaty. Both of these were heavily modified and eventually cancelled by the Treasury. The first was to provide a support fund of £5m through an increase to the navy estimates to provide work and offset unemployment. This was proposed in 1924, although the Treasury cut two-thirds from this figure and refused to renew it in later years.<sup>170</sup> An attempt to guarantee the loans made to shipyards to allow them to undertake contracts before payment had been received lasted only a little longer, and was terminated in 1926.<sup>171</sup>

Treasury dominance is perhaps most aptly illustrated during the naval ‘cruiser crisis’ of 1925, which involved at its centre the Chancellor of the Exchequer, Winston Churchill, a

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<sup>168</sup> R. P. Shay, *British Rearmament*, p. 25.

<sup>169</sup> ‘Difference between Treasury Control over Civil Departments and over Service Departments’, 1934 TNA T160/580/10; Gordon, *British Seapower and Procurement between the Wars*, pp. 96-7. N.B: The method of cataloguing Treasury files in the National Archives has recently changed. The old method, found in earlier published work, has a longer file number, beginning with F, in place of the final set of digits. In this case, this record could previously be found at T160/580/F14227. See also note 297, p.122.

<sup>170</sup> ‘Minutes of Meeting of the Admiralty Board’, paper 1813, 18<sup>th</sup> February 1924, ADM167/69.

<sup>171</sup> Gordon, *British Seapower*, p. 77.

former First Lord of the Admiralty and Minister of Munitions. The crisis unfolded because the Admiralty, keen to find other ways to maximise the strength of the British fleet, had recognised the treaty loophole regarding cruiser construction. The restriction as agreed at Washington only applied to the size of each vessel, not the number constructed. Thus, they sought to compensate for the cancellations in large battlecruisers elsewhere by instead ordering more light cruisers. These were argued for on the basis of being essential for protecting the trade routes that Britain, as an island nation with a large overseas Empire, relied on to a much greater degree than other powers.<sup>172</sup>

The ships in the existing fleet, based on pre-war technology which had since rapidly evolved, were now comparatively slow, lacked operating range and were poorly armoured compared to the latest American and Japanese designs. With Japan perceived as a potential future threat, there was a desire among the Royal Navy's senior figures for an increased presence in the Far East, and so the Admiralty had announced a new construction program in 1924. The scheme was intended to last for at least a decade, and would, if fulfilled, be an important boon to the private industry which had of course witnessed an almost complete cancellation of orders two years earlier. The calculation was made at this point that Britain would need at least seventy cruisers (split between trade protection and supporting the main fleet) to reach an adequate level of defence, representing a numerical increase of nineteen vessels over and above current levels.<sup>173</sup> However, when factoring in the ships in service that were due to reach the end of their useful lives, the conclusion was that at least 46 new cruisers would be needed within ten years.<sup>174</sup> Based on these plans, the Treasury estimated a budget increase of nearly 50% by 1928 on the 1924 naval expenditure estimates, working out at another £25m annually on top of the £55m agreed for 1925.<sup>175</sup>

Most of this budget increase was to be spent on new construction. The wrangling over financing commenced almost immediately. On first appearances, it might have been suggested that Winston Churchill was the ideal Chancellor for the Admiralty to deal with. Quite apart from his previous role as First Lord of the Admiralty, he had been a strong backer of naval

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<sup>172</sup> C. M. Bell, *Churchill and Seapower*, pp. 103-4.

<sup>173</sup> C. M. Bell, *Churchill and Seapower*, p. 104.

<sup>174</sup> C. M. Bell, *Churchill and Seapower*, p. 105.

<sup>175</sup> C. M. Bell, *Churchill and Seapower*, p. 103.

expenditure programmes between 1921 and as recently as 1924 and was ‘deeply impressed’ by the Admiralty’s view of a Far Eastern menace. Moreover, he had under the short Labour government between January and October 1924 attacked its policy of halting work on the British naval base in Singapore.<sup>176</sup> However, following the re-election of a Conservative government and his subsequent switch to the task of balancing the budget and tackling a weak economy as Chancellor, his enthusiasm for naval expansion quickly waned.<sup>177</sup>

Churchill’s reasoning was two-fold: He believed that the prospects of war with Japan in his lifetime were remote and likely to remain that way, with the implication that the international situation did not resemble the situation between Britain and Germany before the Great War. Secondly, he challenged the Admiralty’s core belief that the improved fleet could land a decisive victory over the Japanese in the event of any war. Britain, he argued, lacked the resources to conduct a prolonged campaign so far from home waters, and the cruiser programme would make little difference to this predicament. Thus, he was in favour instead of a far more limited (and much cheaper) ten-year approach of holding and fortifying the Singapore base, and the commitment to a policy of containment against Japanese intentions in the area.<sup>178</sup>

The Admiralty, unsurprisingly, took a different view. However, Churchill held the ear of a largely sympathetic Stanley Baldwin, the Prime Minister. In letters to him in late 1924 and early 1925, he argued for reduced expenditure along the lines that there would be little prospect of a war against *any* major naval power for the next twenty years, in effect doubling the time any construction programme would need to be completed in, or stopping it altogether until the economy improved.<sup>179</sup> He also took his views to the CID, where he gained support from its Foreign Office representatives. His claim was that a complete cancellation of everything other than submarines and support vessels could save almost £10m a year over two years, and still represent an ‘ample’ increase on the earlier quoted figure of £55m.<sup>180</sup> On top of the CID, Churchill still needed Cabinet support for these proposals. In effect he was putting

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<sup>176</sup> C. M. Bell, *Churchill and Seapower*, p. 100.

<sup>177</sup> J. Neidpath, *The Singapore Naval Base and the Defence of Britain’s Eastern Empire, 1919-41* (Oxford: Clarendon Press, 1981), p. 65.

<sup>178</sup> Neidpath, *the Singapore Naval Base*, p. 104; C. M. Bell, *Churchill and Seapower*, p. 105.

<sup>179</sup> Churchill to Baldwin, Treasury Supply Papers, 15 December 1924, TNA: T161/243/S25613/ANNEX/5.

<sup>180</sup> ‘Navy Estimates’, 29 January 1925, TNA: CAB24/171.

the power of his Treasury view to the test against the countervailing Admiralty view of what expenditure levels the government believed would be ‘necessary’ for defence.

All bar one member of the Cabinet sided with Churchill. Only Lord Cecil agreed with the Admiralty (and only then because the First Lord was an ‘old friend’)<sup>181</sup> over the proposed cruiser scheme. Given the state of Britain’s finances and the proposed spending cuts elsewhere, this was not an unforeseen result. It did not prevent the crisis which then followed. Several senior naval figures responded to the Cabinet’s decision by threatening to resign from positions in the CID, the Admiralty and government administration if Churchill’s restrictions were implemented. Baldwin, finding himself in the middle of the wide chasm of opinion that separated the sides, sought a form of compromise – or at least the forestalling of a conclusion – by instructing the CID to form an independent committee to advise on the subject.<sup>182</sup> The deliberations that followed were lengthy, acrimonious, and outside the remit of this work. It does however suffice to note three things about them: The first is that this highlights further deterioration in the fractious Admiralty-Treasury relationship following the 1921 expenditure debate and 1924 subsidy, the second that this represents a rare incidence before Manchuria in 1931 where the CID’s subcommittees were called upon by Cabinet to answer any questions with immediate consequences, and the third that the tactic of forming committees to examine and advise (and forestall) was one which would be returned to throughout the 1930s.

Importantly, in the cruiser debate the PSOC was not involved, for it remained until 1927 under the auspices of the Board of Trade. Thus, the pre-1927 CID was almost wholly basing its decisions on the assessment of threats given by the CoS, and did not approach the question with the impact on industry in mind.<sup>183</sup> Even when chaired by the pro-Navy Cabinet secretary Maurice Hankey, the CID thus still found it difficult to justify the extra expenditure the Admiralty demanded based on the arguments which had been put forward, and eventually sided with the Cabinet and Treasury. Its conclusion was that the naval budget should be fixed at £58m, which was in fact marginally lower than Churchill’s earlier offer.<sup>184</sup>

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<sup>181</sup> C. M. Bell, *Churchill and Seapower*, p. 107.

<sup>182</sup> C. M. Bell, *Churchill and Seapower*, p. 108.

<sup>183</sup> The implications of the change of structure become apparent in the aftermath of Manchuria, for a discussion, see chapter 4, below.

<sup>184</sup> CID 199<sup>th</sup> Meeting, 2 April 1925, TNA: CAB2/4.



The report came to the Cabinet in July 1925, and the same pattern repeated itself: whilst the plan to restrict naval expenditure found the support of a sizeable majority, the Admiralty could at least count on Baldwin's wish to avert another round of walkouts and the possibility of resignations. Thus, a form of compromise was reached by agreeing to a total of seven cruisers being laid down over the next two years, with expenditure on them notionally to be clawed back from future naval estimates and on the condition that the Admiralty agreed to find 'offsetting economies', or in other words, to reduce administrative and overhead expenses.<sup>185</sup> This represented a modest improvement in the number of ships built, although it was still six fewer than the Admiralty had originally asked for. All in all, this episode, while neither a complete victory for the Treasury nor a complete humiliation for the Admiralty, demonstrated quite clearly the power of the former's scrutiny over the naval budget.

Like Washington, the cruiser crisis was bad news for private manufacture. Even the most positive development of the talks – the agreement on orders for seven additional ships – was not as good as it may first appear. The commitment to reduce Admiralty expenditure in other ways meant that the State-maintained Royal Dockyards (which came with overheads that cost the Admiralty money whether they were actively in use or not) were now under more pressure to pay their own way. The Dockyards were, of course, another centre of capacity, skills and research and as such the construction of ships in vacant Royal Dockyards could never be abolished entirely – even if the Admiralty desired the preservation of private capacity. Thus, as budgets were cut further, it made more financial sense to keep Royal Dockyard capacity at least partially occupied, as staffing and overhead costs there were allocated to the Admiralty budget. Therefore despite the earlier warnings about damage to skills and facilities, the decision was taken that just three of the new ship contracts – for the *London* and *Norfolk* classes – were to be placed with private arms manufacturers.<sup>186</sup>

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<sup>185</sup> C. M. Bell, *Churchill and Seapower*, p. 109.

<sup>186</sup> McMurtie (ed), *Jane's Fighting Ships*, pp. 38-9.

## Chapter Four: From competition to collaboration: The Warshipbuilders' Committee and the National Shipbuilders Security Scheme, 1926-31

The Washington agreement, weak global trade, failed diversification and the cruiser crisis painted a depressing picture for naval arms manufactures at the beginning of 1926. It was the suffering experienced through the lack of orders on one hand and the sector's own inability to make up the shortfall elsewhere on the other which prompted more radical action and drove firms together in new ways. It was against the backdrop of the cruiser crisis and naval treaties in the mid-1920s that the Warshipbuilders' Committee (WSBC) was formed. The committee grew out of other unsuccessful attempts to assist private industry – discussed below – in 1925 and 1926 which drove shipbuilding firms towards collaboration rather than competition. Unable to count upon the Admiralty winning any future increases from the Treasury or Cabinet over naval expenditure in the medium term, the individual yards soon realised that the process of competitive tendering between them was unsustainable in the light of insufficient orders to go around, and could even drive most of the industry out of business.

By 1926, the position was becoming especially acute; the Coventry Ordnance Works had closed altogether, while Beardmore, Scott and Yarrow had completely run out of profitable work, naval or otherwise, and Palmer and others fared little better.<sup>187</sup> Sir Alexander Kennedy, the Chairman of Fairfield, summed up the mood of firms in a similar position to his own when he noted despondently in a speech: '...today private firms [find] themselves burdened with resources and equipment capable of meeting naval requirements far beyond any programme that might for some years to come – if not for ever – likely to be laid down'.<sup>188</sup> His words could have as easily come from the First Lord; he was after all providing the hard evidence which supported Beatty's and D'Eyncourt's worst fears.

### 4.1 Admiralty responses II: Bending rules

The Admiralty for its part had long been a champion of the need for state funding (through a higher naval budget) to provide firms with a minimum level of orders to ensure

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<sup>187</sup> Peebles, *Warshipbuilding*, pp. 111-2.

<sup>188</sup> Sir Alexander Kennedy, speech at launch of *Taranaki*, *Glasgow Herald*, 12 December 1926.

survival, even if it would still be a long way from providing the private industry to stand a chance of maintaining the world-leading position it had carved out before Washington. On top of the heated discussions over the level of the naval budget, the Admiralty had also devised several schemes to preserve capacity of key items (where few alternative sources of supply existed) in the mid-1920s, but these were often poorly conceived and, for the most part, did not work particularly well. Postan has asserted that the Admiralty's concerns over naval gun capacity caused them to give Vickers a 'virtual monopoly of contracts' for the rest of the 1920s.<sup>189</sup> While capacity preservation was certainly a priority, the 'monopoly' is not what it seems here. Guns were a key production bottleneck, but Postan does not distinguish between gun mountings – the large, swivelling, turret part of the gun, and the other parts of the gun, including the forging – the tubes and the barrel – and surrounding mechanism of the gun. The Admiralty could hardly give a monopoly to Vickers in the first instance: from 1925 it was the only firm in the country capable of making mounts, so it had a monopoly by default. In terms of forgings, the Admiralty split the small amount of available work proportionally between Vickers, Armstrong's and Beardmore.<sup>190</sup> However, Postan is correct in his assertion that the Admiralty were very worried indeed about the condition of private facilities.

Thus, the gun case brings us to a scheme that was tried and returned to throughout the second half of the 1920s – that of finding ways to bend normal contract procedures to ensure funds were released to firms in a more predictable fashion. The key figure here was the man responsible for overseeing procurement, the Third Sea Lord and Controller of the Navy from 1925-8, Sir Ernle Chatfield. Chatfield, who sat on the PSOC and was the direct superior of the Engineer in Chief of the Fleet (at this point Harold Brown, Supply Committee III's chairman), had expressed his deep concern at the decline in naval capacity, and noted the '[great] importance of retaining latent strength for some future danger' Because of his, and the responsibility he felt 'for the future material development of the Navy', Chatfield believed it was to 'the great private firms [which he] had to look'.<sup>191</sup>

Thus, even before the cruiser crisis, discussions had been held with steel manufacturers capable of making armour plate – another bottleneck – for an additional cost to be added to

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<sup>189</sup> M. M. Postan, *British War Production (History of the Second World War)* (London: HMSO, 1952), p. 48.

<sup>190</sup> Gordon, *British Seapower*, pp. 86-7; Johnston and Buxton, *Battleship Builders*, p.174

<sup>191</sup> E. Chatfield, *It Might Happen Again: The Navy and Defence* (London: Heinemann, 1947), p. 3838.

bids to cover ‘dead charges for plant not fully used but kept in being’.<sup>192</sup> After the failure to get the funds for direct assistance past the Treasury in 1924, Chatfield spearheaded an agreement in 1925 with firms over armour which essentially agreed to pay a higher price for small orders – in other words providing a subsidy in the form of a cost premium to steel firms to keep otherwise idle plant in operation. He went to great lengths to be secretive about this agreement, almost certainly coloured by the experience of two failed assistance schemes and the cruiser crisis, and so only informed the PSOC of it in guarded terms once the terms had been finalised with the manufacturers.<sup>193</sup> Indeed, when the Auditor-General found out about it the following year, the Treasury immediately protested, and after a payment of £60,000 was made despite no armour being ordered at all in 1929, the scheme collapsed.<sup>194</sup>

Compared with an attempt to get £5m added to the naval budget, this scheme was only a very limited attempt at assistance, but nevertheless still failed. This experience, coupled with the cruiser crisis, forced a change of tack. It pushed them towards working with industry to form a rota to share orders, and ensure the steadier and more predictable stream of funds which had formed the basis of earlier schemes. This is what would become the Warshipbuilders’ Committee. Very little has been written about the operation of this organisation. Extensive documentation of the group’s dealings can rarely be found in business archive collections. Indeed, in the extant and accessible archival material relating to the committee, there are references to the discussions between the yards only in the records of two shipbuilders – Scott and Brown. While these two collections contain letters and circulars from the other yards, for example from Vickers, letters and circulars in the other direction do not appear in the Vickers archive, suggesting that they may have been deliberately destroyed. Moreover, even in the two collections where material on the WSBC has survived, it is either fragmentary or extensively fire damaged. As a result committee records from before 1930 lack the quantity and quality of documentary evidence available for its later years, and its activities for the earlier period are thus still shrouded in a degree of mystery. However enough remains from it and especially from later references to allow and outline a picture of their early work, and thus a coherent narrative may be constructed. In order to do this, part of what follows

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<sup>192</sup> Gordon, *British Seapower*, p. 82.

<sup>193</sup> ‘24<sup>th</sup> Meeting of the Principal Supply Officers Committee’, PSO 24<sup>th</sup> Mtg., 25 February 1926, TNA: CAB60/2.

<sup>194</sup> Gordon, *British Seapower*, p. 84.

below is drawn in part from post-1931 records.<sup>195</sup> However, before the relationship between the Admiralty and WSBC can be fully described, some background is required first.

#### 4.2 Composition, organisation and membership: the destroyer rota, 1926-9

On the infrequent occasions when the WSBC is mentioned in broader published studies, some useful, though sometimes contradictory, points have emerged: it began life as an unofficial and secretive 'rota' designed to share out Admiralty work on destroyers; it had no relation with the organisation of the same name which existed as an employers' union from 1899-1911<sup>196</sup>; and the Admiralty either directly assisted the group's creation, or at the very least (and for the reasons above) were willing to overlook its existence as an organisation for the benefit of themselves and industry as a whole.<sup>197</sup> On the last point, there appears to be some difference in the conclusions drawn, although given the nature and scarcity of source materials (and that the WSBC is usually of tangential interest to other studies) this is not surprising. For instance, Hugh Peebles and Anthony Slaven conclude separately that the Admiralty assisted warship builders with the operation of an informal destroyer rota in the 1920s stemming from an arrangement dating from November 1926<sup>198</sup>, while Lewis Johnman and Hugh Murphy believe that the Admiralty and Government had no knowledge whatsoever of this 'price-fixing ring' until the group was forced to declare its existence in front of the Royal Commission for the Private Manufacture of Arms in 1935.<sup>199</sup> Johnman and Murphy also note that the Admiralty were then prepared to deal with them as a single body afterwards.<sup>200</sup> As will be shown, the shipyard sources, when used in combination with Admiralty and other

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<sup>195</sup> The main bulk documentary evidence for the WSBC comes from four badly fire-damaged boxes in Scott shipbuilders at the Scottish Business Archives, University of Glasgow. Correspondence with not only Barr at the SEF, but most other committee firms, along with minutes and circulated notes, survives in reasonable quantities. From this, it is possible to establish the prominent role several company directors played; yet Vickers, like most other yards involved in regular correspondence, have no traces in their own collections. It is likely therefore to assume that – possibly along with the papers in Scott – the intention was to destroy all evidence of their dealings once the Admiralty instigated cost investigations in 1941. Most of what follows is drawn from the fire-damaged letter folders at the University of Glasgow, GD319 12/7/5-7.

<sup>196</sup> For more details on this group, see: Federated Admiralty Contractors papers (MSS.237/6/A), Modern Records Centre, University of Warwick.

<sup>197</sup> L. Johnman and H. Murphy, 'Welding and the Shipbuilding Industry' in Richard Harding, *The Royal Navy 1930-2000* (London: Routledge, 2005), p. 101; A. Slaven, 'A Shipyard in Depression: John Brown's of the Clydebank 1919-38', *Business History* 19 (II) (1977), p. 200; Peebles, *Warshipbuilding*, p. 111.

<sup>198</sup> Slaven, 'A Shipyard in Depression', p. 200; Peebles, *Warshipbuilding*, p. 111.

<sup>199</sup> Johnman and Murphy, 'Welding', p.101.

<sup>200</sup> Johnman and Murphy, 'Welding', p.101.

papers, help to shine a new light on the organisation and motives of the WSBC, help highlight how much was (and frequently was not) known about their existence, and add colour to what has so far been only a brief discussion of the highly secretive nature of the group's business.

The WSBC was, in its initial form in 1926, composed of fifteen firms. These were Beardmore, Vickers, Armstrong-Whitworth, John Brown, Cammell Laird, Denny, Fairfield, Hawthorn Leslie, Palmer, Scott, Stephens, Swan Hunter, Thornycroft, White and Yarrow.<sup>201</sup> In other words, it was the same list of firms as comprised the naval armaments industry in 1918, with the exception of the Coventry Ordnance Works, which had folded in 1925. In addition, Vickers and Armstrong-Whitworth merged on 1 January 1927, Beardmore collapsed in 1930, followed by Palmers in 1933, while Harland and Wolff was added sometime during or just after November 1930. Otherwise the membership stayed entirely constant until at least 1942.<sup>202</sup> Indeed, excluding the government-owned Royal Dockyards, no naval vessel carrying a gun larger than six inches or weighing more than 1,000 tons was built for any navy in the world in British yards at any point between the wars by any firm except those listed. On occasion some specialist engine manufacturers, like Parsons and Wallsend, were included in discussions, although not in the committee's first years when it operated the destroyer rota only. These firms were, not surprisingly, only part of discussions for contracts or bids for machinery – for example the engines for *HMS Warspite* – in which Parsons were the successful bidder.<sup>203</sup>

The committee was created a time of greater industry collaboration more generally. The Shipbuilders Conference, formed in 1928, was a parallel organisation born out of the desire to deal with the 'rather uncoordinated state of the industry on the commercial and economic side...which in the grievous economic circumstances...both existing and imminent, threatened grave danger to the...shipbuilding industry as a whole'.<sup>204</sup> The Conference was a much broader initiative which brought together dozens of shipbuilders of all kinds and instigated a broad

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<sup>201</sup> Table 4.2: 'Shipbuilder Codenames as of 1932 *SECRET: Minutes of Private Arrangement made by letter concerning 'Minespools 32'.*' GUAS GD319 12/7/7.

<sup>202</sup> Again, the fragmentary nature of the sources makes pinpointing exact dates difficult, although it is possible to determine that Harland and Wolff's membership was to be ratified at a meeting in on the 26<sup>th</sup> of November 1930, and that all of these firms were still active within in the group in 1942. See GUAS: GD319 12/7/6.

<sup>203</sup> See table 4.2, below.

<sup>204</sup> J. R. Parkinson, *The Economics of Shipbuilding in the United Kingdom* (Cambridge: Cambridge University Press, 1960 [reprinted 2011]), p. 136.

initiative for an industry-wide ‘tendering expenses scheme’ to pay a 1% levy on successful tenders into a collective pot with the purpose of reimbursing yards that were unsuccessful in their bids<sup>205</sup>, so as to avoid firms cutting even further into their estimates or profit margins to secure contracts.

The WSBC was, however, a very powerful group, even when examined in the context of the 1920s when individual firms involved were at their weakest owing to poor trading conditions. After all, no other firms in Britain, except those in the group, could meet the demands of constructing a complex warship or had any experience of Admiralty work. Furthermore, it was widely accepted that it was politically impossible – given the precarious position but also the world-leading reputation of British shipbuilding and the degree of technical secrecy involved – for the admiralty to place an order abroad, even if it was technically possible or financially more prudent. Instead, the aim in the 1920s was to assist British firms in winning orders from foreign navies.<sup>206</sup> This sits in stark contrast to the Shipbuilders Conference, which did have to face competition from abroad and a wide range of different customers to compete for. Thus, even if the WSBC was operating as a subset of members of the Shipbuilding Conference, it had some very notable advantages over it.

The crux of understanding the committee’s formation into a work-sharing rota is to understand the shared interests of not only the individual members, but also the initial shared interest between Admiralty and industry for the preservation of industrial capacity. The Admiralty, like industry, had reiterated their fear of a ‘race to the bottom’ if strictly secret competitive tendering continued, which could drive yards out of business as each fought to win a contract at unsustainable prices.<sup>207</sup> From the Admiralty’s point of view, such cost cutting had obvious disadvantages. While it might temporarily provide the taxpayer with better value for money, only the most efficient yards would survive, and thus the total capacity amongst specialist yards would as a result be severely restricted in future times of need. Moreover, upon a return to relative prosperity when truly competitive tendering could be reinstated, the

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<sup>205</sup> ‘Proposals for a Tendering Expenses Scheme and Other Methods to Aid Shipbuilding’, 1928, NMM: SRNA4/S50.

<sup>206</sup> C.M. Bell *Royal Navy*, pp. 149-157.

<sup>207</sup> 24<sup>th</sup> meeting of the Principal Supply Officers Committee, 25 February 1926, TNA: CAB60/2.

more firms still in existence at that point the better, as a return to normal business rivalry would ensure value for money remained strong and facilities stayed up to date.

Despite this, not every yard was initially convinced of the merits of the group: Eustace Tennyson D'Eyncourt, the former Director of Naval Construction (DNC, and not to be confused with the Director of Navy Contracts), was at this point employed as a director of Armstrong's (a position he held until 1927), and he expressed reservations in the committee's early days at the ideas of agreeing prices and implementing a levy. At a meeting in June 1926 he reported that his 'Chairman would have nothing to do with [such schemes]', although it is not clear what his own personal views were on the matter, especially in light of his earlier warnings of the decline of the naval armaments industry.<sup>208</sup> Nevertheless, it would appear his chairman and his firm were apparently soon talked round, as they were listed only a few months later as participants in committee. The first operation of the scheme, agreed at a meeting which D'Eyncourt attended, showed the clear advantages for both the yards involved and the Admiralty. The firms first devised a three-year rota relating to destroyers orders only. A very brief attempt had been made earlier (in 1925) along similar lines to devise a cruiser rota, but the problems of the 'Cruiser Crisis' killed the scheme off and shifted minds towards destroyer contracts, which was the focus of discussion in 1926. Each was allocated a position in the rota by the drawing of lots and allowed to bid at a price agreed amongst the members, a level at which it was anticipated would return a small profit, allowing a more even spread of contracts around the existing yards and avoiding a race to the bottom.<sup>209</sup>

In the circumstances it could be argued that this was not highly controversial – it officially broke tendering rules, but carried a reasonably low risk to the taxpayer and a low risk to the Admiralty; destroyers were constructed by all of the member firms, made to a standard design, were comparatively small and cheap, were unrestricted under the Washington Treaty, and were ordered relatively frequently<sup>210</sup>, while the Admiralty at all times retained the right to inspect the financial records of all firms, and possessed the ability to compare costs against previous

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<sup>208</sup> Brown to Scott, 17 June 1926 GUAS: GD319 12/7/6.

<sup>209</sup> 'Meeting at Hotel Cecil – Hull and Machinery for Admiralty Contracts' 19 December 1926, GUAS: GD319 12/7/6

<sup>210</sup> A destroyer, typically, cost no more than £250,000 and weighed no more than 1800 tons. Battleships could be more than twenty times the size and cost.



orders placed or against ships constructed in the Royal Dockyards.<sup>211</sup> Furthermore, with over a dozen competitors, any excessive bids in the scheme's early phases obviously carried the risk of the firm in question not being invited to tender in the future or being removed from the rota. Thus, on the face of it, there existed a system of checks and balances to allow the rota to work while keeping the prices from escalating out of control. In sum, given the troubled picture for shipbuilding in the mid-1920s and the concern for the future existence of some of the Admiralty's major partners, the operation of a rota for destroyers seemed to offer some security in a climate of scarce orders, and at a price deemed acceptable by both sides, and, perhaps most crucially, offered some spreading of work around the private industry to keep facilities in use and skills sharp in case of future need.

At this point however, one encounters contradictions when it comes to establishing exactly how much was known about the WSBC by the Admiralty. This is perhaps to be expected – the Admiralty certainly had an interest in at least keeping up the pretence that it knew nothing. Moreover, in practice, the rota did not require direct Admiralty involvement; firms from the group could, in theory, have bid at the agreed price without any outside intervention. So, while Peebles and Slaven both explicitly state that the rota was drawn up with Admiralty assistance (and Murphy and Johnman say that the Admiralty had no knowledge of it), it is difficult to pin down from the surviving documents exactly what form this assistance took. From the evidence that remains there appears to be elements that partly support both arguments.

On one hand it *cannot* be said with certainty that the Admiralty had full knowledge of the 1926 agreement, and more specifically, how the firms were communicating with each other. Indeed, the Admiralty never officially admitted knowing anything about it in its testimony before the Royal Commission on the Private Manufacture of Armaments in 1936.<sup>212</sup> It is therefore reasonable to suppose that the group was not formed by the Admiralty, but rather formed of its own accord but with a shared interest in the principle of retaining otherwise 'excess' capacity. That having been said, on the other hand there is stronger evidence which suggests that tacit Admiralty approval was given to the operation of this ring of firms with its one percent levy. Firstly, there is the precedent which had previously been set by the Admiralty

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<sup>211</sup> Peden, *British Rearmament and the Treasury*, p. 50.

<sup>212</sup> Murphy and Johnman, 'Welding', pp. 101-2.

to directly assist firms. While this had started as early as 1920, there had been the more recent cases – as already discussed – of the short-lived armour subsidy and the increase in naval estimates to try to alleviate unemployment.

In each case, the Admiralty failed to get an agreement for sufficient funds to maintain idle plant past the Treasury. On the subject of the armour subsidy, the firms that formed the agreement included Cammell Laird, Vickers, Armstrong-Whitworth and Beardmore along with other exclusively steelmaking firms. In addition, D'Eyncourt, the former DNC and from 1925-30 a director at Armstrong-Whitworth, had a close professional relationship with Chatfield since before the Washington Treaty.<sup>213</sup> As a result it is therefore nearly certain that most, if not all, WSBC members knew of previous subsidy and assistance schemes, and knew of Chatfield's desire to assist private manufacture. Therefore, it is reasonable to suppose that Chatfield had a direct hand in the organisation of a destroyer rota. As this was perhaps even more contentious than the price agreement for armour, the fact that on the one hand it remained secret and on the other, that the Admiralty never admitted knowledge of it, is not surprising. Nor should it be surprising that no other reference remains of these agreements for steel or rotas in the papers of the WSBC members, or indeed in Chatfield's own diaries, letters or memoirs.

This conclusion – broadly in line with Peebles and Slaven – does not, however, assume that the arrangement remained this way. There is far less evidence which suggests that the Admiralty or Chatfield's successor as Controller (Sir Roger Backhouse) knew that the group continued to exist beyond the initial 'emergency' period between 1926 and the end of the initial rota in 1929, by which point the Shipbuilding Conference and an industry-wide levy had been established (and were a more public organisation that could reasonably have been believed to have superseded any rota). Nor does it appear that the Admiralty had any idea of how the group worked in practice or how it transformed from its early days into a powerful rearmament cartel. Despite the sharing of staff between industry and the Admiralty, there is no evidence that information about the WSBC's scheme was fully understood by the Admiralty. In other words, it was more or less a one-way relationship after the termination of the Destroyer Rota. From later evidence discussed in the chapter on rearmament itself (when the

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<sup>213</sup> D'Eyncourt, *A Shipbuilder's Yarn*, pp. 140-1.

WSBC desperately tried to stop the Admiralty from uncovering the extent of its members' profiteering)<sup>214</sup> it can be reasonably concluded that, as Murphy and Johnman suggest, the Admiralty knew almost nothing at all about developments in, and the inner workings of, the Warshipbuilders Committee until the evidence from the Royal Commission on the Private Manufacture of Armaments in 1935 (by which point Chatfield was now First Sea Lord), and even after that continued to know embarrassingly little and thus was continually outmanoeuvred by it until the middle years of the Second World War. In short, the rota drawn up for destroyers in the 1920s can be viewed as a direct successor to earlier assistance schemes, while the profiteering which followed in the later 1930s was a different matter altogether.

In any event, let us return to the organisation and workings of the WSBC. The members met as a group for the first time in London's Hotel Cecil near the headquarters of the SEF in February 1926. Meetings took place with a representative from the SEF there until the Cecil's demolition in 1930, and thereafter took place either in a private room at the headquarters of the SEF (in 13 Victoria Street, London) or the nearby Hotel Victoria. The SEF controller from 1923, former shipbuilder and industrialist John Barr, was the man chosen to be responsible for the lines of communication between the WSBC yards and the federation – a position he held continuously until 1937. The representatives from the firms involved were drawn only from the highest echelons – in the majority of cases, it was the chairman of the firm in question, while the rest were represented by some other suitably senior director. Moreover, a study of the directors' minutes of the WSBC members firms highlights that discussions were kept very secret indeed, for despite men like Kennedy (Fairfield) and Craven (Vickers) who chaired their respective boards and frequently attended and contributed to WSBC meetings, there is no mention of the WSBC's existence or agreements at company board level.<sup>215</sup> The committee is conspicuous by its absence. Thus, it appears that outside of this small cadre and – at most – the very top ranks of the SEF and the firms involved, very few men knew even of the committee's existence, let alone the scope of its operations.

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<sup>214</sup> See section 10.3, below.

<sup>215</sup> See for example, the directors' minutes of Fairfield (Glasgow City Council Archives [hereafter GCC]: UCS2/1/2), the directors' minutes of Vickers Armstrong (Cambridge University Library [hereafter CUL]: MS Vickers), and the directors' minutes of John Brown Clydebank (GUAS: UCS1/5/6).

Nevertheless, it was also the case that before 1929 the information shared was fairly limited and relatively uncontentious; it remained only as a destroyer rota, and the 'normal' tendering practice continued for the few larger orders that were available, including cruisers. The rota was not particularly sophisticated; in its first guise it simply involved the drawing of names from a hat (Beardmore, Hawthorn Leslie, Palmers, Fairfield, Cammell Laird and Vickers were the first names out).<sup>216</sup> Nor did the profit margin involve much in the way of sophisticated calculation – a round number equivalent to approximately 10% of the costs was to be added to the final bids.<sup>217</sup> Perhaps because of this rather rudimentary method of allocating orders to firms and setting prices, the first iteration of scheme was thus also ineffective at solving the problems facing the industry. Profits on the contracts remained low, and, in some cases, yards still made small losses. Fairfield, for instance, lost £1,375 on an order, while Brown in Clydebank lost almost £10,000 on a contract for two destroyers.<sup>218</sup> This was nevertheless only a relatively small deficit and a step in right direction – albeit not a particularly large step – away from the cutthroat competition that industry and the Admiralty feared. These results can also be interpreted as firms adopting a naturally cautious approach to tendering and not seeking to inflate prices to levels that would be a clear hike over previous quotes, and thus run the risk of not being invited to tender for orders in the future.

By the start of the 1930s, a shift can be detected: small but significant profits were being made on almost every naval order<sup>219</sup> – including, but not limited to, destroyers – compared to the spate of losses that continued to be incurred on merchant and passenger work. At Brown, compared with the loss on the two 'A-Class' destroyers, the two 'F-Class' contracts from four years later netted them an extra £87,000<sup>220</sup>, a marked improvement from the situation from 1922-8, where 23 orders in total netted the company a combined loss of £211,000.<sup>221</sup> At Fairfield, the small loss on the naval machinery contract was an exception rather than the rule, compared with twelve out of fifteen merchant orders in the same period that failed to cover

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<sup>216</sup> 'Meeting at Hotel Cecil – Hull and Machinery for Admiralty Contracts' 19 December 1926, GUAS: GD319 12/7/6, the rest of the rota has been lost to fire damage.

<sup>217</sup> 'Meeting at Hotel Cecil'.

<sup>218</sup> Peebles, *Warshipbuilding*, p. 111.

<sup>219</sup> For a direct example of how prices were fixed, see Table 4.2, below.

<sup>220</sup> Slaven, 'A Shipyard in Depression', p. 198.

<sup>221</sup> Slaven, 'A Shipyard in Depression', p. 198.

costs.<sup>222</sup> Thus, although returns on Admiralty work rarely yielded more than a modest few percent profit before 1931, the WSBC appeared to at least be safeguarding a price ‘floor’ below which tenders would not sink.

This would appear to indicate a broadening of the group’s remit from the initial purpose of cooperation on destroyer contracts, which were small and numerous, to larger ships. Pinpointing exactly when and how this shift came about is difficult; although evidence from 1930 may help to shed some light upon this. This particular year was one of transition for the WSBC, following the bottoming-out of new orders in 1929. The initial rota had been concluded with the launch of the last of the ‘A-class’ destroyers in October 1929, and had been extended to the B and C classes, the latter of which had been allocated in the summer of 1930, with work due to begin in autumn in the respective yards.<sup>223</sup> At this point, the SEF had been informed through unnamed ‘sources’ that Harland and Wolff (H&W) of Belfast were also being invited to tender for Admiralty contracts for an upcoming cruiser class, information that was immediately passed on to the members of the WSBC.<sup>224</sup> H&W, although not a frequent supplier to the Admiralty, did have some past naval experience with complex vessels during the Great War, with the construction of the large cruiser *HMS Glorious* and also had facilities capable of handling large vessels.<sup>225</sup> At the same time, WSBC member Beardmore was in the process of voluntarily liquidating itself under the National Shipbuilding Security (NSS) scheme, and thus was no longer taking part in warship construction, which, combined with other firms that had dropped out before owing to liquidation, meant that the ‘group’ was smaller. Thus, when Captain T.E. Crease, Barr’s deputy, communicated the developments at Harland and Wolff to James Brown of Scott shipbuilders, he argued that ‘this makes a difference, as they [H&W] are not parties to the current arrangement and must be brought in somehow’.<sup>226</sup>

Other members evidently agreed. Craven from Vickers and Batey from Hawthorn Leslie joined Crease as ‘representatives from the group of firms’ and met Rebbeck of Harland and

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<sup>222</sup> Peebles, *Warshipbuilding*, p. 110.

<sup>223</sup> J. English, *Amazon to Ivanhoe: British Standard Destroyers of the 1930s* (Kendal: World Ship Society, 1993), pp. 30-33.

<sup>224</sup> Crease to Brown, 29 October 1930, GUAS: GD319 12/7/6.

<sup>225</sup> Buxton and Johnston, *Battleship Builders*, p. 84.

<sup>226</sup> Crease to Brown, 29 October 1930, GUAS: GD319 12/7/6.

Wolff on Wednesday, 12 November 1930 to put across their proposals for joining the rota, and ‘emphasised the necessity for discretion and absolute secrecy’.<sup>227</sup> H&W agreed to the terms on the following day, and were formally admitted to the group at a meeting two weeks later. The next rota included H&W for the first time. In it, the firms agreed that ‘it was essential that [the] arrangement should be made so as to ensure the reasonable geographical distribution of work’, and as a result were divided up into three geographical areas, the Tyne (known as Group no.1), the Clyde (No.2) and the North West Coast (No.3).<sup>228</sup> Firms were only allowed to switch places on the rota with other firms if it was within the same geographical group, or if it was agreed by rest of the firms. Crucially, the list omitted the White and Thornycroft shipbuilding companies in the South of England. These firms were specialist builders of destroyers and smaller naval vessels, and their omission was because of the nature of the new scheme, which agreed ‘...that the rota should provide for cruisers, aircraft carriers and all auxiliary warships of a value exceeding £600,000 for hull and machinery only, for the Admiralty and Dominion navies’.<sup>229</sup>

The group was thus no longer ‘just’ for the operation of a destroyer rota over a fixed timescale. It was now definitely and consciously developing a new scheme that was clearly distinct from the destroyer rota. The fact that ‘secrecy’ was mentioned so clearly in the initial talks is also striking. Who would H&W need to be careful of informing? Given that the new agreement was for Admiralty and Dominion contracts, it is reasonable to assume that this was a deliberate attempt to exclude wherever possible any outside knowledge, Admiralty included. After all, the last time the Treasury had found out about an Admiralty assistance scheme – when Chatfield informed the PSOC which in turn informed the Auditor-General – it had led to the collapse of Chatfield’s armour subsidy in 1929.<sup>230</sup> Thus, it is particularly noteworthy that the Admiralty formed no part of these meetings at any point, and there was no attempt to include them in discussions or notify them of the decision that H&W were to be ‘brought in’. For this reason, at least from the point when the new agreement was initiated, it is reasonable to conclude that the Admiralty no knowledge of the operations of the WSBC.

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<sup>227</sup> Crease to Brown, 14 November 1930, GUAS: GD319 12/7/6.

<sup>228</sup> ‘Meeting of Warship Group’ (partially fire damaged – date obscured, but is in file for December 1930), GUAS: GD319 12/7/6.

<sup>229</sup> ‘Meeting of Warship Group’, GUAS: GD319 12/7/6.

<sup>230</sup> Gordon, *British Seapower and Procurement*, p. 84.

Moreover, it appears clear that the WSBC's members believed that this work-sharing agreement brought benefits that could not be discarded or disclosed lightly, and it was thus critical that the WSBC continued to exist and include every private manufacturer capable of making any kind of naval vessel for the Admiralty. The original destroyer scheme was no longer fit for purpose in this regard. The replacement had to be (and was) more sophisticated, with different rotas and agreements for different kinds of ship. Most importantly, as evinced by the discussions with Harland and Wolff, it had to be secret.

#### 4.3 Developing the lines of communication after 1929

The financial returns on Admiralty contracts show that while the WSBC's destroyer rota prevented cutthroat competition, it did not guarantee the firms involved handsome profit margins. However, viewing the committee's early years before 1931 from a profits perspective alone is to underestimate its significance as an organisation. As one might expect, income and profits in these lean years of dwindling defence expenditure and only modest civilian construction were markedly lower when compared with the demand for ships during previous war or during rearmament in the second half of the 1930s.<sup>231</sup> The crucial point is that the firms had moved from a climate of competition to an information-sharing forum and culture of cooperation on prices for ships, while keeping existence of such cooperation secret. This asymmetry of information after the conclusion of the first destroyer agreement was the WSBC's greatest strength. As a forum for discussion with the power to conclude deals between rival firms, the committee held the most important tools necessary for manipulating the market to its own benefit: a united membership and a customer (the Admiralty) that could and would only buy from these members. As such, the WSBC represented a radical departure in the history of British naval shipbuilding and arms contracting by deviating from competitive tendering and replacing the process with agreed prices that led the customer to believe that the lowest bid represented the best value.

Thus by the beginning of the 1930s, albeit still a time of disarmament and scarce orders, the committee had developed a more sophisticated rota and more sophisticated lines of communication which allowed for information to effectively be shared and distributed through all interested parties, in practice fatally undermining the initial benefits envisaged by the

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<sup>231</sup> Peebles, *Warshipbuilding on the Clyde*, p. 124.

Admiralty only a few years earlier in 1926, and explaining in part the handsome profits returned during later rearmament. How the committee transformed from a rota into a powerful cartel requires further explanation, which can be achieved in part through a description of the committee's methods.

The enhanced process of cooperation after the cruiser rota of 1930 worked in the same basic way for more than a decade. Upon receiving a tender from the Director of Navy Contracts (again, not to be confused with the Director of Naval Construction or DNC), each firm wrote to Barr at the Shipbuilding Conference notifying him of the Admiralty's intention to place an order. To quote from a typical example of correspondence between firms and Barr, James Brown at Scott 'begged to advise the committee' that his company had 'received the usual enquiry for the construction and completion in all respects of Hull and Machinery of one and each of the two destroyers for H.M. Navy' before detailing the exact deadline for Admiralty receipt of the tender, and communicating the Admiralty's instruction that the tender was strictly confidential.<sup>232</sup> Barr (and from 1935, Crease) at the committee's hub, collected such notifications together while also on occasion writing to firms which had failed to send word, to confirm that they had, in fact, been invited to tender.<sup>233</sup> Such information sharing allowed Barr to do two things: one was to confirm that the tenders were being invited from all eligible firms, in other words to ensure that the Admiralty were not unduly favouring one yard over another. The second was to level out the playing field and alert yards to tenders they had not yet received, but could reasonably expect in the near future, giving them as much time as possible to prepare cost estimates. The driving motivation behind these actions appears to have been to circulate intelligence on Admiralty procedures: by ensuring the continuance of tenders to all eligible firms, the committee could in turn continue in the belief that no yard was being excluded on a price or quality basis, and thus could continue to design effective rotas for tenders at prices that the committee considered would allow for acceptable profits to be made.

With tenders received, Barr's next task was to ascertain which yards were interested in 'winning' the contract. In the disarmament years this included practically every firm able to undertake the order, while in the rearmament period because of increased construction activity

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<sup>232</sup> For example, see Brown to Barr, 13 October 1933 or Brown to Crease, 18 November 1935, GUAS: GD319 12/7/6.

<sup>233</sup> Barr to Alexander, 6 December 1933, GUAS: GD319 12/7/6.



it was commonplace for several firms to notify Barr that they did not wish to be considered for the contract. The same process was followed: firms would notify Barr of their intent to bid, and Barr (and later Crease<sup>234</sup>) would coordinate efforts to get representatives from each round a table. At this meeting, the most accurate cost figures available would be discussed openly with all manufacturers, so that the group knew, to the penny, what each firm believed it would cost them to produce the vessel required by the Admiralty.<sup>235</sup> Such information was then compiled into lists and duly circulated, so that each committee member had a written record of its own costs relative to those of others in the group. In rarer but not necessarily infrequent cases, particularly when meetings had been called at short notice and thus detailed estimates were not yet available, firms wrote to each other to provide costs. To give but one example, in January 1929, Sir Harold E. Yarrow, managing director of the shipbuilders of the same name in Scotstoun, Glasgow, wrote to James Brown at Scott giving him a full and exact breakdown of their estimated costs for a destroyer leader, a destroyer, and a depot ship.<sup>236</sup>

That the leading men at the top of what should ordinarily have been rival organisations were willing to write to their opposite numbers disclosing how they arrived at final prices is, in some ways, astonishing. This was well beyond the terms of the initial rota, risky, and perhaps even undermined ‘normal’ business practice, namely the desire to keep information about costs and overheads secret, lest a rival use it to their advantage. This said, gentleman’s agreements of this sort were not uncommon before 1945. The Shipbuilders’ Conference of 1928 was a variation on a theme: many similar national shipping schemes existed around to regulate freight rates or passenger fares.<sup>237</sup> Indeed many of these were publicly backed by that country’s government for reasons of protecting its own industry.<sup>238</sup> The Board of Trade even

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<sup>234</sup> Murphy writes that Crease was appointed as the Admiralty’s ‘liaison’ to the committee after 1936, with the stated intention of keeping the Admiralty in the loop as to what the WSBC were doing in the aftermath of the revelations at the Royal Commission. Despite his position as a former senior naval officer, the fact that he had been working with the committee for several years beforehand suggests either that he was not forthcoming with information to the Admiralty before 1936, or that the ‘appointment’ was merely a continuation of past practice. It is doubtful he was any more willing to divulge details afterwards either, given the Admiralty’s continued inability to regulate the committee in the years after the commission.

<sup>235</sup> ‘Estimates’, undated, GUAS: GD319 12/7/6.

<sup>236</sup> Letter from Yarrow to Brown, 28 January 1929, GUAS: GD319 12/7/6.

<sup>237</sup> W. Sjöström, ‘Collusion in Ocean Shipping: A Test of Monopoly and Empty Core Models’, *Journal of Political Economy* 97 (5) (1989), pp. 1170-1.

<sup>238</sup> J. Fear, ‘Cartels’ in G. Jones and J. Zeitlin (eds.), *Oxford Handbook of Business History* (Oxford: Oxford University Press, 2008), pp. 273-7.

noted some years later during WWII that ‘the variety of arrangements is striking, and attests to the ingenuity of industrialists’.<sup>239</sup> However, what set the WSBC apart was the fact that it was a group of firms working against a single customer – the government – to regulate prices. The Shipbuilders’ Conference may have been able to agree an industry-wide levy that covered tendering costs, but its members had no control over its customers – who could freely choose to go elsewhere if the price was not right – nor did its member firms share their own breakdown of costs with each other.

A mix of historical factors and contemporary circumstances made the WSBC unique. It appears that the benefits of collaboration, the value of the shared information, and the prospects to negotiate better prices – even if the contracts had to be shared between rivals – outweighed the drawbacks, and reflected in part the desperate situation for naval shipbuilders in the 1920s and early 1930s. More simply, these episodes serve to highlight both how immense the degree of collaboration was between all member firms, and that collaboration of this kind occurred regularly and not just when directed from the SEF through Barr at the hub of the committee.

The one percent ‘tendering expenses’ levy added to the final costing for a ship was therefore not the only good reason for keeping the WSBC together. In addition to the access to shared information, there was the potential for pooled resources, steady allocations of work, as well as a high price floor for orders. The kick-back that the levy provided to cover the costs of preparing tenders sweetened it further, but taken together all these factors provided a strong disincentive to leave the committee. Indeed, while D’Eyncourt initially reported that his chairman at Armstrong did not like the idea in 1926 (its own weak financial position forced it to merge with Vickers in January 1927, so it was not a member of the group for long at any rate) any warship firm would have found existence outside of the group significantly more difficult. For without knowing the ‘winning’ price a competitor firm would have been forced to undercut rivals, and in not knowing the prices that rivals were bidding, would in all likelihood have had been faced with the return to the cutthroat and loss-making bids in order to gain contracts. It is therefore not surprising that, from the committee’s earliest days until well into the Second World War, the membership remained remarkably stable.

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<sup>239</sup> Fear, ‘Cartels’, p. 273.

Factors that pulled the yards together aside, there was also an external ‘push’ that encouraged this strength-in-numbers approach. This was precipitated in 1929, although it did not manifest itself fully until rearmament. The election of the second MacDonald Labour government in June 1929, and its public commitment to a further curtailment of defence spending, was a catalyst for strengthening the already tight bonds between firms. It also served to highlight the dangers of being seen to collude on stabilising prices when the government of the day intended to – and with significant public support – pursue disarmament and cut arms spending back further.<sup>240</sup> Thus, like the first steps towards cooperation between the yards had been the result of external circumstances (and was aided by the Admiralty, which believed it was protecting the industry), the 1929 election highlighted to each yard the importance of strict secrecy. Moreover, if the election pledges of the Labour Party – arbitration and disarmament<sup>241</sup> – were anything to go by, the years to come would if anything be even worse than those which had prompted the formation of a group in the first place. In other words, 1929 was no time to end the relationship. The WSBC, probably even before the admission of H&W, had begun to realise that it was in their collective interest to continue to utilise the lines of communication that had been built up until such a scenario where market conditions had improved.

On the face of such events, it might appear that one possible solution was a redoubling of business-Admiralty unity in much the same way as had occurred in 1926, and a continued lobbying for naval defence. MacDonald’s visions for disarmament in 1929, and the prospect of another arms limitation conference, scheduled for London in 1930, greatly diminished any prospects for the success of any such plan. Faced with a greater threat, the solution for committee members was still greater cooperation, and, while it cannot be proven absolutely from the remaining sources, it is likely this was when the idea for an expanded rota began to gain traction. The prospects of any rise in naval spending looked undeniably grim in the second half of 1929 (which proved to be one of the industry’s worst years<sup>242</sup>), so the response to expand the rota and ensure that profits were returned on all ships, not just destroyers, was in

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<sup>240</sup> R. Vickers, *The Labour Party and the World: The Evolution of Labour's Foreign Policy 1900-1951* (Manchester: Manchester University Press, 2004), pp. 93-4.

<sup>241</sup> Vickers, *The Labour Party and the World*, p. 93.

<sup>242</sup> See Johnman and Murphy, *British Shipbuilding and the State*, Table 3. Unemployment in private shipbuilding peaked in October 1929 at over 40%.

this context rational and understandable. It was also illegal, and went well beyond the original scheme set out.

It has already been noted that the Admiralty retained the right to inspect the financial records of the firms that supplied the navy; in practice they did not take up this option at any point during the 1929-40.<sup>243</sup> This oversight, although large, was not necessarily the only reason the WSBC was able to continue operating in the 1930s, as with the methods outlined above, it is far from certain the ring would have been uncovered unless there was a particularly thorough examination of practically all WSBC members. Moreover, while the CID had convened a 'contracts coordinating committee' that existed 'to secure economy and eliminate the forcing up of prices by competition' since 1920, it was concerned about precisely the opposite effect, (namely a major crisis causing inter-service rivalry for resources and thus industry selling to the highest bidder), and as such was not an effective check on WSBC tenders.<sup>244</sup>

It is therefore extremely likely that the members of the committee were confident that their financial records would not be examined to the extent their plans would be revealed. In this sense the long-standing relationship between the Admiralty and most of the WSBC firms worked in the latter's favour. Indeed, E.C. Jubb, the Director of Navy Contracts, wrote some years later in 1936 that the system of competitive tendering remained 'one of the greatest safeguards against undue profits'.<sup>245</sup> Whatever the underlying reasons, the WSBC took no chances from 1929, and from 1930 certainly took the opportunity to develop a more covert organisation that would help keep it free from unwanted attention.

One obvious step that was taken was to remove reference to its members. Therefore, by the beginning of 1931, many (but confusingly, not all) mentions of firms in the minutes of meetings and correspondence were in code. This apparently followed a set pattern: Clyde yard 'one' was 'CONE', Clyde two 'CETU', and so on, although it is not always this clear. For

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<sup>243</sup> It was only in 1941, almost two years after the outbreak of war, that the Admiralty began to send accountants to scrutinise the records of WSBC members – five years after their existence was 'revealed' at the Royal Commission. The reasons for this lapse are discussed in the chapter on rearmament.

<sup>244</sup> N. Rollings, 'Whitehall and the Control of Prices and Profits in a Major War, 1919-39', *Historical Journal* 44 (II) (2001), p. 524.

<sup>245</sup> 'Admiralty Contracts, Prevention of Profiteering' 17 July 1936, Templewood Papers, CUL: MS Templewood Part 9 File 5.

example, while Stephen, Scott and Denny were on the Clyde and Swan Hunter and Hawthorn Leslie were on the Tyne, and thus fit the pattern – Yarrow and Fairfield (also the Clyde) are ‘D’ while yards as far apart as Belfast and the Isle of Wight are grouped under ‘M’:

**Table 4.1: Shipbuilder Codenames as of 1932**

<b>Shipbuilder</b>	<b>Codename</b>	<b>Area</b>
Stephen	CONE	Clyde
Scott	CETU	Clyde
Denny	CESEX	Clyde
John Brown	CESEVN	Clyde
Yarrow	DETU	Clyde
Fairfield	DETRE	Clyde
Thornycroft	MOTRE	Hampshire
White	MOFOR	Isle of Wight
Cammell Laird	MOFIV	Birkenhead
Vickers Armstrong	MOSEX	Tyne
Harland and Wolff	MOTEN	Belfast
Swan Hunter	TONE	Tyne
Hawthorn Leslie	TEATE	Tyne
Palmer	Not listed	Tyne

Source: *SECRET: Minutes of Private Arrangement made by letter concerning 'Minespools 32'*. GUAS: GD319 12/7/6

Furthermore, with barely a dozen members, there appears to be spaces left in the code which no yard in the group is allocated to. Nevertheless, the codes, much like the first attempt to draw a destroyer rota from a hat, seem unsophisticated and amateurish. Handwritten scribbles on several pieces of correspondence put the names of firms next to codes, rendering the codes useless, while on other occasions it appears the firms dropped the codenames altogether and lapsed into referring to each other in the usual way. Had it not been for the constant urge for ‘utmost secrecy’ from Barr at the SEF, which indicates the group knew what

it was doing was likely to land its members in serious trouble, one wonders if these codenames were ever really intended to fool anyone.

In addition, minutes with sensitive information, including details of prices were stamped ‘secret’ rather than just ‘private’, often not dated, and not sent by mail. At least in the cases of the surviving ‘secret’ files, these appear to have been circulated at face-to-face meetings in London, which minimised the odds of interception.<sup>246</sup> Highly ambiguous telegrams between firms also exist.<sup>247</sup> Such activities suggest very clearly that the WSBC committee was acutely aware of the illegality of their actions – if not always particularly good at devising methods that would guarantee those actions stayed concealed.

#### 4.4 Price-fixing from 1929

With secrecy somewhat better assured, the WSBC concentrated on developing the terms and conditions under which a rota was to operate. Some rotas, most notably for destroyers and cruisers (given the larger number of these ordered), lasted for four or even five years, usually far in advance of anything the Admiralty had announced, such was the committee’s faith in the scheme’s future operation. Frustratingly, there are relatively few examples of the specific terms and clauses of rotas in existence. While agreements such as those shown above in principle tell us the members present and the ships that the rota pertains to, the specifics for the period before the Manchurian crisis of autumn 1931 are few and far between. Since the most complete evidence of such a scheme dates from 1935 onwards (and there is little to suggest that the same basic principles had been altered substantially compared with some years beforehand), then examining a later rota can shed light on what rules were imposed upon firms for its duration. In the case of the 1936 destroyer rota, it is worth quoting the first four clauses in full:

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<sup>246</sup> ‘Cruiser Rota Etc. – SECRET’, undated, GUAS: GD319 12/7/6.

<sup>247</sup> See, for example, Gowan (Palmer) to Brown (Scott) ‘Pool Abandoned’, 18 September 1926, GUAS: GD319 12/7/6.

Consequent upon the enlarged prospective Admiralty programmes in the next few years and prospective foreign enquiries, the following revised arrangements in connexion with the Rota are agreed:

1. The Rota shall be continued until completion of the round that is in progress on 31<sup>st</sup> March, 1940.
2. During the four years ending 31<sup>st</sup> March, 1940, Denny, Thornycroft, White and Yarrow shall all receive orders for an average of two destroyers per annum, either British or First-Class foreign, and they undertake to accept such foreign orders if required to do so by the Rota arrangements.
3. Vickers-Armstrong, Cammell Laird and John Brown will each forfeit their next turn in the Rota, following their Argentine orders.
4. The current enquiry will be left for Denny, Thornycroft, White and Yarrow to deal with as they mutually arrange, and any order obtained will not be included in the Rota arrangement. The remaining firms will refrain from any further competition on this enquiry.<sup>248</sup>

Although pertaining to a different period in British naval construction (which is discussed in later chapters), the above document is one of a very small number of surviving records of how the WSBC allocated contracts between the member firms. As this particular agreement was a revision of a previous document, it implies strongly that very similar, if not identical, arrangements had existed in the past, as the four-year period discussed appears to be simply another ‘round’ of a rota already in operation. Secondly, this rota – and other surviving examples – makes clear that some firms were to receive more classes of certain types of ship than others, relative to their size, capacity and areas of expertise. Perhaps most importantly, the clauses in the rota suggest complete and unchallenged authority in the decisions of the committee. With the exception of a provision in certain circumstances (usually if one yard was unusually busy) for firms to swap contracts with each other, the rota was final and non-negotiable.

Another striking aspect of the document quoted above is the degree of confidence in the orders that would be placed in future years. Any scheme that tried to forecast four or five years into the future needed to have very sound information and intelligence, and the WSBC was no different. While this was not possible before rearmament, once again, the asymmetry of information came to the fore. The relationship between senior Admiralty and industry figures allowed for a notable few within the WSBC to gain some information, if not influence, over

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<sup>248</sup> ‘Destroyer Rota Arrangements – SECRET’’, 9 October 1936, GUAS: GD319 12/7/6.

planned orders. In particular, Captain Crease of the SEF and Sir Charles Craven of Vickers, acted most frequently as the go-between for information on Admiralty procurement, and, once more willingly disseminated what they knew to the group.

At first, there was the Admiralty's own weak position vis-à-vis the Treasury. This meant there was relatively little inside information to disseminate to industry: the Admiralty faced similarly uncertain conditions with regards to future budgets and orders. However, by 1936, and with a full rearmament on the horizon, the WSBC seemed to be able to plan rather further in advance. Barr, in a document pertaining to tenders for capital ships, reported to all tendering firms that:

It is understood that it is not the desire of the Admiralty that they [Harland and Wolff] should build capital ships... According to the latest confidential information, the programme of capital ships, aircraft carriers, cruisers and destroyers to be placed between now and March 1940 is as follows...<sup>249</sup>

The list then went on to detail, by year, how many ships and of what class and type the Admiralty would order. While the name of the source was not revealed, Barr knew, for example, that among other contracts there would be five 8000 ton cruisers and two 5000 ton cruisers in 1937/8, and there would be nine *Tribal*-class and nine 'I-class' destroyers the following year.<sup>250</sup> The document also had an 'assumption' that the Royal Dockyards would not build capital ships or aircraft carriers, but would build some of the cruisers, which allowed them to 'attempt to draw up an allocation of work'.<sup>251</sup> To have this level of detail four years into the future – even accounting for the more regular orders that were placed after 1935 – is remarkable, and shows a well-developed system of collecting intelligence from the Admiralty and using it to share contracts between the member firms. Once more, the behaviour of the Admiralty and the WSBC in the war itself (see chapter ten), where the former clamped down on profiteering while the latter desperately tried to cover its own tracks, suggests strongly that this was mainly a one-way relationship.

However, even in 1930 some future information about orders and tenders was available to the WSBC, even if it foresaw only a few months into the future. Nevertheless, such a structure

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<sup>249</sup> 'Points for Discussion at a Meeting of Firms Capable of Building Capital Ships', 18 September 1936, GUAS: GD319 12/7/6.

<sup>250</sup> 'Points for Discussion', 18 September 1936.

<sup>251</sup> 'Points for Discussion', 18 September 1936.



allowed for prices to be relatively easily and effectively fixed. Once a notice of a tender was given to firms, estimates were prepared in an entirely standard way; there was little or no collusion in the first instance, and firms submitted to Barr what were ostensibly honest prices for fulfilling the contract. At the subsequent meeting in London, however, costs were openly shared with all interested parties. The list of estimated prices was then averaged out across all firms intending to bid, before a final price to be quoted was agreed upon. A particularly revealing early example is found in Table 4.2 below, for the machinery for HMS *Warspite*. A number of points from it must be highlighted. The first is that the firm providing the lowest estimate, John Brown, was instructed to ‘lose’ the tender by entering a bid higher than Parsons, the eventual winner of the contract. The second is that, despite having organised which firm was to receive the contract, the other firms did not simply withdraw from the process, but instead submitted higher quotations to give the deliberately false impression to the Admiralty of a genuine bid (indeed, in the handwritten notes at the side of the chart the term ‘add hundreds’ appears next to the losing bids, presumably because the rounded nature of the figures might have aroused suspicion). The third point is that exactly 10% was added onto the mean of estimates, and rounded to the nearest hundred (the exact figure is 448,712), which was the amount quoted for the winning bid.<sup>252</sup>

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<sup>252</sup> All taken from ‘Machinery for HMS *Warspite*’, GUAS: GD319 12/7/6.

**Table 4.2: An example of a price agreement between firms – 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.**

<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
<i>Mean of estimates</i>	<i>£407,920</i>	
<i>*Engine manufacturer only</i>		

Source: *Machinery for HMS ‘Warspite’ (Secret)* GUAS: UGD GD319 12/7/5

In adding 10% to an average for all yards, and not simply to the estimate provided by the firm organised to win the contract, the system encouraged other yards to keep their prices competitive. Had this been, for example, Cammell Laird’s turn in the rota, a loss would have been incurred on the contract, as the ‘winning’ bid was £448,700, and Cammell Laird’s estimate original was £460,800. At the other end of the scale, firms were provided with a disincentive to insert an artificially low price, since it would not aid them in winning a contract ‘out of turn’, and driving the average price down would only harm their own profit margins when it was their turn to gain a contract in the future. Conversely, had it been Brown’s ‘turn’ to be allocated this contract, the winning price would have represented a mark-up of £61,100, or a profit margin of over 15%, on its own estimate. This did not mean necessarily that John Brown was a cheaper or more efficient naval manufacturer than Cammell Laird, as costs could vary substantially according to the other work the yard had and the materials it held in reserve at the time. Nevertheless, by operating in this way the scheme actively rewarded rationalisation and efficiency, as a firm could not assume it would make a profit irrespective of the initial cost estimate.

Some deductions were made from the final cost. On top of the 1% to cover the tendering expenses which was split among the other members, money was also deducted for the National Shipbuilders' Security scheme (see 4.5, below) and the Shipbuilding Conference itself.<sup>253</sup> Once again, these had an element of secrecy to them. These costs were officially to be hidden from the tender by being distributed throughout the ship;<sup>254</sup> on a complete order, certain amounts would be allocated to the hull, the armour and the engines, so as not to lump several thousand pounds into a single component and possibly draw attention to its inclusion. The NSS, like the other builders, took 1% of the final cost, while a much smaller figure – often as small as a few hundred pounds – was allocated to the Shipbuilding Conference.<sup>255</sup> While these costs inevitably did eat into profits, they were nevertheless a small price to pay given the general industrial uncertainty of the period. In the case of *Warspite*, the total deductions were calculated at £10,500, or 2.3% of the final cost.<sup>256</sup>

It should be borne in mind at this point that a profit margin of around 10% represented a very healthy return in the years before rearmament – the average profits in the merchant and passenger sector remained perilously low well into the 1930s. Indeed, taking an example from late 1931, the price quoted for a standard 7,500DWT cargo steamer had actually fallen by more than £11,000 to £37,500 compared with two years earlier.<sup>257</sup> Even this reduction failed to stimulate demand; work was still scarce, and unemployment still high. Even when contracts were secured, market conditions were still unfavourable – Fairfield had problems with customers defaulting on the merchant or passenger ships they had purchased as late as 1935.<sup>258</sup>

Moreover, fixed-price contracts like these should have normally carried a high degree of uncertainty for the manufacturer: any unforeseen workplace stoppages, such as strikes, or unexpected peaks in the cost of raw materials, could have eradicated any projected gains, while attempting to build these into the bid for a tender and increasing the price ran the risk

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<sup>253</sup> Letter from Craven to Brown, 20 April 1931, GUAS: GD319 12/7/6.

<sup>254</sup> Craven to Brown, 21 April 1931, GUAS: GD319 12/7/6 This letter, sent the following day, split £25,000 of the tenders cost as £13,000 to the hull, £1,000 to electrical equipment and £13,000 to machinery.

<sup>255</sup> 'Shipbuilder Codenames as of 1932 *SECRET: Minutes of Private Arrangement made by letter concerning 'Minespools 32'*, GUAS GD319 12/7/7.

<sup>256</sup> *Machinery for HMS Warspite (Secret)*, GUAS: GD319 12/7/6.

<sup>257</sup> Slaven, *British Shipbuilding*, p. 91.

<sup>258</sup> Peebles, *Warshipbuilding*, p. 142.

losing out on the contract altogether.<sup>259</sup> Thus, the naval yards should in these circumstances have been competing furiously for a relatively small number of Admiralty contracts to keep money coming in. The committee's work almost entirely eradicated such uncertainty. After 1936 when orders for numerous vessels were placed at once as rearmament started in earnest, this translated into far higher margins on contracts, and increased profits for the firm as a whole.

Thus, membership of the WSBC paid handsome dividends – financial and otherwise – even in the harsh climate of the times, and this only continued as demand grew in the later 1930s. Moreover, the very existence of a committee which operated to rig the prices paid by the Admiralty, its main customer, is doubly shocking insofar as the public belief and common contemporary criticism of private arms manufacturers was that they had an uncomfortably *close* relationship with the various governments, MPs and Admiralty figures of the day, stretching back for many years before the Great War.<sup>260</sup> In this case, the public were right about the existence of unethical practices in armaments manufacture, but wrong about the causes of it.

In sum and in light of the above information, there are three plausible hypotheses for how much the Admiralty knew about the existence of the WSBC. The first is that the Admiralty should be taken to have not known anything at any point about the WSBC. This is highly unlikely. In 1925 there existed simply too much overlap between shared industry and Admiralty interests, manifesting in the controversial Chatfield subsidy and other assistance attempts, to believe a parallel operation involving some of the same firms and actors was formed with no Admiralty knowledge. This leaves either the second option, namely that it had known about the price 'ring' all along, or finally that somewhere between 1926 and 1936 the relationship changed, and industry decided to 'go it alone'. From the evidence available it appears that the third scenario is the most likely, for while there was obviously good reasons to share work round in the climate of 1926, there were far fewer reasons for allowing an effective cartel to be extended to all types of ships once recovery was under way. It must be supposed

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<sup>259</sup> W. Ashworth, *Contracts and Finance*, (London: HMSO, 1953), pp. 107-8.

<sup>260</sup> W. H. Williams, *Who's Who in Arms*, (London: Labour Research Department, 1934), pp. 14-15. This is not necessarily a completely 'wrong' view, but the relationship was considerably more complex than the public or LRD knew.

that had the Admiralty really known about the *extent* of cooperation, it would have acted to break the ring up through a close investigation of the accounting practices of the member firms. Moreover, as chapter ten shows, the WSBC firms were so fearful after the outbreak of the war of the possibility of the Admiralty finding out about their collusion that they attempted to twist the figures and present their costs in the most favourable light.<sup>261</sup> This is hardly behaviour one might expect from a group fully in cahoots with its main customer.

#### 4.5 The National Shipbuilders Security Scheme, 1929-31

In sum, the WSBC was a rather dramatic response from industry to the crisis in naval manufacture following earlier unsuccessful attempts to secure a stable income stream. It was not the only industry-led development of the 1920s which had an impact specifically on the private manufacture of naval armaments however, nor was it the only initiative that had a transformative effect on the relationship between state and industry. In 1929 a separate but inextricably related development, namely Sir James Lithgow's National Shipbuilders Security (NSS) scheme, began to gather momentum.

The NSS, in its simplest terms, was a project whereby firms would voluntarily offer themselves up for sale to the backers of the scheme and their yards would be 'sterilised', and not made available for future shipbuilding use. The term 'sterilise', which the NSS itself used, was a fairly accurate representation of what the scheme sought to do: when a yard was purchased, it was stripped out, demolished and a legal clause was inserted prohibiting any new owner from using the site to build ships for an extended period of time, typically several decades.<sup>262</sup> The rationale behind this was straightforward. The fear was that unless such measures were taken, the yards may be reopened at the first sign of an upturn in the market, and the underlying problem over overcapacity would never be fully solved. Although the NSS worked mainly in the merchant and passenger sectors, it also had an impact after the Manchurian incident on the supply of naval arms and the CID's changing defence hypotheses. Indeed, the central involvement of Sir James Lithgow – a key figure in war planning in the later part of the 1930s – in the NSS means that it is of central relevance to this thesis. Moreover, Lithgow's business acquisitions of naval armaments firms in the later 1930s

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<sup>261</sup> See 'Letter from Crease to all Warship Group Firms', 13 October 1941, GUAS: GD319 12/7/6.

<sup>262</sup> 'Prospectus, National Shipbuilding Security Ltd.' 1930, National Maritime Museum (see note 263, below).

(including Beardmore and Fairfield) take on new significance when coupled with his work for the CID, and lead to the conclusion that the NSS deserves much more attention in the history of British naval armaments and shipbuilding than it has hitherto been given.<sup>263</sup>

Sir James Lithgow, who spearheaded the scheme, was co-owner with his younger brother, Henry, of the Port Glasgow based shipbuilding and engineering firm, Lithgow's (so named after his father, William, renamed the former Russell's yard in 1918).<sup>264</sup> James Lithgow was not just a well-known figure on Clydeside; he had also served with some distinction in the Great War, seeing action on the front and rising to the rank of Colonel. Later in the war, he was called back to London to serve as the Director of Merchant Shipping. He subsequently was knighted, served as the British employer's representative on the International Labour Organisation (ILO) in Geneva and for three years was the President of the Federation of British Industry. His upbringing on the Clyde had brought him into contact with the engineering magnate Lord Weir, one of the PSOC's architects, before the Great War, and Weir was a man Lithgow forever considered a 'mentor'.<sup>265</sup> He had also developed a close bond with another fellow Glaswegian, Sir Andrew Rae Duncan, who had held senior appointments in the SEF, Imperial Chemical Industries (ICI) and the Bank of England. Indeed, his biographer later noted that Lithgow made 'several important decisions in his life based partly on the advice of Lord Weir and Sir Andrew Duncan'.<sup>266</sup> Lithgow was nevertheless a respected, influential and well-connected figure in his own right, but with Weir and Duncan formed a formidable trio of industrial magnates.

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<sup>263</sup> The NSS has often been consigned to footnotes in the histories of British industry, most frequently in the context of rationalisation in shipbuilding following the downturn and depression which characterised most of the 1920s and early 1930s. Professor Tony Slaven has been one of the very few to afford the NSS the attention and significance it deserves as an organisation critical in reorganising shipbuilding, and has been one of a tiny number to utilise the papers of the NSS. Much has been written up for the first time in his book, *British Shipbuilding*, published in winter 2013 as this thesis was in its final stages. Unfortunately, the archives of the NSS were lost some decades ago, apparently during the transfer of the National Maritime Museum (NMM) archives from the former Woolwich Arsenal to the Royal Naval College, Greenwich. What survives today is largely based on the extensive notes he took of the collection in the 1970s, cited by Professor Slaven in the format 'National Shipbuilders Security', Deeds of Covenant, 27 February 1930, NMM', or the correspondence with the NSS surviving in the records the individual firms themselves. Where not otherwise cited or given as from company records, what follows in this format is based on these notes, and used with Professor Slaven's kind permission.

<sup>264</sup> H. Murphy, 'Déjà Vu all over again: The Reluctant Rise and Protracted Demise of Scott Lithgow' (Unpublished PhD thesis, University of Westminster, 2001), p. 33.

<sup>265</sup> J. M. Reid, *James Lithgow: Master of Work* (London: Hutchison, 1964), p. 90.

<sup>266</sup> Reid, *James Lithgow*, p. 93.

Lithgow and Duncan had long harboured a desire to boost the shipbuilding industry. As such, the NSS should be viewed against the backdrop of generally unsuccessful attempts to encourage production in merchant and passenger construction that existed throughout the 1920s, but took on a new direction under Lithgow (namely, to restrict capacity for production instead). State intervention in shipbuilding had been deeply unpopular among firms for many years before 1930, and the idea of nationalising the industry – mooted as late as November 1918 – only served to set off vigorous reactions from the Shipbuilding Employers Federation (SEF) whenever it was brought up.<sup>267</sup> Of course, before 1922 the fortunes of yards and the forecasts of future prosperity rendered any such move highly unlikely, yet even the poor market conditions that persisted thereafter did little to bring many in industry over to the idea. Thus, in spite of the wide discrepancy between the number of berths available, in part as a result of wartime expansion, and the limited orders for ships, the President of the SEF, Sir William Currie, nevertheless declared in 1929 that the ‘Shipbuilding Industry has always been opposed to State aid or interference of any kind.’<sup>268</sup> On this point, the SEF were at least in luck: government policy had shifted markedly since the conclusion of the war, and had no intention of intervening in industry either.<sup>269</sup>

A continued opposition to interference should not be confused with the notion that shipbuilders would refuse to accept any help from the state. As Slaven notes, while ‘intervention was anathema to [the industry], friendly support without strings attached was another matter’.<sup>270</sup> Indeed, comparisons were frequently drawn by shipbuilders in the 1920s with Germany, Japan, the USA, Italy and France. The governments in all of these countries either subsidised ship construction or undertook some form of fleet modernisation to provide work to yards. The closest British equivalent was the Trade Facilities Act (TFA) of 1921, which provided money to guarantee loans for any capital project, including shipbuilding. As the system guaranteed the loans taken out by private buyers to cover the cost of the vessel they purchased it was therefore inapplicable to naval shipbuilding (for the obvious reason that the buyer was the state itself).

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<sup>267</sup> C. E. Fayle, *The War and the Shipping Industry* (Oxford: Oxford University Press, 1937), p. 337.

<sup>268</sup> *Glasgow Herald Trade Review*, 1929.

<sup>269</sup> Slaven, *British Shipbuilding*, p. 85.

<sup>270</sup> Slaven, *British Shipbuilding*, p. 85.

Perhaps more importantly, it was also poorly conceived and not particularly successful in the context of shipbuilding more generally. Since overcapacity in berths and an oversupply of merchant vessels were the main problems, the British scheme – along with those abroad – only exacerbated the sector’s existing problems. For instead of helping to rationalise industry, the TFA merely tended to prop up the already excessive number of otherwise uncompetitive yards and keep prices low, which only further hindered the small and dwindling number of naval firms from filling the holes in their order books with merchant or passenger ships. Thus, although popular with struggling firms, the political will to keep the act was waning. The Chancellor of the Exchequer, Winston Churchill, believed by 1925 the act had outlived its usefulness, while the Prime Minister, Baldwin, believed that the present financial situation dictated an end to the scheme, and also suggested that in giving ‘special facilities to a competitive industry’ it was only encouraging other nations to respond in kind.<sup>271</sup> The Act was terminated in March, 1927.<sup>272</sup>

The abolition of the TFA prompted Lithgow, Duncan and others to seek alternatives, and it was through this that the NSS was born. The NSS did not therefore represent the first attempt to assist struggling yards, but it was a notably different direction in which industry, not the government, took the lead. This new scheme was not brought into existence immediately: for the first year after the TFA was abolished, conditions in the market did not deteriorate markedly, although the pace of new orders remained static. Similarly, although the unemployment rate in shipbuilding actually fell substantially, it continued to remain far higher than the national average, and never returned to 1921 levels.<sup>273</sup> By 1929, however, there was mounting evidence that another large-scale deterioration was imminent: work in progress had fallen by over 40% in a year, and this was exacerbated substantially with the global financial panic that started that autumn on Wall Street.<sup>274</sup> Not only was the prospect of merchant and passenger work in the near future extremely bleak; the renewal of arms limitation at the 1930 Naval Treaty, coupled with the perilous financial situation in Britain, meant that expanding

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<sup>271</sup> ‘Trade Facilities Acts: Deputation from employers in shipbuilding industry’, 15 February 1927, TNA: T160/550/8.

<sup>272</sup> M. Lindberg and D. Todd, *Anglo-American Shipbuilding in World War II: A Geographical Perspective* (Connecticut: Greenwood, 2004), p. 75.

<sup>273</sup> Johnman and Murphy, *British Shipbuilding and the State*, Table 3.

<sup>274</sup> Slaven, *British Shipbuilding*, p. 88.



warship production remained out of the question. As state assistance, friendly or otherwise, was not forthcoming, the NSS scheme for rationalisation – with rather bolder aims than the TFA – was hatched.

The NSS grew directly from the discussions being held in the Shipbuilding Conference (see chapter three) over reviving the industry's fortunes. By the end of 1928, the Conference believed that the best course of action was to instigate a scheme for spreading the small amount of work available around fewer yards, for 'uneconomic competition' through artificially low prices constituted more of a threat to the industry than did the collapse of firms.<sup>275</sup> This scheme was agreed in principle by March 1929 and developed from that point until its official launch in 1930.<sup>276</sup> Thus, in some senses it was a notable departure from those underpinning the TFA, and a reflection of both the economic realities of the day, and the failure of the TFA to revive production. The issue that remained was how to pay for such a scheme. To this end, Duncan, former president of the SEF, who by 1929 had become a director of the Bank of England, wrote in March of that year to the Bank's Governor, Montagu Norman, on behalf of the conference with a request to provide banking facilities and support for the scheme.<sup>277</sup>

Duncan did not have to work especially hard to convince Norman of the merits of the NSS, as the Governor of the Bank of England had been a vocal supporter of rationalisation schemes for some time. As a result, and with Duncan's help, it took just a few weeks for Norman and other senior Bank figures to agree and meet a small conference delegation led by Lithgow and John Barr (controller of the Shipbuilding Conference and WSBC) – there was no government involvement, it was strictly a meeting set up by a mutual contact between the Shipbuilding Conference and the Bank. Here, Lithgow asked Norman for assistance in providing capital to support the new scheme, with a figure of around £2,000,000 mooted. Norman agreed to assist but stopped short, for the time being, of an agreement to provide the money from the Bank reserves.<sup>278</sup> He also stressed that any support would be on the condition that no vast conglomerates were formed in the process which might reduce 'healthy'

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<sup>275</sup> Slaven, *British Shipbuilding*, p. 95.

<sup>276</sup> Slaven, *British Shipbuilding*, pp. 95-6.

<sup>277</sup> 'Securities Management Trust, Letter from Duncan to Norman', 11 March 1929, BOE: SMT/2/280, file 142.

<sup>278</sup> 'Meeting with Norman and J. Frater Taylor', 29 October 1929, BOE: SMT/2/280, file 142.

competition. He was assured that uneconomic competition was the gravest danger yards faced, and that the new scheme was not intended to create larger, unwieldy companies.<sup>279</sup> However, given what has already been discussed regarding John Barr's central role in organising the WSBC (which in one way or another was running a scheme that eliminated 'healthy' competition) it could be suggested that in the case of warship yards, this agreement was never entirely subscribed to.

Another Bank of England director, J. Frater Taylor, was also advising Norman that there was no 'reason why the [industry] could not be put on its feet' as long as there was a 'live force behind the project', and suggested that Norman keep 'pounding at Lithgow' to ensure he stayed involved and focused on the project. It was partly because of Norman's encouragement that Lithgow soon emerged as the live force he was seeking to rationalise the industry, and the two discussed their ideas frequently in the second half of 1929. Lithgow's connection to Norman and Duncan, coupled with his active role in persuading firms around Britain to back the scheme was crucial<sup>280</sup>, and it was thus no surprise when, at the first meeting of the NSS in the weeks following its constitution in February 1930, Lithgow was unanimously elected as its Chairman.<sup>281</sup>

The agreed terms of the NSS were that it existed for 'the purpose of purchasing redundant and obsolete shipyards, the dismantling and disposal of their contents and the resale of sites under restriction against further use for shipbuilding'.<sup>282</sup> By restricting the resale and reuse of sites for shipbuilding for a period of many (typically 40) years, the NSS attempted to ensure that yards would not re-enter a fragile market at the first sign of an upturn. In addition, and unconventionally, it was up to the owners of the yards to declare their firms redundant and to liquidate themselves voluntarily by selling their assets for a 'fair' market price, which was determined by John Barr, who was appointed by the NSS as valuer.<sup>283</sup> Barr's close involvement with the NSS, the Shipbuilding Conference and the WSBC illustrates a great degree of overlap between the membership of three (ostensibly separate) organisations,

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<sup>279</sup> 'Meeting with Shipbuilding Conference', 24 April 1929, BOE: SMT/2/280, file 142.

<sup>280</sup> Slaven, *British Shipbuilding*, p. 97.

<sup>281</sup> 'Meeting of Proposed Subscribers', 28 March 1930, NMM: NSS.

<sup>282</sup> Slaven, *British Shipbuilding*, p. 97; 'Deeds of Covenant, 1930', NMM: NSS.

<sup>283</sup> Murphy, 'Scott Lithgow', p. 48.

although while the NSS had similar motives to the WSBC, in that both were concerned with excessive competition, each responded to the challenge in entirely different ways.<sup>284</sup>

The NSS began life on 27 February 1930 backed by the vast majority – forty six – of the largest shipbuilding firms, including almost all of the WSBC members. Its board of directors included Sir Charles Craven of Vickers, Sir Alexander Kennedy of Fairfield, Sir Frederick Rebbeck of Harland and Wolff, and a number of smaller merchant shipbuilders (including most notably Sir Amos Ayre, then director of the Burntisland Shipbuilding Company, and who would later be both the chairman of the Shipbuilding Conference and Director of Merchant Shipbuilding during the Second World War).<sup>285</sup> Perhaps sensing the possibility of allegations of conflicts of interest<sup>286</sup> and the probable unpopularity of a scheme which closed down yards in areas already experiencing high unemployment, the board immediately applied (successfully) for an exemption to remove the names of the directors from the new company's correspondence.<sup>287</sup> However, the NSS proceeded without having finalised financial arrangements with the Bank of England, although discussions were ongoing. Instead, the scheme only had the comparatively minor sum of £100,000, raised through an issue of £1 shares – far short of the £2,000,000 Lithgow believed it would need to fulfil its goals. This lack of capital meant that when the NSS made their first major purchase, paying £209,000 for the shipyard of the giant company (and WSBC member) Beardmore, it had to go to the Bank of England to borrow the money (secured against the assets of the backer firms) to cover the cost.<sup>288</sup>

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<sup>284</sup> With reference to the section on the WSBC, it is obvious why this was the case. The WSBC had, as has already been discussed, a small membership of firms which had unique capabilities and, most importantly, were the only firms used by the Admiralty for naval orders. Thus, the barriers for entry to this group were so high that an effective rota could be devised for naval orders. Given that the rest of industry was not dealing with the state but instead with private buyers in Britain and abroad for more general classes of ship, such a rota was clearly not possible, and competition had to be removed in other ways. It did not preclude WSBC members being part of the NSS, as their business interests overlapped with passenger and merchant work.

<sup>285</sup> L. Day and I. McNeil (eds.), *Biographical Dictionary of the History of Technology* (London: Routledge, 2013), p. 55.

<sup>286</sup> For example, Lithgow's role as a Clyde shipbuilder had led to the suggestion by some yards that the NSS sterilisation policy was biased towards the health of Clyde shipbuilding over that of North-East of England.

<sup>287</sup> 'Minutes of Meeting', 15 May 1930, NMM: NSS.

<sup>288</sup> Johnman & Murphy, 'Welding', p. 96.

Beardmore had once been the fourth largest British shipbuilding firm in terms of market capitalisation<sup>289</sup>, and with thirteen berths with a theoretical construction capacity of over 100,000 gross tons, it was also (with the exception of the Palmers purchase by the NSS in 1934) the largest yard to be sold to the NSS before 1940.<sup>290</sup> It was also closely connected to the Bank of England, making it a rather unusual case, which requires some explanation: Less than three years before the sale, the Bank had provided the Beardmore company (which included the steel forge in Parkhead) with three quarters of a million pounds to see the firm through its troubles in return for an equity stake in the company. The scheme devised by Norman and Duncan was for the money be used to convert existing loans to other banks – which had little chance of being repaid otherwise – into cumulative preference stock, effectively giving the Bank complete voting control over the firm, which was used to oust the incumbent chairman Lord Invernairn.<sup>291</sup> Interestingly, in 1928 Norman had offered Lithgow (and considered offering Weir) the chairmanship of the firm but, after Lithgow declined the offer to focus on running his own yard, Norman consulted Duncan and instead settled the former director of Coventry Ordnance Works, H.A. Reincke.<sup>292</sup>

By 1930, however, Beardmore's financial situation had deteriorated further, and the Bank's money appeared inadequate to stop the blood-letting. The scrap value of the shipyard in the highly depressed market was barely £30,000.<sup>293</sup> Thus, while the £209,000 the NSS paid to liquidate the shipyard went only a quarter of the way to recouping the investment – and gave up by far the larger part of the company in doing so – it was still a relatively good price, especially given that there were no other interested buyers, and that it allowed the bank to hold on to the marginally healthier steel forge in the process.<sup>294</sup> Indeed, Montagu Norman's secretary noted that 'nothing like these terms would have been obtained had it not been for the interest of [Norman] in the [NSS]; this is one way in which Lithgow has shown his gratitude'.<sup>295</sup> In other words, Norman's financial support for Lithgow's scheme – even if it meant loaning the NSS money to buy the yard from the Bank – allowed for a smooth sale at a

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<sup>289</sup> Slaven, *British Shipbuilding*, Table 3.5.

<sup>290</sup> Slaven, *British Shipbuilding*, Table 4.9.

<sup>291</sup> Hume and Moss, *Beardmore*, p. 211.

<sup>292</sup> Hume and Moss, *Beardmore*, p. 212.

<sup>293</sup> Johnman and Murphy, 'Welding', pp. 96-7.

<sup>294</sup> Memorandum, 30 May 1930, BOE: SMT/2/280.

<sup>295</sup> Memorandum, 30 May 1930, BOE: SMT/2/280.

price which satisfied the owners, satisfied the bank, and removed substantial capacity from the market, satisfying the industry.

While it could be suggested that a ‘cheaper’ option for the firms which backed the NSS would have been to allow Beardmore to collapse, it should be borne in mind that such a course of action would have had adverse consequences. First, an orderly sale was better for the industry’s public relations and investor confidence than an enforced collapse of one of its industrial giants. Secondly, the Bank of England, essentially the NSS’s underwriter, stood to lose hundreds of thousands of pounds should Beardmore collapse, and desired a more positive outcome.<sup>296</sup> More importantly, however, buying Beardmore allowed the NSS to insert the key clause for the restriction of the firm’s shipbuilding capacity for a period of 40 years, whereas liquidation of the company alone offered no guarantees that the huge Dalmuir yard would not re-enter the market when conditions showed signs of improvement.

Of course, liquidating major industrial concerns, even if deemed beneficial for the industry as a whole, was not without side effects. The communities that stood to lose out from a firm’s closure were rather less inclined to see the up side of such brutal cuts in the name of rationalisation.<sup>297</sup> For although many yards employed only a small fraction of their pre-war workforce between 1930 and 1933, a closure could still affect the livelihoods of thousands.<sup>298</sup> As a result, protest, marches and allegations of areas being unfavourably targeted for cuts were frequent. To allow the work of the NSS to be conducted as efficiently as possible and to avoid allegations of conflicts of interest, Lithgow, in addition to removing the public listing of directors, repeatedly demanded (and was able to ensure) absolute secrecy from his board. Individual members were instructed to ‘refrain from talking’ to the press, and told that all external communications, even at AGMs, were ‘at the discretion of Sir James Lithgow’.<sup>299</sup> Indeed, the policy was enforced from 1930 through late 1932, when Lithgow decided to change tack in the face of mounting criticism of the NSS’s work, and to declare some ‘advertising’ of the scheme’s merits might be beneficial.<sup>300</sup> By 1933, Lithgow went further still

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<sup>296</sup> ‘Notes and Memoranda of November 1929’, BOE: SMT/2/280.

<sup>297</sup> The ‘Jarrow March’, where hundreds of unemployed workers marched from the North East coast to London to protest following the closure of Palmers is perhaps the best known.

<sup>298</sup> Johnman and Murphy, *British Shipbuilding and the State*, Table 3.

<sup>299</sup> Minutes of Meeting, 15 May 1930 & 28 January 1932, NMM: NSS.

<sup>300</sup> Minutes of Meeting, 12 October 1933, NMM: NSS.

on this front, indicating that while it was best ‘not to seek chances to enter controversy’, board members should ‘if the occasion arose...not miss the chance to explain the aims of the company’.<sup>301</sup>

However, in the earliest days the NSS simply needed funds to even begin to achieve its goals. To this end, a hugely significant moment was reached on 21 January 1931, two months after the Beardmore deal was concluded, when £1 million in loan guarantees were offered to the NSS through a subsidiary of the Bank known as the Bankers Industrial Development Company (BIDC). The Bank had set this project up the previous year with the aim of financing schemes of reorganisation in industry. The loan was to be made as First Mortgage Debenture Stock, redeemable over 30 years, with an annual interest rate set at 5%.<sup>302</sup> While the BIDC was not aimed solely at shipbuilding, the £1m outlay represented a sixth of its total available funds, making the NSS one of the largest beneficiaries.<sup>303</sup> To pay for the interest on the loan, or if necessary to raise extra capital for the purchase of more yards, the 46 firms backing the NSS agreed to pay 1% on the sale price of all contracts undertaken, back-dated to the end of 1930.<sup>304</sup> With this support agreed, the NSS was able to purchase yards at a tremendous pace: within barely 18 months from the Beardmore sale the total number of berths liquidated reached 82, with a total capacity of 491,000 tons.<sup>305</sup>

Before jumping too far ahead in the narrative, it is important at this point to highlight an important issue linked to earlier discussions in chapter three: how compatible the Admiralty’s grave concerns over maintaining naval shipbuilding capacity and capabilities were with these broader industry rationalisation measures. As already noted, the technological differences between a warship and a cargo ship meant that the problem of idle plant for equipment such as armour and guns was very different from that of an idle slipway in a merchant shipbuilding yard. Thus, the ideal solution to the former problem for the Admiralty was to find a way of sustaining excess capacity should it be required at some future date, while the ideal solution

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<sup>301</sup> Minutes of Meeting, 12 October 1933, NMM: NSS.

<sup>302</sup> Slaven, *British Shipbuilding*, p. 98.

<sup>303</sup> R. S. Sayers, *The Bank of England 1891-1944* (Cambridge: Cambridge University Press, 1976), p. 229.

<sup>304</sup> To put it another way, £5m worth of contracts would have been the minimum amount of work required annually to meet the interest payments. If, however, the previous five years were anything to go on, even depressed market conditions returned more than enough work around the member firms (approximately £25m per annum) to meet the interest payments several times over.

<sup>305</sup> NMM: NSS Minutes, 28<sup>th</sup> January 1932.

for the latter and for the industry as a whole was to find a way to eradicate excess capacity, preferably for a very long time. These competing motivations for support versus eradication could not easily be reconciled, and the NSS therefore had from its inception the potential to conflict with the Admiralty's wishes to see capacity retained. Here, it is significant that the WSBC supported the NSS scheme at least with regard to Beardmore, showing that it was willing to ignore Admiralty desires. Clearly, the firms represented in the WSBC existed as businesses first and foremost; if it made more sense to liquidate capacity through the NSS, as it did for Beardmore, then patriotic concerns about the implications for a future war effort did not feature in the decision making, at least in 1930.<sup>306</sup> As the next chapter will show, however, Manchuria changed this dynamic.

#### 4.6 Conclusions: The WSBC and NSS in the context of shipbuilding before Manchuria

After the Washington Treaty, the British Admiralty, along with every shipbuilding company, naval or otherwise, had to adjust to a new, unfamiliar, and uncomfortable post-war climate. Of these groups, the private naval arms industry was the least able to adapt. Unlike the rest of the shipbuilding sector, and even in the most buoyant of markets, naval shipbuilders relied heavily on one customer, the Admiralty, funded by the government, for a large proportion of their income, and, to fulfil that customer's needs, had built up expensive plant especially during the Great War to meet what was even at the best of times erratic patterns of demand. In the context of enormous financial pressures in the aftermath of the Great War along with unprecedented political support for disarmament, the Treasury pushed successfully to cut expenditure and stabilise the British economy, which meant that previously erratic demand was replaced by consistently low demand (*Nelson*, *Rodney* and the cruiser programme notwithstanding). As a result, the various courses of action pursued by the Admiralty and private industry throughout the 1920s and early 1930s must be interpreted as responses to a crisis the like of which they had never experienced.

Following several unsuccessful attempts by both sets of actors to lobby the government for subsidies or other support, the WSBC was founded in 1926, and was in a way an unintended consequence of the government's lack of foresight with regards to private

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<sup>306</sup> During the discussions for the sale of Beardmore, the question of British 'need' for its naval plant is not a factor. See Minutes, 15 May 1930, NMM: NSS.

industry.. Its evolution was a direct consequence of the Admiralty placing too much trust in the idea that both it and private industry shared the same interests. The reasons for the WSBC going it alone can be boiled down to powerful motivations for self-preservation first and profits second. There was, however, never a complete breakdown in Admiralty-business relations. Instead, the WSBC's members kept up the practice of maintaining close working ties with the Admiralty, sharing staff and information frequently, while at the same time conspiring to form a ring that inflated and fixed prices.

This scheme could only work because of two principles that industry believed would never be invalidated. First, while foreign buyers were welcome to come to Britain for ships, the Admiralty was never in the business of going abroad for orders, and would always call on the services of the same small group of firms whose high levels of technological and other capabilities formed an impenetrable barrier to entry for other companies. This underpinned the WSBC's existence and effectiveness. Second, it is important to note the arms-length approach the Admiralty took to the industry's work. Trust between the Admiralty and Britain's warshipbuilding firms had been developed during the naval arms race with Germany and the Great War, and the Admiralty was therefore not in the habit of inspecting the financial accounts of firms. Price collusion among the firms could, as a consequence, take place and indeed continue for a long period of time. With each successful tender, confidence in the validity of scheme grew on the part of members of the committee. Admittedly, in the years before Manchuria, collusion did not result in greatly inflated prices or massive profits, but this was only because there were not enough orders to go around. As we shall see in the chapters on rearmament, this would change.

For now, though, it is important to examine the reasons for the general lack of attention among scholars towards this group, which are twofold. One is that it was highly secretive, and the members were also particularly good at getting rid of evidence, so that only a few files survive in company archives. The second is that histories of shipbuilding have focused primarily on the Shipbuilding Conference, and treated the firms in the WSBC as a subgroup of it, especially with regard to the industry-wide levy. In fact, the above has shown that the WSBC's operation was quite unlike that of Shipbuilding Conference. In theory, the latter was set up to protect British firms from themselves, so that they could compete effectively in the



market with foreign competitors. For the former, the scheme instead effectively cornered the entire naval shipbuilding market.

The wider point, however, is that the WBSC came into existence and carried out its operations because, unusually, the entire industry sat outside the corridors of political power. It was not an effective lobby group in the 1920s and it realised it could not alter the political currents, so instead had to work within them. The WSBC thus came to exist through *lack* of power and influence as a *defensive* group that was formed for self-preservation rather than patriotism or loyalty to its main customer. Thus, far from being part of a shadowy military-industrial complex that gained influence through lobbying, the WBSC worked at least as much against the government and its main customer by fixing prices as for it by supplying ships. Here, too, it is worth underscoring that aims of the government and those of the military differed substantially after the war, and the two cannot be thought of as part of a single, monolithic state with a unified vision of defence. Indeed, in many ways, between the Washington Agreement and Manchuria, the Admiralty was as much an outsider as industry.

Yet barely two years after the Manchurian crisis the political landscape had, once more, completely shifted. By the end of 1933, some industrialists – although not WSBC members – even sat on subcommittees of the Committee for Imperial Defence and advised on the manufacturing and defensive ‘deficiencies’ which faced Britain. Thus, we must now turn to explain how the shift in British (and global) politics that occurred between the summer of 1931 and the spring of 1932, starting with the formation of a National Government, changed the debate on defence, and altered the landscape for private industry.

## Part Three: The formation of a National Government, the Far East, and the PSOC approach to industry 1931-34

### Chapter Five: From ‘outsiders’ to ‘insiders’, industry and the rehabilitation of the supply planning framework

The three politically tumultuous years that followed the formation of the National Government in 1931 witnessed a fundamental transformation both in the nature of defence planning and the peacetime relationship between the British government and the naval arms industry. Between 1922 and 1931 the debate between Admiralty and Treasury had been comprehensively won by the Treasury’s arguments favouring spending limitations over the Admiralty’s calls for renewal and continued investment, while the CID and its subcommittees had not been called upon to work on pressing matters of national security. However, spurred by the changes in the political situation after the Japanese invasion of Manchuria, the CID adopted a far more central planning role and its subcommittees contributed a great deal towards understanding British defensive deficiencies by 1934. As a result, from this point it was the CID, comprised of all three fighting services, and not just the Admiralty, which became the vehicle for articulating Britain’s defence needs to the Cabinet.

This undertaking would result in industrialists playing a key role in advising, and then shaping, defence policy for the first time. On the other hand, by 1934 the Admiralty also began to compete heavily with the developing Air Force for a share of the defence budget. Thus, while the narrative to this point has stressed the private industry’s existence outside of the state planning framework and consequently focussed on industry’s responses to the crises in the 1920s and the Admiralty-Treasury disputes, from 1931 onwards the increasing importance of the CID warrants a more detailed examination of the process that gave new meaning to defence planning, and subsequently led to approaching industrialists for assistance. It will be suggested, ultimately, that this sequence of events benefitted both the businessmen involved and the supply organisation of the CID.

### 5.1 Overview: Constraints and pressures

Between Washington and Manchuria, support for the navy had been occasionally vocal but rarely consistent. As demonstrated in chapter four, Winston Churchill argued in favour of increased naval expenditure almost as often as he argued against it before between 1918 and 1931, first supporting expansion of the fleet before succeeding in slashing naval estimates and finally implementing the Ten Year Rule for perpetuity.<sup>307</sup> This sort of behaviour was not unique to him: past, present and future Prime Ministers Stanley Baldwin, David Lloyd George and Ramsay MacDonald had periods on both sides of the divide, at times supporting the centrality of the navy to British defence, and at others angering the Admiralty and its backers for ‘dangerously imperilling everything for which the Royal Navy stands’.<sup>308</sup>

This shift in the rhetoric from political heavyweights serves to highlight the severe constraints on domestic, foreign and economic policy which they were operating under before 1930. In short, it was one thing to commit to the principal that the Royal Navy was central to the British way of life, so long as it did not mean spending vast sums on it. In MacDonald’s case, his Labour party were a hotchpotch of different factions and organisational interests<sup>309</sup>, marked with strong anti-war tendencies, and as such harboured deep divisions throughout the disarmament period, divisions which at all times required careful handling in order to stop the party from fracturing.<sup>310</sup> Similarly, Baldwin’s party had split in 1929 along lines of financial priorities, just one of which was how best to divide and settle the armed forces budget.<sup>311</sup> The difference between these years and those post-1931, was that while the domestic political and economic pressures remained (and, in the latter case, intensified after 1929), the geo-political landscape shifted substantially and as such increased the importance of future defence planning. This was what underpinned the change in the relationship between industrialists, the State, and private armaments manufacture.

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<sup>307</sup> Bell, *Churchill and Seapower*, pp. 133-4.

<sup>308</sup> Neidpath, *Singapore Naval Base*, pp. 64-5.

<sup>309</sup> K. Morgan, *Ramsay MacDonald* (London: Haus, 2006), p. 45.

<sup>310</sup> R. Vickers, *The Labour Party and the World: The Evolution of Labour’s Foreign Policy 1900-51* (Manchester: Manchester University Press, 2004), pp. 80-4.

<sup>311</sup> P. Williamson ‘Safety First: Baldwin, the Conservative Party, and the 1929 General Election’, *Historical Journal* 25 (July, 1982), p. 392.

As a result of such competing motivations, pressures and constraints, it is unsurprising that historians have taken many different views on the problems and solutions to the economic and political issues of the day.<sup>312</sup> Thus, if one considers the constraints and shifting political rhetoric alongside the relatively rapid shift from no discernible external military threats in 1929 to a situation in where the Japanese, Germans and Italians could all be considered potential enemies by 1935, then it becomes apparent that this is a period in need of disentangling in order to understand the changes in defence planning and its impact upon industry. It was only after Manchuria where the CID – and particularly its Principal Supply Officers' Subcommittee – emerged from the shadows of the 1920s and took on a significant role in defence planning, devising methods to tackle deficiencies while the world around it constantly shifted. It is here where some industrialists went from outsiders to insiders planning for war in partnership with the state while others formed defensive rings to secure the future of their firms. Put simply it is this period where the 'pivot' between total exclusion and limited inclusion of industry occurred.

This section thus considers industry and politics between the fall of the Labour government in mid-1931 through to the first report of the CID's 'Advisory Panel of Industrialists' in 1934. It considers primarily the formation of a 'government of national interest', Manchuria and the first CID 'defence deficiency' programme which followed it, and the subsequent approach to civilian industrialists. Like the previous section, it comprises two related but separate chapters. The first covers the changes which took place in 1931 and the CID deliberations on how to approach industry which took place in 1932 and 1933. The second concerns the actual approach to industry and the early work of the Advisory Panel from 1933, and the impact this early work has upon related developments in industry, most notably the NSS scheme.

Four arguments are thus put forward for the years 1931-4. Firstly, planning and hypothesising *were* valuable to the later rearmament drive, and that this need not be linked just to policies or programmes that came to fruition. Significantly, whether plans were implemented or not, it was in these years the initial lines of communication between planners

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<sup>312</sup> See K. Neilson, 'The Defence Requirements Sub-Committee, British Strategic Foreign Policy, Neville Chamberlain and the Path to Appeasement', *English Historical Review* CXVIII (June, 2003), pp. 670-674 & P. Bell, *Chamberlain, Germany and Japan, 1933-4* (London: Macmillan, 1996), pp. 107-44.

and industry opened and began to function. Indeed, it was in 1932 that deficiency planning started, not – as some historians have suggested<sup>313</sup> – late 1933 once Nazi Germany had withdrawn from the Geneva disarmament conference. Secondly, certain industrialists, parts of the arms industry and state actors definitely and demonstrably benefitted from each other through these channels, and while this has an element of a conspiracy about it, it was in fact much more complex. Thirdly, this period is unique in a number of ways: the specific nature of the threat in 1931 and 1932, the costs involved, and the time needed to remedy deficiencies meant it was at the outset a *naval* question. Indeed, one could reasonably suggest that had Germany been identified by Britain as the ultimate threat in 1931 instead of concentrating first on Japan, the composition and functioning of the CID's partnership with the small industrial elite that it brought into the fold – and indeed the very nature of British rearmament – may well have been entirely different. Finally, any cooperation between industrialists and the CID was only possible because of the structure of the National Government, itself a product of an economic catastrophe unlike anything witnessed before that point. The National Government's cautious approach and inherent indecisiveness explain the nature and length of defence planning and why there was so little *material* progress in the years that followed Manchuria. Indeed, this theme of planning without progress recurs throughout the decade.

### 5.2 The Royal Navy and spending in 1931

From the Royal Navy's perspective, the key issue in the early 1930s was Japan. The Royal Navy was a young and large fleet at the end of the Great War, but by 1930 had received comparatively minor funding for more than a decade.<sup>314</sup> As the 1920s approached their conclusion, the Imperial Japanese navy, the third largest in the world, added another dimension to the problem, as Japanese interests in China contended with Britain's own in East Asia. Although Churchill had successfully argued in 1925 that the Far Eastern problem did not resemble the kind of crisis Britain faced with Germany before the Great War, by the end of the decade Japanese agitation for increased influence in China was causing increased concern at

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<sup>313</sup> B. J. C. McKercher, 'From Disarmament to Rearmament: British Civil Military Relations and Policy Making, 1933-4', *Defence Studies* 1 (I) (July, 2001), pp. 21-48 & K. Neilson, 'The Defence Requirements Sub-Committee, British Strategic Foreign Policy, Neville Chamberlain and the Path to Appeasement', *English Historical Review* 118 (477) (2003), pp. 651-684.

<sup>314</sup> Gordon, *British Seapower*, pp. 73-4.

the Admiralty.<sup>315</sup> In late 1931, the Japanese invasion of Manchuria escalated the ‘problem’ of the Far East into a full scale diplomatic crisis – more of which is discussed below. Moreover, the key British outpost – the Singapore naval base – had suffered under the same cuts in funding that had helped weaken Britain’s private naval manufacturers, and as such had not fully recovered from the cancellation of works in 1924.<sup>316</sup> It was thus underprepared should Britain wish to directly intervene in China.

Underpinning these problems was the London Naval conference of 1930. Compared to Washington, London was more of a modest revision to existing terms – partly because Japan and the United States would not concede an inch in their respective demands.<sup>317</sup> Thus, the most that could be agreed was for an official distinction drawn between ‘heavy’ and ‘light’ cruisers (8 inch compared with 6 inch guns) for the first time, while tighter restrictions were drawn on the sizes of submarines. Perhaps most notably, the 5:5:3 ratio between Britain, the United States and Japan was replaced by a 10:10:7 ratio for all except capital ships (which remained at 5:5:3) and submarines (5:5:5), effectively allowing Japan more room for construction of cruisers and smaller vessels while holding Britain and United States at parity. Like Washington, the London agreement allowed the United States and Japan to undertake some increase in the pace of construction, as the tonnage limits for cruisers (the United States) and capital ships (Japan) were made higher than their current levels – indeed the United States used these new limits to partially offset the effects of the depression, a notably different tactic to the disarmament-obsessed Labour party in Britain.<sup>318</sup> This did not, however, put an end to Japanese ambitions in China, although it did strengthen Japanese naval power relative to Britain’s in the region.

Thus, while Britain’s naval position in 1930 was therefore, at least in terms of money spent, broadly similar to the post-Washington period in the 1920s, the geopolitical shifts, particularly tension in the Far East, added a new urgency to the Admiralty’s demands for fleet modernisation. However, these were still being made in a period of powerful political and economic constraints surrounding disarmament which had existed since Versailles, and which

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<sup>315</sup> J. H. Maurer, ‘Winston has gone mad: Churchill, the British Admiralty and the Rise of Japanese Naval Power’, *Journal of Strategic Studies* 35 (VI) (October, 2012), p. 793.

<sup>316</sup> Neidpath, *Singapore Naval Base*, pp. 120-1.

<sup>317</sup> Neidpath, *Singapore Naval Base*, pp. 118-9.

<sup>318</sup> Gibbs, *Grand Strategy*, pp. 30-1.

the Labour Government had little to no interest in altering, admittedly for both ideological and economic reasons. To understand why this scenario changed in the second-half of 1931, one must understand the nature of Labour's collapse, and the National Government's rise.

### 5.3 Origins, structure and economic background of the National Government, 1931: 'Not a coalition in the ordinary sense'

The National Government was born from a crisis caused by economic pressure fracturing an already weak Labour government that had been in power since 1929.<sup>319</sup> However, at no point since Ramsay MacDonald took over as Prime Minister had the private naval armaments industry any cause to believe in his party's business proposals. While unemployment had actually fallen in the year before the Wall Street Crash<sup>320</sup>, the Labour Party had pinned its pre-election hopes on a continuation of this revival, and had only proposed to 'stimulate the depressed export market', while pursuing the 'drastic reduction in armaments' which was 'long overdue'.<sup>321</sup> This misunderstood and misrepresented the role of naval arms, and rather crudely bundled it together with merchant shipbuilding, assuming an upswing in one would amply compensate from the other, which it did not. Little had been learned since Washington.

When severe economic problems split the party and precipitated the fall of the government, what followed was a coalition that gained the largest landslide in parliamentary history: 554 seats were won by candidates of all parties backing the new coalition National Government, totalling over 90% of the votes cast, while the dissenting Labour MPs who stood in opposition were decimated. However, despite MacDonald returning to lead the new government, over 470 of these seats were held by Conservatives – who had on their own received more than 55% of the popular vote.<sup>322</sup> It had an undeniable mandate to govern and, crucially, despite the financial restrictions which necessitated the coalition in the first place, was no longer mainly comprised of MPs who had so staunchly backed disarmament. This unique political situation cannot be underestimated, as it is highly unlikely that industrial elites

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<sup>319</sup> Williamson, 'Safety First', pp. 408-9.

<sup>320</sup> Slaven, *British Shipbuilding*, pp. 88-9.

<sup>321</sup> 'Labour's appeal to the Nation' (Labour Party Election Manifesto, 1929) Warwick University Digital Archive [<http://contentdm.warwick.ac.uk/cdm/ref/collection/tav/id/1781> – Accessed 19.11.2013].

<sup>322</sup> Berkeley, *The Myth that will not Die*, p. 116.

would have been discussed or approached at the same time or in the same way under had the previous government emerged intact from the economic crisis of 1931.

This event is important for war planning when taken in tandem with the events unfolding in Manchuria, because Manchuria opened up a grave naval threat without removing the restrictions set by the London Treaty or the economic constraints that had helped cut the naval budget. Indeed, the worsening economic situation had already had grave implications for the Admiralty's budget. Naval expenditure had recently been cut in 1931 to its lowest level since the war, £52.5m.<sup>323</sup> This was £5.7m – or 10% – lower than the last year of the previous Conservative government, and while it still represented over 40% of the total sum available for all three services, a cut of this magnitude in peacetime coupled with the overheads reserved for the administration and salary costs of the Admiralty (significantly more than half of the total sum) meant the money available for new ships was slashed virtually to the bone.<sup>324</sup> When the First Lord of the Admiralty, A.V. Alexander, had introduced the navy estimates to Parliament, he noted:

I have been pressed by the shipbuilding industry on more than one occasion recently that, in view of the depressed state of that industry, we should anticipate naval building of the next few years; but both from the point of view of the financial position and from the fact that such an expedition of naval building would prejudice the negotiations for disarmament, it is impossible for me to accede to such a request.<sup>325</sup>

As a result, 1931 was the second worst year for naval construction during the entire period between the wars, but also one where a new naval threat emerged.<sup>326</sup> When one understands this intractable set of problems, the context behind the discussions for industrial cooperation that follows becomes much clearer.

#### 5.4 Japan, Manchuria and British Naval Defence

In the period between the National Government's inception in late August and election success in October, Japanese forces invaded the Manchuria region of North-eastern China, annexing it and declaring a puppet state.<sup>327</sup> Japan, like the economies of Britain, America and

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<sup>323</sup> See Table 3.1, above.

<sup>324</sup> See Johnman and Murphy, *British Shipbuilding and the State*, Table 6.

<sup>325</sup> Hansard, HC Deb. 11 March 1931, vol. 249, c1210.

<sup>326</sup> Johnman and Murphy, *British Shipbuilding and the State*, pp. 55-7.

<sup>327</sup> Gibbs, *Grand Strategy*, p. 75.



Germany, had been badly crippled by the ongoing economic crisis.<sup>328</sup> The downturn in international trade was exacerbated by China, its second largest market, boycotting Japanese goods. The boycott was directly linked to the question of Manchuria, where the Chinese government alleged Japanese encirclement of the important transport (and economic) artery, the South Manchurian Railway. The crisis began in earnest in September, 1931 after Japanese forces enacted a swift invasion to secure their country's political and economic interests.<sup>329</sup> Over the following months, the situation worsened, and Japan used an attack in Shanghai on Japanese nationals by a Chinese mob in January 1932 as a pretext for strengthening naval forces around the city, leading to open conflict until March. Moreover, while Manchuria was undoubtedly of international significance, it was the resultant the naval blockade near Britain's interests in Shanghai that was the most serious aspect of the problem.<sup>330</sup>

The National Government now found itself in a difficult position: public opinion both in Britain and internationally demanded that the League of Nations make sanctions (although it should be noted that few were in favour direct of military action) against Japan for taking the law upon itself by invading a sovereign state, while British ministers were anxious to avoid instigating any moves which could entangle Britain in a complex problem which might lead to further military involvement as a belligerent in the Far East.<sup>331</sup> The reduced strength and poor state of British defences in Hong Kong and Singapore was a primary motivating factor in the British decisions which followed. As hostilities continued around Shanghai, the Permanent Under Secretary of the Foreign Office, Sir Robert Vansittart, noted in a memorandum that 'We are incapable of checking Japan in any way if she really means business and has sized us up, as she certainly has done... Therefore we must eventually be done for in the Far East'.<sup>332</sup> This assessment of British weakness in the face of new threats was to be highly significant in the CID deliberations that followed.

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<sup>328</sup> M. Shizume, 'The Japanese Economy during the Interwar Period: Instability in the Financial System and the Impact of the World Depression', *Bank of Japan Review* 2 (May, 2009), pp. 4-5.

<sup>329</sup> Gibbs, *Grand Strategy*, p. 74.

<sup>330</sup> Neidpath, *The Singapore Naval Base*, p. 123.

<sup>331</sup> Neidpath, *The Singapore Naval Base*, p. 124.

<sup>332</sup> Vansittart minute, 1 Feb 1932, DBFP II no. 282 & I. Nish *Anglo Japanese Alienation 1919-52* (Cambridge: Cambridge University Press, 2010), pp. 39-40.

Vansittart's view was reinforced in a report by the CID Chiefs of Staff (CoS) – a subcommittee comprising the First Sea Lord, the Chief of the Imperial General Staff and the Chief of Air Staff – who believed that even if emergency action was taken immediately the bases would fall before a fleet capable of defending them could be formed and dispatched to the area.<sup>333</sup> The Cabinet, at a series of meetings in March, agreed while the situation was alarming, Britain was not militarily, economically or financially prepared for a war in the Far East unless assistance from the United States – a highly remote possibility – was forthcoming.<sup>334</sup> Essentially, Britain was forced into conceding Japan's 'legitimate claim' in China, for it was unable to make the naval commitment – because of earlier policy decisions – of deterring or engaging the Japanese fleet.<sup>335</sup>

The complex web of foreign policy that surrounded the Far Eastern question – like the composition and workings the National Government in Britain – is well known to diplomatic and political historians, and space does not exist for discussing it in full here. However, the important fact which is very much worth highlighting is the change that Manchuria caused in the nature of defence planning. Manchuria highlighted Britain's defensive deficiencies, and the National Government clearly started taking such deficiencies seriously, but did not have the economic means or the public support for any large-scale rearmament. The first White Paper on defence which alerted the public and much of the business community to the possibility of rearmament was not published until March 1935, more than three years after Manchuria.<sup>336</sup> This is important to keep in mind, as what happened between January 1932 and the White Paper at the CID was therefore shrouded in a high degree of secrecy, and not reported in the press or known by the vast majority of industrialists. Indeed, the term 'planning war, pursuing peace', which has been applied to America between the wars, is also not too far from what happened in the years between 1932 and 1934 in Britain.<sup>337</sup> The public, through organisations like the National Peace Council and the League of Nations Union, which had together hundreds of thousands of subscribers, remained broadly against rearmament and

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<sup>333</sup> Vansittart minute, 1 Feb 1932.

<sup>334</sup> Gibbs, *Grand Strategy*, p. 79.

<sup>335</sup> Neidpath, *The Singapore Naval Base*, p. 124.

<sup>336</sup> *Statement Relating to Defence*, March 1935, Cmd. 4827.

<sup>337</sup> P. Koistinen, *Planning War, Pursuing Peace: The Political Economy of American Warfare 1920-39*, (Lawrence: The University Press of Kansas, 1996).

armed intervention before 1935, which only served to further constrain the freedom for political manoeuvre than the National Government had. As a result, the need for effective defence planning – preferably by spending as little money as possible and in a way that attracted as little attention as possible – was paramount.

### 5.5 Abandoning the Ten Year Rule and Restarting Industrial Cooperation

The first, and most notable, effect of Manchuria on policy was the beginning of the process which led to the cancellation in March 1932 of the ‘Ten Year Rule’, which had governed strategic thinking since 1919. The assumption that there would not be a major war for at least another decade – renewed annually until Churchill made it self-perpetuating in 1928 – was thought by the CoS subcommittee to be outdated and in need of revision.<sup>338</sup> The subcommittee thus produced a report which warned Cabinet that, in the event of conflict in the Far East, British defences were in such a serious state that they were (with special reference to the Singapore base) ‘completely inadequate’.<sup>339</sup> For instance, the report noted that no vessel larger than a light cruiser was stationed in Singapore, Hong Kong or in the Huangpu River – the three stations most likely to be in the thick of any action in the region. The report warned that if these bases were to be lost, so too would be British naval supremacy east of India, leaving ‘our vast territorial and trade interests in the Far East as well as the coastline and communications with our Dominions and India, open to attack’.<sup>340</sup>

Although these bases were extremely far from home waters – nearly six weeks’ sailing from Europe – and as such needed to be able to withstand attack for a longer period of time without naval support, the report was nevertheless also critical of the state of defences closer to home. The CoS stressed that throughout the Empire naval defences were far from acceptable, even for the most basic tasks of protecting critical overseas trade lines and communications, and the problem was not just confined to bases, but also the number and quality of fighting vessels. The Ten Year Rule, the report’s authors argued, had been an ‘insurmountable barrier’ to taking the necessary steps to rectify the problems facing the Royal Navy and wider British Imperial defence, and its continued adoption for the previous thirteen

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<sup>338</sup> ‘Imperial Defence Policy’, Annual Review by CoS, CoS 295, 23 Feb 1932, TNA: CAB23/70.

<sup>339</sup> ‘Imperial Defence Policy’.

<sup>340</sup> ‘Imperial Defence Policy’ & Gibbs, *Grand Strategy*, p. 78.

years had lulled the public into a false sense of security and even ignorance as to the condition of the armed forces and caused the public to underestimate the potential for conflict well within the ten year timeframe.<sup>341</sup>

The CoS report was placed in front of the CID, and quickly accepted, in March 1932. The report brought into focus the ‘mistakes’ that had allowed bases and ships to become obsolete in the decade since 1922. However, in the years that had followed, the country relied on accumulated stocks of weaponry and ensuring expenditure on upkeep was kept to a minimum, something that had a degree of economic and political rationality in the 1920s. But, it also had profound side effects. Thus, when the Chiefs of Staff highlighted the deficiencies to the CID in 1932, they not only had to convince the Treasury of the need to take action starting immediately, but also had to take into account in their immediate planning the erosion of industry and skills which had occurred over the previous ten years.<sup>342</sup> Japan was therefore not conceptualised as an imminent and major threat to British security by the CID even after the incident in Shanghai – the report was as much about the long-term decline of defensive capabilities as it was about a war with Japan over China. Manchuria is thus better thought of as an event which prompted a wide re-evaluation of the condition of British defences across the board and brought the question of armaments back to the table for the first time since the ‘Cruiser Crisis’ seven years earlier. The larger and longer-term impact of Manchuria in 1932 was to start the ball rolling on the question of deficiencies, and afford much greater attention to industrial requirements, which had been largely ignored since the end of hostilities in 1918. In this sense, it was a highly significant point in British war planning.

Cabinet officially abandoned the Ten Year Rule on 23 March, 1932. Once more though, finance had to be considered first and public opinion second. The Cabinet meeting which formally abandoned the rule stressed that doing so did not mean increasing expenditure; nor did it mean abandoning the official policy of disarmament – still ongoing via conference in Geneva.<sup>343</sup> It could be seen a tokenistic or even meaningless gesture: the Ten Year Rule had remained a secret since its inception and as such the only outward sign of a change in policy

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<sup>341</sup> It should also be noted that the report, while mostly focussed on naval defences, also criticised the RAF and Army programmes for falling ‘far short’ of the level needed for sufficiency.

<sup>342</sup> Gibbs, *Grand Strategy*, p. 80.

<sup>343</sup> C. M. Bell, ‘Winston Churchill and the Ten Year Rule’, *Journal of Military History* 74 (Oct, 2010), pp. 527-8.

would have been the simultaneous abandonment of the (very public) commitment to disarmament, which the government was not prepared to do.<sup>344</sup> However, on the other hand, this was a significant moment, for – in the minds of policymakers, if not the public – the hypotheses on which imperial defence was framed were now no longer based on the idea that there would be no major war for a decade, and progress could be made to tackle deficiencies.

Just how to do that, though, was a major issue, and, as in the case of the cruiser debates in the 1920s, the Treasury weighed in with a clear and persuasive case centred on financial limitations. It argued that even had the bases been fully reinforced some years before and thus able to withstand attack until a fleet, modern or otherwise, could be readied in the Far East, Britain was in no position economically to sustain any sort of prolonged conflict and the question of improving the bases was moot until such a point where the economy had regained a sound footing. The Cabinet, unsurprisingly, also took this view. Furthermore, members of the Cabinet believed that an agreement to reinforce bases would also mean stationing larger, more advanced warships in the Far East, and quite apart from the costs involved the resulting increase in arms manufacture would also raise legitimate questions at the Geneva conference over the sincerity of British disarmament promises.<sup>345</sup> Importantly however, the Prime Minister (albeit with more deliberation and more delay) instructed the CID to prepare a report showing the ‘position of the private armaments industry in our system of Imperial Defence’ and the ‘position today compared with pre-war times’, with a comparison of foreign armaments industries.<sup>346</sup> Although this was a long way from a commitment to address the deficiencies that existed, it was the first serious attempt post-Manchuria towards understanding them.<sup>347</sup>

As a result the official historian of rearmament has claimed the National Government were guilty of ‘unbelievable tardiness’ in understanding the implications of the warnings it was being presented with and taking action to rectify the problem.<sup>348</sup> There is, however,

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<sup>344</sup> Gordon, *British Seapower and Procurement*, p. 107.

<sup>345</sup> Gibbs, *Grand Strategy*, p. 81.

<sup>346</sup> ‘The Position of Private Armaments in British Defence’ PSO359, 10 March 1933, TNA: CAB60/13. Note: PSO357 from 6 March has an identical title and refers to the same reports.

<sup>347</sup> For the purposes of this work, the third question on foreign competitors is not discussed in great detail, as it was sent to the ‘industrial intelligence on foreign countries’ subcommittee for further analysis.

<sup>348</sup> Gibbs, *Grand Strategy*, p. 80.

another interpretation. By raising the usual problems of finance and public opinion, while accepting the recommendations of the report in principle, the government shifted attention onto the remaining part of the conundrum: industry. Compared with rearming, which was constrained by finance and public opinion, the problem concerning the erosion of plant and skills was one where steps could be taken by the CID to examine the issues without the pitfalls of being publicly seen to be belligerent or financially irresponsible. In theory this could have allowed a faster and more efficient rearmament in the future without attracting attention at present. Such a move could not be done without some cooperation with industry, which did, of course, raise its own complications. Nonetheless, this was at least an area where there was at some prospect of progress being made under the political and economic climate of the time. The implications of this shift towards cooperation are discussed in the next chapter, but first it must be outlined how the decision was taken to approach industry, and, once that was done, how a small industrial elite was selected, approached and became involved in the higher echelons of British war planning.

#### 5.6 Contingency Planning at the CID, 1932-3

The escalation of the crisis in the Far East was immediately noted in the CID's subcommittees, which had been diligently keeping abreast of Japanese developments since the late 1920s.<sup>349</sup> In this respect, the cancellation of the Ten Year Rule had given the work of subcommittees like the Principal Supply Officers Committee (PSOC) renewed meaning. For although the committee was formed in the early 1920s to coordinate the supply needs of the three forces, there was virtually no point before 1932 where its work had any real prospect of being immediately useful. Indeed, when the PSOC had investigated the question of shipbuilding requirements in the first year of a future war in 1929, it quickly abandoned the project and focused on other tasks.<sup>350</sup> However by the time the Prime Minister acted on the Chiefs of Staff's warnings of deficiencies, steps were already underway in the PSOC to investigate the existing productive capacity available for defence.<sup>351</sup> As one member later put

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<sup>349</sup> 'Sixth Annual Report of the Principal Supply Officers Committee', Appendix G, PSO(SB)101, 12 December 1929, TNA: CAB60/35.

<sup>350</sup> This was not perhaps as significant as it appears – the PSOC busied itself with many loosely related and hypothetical issues in the 1920s without any longer term defence objective defined. 'Labour Requirements' PSO(BT)42, 10 January 1929, TNA: CAB60/66.

<sup>351</sup> 'Minutes of the Supply Board' PSO(SB) 24<sup>th</sup> Mtg., 11 October 1932, TNA: CAB60/30.

it, 'the limiting factor was [no longer] the lack of something to investigate, but the lack of staff for investigations'.<sup>352</sup>

However, their work in the 1920s had still given them something of a head-start. Indeed when Maurice Hankey, the secretary of the CID, initiated proceedings towards investigating the state of industry, he immediately circulated the two previous annual reports of the PSOC which had already referenced the problem explicitly.<sup>353</sup> In other words, the problem was not with the PSOC's work, but rather that Cabinet had taken little notice of it for long periods. Manchuria was not so much a fundamental change in Supply Organisation – the structure remained the same – but a change in the Cabinet's attitude towards supply, which in turn gave the PSOC new purpose.

In the PSOC annual report for 1930/1, produced before Japan had invaded Manchuria, private manufacturing capacity was already being referred to as a 'problem of peculiar magnitude and difficulty' with particular attention being drawn to the lack of 'technical knowledge and trained personnel', and the issue of 'expansion capacity [being] progressively reduced as peace time orders for munitions continue[d] to fall off'.<sup>354</sup> In the following year's report, produced in summer 1932, special reference was made to the 'contraction in the naval sphere of production capacity [as a] number of yards have been dismantled<sup>355</sup> and others are likely to be closed down'. It also recognised that any 'special forms of assistance' would require 'political considerations outside the scope of this Committee'.<sup>356</sup>

Building on annual reports, and in response to MacDonald's request, the Controller of the Navy, Rear Admiral Forbes, produced a second up-to-date document detailing the Admiralty's

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<sup>352</sup> 'Minutes of the Supply Board' PSO(SB) 30<sup>th</sup> Mtg., 25 October 1933, TNA: CAB60/31.

<sup>353</sup> 'The Position of Private Armaments in British Defence', PSO359, 10 March 1933, TNA CAB60/13 (these were PSO318 and PSO350). This also further illustrates the earlier point about the Labour government: the PSOC, to its credit, had kept up to speed with the changes in British armament manufacturing capacity even when there was clearly no political will to act on it. As a result of this work, they were able to respond to a Cabinet request immediately.

<sup>354</sup> 'Extract from the Eighth Annual Report of the Principal Supply Officers Committee', PSO318, 31 July 1931, TNA CAB60/12.

<sup>355</sup> The term 'dismantling' is important, since this is potentially more serious than a yard that has gone out of business. It was, in effect, a direct reference to the work of the NSS in sterilising capacity and removing the possibility, despite the merits of industrial rationalisation, of rapid reactivation in a national emergency.

<sup>356</sup> 'Extract from the ninth Annual Report of the Principal Supply Officers Committee', PSO50, 30 July 1932, TNA CAB60/13.

estimated dependence on private firms in war time. Again, this was based upon the hypothetical contingencies which the PSOC was working under, set by the Chiefs of Staff's view of the most pressing threat to British security. Forbes pointed out that not all firms they used were 'armament' firms in the narrower sense, since 'their existence in peace time does not entirely depend on the maintenance of orders for equipment'.<sup>357</sup> The list gave cause for concern: 95% of hulls, 98% of engines and 100% of armour plate came from private firms, as did 70% of guns and 100% of gun mountings.<sup>358</sup> Moreover, although the Admiralty had only lost one firm from the pool of hulls and engine manufacturers since the war, it had lost two of five from armour, two of four from guns and two of three from gun-mounting in the same time-frame.<sup>359</sup> Although not explicitly listed by the Admiralty, the two gun making firms which collapsed in the period from 1925-33 were Beardmore and the Coventry Ordnance Works. In other words, for some components on which there was already 100% reliance in the previous war, the pool available to meet the same task in the next was in some regards much smaller than it had been a decade beforehand. Moreover, it should be borne in mind that in 1914 Britain was in the midst of extended naval race with Germany, which meant the firms involved possessed the latest equipment and technical knowledge. In 1933, not only were they far weaker in this regard, the fleet itself was older and in more obvious need of modernisation. In many ways therefore, the task was even greater than the numbers made out.

The third part of the Prime Minister's request, namely Britain's comparison with foreign countries, does not require much elucidation here. However, there is one further (and otherwise separate) investigation by the Sub-Committee on Industrial Intelligence in Foreign Countries which has some content worth noting. This showed that Italy now had as many ships and submarines under construction – thirty – as Britain, and more specifically, Italy had two orders for large and technologically complex ships to Britain's none.<sup>360</sup> The situation had arisen primarily because Italian yards had succeeded in winning tenders ahead of British yards for numerous foreign naval contracts.<sup>361</sup> Moreover, other rivals, including Japan, were

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<sup>357</sup> 'Note and Statement by Third Sea Lord and Controller', PSO359, 10 March 1933, TNA: CAB60/13.

<sup>358</sup> 'Note and Statement by Third Sea Lord and Controller', p. 1.

<sup>359</sup> 'Note and Statement by Third Sea Lord and Controller', p. 1.

<sup>360</sup> 'Position of the Private Armaments Industry in Imperial Defence – Report by the Sub-Committee on Industrial intelligence in Foreign countries', PSO 361, 8 March 1933, TNA: CAB60/13.

<sup>361</sup> 'Report by Sub-Committee on Industrial Intelligence in Foreign countries', p. 7.



becoming stronger. The Japanese Admiralty owned 12 factories, and were now not only self-supporting, but due to enter the export market.<sup>362</sup> This prompted the committee to comment that there was ‘no doubt that the capacity of this country to build warships and produce munitions has been very substantially reduced since 1914’ both in real terms and relative to rivals, and it blamed the Washington and London treaties, the existence of ‘large stocks of equipment which are being used up but not replenished’, and the lack of foreign orders for the decline.<sup>363</sup> It concluded that the results of this decline had been to ‘gravely prejudice the ability of this country to make warships’ and, perhaps more worryingly, had ‘dispersed the necessary technical staff’.<sup>364</sup>

Perhaps the most important part of the report was its underlining of the fact that even the guns for the two large Washington Treaty battleships (HMS *Nelson* and HMS *Rodney*) had been delayed because of the lack of skilled men able to design and make gun mountings. So, even during relatively ‘lean’ years for arms orders, forges were forced to recall pensioned members of staff to oversee and instruct the inexperienced younger generation who had never been given the chance to work on such contracts before. It concluded by stating that, in marked contrast to Britain’s own position, ‘no foreign country, with the exception of those defeated in the last war, has the capacity to manufacture munitions been reduced, compared with 1914’.<sup>365</sup> In short, the two new papers – coupled with the earlier PSOC annual reports – were four documents telling the same story very clearly from different angles, and were an absolute validation of Beatty’s grim predictions of more than a decade before.

### 5.7 The Supply Board and Approach to Industry, 1932-3 – Virtual Reality

Of course, pointing out the relative weaknesses that existed was only one half of the battle. In the absence of National Government will to assist industry or place orders, there was still the task of finding other ways to improve industrial organisation should rearmament be required at short notice. The actual task of planning for this was undertaken by the Supply Board (see Table 5.1 below, and for its place in the CID structure, refer to Figure 2.1), which reported to the PSOC and was composed of senior Air Force, War Office and Admiralty

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<sup>362</sup> ‘Report by Sub-Committee on Industrial Intelligence in Foreign countries’, p. 28.

<sup>363</sup> ‘Report by Sub-Committee on Industrial Intelligence in Foreign countries’, p. 31.

<sup>364</sup> ‘Report by Sub-Committee on Industrial Intelligence in Foreign countries’, p. 31.

<sup>365</sup> ‘Report by Sub-Committee on Industrial Intelligence in Foreign countries’, p. 7.

figures, but had no representation in 1932 from industry or business. Since 1924, the board's remit had been to consider broadly the potential problems of supply in Britain and the dominions during a future war and offer some solutions to likely issues before an emergency arose. This planning body could not and did not fully eradicate these problems, as it had no budget and operated in secret, like the rest of the CID. The Supply Board thus lacked the ability, for example, to remove industrial bottlenecks through investment in the expansion of facilities. Instead, it existed to think through problems and report upwards.<sup>366</sup>

As already noted, the primary difference between the PSOC and its subordinate Supply Board was the latter's narrower focus on explicitly military items. The PSOC considered the problem from a broader perspective, taking in civilian supplies, contracts and anticipatory purchases.<sup>367</sup> The Board's task was nevertheless still enormous in 1932: it coordinated and organised the provision of everything from entire warships down to medical supplies, which led to the creation of yet more and increasingly specialised subcommittees to consider the supply of each item or product. For example, Supply Committee (SC) I handled munitions, SCII focused on engineering, SCIII was shipbuilding capacity and so on. While SCIII was obviously of primary concern to the Admiralty, in other committees, particularly munitions, the three service arms interacted to discuss questions of supply and capacity that affected all of them. It was thus the Supply Board's job to oversee and coordinate these diverse, but often competing, interests.

The Supply Board's history before Manchuria was thus much like its parent organisation: the geopolitical climate and the existence of the Ten Year Rule had created a set of assumptions and the illusion of breathing space around the timescale for solving issues which changed dramatically after Manchuria. The Supply Board is however especially worthy of note, for it more than any other body was tasked with monitoring conditions in industry and looking for potential bottlenecks in production should an emergency situation appear. It was more attuned not only to developments in the established armaments industries for the three service departments, but the related question of competition among the three for the same pool of resources.<sup>368</sup> It also had an exceptionally senior membership. The Engineer in Chief of the

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<sup>366</sup> Postan, *British War Production*, p. 35.

<sup>367</sup> Figure 2.1, chapter 2, gives a graphical representation of the Supply Board's role.

<sup>368</sup> Postan, *British War Production*, p. 35.

Fleet (Harold Brown) and the Controller of the Navy (Charles Forbes) both sat on it, and they, along with the Director of Naval Construction (who did not sit on the Board), constituted the three most important figures in Admiralty procurement. The War Office and Air Ministry had similarly senior representation. It was therefore the single most significant committee to look to for evidence of government and defence department attitudes towards industry and industrialists, as taken from the point of view of some of the most knowledgeable men in the country at that time.

**Table 5.1: Permanent Members of the Supply Board after Manchuria**

<b>Name</b>	<b>Position</b>
Air Vice-Marshal Hugh C.T. Dowding (Chairman)	Member for Supply and Research, Air Ministry
Rear-Admiral C.M. Forbes	Third Sea Lord and Controller, Admiralty
Brigadier R.K. Hezlett	War Office & Chairman, Supply Committee I
Air Commodore A.W. Bigsworth	Air Ministry & Chair, Supply Committee V, VI
Mr F.C. Bovenschen	Director of Contracts, War Office
Mr W. Daniels	Controller, India Store Department
Mr C.B Burdekin	Office of High Commissioner, New Zealand
Lieut-General Sir J. Ronald E. Charles	Master-General of the Ordnance, War Office
Major-General R.L.B. Thompson	War Office & Chair, Supply Committee II
Engineer Rear-Admiral H.A. Brown	Admiralty & Chair, Supply Committee III
Mr J.W.L. Oliver	Admiralty & Chair, Supply Committee IV
Mr W. St. D. Jenkins	Director of Contracts, Admiralty
Mr T. Trumble	Defence Liaison Officer, Commonwealth of Australia.
Mr C.R. Brigstocke	Director of Contracts, Air Ministry

Source: PSO(SB) 20th-34th meetings. TNA: CAB60/30-1

The job of monitoring industry was part of the PSOC's remit and not new or prompted by events in Manchuria alone. Rather, Manchuria should be viewed as providing a renewed sense

of impetus and vigour to this task.<sup>369</sup> Moreover, other recent events closer to home had influenced this work already: the wave of business failures from the mid-1920s to the early 1930s – the most notable of which were the giant armaments manufacturers William Beardmore of Dalmuir and the Coventry Ordnance Works – had been picked up on Supply Board antennae from 1928 and reported on along with the labour situation and the work (as outlined in the previous chapter) of Sir James Lithgow's National Shipbuilders Security scheme.<sup>370</sup> As such, it was the pace rather than nature of work which changed. Taken together, 1932 was the year where systematic investigations into capacity got under way, but preparations for war were still a long way off.

The main objectives of the capacity investigations by 1932, although still strictly hypothetical, were to identify industrial capacity and allocate the productive resources of all the major armaments manufacturers between the competing demands of the three service arms. This was achieved by allocating the capacity of a firm, for instance Fairfield, to the relevant Supply Board subcommittees – in this case Supply Committee III (Shipbuilding).<sup>371</sup> It was not the job of the Supply Board (or PSOC) to construct the hypotheses of where and when a war was most likely to break out; instead it worked with the hypotheses given to them by their counterparts on the CoS subcommittee.<sup>372</sup> These capacity investigations were thus built on a shifting set of assumptions based on a shifting political outlook and economic base, and for that reason were undertaken as surreptitiously as possible: enquiries were made on a discreet and informal basis as to what firms felt they could produce if working under emergency conditions.

From these investigations, a list of key firms was drawn up and allocated to the Admiralty, Air Force or War Office, based on what their representatives felt was needed to meet each service's anticipated future requirements. For the majority of firms identified as potentially important, the allocation between services was a relatively straightforward task: the War

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<sup>369</sup> Capacity investigations had been ongoing for some years before Manchuria.

<sup>370</sup> 'Rough Estimate of quantities of materials required by Supply Committee III', PSO(SB)53, 5 March 1929 & 'Labour Requirements' PSO(BT)42, 10 January 1929, TNA: CAB60/35, 60/66.

<sup>371</sup> 24<sup>th</sup> Meeting of the Supply Board, PSO(SB) 24<sup>th</sup> Mtg, 11 October 1932, TNA: CAB60/30, p. 12.

<sup>372</sup> The PSOC had taken direction from the Chiefs of Staff on what to investigate since the 1920s, though the best example for how the system worked was the document, frequently updated, entitled 'Basis on which Supply Preparations are to be framed', which guided PSOC calculations. See, for example, Gordon, *British Seapower*, p.48 & 'Basis on which Supply Preparations are to be framed', CID1171-B, April 1935, TNA: SUPP3/18.

Office or Air Force had no need, for instance, for most of the productive capacity of any of the naval shipyards which constituted the Warshipbuilders Committee, while by the same token the Admiralty did not want or put claims upon the services of the major rifle and small ammunition manufacturers. In some cases it was thought by the Supply Board that firms had sufficient capacity to supply more than one fighting service, allowing their operations in the event of war to be split according to the production estimates given. Barr and Stroud, manufacturer of optical rangefinders, was one prominent and recurring example of a firm appearing on the lists of both the Admiralty (for naval guns) and the War Office (for field artillery), while Messrs Saunders-Roe was split fifty-fifty between aircraft and boat manufacture.<sup>373</sup> In both cases the allocation was settled by mutual agreement between the respective subcommittees.<sup>374</sup>

Of course, this supposed a certain kind of conflict. For instance, in the case of Barr and Stroud the CoS believed in the early 1930s that any war would only require a small army, and therefore a relatively small requirement on army rangefinders. This meant that while a certain hypothesis held, capacity available was sufficient. In cases where the estimated productive capacity available was deemed to be insufficient to meet demand in the event of war breaking out or full scale military mobilisation, or where more than one service required the production facilities of a given firm, a different approach was needed. In one especially notable example, Supply Committee No. III (Shipbuilding), chaired by Engineer Vice-Admiral Harold Brown, had ‘demanded the allocation of practically the whole of the Vickers works in Elswick to the Navy’ for the manufacture of power-worked gun mountings.<sup>375</sup> The War Office, it was noted, also relied heavily in peacetime on the same plant for armoured vehicles, and this would inevitably increase during a war situation. It therefore registered its own demands on the Vickers plant, while the Air Ministry did the same for fighters and bombers. It was the Supply Board’s job in these circumstances to adjudicate.<sup>376</sup>

In the case of Vickers, Rear Admiral Forbes, the Third Sea Lord and Controller of the Navy, responded to Army and Air Force claims by arguing that ‘the provision of gun

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<sup>373</sup> ‘Minute from Supply Committee VI’, PSO(SB) 322, 20 Feb 1933, TNA: CAB60/39.

<sup>374</sup> ‘Allocation of the Capacity of Messrs Saunders Roe between Supply Committees III and VI’, PSO(SB) 26<sup>th</sup> Mtg, Minute 6, TNA: CAB60/31.

<sup>375</sup> ‘Report by ‘No. III Supply Committee’, PSO(SB) 252, 1 October 1932, TNA: CAB60/38.

<sup>376</sup> ‘Provisional Allocations to Supply Committee No. III’, PSO(SB) 313, 17 Feb 1933, TNA: CAB60/39.

mountings had always been a nightmare for the Admiralty, as it was invariably the limiting factor in the construction of every kind of warship'.<sup>377</sup> Pointing out that a large naval gun took at least 12 months to complete, he went on to state that they were therefore especially anxious to ensure that this plant, along with Vickers' other gun factory at Barrow, were allocated to them, as 'these alone were suitably equipped for this kind of work'. Even if this was agreed to, Forbes believed the situation with regards to gun mountings was so dire that it would probably still become 'necessary to augment these resources by placing some work with other firms' even if currently ill-equipped to fulfil orders.<sup>378</sup>

To help solve the problem, the members of the Supply Board agreed that Vickers had to be visited by both Admiralty and War Office staff to ascertain 'within very fine limits' what could and could not be produced in emergency situations, and how well Vickers' promises matched up to this figure.<sup>379</sup> As Vickers were under contract to produce equipment for the War Office and Air Force, and were a regular supplier to the Admiralty, the Supply Board had some more concrete information about likely peacetime and emergency capacity at Elswick and Barrow than was the case for the majority of firms approached during the early phases of identifying deficiencies, but even with this information, there was a high degree of guesswork.<sup>380</sup> Furthermore, it was quickly realised by the Supply Board that this method of allocating capacity was far from ideal; in a land war it would clearly be beneficial to prioritise armoured vehicles first and naval guns later, while in a three-front war (land, sea and air) the priorities were somewhat harder to agree upon. It was, however, the CoS job to create the hypotheses of who Britain would be most likely to face in war and where, and it was for the Supply Board to ascertain how the private industry would meet those demands. The Supply Board acknowledged that if a decision could not be reached, it would have to be referred back

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<sup>377</sup> See also the report from the Foreign Industrial Intelligence Committee which argued along similar lines. The debate over gun mountings was, however, nothing new. Gun making was first recognised as the key factor in capital ship construction during the naval race with Germany before the First World War, and had remained an issue as naval guns became larger, heavier and more accurate over time. 24<sup>th</sup> Meeting of the Supply Board, 11 October 1932 & Report by the Sub-Committee on Industrial intelligence in Foreign countries', 13 March 1933, TNA: CAB60/30 & 60/13.

<sup>378</sup> 24<sup>th</sup> Meeting of the Supply Board, 11 October 1932, TNA: CAB 60/30 p. 13.

<sup>379</sup> 24<sup>th</sup> Meeting of the Supply Board, 11 October 1932, p. 14.

<sup>380</sup> 'Report by Chairman of Supply Committee Nos. I, III and VI', 8 December 1932, TNA: CAB60/13.

to the CoS, 'with the view to the relative order or urgency from a strategic point of view being determined'.<sup>381</sup>

In this instance, such a referral was not necessary. The visit to Vickers, which was led by Harold Brown and undertaken in late 1932, resulted in a decision to split the work of the Barrow and Elswick plants among the three Defence departments, but protecting the Admiralty's first claim on facilities for manufacturing gun mountings. The visit was referred to afterwards by the Supply Board as 'represent[ing] the first attempt to allocate the output of a firm between the three services, and a very valuable piece of constructive work'. The same document indicated that the 'method adopted in the solution of this problem might usefully be followed in the future'.<sup>382</sup>

The Admiralty was not solely interested in the capacity of shipyards: by 1933 SCIII had also visited steel foundries, optical munitions manufacturers and engineering plants. SCIII had, for instance, put a claim on the majority of the Weir plant in 1932 for warship pumps – noting that they 'relied upon' and required at all times around one third of capacity, but 'contemplated this being doubled in an emergency'.<sup>383</sup> Supply Committee I (Armaments), felt that Weir's plant would be vital – as it had in the last war – for shell machining, and put its own claims upon some of the facility. After a further visit in late 1932, the Supply Board found that Weir's was 'a high class engineering firm' that was 'well equipped' for not only Admiralty pumps, but also shell, gun carriages, gun mountings and aero engines, with the potential for rapid expansion.<sup>384</sup> It was concluded that while some balancing of machinery loads would be required, Supply Committee I should be given 15% capacity for the time being, and this could be reviewed if the plant was refitted at a later date for more munitions work.<sup>385</sup>

The decision to visit the Vickers and Weir plants did not mark any serious escalation or change of direction in war planning in 1932 and 1933 – there was no chance at this point that Cabinet were ready to authorise new orders for any extra equipment the defence departments

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<sup>381</sup> 24<sup>th</sup> Meeting of the Supply Board, 11 October 1932, p. 14.

<sup>382</sup> 25<sup>th</sup> Meeting of the Supply Board, 14 Feb 1933, PSO(SB) 25<sup>th</sup> Mtg, TNA: CAB60/31, p. 12.

<sup>383</sup> 'Investigation of the Capacity of G&J Weir, Ltd', PSO(SCI)310, 12 September 1932, GUAS: DC96/17.

<sup>384</sup> 'Investigation into Capacity of G&J Weir'.

<sup>385</sup> 'Investigation into Capacity of G&J Weir'.

felt they needed. From a Supply Board perspective making visits to plants was not common (although also not unique), but Vickers' and Weir's roles as both major armaments manufacturers and regular and long-standing suppliers to all three service arms meant that any visits of this sort would have been unlikely to draw any special attention from the business community.<sup>386</sup> It does however highlight interesting deliberations over Britain's ability to produce certain key components of defence, in this case armoured naval guns and pumps for boilers. The problem with the lack of existing facilities to make guns and mountings had been severely exacerbated by the collapse of Beardmore in 1930, which had reduced available capacity in Britain by as much as 50%, leaving, as Forbes noted, almost exclusive reliance on Vickers.<sup>387</sup> The naval guns issue should therefore be understood in this context and not merely taken as another example of the Navy, Army and Air Force rivalry, itself a common feature of the 1920s and 1930s.

Similarly, this example does not provide any concrete evidence of the actual allocations of capacity for future armament orders. Sir Harold Brown, later said much of the work done between 1932 and 1934 still had 'an air of unreality' about it<sup>388</sup> and, during the discussion on guns the Supply Board made it abundantly clear that 'all allocations, including this one, must be of a provisional nature' and that 'approval of [the Vickers allocation] would not preclude members from raising the question again should further information...necessitate its reconsideration'.<sup>389</sup> In other words, the agreement among the services held as long as the calculations of the external threats to Britain remained the same *and* the general industrial picture remained unaltered. A shift in one or both would naturally alter or even invalidate any existing arrangements. Since both were complicated and fluid, these arrangements did, perhaps inevitably, change many times between 1932 and 1939.<sup>390</sup> As far as the industrial picture was concerned, the naval shipyards were struggling to find any orders at all: just 4,000

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<sup>386</sup> At least, not in the way that visiting a factory ordinarily engaged in civilian work and never previously used as a defence contractor would be. In 1930, the SB noted that 'owing to the ban of secrecy under which work is to continue, no abnormal enquiries must be made without ministerial approval' 12<sup>th</sup> meeting, PSO(SB), 18 December 1930, TNA: CAB60/30, p. 13.

<sup>387</sup> 'Minutes of the Supply Board' PSO(SB) 24<sup>th</sup> Mtg., 11 October 1932, TNA: CAB60/30, p. 13 & Johnston and Buxton, *Battleship Builders*, p. 174.

<sup>388</sup> H. Brown, 'Reminiscences, vol. II', p.110 (unpublished), Box I, Turner Brown Papers, Liddell Hart Centre for Military Archives, King's College London [Hereafter BLH: TB].

<sup>389</sup> 25<sup>th</sup> Meeting of the Supply Board, 20 December 1932, p. 13.

<sup>390</sup> Brown, 'Reminiscences, vol. II', p. 112.



tons of work was in hand for private manufacturers in 1931, which included two destroyers for the Portuguese government, and almost 90% of berths lay empty.<sup>391</sup> Beardmore had closed, and Palmer teetered.

### 5.8 Approaching Industry, 1933

Along with discussions about allocations of firm's capacities, another issue was being debated in the Supply Board simultaneously, namely local area organisation. The latter in particular brought members of the Board around to the idea of industrial cooperation in planning.<sup>392</sup> Unlike the supply question, which was in the main a response to the deficiencies and problems highlighted by the Chiefs of Staff in early 1932, the revisiting of area organisation was borne out of the experiences of the Great War, where the sudden imposition of an organising body on top of existing Boards of Management had led to what the Supply Board described as 'much friction and confusion, which should in the future be avoided at all costs'.<sup>393</sup> Until this point however, the issue of secrecy meant representatives from business were not called to give evidence before any part of the Supply Board or PSOC. The topic was discussed once before Manchuria, at the 17<sup>th</sup> meeting of the Supply Board in 1931, but at that point the plan to consult industrialists did not get off the ground. Lieutenant General Charles felt then that 'the time had not yet come to approach industry', but did not rule out doing so in future should circumstances change. Percy Ashley, attending the meeting from the Board of Trade, 'deprecated the [CID] at present of approaching any outside individuals', although like Charles he felt the question could be reopened in the future. The Supply Board therefore agreed that 'the time had not yet come when it is necessary or desirable to make a general approach to leaders of industry and invite their cooperation in the work of the Supply Board'.<sup>394</sup>

The circumstances in late 1932 were, however, far removed from those of 15 months earlier. By the 25<sup>th</sup> meeting, in December 1932, some members of the Supply Board believed it was 'essential that some organisation should be built up in times of peace [for organising

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<sup>391</sup> Warren, *Steel, Ships and Men*, p. 251; Johnman and Murphy, *British Shipbuilding and the State*, Table 5 & A. Borthwick, *Yarrow and Company Limited, 1865-1977* (Glasgow: University of Glasgow Press, 1977), p. 54.

<sup>392</sup> Brown, 'Reminiscences, vol. II', p. 110.

<sup>393</sup> Minutes of 25<sup>th</sup> Meeting & Note by the Director of Navy Contracts, PSO(SB)298, November 1932, TNA: CAB 60/31 & SUPP3/18.

<sup>394</sup> 17<sup>th</sup> Meeting of the Supply Board, PSO(SB)17<sup>th</sup> Mtg., 28 August 1931, TNA: CAB60/30, pp. 9-10.

regions] and that war time organisation should be based on this'.<sup>395</sup> Beyond this general sentiment though, there was a marked difference in opinion over what shape such an area organisation would take. Admiralty members of the board believed that a system 'based on the existing Admiralty scheme' where technical officers 'stud[ied] each area in peace time and knew to where they would be despatched in an emergency, in order to form the nucleus of the area organisation' was the most desirable.<sup>396</sup> On the other hand, the Chairman, Dowding (from the Air Ministry) had a 'somewhat different conception' whereby the role of area organisations was not to organise the production of a special item or set of items, but to 'comb out and exploit unknown local manufacturing resources for a variety of [different items, across the fighting services]'.<sup>397</sup> As the basis for his belief, Dowding used the example of Siddeley's automotive works in Coventry, whose chairman had devised a scheme for war production that 'made all other local firms subsidiary to his'. Such an arrangement, Dowding argued, 'would inevitably cut across the plans of other Supply Committees and endless confusion would result ... [and] was a very great danger which must be provided against in peace time'.<sup>398</sup>

For the most part these divisions reflected the differing nature of manufacturing for the Admiralty and Air Ministry. The Admiralty were used to bespoke components being built by experienced suppliers (such as the members of the WSBC) in particular areas of the country – the specific example cited by Vice Admiral Forbes was the experience of John Brown with steel and armour plate; while the Air Ministry was more concerned with general suppliers, for example those in the textile industry, who could turn their hand towards other simple and mass production techniques to help meet demand as it arose. Neither conception for the organisation of industry was any more 'wrong' or 'right' than the other; instead it serves to highlight the problems arising from translating a system which may have worked for one Defence Department used to dealing with its own businesses or sectors of industry into a generally applicable rule for the supply organisation of all three.

It must also be noted that any solution which allowed each department to devise its own system would certainly have had similar problems. Unless there was an agreed upon standard

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<sup>395</sup> 25<sup>th</sup> Meeting of the Supply Board, 20 December 1932, TNA: CAB 60/31 p. 10.

<sup>396</sup> 25<sup>th</sup> Meeting of the Supply Board, p. 7.

<sup>397</sup> 25<sup>th</sup> Meeting of the Supply Board, p. 7-8.

<sup>398</sup> 25<sup>th</sup> Meeting of the Supply Board, p. 8.

there was little to stop each cutting across the bows of the others and invalidating any attempt to share resources. It was as a direct result of this conundrum and the problem of organising regions that discussions began over alternative ways to organise industry, and how this could be best achieved. The contribution recorded in the minutes from Engineer Vice-Admiral Harold Brown in December, 1932 is worth quoting in full:

He thought that the Supply Board should utilise the heads of industry rather than the heads of specific firms. He understood that the authorities when studying the question in America had experienced difficulty as they had consulted heads of firms who had made plans for the production of their own particular product, irrespective of other requirements of the general productive capacity in their locality. He understood that they were now consulting people of influence with a general knowledge of their area [with] a view to assessing the most economic production.<sup>399</sup>

Brown went on to emphasise the importance of this question, indicating that in his view ‘the establishment of area organisations would be the means of implementing the mobilisation of industry’. He also believed that ‘the sooner the Principal Supply Officers Committee spread its tentacles through the country, the better the task would be done and less likelihood would there be for a breakdown’.<sup>400</sup> Jenkins, Charles, Forbes and Dowding all agreed, with the latter concluding that it was a ‘tremendous problem’. The chair then instructed the three defence departments to create jointly the terms of reference for a special sub-committee that would be formed to investigate the issue. This was the first, albeit very tentative, step towards working with industrial elites with a view to easing the problems of war supply in peacetime.

The Supply Board’s remit did not cover making this decision with no input from ministers. The committee frequently noted that any decisions which ‘involved questions of major policy, as well of finance, had to be referred to the Committee of Imperial Defence for formal approval’.<sup>401</sup> Thus, in order to be able to approach industry, the question needed to first be discussed higher up the chain of command, through the PSOC to the CID’s executive committee chaired by the Prime Minister.<sup>402</sup> To this end, in March 1933 Walter Runciman, the PSOC’s chairman and President of the Board of Trade, circulated the two earlier PSOC reports on the condition of the private armaments industry to CID members which included the PM,

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<sup>399</sup> 25<sup>th</sup> Meeting of the Supply Board, p. 8.

<sup>400</sup> 25<sup>th</sup> Meeting of the Supply Board, p. 8.

<sup>401</sup> See, for example ‘30<sup>th</sup> Meeting of the Supply Board’, PSO(SB) 30<sup>th</sup> Mtg, TNA: CAB60/31, p. 5.

<sup>402</sup> Although the Prime Minister was notionally the head of the CID, much of the day-to-day running of the committee was undertaken by the CID’s secretary Maurice Hankey, who reported directly to him.

Ramsay MacDonald, the Foreign Secretary, John Simon, and the First Lord of the Admiralty, Bolton Eyres-Monsell. These were tabled at the CID's 258<sup>th</sup> meeting the following month.<sup>403</sup>

When the three men met as part of the larger committee on 6 April, MacDonald told the room that the reports made the situation appear 'very serious', and that 'it would be necessary to see what could be done from an industrial point of view to assist industry'. He also suggested that 'this matter should be taken out of the hands of the Services and considered from a civic [sic] and industrial aspect'.<sup>404</sup> Put another way, MacDonald had warmed to the view that business figures should be asked for their assistance in tackling the problem. However, the Prime Minister, although in agreement, was once again just catching up with the view the PSOC and Supply Board had arrived at some months before. Thus, despite Eyres-Monsell voicing concerns over the private naval shipbuilding industry declining in Britain and expanding in Italy and other nations, MacDonald refused to agree to any direct measures, citing his concerns of the possible effect on the ongoing disarmament talks in Geneva and efforts to control the international armaments trade.<sup>405</sup> So in this case the meeting concluded with an agreement only to put in front of Cabinet proposals for yet more committees – without legislative power – to look into 'remedying the serious situation that had been revealed'.<sup>406</sup>

Cabinet approval for the PSOC to approach industry was received the following week. It also allowed for the formation of an inter-departmental committee to further examine defensive deficiencies. This body, the Defence Requirements Committee (DRC), produced its first report in 1934, and is discussed in the next section.<sup>407</sup> Despite Cabinet approval for industrial input into the planning process in principle, however, nothing happened overnight. Crucially, however, there was a general movement towards recognition of the wisdom of the idea within various parts of the CID organisation by mid-1933. Indeed, by summer, the topic had begun to appear on committee agendas under the heading of 'method of approach to industry'.<sup>408</sup>

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<sup>403</sup> 258<sup>th</sup> Meeting of the CID, CID1106, 6 April 1933, TNA: CAB2/5.

<sup>404</sup> 258<sup>th</sup> Meeting of the CID, p. 1.

<sup>405</sup> 258<sup>th</sup> Meeting of the CID, p. 2.

<sup>406</sup> 258<sup>th</sup> Meeting of the CID, p. 3.

<sup>407</sup> 'Report of the DRC' DRC14, 28 January 1934, TNA: CAB16/109.

<sup>408</sup> '30<sup>th</sup> Meeting of the Supply Board – Minute 3: Method of Approach to Industry', PSO(SB) 30<sup>th</sup> Mtg, TNA: CAB60/31, p. 2.

Although moving slowly, there was clearly a paradigm shift in CID thinking away from the strict secrecy and isolation from industry that existed before the abandonment of the Ten Year Rule. At the 30<sup>th</sup> meeting of the Supply Board the discussion had advanced to a stage where Dowding felt ‘immediate steps should now be taken’ to ‘obtain the assistance of civilian experts of what, after all, was an industrial problem’.<sup>409</sup> Brigadier Hezlett was, by this point, also urging ‘immediate consultation with industry’, and at the following meeting in September 1933, the actual specifics of ‘taking advantage of industrial experience [to solve] the problem of locating capacity for war products’ were finally discussed – four months after the PM, and nine months after some of the Supply Board’s own members, had expressed support for the idea. Lieutenant General Charles thought that in first instance civilian experts should ‘advise on the general question of how work under the existing system might be accelerated’ and hoped that ‘the assistance of industrialists might reveal sources of supply hitherto unknown to the Defence departments’.<sup>410</sup> Sir Reginald Townsend, attending as Director of Ordnance, agreed and stated that he had found ‘the advice of civilian experts was most helpful and always given willingly’.<sup>411</sup>

Still, not everyone was enthusiastic. Bovenschen expressed agreement in principle, but warned that it was ‘not clear at this stage what industrialists would be asked to do’, while Bigsworth felt the organisation worked well in its current form. Others believed there were more pressing problems, including selecting a full-time chairman for Supply Committee No.1 (armaments) or were still doubtful whether any good would come of leading industrialists being brought into the fold.<sup>412</sup> Nevertheless, those in favour of approaching industry won the day: The Chairman, Dowding, and Hezlett both firmly argued that it was ‘essential to approach leaders of Industry in the first instance’ while Brown believed the Supply Committee ‘required the assistance of industry in order to carry out its work’. In the end, this view won out, and the decision – if not the specifics – of approaching industrialists was agreed upon. To this end Charles prepared a memorandum, which asked the PSOC to endorse proposals for the

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<sup>409</sup> 30<sup>th</sup> meeting of the Supply Board, p. 2.

<sup>410</sup> 30<sup>th</sup> meeting of the Supply Board, pp. 2-3.

<sup>411</sup> 30<sup>th</sup> meeting of the Supply Board, p. 4.

<sup>412</sup> 30<sup>th</sup> meeting of the Supply Board, p. 5, p. 7.

Supply Board to approach industrial experts in an advisory capacity, but to ‘leave executive action in the hands of the defence departments at present’.<sup>413</sup>

On one hand, this was no mean feat when one considers how reluctant the same committee had been only a year and a half before, or indeed how far the prospect of receiving ministerial approval for industrial assistance in helping to reverse the decline in the armaments industry would have seemed in the aftermath of Labour’s election victory. On the other, it does appear to show a weakness in the committee structure. For, despite many voices arguing for some kind of approach to industry, there was still a long and painfully slow path to actually reaching any sort of decision on what was a rather basic point after some years of PSOC warnings about the state of Britain’s productive capacity. Perhaps this was to be expected. After all, the CID and its subcommittees were designed for the purpose of bringing together and coordinating the competing claims of the three branches of the armed forces, and to reach compromises despite differing aims and objectives. As the investigations into capacity show, in some respects this was working well. However, when in a case where the Supply Board was expected to pick one choice out of a possible two options, the desire to reach a compromise merely meant months of delay.

The main remaining important question concerned which business figures to approach. Brown’s views clearly carried weight, and Vice Admiral Forbes also believed that the ‘only way to get at the right men would be to approach the heads of the business’ and ‘the big magnates’ in the first instance. The terms used by Brown and Forbes, namely ‘heads of industry’ and ‘big magnates’ lack any further definition in the records of the committee. After all, the most senior figures in industry were also typically owners and chairmen of firms, and big magnates in their own right. However, one can suggest that – and this is borne out by the men eventually chosen – that Brown and Forbes were thinking particularly of the relatively small number of men who had transcended the business sphere into public and political life as spokesmen for, and well known figures in, their respective industries. Cobb, the Deputy Director of Navy Contracts, was by this point the lone dissenting voice, believed that ‘in many cases leading industrialists were merely financiers with little knowledge of technical or detailed working’, and suggested approaching subordinates instead to get them to work with

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<sup>413</sup> Memorandum by Master General of the Ordnance, War Office, PSO(SB)376, August 1933, TNA: CAB60/40.

the individual Supply Committees rather than the Supply Board or PSOC.<sup>414</sup> However, Dowding, the Chairman, agreed with Brown and Forbes and pointed out the ‘invaluable assistance’ Sir Harry McGowan, Chairman of Imperial Chemical Industries (ICI), was providing regarding explosives, through the technical expertise of his staff.<sup>415</sup> In addition letters from Weir and Thornycroft to the *Times* were circulated ‘as a matter of interest’.<sup>416</sup> In retrospect, it perhaps should not come as a surprise that the ‘heads of industry’ view won out. After all, the Supply Board’s main concern was with the organisation and coordination of industry as a whole, as well as maintaining secrecy as far as practicable. Thus, approaching a small coterie of businessmen who had risen to the very top of the tree served the Supply Board’s remit better than subordinates with technical knowledge of manufacturing processes.

It was thus agreed that the Controller of the Navy, the Master General of the Ordnance, Mr Browett from the Board of Trade, and the Chairman should consider which suitable individuals should be consulted, and that these names should be laid before the PSOC ‘without delay’. It was also deemed highly desirable to have a meeting with these industrialists and the Chairman of Supply Committee I (whose problems were deemed to be the most urgent) before the end of the 1933 ‘in order to acquaint them with the system of supply and discuss general principles’ in addition, they should ‘be given an idea of the organisation and the hypotheses on which work was being conducted’.<sup>417</sup> The agreements reached at this meeting were, in essence, a peacetime first: the formal foundation point of a panel of civilian industry advisors within the Committee for Imperial Defence.

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<sup>414</sup> 30<sup>th</sup> meeting of the Supply Board, PSO(SB) 30<sup>th</sup> Mtg. 25 October 1933, TNA: CAB60/31, pp. 4-5.

<sup>415</sup> McGowan’s involvement in 1933 was far less involved than the proposed collaboration with industry, however. While Dowding clearly appreciated McGowan’s assistance, he was in essence only being asked the opinion of his company on specific technical questions, and was not involved in matters of supply organisation.

<sup>416</sup> ‘Industrial Mobilisation: Note of letters to *The Times*’, PSO(SB)387, 30 November 1933, TNA: CAB60/40.

<sup>417</sup> 31<sup>st</sup> meeting of the Supply Board, PSO(SB)31<sup>st</sup> Mtg, 9 February, 1934, TNA: CAB 60/31 p. 7.

## Chapter Six: The Advisory Panel, information sharing and inside information, 1933-4

In the event, the men picked were not ‘merely financiers’. They were Lord Weir, Sir James Lithgow and Sir Arthur Balfour, three extremely powerful businessmen from engineering, shipbuilding and steel respectively. Weir’s background has already been discussed in the context of the formation of the PSOC in the early 1920s, but by this point had further grown his father’s firm, G&J Weir Ltd, from a Glasgow-based pumps manufacturer into a truly global enterprise. It was also one that had turned rapidly and with great effect from civilian production to making war materiel, including boiler pumps for naval vessels in the Great War. As one of the architects of the PSOC structure that he was now being asked to assist, Weir was held in extremely high regard for possessing a blend of business acumen and leadership with technical knowledge, and those facts distinguished him as a rare breed. During the latter stages of the Great War he had served for eight months as Lord President of the Air Council, and had subsequently been chosen to serve in similar capacities on the committee which investigated the role of the Fleet Air Arm in 1921. However, his most important contribution with regards the supply of materiel had been through his work in the Ministry of Munitions in the Great War, and it was this that underscored his credentials for the initial PSOC plan. Weir had since held close connections with high-ranking members of the Conservative party. After serving on the Salisbury committee in 1923, he kept frequent private correspondence with, among others, Stanley Baldwin and Neville Chamberlain – the latter referring to him as ‘My Dear Willie’ in letters – and both too stayed at his Eastwood Estate in Glasgow on several occasions.<sup>418</sup> He was extraordinarily well respected, well connected, and thus an obvious choice to assist the Supply Board with its work.

Colonel Sir James Lithgow, the second industrialist on the list, has similarly been covered already in this work. Like his friend and mentor Weir, he was a successful business owner with a track record of government service during the war. Lithgow served both at the front line and as the Director of Merchant Shipping. Furthermore, although he had no experience in armaments manufacture – his firm was a leading provider of merchant and passenger vessels – he had founded and led, with the assistance of the Bank of England, the National Shipbuilders

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<sup>418</sup> Chamberlain to Weir, GUAS: DC96/22/2.



Security (NSS) scheme in 1930 and served for three years as the President of the Federation of British Industry.<sup>419</sup> Thus, like Weir, he was chosen for his role in overseeing and coordinating industry, and thus for the unusual level of experience he could bring to the question of supply organisation.

The third member of the panel was Sir Arthur Balfour, chairman of Arthur Balfour & Co (formerly Seebohm and Dieckstahl) steelworks, Sheffield. Balfour has not appeared in the narrative before now, but was a man of similar stature to Weir and Lithgow. His firm manufactured steel and armour for all three service arms, and, like his counterparts, Balfour had long-standing relations with the state. In the Great War he was a member of both the Advisory Committee on War Munitions and the Industry Advisory Committee to the Treasury. In the immediate aftermath of the war he was one of three independent members on the Coal Industry Commission, a major enquiry set up by an Act of Parliament (as a Royal Commission) to investigate the state of the British coal industry, with the stated intention of improving productivity. Although the then Prime Minister, David Lloyd George, did not act on the commission's findings, Balfour's work gained him great respect, and he was knighted in 1923 before becoming President of the British Chambers of Commerce until 1924 and serving on the Committee on Industry and Trade and the Economic Advisory Council from 1924-30.<sup>420</sup> Complementing his counterparts, Balfour's experience in raw materials and productivity questions in national industries such as coal and steel meant he possessed a desirable skill-set that marked him out as beneficial to the PSOC.

None of the industrial members selected were from firms represented in the WSBC. This may appear strange, given long-standing relationships of some of these firms with the Admiralty, and the importance of firms such as John Brown and Vickers to the war effort between 1914 and 1918, and indeed of Vickers' work for all three defence departments more or less consistently since 1900. While the full deliberations on selecting industrial members (and therefore the full list of names suggested) have not survived in the archives, a few reasons may be suggested for why men such as Charles Craven (of Vickers) were not included

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<sup>419</sup> Reid, *James Lithgow*, pp. 90-1, p. 132, pp. 193-203.

<sup>420</sup> Mary Walton, 'Balfour, Arthur, first Baron Riverdale (1873-1957)', *Oxford Dictionary of National Biography*, (Oxford University Press, 2004); online edition, Oct 2006 [http://www.oxforddnb.com/view/article/30552, accessed 9 Oct 2013].

in the advisory panel. The first is that Weir, Lithgow and Balfour all had a long and proven track record of working with the government, not just fulfilling contracts for the armed services. All three had an established record of *public* service that had brought them into close contact with the top echelons of government – which the CID and PSOC ultimately reported to – and which should not be underestimated. When Weir made his opinions known, as he did to *The Times* to support Thornycroft, the CID took note.<sup>421</sup> Perhaps most revealingly, a 1933 memorandum from the Assistant Director of Ordnance Factories at the War Office, G.S. Witham, was circulated to the CID (and later shared with the Advisory Panel) and noted that ‘many of the men who had actual experiences of war production in 1914-18 have passed out of industry. It is therefore a matter of considerable urgency that those who remain in industry should be harnessed into the organisation’.<sup>422</sup> Weir, Lithgow and Balfour certainly fitted the bill in this regard.

Secondly, the concern over the sensitivity of information was a recurring theme of Supply Board discussions, and it was therefore determined that the numbers of industrial advisors was to be kept as small as possible. The first discussions mentioned a panel of ‘no more than six’ members was desirable. This was then cut to four, and then three by the time of selection. In this regard the three that were chosen had plentiful experience – and earned a degree of trust – in dealing with secret information of this kind. As all three had risen through their firms and faced the challenges of the Great War, they were among a small group with a blend of both technical and managerial experience. Craven, despite his role as managing director of Britain’s largest armaments maker, Vickers, had not reached this level by 1933. He had not served in wartime ministries (he was a twenty-nine year old submarine lieutenant in 1914), he had not served on post-war commissions, his experience leading Vickers had been exclusively in peacetime (from 1924) and he had also not yet been knighted for his public service. While all of this would come in due course (he did play a significant role in the Second World War) his CV at the time the decisions were made did not match Weir, Lithgow or Balfour.<sup>423</sup> Finally, the fact that Weir, Lithgow and Balfour were not explicitly armaments manufacturers (even if

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<sup>421</sup> ‘Industrial Mobilisation: Note of letters to *The Times*’, PSO(SB)387, 30 November 1933, TNA: CAB60/40.

<sup>422</sup> Witham Memo, February 1933 (cited in Lithgow papers), GUAS: DC35/31.

<sup>423</sup> Moreover, Vickers’ Chairman, Herbert Lawrence, was much more in the mould of the ‘financier’ that Cobb described, with background almost wholly in banking. Lawrence only joined the firm as director in the mid-1920s, and was by 1933, 72 years old.

their wares – at least in the cases of Weir and Balfour – were bought by the defence departments) may have been a contributing factor. The question they had to tackle concerned supply organisation for industry as a whole, and it cannot be ruled out that interests that aligned too closely with one set of defence priorities may have been undesirable.

#### 6.1 The Advisory Panel and information sharing – a two-way relationship

The three members were invited to join in October 1933 and would be known and listed as the Principal Supply Officers Committee's 'Advisory Panel of Industrialists' until 1939. Indeed, this invitation could and should also be viewed through the prism of related events, most notably the ongoing sterilisation efforts. Deliberations on who to approach in industry had, after all, taken place in a fluid period. Compared with 1932, the process of liquidation in warship yards appeared, if anything, to be increasing: Palmer was in the process of being sold to the NSS, and parts of Fairfield or Armstrong were potentially next in line. The Supply Board were acutely aware of the possibility of losing more firms from the pool, and Bigsworth (Air Ministry), Charles (War Office) and Forbes (Admiralty) from the Supply Board, plus representatives from the Board of Trade, formally met Lithgow, Weir and Balfour in their new capacity as advisors for the first time at Whitehall on 19 December. The President of the Board of Trade, Walter Runciman, chaired the meeting, which was arranged for the purposes of 'explain[ing] the present organisation for, and the situation as to, industrial mobilisation, and to discuss the acceleration of the turnover of manufacture from peace to war.' Despite the collaboration being in its earliest stages, the panel had already been supplied in advance with some details of how the CID and its subcommittees operated, and so were invited (after a short re-cap by Charles from the Admiralty) to comment upon the structure before being asked to take on the task of preparing a report on capacity and efficiency within industry.<sup>424</sup>

Interestingly, the responses from all three men appear to indicate they still held only a limited knowledge of the work of the CID, PSOC and the Supply Board in particular. Weir, who held by far the most prior knowledge of the CID and had advised it in the past, commented that the '[Supply Committee] organisation, which presumably represents the central policy of His Majesty's government, appeared adequate', while Balfour was just

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<sup>424</sup> 'Cooperation with Industry', PSO 407, 19 December 1933, TNA: CAB60/14. Quotation p. 2.

‘pleased to see that a complete organisation was in existence’.<sup>425</sup> Lithgow required both explanation and clarification on the matters of ‘secrecy [and] the methods by which firms were approached prior to the investigation of their works’, which he was provided with in January 1934.<sup>426</sup> At this stage the industrialists could only make general comments on the nature of supply organisation, and all broadly agreed that the situation could be improved, and that industry was, in many ways, weaker than it was in 1914.<sup>427</sup> It was then agreed for the advisory panel to be furnished with the reports of the PSOC from 1932 and 1933, as well as ‘memorandums and a chart dealing with the Organisation at present in existence’.<sup>428</sup>

Gaps in knowledge of this nature – even in the minds of men with extensive experience of wartime industry – should not be unexpected. After all, the work of the PSOC’s Supply Board was highly secret and was quite unlike the previous Ministry of Munitions, so for Lithgow, or indeed any of the top industrial experts, to know little of the extent of the individual Supply Committees’ investigations into capacity is unsurprising. Arguably, it stands as a clear demonstration of the success of keeping such an organisation out of the public domain to the extent that these ‘really big magnates’ were only having the basics of supply organisation fleshed out to them in December 1933. Perhaps more surprisingly, it appears the members of the panel were given relatively little extra assistance in terms of staff to support them with their work – Reginald Townsend was primarily concerned about the PSOC finding ‘adequate staff to keep pace with the recommendations likely to result’.<sup>429</sup> This in part should highlight the fact that the CID, despite its numerous subcommittees, was now understaffed and overworked, especially given the importance of its tasks. Moreover, it should also highlight how much the industrialists had to acquaint themselves with, in a short space of time.

The panel members were provided with more secret background material throughout the January and February of 1934. Assisted by the Supply Board’s joint-secretary, Lieutenant Colonel Hind, and Witham, the material included reports from the Admiralty on procurement, reports from the Master General of the Ordnance on allocation of experimental and

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<sup>425</sup> ‘Cooperation with Industry’, p. 3.

<sup>426</sup> Witham to Lithgow, 2 January 1934; ‘Summary of firms visited 1930-33’; ‘Some notes on process specifications’, GUAS:DC35/31

<sup>427</sup> ‘Cooperation with Industry’, p. 4.

<sup>428</sup> ‘Cooperation with Industry’, p. 5.

<sup>429</sup> ‘Minutes of the Supply Board’, PSO(SB) 30<sup>th</sup> Mtg, TNA: CAB60/31.

developmental work, and a memorandum from Supply Committee I on the production of armaments in an emergency.<sup>430</sup> The information was highly revelatory. Lieutenant General Charles, the Master General of the Ordnance, noted the ‘dwindling choice of firms capable of manufacturing stores which are non-commercial in character’.<sup>431</sup> In addition, Hind provided Lithgow, Balfour and Weir with a 20-page document detailing all of the ‘key’ firms visited in the past three years, the capacity currently available, and what would be needed in the event of a war. Beardmore, for instance, would take five months to make a single gun-carriage for the War Office, but within eight months could make eight carriages per week.<sup>432</sup>

Perhaps most interestingly of all, the Director of Navy Contracts, Jenkins, wrote in his report that the Admiralty:

‘...varied the policy of inviting competitive tenders in the case of certain armament firms whose designing staff and productive capacity is [sic] essential to maintain as a nucleus in an emergency. In such instances it is customary to confine the orders to these firms on condition that fair prices are charged and that they can meet delivery requirements.’<sup>433</sup>

In other words, the Director of Navy Contracts was confirming what the WSBC believed, but did not conclusively know: that the Admiralty were less interested in the lowest possible price, but more interested in spreading orders around a group of specialist facilities as long as the price appeared fair (and, one presumes, they accepted the lowest tender from the invited firms). Jenkins also drew attention to the Admiralty’s difficulty with ‘providing enough work in peace time for these ‘key firms’’.<sup>434</sup> As this report was written in March 1932, Jenkins was almost certainly never explicitly intending for someone like Lithgow, a shipbuilder, to find out. Events had clearly overtaken these plans by 1934, however, and for a businessman to have this sort of officially secret information – and in writing no less – was both highly unusual and reflected the unique set of circumstances the CID and its supply subcommittees found itself in at this point.

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<sup>430</sup> For example: ‘Eighth Annual Report of the Principal Supply Officers Committee, 1931’, PSO(SB)39; ‘No.1 Supply Committee, Proposals for Acceleration of Progress’, undated, GUAS: DC35/31.

<sup>431</sup> ‘No.1 Supply Committee, Proposals for Acceleration of Progress’

<sup>432</sup> ‘No.1 Supply Committee, Proposals for Acceleration of Progress’.

<sup>433</sup> ‘Report from Director of Navy Contracts on Commodore Bigsworth’s Memo’, PSO(SB)226, 22 March 1932, GUAS: DC35/31.

<sup>434</sup> ‘Report from Director of Contracts, Admiralty’.

## 6.2 Recommendations

To their credit, the panel's members wasted no time in undertaking their task. By the end of February, just nine weeks exactly after the first meeting and two weeks after they were furnished with the last round of further information, Lithgow, Weir and Balfour had produced and circulated a report (often incorrectly referred to as just 'Lord Weir's Memorandum') outlining their views on the basic problems with the organisation of industry, as well as providing some suggestions for improving upon the existing structure. The panel began by apologising for the 'informal nature' of the report owing to the speed with which it was prepared, and which had meant that they had not been able to 'intensely study' the full question. Thus, the report indicated that it would be confined to the examination of relatively simple objects, namely the production of shells and munitions (the responsibility of Supply Committee I), rather than the engineering, armour and shipbuilding sectors that the panel's members had more working knowledge of. In addition, the panel held some clear misgivings over suggesting ways for the state to reorganise or interfere with normal business practices, and put on record the 'personal distaste with which [they] regard[ed] the work'. Indeed, they were at pains to note that they justified it to themselves 'on the fundamental basis of the importance of national security alone'.<sup>435</sup>

Despite this, Lithgow, Weir and Balfour<sup>436</sup> were not short of suggestions. They first recorded their fears that the 'coordination of supply will require something much more effective than the current structure in the event of a [world war]', something they viewed as only adequate for peace-time or limited conflicts at the moment. They also believed that the peacetime industries (such as shipbuilding and engineering) were better equipped to prepare for war than those needed for shell and munitions production, as the latter were only needed in substantial quantities in the event of a large-scale conflict, making an expansion of industry in peacetime highly problematic. However, they insisted that this did not mean that shipbuilding and other areas required less attention as a result, and warned against 'frittering away the valuable opportunity' to 'give definite support' to a small number of units. In other words, they

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<sup>435</sup> 'Memorandum by Lord Weir, Sir James Lithgow and Sir Arthur Balfour', PSO 415, 20 February 1934, TNA: CAB60/14, p. 1.

<sup>436</sup> Weir and Lithgow co-wrote the report, as Balfour was in America. The latter did however sign-off on the contents of the document, and added a three page postscript to it.

wanted orders to be distributed around the larger armament manufacturers in order to build up their capacity and expertise in preparation for a period of high demand. Failing to do so, they argued, would only ‘maintain in existence...a series of weak and inefficient units unable to deal with an emergency or to act as progressive units in time of war’. This was particularly serious, for during wartime such units should be ‘the most valuable assets for armament supply...due to their peacetime scale of output’ and had to be ‘able to carry and administrative and executive structure, strong in organising and technical personnel coupled with toolroom strength, metallurgical knowledge and experimental facilities’.<sup>437</sup>

More generally, the report indicated clearly the industrialists’ convictions about the limits of planning. They note that while weaknesses can ‘be met by planning and prevision’ they were ‘convinced that however perfect [Britain’s] organisation may be, no mere paper planning can cope adequately with the foreign situation’ which, in their eyes, would have Britain in conflict with nations that possessed a much ‘strong[er] peacetime armaments industry’. Moreover, they expressed concern that ‘all technical, design and production facilities’ for all types of lethal weapons (including warships) were dependent on a tiny number of firms or state bodies. In the case of Supply Committee I, production relied completely on Vickers and the state-owned Woolwich Arsenal, whereas in 1914, there were six comparable facilities. Weir, Lithgow and Balfour noted that ‘in these two units reside all the technical data and experience of this country’, and should provide a kind of ‘parental guidance’ to less experienced firms. They were also not convinced that Woolwich was safe in the event of aerial attack.<sup>438</sup>

These problems, of course, were well known to the industrialists and PSOC alike as a problem not unique to munitions. Noting this, the panel’s solution was for the dissemination of the industrial knowledge held (in the case of munitions by Vickers and the Woolwich Arsenal) among some of the key firms which had been identified over the previous two years. The reports given to the industrialists contained both the listing of the thousands of firms previously been engaged in armament work of any kind and the extent of the investigations (such as that at Vickers) which had been undertaken at dozens of facilities around the country. The advisory panel deemed the first list as ‘too broad’ to work, and instead recommended

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<sup>437</sup> ‘Memorandum by Lord Weir’, PSO 415, TNA: CAB60/14. Quotations from pp. 2-4.

<sup>438</sup> ‘Memorandum by Lord Weir’, PSO 415, TNA: CAB60/14. Quotations from pp. 4-6..

investigation of a much smaller number – around 250 to 400 – of ‘major’ firms with ‘all attention being concentrated on them’ for the mobilisation of industry for all types of armaments from rifles to ships and aircraft. These firms, they suggested, would almost all be well known to the War Office, Air Ministry and Admiralty, meaning more accurate estimation of their skills and theoretical capacities.<sup>439</sup> Lord Weir had previously offered to ‘advise as to which firms were most suitable’ but warned that approaches should only ‘be made to the big firms and the big men’.<sup>440</sup>

Essentially, what the panel advocated was a system of what would be most frequently known as ‘educational orders’, whereby an already trusted firm could develop skills that it did not possess in peacetime in order to be ready with little delay to ramp up production of items needed during war. The items made during peacetime would initially be expensive and slow to manufacture, but it would allow for an invaluable knowledge base to be built up while simultaneously adding to Britain’s existing stock of weapons and munitions. This ‘shadow’ industry could then be turned over quickly to a wartime footing should the need arise. In the case of naval shipbuilding, where the number of berths was adequate but skills and facilities had eroded over time, educational orders would enable a new generation of apprentices to be trained, and allow much shorter lead-in times between when a ship was ordered and when it was finally commissioned. Such ideas were not new – Weir had said the same thing several times since 1931, most recently in a letter to the *Times*<sup>441</sup> a month before meeting the CID – but in February 1934 the audience was very different. Moreover, it cannot be ignored that these proposals also served the interests of the panel members, who were all active in firms that would benefit from the policy.

As an intriguing side-note to the recommendations, the report also sheds light on the limits of the information shared with the industrialists in early 1934. For instance, they make clear at the beginning of the report that an ‘underlying reservation’ was that they ‘do not know and cannot question the hypothesis on which our war needs are based. When a figure is mentioned, we accept it.’ In addition, when the figure of 20 million shells for the first six

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<sup>439</sup> ‘Memorandum by Lord Weir’, PSO 415, p. 6.

<sup>440</sup> Meeting, PSO 407, 19 December 1933’ TNA: CAB60/14, p. 5.

<sup>441</sup> Lord Weir ‘British Shipyards, Importance of Varied Work, Continuity of Technical Progress’, *The Times* 17 November 1933.



months of a war was discussed, they noted that ‘without further information, it is impossible to be dogmatic on whether [the existing facilities] make a sufficiently strong foundation for this country’.<sup>442</sup>

Moreover, the limitations on the information available to Weir, Lithgow and Balfour were not confined to just the subject of defence hypotheses. While this may have been deliberate, it is perhaps more likely another reflection of how little time and resources were available to allow them a fuller knowledge of the CID. At the 32<sup>nd</sup> meeting of the Supply Board, which took place two weeks after the industrialists’ memorandum was submitted, the Chairman, Air Marshal Dowding, noted that, on the subject of supply organisation, ‘Lord Weir had not been given full information about the whole process’, while Lieutenant-General Charles said that the panel’s proposals for spreading orders around more firms were perhaps made because they ‘did not realise how minute the present Service orders were’.<sup>443</sup> Admittedly, the panel had only been working for the PSOC for a matter of weeks, so it is perhaps unrealistic for these hypotheses and processes to have been shared from the outset, but it is at least clear that while the industrialists had been given a unprecedented amount of secret information, there was still a great deal that was unknown to them.

The report was, nevertheless, taken very seriously by the Supply Board. The members were so impressed that it was agreed that the industrialists should be brought back in as soon as possible and allowed to elaborate on their proposals in front of the PSOC.<sup>444</sup> This did not mean that the PSOC and Supply Board were now prepared to invite industrialists in to the fold in larger numbers, however. Indeed, during the 33<sup>rd</sup> meeting in May, the PSOC’s members reiterated their belief that while industrial cooperation was now essential, adding more civilians as permanent members was not wise. Whitham noted that ‘their presence might be found embarrassing, and might reasonably offend the susceptibilities of their trade competitors’ if the information became widely known. Jenkins stated that his long experience of employers’ groups led him to think that their help would not be found very satisfactory, as they were always apt to safeguard the interests of their least efficient member. In his opinion,

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<sup>442</sup> ‘Memorandum by Lord Weir’, PSO 415, TNA: CAB 60/14, pp. 3-4.

<sup>443</sup> ‘Minutes of the 32<sup>nd</sup> meeting of the Supply Board’ PSO(SB)32<sup>nd</sup> Mtg, 21 March 1934, TNA: CAB60/31, p. 15.

<sup>444</sup> ‘Minutes of the 32<sup>nd</sup> meeting of the Supply Board’, p. 16.

it would be more profitable to get into touch with an outstanding individual in the particular trade, and take him into full confidence only if he fit the bill, in the same way they had done for Weir, Lithgow and Balfour. They did however conclude that this was only for the present and would consider changing it in future.<sup>445</sup>

The meeting with the Advisory Panel took place on 9 April, and culminated with Dowding producing a lengthy memorandum to address and respond to each of the individual points the panel raised as well as providing them with some more information on the state of procurement. Some aspects of this memorandum are especially noteworthy. On the subject of the decline of the armaments industry, Dowding wrote that the:

...gravity of the situation, revealed by the weak state of the armament industry in Great Britain, has long been fully realised. It was brought to the notice of the [CID] in the Ninth Annual Report of the PSOC (in 1932). The Supply Board are very conscious of the extent to which the field of armament supply has dwindled and concur wholeheartedly with Lord Weir's proposal to create a shadow armament industry capable of meeting at least the major part of our war requirements. Peace requirements are at present so small that they are almost fully absorbed in maintaining capacity in Government factories...

The acceptance of this policy, which would be of the greatest value in widening the field of supply, would therefore entail some increase in peace-time orders and possibly also some increase in the cost of peace-time contracts. It is considered, however, that the increase of war time capacity thus achieved would amply compensate for these disadvantages.<sup>446</sup>

In addition, he also gave the PSOC's endorsement to the concept of educational orders to some non-armament firms, and to an immediate selection of 400 of the most suitable firms for War Office, Admiralty and Air Ministry contracts that already possessed a 'nucleus of plant and experienced personnel'. He also reaffirmed his commitment to a small advisory panel and that that more experts 'should not, at present, be brought into active membership of any of our subcommittees'. Finally, on a point responding to Weir, Balfour and Lithgow's suggestions for the mobilisation of current armament manufacturers, Dowding reported that he had informed the panel that the PSOC was already, in fact, making progress on this matter, and that schemes regarding the 'capacity of Messrs Vickers-Armstrong and Beardmore are under preparation in

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<sup>445</sup> 'Minutes of the 32<sup>nd</sup> meeting of the Supply Board', p. 12.

<sup>446</sup> 'Note by the Chairman of the Supply Board on the memorandum by Lord Weir', PSO 421, 26 April 1934, TNA: CAB60/14, pp. 2-3.

conjunction with these firms'.<sup>447</sup> Moreover, on the issue of shell filling, the panel were informed that a WWI facility in Hereford had been kept on a 'care and maintenance basis' so that it could be turned over to production relatively quickly should circumstances dictate.<sup>448</sup> Given Lithgow's involvement by 1935 with Beardmore and his National Shipbuilders Security scheme (see Part Four) these pieces of information, on top of the wealth already shared with the panel, would soon become very significant indeed.

The PSOC, and indeed the wider British government, benefitted immediately from the cooperation of this small group of industrial advisors. While in the area of naval arms the industrialists were not suggesting any radical overhaul to existing practices, the 'shadow' scheme was proposed to reduce the theoretical future strain that would likely be placed on firms like Vickers, allowing it to expend its efforts in other areas. The same could be said of educational orders, which were motivated by the desire to reduce the problem of securing a steady supply of items that only a handful of firms could, at present, fulfil. The suggestion to focus any effort on a much smaller pool of firms than had hitherto been the case, self-serving as it may have been, was perhaps just as important, as it allowed the work of a small committee to be more effectively directed towards hundreds, rather than many thousands, of facilities.<sup>449</sup>

Of course, the industrialists were also gaining from their new relationship with the CID. As businessmen whose firms had long benefitted from the British government, access to secret information on supply organisation and likely procurement bottlenecks (or, in other words, what a major customer might need in the near future), had obvious value. However, regardless of the panel's motivations or the recommendations that Dowding and the Supply Board may have been endorsing, the Supply Board and PSOC were still in no position to act upon them in April 1934. This was, however, a crucial first step towards informing these key industrialists of where the PSOC believed the problems in supply might be, and developing a dialogue to overcome them. It was also progress towards what would eventually be implemented following the publication of the first White Paper on Defence – which brought rearmament

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<sup>447</sup> 'Note by the Chairman', p. 5.

<sup>448</sup> 'Note by the Chairman', p. 5.

<sup>449</sup> At the 30<sup>th</sup> meeting of the Supply Board (before the decision was made to create a panel), Bovenschen conceded that a major stumbling block was not 'lack of something to investigate' but 'lack of staff' and knowing 'which firms to go to first'. 30<sup>th</sup> meeting, PSO(SB), TNA: CAB60/31.

into public consciousness – in March 1935. The financial and political situation at home and abroad in mid-1934 meant however that this stayed, like most of the PSOC's plans, as a hypothesis. In retrospect, however, it is unlikely that this scenario of cooperation and extensive planning would have arisen at all in the wake of Manchuria if there had been no National Government. The 'spark' was the revocation of the Ten Year Rule, which required Cabinet support, and it is highly doubtful whether the Labour Cabinet of 1931 would have backed it in the same way. The unique blend of extreme financial and political pressures necessitated an approach which planned much but spent little, and this is one important reason for the formation of the Advisory Panel rather than skipping straight to a form of limited rearmament in 1932.

### 6.3 Related Business Developments: Lithgow and the NSS, 1933-4

The discussions between the industrialists and the PSOC that followed the initial report, and the implementation of the recommendations, are discussed in chapter seven. At this stage, attention must return once more to Lithgow's National Shipbuilders Security (NSS) scheme. The origins of the NSS, which dates back to 1929, have been discussed in chapter four. As suggested, the NSS can be seen in the context of the pre-Manchuria period as another in a long line of attempts by industry to cope with the dire market conditions experienced in the 1920s, although for our purposes here the history of the NSS after 1933 is best understood when placed in the context of the CID's changing defence hypotheses and the subsequent approach to industry.

From its inception in 1930, the NSS had successfully liquidated hundreds of thousands of tons of shipyard capacity. For the most part, this was not a problem that the PSOC was particularly concerned with, as only a relatively small part of merchant capacity was used during the Great War, and there were still many hundreds of berths left. Beardmore was a larger issue for the PSOC, however, because, along with Vickers it was responsible for making components of naval guns and other technically advanced items. Its closure had therefore left a gap in the market that, by 1934, was a major cause for concern. Fortunately for the PSOC, the situation was not as bad as it might otherwise have been: The Beardmore Company was split over two sites in the west and east of Glasgow, namely the shipyard in Dalmuir and the forge in Parkhead, around ten miles away, respectively. The closure of the Beardmore shipyard under the NSS scheme had naturally been solely concerned with rationalising shipbuilding

capacity, and by April 1933 work had been completed to liquidate and sell off the yard's machinery.<sup>450</sup> It is important to note that the NSS did not purchase the firm's engineering plant and forge – these were outside of the terms of reference of Lithgow's scheme, and as such remained owned by the Bank of England.<sup>451</sup>

Incidentally, one of the outcomes of this arrangement was that Lithgow – who refused an earlier offer from Norman and Duncan<sup>452</sup> to become chairman of the firm when the Bank initially invested in Beardmore in 1928 – agreed to sit on the board of the surviving part of the firm, with the intention of advising the company on rationalisation (and, one assumes, being a conduit back to the Bank).<sup>453</sup> This should not be overstated at this juncture: Lithgow played only a minor role before 1935, and there is no indication that he knew anything about the WSBC. In sum, although Beardmore's capacity to make warships and most aspects of heavy naval guns had been eliminated, its existence as an engineering and steel company meant the rump of the business survived, and some naval arms production capacity – especially in armour plate – remained.<sup>454</sup>

Until 1933, Lithgow and the board of the NSS had favoured the liquidation of entire yards or companies, rather than individual sites or berths belonging to a larger shipbuilding company.<sup>455</sup> In this respect, the diversity and size of the Beardmore business made it an unusual case that was not mirrored in other yards which made ships alone. At the outset this policy of large-scale liquidation caused relatively few issues as there was no shortage of sellers, but after more than two years of sterilisation the plan began to pose problems. Beardmore was, by this point, one of only a relatively small number of yards capable of making warships which had been liquidated by the NSS. The main sticking point was that general builders, particularly those constructing the simpler cargo vessels, could be bought wholesale, while the more specialised yards held some assets which their owners remained unwilling to sell, even if many of the firm's berths were unoccupied, or they were willing to

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<sup>450</sup> Hume and Moss, *Beardmore*, p. 217.

<sup>451</sup> Hume and Moss, *Beardmore*, p. 216.

<sup>452</sup> See section 4.6.

<sup>453</sup> Murphy, 'Scott Lithgow', p. 64.

<sup>454</sup> See William Beardmore, Directors Report, 16 April 1934, GUAS: GD320/2/10 & Hume and Moss, *Beardmore*, p. 218. The survival of the engineering plant is critical –as some of the requirements for gun making were, at least in theory, preserved.

<sup>455</sup> Minutes – various locations, but see especially Barr's input from 16 December 1932, NMM: NSS.

sell off parts of the business. This was causing uneven results; the liquidation of the merchant stock was, by the conclusion of 1932, proceeding far quicker than that of the equivalent warship and liner berths, which were almost always much larger and more technologically advanced, and thus concentrated in the hands of a few firms.<sup>456</sup> As a result, an urgent meeting was called among the directors of the NSS and the major warship manufacturers to discuss the problem in early 1933.<sup>457</sup>

The meeting, chaired by Lithgow, took place on 23 February, and naturally included the vast majority of WBSC members. Their representatives included Sir Thomas Bell and Captain T.E. Crease (of Brown), W.L. Hickens and R.S. Johnson (of Cammell Laird), Sir Maurice Denny (Denny), Sir Alexander Kennedy (Fairfield), Sir Frederick Rebbeck (Harland and Wolff), Captain G. Bates (Hawthorn Leslie), Sir John Scott III and James Brown (Scott), A.M. Stephen and A.L. MacLellan (Stephen), Sir H.A. Lawrence, Colonel Beaumont-Nelson, and Charles Craven (Vickers Armstrong), Sir George Goodwin (Samuel White), and Sir Harold Yarrow (Yarrow). Aside from the defunct Beardmore and troubled Palmer companies, only Swan Hunter and the destroyer builder Thornycroft did not attend the meeting. Here, the odd scenario arose where the NSS – with John Barr as valuer – attempted to persuade a ring of firms that had been sharing information with one another for several years, and who he was acting as secretary for, to sell off some of their yards to rationalise the industry and reduce excessive competition! Amongst the smoke and mirrors where some of the meeting members knew of the existence of a ring and some did not, the meeting ultimately failed to persuade the firms to sell up, but it did lead to an important change in NSS strategy. Following Barr's suggestion to break the stalemate, the NSS agreed to look into the purchase of individual sites or even single berths from a warship firm, rather than the entire establishment, if it helped achieve the organisation's goals.<sup>458</sup>

One of the first deals struck under this system was for three yards from Palmer's shipbuilding company (Amble, Hebburn, and Jarrow where the firm was headquartered). Ironically, Palmer's was one of the only firms not present at the meeting when the agreement

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<sup>456</sup> See Minutes, 16 December 1932, NMM: NSS. For an example of the notice sent to the warshipbuilders, see Lithgow to Scott, 23 January 1933, GUAS: GD320/2/10

<sup>457</sup> Letter from Lithgow to Scott, 27 January 1933, GUAS: GD319 12/7/6.

<sup>458</sup> 'Meeting of Warship and Liner Builders' 23 February 1933, NMM: NSS.

was reached, and, as the company was in receivership by 1933, what started out as discussion of the purchase of an individual yard in fact ended up with the sale of the entire firm.<sup>459</sup> This was soon followed by purchases of berths from Vickers Armstrong (which constituted part of the holdings of the former Armstrong Whitworth Company), Swan Hunter and Fairfield. The last turned out to be a contentious issue, as Montagu Norman himself felt that Fairfield – which needed nearly double its agreed overdraft limit in order to survive – was too important to liquidate. The Bank of England – through its Securities Management Trust (SMT) company – therefore agreed to offer the £200,000 necessary to keep Fairfield in business, but only on the condition that the NSS would buy the company at a later stage if Fairfield could not repay the loan.<sup>460</sup> The final arrangement was for the sale of four of the company's berths instead of the whole firm, but with the personal agreement by Lithgow for the NSS to purchase the rest if 'liquidation proved necessary'.<sup>461</sup>

By the time Lithgow, Weir and Balfour joined the CID the NSS had purchased or agreed to purchase around 800,000 tons of shipbuilding capacity from over 20 firms, comprising some 130 berths at a cost of almost one and a half million pounds. Although the NSS would continue until the outbreak of war, its work in less than four years to 1934 comprised over 60% of the total carried out under the scheme, and cost 50% more than the value of the original loan by the BIDC. Perhaps more significantly, every single one of the NSS's major acquisitions of naval facilities had already taken place or was under discussion by 1934. Significantly, at no point had attempts to persuade warshipbuilders to sterilise berths at the same rate as cargo manufacturers been particularly successful. The original intention had been to cut around one third of total shipbuilding capacity – 1.3m tons – from the sector.<sup>462</sup> However, by the time the scheme concluded, only 37 of the desired 50 warship berths had been eliminated from the available pool – equivalent to around 20% of total capacity – while nearly 180 cargo and merchant berths had been removed against an initial target of 120, equivalent to nearly 50% of the available cargo manufacturing capacity at the beginning of

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<sup>459</sup> Hebburn was eventually sold to Vickers Armstrong.

<sup>460</sup> Norman to Duncan, 9 June 1933, BOE: SMT/3/282.

<sup>461</sup> Slaven, *British Shipbuilding*, p. 101.

<sup>462</sup> Minutes of Meetings, 23 July 1934, NMM: NSS; 'Servicing the Loan', 10 November 1930, BOE: SMT/2/280, file 142.

1929.<sup>463</sup> Thus, while the NSS undershot on warship and liner berths, it ended up sterilising over 1.4m tons of capacity in total by 1939.<sup>464</sup>

On the face of events, this should not have been the case. Despite a global economic downturn which hit international trade and personal incomes (which drove the market for merchant and passenger vessels), firms involved in the manufacture of cargo vessels were also likely to have a diverse customer base and smaller overheads than those which derived a large proportion of their income from naval contracts.<sup>465</sup> One explanation for this imbalance is the existence and operation of the WSBC. As a mechanism for avoiding cutthroat competition and for raising prices (and profits), the committee allowed the warship sector more scope to mitigate the impact of market forces in a way that smaller merchant builders could not. As such it made them less likely to be enticed by the NSS scheme. Moreover, the long-term nature of disarmament had led the naval manufacturers to create and develop structures to deal with excessive competition some years before the onset of the global economic crisis, and while they could also compete for merchant work, the reverse was not true for merchant builders. At the very least, one could argue that the WSBC's success in raising the price floor for the relatively few naval orders acted as a disincentive for its members to sell to the NSS, given that typical prices offered under the scheme were just half the pre-war value of a firm.<sup>466</sup> It is, of course, almost impossible to prove absolutely why far fewer of the WSBC members could be persuaded to sell from surviving documents – the conversations between WSBC members appear to have been, for the most part, destroyed – perhaps deliberately. Thus, the role John Barr played in his simultaneous capacities as valuer to the NSS, secretary of the WSBC and chair of the Shipbuilding Conference remains intriguing, but largely unknown.

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<sup>463</sup> Compiled from Slaven, *British Shipbuilding*, Table 4.9' and NSS minutes (Slaven notes) Even if one accounts for the latter's smaller average tonnage capacity per berth (around 6,000 tons vs. 9,000 tons), the total cargo tonnage sterilised vastly outstrips that of warship (and large liner) work by a ratio of well over 3:1. This equates to approximately one quarter of the capacity for warship production, but almost 50% of the capacity for cargo work. Incidentally, Slaven calculates the sterilised warship berths at 41 – I have not included smaller berths, including those at Palmer's yard in Amble (c.1500 tons each), as although part of a warshipbuilding firm, these were not used for the manufacture of naval ships.

<sup>464</sup> Slaven, *British Shipbuilding*, 'Table 4.9', pp. 98-100.

<sup>465</sup> Slaven, *British Shipbuilding*, 'Table 4.7', pp. 81.

<sup>466</sup> 'Minutes of Meeting', 31 July 1930, NMM: NSS.



Nevertheless, the most important point of note here is that despite the comparatively small reduction in naval capacity, the contingent of private naval armaments makers had been slimmed down considerably by 1934 compared with a decade earlier. Though some of this had taken place in the 1920s – Vickers and Armstrong Whitworth merged in 1927, while the Coventry Ordnance works ceased operations in 1925 – it was the NSS which eliminated most of the capacity. Beardmore and Palmers were removed from the pool entirely, while parts of Vickers Armstrong, Fairfield and Swan Hunter all reduced the number of berths in use. In all, over 300,000 tons of naval capacity was sterilised by the scheme before the beginning of rearmament (the merchant figure was over 1,100,000<sup>467</sup>). Moreover, for the manufacture of certain components there was a very substantial loss of productive capacity indeed, to which an assessment of berths and tons lost alone cannot provide a full picture. For example, the closure of the Beardmore plant in Dalmuir removed one of only two such specialist gun making (the other was part of Vickers Armstrong) in 1930, at that moment cutting Britain's capacity effectively in half. This was, as already shown, immediately noticed by the Admiralty whose representative highlighted to the CID's Supply Board in 1932 that the 'bottleneck' created in gun mounting effectively dictated the pace of all naval construction, as ships could only be brought into service as fast as guns could be made.<sup>468</sup> Similarly, the Beardmore engine works – also on the Dalmuir site – is another (if perhaps less dramatic) example of sterilisation that had a greater impact than the reduction in the number of berths alone would suggest.

#### 6.4 Lithgow, the Supply Board and the NSS, 1933-4

The activities of the NSS were thus of great significance to the planning that took place in the PSOC's subcommittees after Manchuria. For while the NSS was busy from 1929 formulating methods to deal with a perceived overcapacity in the industry during an intense industrial depression (and expended most of its efforts liquidating merchant berths), the job of the PSOC and the its CID parent was to look as far ahead as was practically possible to assess security threats to Britain and take early steps to deal with them. The sterilisation of the Beardmore and Palmer along with parts of the Fairfield yard coincided more or less exactly with the Supply Board's discussions of British naval deficiencies. The problem, however, was that the PSOC was dealing with hypothetical and ever-changing scenarios which were by their

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<sup>467</sup> Slaven, *British shipbuilding*, p. 102.

<sup>468</sup> 24<sup>th</sup> Meeting of the Supply Board, 11 October 1932, p. 13, TNA: CAB60/30.

very nature top secret, and thus could not act publicly to step in and counter the rationalisation schemes in order to preserve naval capacity.

In addition to secrecy, there was plainly no money or political will for intervention in industry. Providing orders to keep facilities at Beardmore and Palmer in operation would not only have been costly, it could also possibly even have contravened the limits set by the 1930 London Naval Treaty and thus would have sent out the wrong signals not only to Britain's friends (or sparked a retaliation from potential enemies), but also to the British public, whose pacifist tendencies were reaching their collective peak by 1933.<sup>469</sup> Indeed, a tentative enquiry by the Shipbuilding Employers Federation to the Admiralty in December 1930 for an acceleration of naval construction had been rebuffed for these very reasons, with the First Sea Lord concluding that any move 'would be overwhelmed by public as well as [parliamentary] criticism to the effect that there were far better ways of spending money than on warship building'.<sup>470</sup> While the threats in 1933 were of a quite different and more serious nature, there was still – as previously indicated – no immediate prospect of a change of heart on this matter.

In sum, Lithgow's invitation to sit on the Advisory Panel of Industrialists in the winter of 1933 was almost certainly closely related to the NSS sterilisation programmes, and perhaps even his role (albeit minor) at Beardmore. Thus, while the PSOC and its sub-committees apparently remained oblivious to the existence of the WSBC price-raising mechanism, they were acutely aware of the possibility of losing firms from their list of suppliers during an industrial depression of this magnitude.<sup>471</sup> Firms that collapsed financially could, in theory, be restarted relatively quickly if the need arose because their physical assets remained intact, but under the terms of the NSS this was impossible, as in many cases the assets were quickly stripped from yards and sold off, and the land usually repurposed and prevented from being used for shipbuilding in the future.<sup>472</sup> Without a change of strategy, the crisis surrounding the lack of naval guns and armour-making facilities (and perhaps even the munitions plant at Vickers) would not be resolved, or might even deepen further. In short, although there were

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<sup>469</sup> P. Kyba, *Covenants without the Sword: British Public Opinion and Defence Policy, 1931-35*, (Waterloo: Wilfrid Laurier University Press, 1983), p. 26. In short, the public deemed any armaments spending totally unnecessary given, among other factors, the scale of the financial crisis.

<sup>470</sup> Slaven, *British Shipbuilding*, p. 90.

<sup>471</sup> 'PSOC Report: Private Armaments Industry', PSO 1109, 31 March 1933, TNA: CAB4/22.

<sup>472</sup> J. Greaves, *Industrial Reorganisation in Interwar Britain* (London: Palgrave, 2005), pp. 223-225.

many other good reasons for choosing Lithgow as an advisor, Sir James's role as Chairman of the NSS meant that despite not being a naval shipbuilder at the time of his appointment, he was nevertheless central to one of the PSOC's greatest problems, and almost certainly key to the solution.

It should therefore now be of little surprise when it is recalled that the Supply Board's first priority for Lithgow, Weir and Balfour when they joined the Advisory Panel was for them to get up to speed with the procurement structure for war supplies so that an accurate picture of the scale of British deficiencies could be established. All three men were then supplied with a list of the 'key firms' as they existed in 1933 as well as the tendering and procurement processes for the War Office, Admiralty and Air Ministry. The content and reception of the report that was produced in February 1934 were the result of these developments. But they also conditioned to an extent what happened within the NSS, which had, by early 1934, recently finished negotiating the final purchase of the Palmer yards and part of the former Armstrong-Whitworth holdings of Vickers-Armstrong.

Instead of liquidating the assets, as had been a central tenet of NSS policy since the scheme was first discussed in the 1920s, Armstrong's large Tyneside Walker yard, disused but formerly engaged in naval construction, was purchased for £125,000 in July 1934 and put on a 'care and maintenance' basis: rather than being permanently sterilised, it was essentially mothballed with the possibility of re-starting the facility at six months' notice. The official reason given by Lithgow was that the Walker yard could be used as a 'threat' to those who were slow to rationalise, as 'restoring a yard such as this could be used to make other builders...more likely to reduce their facilities.'<sup>473</sup> Likewise, the Hebburn yard of Palmers, also a former naval facility, was bought for £100,000 and not sterilised, but sold on ten months later to Vickers for a sum of £85,000.<sup>474</sup> To put another way, Vickers-Armstrong had sold one yard that the firm did not want to the NSS and bought one from it that it did, and made a profit of £40,000 into the bargain, while the NSS lost £15,000.<sup>475</sup>

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<sup>473</sup> Minutes of Meetings, 23 July 1934 NMM: NSS.

<sup>474</sup> Minutes of Meetings, 27 March 1945, NMM: NSS.

<sup>475</sup> Minutes of Meetings, 12 October 1933, 30 May 1934, 27 March 1935, NMM: NSS.

It could be argued that a mothballing strategy was an effective way to encourage other naval manufacturers to increase the pace of their own internal rationalisation schemes. There are problems with such an analysis, however. For one thing, the sterilisation of naval berths and facilities lagged behind that of their merchant counterparts; therefore, retaining a large facility in 1934 when there was still (a perceived) substantial overcapacity in naval construction seems odd in light of the evidence presented previously. Moreover, it is hard to see on what basis mothballing would have been effective at enticing rivals to reduce their capacity. The NSS would surely have undermined its own argument by bringing another facility back into operation while simultaneously claiming that more berths and yards needed to be closed. Secondly, a complete reversal of a central policy on the back of nearly four years of sterilisation is extremely difficult to explain with the rationale that was provided. Before 1934, there is no evidence of any belief in the wisdom of mothballing yards (at the NSS's expense) or selling yards at a loss to be kept in use – this particular policy was without precursor and came at Lithgow's suggestion more or less out of the blue. The notable precursor that *does* exist, however, is the case of the shell-filling factory in Hereford, which, it should be recalled, Dowding had suggested be mothballed in a communication with Lithgow just three months prior, in the early months of 1934. Finally, although not known at the time, the Walker and Palmer acquisitions represented the last serious naval purchases by the NSS – some two years before rearmament orders began flowing. This fact must strongly indicate that if Lithgow was indeed serious in his attempts to increase the pace of capacity reduction in May 1934, then his plan backfired spectacularly.

It must be therefore concluded that the Walker and Hebburn mothballing cases require an alternative explanation than the reason given by Lithgow. There is no doubt that changes in Lithgow's thinking took place between the end of 1933 and the summer of 1934, precipitating a fundamental shift in NSS policy. The question is: What caused this shift? When Lithgow's involvement with the NSS is matched up against the information he gained from the Supply Board, it appears far more convincing and more likely that the reasons for mothballing the Walker yard had far more to do with the Supply Board's clear concerns over deficiencies and available capacity than it did with other builders being slow to rationalise. After all, the complete and unexpected change of course only occurred after the Supply Board's deepest concerns – and what would be needed to meet the hypothetical defence requirements of the British state – were laid bare to Lithgow. Of course, and for the reasons noted above, he could

not articulate these publicly, even to his colleagues and fellow board members on the NSS. In short, one can argue that it is likely that the NSS, formed as a response to overcapacity in industry and funded by a large Bank of England loan, through the actions of one influential man, deliberately slowed the pace of naval sterilisation after the deficiencies in defence were articulated by senior Army, Navy and Air Force members on the Supply Board. While there is nothing to suggest he was instructed or even pressured into this course of action, once the gravity of the situation was made clear, he seems to have made adjustments accordingly. This not only highlights the role Sir James Lithgow was able to play in industrial reorganisation, but also underlines the effect the planners in the PSOC and its Supply Board could have, indirectly, upon industry through interactions with a small coterie of key industrialists.

### 6.5 Conclusions – A changing political economy

It is clear that Lithgow knew much more than the rest of the NSS board (and the WSBC for that matter) about the nature of defence deficiencies, but could not, and did not, share that information. The same is broadly true for Balfour and Weir who, along with Lithgow, had far more ‘inside’ information than the rest of industry had access to. This information was nowhere near complete: the CID and PSOC knew a great deal more about the basis upon which these deficiencies were being calculated, but were not prepared to share that information with Lithgow, Weir and Balfour in 1934. Then there was the Warshipbuilders’ Committee, which in 1934 did not contain any of the advisory panel members, and was simultaneously quietly operating its own price-fixing scheme of which most of the directors of the NSS – and one can presume all of the Admiralty, PSOC and Advisory Panel – knew virtually nothing. At the root of this behaviour lay the potentially very serious conflicts of interest that no party could allow to be made public: WSBC members had a substantial presence on the NSS board which was busying itself with restructuring the market, while the Advisory Panel of Industrialists had access to officially secret information about defence deficiencies and the PSOC’s investigations into the businesses of their rivals.

The changes that occurred in these years – both in supply organisation and in industry – shaped the rearmament that followed and preceded the DRC and post-1934 period, which has

been characterised as the period where defence policy began to shift.<sup>476</sup> By then, compared with 1931, there had been a complete change in the nature of war planning and the attitude of the CID. Criticisms of the slow pace of change are, of course, still valid, but one should not ignore the major developments that took place in this period. While the relationship between state and industry extended only to a small handful of men in 1934, the very fact they were brought into the confidence of the PSOC, with Cabinet approval, and given top secret information marked a clear paradigm shift in thinking. Rather than industrialists being outsiders developing responses to crises, a small band was now part of the fold, and as such had information that far exceeded that of their peers. Weir, Lithgow and Balfour might not have been naval arms manufacturers in 1934, but they were nevertheless, to the CID, the most important voices on the subject.

As already mentioned the watershed moment was in autumn 1931 when Japan invaded Manchuria, but the process of bringing industry into the fold which followed occurred because of the National Government. The PSOC was chaired by a Liberal, the CID by Labour, but power almost certainly lay with the large Conservative contingent led by Baldwin. The result of this was that the 'government of national interest' had an enormous mandate to govern, and did so along very different lines from the narrow interests of their parties. As such, the CID's executive committee – staffed by Cabinet ministers – was broadly receptive to any PSOC attempts to plan for tackling defensive deficiencies, provided they were kept out of the public domain and did not incur huge costs.

There still existed two large 'brakes' on the CID's ease of operation. Financially, Britain was still weak and struggling to emerge from the effects of the depression, and politically the government remained reluctant to authorise any increase in armaments manufacture lest the UK be perceived internationally as aggressors or be subject to a public backlash for abandoning the popular principle of disarmament. This was the climate which existed more or less without change until the second-half of 1934.<sup>477</sup> These 'brakes', or constraints, should not be forgotten, for they explain why the process of industrial involvement evolved in the way it did. The desire for a tentative, secret approach (not to mention the continuing reticence of some staff to support the inclusion of civilians) meant that the PSOC followed a meandering

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<sup>476</sup> McKercher, 'From Disarmament to Rearmament: British Civil Military Relations', pp. 21-2.

<sup>477</sup> Shay, *British Rearmament*, pp. 46-7.

path between Japan's invasion and the Advisory Panel's first report nearly two and a half years later. First, the deficiencies in weapons were highlighted, and then the investigations took place into the existing facilities for manufacturing, before a protracted debate took place for whether or not there would be any benefit in bringing industrialists into the fold. While it is possible to argue that before 1931 the conditions did not exist to identify or fix such defensive deficiencies, Gibbs's characterisation of the 'unbelievable tardiness' of rearmament policy during these years appears to be applicable to the performance of the CID and PSOC in approaching industry, even if one accepts that their freedom to manoeuvre remained constricted before 1935.

In terms of the nature of industrial cooperation, it is of course very difficult to split the 'naval' components from the wider issues of supply organisation. It would not be wise to attempt to, either. For although it was a naval problem in the Far East which sparked the PSOC's deliberations, the overlap in the interests of the defence departments and the necessarily broad nature of the capacity problem meant that while certain problems were more relevant to the Admiralty, War Office or Air Ministry, none of these decisions were being made in a vacuum. Everyone in the PSOC, Supply Board and Advisory Panel appeared to recognise the fluidity of the situation, and the hypotheses on which requirements were based. The key difference compared with, for example, the years around Washington, was that it was not just a few Admiralty figures calling for more attention to be paid to private industry, it was the CID's supply organisation, and this (despite the primacy of Treasury control of expenditure) was an important step forward when compared with a few years earlier.

To this end, there was both a huge shift in thinking between 1931 and 1934, and at the same time a distinct lack of progress. The financial and political pressures meant that the members of the WSBC and Admiralty, as organisations, still lacked influence over spending in much the same way that they had between 1922 and 1931. Naval expenditure was still not recovering.<sup>478</sup> However, the lack of orders was now widely accepted within the CID as having a detrimental effect on Britain's ability to wage war and, most importantly, a secret state-industry framework now existed to investigate the problem. The problem was top-level

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<sup>478</sup> See Table 7.2, below.

government, and the next step to actually solving the problem could not be taken until there was another step-change in either the political or financial climate.



## Part Four: The Ultimate Potential Enemy & Rearmament Planning 1934-36

### Chapter Seven: Towards Rearmament, 1934-5

The overriding assumption that had guided British defence planning in the 1920s was that there would be no war for at least another decade. For the vast majority of this time the reasoning appeared sound and successive governments remained confident that peace would prevail. Indeed, by 1931, when the Ten Year rule was last renewed, Britain was a leading participant in all global disarmament discussions and faced no direct threats to its shores, empire or business interests from abroad, excluding perhaps the distant rumblings of unrest in the Far East. As a result, defence planning before Manchuria was piecemeal, incoherent and damaging to the established (and primarily naval) private armaments industry. By the end of 1935 Britain's international security looked far less certain than it did in the spring of 1931; instead of no threats, Britain now potentially had three credible adversaries in Japan, Germany and Italy. As a direct result of these developments, the tentative work of the CID to explore, if not tackle, industrial and material deficiencies that began after Manchuria took on even greater meaning and urgency. Thus, by the time Mussolini's Italian forces had invaded Abyssinia (modern-day Ethiopia) in October 1935, a two-front war in Europe and Asia requiring a renewed navy and an expanded air force was considered by the CID a very real possibility. Moreover, the idea of a major rearmament effort entered, finally, into in public consciousness.<sup>479</sup>

#### 7.1 Political Background, 1934

Of course, the first indications of a two-front threat during this time came not from Italy but Nazi Germany, which had emerged as a force under Hitler in early 1933 and withdrew from the Geneva disarmament conference that October. The deterioration of relations with Germany prompted the CID to formally plan on the basis of a twin German-Japanese threat by

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<sup>479</sup> Kyba, *Covenants Without the Sword*, pp. 152-5.

the beginning of 1934.<sup>480</sup> Cabinet responded to the CID's concerns with the largely Hankey-led initiative known as the Defence Requirements Committee (DRC) – another CID subcommittee. The DRC gained Cabinet approval to examine the 'worst problems in British defence', and as such has been characterised by some historians as the 'first major step' taken in war planning since 1918 and the 'beginning' of rearmament'.<sup>481</sup> On the first of these contentions, it was nothing of the sort. For, while it may have been a step-change in top-level foreign policy insofar as it was a clear recognition from Cabinet of the need to improve the condition of British defences, as far as planning is concerned it was only a continuation of the work of the supply subcommittees from years earlier. Indeed, the organs of the PSOC rarely *stopped* planning and thinking, even when there was little to plan for, in the second half of the 1920s. Deficiency hypotheses had been circulated since 1931, so while the recognition of the German threat at the end of 1933 – and the formation of a committee with an explicit remit to discuss deficiencies – has perhaps understandably been taken as a point of departure for the study of rearmament policy, in terms of *industrial* deficiencies and planning the work was already well under way, as evinced by the long process which led to the establishment of the advisory panel.

This part of the thesis is comprised of two chapters. The first discusses the continued development of the work of the PSOC and the related role of the DRC in formulating new hypotheses of Britain's ultimate potential enemy in 1934. This work led to the abandonment of disarmament and the adoption of rearmament, announced to the public through two White Papers on defence in 1935 and 1936, and which form the basis of second chapter. The general theme as far as government and CID defence policy before 1937 is concerned, however, is one of indecision, time wasting and missed opportunities, which together led to a failure to act upon the PSOC's planning framework to materially remedy deficiencies. The financial and political constraints in the post-Manchurian period were beginning to ease by late 1934, but the continued fear of public outcry or economic collapse underpinned the thinking of senior members of the National Government, hampered the progress of the defence planning framework, and led to frequent divisions over the nature, speed and cost of any future defence

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<sup>480</sup> P. Bell, *Chamberlain, Germany and Japan*, p. 16.

<sup>481</sup> Neilson, 'The Defence Requirements Sub-Committee', pp. 651-652.

program. In short, there was much planning taking place within the lower echelons of the CID, but it lacked overall direction until well into 1936.

Moreover, while the background to the White Papers is well known political history, it does have an industrial element which is too often overlooked. Industry was, however, central to defence policy. Firstly, the industrial problems posed – initially facilities, and then materials and skilled labour – were always present in defence policymaking after 1934, and crucially were increasingly understood through the advice given by and experience of the CID's civilian industrialist members. These men, and particularly Lord Weir, came to play an important role in articulating defence plans, even if these plans were too often scrapped, ignored or forgotten before 1937. Secondly, there is the issue of profits. It was towards the end of 1935 that rearmament went 'public', and while the secret work of the PSOC and Supply Board continued, the idea that Britain was going to spend large sums on re-equipping her fleet and building an air force was, by this point, widely understood as imminent. Therefore, the activity – and thus value – of established armament makers began to increase once orders started being placed in 1936, and the public, which still had remaining pockets of firm pacifism, openly questioned whether war should lead to private gain.<sup>482</sup> The subsequent Royal Commission on the Private Manufacture of Armaments, which published its final report in October 1936, was the National Government's public acceptance of the weight of such feelings.

It was as a result of the worsening geopolitical situation that the National Government finally felt compelled to rearm, and as such fundamentally transformed the outlook for armament manufacturers. Like the previous sections, these chapters highlight the naval dimension of the discussions, and argue that despite the Navy retaining a high priority, naval rearmament was a fairly late and tentative process for private manufacturers that only began to gather pace in latter half of 1936 – at which point the WSBC's members began to reap the fruits of their 1920s collaboration in a huge way. Most importantly however, the public nature of rearmament raised the profile of Balfour, Lithgow, and particularly Weir considerably, and all three benefitted materially from the orders placed as a result of the advice given and information shared. Of course, many other manufacturers not connected with the CID and not privy to the same level of 'inside' information also received increased orders. The crucial

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<sup>482</sup> Anderson, 'Merchants of Death', p. 15.

difference with the members of the Advisory Panel, most notably Sir James Lithgow, was that between 1934 and 1936 he managed to transform his business portfolio from a merchant shipbuilder to an armaments magnate like no other individual.

## 7.2 Background to the White Paper: the DRC and abandoning disarmament

Much like the recommendations in the wake of Manchuria, it was a CoS strategic review at the end of 1933 which highlighted a growing threat – this time much closer to home – and, like the process which led to the abandonment of the Ten Year Rule, quickly passed through the CID and the Cabinet in November, 1933.<sup>483</sup> The final Cabinet recommendation was for the formation of a new sub-committee, the DRC, which would be comprised of the CoS plus Hankey (the Cabinet and CID's chief civil servant) along with Vansittart, and Fisher, respectively the chief civil servants in the Foreign Office and Treasury (see Table 7.1, below).<sup>484</sup> Although more or less contemporaneous with the Advisory Panel of Industrialists at the PSOC, the work of the two did not have direct relevance to each other until the summer of 1934. Supply deficiencies were a separate question stemming from discussions in 1932, and the work of approaching representatives from industry had their own, longer roots which predated the developments in Germany. Indeed, as has already been discussed, the advisory panel, Supply Board and PSOC were not tasked with formulating the defence hypotheses themselves, and were interested primarily in addressing production deficiencies which had been building since the early 1920s. For these reasons, the Supply Board had more or less its own separate history until at least the publication of the first DRC report in 1934, but thereafter was strongly guided by the recommendations laid out by the DRC's committee members.

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<sup>483</sup> Neilson 'The Defence Requirements Sub-Committee, p. 662.

<sup>484</sup> Neilson, 'The Defence Requirements Sub-Committee, p. 651.

**Table 7.1: DRC Members as of 1934**

<b>Member</b>	<b>Role and Affiliation</b>
Sir Maurice Hankey	Cabinet Secretary and CID Secretary
Sir Robert Vansittart	Permanent Under-Secretary, Foreign Office
Sir Warren Fisher	Permanent Secretary, Treasury
Admiral Sir Ernle Chatfield	First Sea Lord & Chief of Naval Staff, Admiralty
General Sir Archibald Montgomery-Massingberd	Chief of Imperial General Staff, War Office
Air Chief Marshall Sir Edward Ellington	Chief of Air Staff, Air Ministry

Source: Drawn from Neilson 'Defence Requirements Sub-Committee, British Strategic Foreign Policy, Neville Chamberlain and the Path to Appeasement' *EHR* 118:477 p. 652.

The DRC is often credited with identifying Germany, not Japan, as Britain's 'ultimate potential enemy'.<sup>485</sup> However, the October report of the CoS which first recommended establishing the DRC in the wake of Hitler pulling Germany out of the Disarmament Conference, had, in order, 'the defence of the Far East, European commitments and defence of India from Soviet aggression' as its top priorities. Moreover, it found that naval expenditure, particularly on cruisers, should be increased to meet Britain's commitments.<sup>486</sup> Of course the Treasury and the Chancellor, Neville Chamberlain, did not see things this way, and hoped that the DRC would be sufficiently well represented by Treasury and Foreign Office officials so that the views of the CoS – which had a 'tendency to add up the requirements of all three departments rather than establish priorities' could be tempered.<sup>487</sup>

While the deliberations of the DRC in formulating defence hypotheses were certainly relevant to private industry (insofar as the composition of future equipment orders would be shaped by the answers given), space does not allow for coverage of every detail of the committee's discussions that took place across the three-month period. However, there are some particular aspects which are worthy of highlighting. First, in the weeks prior to the DRC's first meeting, the Treasury, through Warren Fisher, had insisted that the DRC should be

<sup>485</sup> Neilson, 'Defence Requirements Sub-Committee', p. 652 & W. Wark, *The Ultimate Enemy: British Intelligence & Nazi Germany* (Ithaca: Cornell University Press, 1985), p. 23.

<sup>486</sup> Neilson, 'Defence Requirements Sub-Committee', p. 662.

<sup>487</sup> See Neilson, 'Defence Requirements Sub-Committee', p. 682 for more discussion on this; Peden, *British Rearmament and Treasury*, p. 28.

clear on which nation or combination of nations posed the greatest danger *before* any scheme to prepare British defences was drawn up.<sup>488</sup> This was a fundamentally important point of British policy between 1933 and 1936, for it linked industrial and military preparedness for war to the political and strategic decisions about the nature of the threats faced. It was not assumed that Britain would consider threats and spend money on building up the foundations of rearmament concurrently; preparation was only to follow once the National Government could agree upon the direction of policy. In practice, this caused problems and delays, for there remained myriad different views within the DRC and Cabinet throughout the years between Manchuria and Abyssinia.

Secondly, when the DRC first met in late 1933, the Foreign Office representative Sir Robert Vansittart had already accepted the Treasury view's on the limits to defence expenditure, and seemed concerned especially with the weight of domestic feeling against armament orders. He argued that

I should prefer to guard against [all of the risks], but we obviously cannot do so. It would cost far too much money and far too many votes apart from numerous other considerations. If we cannot cover the whole ground, first things come first, and we must begin a day's march nearer home.<sup>489</sup>

Thus, financial and domestic political considerations were guiding the senior Foreign Office official's thought, in much the same way as they had guided most government decisions throughout the 1920s to reign in armament spending and continue pursuing disarmament. Interestingly, it appears from Vansittart's words that preparing against Germany was as much about practicality as it was about ideology. He had argued previously that Britain could do nothing about Japan if she really desired to attack, so to him the logical progression was to allocate most of the resources to areas where they would make most difference, not where the threat was currently largest or the deficiencies greatest. Secondly, the important underlying assumption was that a discussion of priorities, rather than deficiencies, was in order, and this became the guiding factor in early DRC deliberations. At the first meeting, both Hankey and Fisher referred to the question of priorities explicitly, while Vansittart reiterated his view that

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<sup>488</sup> Peden, *British Rearmament and Treasury*, p. 109.

<sup>489</sup> Minutes of 2<sup>nd</sup> DRC meeting, 27 Nov 1933, TNA: CAB16/109.

Europe must come first – although he admitted that this view was not widely held among other Foreign Office staff.<sup>490</sup>

Essentially, the rest of the discussions followed a pattern not dissimilar to Admiralty-Treasury disputes in the 1920s. Chatfield continued to highlight the danger in the Far East, the relative weakness of the Royal Navy, and the reliance on seapower for supply routes in the event of war. On this he was broadly supported by Hankey. Vansittart and Fisher believed Japan would not attack Britain unless out of opportunism, in other words meaning when Britain was engaged fighting another power. To Vansittart and Fisher, this meant that Europe was the most likely place to be ‘otherwise engaged’, and it followed that Britain should focus on Germany. To Hankey and Chatfield the same line of reasoning to them meant that *if* Britain became embroiled in a European conflict, Japan would sense weakness in the Far East and be more likely to attack, and as such the two were related questions and should be considered as equal priorities.<sup>491</sup>

What followed could as well have been drawn from the ‘cruiser crisis’ of 1925 or the immediate aftermath of Manchuria. Hankey and Chatfield felt the answer was to increase naval expenditure to deter Japan, while the Treasury view was that no amount of expenditure in Singapore and Hong Kong would make British interests any more secure. The other two members of the committee, representing the Air Force and War Office, backed Chatfield. Their view was that Germany remained some years from becoming being a realistic military threat to Britain, so Japan should be the focus of current attention.<sup>492</sup> Despite being four against two, the DRC had, in early 1934, split along clear lines – the CID secretary and three Chiefs of Staff on one side, and the chief civil servants of two major government departments on the other.

The DRC met another six times in the first two months of 1934, but the gap between Fisher, Vansittart and the CoS and Hankey did not close noticeably. It is for this reason that the final report, authored by Hankey, had elements which helped placate the demands of both sides, but was as a result merely a compromise that was far from achieving the ‘clarity’ the

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<sup>490</sup> Minutes of 1<sup>st</sup> DRC meeting, 14 Nov 1933, TNA: CAB16/109.

<sup>491</sup> Minutes of 4<sup>th</sup> DRC meeting, 18 Jan 1934, TNA: CAB16/109.

<sup>492</sup> For a discussion of the various points made in the debate, see Neilson, ‘The Defence Requirements Sub-Committee’, pp. 665-673.

Treasury had wished for. It recommended that Britain seek a 'policy of accommodation with Japan' and that Germany was the 'ultimate potential enemy'.<sup>493</sup> These were both fairly weak characterisations which stopped short of admitting full attention should be given immediately to Germany, but nevertheless were enough to get Vansittart and Fisher to be signatories to it. It did however broadly follow the lines set out by the CoS and particularly Chatfield; in terms of deficiencies Singapore and the Far East were first priority, and the Royal Navy was to receive an extra £21m to meet their immediate deficiencies, and would need to spend in excess of £14m a year for the five years until 1939 to replace and update older ships and provide them with aircraft support – in other words another £94m of funding before 1939.<sup>494</sup>

### 7.3 Chamberlain and naval defence spending

The DRC's report, like the PSOC's request to approach industry, required ministerial approval. In the case of the DRC, this was set for May, 1934 in the Ministerial Committee on Disarmament.<sup>495</sup> Unlike the PSOC's request, however, this issue prompted a heated and prolonged debate which in some ways was a repetition of the discussions in the DRC. The Treasury (this time represented by the Chancellor, Chamberlain), rejected the findings of the report and argued for a reordering of the DRC's priorities with a focus on a massive aerial deterrent and no increased naval work. Chamberlain based his views on the public fear of Germany, and that the public preferred increases in welfare spending over increases in defence spending. Moreover, he insisted that a balanced budget was a priority.<sup>496</sup> Chamberlain found some sympathy from MacDonald and Baldwin on cost reductions and support on ruling out borrowing to fund any new defence programmes, although neither wanted any further cuts in naval expenditure.<sup>497</sup> Others were divided on principle – accepting a large increase in defence expenditure would derail the upcoming naval limitation talks<sup>498</sup> (and, it could be argued, perhaps even the disarmament process in Geneva) permanently, and wished for Britain to explore all limitation avenues before considering rearmament.

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<sup>493</sup> Neilson, 'Defence Requirements Sub-Committee', p. 672.

<sup>494</sup> Gibbs, *Grand Strategy*, p. 123 – this was split up between £21m for rectifying deficiencies, £67m for new naval construction, and almost £6m for the expansion of the Fleet Air Arm.

<sup>495</sup> Gibbs, *Grand Strategy*, p. 99.

<sup>496</sup> Peden, *British Rearmament and the Treasury*, pp. 68-9.

<sup>497</sup> McKercher, 'From Disarmament to Rearmament: British Civil Military Relations', p. 39.

<sup>498</sup> Gibbs, *Grand Strategy*, p. 126.



In short, there were still wide differences in opinion between the Treasury on one side and the Admiralty on the other that could not be solved easily. It was August 1934 before agreement was reached, after months of deadlock. At the final meeting, the Admiralty received some last-minute support from several ministers and civil servants, including MacDonald, Baldwin and Anthony Eden (the latter at this point the Under-Secretary for Foreign Affairs). All three believed that friendly relations with Japan were likely to antagonise America, and in order to remain a presence in the Far East, Britain had to rely on its Navy.<sup>499</sup> The British fleet was demonstrably unable to meet this commitment: if any substantial fleet was sent to Japan, the remaining force at home was no longer large enough to protect trade routes and engage a rival power in European waters.<sup>500</sup>

Inexplicably however, Chamberlain appears to have been allowed to draft the final agreement along broadly the same lines he had been proposing all along without much interference from his opponents (including Hankey who, in his capacity as Cabinet Secretary, drafted the original DRC report). Given the heated disagreements between Treasury and Admiralty and fundamental disagreements between ministers, how this was allowed to happen, despite Chamberlain's power and influence, is still shrouded in mystery.<sup>501</sup> As a result, citing 'overriding financial considerations', Chamberlain succeeded in vastly reducing the amount of increase in defence expenditure from £71m to £50m. This included a cut in the Admiralty's share of the increase by £8m (to £13m), a cut to the Army's share by half to £20m and doubling the increase the RAF would receive to match the Army's level. The 1934-9 naval replacement programme was also altered, no longer to be considered as a five year programme, and instead to be dealt with on a year-by-year basis – a notional cut of more than £60m from the estimated £67m ship replacement programme.<sup>502</sup>

Peter Bell has called this a 'major change of emphasis' towards the RAF, while Neilson has taken this episode as an example of Treasury dominance over the Admiralty budget, and

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<sup>499</sup> Neilson, 'Defence Requirements Sub-Committee', pp. 675-6.

<sup>500</sup> McKercher, 'From Disarmament to Rearmament: British Civil Military Relations', pp. 37-9.

<sup>501</sup> Neilson argues that the 'need to get a final agreement was politically pressing' and that the Foreign Secretary, Sir John Simon, probably agreed because he believed more money could be added subsequently. Neilson, 'Defence Requirements Sub-Committee', p. 677

<sup>502</sup> Gibbs, *Grand Strategy*, p. 124. P. Bell wrongly asserts the cut was from £67m to £55m. It was actually to be cut to £5.5m.

contrasted this with the 1920s when the ‘Admiralty had managed to fend off [the Treasury] using a combination of political strength and need to respond to international events’.<sup>503</sup> It is, however, difficult to support either of these views fully. Firstly, too much has been made over the revision to the five year replacement plan. In the 1920s the Treasury used the relatively settled international situation as reason to restrain naval expenditure, and were highly successful in this regard – between Washington and the onset of the financial crisis eight years later, Admiralty expenditure remained remarkably stable. In 1922 it was £81m, and thereafter it stayed close to £55m, with fluctuations of no more than 5% either way (excepting the one off increase negotiated for cruisers in 1926), until 1932.<sup>504</sup> Moreover, the replacement plan in the initial DRC report was supposed to be an estimate based on previous needs, and both its members and Chamberlain noted that these could be amended if the situation changed in the future, particularly with regards to a German threat.<sup>505</sup> It was therefore, a moot point – most of the replacement money was earmarked for 1937-9 – and as the geopolitical situation had changed markedly by then, it meant that the rest of the money and much more besides was in the event allocated to the navy.

In addition, Neilson has pointed to ‘industrial constraints, not finance’ as the determinant of the speed of naval construction, with the implication being that because capacity was limited, a major naval rearmament programme could not have been undertaken in 1934, even had Chamberlain wanted to.<sup>506</sup> The point about industrial constraints was generally true – indeed, it was the focus of Supply Board investigations – but it does not hold here. The Supply Board, unlike the DRC, were looking at capacities and facilities assuming a major war where production would need to be maximised. This was not the scenario in 1934. The private armaments sector had been thinned down since Washington, certainly, but still comprised a number of large (and largely unused) naval shipyards. Even following NSS closures, Slaven calculates that around 100 berths suitable for warship or liner construction, with a total

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<sup>503</sup> P. Bell, *Chamberlain, Germany and Japan*, p. 124 & Neilson ‘The Defence Requirements Sub-Committee’, p. 678.

<sup>504</sup> See Table 2.1, above.

<sup>505</sup> Gibbs, *Grand Strategy*, p. 124.

<sup>506</sup> Neilson, ‘The Defence Requirements Sub-Committee’, p. 680. Neilson does, however, note that there were no such restrictions on the ‘mundane’ matters of manning and oil supply, and more could have been achieved here.

capacity of three quarters of a million tons, survived into 1935.<sup>507</sup> By way of comparison, total private warship construction was barely 80,000 tons across the years 1933-35.<sup>508</sup>

This highlights an important point which has not been the focus of Neilson's work: even the full £21m on top of the 1934 budget was well below expenditure levels in the previous war, and could have been absorbed by existing private industrial capacity in peacetime (the *King George V* programme for a class of five ships, on its own, was nearly £40m in 1937).<sup>509</sup> Given that the DRC was looking at least five years into the future for any expenditure programmes to bear fruit, then it was not necessarily the total amount of spending, but how the money was to be spent that was the issue here. In the case of the major supply bottlenecks, such as gun-mounting and armour, Chamberlain's proposals effectively put off immediate expenditure and waited for circumstances to change. As chapters nine and ten argue, extra spending on deficiencies in 1934 could have paid dividends during later rearmament, and the bottlenecks the PSOC and its sub-committees identified could have been overcome and then expanded in the five year period.

However, it should be remembered that Chamberlain's actions are actually evidence of a slight improvement in the Admiralty's lot compared with the 1920s: despite rejecting the notion of the Japanese threat, having support for financial prudence and being left in charge of drafting the final agreement, Chamberlain still agreed to a £13m increase in expenditure to remedy naval deficiencies. In other words, the Manchurian crisis had shifted the terms of reference of the debate, and prompted the National Government into thinking that conflict of some sort was possible well within the 'ten years' that had guided thinking until that point. The discussion in 1934, protracted as it was, did not establish Germany unequivocally as the main threat, but did work under the assumption that defensive deficiencies existed, and that it was now a question of how much extra to allocate to the service departments and how that figure was going to be divided. To focus on Chamberlain cutting £20m from the total in 1934 (and doubling the amount of the RAF's increase) and looking at the headline figures alone thus misses important nuances. The text of the final agreement actually reaffirms concerns

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<sup>507</sup> Slaven, *British Shipbuilding*, p. 102.

<sup>508</sup> Johnman and Murphy, *British Shipbuilding and the State*, Table 5.

<sup>509</sup> Edgerton, *Britain's War Machine*, p. 212.

over Far Eastern defence and the need to show naval strength to deter Japan.<sup>510</sup> Put simply, despite the other problems for industrial bottlenecks, the argument for attaching a low priority to naval spending could not be won so easily after Manchuria.

While it is hard to pinpoint absolutely why this was the case, only part can be explained by the political fall-out of reversing the decision of a Cabinet appointed committee. The role that the PSOC and Supply Board played in establishing the extent of industrial and material deficiencies has almost always been completely excluded from the narrative, but it should be remembered that most of those who spoke up in favour of increased naval expenditure, including Baldwin, MacDonald and Hankey, had all viewed and been conditioned by the PSOC's warnings of overreliance on a small group of struggling firms and the condition of equipment in Britain and around the Empire. In 1932 and 1933 the situation had been made very clear as to the seriousness of the industrial problem, with evidence collected and supplied in great detail. Moreover, Britain's industrial situation had been starkly contrasted with that of her rivals – including Japan, Germany and Italy – long before the DRC had even been constituted, let alone had ministers met to discuss its report.<sup>511</sup> It was, however, only a compromise. What Britain needed for a future war was investment in industrial capacity, facilities and skills. In this episode, the Treasury had taken the sting from the DRC and succeeded in revising downwards the proposals. It was a small but significant step in the right direction and perhaps a better settlement than otherwise might have been for the Admiralty, but progress was still slow.

After Cabinet had instructed the CID to investigate deficiencies and the Prime Minister had accepted the 'serious problem' of industrial capacity, the first step had been taken towards a commitment to address the issues. Only so much of it could be achieved by planning and organisation, the rest could only be solved by investment or more orders that utilised more capacity through expansion or replacement of equipment. In this regard, the service which retained the largest industrial base in peacetime was Admiralty. Factories could be turned over to shell production; rifles and air frames could, after some start-up time, be mass produced. Warships could not. Therefore, a refusal to grant the navy any significant increase in expenditure would have been, in fact, a reversal of almost every supply recommendation that

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<sup>510</sup> Gibbs, *Grand Strategy*, p. 126.

<sup>511</sup> 'Report by Sub-Committee on Industrial Intelligence in Foreign countries', PSO361, TNA: CAB 60/13, p. 7.

the CID or ministers had accepted since February 1932. In short, the PSOC was having some effect in educating ministers on supply issues, but it faced barriers to making the progress it believed necessary.<sup>512</sup>

Regardless of the reasons for arriving at the cost of the deficiency programme, it should be borne in mind that the DRC's report was not publicly announced as rearmament in July 1934, and discussions took place in secret. In the days before the agreement was finalised, Baldwin pointedly refused to elaborate in parliament on the deliberations taking place in the Cabinet on defence, and reiterated his and the National Government's commitment to disarmament.<sup>513</sup> Once the sums were finalised, the announcement was similarly low-key – Baldwin mentioned only the air programme, and omitted any reference to naval or army spending.<sup>514</sup> This was the key conundrum for Baldwin: how to plan war while pursuing peace. The middle ground he took was understandable in light of the circumstances, but it was not ideal for defence preparation. This middle ground would, however, be a recurring theme for two more years to come.

Finally, it should not be assumed that this extra £50m was granted immediately to the defence departments and was then promptly spent on remedying deficiencies. The deficiency programme was explicitly supposed to address the problems across the 'five years from 1934'.<sup>515</sup> As the table below illustrates, this gradual plan was adhered to – there were no significant spending increases in 1934 or 1935. Aside from a limited programme of small light cruisers, the majority of the initial DRC money allocated to the Admiralty was only used up in 1936 and into 1937 (although the process of drawing up and placing orders began earlier), when the geopolitical situation had deteriorated further again and new, more expensive, rearmament programmes had very publicly replaced the tentative measures set out in the summer of 1934. Indeed, after being cut from over £80m to £56m in the aftermath of Washington, naval expenditure did not go past the £60m threshold again until the year ending

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<sup>512</sup> See Table 7.2, below. This gap was not closed until 1939. Indeed, despite conventional explanations of rearmament stressing the prominent role of the RAF, the total amount spent on the Admiralty between 1936-8 was £247.8m, while the RAF received £159.3m. R.P Shay, *British Rearmament in the Thirties: Politics and Profits*, p.297

<sup>513</sup> Hansard, HC Deb 19 July 1934.

<sup>514</sup> Hansard, HC Deb 30 July 1934.

<sup>515</sup> Gibbs, *Grand Strategy*, p. 96.

1936. It bottomed out at £50m in 1933 – and had not been above £60m since 1922. By way of comparison, in 1922 it was £81m (and was £157m, although this included demobilisation costs, in 1920). Spending only got close to pre-Washington levels from 1937 (see Table 7.2, below). Moreover, expenditure on the Admiralty was *not* the same as the sum spent on new construction. Between 1934 and 1936, for example, around £35m of the total figure was reserved for overheads – costs and wages – leaving only £20-30m of the total sum available for spending on equipment.<sup>516</sup> Thus, despite the step forward that July 1934 represented for the fortunes of the Royal Navy, this was still very much a period of planning without spending. It may have been the end for disarmament, but it was not yet the industrial beginning of rearmament.

**Table 7.2: Naval and RAF Defence Expenditure, 1932-9.**

<b>Year</b>	<b>Naval Expenditure (£m)</b>	<b>Naval % total defence expenditure</b>	<b>RAF (£m)</b>
1931/2	51.0	47.4%	17.9
1932/3	50.1	48.5%	17.1
1933/4	53.4	49.6%	16.7
1934/5	56.6	49.2%	17.6
1935/6	64.9	47.3%	27.5
1936/7	81.0	43.6%	50.0
1937/8	101.9	39.8%	81.8
1938/9	132.4	33.3%	143.5

Source<sup>517</sup>: R.P Shay, *British Rearmament in the Thirties: Politics and Profits*, p.297

#### 7.4 PSOC and Supply Board developments, July 1934 - March 1935

After the first report of the advisory panel, comparatively little was achieved or even discussed in the PSOC or Supply Board until autumn 1934, some six months after Weir,

<sup>516</sup> Johnman and Murphy, *British Shipbuilding and the State*, p. 57 & ‘Estimated Annual Expenditure on Rearmament, 1934-9’, 3 July 1940, TNA: CAB102/4.

<sup>517</sup> These figures were taken from Shay’s work while earlier figures in this thesis use B.R Mitchell. This is because Shay’s figures are the most accurate available for the 1930s (unlike B.R. Mitchell, he includes expenditure from the Defence Loan), but Shay does not provide figures for the 1920s. It is important to note that Shay counts from the beginning of each financial year – for example 1931 in Shay is 1.4.1931-31.3.1932 – while Mitchell is somewhat unusual and counts from the end. For consistency, however, I have moved Mitchell’s years into synchronisation with Shay’s, meaning each year is denoted as the year beginning 1 April.

Lithgow and Balfour had been invited to elaborate on their proposals for supply organisation. Of course, in the case of the Supply Board, it only met relatively infrequently at the best of times – fewer than forty occasions in six years before 1936 – but while the nine months leading up to the report from the industrialists had witnessed a flurry of activity, the months that followed can be best characterised by the various Supply Committees (SC) busying themselves with investigations of productive capacity, and Lithgow's aforementioned work with the NSS. Their members had, however, been aided in their task by Weir, Lithgow and Balfour's recommendations, and were now focussing more explicitly on selecting the '400 or so' major firms that had been suggested as a sensible maximum.<sup>518</sup> It should be remembered that this period coincided more or less exactly with the months in which Hankey's finished DRC report was under review by ministers (and the subsequent parliamentary recess in August and September), so with the CID's underlying defence hypotheses likely open to revision at short notice between April and July, it was perhaps understandable that the pace had eased off somewhat.

The main development of note before July was the formal acceptance by the Supply Board of the recommendations in the Weir, Lithgow and Balfour report; this occurred at the end of April.<sup>519</sup> Dowding's response to the recommendations has already been covered in the previous section, but it ought to be illustrated just how minimal the level of dissent was to the report's main conclusions. The Supply Board stated that it 'concurred whole-heartedly' with the plans to create a shadow armaments scheme, and 'cordially endorsed' the plans of investigating a smaller list of major firms and placing the 'educational orders' with them.<sup>520</sup> Dowding believed the panel's proposals would be 'of the greatest value in the field of supply' and steps should be taken along these lines 'as far as is practicable'.<sup>521</sup> The board reaffirmed the tenet of only approaching a very small group of key industry experts as and when required, and reiterated that in terms of solving manufacturing problems they should 'avoid any suggestion of dictating precise methods' to industrialists and to give them 'as much latitude as

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<sup>518</sup> 'Memorandum by Lord Weir & James Lithgow'.

<sup>519</sup> 'Note by Chairman of the Supply Board on the Memorandum by Lord Weir', PSO421, 25 April 1934, TNA: SUPP3/18.

<sup>520</sup> Note by Chairman of Supply Board on Memorandum by Lord Weir, pp. 2-3.

<sup>521</sup> Note by Chairman of Supply Board on Memorandum by Lord Weir, p. 3.

possible'.<sup>522</sup> While this is a quite remarkable degree of deference to the wisdom of civilians with only a limited CID knowledge, it is perhaps precisely because the advisory panel had not proposed or found anything radically different to what the PSOC had already believed that the Supply Board were willing to give such unquestioning support to Weir, Lithgow and Balfour's suggestions. Nevertheless, the 'latitude' with which they proposed to give Weir is noteworthy: as later chapters show, his latitude – and influence – only continued to grow.

There is a related example from 1935 which perhaps helps to explain why Weir, Lithgow and Balfour were so valued and remained part of the CID machinery for the duration of the 1930s. At Weir's suggestion, the PSOC approached Sir Glynn West, Sir Keith Price and Sir William Alexander for consultation on the expansion of shell production. All three had been employed in this capacity in the last war, with West serving as Director General of Shell Manufacture under Weir in the Ministry of Munitions. Like Weir, Lithgow and Balfour, this trio were invited to prepare a memorandum, which was circulated to the PSOC and Supply Board. The crux of the suggestions was returning to peace-time construction of shell factories and the retention of a nucleus of staff, a proposal which the Supply Board unanimously found 'quite impracticable' and noted that many of the views expressed were incorrect.<sup>523</sup> They were so unimpressed that Dowding remarked that there appeared to be 'some disadvantage in obtaining advice from individuals whose experience was confined to the last war or prior to 1914' as they were 'not fully au fait with existing conditions'. The trio were compared unfavourably with Weir, Lithgow and Balfour who were described as providing 'very valuable assistance'. The conclusion agreed upon was merely that the three men 'should be thanked for their work', and were not consulted again.<sup>524</sup> This illustrates both how rare the advisory panel's knowledge was – being both 'au fait with existing conditions' and having wartime experience – as well as how rare industrial involvement in the CID's subcommittees remained, even in the post-White Paper period in 1935. It would be well into rearmament itself, when the political and industrial dynamic had changed dramatically, before anything remotely similar was reached by any other group of business experts, and even then none matched the advisory panel in terms of breadth or depth of involvement.

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<sup>522</sup> Note by Chairman of Supply Board on Memorandum by Lord Weir, p. 6.

<sup>523</sup> 38<sup>th</sup> Meeting of the Supply Board, PSO(SB)38<sup>th</sup> Mtg, 4 April 1935 & Memorandum by Sir Glynn West, Sir William Alexander and Sir Keith Price, PSO 467, undated, TNA: CAB60/31.

<sup>524</sup> 38<sup>th</sup> Meeting of the Supply Board.



Returning to the situation in late-summer 1934, and once Chamberlain's expenditure agreements had been finalised, the main development upon supply organisation was that the CID's new (and in some ways more definite) defence hypotheses had rendered a significant part of the Supply Board's calculations and investigations obsolete. Taken in tandem with the industrialists report, the two had a clear impact on the relationships between the individual Supply Committees (SC), as the main task in September for the coordinating Supply Board was to sort out a dispute between SCI (Munitions) and III (Shipbuilding), on the subject of what SCI claimed were 'major firms selected for investigation in accordance with Lord Weir's recommendations'.<sup>525</sup> The dispute occurred after SCI had prepared a list of several hundred firms that it felt it would need to utilise, and submitted it to the Supply Board just two days before it was next due to meet. A large number of these firms had been provisionally allocated to or, in some cases, even investigated by other Supply Committees.<sup>526</sup> Dowding, the Supply Board Chairman, felt this move by SCI was 'disconcerting', and felt it should only have 'laid claim to those firms which other Supply Committees had not been allocated with a view to the supply of armaments'.<sup>527</sup> Witham (SCI and Assistant Director of Factories, War Office) then stated, rather bluntly, that a reallocation of firms to his committee 'would be necessary, and that the sooner this was done the easier it would be for all concerned'.<sup>528</sup>

What then followed was a rare spat between the board's members: Vice Admiral Henderson said the proposal was 'impossible to agree to' and demanded the request from SCI be withdrawn, while Witham and Sir Reginald Townsend (Director of Ordnance) drew entirely different interpretations of what Weir meant by his '400 firms'. Witham clearly believed that because the industrialists were brought in to assist with the problems facing SCI in 1933, Weir's recommendations applied explicitly to his committee. Townsend, who also represented the War Office, attempted to be more diplomatic and considered 'that it was not Weir's intention that 400 firms be allocated to [SCI] in particular, but rather that they should be devoted to war production, including the requirements of other Supply Committees'.<sup>529</sup>

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<sup>525</sup> 'List Prepared by Supply Committee No. I', PSO(SB)438, undated. TNA: CAB60/41.

<sup>526</sup> 'List Prepared by Supply Committee No. I'.

<sup>527</sup> 35<sup>th</sup> Meeting of the Supply Board, PSO(SB)35<sup>th</sup> Mtg, September 1934, TNA: CAB60/31.

<sup>528</sup> 35<sup>th</sup> Meeting of the Supply Board.

<sup>529</sup> 35<sup>th</sup> Meeting of the Supply Board. Witham and Townsend were both from the War Office – Townsend was effectively Witham's direct superior.

Fearing that all previous investigations until that point would be scrapped and the process started afresh, Bovenschen argued against Witham's proposals, and at the very least that some caveat need be inserted to allow first claim on 'essential products'. The meeting ended with Dowding and the others siding together and that instructing Witham, in no uncertain terms, that he should discuss the issue with the heads of the other Supply Committees first, and 'determine what capacity could be made available to him, and should proceed on that basis'.<sup>530</sup> By the standards of other meetings, this was a fairly frank telling-off from Dowding, but it does highlight the role of the industrialists – and the limitations of the Supply Board system – rather well.

Firstly, it is apparent that the panel – while usually referred to as just 'Weir' – were used and genuinely treated as experts whose advice was trusted and taken very seriously. At no point was the validity of their conclusions challenged; instead the disagreement was over the interpretation as to how the advice of the panel could be applied to the individual Supply Committees. Secondly, the Supply Board in 1934 appeared to be just as concerned with avoiding the various SCs cutting across the bows of one another as it was with actually allocating capacity in the best way to the relevant bodies. In other words, it sought fairness through enforcing the first claims on capacity rather than acting as an executive body which decided what each SC received. Thirdly, while the Supply Board was undoubtedly a useful forum for discussing competing claims on industrial capacity, its conclusions were constantly open to revision. The Vickers investigation in 1932 had resulted in a fragile, non-committal agreement between services, but such agreements were prone to shattering if and when defence hypotheses changed.

However, later 1934 also witnessed some notable new developments in supply organisation. Building upon the foundations put in place by the advisory panel's memorandum, the board had a sufficient outline of requirements that allowed it to focus its investigations onto more specific topics. When the industrialists were first approached in winter 1933 the main issue in hand was the condition of armaments industries more broadly, and in particular the problems facing Supply Committee I (Munitions).<sup>531</sup> At the centre of this

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<sup>530</sup> 35<sup>th</sup> Meeting of the Supply Board.

<sup>531</sup> See 'Memorandum by Master General of the Ordnance, War Office', PSO(SB) 376, 1 October, TNA: CAB60/40.

question in 1933 were the large private armaments manufacturers and the need for the production of field and naval artillery shell. Guided by the experience of the Great War, the industrialists had initially spent a significant portion of their time thinking about how the specialist armaments makers could take the lead in turning other firms into mass producers of relatively simple items in the event of war (under the headings ‘elasticity in supply arrangements’, ‘decline in the armaments industry’ and ‘methods of expansion’) to avoid supply bottlenecks. For this reason, the decline of firms like Beardmore and the issue of shell manufacture were closely related in this case, as they were both considered as part of the general problem of the industrial knowledge-base.<sup>532</sup> By November 1934, the focus shifted from the industrial facilities themselves to the related problem of skilled labour, which had hitherto been an addendum to discussions.

It was only at this relatively late point that the PSOC began a series of more definite and detailed calculations of skilled labour requirements, although this would recur throughout the rest of the decade.<sup>533</sup> When the question had first been brought up some years before in 1929, the Supply Board were instructed by the CID to ‘confine their attention to the requirements of raw materials, with a view to simplifying the problem as far as possible’.<sup>534</sup> Thus, although the question had been considered periodically since then, it was only the tail-end of 1934 before the issue gained sufficient traction to be properly investigated. As *Nelson* and *Rodney* had shown, there was difficulty, even in leaner times, of finding skilled staff. More importantly, while the work on these two ships had helped for training new staff, by 1935 these ships had been complete for almost a decade, and in the absence of other orders in the interim, much of the benefits of the training the work had provided had been lost.<sup>535</sup>

The shift towards the understanding the availability of labour was caused at least in part by continuing problems in industry – an Admiralty member of the Supply Board had noted that Thornycroft and others had lost naval orders from Argentina, Uruguay, Siam and China for vessels to Italian shipyards since July, and the trend of naval orders being placed elsewhere

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<sup>532</sup> Note by Chairman of Supply Board on Memorandum by Lord Weir, pp. 2-3.

<sup>533</sup> See, for example: ‘Categories of Staff and Workpeople’, PSO(SB)713, 30 November 1937, TNA: CAB60/45.

<sup>534</sup> ‘Computation of Labour Requirements for Industry’, PSO(SB)41, 7 February 1929, TNA: CAB60/34.

<sup>535</sup> Cammell Laird, the constructors of *Rodney*, received the contract for the new aircraft carrier in 1935, but had built no other warships between 1925 and 1932, when it received a contract for a light cruiser. See Warren, *Steel, Ships and Men*, p. 254.

had only become more pronounced since 1932.<sup>536</sup> The major concern here was no longer idle capacity – as the deficiency program would go some way to addressing this – but more explicitly the issue of skilled labour to actually complete the contracts. The Supply Board's report stated that:

In this country, foreign orders enable a greater proportion of shipbuilding workers and armament producers to obtain experience of warship construction and equipment; this is a consideration to which the Admiralty attach the utmost importance as unless they can count on the aid of efficient shipbuilding firms, rapid expansion of the Navy in an emergency would be impossible.<sup>537</sup>

This was followed with more evidence of the continuing industrial problems and finally with the recommendation in the Supply Board's annual report that the PSOC bring to the attention of the CID's executive committee 'the serious shortage of skilled labour...in the shipbuilding and armament industries in particular, which is likely to prove a major limiting factor [in the expansion of production].'<sup>538</sup> The CID was promptly informed, and action was soon taken: the Ministry of Labour was asked for input into the problem the same month.<sup>539</sup>

From this, a much more advanced understanding of the nature of skilled labour in shipbuilding appears to have been formed in a short space of time. As late as autumn 1934, the PSOC and its Supply Committees, busy investigating their own niche areas, had given comparatively little consideration to the question, and focused almost exclusively on the existence and availability of plant and facilities. By April 1935, shortly after the White Paper, extensive lists of the myriad professions active in naval construction – from Angle Smiths to Boilermakers, Carpenters, Electrical Fitters, Gear Cutters, Riveters, Welders and dozens of others – were listed alongside estimates of their current numbers and how these matched up with anticipated future requirements, and the relative claims on each that the individual SCs felt they may need.<sup>540</sup>

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<sup>536</sup> 'Italian Competition in Warship Construction – Note by Admiralty Representative', FCI68, 8 November 1934, TNA: SUPP3/18, p. 2.

<sup>537</sup> 'Italian Competition in Warship Construction – Note by Admiralty Representative' pp. 2-3.

<sup>538</sup> 'Note on the Seventh Annual Report of the Supply Board', 10 November 1934, TNA: SUPP3/18.

<sup>539</sup> Letter to Myrddin Evans, Ministry of Labour (no author given), 12 November 1934, TNA: SUPP3/18 & 'Twelfth Annual Report, Principal Supply Officers Committee', November 1934, GUAS: DC35/31.

<sup>540</sup> 'Emergency Labour Requirements for Naval Shipbuilding and Marine Engineering', PSO(SB)591, 28 April 1935, TNA: SUPP3/18 & CAB 60/45.

These calculations illustrated the scale of the problem: while unemployment remained high, the total number of engineers and other skilled staff theoretically available in the workforce fell far below the level the three defence departments believed would be needed if all were simultaneously working at maximum capacity. Moreover, many of the engineers currently employed worked in automobile factories, which it was anticipated would be turned over to war production in the event of conflict, but were not ordinarily to be used to build up a peacetime defence force.<sup>541</sup> On the subject of labour, Weir and Lithgow both advocated some general de-skilling of tasks where possible. However, both they and the PSOC anticipated that since the full cooperation of trade unions would be essential to maximise efficiency, antagonising them by replacing skilled workers with semi-skilled or unskilled staff was not something that should be considered until an emergency was upon them, and such a view prevailed throughout in 1935 and 1936.<sup>542</sup>

While these further investigations, still under the veil of secrecy, achieved a far greater degree of nuance and detail than had hitherto been the case, the underlying problem was still the same: if the defence hypotheses changed once more, for example away from a naval war towards an expeditionary force on the continent requiring vast quantities of small arms and field artillery, then the composition of skilled workers necessary and the demands placed upon them would shift accordingly. This was, quite obviously, an unsatisfactory situation. However, not much could be done to train new staff or sharpen skills in engineering without more orders being placed, educational or otherwise (or indeed winning naval contracts from foreign governments), none of which appeared likely in the short term.

### 7.5 Japanese naval rivalry & spending, 1934/5

The Supply Board's attempts to calculate the availability of skilled labour had tackled one issue but uncovered another. Knowing where labour was required and what quantities would be needed was directly dependent upon the scale of the construction programmes and their proposed date for completion. The aerial aspect of the deficiency programme was revised (see 8.2 below) during these calculations and brought forward by two years, but the naval aspect

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<sup>541</sup> 'Emergency Labour Requirements for Naval Shipbuilding and Marine Engineering'.

<sup>542</sup> See, for example, 'Sub Committee of Defence Policy and Requirements – 20<sup>th</sup> Meeting', DPR 20<sup>th</sup> Mtg, 7 May 1936, CCC: WEIR17.

was arguably more pressing still and as yet unanswered. The Washington and London Naval Treaties of 1922 and 1930 were due to expire at the end of 1936, leaving potentially unrestricted naval competition by former treaty signatories. Britain had little desire to enter into another naval race in order to stay ahead of its rivals and maintain a meaningful presence around the globe. Doing so carried a risk of eroding public or financial confidence or prompting retaliatory action from other powers, while not doing so would mean conceding ground to rivals. However, without some grasp of this information, construction levels – and thus labour calculations – were moot.

In order to seek answers, informal discussions were held with America and Japan in the latter third of 1934. Old disputes left over from the London conference reared up once more, and no side could agree upon levels acceptable to the others. Japan now demanded parity in tonnage (up from the 10:10:7 ratio for cruisers and smaller ships agreed with Britain and America in 1930), with freedom within that limit to build whatever type of vessel she so desired. In addition, France and Italy also sought upward revisions to the existing terms in order to come to an agreement. These profound differences meant that in December Japan announced its intention to let her treaty obligations expire at the end of 1936.<sup>543</sup>

This was an even larger problem for Britain than it first appears; Japan, it must be recalled, had negotiated treaty limits well above its current levels in both 1922 and 1930 leaving it the most ‘room’ to build up to the agreed levels. As a result, it had managed to increase spending by 90% across the preceding five years (Britain’s had fallen by 12%) without contravening the Treaty.<sup>544</sup> In other words, the Japanese had held considerable freedom to expand its navy while Britain was forced into coping, more or less, with the fleet it had, against an increasing Japanese threat in the Far East that it could not match. From 1936, that problem was only going to get larger – for even if the domestic situation allowed for capital ships to be ordered immediately, many would take 3-5 years to be combat-ready.<sup>545</sup>

In this environment, the Admiralty informed the Foreign Office that it believed that the best remaining course of action would be to explore limitation options with France and

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<sup>543</sup> Gibbs, *Grand Strategy*, p. 156.

<sup>544</sup> Hansard, HC Deb 14 March 1935 vol. 299 c.600.

<sup>545</sup> Rearmament construction times taken from: ‘Minutes of Board Meeting at Brown, Clydebank’ 17 February 1938, GUAS: UCS1/1/2.

Germany, with the aim of freeing European resources to be deployed elsewhere, namely the Far East.<sup>546</sup> Thus, in early 1935 Admiralty and Foreign Office figures discussed the option of a pact with Nazi Germany, which culminated in talks with Hitler in March and April, three weeks after the publication of the White Paper.<sup>547</sup> This move to discuss separate naval arms limitations with Germany, a non-Treaty power, was a clear step away from the multilateral agreements that had held disarmament together since 1922, and risked antagonising France, Italy or both. In other words, the document that had restricted a naval arms race for the past thirteen years was now hanging by a thread.

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<sup>546</sup> Cabinet Conclusions, CC 12(35), 27 February 1935, TNA: CAB23/81/12.

<sup>547</sup> Gibbs, *Grand Strategy*, pp. 164-5 & *Exchange of Notes Between His Majesty's Government in the United Kingdom and the German Government Regarding the Limitation of Naval Armaments*, June 1935, Cmd. 4930.

## Chapter Eight: The White Papers, 1935-6

In terms of the background to the White Paper, there had been little movement from the National Government since Manchuria to indicate that it was willing to publicly announce an intention to rearm. Although the Admiralty had constantly warned of the Japanese from the second-half of the 1920s, the CID had harboured deep concerns about the Far East and Germany as far back as 1930, and the PSOC had highlighted the supply and labour bottlenecks connected with future defence schemes from 1933, the National Government had remained outwardly reluctant to indicate any support for rearmament or industrial mobilisation. This position did not change in 1934. The reasons for this are not hard to locate: public support for any form of defence spending had been low since the end of the Great War, and any hint of armed conflict thereafter usually resulted in some sort of public outcry against British involvement. Although there was a growing feeling of insecurity around developments in Germany, this had not managed to overcome the strong pacifist sentiments that still existed. At best the German situation had reaffirmed public support for the concept of ‘collective security’, primarily through the League of Nations, but until that point events such as Manchuria and the talks in Geneva had only served to highlight to the British government just how strong the distaste for war was. As a result, this was a period where deficiencies were not hard to spot, but were nevertheless not remedied.

### 8.1 Politics, Pacifism and ‘going public’: November 1934 – March 1935

The pacifist sentiment is borne out by virtually all of the British polling between Manchuria and the first White Paper. ‘Peace’ candidates had performed particularly strongly in by-elections between October 1933 and December 1934 – in Fulham the National Government majority of more than 14,500 was wiped out, replaced by a Labour majority of nearly 5,000, while in Lambeth and Putney the swing away from the National Government was even higher still.<sup>548</sup> A straw-poll in a London newspaper had more than 75% of respondents desiring Britain to stay out of any Franco-German conflict, regardless of the circumstances.<sup>549</sup> Moreover, almost twelve million people signed the League of Nations Union’s so-called

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<sup>548</sup> Kyba, *Covenants without the Sword* p. 99.

<sup>549</sup> Kyba, *Covenants without the Sword* pp. 119-20



‘Peace Ballot’ from 1934, with eight in every ten stating support for the all-round abolition of military aircraft and more than nine in ten supporting ongoing international disarmament.<sup>550</sup>

Quite apart from the criticisms from pacifists of armaments spending, the economy was recovering, but still not back to full strength. Unemployment remained high – 12% in 1934, compared with 7% pre-Depression. As a result, popular sentiment indicated that Britain’s first priorities lay in restoring prosperity at home, not abroad. MacDonald thus believed that any significant defence expenditure ran the risk of a ‘financial smash’, and urged restraint.<sup>551</sup> Guiding his belief was earlier National Government policy: unemployment benefit was cut under the terms that brought his coalition into existence, and the British public expected this to be reversed once the economic outlook improved.<sup>552</sup> The National Government sought re-election in 1935, and understood that unless – or perhaps even if – it delivered the economic stability it had promised in 1931, the Labour vote would rebound very strongly, as Fulham had indicated.<sup>553</sup> These were powerful messages to MacDonald, Baldwin and Chamberlain, which they were not prepared to ignore. Taken together, they acted as further constraints on the National Government’s freedom of manoeuvre, and ultimately prolonged the period of behind-the-scenes planning well away from public (and business) eyes into the middle of 1935.

This being said, there was from November 1934 a more concerted effort to use the anxiety over ongoing German rearmament to educate the electorate of the problems of British defensive deficiencies. In October, Foreign Office intelligence had pointed to a German air force that was expanding far faster than was first anticipated, and an expansion that swamped comparable British plans.<sup>554</sup> The pressure to respond prompted both Lord Londonderry (the Secretary of State for Air) and Baldwin to stress that while Britain was *not* intending to rearm, it did need to ‘make good’ on its shortfall of equipment for defence, with explicit reference to the German re-armament and the Nazi party’s refusal to cooperate with the Geneva Disarmament process. By linking the two together, Baldwin was able to announce on 28 November an increase in the pace of construction of aircraft and aerial defences – with the

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<sup>550</sup> Kyba, *Covenants without the Sword*, ‘results of the Peace Ballot’, p. 149

<sup>551</sup> ‘Minutes of Committee for Imperial Defence’, 22 November 1934, TNA: CAB2/6, p. 1.

<sup>552</sup> Morgan Ramsay MacDonald p. 79 & Smart, *The National Government*, pp. 108-9.

<sup>553</sup> J. C. Robertson, ‘The British General Election of 1935’, *Journal of Contemporary History* 19 (I) (1974), pp. 150-1.

<sup>554</sup> Gibbs, *Grand Strategy*, p. 135.

completion date of the air programme now being set at 1937 – not to be able to fight a war against Germany, but rather to merely safeguard the British Isles from attack, and thus head-off a portion of the criticism that followed from the Labour party.<sup>555</sup> While this solved one problem, it again created another: by linking Germany and air together, it made it more difficult to publicly announce any new army or navy spending, as neither could have been justified on the same basis.

The senior members of the National Government thus trod a very fine line: the extant threats had to be made clear in order to justify some remedial action, but not in such a way that would erode the already fragile public support or convince the Nazi leadership that Britain desired head-on conflict. MacDonald by this point had long been in poor health and it was widely believed he would soon be forced into retirement.<sup>556</sup> As such, from the latter part of 1934 spokesperson duties for the government fell to Baldwin, and more or less stayed this way thereafter. Baldwin, during a debate on armaments in parliament, sought to soothe the mood: he reiterated his belief in arms limitations, and played down the more alarmist predictions – most notably from Winston Churchill – that by the end of 1937 Germany would have an air force double the size of Britain's own. Baldwin conceded that while German preparations were a cause for anxiety, a limited scheme to ensure British defensive superiority was all that was required for the time being.<sup>557</sup> Politically, this achieved its goals in November 1934, but it was hardly a conclusive step towards meeting the German threat or conversely a clear sign to Hitler that Britain desired peace. Nor could this line of reasoning hope to broach the subject of any future naval programmes; Germany remained a comparatively weak naval power that was unlikely to be a threat to Britain for years to come.<sup>558</sup> As such, the result of Baldwin's speech was probably counter-productive, as some in Germany believed that Baldwin had just given tacit consent to Nazi rearmament plans – and the shares of the publicly-listed German private armaments manufacturers rose in Berlin as a result.<sup>559</sup> It was also a decidedly mixed message

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<sup>555</sup> Hansard, HC Deb 28 November 1934.

<sup>556</sup> Morgan, *Ramsay MacDonald*, pp. 80-1.

<sup>557</sup> Hansard, HC Deb 28 November 1934.

<sup>558</sup> Gibbs, *Grand Strategy*, p. 166.

<sup>559</sup> Gibbs, *Grand Strategy*, p. 141.

to the private armaments manufacturers, who were still left guessing what direction defence policy would take, and what the knock-on effect would be to them.<sup>560</sup>

Of course, this was because the National Government itself had no clear idea of the direction of defence policy. The announcement from Baldwin did not mean that the German threat had become the overriding concern of British war planners, for what Baldwin said and what the National Government thought were two very different things. Indeed, the German view is not reflected in the supply discussions at the PSOC, quite the opposite. From late 1934 and throughout 1935 the report titled ‘the basis on which supply preparations are to be framed’, the guiding document of the PSOC’s hypotheses set by the CID, very deliberately stated that while the air programme was to be accelerated, requirements should be drawn up for *both* a war in the Far East and a war against Germany in the five years from 1934.<sup>561</sup> In other words, the CID and PSOC were, quite rationally, still taking the broader view on possible defensive risks and were actively encouraged to draw up plans for what would be needed in the first 12 months of both a European and Far Eastern war.<sup>562</sup> These were of course hampered by uncertainty over future naval limitation agreements, meaning specifics could not be addressed, but this is a reflection of the geopolitical situation and treaty complexities more than the failings of the subcommittees themselves. Therefore, to all intents and purposes the same problems existed in 1935 as did in the immediate aftermath of Manchuria – planning had to continue for the time being. There was some will to address deficiencies and meet the shortfall of labour and equipment, but not so much that the National Government would risk going to the public and announcing a large rearmament programme in the air and sea, to be paid for with further austerity measures in welfare and benefits. However, one can argue that the time was ripe for action, and the White Paper that followed was the ideal moment in which to outline an expansion of industry to ease anticipated bottlenecks.

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<sup>560</sup> See, for example, Crease to WSBC Committee, 9 October 1934, GUAS: GD319 12/7/6

<sup>561</sup> ‘Basis on which Supply Preparations are to be framed’, CID1171-B, April 1935, TNA: SUPP3/18.

<sup>562</sup> ‘Basis on which Supply Preparations are to be framed’.

## 8.2 The first White Paper on Defence and Anglo-German naval pact, 1935

Instead of pressing on with industrial expansion, these continuing political constraints explain the rather limited nature of the White Paper, known officially as the ‘Statement Relating to Defence’, which was published on the 4 March, 1935.<sup>563</sup> The paper had been drafted over January and February by the same group of civil servants that had been responsible for the DRC investigations between November 1933 and February 1934, and was to all intents a continuation of the National Government’s attempts to educate the public of the growing external threats to Britain’s security. Even Hankey, one of the strongest advocates of rearmament – and especially naval rearmament – felt that public opinion was not yet ready to accept the privately-held views of the CID and Cabinet.<sup>564</sup> Thus, while the National Government was warming to the idea of a more substantial rearmament effort, it was short on the specifics of what needed to be achieved. As a result, as one might expect, there was a very deliberate effort in the paper to highlight deficiencies in Britain’s ‘first line of defence’ rather than deficiencies in offensive capabilities, and how these deficiencies prevented Britain from playing a full role in a system of collective security, but did not attempt to answer the question of what needed to be done conclusively. By the same token, there was a clear and sustained attempt to link British armaments with concepts of peace and deterrence, not preparation for war.<sup>565</sup>

Hankey (and the DRC’s) influence was, however, good for the Admiralty, as this was a document which stressed the central role of the navy in British defence. In affording priority to the protection of British citizens through deterrence, the paper affirmed that while ‘establishment of peace on a permanent footing’ was the ‘principal aim of British foreign policy’, it also claimed that ‘if peace should be broken, the navy is, as always, the first line of defence’.<sup>566</sup> Thus, the navy was a defensive force, essential for safeguarding British interests in an uncertain world. A potential war in the Far East was deliberately omitted (despite being the main concern of the DRC report), while the communications, raw materials and food supply that Britain, as an island nation, relied on for its very existence, formed the focus of

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<sup>563</sup> *Statement Relating to Defence*, March 1935, Cmd. 4827.

<sup>564</sup> Hankey to MacDonald, 10 January 1935, CCC: HNKY7

<sup>565</sup> *Statement Relating to Defence*, March 1935, Cmd. 4827.

<sup>566</sup> *Statement Relating to Defence*, March 1935, Cmd. 4827.

attention and were repeatedly stressed. The Empire was placed firmly in the context of British security: Britain needed to defend imperial possessions, including its network of ‘bases, fuelling stations and harbours’ in order to protect the merchant vessels that the British way of life depended on. Leading on from this point, the paper argued that unless the long-term security of Britain’s ports and sea passages could be ensured ‘all other measures of defence are of little avail’, and, despite the developments in the power and range of air forces, British merchant ships delivering supplies ‘remained as open to naval attack as ever’. For these reasons, the CID stressed it was not seeking to expand the fleet – government policy remained absolutely committed to the limitations put in place by Washington and London – but the battleship remained ‘the essential element of upon which the whole structure of our naval strategy depends’ and thus the navy required ship replacement and modernisation solely due to the advanced age of a high proportion of British vessels. Japan, incidentally, was only mentioned in the context of their participation in the upcoming naval conference of 1935.<sup>567</sup>

As such, there was a considerable gulf, even in March 1935, between what the DRC, CID and increasingly what the Cabinet believed were serious threats and what the National Government felt able to announce the public and wider world. Having argued in private that Germany was a potential enemy in the ‘five years from 1934’ and the Japan was an immediate concern, the White Paper performed a partial U-turn and played up the threat on Britain’s doorstep and played down entirely the problems in the Far East. However, in terms of priorities, the White Paper still looked much more like the DRC’s first report than Chamberlain’s (re)conceptualisation of it. It was a decidedly mixed bag. Nevertheless, the statement was still savagely attacked by the remainder of the non-National Labour and Liberal parties as a ‘complete change of policy’ which would lead Britain away from peace and backwards into the ‘anarchic world that brought us the war of 1914-18’.<sup>568</sup>

Industrially, the White Paper was symptomatic of a wider problem in National Government thinking across the previous twelve months. It was clearly torn between national security – albeit different definitions of it – and both economic stability and the public mood. As tentative as the White Paper was, it still rested on the foundation that rearmament meant new orders for new weapons which cost far more than the government was prepared to

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<sup>567</sup> *Statement Relating to Defence*, March 1935, Cmd. 4827.

<sup>568</sup> Hansard, HC Deb 11 March 1935, vol. 299, c46.

commit at this stage. The deficiency programmes had come along at the same time as a modest revival in merchant shipbuilding, but this was insufficient to revive the armaments industry. For instance, Yarrow received just two Admiralty orders, for small destroyers, between Manchuria in 1931 and Abyssinia four years later<sup>569</sup>, while Cammell Laird launched just 50,000 tons of vessels in total in the same period, with the only notable Admiralty order being a small cruiser.<sup>570</sup> The work-sharing terms of the WSBC meant that this level of construction was typical of the rest of the sector.

The underlying issue was that the National Government did not separate out the industrial base on which any rearmament effort was to be built from the end product, be that ships, tanks or aeroplanes. It understood that there were industrial problems, but was not seriously thinking about solving them unless it was part of a broader rearmament policy. The PSOC – and Weir, Lithgow and Balfour – were thinking completely differently. As a result, the government continued to pay relatively little attention to industry and leave it in limbo – despite consistent recommendations from the Supply Board and Advisory Panel to place educational orders or schemes aimed at strengthening the facilities and skills base of armaments manufacturers. The lack of foresight is readily apparent, but perhaps most aptly illustrated in the actions of Sir John Jarvis, a businessman who first raised £40,000 through donations and then spent a further £100,000 of his own money to assist the unemployed shipbuilders of the Palmer yard in Jarrow by, among other things, buying the retired sister ship of the *Titanic*, the *Olympic*, and bringing it to Tyneside for scrapping.<sup>571</sup>

The Admiralty had ideas for assisting industry in the maintenance of skills and capacity, but these were typically limited. Chatfield's armour subsidy that had been brought down under the weight of Treasury opposition in 1929 was re-started with some Treasury consent, albeit as an agreement to pay a higher price per ton of armour if the three major firms (Beardmore, Brown and Vickers) made a commitment to retaining capacity capable of producing up to 18,000 tons per annum between them.<sup>572</sup> While not a bad start, this was however only a

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<sup>569</sup> Borthwick, *Yarrow and Company Limited*, p. 54.

<sup>570</sup> Warren, *Steel, Ships and Men*, pp. 253-4.

<sup>571</sup> M. Perry, *The Jarrow Crusade: Protest and Legend* (Sunderland: University of Sunderland Press, 2005), p. 131.

<sup>572</sup> Gordon, *British Sea Power*, p. 85.

fraction of what would later be needed.<sup>573</sup> Other schemes in 1934 included diverting money from research and development to construction, which paid for the new engines that were fitted to HMS *Warspite* that year – with a price fixed by the WSBC.<sup>574</sup>

However, political events somewhat overtook the limited aims of the White Paper. Within weeks Hitler stated his intention to produce enough aircraft to achieve parity with France (which possessed a far larger air force than Britain), and as a consequence the estimates of German air power had to be revised upwards once more. In response, the DRC and the ministerial committee from 1934 were re-formed in the summer of 1935 to urgently investigate the question, while a committee on the expansion of air power was formed with Lord Weir as a full member.<sup>575</sup> At the same point, talks to bring all major naval powers to a new conference in London before December were under way. Britain had also extracted an offer – necessarily secret as not to alarm France – from Hitler to limit the German navy to 35% of the British level. This was accepted on the basis that Hitler was probably going to build a fleet regardless, and as such it may be best to accept while a binding offer was on the table.<sup>576</sup> The pact was finalised in June 1935, and for the time being smoothed over one part of the naval problem, although like the Washington and London treaties before it, effectively allowed the tiny German navy several years of unrestricted construction to ‘catch up’ to its agreed limit.<sup>577</sup>

Despite the failures to address the fundamental material weaknesses in British defence with the White Paper, there were some positive naval developments. A side-effect of the heightening of the aerial threat and apparent reduction in naval antagonism has been that scholarly analysis of the period surrounding White Paper, like Chamberlain’s revision of the DRC programme, has focused much more heavily on air programmes than on seapower. As such it has been used by historians to illustrate the increasing centrality of the RAF at the

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<sup>573</sup> Hume and Moss, *Beardmore*, p. 240.

<sup>574</sup> Minutes, Board of the Admiralty, 15 March 1934, ADM: 167/90/3182. See also Table 4.2, above.

<sup>575</sup> Lord Londonderry (Secretary of State for Air) to Weir, 20 May 1935, CCC: WEIR19.

<sup>576</sup> *Exchange of Notes Between His Majesty’s Government in the United Kingdom and the German Government Regarding the Limitation of Naval Armaments*, June 1935, Cmd. 4930 & Gibbs, *Grand Strategy*, pp. 164-5.

<sup>577</sup> Britain did have to inform the USA, Japan and France, however. The former two powers had no problems with the arrangement, although France protested loudly.

expense of the navy and army<sup>578</sup> – but the reality was far more nuanced and balanced. It is clearly the case that the revisions to the aerial programme were significant; however the subsequent Anglo-German naval pact and second London naval conference put the cart before the horse. In short, the key point is the role which the White Paper played in publicising, for the first time between the wars, the intention to rearm while placing the role of the navy centrally within it. It is this point which has been overlooked in favour of focusing on the aerial threat. In this sense, the White Paper was a limited document, but one that nevertheless reflected the work of the CID's subcommittees since Manchuria in highlighting the need for increased naval defence and new naval construction programmes. Like the CoS report, it believed in the existence of a naval threat and the merits of a naval solution, and like the PSOC and Supply Board, believed that the 'deliberate retardation' of armaments since Washington was a grave cause for concern. In sum, the work of the PSOC and Supply Committees from 1932-5 had been translated into the White Paper's contents. However, one should not be too quick to assume the PSOC was having any profound impact on defence policy. The major stumbling block was not in getting Cabinet to accept that supply problems existed; it was getting Cabinet to take steps to at least partially alleviate these problems, even from within its constrained position. For all of the work of the various subcommittees in the previous three years, there was little progress.

### 8.3 Industrialists, the Second White Paper and Second Naval Conference 1935-6

Although the increase in armaments spending and the necessity of sea defence had come into the public domain from the end of 1934, it was not 'rearmament' that the electorate were being sold. Major rearmament plans only followed the Italian invasion of Abyssinia and the general election from October 1935. Before that point – and from the period of the Anglo-German pact – the DRC was reconvened to reconsider the position of British defence, and to consider what steps should be taken in light of recent international developments. Due to the pressing nature and fluidity of the international situation, the DRC prepared its next report in just three weeks.<sup>579</sup> This, like the first report, stressed the continuing problems in the Far East,

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<sup>578</sup> P. Bell, *Chamberlain Germany and Japan*, p. 124 & Neilson 'The Defence Requirements Sub-Committee', p. 678.

<sup>579</sup> Gibbs, *Grand Strategy*, pp. 178-9.



and the possibility of an alliance between Germany and Japan.<sup>580</sup> In addition, it pointed to defence spending in Germany reaching almost one billion pounds annually (the comparable British figure was under £150m), the increase in Japan's naval strength relative to Britain's, and the additional problems posed if Italy did not remain neutral.

The crux of the report was not so much a change in timeframes – it still considered war unlikely before 1939 – but how any rearmament scheme was to be paid for. In order for Britain to equip adequately for its own security and to discourage aggression, the National Government was told there was 'no alternative' but to 'widen its horizon and resort to some system of capital expenditure'.<sup>581</sup> In other words, tax more, spend less or take out another loan to finance rearmament. That this idea was signed off upon by the Permanent Secretary of the Treasury (Warren Fisher) as part of the DRC indicates at least a partial relaxation of financial stringency on his part – but this should not be taken as evidence that the Treasury, or indeed the Cabinet, had subscribed to any of the tax, cutback or loan options. It was however quite a marked change from MacDonald's 'financial smash' warning of only a few months earlier.

Like the first report, this was to be put in front of ministers on an interim basis, before being sent back to the CID with the final agreed upon guidelines. At this point, there was, however, one major difference. In 1934, the group of ministers reviewing the first DRC report was known as the 'Ministerial Committee on Disarmament'.<sup>582</sup> In April 1935 it was formally reconstituted as the Defence Policy and Requirements Sub-Committee (DPR). This committee (despite being sometimes listed as a sub-body of the CID) was from this point onwards sitting atop the organisational structure, as the Cabinet organ which considered and acted upon the work emanating from the CID.<sup>583</sup> Its name alone suggests an important change in emphasis, and indeed in many ways marks the end, in planning terms, of the deficiency programmes, and the starting point of rearmament planning.

The DPR's membership for the first meeting was drawn from the very top echelons of politics – the Prime Minister took the chair, while the Lord President of the Council, Chancellor of the Exchequer, Foreign Secretary, War Secretary, First Lord, Air Secretary and

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<sup>580</sup> '2<sup>nd</sup> Report of the DRC', DRC25, 29 July 1935: TNA: CAB16/109.

<sup>581</sup> '2<sup>nd</sup> Report of the DRC'.

<sup>582</sup> Gibbs, *Grand Strategy*, p. 175.

<sup>583</sup> Gibbs, *Grand Strategy*, p. 180.

President of the Board of Trade made up the rest of the committee. The DRC's members – the CoS, Hankey (who was also Cabinet Secretary), plus the Treasury and Foreign Office permanent secretaries – also attended, although were not listed as full members of the committee.<sup>584</sup> Since the DPR was now notionally the top level of the CID pyramid, its actions need to be closely scrutinised, for they reveal some important points about the nature of defence and supply planning – and the successes and failures of it.

The first meeting in late-July concerned only the second DRC report. After this point, the committee was re-formed to meet on a regular basis, beginning in October. As far as the first meeting is concerned, however, the DPR agreed with the recommendations of the report, but still expressed a clear caution in moving immediately towards rearmament. Instead, the DRC was instructed to proceed along the lines of the interim report and prepare full defence programmes for all three services based on the assumption these programmes should be complete and paid for by the end of the 1938/9 financial year. In industrial terms, the DRC was asked to provide answers on what 'special measures would be required for increasing factory output to provide the material required' and 'how long a period would be required to reach a state of preparedness'. This was, of course, still with the caveat that 'existing financial and political considerations' would have to be taken into account.<sup>585</sup> On one level, this was just more thinking and more planning, but on another marks an important step towards a coherent rearmament policy, albeit – like the White Paper – a tentative one.

The DRC, working in conjunction with other CID subcommittees, set to work between August and November. Owing to the upcoming general election and status of the DPR's members, relatively little else was achieved until after the end of this period, as the committee's senior Cabinet members set to work on the National Government's re-election bid. As had been predicted, MacDonald stepped down as Prime Minister in June, citing failing health, and was replaced by Baldwin.<sup>586</sup> MacDonald remained part of the multi-party National Government, swapping places with Baldwin as Lord President of the Council, and together the

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<sup>584</sup> 'Committee on Defence Policy and Requirements – Terms of Reference on Defence Requirements', DPR(DR)1, 30 December 1935, CCC: WEIR17.

<sup>585</sup> 'Fourth Meeting of the Defence Policy and Requirements Committee', DPR 4<sup>th</sup> Mtg, 31 July 1935, TNA: CAB16/109.

<sup>586</sup> Morgan, *Ramsay MacDonald*, p. 81.

government returned a very sizable, but nevertheless substantially reduced, majority.<sup>587</sup> In the run up to the election over summer, the deteriorating Abyssinian situation – first sparked by border clashes with Ethiopians in Italian Somaliland in December 1934 – had overshadowed the normal course of campaigning, although it did not become a major feature of future defence planning in the CID until August.<sup>588</sup> Throughout the crisis the League of Nations had repeatedly failed to bring Italy to heel, and on 3 October, exactly six weeks before the election, Italian forces invaded Abyssinia. Further attempts at sanctions from the League were similarly ineffective – severely damaging the organisation’s credibility – and the National Government’s inability to decisively influence the situation was an embarrassment to Baldwin and his Cabinet.<sup>589</sup>

For these reasons, historians have extensively debated the exact role armaments policy (and the notion of collective security) played in the result of the election, and whether it delivered a mandate for rearmament that followed, or if the public had been misled by the National Government’s rhetoric.<sup>590</sup> Thus, a brief examination of the rhetoric and campaigning around the general election is relevant at this juncture. In many ways campaign rhetoric was not so different from the White Paper which preceded it, in that what the National Government believed was far removed from what it was willing to publicly say. Less than one quarter of the fifty or so different official election leaflets from the government mentioned defence or international relations – most of the focus throughout October and November was on the economy and domestic situation.<sup>591</sup> Similarly, only a brief amount of time was given over in speeches by the senior government members to foreign affairs. The clauses in the manifesto which referenced defence read much like the White Paper of eight months earlier: collective security and prevention of war was the ‘keystone’ of government policy, while the defence programme would ‘be strictly confined to what is required to make the country and the Empire safe, and to fulfil obligations towards the League’.<sup>592</sup>

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<sup>587</sup> Smart, *National Government*, p. 119.

<sup>588</sup> For overview of progress and early recommendations, see ‘Minutes of 6<sup>th</sup> Meeting of DPR’, DPR/6<sup>th</sup> Mtg., 5 September 1936, CCC: WEIR17.

<sup>589</sup> J. C. Robertson, ‘The British General Election of 1935’, *Journal of Contemporary History* 19 (I) (1974), p. 159.

<sup>590</sup> Robertson, ‘The British General Election of 1935’, p. 164.

<sup>591</sup> Robertson, ‘The British General Election of 1935’, pp. 159-60.

<sup>592</sup> I. Dale, *Conservative Party General Election Manifestos, 1900-1997* (London: Routledge, 1999), p. 53-9.

In light of the experiences not only of the previous twelve months, but indeed of any point since the Wall Street Crash, such rhetoric should not be particularly surprising. In by-elections or polls where the National Government fared poorly, analysis indicated that the issues of the economy and welfare held a far higher priority than the international situation.<sup>593</sup> In this sense, Baldwin and his colleagues were behaving as rational and calculating politicians, but in not attempting to articulate the seriousness of the defence conundrum and attempts to tackle it through the DRC and DPR, the National Government opened itself up to the charge of misleading the electorate when rearmament soon followed. Support for the League had been wavering within the Cabinet for a significant period before Abyssinia, and as such the public commitment to it appeared in hindsight, insincere. Moreover, the repetition of the claim that spending would only be taken to meet deficiencies was a missed opportunity. The League's credibility had been shaken, the international situation had further deteriorated, and the chances of a National Government majority were exceedingly high yet the rhetoric was no stronger than it was eight months earlier in March, and as such, Britain probably lost more ground in closing the gaps the CID believed needed to be closed.

The first major act of the re-elected government was to summon the DPR to examine the DRC's third report, which was nearing completion in November, and to convene the Second London Naval conference, which began in December.<sup>594</sup> The preparations for the latter highlighted Britain's relative decline in naval capabilities. Referencing Japan's recent naval increases, the First Sea Lord Ernle Chatfield (at this point also working on the DRC report showing Britain's levels of industrial preparedness), urged for the limitation, if at all possible, of the size of ships and guns constructed – even if a general limit of how many of them were made could not be agreed upon. Referencing the industrial situation, Chatfield believed that failure to implement size limitations would allow Britain's rivals to

...spring a surprise which is exceedingly difficult to meet, because the designing or new guns and mountings takes a number of years and once a country has got a start by secret preparations her opponent cannot catch up to her quickly.<sup>595</sup>

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<sup>593</sup> Kyba, *Covenants Without the Sword*, pp. 99-100.

<sup>594</sup> Roskill, *Naval Policy Between the Wars* v. 2, p. 314.

<sup>595</sup> 'Chatfield memorandum', NCM(35)23, 31 October 1935, TNA: CAB29/148.

In other words, as a result of not building new ships to replace older ones, Britain was potentially not developing new technology – and not sharpening technical skills – at the same rate as the Japanese and other nations that had been allowed to build up to treaty limits over the previous five years, and the country would therefore be vulnerable if a rival suddenly developed larger and better guns.

Chatfield's point was borne out by the composition of the fleet. In December 1935, the most modern British ships with large guns were the *Nelson* and *Rodney* battleships, essentially cut-down versions (in order to meet Washington Treaty limits) of late-WWI designs.<sup>596</sup> The others were remnants of the last war. Of the smaller post-war heavy cruisers, the *County* and *York* classes were only around one quarter of the displacement of the battleships, and were also built to Washington limits, meaning in order to meet total weight restrictions they lacked sufficient armour and came equipped with much smaller weaponry, and at any rate were based on designs that were by then over a decade old. In terms of construction in the five and a half years since the London Treaty, there had been sixteen light cruisers – around one sixth the size of *Nelson* – laid down, of which eight were in commission. However, the smaller of these were of limited combat use, even for trade protection, and were certainly inferior to heavy cruisers and no match for battleships. In terms of the large and heavy naval guns, which the Third Sea Lord had called 'invariably the limiting factor in the construction of every kind of warship'<sup>597</sup> in 1933, just one substantial order – in 1923 for *Nelson* and *Rodney's* weapons – had been placed in the thirteen years since Washington in British private yards.

By way of comparison, the Imperial Japanese Navy had launched six heavy cruisers in the same period, and had four more under construction (see Table 8.1, below). These ranged from 11,000 to over 15,000 tons, and as such, were significantly larger and more powerful than the equivalent light British cruisers, and at the same time from a newer generation of vessel than their ageing heavy British counterparts.<sup>598</sup> This aptly highlights the failings of the treaties in practice. For while in principle the idea of arms limitation between 1918 and 1930 was sound, Britain's position as the largest navy meant she had most to lose: despite being 'limited' to a fleet 60-70% of the size of the Royal Navy, Japan was able to significantly outbuild Britain in

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<sup>596</sup> Johnston and Buxton, *Battleship Builders*, p. 35.

<sup>597</sup> 'Minutes of the Supply Board' PSO(SB) 24<sup>th</sup> Mtg., 11 October 1932, TNA: CAB60/30.

<sup>598</sup> McMurtie (ed), *Jane's Fighting Ships*, pp. 287-295.

some key areas over a period of several years, produce larger ships with larger guns, maintain facilities and skills, and then withdraw from the treaty when it expired. Although the sixteen orders for light cruisers since 1930 – seven as part of the DRC scheme since mid-1934 – were a welcome boost to the navy, just nine were offered to the private yards for tender.<sup>599</sup> Obviously, the lack of large ship orders at any point since 1922 cannot be separated from the previously expressed concerns by the Supply Board – and Admiralty – over the lack of remaining capacity for the construction of large guns. Again, the difference between how the lower levels of the PSOC conceptualised the supply problem and top level policy is marked.

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<sup>599</sup> Derived from McMurtie (ed), *Jane's Fighting Ships*, pp. 18-41.

**Table 8.1 British and Japanese cruiser construction, 1930-5.**

<b><u>Britain</u></b>	Tons (full load)	<b><u>Japan</u></b>	Tons (full load)
Arethusa*	6700	Tone	15200
Penelope	6700	Tikuma	15200
Aurora	6700	Atago*	15500
Galatea*	6700	Takao*	15500
Orion*	9700	Tyokai*	15500
Achilles	9700	Maya*	15500
Ajax*	9700	Mogami*	11000
Leander*	9700	Mikuma*	11000
Neptune*	9700	Suzuya	11000
Apollo	9000	Kumano	11000
Amphion*	9000		
Sydney*	9000	<b>Total Japan</b>	<b>136400</b>
Southampton	11000	<i>(Of which in commission 1st Jan 1936)</i>	<b>84000</b>
Birmingham	11000	(* denotes in commission)	
Newcastle	11000		
<b>Total Britain</b>	<b>149200</b>		
<i>(Of which in commission 1st Jan 1936)</i>	<b>70200</b>		

Source: McMurtie (ed), *Jane's Fighting Ships 1942* pp. 35-41, 294-300

As had been expected, Japan could not be persuaded to sign the second London Treaty. Neither was an agreement with France, Italy or America possible with regards to total tonnage limits and ratios. After months of negotiations, however, an agreement in was reached in March 1936 with the other naval powers to limit the size of guns to 14 inches (8 inches on cruisers) with the allowance for raising the limit to 16 inches should any of the former signatories of the 1922 treaty fail to adhere to these new restrictions in gun calibres.<sup>600</sup> As

<sup>600</sup> In practice, the 14-inch large gun limit was only followed by one major navy: Britain. Japan immediately broke the clause and laid down ships with larger guns, so America and Italy followed suit.

such, the era of quantitative treaty restrictions, which had served to limit British naval construction across the previous fourteen years, was brought to an end – although as the 1930 treaty was in force until the end of the year, while new large battleships could be ordered, no work could commence immediately.<sup>601</sup>

The signing of the treaty was contemporaneous with the second ‘Statement Relating to Defence’ (or White Paper), which had been published three weeks earlier.<sup>602</sup> Like the previous paper, the 1936 White Paper was based largely on the information presented by the DRC, this time in its third report, presented in late-November 1935.<sup>603</sup> Again, there is something of a parallel narrative here, with the discussions of the Second London Naval conference taking place at almost exactly the same time as the DPR’s examination of the DRC report. The content of the third DRC report was a closely guarded-secret, with very few members of government privy to its contents.<sup>604</sup> The report made clear that the original deficiency programmes had not gone anywhere near far enough, and that a three-front war with Italy, Japan and Germany was a possibility. Moreover, German naval rearmament coupled with Japan’s refusal to agree to a lower tonnage limitation than Britain, left no margin for security should both become hostile, especially given a likely commitment to the Mediterranean to face an Italian threat. As a result, the report urged a new standard of naval strength whereby a permanent deterrent force could be placed in the Far East while having a ‘home’ fleet capable of protecting trade and facing the largest European power.<sup>605</sup> Due to the lack of agreements on tonnage limits and ongoing naval construction in Japan, Germany and Italy, the Admiralty and DRC felt unable to specify the minimum size, in quantitative terms, of a fleet capable of achieving this. However, based on current estimates of Japanese and German programmes, the DRC believed that at least seven new battleships, fifteen cruisers and four aircraft carriers would be needed, plus numerous smaller support ships.<sup>606</sup> This was to be known as the DRC’s ‘standard fleet’, and would guide the naval construction plans from 1936 until 1938.<sup>607</sup>

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<sup>601</sup> *Treaty of London of April 22, 1930*, April 1930, Cmd. 3758.

<sup>602</sup> Gibbs, *Grand Strategy*, p. 329 & *Statement Relating to Defence*, March 1936, Cmd. 5107.

<sup>603</sup> ‘3<sup>rd</sup> Report of the DRC’, DRC37, 21 November 1935, TNA: CAB16/112.

<sup>604</sup> Hankey to Weir, 6 December 1935, CCC: WEIR17.

<sup>605</sup> *Statement Relating to Defence*, March 1936, Cmd. 5107.

<sup>606</sup> ‘3<sup>rd</sup> Report of the DRC’ DRC37, 21 November 1935, TNA: CAB16/112.

<sup>607</sup> ‘Practicability of Accelerating the Naval Programme and the Effect on the Programmes of the Other Services’, DPR88, 25 June 1936, TNA: CAB16/140



However, on the subject of the questions surrounding industrial preparedness, the DRC painted a grim picture. While it believed the system of supply organisation (namely the advisory structure with the PSOC and Supply Board), should remain the same, it noted that so much replacement work was already needed to bring the ageing fleet up to modern standards, and that the lack of foreign and domestic orders since Washington had so reduced productive capacity in terms of facilities and skills, that there was no leeway left to significantly expand the fleet to this level in the three-year time-frame.<sup>608</sup> As a result, the DRC believed industrial capacity, independent of political will and finance, was likely to be a major constraint on the rearmament of the navy before 1940. This was a marked change from 1934, when the DRC had proposed a £21m increase in expenditure.<sup>609</sup> Had more money been spent then in the under-occupied yards, it would have had two large advantages: the first is that it would have reduced the amount of replacement work needed in 1936, in effect freeing up more capacity for expansion of the fleet, and it would have allowed for an increased intake in apprentices and a renewal of ageing facilities, effectively reducing the time-lag between beginning rearmament and reaching maximum output. In hindsight, it was a missed opportunity.

In addition, the DRC believed a ‘shadow’ armaments industry, consisting of automobile and other firms which could be turned over to war production quickly (first proposed by Weir two years earlier), should be initiated. This on its own would still not solve the problems faced: the DRC believed around 120,000 extra skilled or semi-skilled workers would be required to meet the requirements of the three services, and rationing of staff between the services would probably be required.<sup>610</sup> These points, and the last especially, were a direct result of the work the Supply Board had undertaken some months before, and showed the National Government the problems of the 1920s coming back to bite.

The industrial nature of the problem prompted a re-think from the DPR. As soon as the ink was dry on the report, the DRC’s author, Maurice Hankey, was instructed to write to Lord Weir. He told Weir that

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<sup>608</sup> ‘3<sup>rd</sup> Report of the DRC’, DRC37, 21 November 1935, TNA: CAB16/112

<sup>609</sup> Gibbs, *Grand Strategy*, p. 124.

<sup>610</sup> ‘3<sup>rd</sup> Report of the DRC’, DRC37, 21 November 1935, TNA: CAB16/112.

The Prime Minister has authorised me to send you a copy of the Report of the Defence Requirements Committee, of which I was chairman, which is now before the government. I must tell you that this Report is of such secrecy that it has not been sent to the Cabinet as a whole, but only to the Committee of the Cabinet which initiated the enquiry. You will therefore treat it as a document of quite extraordinary secrecy.<sup>611</sup>

The ‘committee’ Hankey referred to was the DPR’s subcommittee examining the implications of the third DRC report.<sup>612</sup> Quite apart from a civilian businessman being privy to information that most of the Cabinet had not even seen, there were other striking developments in the pipeline. The Prime Minister wished the DPR to meet regularly from now on to discuss rearmament, and for it to have a new member: Lord Weir (see Table 8.2, below).

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<sup>611</sup> Hankey to Weir, 6 December 1935, CCC: WEIR17.

<sup>612</sup> This was known as the DPR(DR). Weir also became a full member of the DPR afterwards, though the distinction between the committee and sub-committee is to an extent moot, as in December 1935 they shared memberships and were focused on the same questions. However, they were recorded as separate committees, and have been classified in the archives as such.

**Table 8.2: Committee on Defence Policy and Requirements – Terms of Reference on Defence Requirements, 1935.**

<b>Name</b>	<b>Position</b>
Stanley Baldwin MP (Chair)	Prime Minister
J. Ramsay MacDonald MP (chaired July meeting)	Lord President of the Council
Neville Chamberlain MP	Chancellor of the Exchequer
Anthony Eden MP	Foreign Secretary
A. Duff Cooper MP	War Secretary
Viscount Bolton Eyres-Monsell MP	First Lord of the Admiralty
Viscount Swinton MP	Air Secretary
Walter Runciman MP	President of the Board of Trade
Lord Weir	Industrialist
Admiral of the Fleet Sir Ernle Chatfield	First Sea Lord, Chief of Naval Staff (advisory)
Field Marshall A. Montgomery-Massingberd	Chief of the Imperial General Staff (advisory)
Air Chief Marshall Sir Edward Ellington	Chief of the Air Staff (advisory)
Sir Warren Fisher	Permanent Secretary, Treasury (advisory)
Sir Robert Vansittart	Permanent Secretary, Foreign Office (advisory)
Sir Maurice Hankey	CID and Cabinet Secretary (Secretary)

Source: 'Committee on Defence Policy and Requirements – Terms of Reference on Defence Requirements', DPR(DR)1, 30 December 1935, CCC: WEIR17.

Weir, until this point, had been advising the PSOC and serving on the committee on air defence research.<sup>613</sup> In the wake of the first White Paper, Weir had been announced (in May) as an advisor on the air deficiencies, and this had led to a flood of letters from well-wishers, almost always former air staff or industrial partners that had worked with Weir in the Great War, being sent to his offices in Glasgow.<sup>614</sup> Although his work on air defence research is not strictly relevant here, it is worth noting the side-effects of his involvement, on the occasions when such work was more publicly known. Once former colleagues in the Ministry of

<sup>613</sup> 'Sub-Committee on Air Defence Research, 1<sup>st</sup> Meeting', ADR1, 10 April 1935, TNA: CAB16/132.

<sup>614</sup> See GUAS: DC96/21/1-2.

Munitions found out about Weir's new role he was inundated with requests, most of them friendly, for Weir to use his influence and connections to 'put a good word' in with the Air Ministry about their abilities. So many of these arrived, often from those who had not been in contact with Weir for many years, that his secretary responded with the same template letter, thanking them for their wishes, but that Lord Weir's role had been 'exaggerated' and was an advisor only, and as such had no say over appointments.<sup>615</sup>

The inclusion of Weir was agreed upon by the DPR, and signed off by its chairman, Stanley Baldwin. Weir, it was decided, 'should have discretion in any work he might be willing to undertake on behalf of the Committee' and that he should be able to 'associate with Lord Riverdale (but not to consent to Riverdale being a member of the Committee) if Riverdale was prepared to render assistance'.<sup>616</sup> Lord Riverdale was, of course, the title taken by Sir Arthur Balfour, from 1935.<sup>617</sup> In addition, Weir was instructed to

...turn over in his mind, in addition to the [DRC report], the industrial side of our problems...such as the right steps to be taken for organising industry and the production of war material, and the best time and method for approaching both employers and labour with a view to securing their effective cooperation...<sup>618</sup>

Essentially, this meant that Lord Weir was to be given significant latitude for developing any plans to organise the industrial side of any future armament programmes, including the method of approaching and co-opting industry, with the assistance of Balfour. Conversely, the DRC members – which included the heads of the three defence departments – were permitted to 'attend the Committee as advisers...except when the members preferred to meet alone'.<sup>619</sup> Thus, in this particular structure, Weir outranked the heads of the fighting services, and was in closer working contact with the PM and Chancellor than any other civilian in the country. To put it another way, the most senior government body working on the most secret aspects of national security, and during the time the government was still outwardly committed to

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<sup>615</sup> For example, Weir to Wheatley, 27 May 1935, GUAS: DC96/21/2

<sup>616</sup> 'Committee on Defence Policy and Requirements – Terms of Reference on Defence Requirements', DPR(DR)1, 30 December 1935. CCC: WEIR17

<sup>617</sup> Mary Walton, 'Balfour, Arthur, first Baron Riverdale (1873–1957)', *Oxford Dictionary of National Biography*.

<sup>618</sup> 'Committee on Defence Policy and Requirements – Terms of Reference on Defence Requirements', DPR(DR)1. CCC: WEIR 17

<sup>619</sup> 'Committee on Defence Policy and Requirements – Terms of Reference on Defence Requirements', DPR(DR)1. CCC: WEIR 17

meeting ‘deficiencies’ , had a civilian businessman as one of its full members. This, like the advisory panel before it, was not only peacetime first, but also represented a very significant increase in Weir’s access to information, responsibilities, and influence.

Weir immediately played a full and active role in the committee. On the subject of the Third DRC report, Weir believed that the industrial position was worrying, and therefore Britain should concentrate on building a deterrent force first, at the expense of Army programmes, if need be.<sup>620</sup> This was supported by Chamberlain, but not everyone was impressed. Hankey believed that a small and efficient army would also be an effective deterrent, while Henry Pownall, the Deputy Secretary of the CID, remarked privately afterwards that Weir’s ideas were ‘absurd’ and that that Weir’s belief in the inability of private industry to carry out the defence programme was because of his ‘innate Scottish caution’.<sup>621</sup> Nevertheless, Weir and Chamberlain succeeded in reducing the Army demands listed in the third DRC report, and Weir was asked to continue with his work on the state of industry.<sup>622</sup>

In January, Weir submitted a full industrial report to the DPR. This was, in many ways, an update of the advisory panel report of 21 months earlier, with similar advice on the expansion of supply and whom to approach in industry. However, there were some notable new aspects: On the subject of skilled labour, he warned that ‘securing reasonable efficiency... to avoid the misuse of existing skilled labour’ was a ‘major trouble that could seriously affect progress’, but counselled that the CID should avoid any broad consultation with labour unions for the time being, as it would create a counterproductive ‘crisis-type’ atmosphere, and instead tackle the problems as they arose. Most importantly, on the question of authorising the financing of defence orders, Weir suggested the following:

To achieve [the goals of the DRC report], the Supply Departments and contractors will be working against time. Decisions instructing new contractors to proceed... must inevitably be given by the Supply Staff prior to the settlement of financial details. In this sense... the word of the man responsible for Supply must carry, and the spirit and enthusiasm he has evoked in the contractor’s mind must not be chilled by delays of approvals caused by financial control.<sup>623</sup>

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<sup>620</sup> Bond, *British Military Policy Between the Two World Wars* p. 223.

<sup>621</sup> Note by Henry Pownall, 13 January 1936, TNA: CAB 21/422

<sup>622</sup> Bond, *British Military Policy Between the Two World Wars* p. 224.

<sup>623</sup> ‘Sub-Committee on Defence Policy and Requirements. Programmes of the Defence Services. Report’, February 1936, TNA: CAB 16/123, p. 5.

This particular recommendation was aimed squarely at the Treasury, and was undoubtedly shaped by his experience on the advisory panel in the previous two years, where the ideas and plans of the Supply Board and his industrial colleagues repeatedly stalled while the Treasury examined, or revised plans for many months at a time. While the Treasury's opposition to extra defence expenditure diminished noticeably<sup>624</sup> in the second-half of 1935, it was still, for Weir, a cause for concern. Weir finished his report by warning that even if his recommendations were agreed to, there was still no way to say definitely whether the defence programmes could be fulfilled, as time was very much against them.<sup>625</sup>

Weir's report was taken very seriously, and the DPR agreed that he should prepare more reports on the subject. While Weir continued his work on the industrial question, the Cabinet drew up and published the second White Paper. During this time the German situation was intensifying: the Nazi leadership were publicly flouting the Treaty of Versailles by threatening to occupy (and subsequently occupying) the Rhineland. In addition, the British economy was improving – but only slowly – and as a result public priorities were also shifting noticeably towards demands for the League to show more teeth.<sup>626</sup> However, once more, the National Government was reluctant to go public with the full extent of the requirements recommended by the DRC, and instead opted to disclose a more limited form of rearmament, again backed to the hilt with justifications for why Britain had been forced into action. It noted as the 'conditions in the international field deteriorated' throughout 1935 and a 'deplorable' rearmament process was occurring across the globe, the National Government had felt it was no longer wise to 'take risks for peace' as they had plainly not 'removed the dangers of war'. For these reasons, the government believed it had to take steps, but only those 'essential in the present circumstances' in order to secure Britain from attack. Even these were only being made only after a 'prolonged and exhaustive examination' of the condition of the fighting services.<sup>627</sup>

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<sup>624</sup> Peden, *British Rearmament and the Treasury*, p. 71.

<sup>625</sup> 'Sub-Committee on Defence Policy and Requirements. Programmes of the Defence Services. Report', February 1936, TNA: CAB 16/123, p. 5.

<sup>626</sup> Indeed, when the White Paper was presented, even the Labour and Liberal parties no longer criticised it on the principle of arms leading to war, although they did find fault in its 'lack of clarity' for the future. Churchill, incidentally, felt the report did not go far enough. See Gibbs, *Grand Strategy*, p. 267.

<sup>627</sup> *Statement Relating to Defence*, March 1936, Cmd. 5107.

Once again, the Navy was justified on the basis of preserving the essential communications, food and materials, plus free movement between parts of the Empire. However, despite the need for a programme of more capital ships and cruisers over several years, the government only detailed the work that would be undertaken in the next twelve months, i.e. two battleships, five cruisers and one ‘smaller-type’ aircraft carrier (about one quarter of the DRC’s ‘minimum’ level of construction) so as to not to alarm parliamentary opposition more than necessary.<sup>628</sup> The paper did not however attempt to shirk how serious a problem Britain was facing, nor how difficult the industrial challenges were: The increased burden on government contractors meant that to ‘some extent’ they may be required to extend their plant or workshops in order to contribute to the increased output demanded.<sup>629</sup> However, this would absolutely not lead to ‘extravagant profits’ for the firms concerned.<sup>630</sup>

On the subject of finance, Weir’s recommendation was also translated into the report. While it was stated ‘Treasury control would be maintained’, it was deemed important ‘that the work is not delayed by the over-elaboration of financial safeguards’.<sup>631</sup> Given the role of the Treasury in all defence questions until that point – most notably in the cruiser crisis and the DRC’s first report – this clause is remarkable, especially given its origins. This was, in many ways, the first wresting of financial control away from the Treasury towards defence schemes that had occurred since Washington fourteen years earlier. Overall, the second White Paper gave, conclusively, the green-light to rearmament, and was a massive step in going beyond the rhetoric of deficiencies. It went a long way towards articulating the serious need for expenditure in as short a space as possible, and as such was the first public notification to business that there would, in all likelihood, be a prolonged period of military and naval demand that would be in excess of supply, and that everyone should prepare for it. It had been a long time coming, and a small group of industrialists had played a significant role in it.

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<sup>628</sup> In the event, these plans were superseded and larger carriers were built. Smaller-type probably – though no explanation was given – meant a carrier that was closer in size to *Hermes* (11,000 tons) than *Ark Royal* (22,000 tons).

<sup>629</sup> *Statement Relating to Defence*, March 1936, Cmd. 5107.

<sup>630</sup> *Statement Relating to Defence*, March 1936, Cmd. 5107.

<sup>631</sup> *Statement Relating to Defence*, March 1936, Cmd. 5107.

#### 8.4 The position of private industry: James Lithgow, Beardmore and Fairfield 1935-6

Between March and July 1936, plans were drawn up for a major naval programme which would ultimately cost tens of millions of pounds and bring contracts, employment and profit to the private naval armaments manufacturers. Before this point, the deficiency programmes only represented a moderate improvement in the fortunes of the WSBC firms, which were still in a weak financial position with no guarantee of orders in the longer term. As already shown, there were just nine contracts for ships larger than 1500 tons placed in private yards between 1930 and the end of 1935. The Admiralty, while in a better position to argue for more spending than it had been in the 1920s, had still come up against stiff Cabinet and Treasury opposition, although the advent of the DRC, worsening international situation and improving financial situation had altered the balance somewhat since 1934, but only much more conclusively during the last three months of 1935. The position in private industry between the NSS ‘mothballing’ of yards in mid-1934 and the second White Paper has not thus far been covered, although there was little overlap between State and private industry in this period, save for a couple of very significant examples.

This was primarily because from a strictly business point of view there was no outward indication – nor could there be – that long-term rearmament (as opposed to a more-limited deficiency programme) was on the way before 1936. This decision was only taken at Cabinet level sometime around the third DRC report in November, 1935. For this reason, the members of the WSBC were not, even in spring 1936, in a strong position or actively preparing for what was to follow. The Admiralty was still tied up with international negotiations over armaments limitation, and as such did not appear to give the shipyards more than a few weeks’ notice – still on a provisional basis – of the composition of the 1936 building programme. Indeed, even by September 1936, the WSBC was still attempting to collect confidential information in order to speculate the number and types of vessels that would be ordered in 1937.<sup>632</sup> In this sense at least, not much had changed since Washington caught the industry cold fourteen years earlier, and the private industry could not plan for orders too far into the future.

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<sup>632</sup> ‘Points for Discussion at a Meeting of Firms Capable of Building Capital Ships’, 18 September 1936, GUAS: GD319 12/7/6.



For the naval yards, the general outlook for merchant and passenger was somewhat brighter than it was in 1931, but profits remained low, even if the WSBC was successful at bringing in reasonable margins on the few Admiralty and foreign navy contracts going around. Fairfield for instance, still had virtually nothing extra built into the contracts for merchant and civilian contracts into the mid-1930s and were selling them at cost, while the few warship contracts were bringing in 10-12% profit.<sup>633</sup> The PSOC's 'educational orders' were similarly slow to materialise, and when they did begin to appear – again from late-1935 – they were almost uniformly aimed at educating some non-specialist armaments makers (and even then only if it was on such a scale that it did not interfere with the firm's 'normal activities') in non-naval components, particularly aeroplane engines.<sup>634</sup>

There were however a few notable differences compared to the period a decade earlier that brought the WSBC into existence. The most significant of these was obviously the creation of the NSS and the PSOC's advisory panel in 1930 and 1933 – this brought a shipbuilder, an engineer and an armour maker (but not warship builders) inside the CID machinery, and gave Lithgow, Weir and Balfour access to important supply information. While the panel obviously had no idea that rearmament would follow before 1935, it did help in exposing the nature of industrial deficiencies between 1933 and 1935, and as such had a better idea of what *would* be needed and where the bottlenecks were if the CID's hypotheses turned out to be accurate. It has already been shown that Lithgow changed NSS policy to mothball warship facilities, and by the end of 1935 Weir and Balfour had been authorised to devise methods to speed up production.

Very little, if any, of these facts were known to WSBC members, in the same way the WSBC's existence was almost certainly not known to the Admiralty. On one side, Weir, Lithgow and Balfour's work was top secret – and the side effects of Weir's work on air parity showed aptly the kind of response that occurred when these sorts of connections became more widely known. For this reason, had the panel's connections been understood by the private armaments industry, one would expect the same floods of requests to have been generated as was the case with Weir's work for the Air Ministry. On the other side, the WSBC were – still –

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<sup>633</sup> 'Admiralty Orders Completed, 1935', GCC: UCS2/60/1.

<sup>634</sup> Sebastian Ritchie, *Industry and Air Power: the Expansion of British Aircraft Production, 1935-41* (London: Frank Cass, 1997), p. 59.

illegally fixing prices (see Table 8.3, below) and risking the wrath of the Treasury, Admiralty and public, and could not afford word to get out. It is therefore not surprising that the two groups led parallel existences until the middle of the 1930s.

**Table 8.3: 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	1395000	543000	1938000	1	1487850	563125	2050975
Hawthorn Leslie	1238000	530000	1768000	4	1551000	579000	2130000
Fairfield	1210000	520000	1730000	2	1527000	573000	2100000
Harland & Wolff	1280000	535000	1815000	3	1539000	578000	2117000
Swan Hunter	1208000	525000	1733000	5	1574000	571000	2145000
John Brown	1274000	540000	1814000	7	1601000	574000	2175000
Vickers-Armstrong	1250000	540000	1790000	5	1623000	575000	2198000
Scotts	1240000	556000	1790000	6	1593000	572000	2165000
Mean of estimates	1261850	536125					

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

At this point, however, the hitherto parallel paths crossed: Lithgow, by 1936, was chairman of both Fairfield and Beardmore, two of the largest armament firms in the country, and (in the case of Fairfield), a member of the WSBC.<sup>635</sup> This was a striking occurrence when one considers Lithgow's background as a merchant builder – the focus of his entire career until that point. Moreover, in the cases of both failing firms there were no other willing buyers – save the NSS and mothballing or liquidation – before 1935.<sup>636</sup> Thus, like Lithgow's involvement with the PSOC and NSS, these acquisitions stand out and more importantly can be interpreted differently when mapped onto the other events of 1934-6. It is therefore worthwhile deviating briefly from the chronology to examine Lithgow's business ventures at this juncture.

<sup>635</sup> Reid, *James Lithgow*, p. 172.

<sup>636</sup> See also Appendix.

Until 1934, Lithgow's purchases of companies and facilities were fairly unremarkable. As the table (8.4) below illustrates, in the 1920s he and his brother were primarily interested in expansion of the Lithgow site in Port Glasgow, extending the company along the waterfront to the east and west by purchasing parts of other firms which augmented his own business interests in the same geographical area. In this sense, his purchases after his involvement with the PSOC stand out as a clear break from the past, especially so when one considers the public commitment to disarmament, and the lack of interest from would-be rivals.

**Table 8.4: Lithgow's acquisitions, 1915-36**

<b>Acquisition</b>	<b>Company</b>	<b>Date</b>
Port Glasgow East Yard	R. Duncan & Company	1915
Marine Engine building plant	David Rowan & Company	1917
Inch Yard	Dunlop Bremner	1919
Glen Yard	William Hamilton Shipbuilders	1920
Entire company	J. Dunlop Steel Stockholders	1920
Port Glasgow Yard	Murdoch & Murray	1922
Entire company	Rankine & Blackmore Engine builders	1923
Entire company	Ayrshire Dockyard, Irvine	1928
Entire company	Steel Company of Scotland	1934
Entire company	Fairfield of Govan	1935
Entire remainder of Company	Beardmore	1935-6

Source: Derived from content in Murphy, 'Déjà Vu all over again: The Reluctant Rise and Protracted Fall of Scott Lithgow' (PhD thesis, University of Westminster).

Indeed, although Lithgow's steel rationalisation schemes sit outside of the remit of this work, his acquisition of the Steel Company of Scotland in 1934 was, like the NSS, funded by a Bank of England vehicle.<sup>637</sup> His company had sold its holdings in Dunlop Steel to (or more accurately merged them with) the Colville steel company some years earlier, and the new

<sup>637</sup> P. L. Payne, *Colvilles and the Scottish Steel Industry* (Oxford: Clarendon Press, 1979), pp. 209-210.

acquisition represented a major rival to Colville for the steel supplied to Clyde shipyards.<sup>638</sup> Moreover, also like the NSS, the Steel Company of Scotland deal was brokered with the help of long-time friend Sir Andrew Duncan, (now a director of the Bank of England), who was, from January 1935, President of the British Iron and Steel Federation.<sup>639</sup> When the re-armament effort appeared on the horizon two years later, Lithgow sold the Steel Company of Scotland to Colville's and made a profit of more than 40% – almost £300,000.<sup>640</sup>

A similar pattern was repeated with Fairfield in Govan. In the middle of 1935, Fairfield was working on a contract for a liner with the Anchor Line steamship company, itself supported by Cunard. Part-way through the contract, Anchor defaulted on payment of bills of £133,000, which forced it into liquidation and Fairfield – already on the limit of its £200,000 Bank of England overdraft – to the brink of receivership.<sup>641</sup> On one level the episode should highlight the fragility of private armaments manufacturers even in 1935, given that a default on payment of a single order could have catastrophic effects. This was not so different to numerous other struggling yards at the time, however. The most notable difference was the way in which Fairfield was sold. At this point it should be recalled that the Bank of England had struck a deal with Lithgow for his NSS scheme to purchase Fairfield in the future should it be unable to repay its loan.<sup>642</sup> What actually transpired was that Lithgow privately enquired and then purchased the yard from the Bank for himself (although Kennedy was retained as the firm's chairman until 1937, when Lithgow paid him a sum of £5,000 to leave), rather than on behalf of the NSS.<sup>643</sup> Purchasing the shares cost Lithgow £245,000.<sup>644</sup>

Like his reorganisation and mothballing of the Palmer yard in 1934, there appears to be no obvious outward justification for Lithgow taking over another yard in 1935. After all, it flew in the face of the NSS scheme he devised to rationalise the industry through removing yards that were not financially viable – and Fairfield had proven for some years that it was not

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<sup>638</sup> Payne, *Colvilles*, pp. 209-13 & Murphy, 'Scott Lithgow', p. 63.

<sup>639</sup> Reid, *James Lithgow*, p. 169.

<sup>640</sup> Murphy, 'Scott Lithgow', p. 68.

<sup>641</sup> S. Diaper, 'The Sterling Combine and the shipbuilding industry: Merchant Banking and industrial finance in the 1920s' in J. Van Helten and Y. Cassis (eds.) *Capitalism in a Mature Economy: Financial Institutions, Capital Exports and British Industry, 1870-1939* (London: Edward Elgar, 1990), p. 87.

<sup>642</sup> See above, section 5.3.

<sup>643</sup> Norman to Duncan, 18 July 1932, BOE: SMT3/282.

<sup>644</sup> Minutes of Board – Fairfield, November 1935, GCC: UCS2/1. Lithgow took 24,580 shares at £10 each.

financially viable unless it received some Bank of England assistance. As a merchant or passenger shipbuilder, there remained more than ample capacity in surviving firms – the NSS continued to liquidate capacity of this kind until 1939.<sup>645</sup> In terms of warship and armament facilities Fairfield was an altogether different proposition, but once more there are logical inconsistencies. The NSS claimed in 1933 that more needed to be done to reduce berths in the warship and liner sectors<sup>646</sup>, yet, when the chance presented itself to do just that, Lithgow stepped in to preserve capacity instead. Moreover, Lithgow had no previous background in warship construction and had never (before 1933) shown any interest in acquiring any of the other struggling yards. Even in the second-half of 1935 there were very few other interested parties – and this supports the assertion that private industry did *not* expect the yard to profit from a large-scale rearmament in the near future – Lithgow was the only new entrant to the warshipbuilding sector in the years between Washington and the Second White Paper.<sup>647</sup> Moreover, it turned out to be a very good investment indeed: total profit in the decade after Lithgow took over was in the region of £1.5m, including money set aside for depreciation and contingencies. In the five years before he took over, it was £90,000.<sup>648</sup> Therefore, the justification his biographer has subsequently given for the purchase, namely that he did it out of concern for the workers and economy of Govan<sup>649</sup>, seems highly implausible on several levels.

Of course, the evidence is circumstantial. There can be no direct link made between his work with the PSOC and his purchase of Fairfield, save that the remaining justifications seem far more inconsistent with Lithgow's previous behaviour than the remaining alternatives. In this sense, it is impossible to say whether retaining Kennedy as the firm's spokesman and figurehead was a deliberate calculation to learn more about how an armaments manufacturer operated, imposed upon him, or even to deflect attention elsewhere. His purchase of Beardmore, however, strengthens the case that he at least utilised his inside information before

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<sup>645</sup> Slaven, *British Shipbuilding*, Table 4.9.

<sup>646</sup> Minutes, 16 December 1932, NMM: NSS. For an example of the notice sent to the warshipbuilders, see Lithgow to Scott, 23 January 1933, GUAS: GD320/2/10.

<sup>647</sup> See Appendix.

<sup>648</sup> Derived from Slaven, *British Shipbuilding*, p. 111.

<sup>649</sup> Reid, *James Lithgow*, pp. 171-2.

1936 in order to indirectly assist the PSOC and Supply Board by taking a personal involvement in the manufacture of naval armaments.

As already discussed, Lithgow was invited onto the board of Beardmore back in 1932 by Sir Andrew Duncan at the request of Montagu Norman.<sup>650</sup> By 1935, the Bank of England (via the Securities Management Trust) had pumped several hundred thousand pounds – again at Duncan’s suggestion – into the larger Beardmore company to avoid collapse, although the shipyard had brought back £200,000 of that in 1930 via its sale to the NSS. However, the remnants of the company, including a steel forge and engineering plant in Parkhead and Dalmuir respectively, were still a financial black-hole for the Bank. It was therefore desirable that instead of scrapping the plant, some form of rationalisation akin to what was being attempted in steel and through the NSS could be applied to what remained of Beardmore, and thus Lithgow’s experience and connections made him an ideal candidate for the Bank to install on the board. Lord Invernairn, the previous owner, had been moved on – but between 1932 and 1935 Lithgow, pre-occupied with the NSS and his other work, played only a minor role in company policy. During those years the man charged by the Bank with rescuing Beardmore was a German, Mr H.A. Reincke, who served as the chairman between 1930 and 1936.<sup>651</sup>

Like his sudden shift in thinking regarding the mothballing of Palmer and Hebburn, it appears that Lithgow sensed an opportunity to become more involved with Beardmore after 1935, and seized upon it. Between 1932 and 1934, Lithgow and Reincke appeared to have a perfectly normal functioning working relationship, but this deteriorated quite suddenly from 1935.<sup>652</sup> While the reasons for the deterioration are not absolutely clear, Lithgow, by his own admission, criticised Reincke’s running of the company to Norman and Duncan throughout 1935, and by the end of the year, refused to work under him any longer.<sup>653</sup> Lithgow retrospectively justified his cooperation before that point on Reincke being ‘the nominee of

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<sup>650</sup> See section 6.3.

<sup>651</sup> Hume and Moss, *Beardmore*, p. 215.

<sup>652</sup> Hume and Moss, *Beardmore*, p. 236.

<sup>653</sup> Lithgow’s admission comes in a personal memo penned in 1941 in advance of a court case brought by Reincke for wrongful dismissal from the company, which sought damages. Lithgow’s personal recollections remain, although the case was eventually settled out of court. The Beardmore archival collections however have retained these confidential letters, as well as notable correspondence between Lithgow, Invernairn and the Bank of England, and this correspondence sheds considerable light on the reasons behind the sale of Beardmore to Lithgow in early 1936.

my friend, Sir Andrew Duncan, who had confidence in him'. However, Lithgow became convinced that Reincke was not 'persona grata with the Heads of Government Departments and other large clients' and thus he 'formed an opinion on which [he had] consistently acted that any important negotiations had to be conducted by himself'. Furthermore, Lithgow intimated that he wanted to appoint a managing director to handle the London operations of both Fairfield and Beardmore in a 'more limited manner' than the previous two separate post-holders had, and did not think Reincke was up to that job.<sup>654</sup> Thus, when Lithgow got the chance to acquire the majority of shares in Beardmore from the Bank of England, he did so immediately, and Reincke was unceremoniously told to resign the chairmanship by Montagu Norman, so that Lithgow could take his place.<sup>655</sup>

Lithgow's actions, from getting more involved with the company to ousting Reincke, should be placed in the context of wider supply planning. As had been the case with Fairfield, Lithgow negotiated personally with Norman for the sale in the period at the end of 1935 before the second Defence White Paper was published. Norman had taken large holdings in Beardmore only, in his own words, 'reluctantly and under great pressure' to avert 'a catastrophe to the West of Scotland'.<sup>656</sup> Lithgow's offer to take Beardmore off his hands, as it were, was therefore readily and willingly received. In a letter to Norman, Lithgow stated that he was willing to 'infuse an active reconstruction and business-seeking policy' which could only be achieved 'under the guidance of one constantly on the spot, with both the incentive and steadying influence which such a financial stake in the concern ensures'.<sup>657</sup> This was the role Lithgow was willing to personally assume. However, in terms of finances, Lithgow stated that while he was willing to put £700,000-800,000 into Beardmore, he would only do so 'on the condition that for my hard cash I get undoubted security'. By this, he meant he was 'averse to purchasing stocks or shares of doubtful value even at what may be regarded as a low value today, since it may prove to be over-valued at a later date'. He was thus only interested in First-Mortgage Debenture Stock held by Norman and the Bank of England. Moreover, he demanded the Bank's interest certificates for a 'sufficiently heavy discount' so he could afford

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<sup>654</sup> Memorandum of R. v. L., 26 May 1941, GUAS: GD320/2/10/6.

<sup>655</sup> 'Minutes of Special Meetings of Directors of Beardmore, held at the Bank of England', 26 February 1936, GUAS: GD320/2/10/6.

<sup>656</sup> 'Minutes of Special Meetings of Directors of Beardmore, held at the Bank of England'.

<sup>657</sup> Lithgow to Norman, 15 February 1936, GUAS: GD320/2/10/6.

to forego first claim on shares or obligations and sweeten the deal to other shareholders. This, he believed, would mean he would be 'in the position of being interested in the equity in return for my efforts and services rather than in return for hard cash which I might have put up for a doubtful asset'.<sup>658</sup>

Nevertheless, Norman was more than happy to agree to these terms, for it appeared to solve a dilemma the Bank had been pondering for some time. Lithgow was thus given a discount of £6,000 on the First Mortgage Debenture Stock, and a £63,000 discount on the certificates held by the Bank of England. He was also provided with assistance to borrow up to £250,000 should the firm require it. All in all, Lithgow paid just over £785,000 for a very high degree of control of Beardmore<sup>659</sup> – certainly far more than he did for Fairfield, but, in the context of later rearmament orders, still a small sum.

In an attempt to smooth over those hostile to the takeover, Lithgow intended to invite the previous owner, Lord Invernairn, back onto the board. Invernairn retained some voting rights in the company, and his cooperation would thus have been a boost to Lithgow.<sup>660</sup> Invernairn, however, was furious with how the sale had been conducted. He wrote back to Lithgow claiming that the sale would never have happened had Lithgow not done so well out of Colville and the Steel Company of Scotland, and, most importantly, that he had attempted to buy Beardmore back too. He wrote that

...when I [Invernairn] desired to purchase these very same debentures that were held by the Bank of England, the Governor [Norman] virtually refused to consider the matter. You can appreciate my feeling on hearing that he has been willing to deal with you and actually disposed of them to you.<sup>661</sup>

In other words, Invernairn accused Lithgow – and with some basis in fact, it must be said – of getting preferential treatment to buy Beardmore over him through his prior connections with Montagu Norman. As such, he felt that he could only accept a position if some of the company's money was held by independent trustees who were jointly appointed.<sup>662</sup>

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<sup>658</sup> Lithgow to Norman, 15 February 1936.

<sup>659</sup> Norman to Lithgow, 21 February 1936, GUAS: GD320/2/10/6.

<sup>660</sup> Hume and Moss, *Beardmore*, p. 238.

<sup>661</sup> Invernairn to Lithgow, 4 April 1936, GUAS: GD320/2/10/6.

<sup>662</sup> Invernairn to Lithgow, 4 April 1936.



Lithgow denied Invernairn's version of events, and claimed he was only doing what was necessary to restore 'some measure of prosperity to the industry on which so much of the neighbourhood depends'.<sup>663</sup> Lithgow felt that to achieve this, he would need some 'elasticity in control' which he could not have if the trustees held financial interests in the company. Lithgow noted that he took on the role of leading Beardmore because he 'was moved by a sincere desire to assist the West of Scotland through helping to re-establish the prosperity of a concern whose name is a household word amongst us'.<sup>664</sup> He did, however, admit six weeks earlier that he could not expect that he would be widely credited with such 'publicly spirited motives' so it was for that reason he took the decision to link his financial fortunes with the fortunes of Beardmore.<sup>665</sup>

Again, like Fairfield, there is only a circumstantial link – but a very strong one – between the PSOC and his acquisition of Beardmore. It is, of course, also probable that the prosperity of the West of Scotland did indeed matter deeply to him, but perhaps not as much to put over million pounds of his own money up taking on two more firms with no guarantee of future prosperity. However, there is absolutely no doubt that Lithgow knew the potential value of Beardmore more than anyone else involved with the company – including Norman. For, during the discussions to purchase Beardmore, Lithgow sent Duncan material, marked 'secret' from the PSOC detailing Beardmore's potential role in the (then) deficiency programmes from 1935. The site investigation, carried out by the Director of Ordnance Factories for SCI, noted that the firm was 'in such a state of fluidity' that they could not accurately say what its future capacity would be. As a result, the report suggested omitting Beardmore from capacity calculations for the time being 'owing to the disposal of facilities either through financial stress or the sale of essential equipment'.<sup>666</sup>

This was a shrewd move on Lithgow's part. He was essentially raising the spectre of Beardmore having no future value and missing out on orders, and simultaneously offering to purchase the company from the Bank of England and 'save' it from Reincke. Lithgow thus told Duncan that he had intimated to Reincke back in July 1935 that

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<sup>663</sup> Lithgow to Invernairn, 7 April 1936, GUAS: GD320/2/10/6.

<sup>664</sup> Lithgow to Invernairn, 7 April 1936.

<sup>665</sup> Lithgow to Invernairn, 26 February 1936, GUAS: GD320/2/10/6.

<sup>666</sup> Lithgow to Duncan, 7 February 1936, GUAS: GD320/2/10/6.

...they should remove from the minds of the Government Departments any suggestion that their financial position precluded them from entering into Government contracts, and that on the contrary they should find out what the Departments really required...and put up equipment to meet such cases. I emphasised that I made that suggestion from inside knowledge of the developments which were taking place in the organisation of future armament supplies.<sup>667</sup>

Lithgow then told Duncan that the ‘chairman’ (although this could mean chairman of SCI, SCIII, Supply Board or PSOC) told him two weeks earlier that they could not source bullet-proof plate from Beardmore.<sup>668</sup> This extraordinarily frank admission of what Lithgow knew is revealing for several reasons, as it highlights (i) the relative lack of influence he had in Beardmore until that point, (ii) why he was persuaded to overthrow Reincke in 1935, (iii) that Reincke was not taking his claims of ‘inside information’ seriously, (iv) that he did indeed share a small amount of his PSOC work with close business colleagues and friends (and conversely, how little Duncan knew of armament supply organisation in 1936) and (v) that Lithgow was acutely aware of the value that Beardmore held, and would pay whatever was necessary to take control of it.

#### 8.5 Before Rearmament: Constraints, Indecision and Planning without a Plan

Lithgow’s accession to the helm of Beardmore occurred just two weeks before the Second White Paper. While this was contemporaneous with the debate on the future organisation of the CID (see below), it offers a convenient point to bring this chapter to a close and offer a retrospective on what may best be termed as the ‘DRC era’, as it has been punctuated by the three reports which helped shape rearmament as a policy and set the agenda for 1936 and beyond. As such, this was the period of ‘planning without spending’; where industrialists operated in tandem with civil servants and service personnel within the CID framework to think through the major problems, but without the tools to directly solve them. This phenomenon has been explained above as a natural response to the powerful political and economic constraints of the years of depression and disarmament, but in the DRC era, a number of other observations ought to be made.

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<sup>667</sup> Lithgow to Duncan, 7 February 1936.

<sup>668</sup> Lithgow to Duncan, 7 February 1936.

Firstly, it has been shown that the National Government continued to fear a backlash in public opinion, so that a fuller commitment to rearmament only gathered momentum after the National Government was re-elected – in other words in the short space of three months after the Abyssinian crisis and before the Second White Paper was published. Indeed, the idea that rearmament ‘began’ with the DRC’s formation in November 1933 is wide of the mark in two respects – in a supply planning sense this was two years after Manchuria had prompted the first proper reassessment of British naval defensive deficiencies since the war, and in a material sense it was more than two years *before* the Cabinet took the firm decision to begin an expedited and large programme of defence orders which parts of the CID had been arguing for, in one form or another, since 1932.

However, this is not to say that a great deal of supply and defence planning was not going on behind the scenes between 1932 and 1935 – and within this the DRC, CoS and PSOC – all played an important role in establishing the nature of British defensive deficiencies, including the crucial industrial constraint on the speed of any future rearmament programme. The problem was not with any of these bodies, with the Advisory Panel of Industrialists, or with the Supply Committees that operated beneath the PSOC and addressed specific issues. These groups, flaws and minor disagreements aside, planned more or less as effectively as their remit allowed, and successfully identified issues, highlighted bottlenecks, reached sensible compromises and sought out sources of supply. The problem was with Cabinet itself, which frequently listened to and agreed with the various conclusions, but did not act upon the recommendations. Although the National Government eventually came to fully accept the limitations of Britain’s capabilities and the nature of the threats it faced, there was no clear course mapped out until very late in 1935 (and even then, direct action was still some way off), which only occurred once Abyssinia hardened public opinion and the coalition was returned at the polls.

This problem was allowed to occur because the political issue of external threats and the industrial issue of supply deficiencies were treated as the same problem at Cabinet level, despite being handled separately by the PSOC and CoS within the CID. As a result, the goalposts continually moved: Because the threats could not be agreed upon, industrial weakness could not be rectified through even a modest programme of renewal to train and equip the core of private industry – which even by 1936 consisted primarily of the remnants of

the naval armaments manufacturers – for a broad range of future challenges. In many ways, this appears to be rather backwards logic: instead of preparing a flexible industrial base first as a precaution, industry, skills and materials were continually recast in light of the most dangerous enemy or combination of enemies. There was no desire to expand naval gun manufacturing capacity unless it could be agreed first that there would be a conflict which needed lots of new battleships. To this end, the planning and hypothesising going on within CID subcommittees, valuable as it was, was another way for members of Cabinet and government departments to bury their heads in the sand and delude themselves into thinking the problem was under control.

Not many can escape blame here: Chamberlain and the Treasury rejected the findings of DRC reports or sought to alter the conclusions to lower costs throughout of most of 1934 and 1935; the Foreign Secretary from 1931-5, Sir John Simon, was so fixated with enticing Germany back to the disarmament conference that he railed against any re-equipment programmes that might antagonise Hitler<sup>669</sup>, and both Prime Ministers MacDonald and Baldwin at various points fretted about the National Government's record at the polls and commitment to the various disarmament pacts.<sup>670</sup> These are not intended to be exhaustive examples, but they do highlight the factors that prevented a coherent policy to at least address industrial weaknesses, and it was these weaknesses that would eventually hinder the rearmament effort in later years. The false assumption was that the political constraints prohibited all progress, when it need not have. It was only when Weir recommended that the 'word of the man responsible for Supply must carry' that some of the red tape was cut. Moreover, had it not been for the earlier forethought of Lithgow – acting on thinly-veiled PSOC warnings – in mothballing rather than liquidating facilities, the industrial position might have been worse still.

The third point is that from a seapower perspective, the attempt by the DRC to take a holistic and rounded view of deficiencies through investigations into capacity, facilities and skills meant that the Admiralty probably received a better share of the increased programmes

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<sup>669</sup> D. Dutton, 'Simon and Eden at the Foreign Office, 1931-1935', *Review of International Studies*, 20 (I) (1994), p. 43.

<sup>670</sup> Robertson, 'The British General Election of 1935', p. 174.

than the naval threats at the time dictated. Credit should go to Maurice Hankey, who continually fought the Navy's corner, and it should be remembered that at a time when air power and aerial deterrents were the most publicly acceptable face of armaments, it was the Royal Navy that received the largest share of the budget. Significantly, the naval deterrent was subsequently articulated to the public through the White Papers not as aggressive and imperialist, but as the first and most vital line of defence. The nature of the CID's organisation helps explain why this was the case: bodies like the Supply Board and Advisory Panel spanned all three service departments, and as such were naturally inclined to favour compromises which would at least partially satisfy all service departments over decisions which would antagonise and damage relationships on the committees themselves. For this reason, as far as the composition of the DRC is concerned, it quickly became the three services (and Hankey) who stuck together against the representatives from the Treasury and Foreign Office. However, one should not overstate the successes here: Hankey and the CID might have helped secure a better settlement than the navy could have otherwise received, but for industry it was still less than it needed to rectify deficiencies in key bottlenecks.

Fourthly, from a business perspective, it is far from obvious or clear that private armaments manufacturers 'knew' anything at all about rearmament before March 1936: Beardmore's chairman failed to listen to genuine inside knowledge in July 1935, Fairfield's directors and shareholders sold up just months before major orders resumed, and aside from Invernairn trying to buy his former company back, there was little interest from anyone except Lithgow in taking on more shipbuilding capacity. This must highlight the continuing uncertainty that existed in the sector and the hand-to-mouth nature of business prior to the larger naval programmes in 1936, and the failings of the government to address problems which had been identified several years earlier. While the WSBC helped to stabilise the market, it also helped the National Government more than the WSBC members realised, for without the profits it returned, there may well have been far more firms that could not be included in supply estimates owing to the 'disposal of facilities through financial stress'. Even though the navy took the largest slice of the budget, industry remained on its knees.

Before 1936 the Admiralty was tied rigidly to treaty (and financial) limits, and as such had relatively few contracts available for the private yards to tender for. In this regard the relationship between the Admiralty and industry is most conspicuous by its absence. Not since

the destroyer rota ended some six years earlier had the two collaborated meaningfully. Neither side had any means to. It is also clear that the Bank of England's senior directors, including Duncan – someone formerly prominent in shipbuilding, iron and steel – held only a very limited knowledge of rearmament plans before the second White Paper, to the extent they were afforded only small glimpses of the organisation through snippets in Lithgow's letters. This is testament to the secrecy (Lithgow's tantalising leaks aside) of the CID machinery. In short, it says a great deal about the nature of the military-industrial relationship: for most parties, there was none to speak of. Most of industry knew nothing about the planning going on, and the Admiralty had no influence – CID defence hypotheses aside – to help industry out. This did not mean there were not external cartels (the WSBC) or insiders (Lithgow), of course.

Leading on from the above, the final point is that this period also represents another stage in the growing influence of civilian industrialists. If the advisory panel's first report seemed inconceivable during the Labour Government of 1929-31, then Lord Weir's accession to the DPR in 1935 was a new level entirely. By the time of the second White Paper he was no longer 'just' an advisor for one constituent part of the CID, he was an executive member of a panel with power over it, outranking the Chiefs of Staff and privy to information even the Cabinet had not seen. He was making recommendations that were forming the basis of the White Paper, and was trusted implicitly on all industrial matters. By way of contrast the private naval armaments industry, even in 1936, existed outside of the corridors of power, and worked together as an inherently defensive ring against market forces. It has been shown, however, that a few select civilians (albeit not yet with naval shipbuilding interests) were very much within those corridors. Lithgow's acquisitions in the weeks and months before the second White Paper however allowed for some significant crossover between the two for the first time, and occurred just as rearmament was clicking into gear.

## Part Five: The Inskip Era & War, 1936-41

### Chapter Nine: The Minister for Coordination of Defence & Early Rearmament, 1936-7

To be generous to the National Government's track record on defence policy between 1931 and 1935, the desire to keep publicity of deficiency and rearmament plans to a minimum was not wholly irrational for most of that period, even if the political and economic case for doing so progressively weakened from early 1934 to the extent it began to badly hamper efficient rearmament. A clear and mostly positive side-effect of this 'planning without spending' policy was the involvement of Weir, Lithgow and Balfour at an early stage, although this advantage could have been better used before rearmament by heeding some of the panel's warnings about skills, educational orders, and preserving a nexus of facilities. Of course, Lithgow used his involvement to take calculated risks for himself, but the net result was still the preservation of industrial capacity that might otherwise have been lost.

If one can provide good excuses for government inaction until 1935, it becomes harder from 1936. That year should, in theory, have been when planning and action finally came together, when much red tape was cut, and when industrial deficiencies were properly rectified, and when rearmament began in earnest. However, the National Government – following the second White Paper's publication – still took several more months to get a firm grip on rearmament policy, and made some inexplicable mistakes that negated much of the positive work in earlier years. This section is comprised of two chapters. This chapter sets out those failings and discusses the impact of them while the next (and final) the schemes that supply planners invented to circumvent the lack of progress.

#### 9.1 Appointment of Minister for Coordination of Defence & DPR developments

The National Government's first major step following the March announcement of rearmament was to appoint a new minister to oversee the increasingly complex and gargantuan CID organisation during the forthcoming phase of construction. Sir Thomas Inskip was installed in this position – as the newly-created 'Minister for Coordination of Defence' (MFCD), ten days after the White Paper was announced in parliament. In principle, this was a

sensible move, although it was at least a year too late. Moreover, Inskip's appointment was not a natural continuation of earlier defence policy, nor did the decision have especially deep roots in Cabinet debates or DRC reports over the nature of rearmament and deficiencies. Just as the content of the Second White Paper had only taken shape in the weeks preceding publication, the decision that a new minister was necessary was a similarly quick decision. While this was a welcome dose of action from the government, from the point of view of defence 'coordination' it would have been more advantageous to have appointed a minister much earlier, perhaps during the time of the first DRC report (or at least after the first White Paper) when the competing hypotheses of defensive priorities first came to the fore. Instead, while the second White Paper had outlined the rationale for a minister to oversee coordination, the genesis of the idea emerged out of a series of debates, in the media, in Commons and in private, just a few weeks prior to the new minister's eventual unveiling.<sup>671</sup>

The wider political context was that Baldwin and the government had been savaged by press and public since the end of 1935 for appearing militarily weak in the face of the Abyssinian crisis and the subsequent disastrous attempts to bring about an end to the hostilities.<sup>672</sup> At around the same time (January, 1936), there was a clamour in the press – led by former Chief of Air Staff Lord Trenchard – which argued that defence coordination was unsatisfactory, and the air force was being 'starved' of funds. Trenchard cited, both indirectly and directly, the failings of the CoS and Hankey in supply organisation.<sup>673</sup> Trenchard, though once a very senior RAF figure, had retired well before Manchuria and thus had little direct experience of developments since 1932, although he had in the early 1920s clashed with Hankey on CID matters. Indeed, his most recent public intervention was in the Manchurian debate, where he argued for aerial, rather than naval defences of Singapore, and had further

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<sup>671</sup> S. Greenwood, 'Caligula's Horse' Revisited: Sir Thomas Inskip as Minister for Coordination of Defence, 1936-9', *Journal of Strategic Studies*, 17 (I) (1994), p. 22.

<sup>672</sup> And in particular, the Hoare-Laval pact, the Foreign Secretary's (Samuel Hoare) secret agreement with the French PM, Pierre Laval in December 1935. The pact would have given Italy much control over Abyssinia, barring a small corridor connecting Abyssinia to the sea. When the agreement was leaked to the press, the reaction in Britain was one of moral outrage, and condemned the pact for selling-out to the Italians, abandoning the pro-League platform upon which the election was fought, and misleading the British people. Hoare resigned, and the government was deeply embarrassed.

<sup>673</sup> Roskill, *Hankey, Man of Secrets, Volume III 1931-63*, p. 202.



angered Hankey with his involvement.<sup>674</sup> Chamberlain, however, was not unsympathetic to Trenchard's views with regards to the primacy of air power, and harboured his own desire for some reform of the CID, and a return to the focus on cheaper aerial defences at home rather than a three-pronged rearmament across land, sea and air.<sup>675</sup> Biases aside, the clamour for an enquiry and overhaul of the CID's structure had nevertheless been loud enough to reach the House of Commons by mid-February, and it was at this point, three weeks before the publication of the White Paper, that the proposals for a MFCD took shape.

In the Commons, the criticism was specifically that the Chiefs of Staff were reaching agreements that were the 'aggregates of the three service plans', leading to less than ideal compromises instead of the best possible decisions.<sup>676</sup> Both Neville Chamberlain and his brother Austen were vocally critical of the situation, the latter attacking Baldwin's failure to oversee the organisation effectively. In the face of such criticism Baldwin was forced to admit that the other pressures of his role had meant he had not afforded as much time to the affairs of the CID as he would have liked. Thus, in order to satisfy both those who felt Britain remained defensively deficient and those who urged for reform of the CID, Baldwin suggested that there might be a minister who could concentrate wholly on the CID, and report upwards to the PM, particularly for the purposes of getting the 'best out of the committee'.<sup>677</sup>

In the event, the characterisation of the CID reaching compromises was not actually far from the truth, although it was certainly nothing new: the CID's subcommittees had been compromising over competing demands for years before 1935 – even when the compromises, like the demands, were merely hypothetical. Moreover, having another minister in Cabinet to be another mouthpiece for the CID may even have been desirable, at least if it helped push the agenda for overcoming the anticipated supply bottlenecks which had been not been acted upon. However, this aside, criticism of this kind from both Chamberlains was both misplaced and unfair. Given the competition for the same pool of (finite) resources, one could speculate as to the potential state of British defences had the CID's supply committees been completely bogged-down in inter-departmental rivalry rather than reaching mutually satisfactory

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<sup>674</sup> J. Naylor, *A Man and an Institution: Sir Maurice Hankey, the Cabinet Secretariat and the Custody of Cabinet Secrecy* (Cambridge: Cambridge University Press, 1984), p. 130.

<sup>675</sup> Greenwood, 'Caligula's Horse', p. 20.

<sup>676</sup> Greenwood, 'Caligula's Horse', pp. 20-1.

<sup>677</sup> 'Cabinet Conclusions', CC 7(36), 17 Feb 1936, TNA: CAB23/83/7.

outcomes. Indeed, in terms of greasing the wheels of supply organisation, such ability to compromise with relatively few stalemates, was, with hindsight, something to be lauded. The Cabinet and Neville Chamberlain's own Treasury could certainly have learned something from the CoS and PSOC's ability to reach agreements, for it was the indecision and lack of agreed policy at the top level that was holding up the work of the CID and its subordinate bodies, not the other way around.

Not surprisingly though, Hankey and the Chiefs of Staff resisted any external attempts to meddle with the CID structure, and sought to limit the power of any incoming minister over CID affairs. Hankey sought to avoid the distraction of the external review and more serious overhaul which Neville Chamberlain desired, and thus offered two options: that the CID accept a minister who would act as a deputy to the PM and would chair the meetings of the DPR in the absence of Baldwin, or Hankey would resign. This offer allowed Baldwin, and the Cabinet, to head off outside criticism that nothing was being done to smooth out the CID's decision-making process without, in Hankey's words, 'upsetting the psychology of the whole machine', while also avoiding a bitter dispute with Hankey and the Chiefs of Staff.<sup>678</sup> Somewhat ironically, then, the organisation that supposedly compromised too much managed to get Baldwin and the Cabinet to agree to a compromise for the new minister, and kept the mechanism for formulating defence hypotheses and organising supply largely unchanged.

Matters then progressed very quickly indeed. Within four weeks of these discussions, the White Paper had been published and Sir Thomas Inskip had been appointed to the new ministerial role. The short lead-in time explains the nature of the appointment. A lawyer by training, Inskip had none of the background in defence that would have ordinarily marked him out for such a role, but he was – again ironically – known for his conciliatory approach to disputes and willingness to take advice from others.<sup>679</sup> Moreover, he had no inherent connections with or biases towards any of the Service Departments, and, as Gibbs and others have put it, was never likely to interfere in the normal workings of the committee.<sup>680</sup> He has, as a result, also been characterised as 'pedestrian' and 'uninspiring' in his role as MFCD, but he could equally be viewed as a man unlikely to upset the applecart and thus be unlikely to

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<sup>678</sup> Hankey to Fisher, 14 Feb 1936, TNA: CAB21/424.

<sup>679</sup> Greenwood, 'Caligula's Horse', p. 19.

<sup>680</sup> Gibbs, *Grand Strategy*, p. 276-7.

increase the PM's workload at an already critical time. If Austen Chamberlain wanted a man of action to make the right decisions, rather than just those mutually agreed upon, then Inskip was from the outset the polar opposite of that minister. He was nevertheless in a position of some considerable power in terms of the day-to-day running of important subcommittees, and the Chiefs of Staff, Hankey, and Lord Weir, would all have to work closely with him.

In sum, it is hard to escape the conclusion that Inskip was a knee-jerk reaction, that he was unlikely to be the man to drastically speed up the rearmament process, and that if Baldwin was fully committed to the best possible coordination of supply and defence policy in February 1936, Inskip's appointment would not have been handled in the manner that it was. Moreover, Hankey must receive a portion of the criticism here, too. What the rearmament drive needed was action, yet Hankey perceived the new minister as a threat to his organisation and resisted change, and instead ended up missing an opportunity to push the CID's agenda in Cabinet.

#### 9.2 DPR, Advisory Panel Developments and Lithgow's business interests, 1936

With rearmament now in the public sphere and with a minister, at least notionally, appointed to head the rearmament drive, 1936 was comparatively uneventful, in terms of the PSOC and the supply subcommittees. While the previous years had been characterised by much planning in secret based on loose and ever-shifting hypotheses with relatively little spending, the task from April 1936 onwards was much clearer and centred upon how to implement the recommendations of the third DRC report and content of the Second White Paper. In naval terms, this meant building the DRC's 'standard fleet', although the new battleships could not be laid down until the expiration of the London and Washington Treaty limits at the end of December.

In industrial terms, the operation of treaty limits enforced a period of waiting, which meant there was relatively little new construction of larger vessels in 1936, excepting five cruisers already being built to the previous *Town*-class design under the treaty. A further fifteen *Tribal*-class destroyers – ordered one week after the publication of the second White Paper – helped pick up the slack.<sup>681</sup> Most notably however, was that of these twenty ships, just one

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<sup>681</sup> Peebles, *Warshipbuilding*, p. 148.

was placed in the Royal Dockyards, with the other nineteen going to members of the WSBC, providing the single greatest boost to private industry since Washington. In fairness, this was not entirely a political decision, since the remaining Royal Dockyards were engaged in modernisation work on old ships, but it was, nevertheless, without precedent in the period since 1922.<sup>682</sup> Moreover, the differences between men like Weir and Lithgow, who knew about the capacity bottlenecks and the likely scale of future rearmament, and the rest of private industry had in some senses been diminished from 1936, as future requirements were now public knowledge. Consequently, as the private naval arms industry were now able to prepare more securely on the basis of a steady flow orders in the medium-term, the incentive for further WSBC collaboration remained high, for in 1936 it remained unclear for how long any prosperity would last.

Of course, Weir, Lithgow and Balfour were still advisers to and members of the PSOC, and by summer 1936 Weir in particular was playing a prominent role in the DPR committee. His recommendations in January had been turned directly into content in the second White Paper, and his task in the intervening months had been to further consider the question of industrial organisation, based on a report he circulated in January.<sup>683</sup> To this end, he produced further reports in April and May, and contributed fully to the discussions in the DPR. The National Government's guiding principle for rearmament generally was that the 'normal' business activity of the country should not be severely disrupted where possible or where rearmament should impair the economic health of the country.<sup>684</sup> However, in this regard, Weir expressed his concern that the rearmament programme could not be completed in the five year timeframe, and that the 'most serious bottleneck was the shortage of skilled labour' which would be exacerbated by the demands on 'articles of a precision character' such as naval guns and gun mountings. He submitted to the DPR a brief resume of the situation for the industries affected by the White Paper (see Table 9.1, below), to illustrate the scale of the industrial problem with regards to the lack of labour to fulfil the necessary expansion of orders.

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<sup>682</sup> Peebles, *Warshipbuilding*, p. 139.

<sup>683</sup> 'Memorandum by Lord Weir on Industrial Production' DPR(DR)9, 28 May 1936, CCC: WEIR17.

<sup>684</sup> Gibbs, *Grand Strategy*, pp. 301-2.

**Table 9.1: Lord Weir's assessment of industrial capacity, 1936**

<b>Section of industry</b>	<b>Current activity</b>
'Bread and Butter' Steel	At record output and order books
Alloy Steel	Very busy
Forging and Stamping	Very busy
Machine Tools	Output limited by labour shortage
Electrical Engineering	Very busy
Automobile Industry	Running at record output
Airframe Industry	Full capacity and expanding on large scale
Aero-Engine Industry	Not yet fully stretched as a whole
Heavy general engineering	Still has a margin
Light general engineering	Busy
Textile Machinery	Still has a margin
Marine	Most of the best facilities well employed
Auxiliary Machinery	Generally full order books
Shipbuilding	Few empty slips, nearing limit for skilled labour
Railway Shops	Busy
Locomotive Shops	Still a large margin
Chemical Engineering	Fairly busy

Source: 'Minutes of meeting held on 13<sup>th</sup> March, 1936', DPR(DR) 2<sup>nd</sup> Mtg. CCC: WEIR17, pp. 8-9.

Weir went on to detail the barriers to solving the labour question, namely the issue of dilution of individual tasks or the time-lag between taking apprentices on and them becoming highly skilled employees in their own right. These problems were not new, as has already been discussed above, but clearly little progress had been made since the individual Supply Committees began thinking about them well over a year earlier. Only once orders had been placed were apprentices taken on – despite years of planning, the private naval armaments industry was scarcely better prepared than it was immediately after Manchuria. The problem, simply put, was that more could and should have been done before orders were placed to strengthen the industrial base that future rearmament was built on. Instead, the National Government chose not to interfere.

This was still not fully grasped at DPR level. Although the decision to invite Weir into the DPR was certainly a positive step for the organisation of supply for it put those with executive decision making power into close contact with someone who genuinely understood industry, the problem was that its members did not yet fully understand the issues that the PSOC had been articulating for several years. The committee merely reiterated that it would be ‘very bad policy to buy finished munitions from abroad’, while also expressing their reluctance to adopt the ‘semi-war’ conditions that Weir believed would be necessary to organise industry most effectively. Most telling, however, was not the opinions of the Prime Minister or the Chancellor or any other individual on the committee, but rather the basic nature of Weir’s explanations, for they indicate an almost complete lack of supply understanding within the DPR. Baldwin asked if it was possible to calculate the productive capacity of the country, for ‘the committee had little knowledge’ of it, while Weir explained to others – including Ramsay MacDonald – that simply finding more skilled men was not as simple as it was being made out, and that ‘these questions could well be dealt with by existing organisations who were working well and whose procedure should not be disturbed.’<sup>685</sup>

As Weir suggested, these were not topics that Supply Committee members would have struggled with in spring 1936. His outline of the remaining capacity in industry was nearly identical to discussions held in the Supply Board some months before, so it is possible or even probable that the DPR could have found out the same information had its members looked for it – instead they relied on Weir to furnish them with basic information that the PSOC already had. In terms of optical glass (used for Admiralty rangefinders and army and RAF gun sights), the DPR, amusingly, debated in late March and April 1936 whether it would be a good idea for Inskip to investigate capacity in the private industry, since it was likely that ‘large expansion of production was a necessity’.<sup>686</sup> This was several years after the same question had been considered, and firms investigated, by the individual Supply Committees.

This was not an isolated example. In later meetings Weir reported that he was ‘preparing a paper based on his discussions with the PSOC...which would be ready for circulation at the next meeting’. By May, he still had to point out that ‘there was no effective reserve of fully

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<sup>685</sup> Minutes of meeting, 13 March 1936, DPR(DR) 2<sup>nd</sup> Mtg. CCC: WEIR17. Quotations from pp. 8-9

<sup>686</sup> ‘Record of meeting held’, ID/G/167, 26 March 1936, CCC: WEIR17.

trained men that the services could draw upon'.<sup>687</sup> Thus, rather than drawing immediately upon the wealth of information that the PSOC had collected, the DPR spent a significant part of the first year of their existence feeling its way into problems which had already been identified elsewhere in the CID. In fairness, this was not a permanent failing of the new top-level committee – things certainly improved from 1937 – and in some cases the information the Supply Committees had collected with regards to capacity had been somewhat overtaken by subsequent events, and were now out of date. Furthermore, as already illustrated above, the SCs themselves had first raised the labour issue in 1929, but took until 1935 to properly examine and understand it.

The fundamental point is that examples of the DPR working effectively to gain information from the subordinate bodies of the CID and then *act upon them* are largely conspicuous by their absence across 1936 – so as far as naval manufacture is concerned, it was another opportunity missed and more time wasted to prepare the industry for the rearmament drive ahead. Weir was undoubtedly central in informing the DPR members of the nature of industrial problems, but whether they needed him to play this role and could not have given themselves a primer from information collected by the existing framework, is another matter.

The appointment of a Minister, the formation of the DPR and the appointment of Weir to it changed the dynamic of the Supply Board and therefore the role of the Advisory Panel. Since late 1935 it had been Weir who was first asked to produce reports that would be read at the top-level of the CID, while two years earlier a similar request would have been handled by Weir, Lithgow and Balfour (now Lord Riverdale), in conjunction with the Supply Board or PSOC. Thus, rather than a bottom-up approach, whereby the committees handling complex questions turned to industrialists for advice and subsequently took these recommendations upwards for ministerial approval, the formation of the DPR comprising ministers at best occasionally streamlined tasks but at worst lost time and momentum while duplicating the processes already in place. Unlike the PSOC however, the DPR had real power to act and act quickly, but this advantage could arguably have been better utilised in industrial matters had those with experience been given power to act earlier rather than through forming a new top-

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<sup>687</sup> Both quotations from 'Minutes of 20<sup>th</sup> Meeting of DPR', DPR/20<sup>th</sup> Mtg., 7 May 1936, CCC: WEIR17.

level committee with little prior knowledge, essentially relying on Weir to be the PSOC's spokesperson.

Weir was emerging as Britain's pre-eminent industrial authority within the Government. The power the DPR held to make decisions, coupled with his role as a full voting member and undoubted expertise worked to his advantage when compared with his earlier advisory roles. For instance, when he suggested names of firms and individuals to chair a panel to help organise the steel industry, his recommendations were immediately implemented in full. Interestingly, his choice of chair for that committee was none other than Sir Andrew Duncan, another close contact of Weir, Lithgow and Balfour.<sup>688</sup> This was the kind of authority that the Supply Committees – and indeed his colleagues on the Advisory Panel, had sorely lacked in the preceding years.

As an interesting footnote to the emerging supply organisation, there was one member of the framework that never believed Duncan and Weir to be quite as distinguished and deserving of praise as Brown, Inskip, Hankey and a great number of CID members clearly believed them to be. Brown's assistant, the senior civil servant Sir George Turner, worked for the War Office from late 1936, and his diaries and notes – initially kept to allow him to write his memoirs<sup>689</sup> – offer a rare glimpse into the personal remarks and recollections which were often omitted from correspondence. He believed Weir to be a

Peculiar influence...he is treated like a master by those who attend the DPR committee. He sends for them. When he says turn they all turn. Why? I expressed the opinion that he didn't know much about how to build an ammonia plant. The answer [from Brown] was "he is a director of Imperial Chemical Industries". His sole contribution on the ammonia question has been to press for ICI to be given the contract regardless of the existence of a lower offer.<sup>690</sup>

In Turner's eyes, it was 'doubtful whether Weir's influence was as positive as his friends tried to make people believe'. He was not just an advisor he was an 'interferer'. The 'danger' with

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<sup>688</sup> 'Preliminary List of Sections of Industry with which early contact should be made', DPR(DR)9, 28 May 1936, CCC: WEIR17, p. 13.

<sup>689</sup> Turner's diaries are kept in the Turner Brown papers in King's College London. The diaries pertain almost exclusively to the war, but there are a number of pages not in diary form relating to the time from October 1936 onwards, which appear to be recollections. As the concluding section shows, these were almost certainly clouded by his later experience of the Ministry of Defence and the war, but it is clear that Turner had rather less respect for Lord Weir, Sir James Lithgow and Sir Andrew Duncan than Brown had.

<sup>690</sup> 'Other items not in diary form', Turner Brown Papers, BLH:TB Box 7.



Weir was that ‘his reputation and his manner persuaded most people that he could never be talking arrant nonsense so it was not recognised as such at the time’. Perhaps not surprisingly, Turner believed Weir’s influence over Sir Andrew Duncan to be enormous, and that Weir had an acute weakness for ‘jobbery’ – that is, selecting his friends for jobs ‘ten times too big for them’. Duncan received a similar treatment, and was described as being ‘mesmerised by Weir’, and ‘tried to be his own managing director’ by treating his government work ‘like big business’.<sup>691</sup>

Although Turner admitted Weir clearly had experience, his damning assessment of Weir and Duncan – of which more followed during the war itself<sup>692</sup> – offers another side to the development of industrial influence within the state, namely that these ‘experts’ were not opened up to the same scrutiny as other voices, precisely *because* they were presumed to be authorities in their respective fields. From the discussion above, it is at the very least plausible – given the lack of expertise in the DPR – that Weir held the greatest influence by virtue of his supposed status. It has been argued here that, generally speaking, industrial advisers were a useful aspect of the CID organisation throughout disarmament and rearmament. However, as Turner’s assessment should illustrate, it does not mean that civilian businessmen lost interest in business. They sought out allies, diversified their interests when it suited to do so, found ways to solve problems that paid their own firms and interests dividends, and were not afraid to use their status to work the market for government contracts to their own ends. Duncan, Weir and Lithgow undoubtedly helped preserve supply capacity and organise new streams for the benefit of Britain, but, like Lithgow with the NSS and Fairfield or Beardmore, they did not miss the opportunity to consolidate their own position – financially and politically – when the chance presented itself.

The Supply Committees spent a significant part of 1936 and afterwards working on several important topics, but the linkages with the DPR, notionally the top of the organisational pyramid, were not well developed. In general, the main tasks undertaken by the Supply Board and Supply Committees between 1936 and 1939 were i) a continuation of the investigations into armaments capacity and facilities, ii) skilled labour, iii) utilising mercantile

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<sup>691</sup> All quotations from ‘Other items not in diary form’, Turner Brown Papers, BLH:TB Box 7.

<sup>692</sup> See 10.3, below.

capacity to reduce pressure on naval manufacturers and iv) prices and profits.<sup>693</sup> These were all obviously of great significance to the industrial effort, but the problem remained the same: those at the cutting edge of investigations had no power, and those with power were not at the cutting edge – with Weir as the one notable exception. This was not lost on those in the Supply Committees; in October 1936 the chair of SCIII, Sir Harold Brown, left his post and moved to a position in the War Office – despite holding a naval background – and soon stopped consulting with the advisory committee structure altogether.<sup>694</sup> Interestingly, the man behind the move appears once more to have been Lord Weir, who personally recommended Brown to the DPR.<sup>695</sup>

As a result, Lithgow, in contrast to Weir, was becoming markedly less interested in CID affairs and far more interested in running his own firms (at this point Lithgow, Beardmore and Fairfield). Weir, in a move that appears indicative not only of his own role but also of the lack of forethought in the Inskip appointment, had first written to Balfour and Lithgow some two weeks in advance of the second White Paper's publication warning of 'a fundamental change in the organisation of which [the Advisory Panel] was an appendage, and suggesting a meeting to discuss it.'<sup>696</sup> He was referring to the debate about whether to appoint a minister to oversee, and perhaps even overhaul, the CID. Thus, it is clear that Weir – through his DPR connections – was rather closer to Cabinet thinking at this point than both of his counterparts, but also that the Inskip decision came more or less out of the blue, and that he felt compelled to keep his fellow advisers abreast of any changes. This, at least in part, fits with Turner's assessment of industry figures within government.

The changing situation within the CID prompted Lithgow to confess to Weir that he now felt the whole committee structure was a 'farce', and considered resigning from it.<sup>697</sup> In truth, only part of Lithgow's chagrin was down to his marginalised position on the Advisory Panel; as he was also attempting to demonstrate to Inskip and the National Government – through his CID connections – that vacant Beardmore plant at Dalmuir (constituting the dismantled

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<sup>693</sup> See, for example, '50<sup>th</sup> Meeting of the Supply Board', PSO(SB) 50<sup>th</sup> Mtg, 22 July 1936 and 'Ninth Annual Report of Supply Committee III', PSO(SB)596 for examples of ongoing work. TNA: CAB60/32.

<sup>694</sup> See section 10.1, below.

<sup>695</sup> Reader, *The Weir Group*, p. 129.

<sup>696</sup> Lithgow to Weir (citing Weir's earlier letter – not preserved), 22 February 1936, GUAS: DC96/21/4.

<sup>697</sup> Lithgow to Weir, 22 February 1936, GUAS: DC96/21/9.

shipyard which the NSS owned and the remaining marine engineering plant) would be an ideal location for expanding armaments production (particularly for supplementing the Woolwich Arsenal, but also for diesel engines and tanks) providing of course there was some state assistance with re-equipping costs.<sup>698</sup> Knowing his friend's influence, he had written to Weir outlining his case several times in the weeks after taking full control of Beardmore, and bolstered his plans with a site survey provided by the NSS's valuer, John Barr. Knowing that the major Admiralty programmes were perhaps a year away, Lithgow was undoubtedly keen to find out what the other service departments needed in the long term so any re-equipping of the idle yard could begin as soon as possible. On this matter, Lithgow was finding it difficult to get firm answers from anyone; Inskip and the service departments were non-committal, and Weir could say no more than 'from all he could learn', the '[naval] gun programme would keep Beardmore very busy'. Weir's best advice was merely that Lithgow should 'keep in closest touch with the [Master General of the Ordnance] and the Admiralty'.<sup>699</sup>

Lithgow's frustration was not without foundation. Rearmament, of a limited sort, had begun in spring and summer, but comparatively little was achieved in the six months after the publication of the White Paper. It was late 1936 before the RAF's rearmament gathered any momentum – 'Scheme F', the programme under which air rearmament was known until 1938, was only fully conceptualised in February 1936, after the new Air Secretary, Lord Swinton, was appointed.<sup>700</sup> By summer, the Air Minister was already considering whether or not to abandon the scheme and focus on developing new types of aircraft instead.<sup>701</sup> The Army fared little better: political will for sending a force abroad was fragile, and within a few months of the White Paper, the whole question of whether the Army should be ordering large quantities of tanks and artillery based on the principle of a continental commitment was re-opened, and stalled all progress.<sup>702</sup>

Lithgow eventually lost patience with the lack of progress in the autumn months of 1936. He wrote first to Weir, and then to Inskip, to vent his anger. After one meeting with Inskip at Weir's house in November, Lithgow formed the opinion that there was 'no real long view

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<sup>698</sup> Lithgow to Weir, 2 March, 6 March, 11 March, 26 March 1936, GUAS: DC96/21/9.

<sup>699</sup> Weir to Lithgow, 27 March 1936, GUAS: DC96/21/4.

<sup>700</sup> Postan, *British War Production*, p. 16.

<sup>701</sup> Gibbs, *Grand Strategy*, p. 303.

<sup>702</sup> Postan, *British War Production*, pp. 28-9

planning being effectively considered’ and that he could not begin training staff because it was ‘perfectly obvious that little or nothing is done...until every ‘i’ is dotted and ‘t’ is stroked in the specifications for individual requirements’. He reserved particular fury for the PSOC, noting that he had not even read the latest annual report until after it was produced and circulated, and that while the report claimed that ‘contact had been maintained with the Advisory Panel of Industrialists’ it was clearly the case that ‘You [Weir] have been taken fully into the confidence of the fighting services, while so far as I am concerned the contact referred to is just a farce’. At this point, he once more threatened to resign.<sup>703</sup>

Attempting to draw a line under the problem, at this point Inskip made clear to Lithgow the ‘debt which ministers owed for [him] giving so much help’.<sup>704</sup> Lithgow was still clearly angry that Beardmore’s Dalmuir site was not ‘receiving the consideration it ought to receive’, and threatened that without assistance the directors of the company would decide to ‘dispose of the plant piecemeal’. While he ‘appreciated the difficulties which considerations of speed placed upon [Inskip] in regard of the wider questions of policy’, he still believed the plant would be ‘broken up against the national interests’ if the government did not act.<sup>705</sup> Weir then told Inskip that he would ‘do his best to practise the art of lion taming’ with regard to Lithgow, and by the conclusion of 1936 Lithgow and Inskip appear to have resolved – if only in part – their differences.<sup>706</sup>

Lithgow did, however, claim to Inskip that he had ‘no financial interest in Beardmore apart from having the responsibility of being Chairman’, for it was the Treasury who held the stocks and shares, and were therefore ‘much more directly interested’ than he was in the future of the company.<sup>707</sup> This was a blatant misrepresentation of the truth, for while the NSS owned the Dalmuir site, Lithgow was clearly conceptualising the sites as part of the same firm.<sup>708</sup> It is therefore hard to find an alternate explanation other than that Lithgow was attempting to

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<sup>703</sup> All quotations from Lithgow to Weir, 10 December 1936, GUAS: DC96/21/4.

<sup>704</sup> Inskip to Lithgow, 9 November 1936, GUAS: DC96/21/4 (Note: The correspondence between Lithgow and Inskip was forwarded by Inskip to Weir, hence why it appears in his papers, not Lithgow’s [DC35/31]).

<sup>705</sup> Lithgow to Inskip, 17 November 1936, GUAS: DC96/21/4.

<sup>706</sup> Weir to Inskip, 17 December 1936, GUAS: DC 96/21/4.

<sup>707</sup> Lithgow to Inskip, 17 November 1936.

<sup>708</sup> Hume and Moss, *Beardmore*, p. 238. Indeed earlier in the letter to Inskip Lithgow even referred to ‘his colleagues on the Board’.

mislead Inskip into believing the Treasury's own interests were tied up with Dalmuir being re-equipped to receive future rearmament orders.

Furthermore, it was not the case that the remaining Beardmore plant in Parkhead was to be idle. Entirely separately from Lithgow's discussions with Inskip and Weir, the Admiralty had indicated in the summer that Beardmore should double its capacity for armour plate to 9,000 tons (as part of an expansion of the 1934 scheme for the three major armour manufacturers to agree to preserve capacity), and the costs of re-equipping were agreed to be met by the Treasury. In addition, the howitzer plant and steel foundries were re-opened, while work on the enlargement of the armour plant began in October, all at a cost to the Treasury of £143,580 by the end of 1936.<sup>709</sup> All in all, by December, Beardmore was doing rather well, and significantly better than it was twelve months earlier, before Lithgow assumed control.

In sum, while the relationship between one expert advisor and the man hastily appointed to oversee the coordination of defence was frosty, the larger problem was that the beginning of rearmament had muddied the waters of supply organisation significantly. The problem in 1934 and 1935 was that the top echelons of the National Government did not pay enough attention to the recommendations of the PSOC and its subordinates. In 1936, the problem was that they concentrated too much on the DPR. Weir's influence had grown to make him one of the DPR's central pillars, but Inskip and the rest of the committee were hastily learning the ropes and asking questions which had in most cases already been asked while the PSOC and Advisory Panel were marginalised within the new structure. Expert advice, Weir's aside, was poorly utilised between March and December 1936. Given the protracted length of time taken to reach the stage of the White Paper and the enormous planning effort undertaken since Manchuria, this is baffling.

### 9.3 The Royal Commission on the Private Manufacture of Arms

In October 1936, the Royal Commission on the Private Manufacture of Armaments (RCPMA) published its report on the nature of profits in the arms industries. On one hand therefore the RCPMA was a highly significant event; it was an investigation into the supposed 'evils' of the armaments industry, which by its very nature, was a threat to working of the

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<sup>709</sup> Hume and Moss, *Beardmore*, p. 238.

WSBC or, worse still, capable of derailing or hampering defence and supply planning at a critical point of rearmament. On the other, one must be careful of attaching too much importance to it; the RCMPA was first devised in late 1934 in response to what *The Times* then called ‘genuine [public] sentiment of revulsion’ against profit in arms<sup>710</sup>, but by the time it was ready to report nearly two years later the report was, in many ways, a relic of a bygone era of strong public pacifism. In terms of private naval manufacture and supply planning, the answer is very much that the RCPMA did not derail, or even particularly adversely affect, the internal workings of the CID or the cartel-like nature of the WSBC. However at this juncture a brief overview of why the commission failed to upset the applecart and why the National Government and private manufacture emerged unscathed from the episode is necessary, for it reveals more about the resilience of both characters within the CID, and the nature of the political mind-set in Britain.

The RCMPA was, in essence, the National Government’s public acceptance of the weight of public sentiment towards disarmament in 1934. Little more needs to be said than this – as these sentiments have already been covered above, and to do so would only be re-covering old territory – save for that it should be viewed as another by-product of the constraints the government believed it faced, along with the rather limited first White Paper on Defence (1935), and the private concern Baldwin, MacDonald and others held over the results of the by-elections and ‘peace ballot’ of the time. It also followed a similar enquiry in the United States, which had, indirectly, implicated Vickers and ICI in the misbehaviour of American firms seeking to bribe foreign customers into placing orders in the era of the Great War.<sup>711</sup> In this sense, the calls for an enquiry were fuelled by historical allegations of wrongdoing, and not, necessarily, by the current practice of armaments manufacturers during disarmament. Thus, the commission was an anachronism almost as soon as the first private hearings took place post-White paper in May 1935, let alone at the point, almost eighteen months later, when the report was published.

The commissioners themselves – lawyers, correspondents and a businessman – were not experts in defence policy, but were intelligent, sensible, well-meaning and quite willing to

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<sup>710</sup> Anderson, ‘Merchants of Death’, p. 12.

<sup>711</sup> Coulter, *The Senate Munitions Enquiry*, p. 3.

listen to the concerns of the wider populace.<sup>712</sup> Fundamentally however, there were two major flaws. The first is that the RCMPA understood private manufacture through the lens of the Great War, where claims that private profit had a hand in the origins and duration of conflict, could be tested. The second is that the evidence ‘against’ private manufacture was always anecdotal, patchy and indirect, and it was especially this that fatally undermined the case for greater regulation. For instance, a group of church leaders signed a memorandum calling profits in arms ‘repugnant’, stating they ‘encouraged war’ and advocated a transfer to ‘public authority’, but cited no specifics<sup>713</sup>, while Lord Cecil’s opinion was that the ‘public wanted the industry in public hands’ but admitted he could not ‘profess to offer direct evidence of the evils of the question’.<sup>714</sup> The Labour Politician, William Arnold-Foster, admitted his case was not based upon evidence of wrongdoing, but rather simple common sense, while the Communist Harry Pollitt performed better, and showed that Britain’s private armaments makers had sold weapons to both China and Japan (belligerents in the 1931 Manchurian crisis). Beyond this however, none could not pin these facts to the argument that private firms deliberately conspired to create conflict for their own gain.<sup>715</sup>

This was typical of the case against private manufacture, that argued that it was logical and intuitive that industry needed war to survive, and perhaps even did survive through the sale of weapons abroad, but provided no solid evidence that private profit *led to* war. Instead, the best it could do was to prove the reverse was true. Potentially far more serious, however, was the testimony of David Lloyd George, former Prime Minister, War Secretary and Minister of Munitions. Testifying in May 1936 after the publication of the second White Paper Lloyd George had experienced first-hand the organisation of private arms manufacturers during the Great War. His opinion was that private firms could not be relied on to meet the country’s needs in times of emergency, had failed to cope with demand during the last war, and only nationalisation could provide a platform that would meet the essential needs of Britain during a major conflict.<sup>716</sup>

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<sup>712</sup> Anderson, ‘Merchants of Death’, p. 14.

<sup>713</sup> Anderson, ‘Merchants of Death’, p. 15.

<sup>714</sup> Anderson, ‘Merchants of Death’, p. 17.

<sup>715</sup> Anderson, ‘Merchants of Death’, p. 16.

<sup>716</sup> Anderson, ‘Merchants of Death’, p. 19.

This was compounded by less-than-stellar performances in 1936 from the ‘defence’, i.e. the representatives of the private manufacturers themselves. Vickers’ chairman, the 75-year old Herbert Lawrence, appeared almost dangerously unhinged when he railed against a ‘pacifist prejudice’ and admitted that Vickers may well go out of business if disarmament and peace were to prevail indefinitely. Lawrence, of course, had little background in wartime supply – he was in his mid-60s when he joined the firm after a career in finance in the 1920s – but in a position of considerable authority, he perhaps did more for the making the case for the other side than they did for themselves.

Charles Craven – Vickers’ managing director – struggled to explain a leaked letter which appeared to show Vickers hiding royalty agreements from the Admiralty. It was at this point that Craven apparently chose to disclose to the committee via an appendix to written evidence submitted, the existence of the WSBC, and that it had, in fact, been regulating workloads and prices (although no explanation survives for why he did so).<sup>717</sup> This much is at least present in the surviving WSBC papers. From this, it is probable that Craven was fearful of the repercussions if such a revelation came out during heated questioning, and instead attempted to supply an explanation for the motivations behind the WSBC’s formation – which were given as preservation, rather than profit. Astonishingly however, there was no further reference or comment by defendants, the commissioners, or indeed the final report on this startling admission. Moreover, the appendix was never published. It is possible that the commissioners simply did not realise, buried deep within the mountain of statistics and material presented, what Craven was actually saying – but there were certainly no repercussions, nor did the Admiralty seem to change its relationship with the WSBC thereafter. It is also possible, given that the memorandum only appears to exist within the WSBC’s records, that it was never actually submitted as evidence to the RCPMA at all.<sup>718</sup> This being said, Hankey, when

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<sup>717</sup> Murphy, ‘Scott Lithgow’, p. 16.

<sup>718</sup> Murphy and Johnman argue that the WSBC was revealed to the Admiralty after the RCPMA, and regulated thereafter. However, the evidence for regulation is unclear – it centres on a memo from Captain Crease in 1940, who was a senior naval officer, which hints at Admiralty regulation. However, as shown in Part II, Crease had worked for the WSBC since the 1920s, and coordinated many aspects of its work. Moreover, the profit margins continued to increase throughout 1937-40, and there is no other reference to the existence of the WSBC until the Admiralty began to investigate the accounting records of each firm during the war itself. It is therefore at least as plausible that the WSBC was not understood by the Admiralty during the RCPMA, and it was only when the cost investigations began once war was declared that the Admiralty fully grasped the nature of the group. Indeed, the WSBC’s records stop rather abruptly at this point (see 10.2, below), which suggests that once exposed, the



preparing evidence in the CID, clearly *believed* armaments manufacturers to be ‘operating as a ring’<sup>719</sup>, but this is one of the few times such a belief has been recorded by any CID or Admiralty member in writing – and pre-dates the Director of Navy Contracts’ own belief that competitive tendering was working to ensure value for money continued to be delivered.<sup>720</sup>

Weir, Lithgow and Balfour were not called to give evidence. This is not surprising. After all, none of them were known ‘armaments’ manufacturers in the conventional sense, and the RCPMA was looking backwards to the Great War, rather than to the contemporary circumstances of the 1930s. Lawrence and Craven aside, most of the evidence from industry was not particularly contentious, and consisted merely of denying and rebutting the allegations put forward. Most notably however, the strongest case for the continuation of the current arrangements came not from industry, but from the government – or rather the CID. Maurice Hankey, in the same ways he was instrumental in drafting DRC reports arguing for imperial (and thus naval) defence and resisting an overhaul of the CID, was similarly efficient in fending off the commissioners. He frankly admitted to the CID that he was primarily interested in making sure the commissioners had ‘no chance of recommending [the] prohibition of arms manufacture’, and formed a sub-committee within the CID to draft answers to questions and provide evidence for the defence.<sup>721</sup> Hankey called upon PSOC members including Dowding, Bovenschen and Elles to provide the evidence, and for the most part made a good job of arguing that the system in place worked perfectly well and only private – not nationalised – armaments manufacture could provide the necessary expansion in time of emergency, as the ‘strong export trade’ kept afloat a nexus of capacity that could be called upon in war. Of course, while fine in theory, this skirted the issue that the government had not been willing to subsidise firms for the export of arms, and as such, the British private manufacturers were, as has already been discussed, losing out frequently to foreign bids in

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Admiralty exercised the right to fully inspect the books of each firm, and the mechanism to drive up prices was destroyed. See Johnman and Murphy, ‘Welding’, p.101; Murphy,; ‘Scott Lithgow’, p. 16.

<sup>719</sup> ‘CID – Royal Commission on the Private Manufacture of and Trading in Arms – Record of Meeting at Whitehall, Secret’, 21 November 1935, p. 5, TNA: CAB16/124.

<sup>720</sup> ‘Admiralty Contracts, Prevention of Profiteering’, Templewood Papers, 17 July 1936, CUL: MS Templewood Part 9 File 5.

<sup>721</sup> ‘Royal Commission on the Private Manufacture of and trading in Arms – Meeting at Whitehall’, 21 November 1935, TNA: CAB16/124 & Roskill, *Hankey*, p. 248.

Italy, the United States, and elsewhere.<sup>722</sup> Nevertheless, Hankey's ability to present united and consistent evidence was in marked contrast that presented by those seeking an end to private manufacture.

In sum, the 'prosecution' was poor, but the input from industry – particularly Vickers – nearly shot the defence in the foot. They were saved by a combination of Hankey's cunning, and, it must be said, the fluid political situation which completely altered the groundswell of public opinion and National Government thought between November 1934 and October 1936. For while the commissioners only made some modest recommendations to better monitor the current system for abuses, even this was rapidly rejected – as the Cabinet, quite deliberately, submitted the final report to Maurice Hankey (notionally the CID) for 'approval'. To approve recommendations that he had fought so vigorously against was somewhat akin to a turkey voting for Christmas, so Hankey gladly buried the report, and the recommendations never saw the light of day again.<sup>723</sup>

This episode highlights increasing cohesiveness in the Cabinet and a hardening of the collective mind-set. In late 1934 when the Commission was reluctantly agreed to, the National Government was constantly fearful of public backlash (while also citing the adverse cost of armaments). Two years later it could confidently ignore the findings of a Royal Commission. Even the recommendations on a system of costing to limit private profits, which although bureaucratic the Treasury may have wished to champion as desirable, were not acted upon, one presumes because rearmament had now reached the stage where the 'word of the man in supply must carry'. This contrasts markedly with the Inskip episode, it is apparent that Cabinet were now no longer willing to allow an overhaul or disruption to their system of defence and supply organisation, and trusted in it to deliver on rearmament. It is hard to imagine with the disagreements, indecision and inaction over deficiency programmes between Manchuria and Abyssinia, that the government would have so quickly and unanimously buried something of this magnitude. Vickers however, did not do the CID any favours.

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<sup>722</sup> 'Report by Sub-Committee on Industrial Intelligence in Foreign countries', PSO 361, 13 March 1933, TNA: CAB60/13 p. 7.

<sup>723</sup> 'Meeting of the Inter-departmental Committee to Consider the Report of the Royal Commission', 22 January 1937, TNA: CAB16/124.

#### 9.4 Rearmament Proper and Admiralty programmes

The RCPMA's report and eventual burial spanned the end of 1936 and the beginning of 1937. It was at this point, following the 31 December expiration of the London and Washington treaties, that rearmament finally got underway for most of the private naval armaments manufacturers. 1936 had been better than any previous year since Washington in terms of new orders— but not by a huge margin. Expenditure on the navy stood at nearly £65m – the first time it had been above 60m since 1922 – but was still only £10m higher than the average spend between 1923 and 1935, and some £40m lower than the average for the first three years of the 1920s.<sup>724</sup> So although larger proportion of this pot was being funnelled towards private manufacture and away from the Royal Dockyards, as discussed above, it was still a small pot in relative terms, which was inadequate for preparing private industry for the challenges ahead.

However, there were some developments towards the end of 1936 that are not adequately captured by naval expenditure alone. WSBC members, in tandem with Treasury funds, were beginning to renew and re-equip their yards in anticipation of future work. The sums spent on a per-yard basis by 1936 were fairly modest by comparison with the size of orders that would eventually be placed – although these rose further once rearmament took hold. Beardmore spent under £200,000 on re-equipment costs in 1936 (and would eventually spend nearly £800,000)<sup>725</sup>, while Cammell Laird spent £80,000 along with Vickers on meeting its initial share of extra armour plate requirements. Vickers Armstrong's first programme of naval re-equipment was undertaken in 1935 at a cost of £100,000 – but would reach £750,000 by 1938.<sup>726</sup> In this respect, 1936 was the year where the renewal of facilities and the training of new staff began in earnest, if not the year where construction took off. However, as the figures illustrate this was by no means complete by the expiration of the naval treaties; Beardmore, Brown and several other yards were still renewing and re-equipping as late as 1938, so one still must conclude that despite the efforts of the PSOC, the naval yards were not in prime condition by the time the naval treaties expired, and at any rate were not yet thinking of rearmament on a grand scale. In other words, the National Government had failed to act on

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<sup>724</sup> Compiled from Tables 2.1 and 7.2 above.

<sup>725</sup> Hume and Moss, *Beardmore*, p. 241.

<sup>726</sup> Scott, *Vickers*, p. 222.

advice, and not enough had been done to prepare industry between the first White Paper and the expiration of the Treaties some twenty-one months later.

As such, the Treasury did not help with re-equipment costs purely out of concern for Britain's industrial capacity, but did so because yard owners ostensibly did not fully believe that rearmament would provide more than temporary breathing space. The experience of the Great War guided thinking: Lithgow, who knew the rearmament programmes better than most of his contemporaries, believed the total costs of re-equipping Beardmore by 1939 – estimated at over £600,000 – would be of little or no commercial value by 1940.<sup>727</sup> He was thus unwilling to accept the offer of an interest free loan – the Treasury's first offer – and demanded that the state should meet the costs in full.<sup>728</sup> There was a similar situation at John Brown; Sir Allan Grant attributed the credit to the Controller of the Navy, Sir Reginald Henderson, whose 'energy and foresight' pushed through the terms for the expansion of the Atlas armour works, paid for by the Treasury.<sup>729</sup> However, as has already been demonstrated, the WSBC had a remarkable degree of confidence in their rota, and at any rate the second White Paper was taken to mean a prolonged rearmament effort, but it appears the Treasury was not in a position to argue the point if it meant delays. As Weir would have put it, it was a case of the 'word of the man in supply' carrying.

January 1937 witnessed the laying down of two of the five *King George V* class battleships – the most advanced class of Royal Navy warship to that point, and, although unknown at the time, the last class of British battleship for which multiple ships were launched.<sup>730</sup> Unlike smaller (and cheaper) ships, which were covered under the WSBC rota, battleships were omitted. Given their size and cost, the placing of a battleship order was a rare – and in many respects political – decision. This changed the tendering process, and as such did not map on well to the WSBC work-sharing agreement, and thus it appears for these reasons battleships were never seriously considered for inclusion. At any rate, the class eventually comprised five ships, and since one of each which was placed in the five remaining capital ship-building yards (Vickers Armstrong, Cammell Laird, John Brown, Swan Hunter

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<sup>727</sup> Hume and Moss, *Beardmore*, p. 241.

<sup>728</sup> Hume and Moss, *Beardmore*, p. 241.

<sup>729</sup> A. Grant, *Steel & Ships: The History of John Brown's* (London: Michael Joseph, 1950), p. 85.

<sup>730</sup> KGV was followed by the *Lion* class, all of which were cancelled as they could not be combat ready before 1944.. The world's last ever battleship, the *Vanguard*, followed next, and was the only ship of its class.

and Fairfield)<sup>731</sup>, it would not have made a great difference anyway. Even this was not without controversy, for the size and cost of the ships – and the prestige attached to gaining an order – meant that those that missed out on the first round (three more were laid down in May, June and July) were disappointed and angered by the decision. It should therefore be unsurprising to discover that a great deal of behind-the-scenes rumbling went on between the subgroup of WSBC members involved in capital ship building when the first two orders were placed on Tyneside and Birkenhead, as none were awarded to the Clyde yards (essentially John Brown or the Lithgow-controlled Fairfield).

The decision on the location and order of the battleship contracts appears to have been signed off by Inskip, and based primarily upon Cammell Laird's recent lack of orders and John Brown's current contract to complete the liner *Queen Mary*.<sup>732</sup> Stephen Piggot, director of John Brown's Clydebank yard, wrote to Lord Weir to express his disappointment, and to press Weir on the possibility of expediting an order for a third ship.<sup>733</sup> Lithgow, who Charles Craven by then believed was 'a very pushy man',<sup>734</sup> wrote to Inskip to vent his anger at what he believed were grave inaccuracies in the decision-making process, caused by the 'intrusion of political interest' in Admiralty allocations. Lithgow claimed his frustration was not borne out of being a shipbuilder, but out of his 'previous endeavours to assist government policy of stimulating activity in the distressed industrial areas', and that he feared 'political agitation' on the Clyde if the balance was not redressed.<sup>735</sup>

Lithgow's concerns were, of course, playing on existing DPR (and PSOC) fears over the cooperation with the trades unions – something which Weir and Lithgow had earlier been keen to circumvent through the recruitment of unskilled workers for simpler tasks – and one must strongly suspect Lithgow knew full well the buttons that needed to be pressed in order to sufficiently worry Inskip. Inskip's response made it clear that orders would soon be placed on the Clyde, and that if he had 'transgressed in respect of the battleship has gone to Birkenhead' then he hoped Lithgow would 'believe it was an error of judgement rather than by

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<sup>731</sup> McMurtie (ed), *Jane's Fighting Ships*, p. 202.

<sup>732</sup> Lithgow to Inskip, 2 November 1936, GUAS: DC35/31.

<sup>733</sup> Piggot to Weir, 20 October 1936, GUAS: DC96/21/9.

<sup>734</sup> Warren, *Steel, Ships and Men*, p. 248.

<sup>735</sup> Lithgow to Inskip, 2 November 1936, GUAS: DC35/31.

intention'.<sup>736</sup> Quite apart from this being further evidence of Inskip's skill as a conciliator it also highlights a further change in the dynamic of the members of the Advisory Panel. Ostensibly equals in 1934, by the beginning of 1937 Weir is understood by private industry (including Lithgow) to be powerful and well connected, while Lithgow felt excluded and powerless. As such, Weir was the one being complained to by the heads of WSBC yards, while Lithgow was among those doing the complaining.

This was a fairly brief episode of disquiet, for by the summer of 1937 a whole raft of orders for ships of all kinds had been placed in WSBC yards, with most now closing in on full capacity for the first time in well over fifteen years.<sup>737</sup> Illustrative of the nature of private shipbuilding was that demand for naval ships was supplemented by a rebound in global trade. The new orders for merchant marine this created meant that prosperity returned as quickly as it had disappeared in 1922. Demand for material (in particular armoured steel) and skilled labour – both in relatively short supply – rocketed, causing both wages and prices to rise. While exact wage and price increases are hard to establish, there was at the very least a double-digit increase in both on average across the WSBC in 1937 – perhaps reaching as much as 15-20% by the beginning of 1938.<sup>738</sup>

This was more than passed on to the Admiralty, and underlines the success of the WSBC in price-fixing. For while the price of a typical tramp steamer increased by around 15% (broadly in line with cost and overhead increases) in 1937, the profit margins on Admiralty work appear to have doubled to more than 30%, or roughly twice the level of cost increases.<sup>739</sup> Indeed, these levels were around three times higher than the typical profit margins on naval contracts before 1936, which themselves were still far higher than the razor-thin profit margins on merchant vessels in the same years, or the losses incurred on Admiralty contracts in the years before the formation of the WSBC. Moreover, although there was another, albeit brief, industrial recession in 1938, naval contracts held up remarkably well, and this practice was not controlled by the Admiralty until well into the war itself.<sup>740</sup>

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<sup>736</sup> Inskip to Lithgow, 9 November 1936, GUAC: DC35/31.

<sup>737</sup> Peebles, *Warshipbuilding*, p. 148.

<sup>738</sup> Derived from 'Memorandum on conditions now existing in the shipbuilding industry', Shipbuilding Conference Confidential Report, December 1938, GUAS: UCS 1/9/79.

<sup>739</sup> Peebles, *Warshipbuilding*, pp. 140-2.

<sup>740</sup> See section 10.3, below.

How this was allowed to continue unnoticed is not immediately clear, although the answer lies as much with the politics of the CID and National Government as it was with slack Admiralty practices and too much faith in the principle of competitive tendering.<sup>741</sup> Hankey, it should be recalled, remained staunchly opposed to outside meddling with the CID's structure, and once rearmament began, there was a tendency within the CID, and, it must be said, the Treasury to maintain the 'status quo' as much as possible. Anything that unduly upset or hindered progress was deemed undesirable, and the National Government and Hankey both emphasised the importance of the full and willing cooperation of industry.<sup>742</sup> Moreover, the belief that firms required large economic incentives in order to expand production – as witnessed in the funding for new plant and facilities in private firms – carried much weight. As such, any unduly close scrutiny or control of ordinary business practices was rejected outright, while the Government announced to the public that 'to put difficulties in the way of industrial enterprise is to place on its shoulders a great responsibility'.<sup>743</sup> In short, the lack of progress before 1936 and the worsening international situation thereafter had convinced policymakers that making more obstacles for the rearmament drive – which they believed still had to be delicately balanced between security needs and the 'normal business activity' of the country – was to be avoided at all costs. It was the combination of excessive Admiralty trust in industry, with the National Government's twin pressures of not wanting rearmament to destabilise the economy while maintaining as much industrial efficiency as possible that allowed the WSBC to continue for so long.

Perhaps as notable was how underprepared Britain still appeared to be once rearmament had finally gotten under way. The predicted shortages of facilities, skills and materials were not alleviated by the years of planning by the PSOC and Supply Committees. Bottlenecks existed everywhere. Guns, mounting and armour, items which Supply Committee III had expressed grave concern over in 1932 and 1933, were still the main issues more than four years later. Reginald Henderson told the Supply Board that it had reached the stage that 'for the next three years [until the end of 1940], however many slipways were available, it would not be possible to complete the ships to be built under the naval hypothesis with their full

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<sup>741</sup> 'Admiralty Contracts, Prevention of Profiteering', Templewood Papers, 17 July 1936.

<sup>742</sup> N. Rollings, 'Whitehall and the Control of Prices and Profits in a Major War', *The Historical Journal* 44 (II) (2001), p. 532.

<sup>743</sup> Peden, *British Rearmament and the Treasury*, p. 83.

complement of guns'.<sup>744</sup> A few months earlier, Weir pointed out to the DPR that while progress in certain respects appeared satisfactory for *new* construction, when combined with the extra capacity needed for rearming older vessels with new equipment, then the 'magnitude of the task' was great. His calculation was that at least 450 naval guns and gun mountings would be required by 1940, which was 'a very big job for the gun makers'.<sup>745</sup>

Another part of the problem was that while the WSBC handled the prices and contracts for naval ships, the firms were still competing with the rest of the merchant sector to take as many orders as they could, while the going was good. Thus, instead of Vickers handling exclusively naval work, the adherence to the 'normal' business cycle meant that Vickers, Brown and others were also attempting to secure new passenger and merchant orders, and stretching their available staff thinner.<sup>746</sup> Lithgow, for instance, would not accept the Treasury's stipulation that if they met the cost of expanding Beardmore, the new plant could only be used for naval work. He demanded, and received, permission to use it for any orders Beardmore was able to secure.<sup>747</sup> Money was being thrown at the problem at the last minute, precisely because Supply Committee warnings had not been heeded earlier.

Although the attempt by naval yards to secure merchant and passenger work could be justified on one level as providing a steady stream of work in between naval orders to keep staff employed, it was also having adverse effects. Crucially, the inefficient allocation of merchant and naval work meant some naval yards were working to full capacity while their merchant counterparts did not have enough work to justify training extra apprentices. As a result, the contract for the *King George V*-class had to be extended by almost six months past its original 1940 deadline, while an extension of three months was granted on top of the initial estimates for completion for destroyer orders.<sup>748</sup> As Peebles points out, by 1938 a *Tribal*-class destroyer was taking as long to build as WWI-era super dreadnoughts, which were fifteen times larger.<sup>749</sup> Even when otherwise finished, ships were being held up because no guns were available for them. In short, the Admiralty, and by extension the British taxpayer, was paying

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<sup>744</sup> 55<sup>th</sup> Meeting of the Supply Board, PSO(SB)55<sup>th</sup> Mtg, 6 October 1937, TNA: CAB60/32.

<sup>745</sup> 'Minutes of 36<sup>th</sup> Meeting of DPR', DPR/36<sup>th</sup> Mtg, 18 March 1937, TNA: CAB4/27.

<sup>746</sup> 'Interim Report of the Shipbuilding Consultative Committee', 23 July 1937, TNA: SUPP3/18, p. 7.

<sup>747</sup> 'Conditions for the extension of armour plant', December 1936, GUAS: UGD 100/1/16.

<sup>748</sup> 'Minutes of Board Meeting at Brown, Clydebank', 17 February 1938, GUAS: UCS 1/1/2.

<sup>749</sup> Peebles, *Warshipbuilding*, p. 141.



much more per ship, but was waiting far longer to receive the finished product. In other words, problems that were identified years earlier had not been satisfactorily solved.

These problems were not lost on Lithgow, either. He complained to Inskip that the issue was the uncertainty that was being created through break clauses (to allow a quick exit from a contract) being written into orders. These were being justified as necessary under ‘government policy’, but did not give shipbuilders confidence to pass up other orders when they were presented to them. In Lithgow’s eyes, it appeared that ‘Cabinet was still taking their cue from Lord Robert Cecil [a leading disarmament voice] and Company’ and that the ‘Treasury were still restraining the services from a whole-hearted development of their programmes’.<sup>750</sup> Moreover, Lithgow believed that constant delays had meant that now that ‘public opinion was ready for action’ the fighting services still had ‘scarcely a single approved design they could put in front of manufacture’. In short, he was chiefly concerned that ‘no concerted long-view plan existed’.<sup>751</sup>

Lithgow, it must be said, was extremely adept at playing the ‘national interest’ card. He made a deliberate effort to link the lack of organisation with the possibility of military catastrophe, public revolt, or both. He claimed he was speaking from a position of first-hand experience as a concerned citizen – and his overriding interest was not his own wealth, but for the security of the nation and the livelihood of his workers. Whatever his true motivations, it is hard to escape the conclusion that Lithgow was using the levers available to him to influence Inskip into giving firmer answers on contracts than had hitherto been given. In this sense, Lithgow may or may not have known the Treasury’s role in contracts in 1937, but his refusal to meet the costs for the expansion of Beardmore is the other side of the same coin; he was using his firms as bargaining chips by claiming uncertainty over future defence plans, and attempting to use his prior role as an advisor to pressurise an inexperienced minister into giving him assurances.

Regardless of Lithgow’s manoeuvring, the fact that bottlenecks existed and mistakes were still being made in the finished product in 1937 was a failure of policy, not industry. More specifically, it was a failure at the top level of government. The PSOC, Supply Board and

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<sup>750</sup> Lithgow to Inskip, 17 November 1936, GUAS: DC35/31.

<sup>751</sup> Lithgow to Inskip, 17 November 1936, GUAS: DC35/31.

Supply Committees – including the civilian industrial experts – had all fulfilled their remits, and investigated the problems of supply and suggested methods for its improvement. That these problems still existed can be attributed either to a failure to equip the supply committees with the tools (specifically, the financial tools) to build up rearmament capabilities in good time, and as such represented a lack of faith from above – despite Hankey’s assertions – in the CID structure, or a failing within the Cabinet itself to not recognise the seriousness of the situation it was being presented with, and to treat industrial preparedness and the political process of preparing the country for war as the same issue.

This can be seen clearly when Cabinet considered the 1937 construction scheme. When the First Lord unveiled his plans to commence work on twelve large and more than thirty smaller vessels based on the DPR’s recommendations, Cabinet agreed that the Chancellor’s request to lay down some ships later than planned would be met, so as not to ‘resort to emergency measures in relation to labour, or to undue diversion of shipbuilding from their normal channels’, and cited the effect on merchant shipbuilding.<sup>752</sup> In other words, the first major rearmament programme still favoured business as usual for the manufacturers, and made no explicit attempt to *expand* capacity in case of future need. As private industry had received precious little assistance during disarmament, it would be wrong to expect it to have built itself up before rearmament got underway without far stronger incentives than it was provided with. Since such incentives could only come from the National Government or from foreign naval orders (which were being lost to nations that ran subsidies to private builders – another of the PSOC’s suggestions), then one must conclude that the blame must rest squarely with Cabinet, and not the supply subcommittees of the CID.

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<sup>752</sup> ‘Cabinet Conclusions’, CC 8(37), 17 February 1937, TNA: CAB23/87/10.

## Chapter Ten: Later Rearmament and War Supply Organisation, 1937-41

The missed opportunities before and during 1936 were painfully apparent in 1937. Inskip, in fairness, was certainly conscious of the problems in supply that arose, but took far too long to do anything about them. The issues in the naval armaments sector clearly warranted special attention, and did finally prompt some badly-needed action. However, the unsung figure in this later progress was Supply Committee III's former chairman Sir Harold Brown, a naval engineer and vice admiral, for it was his innovations in the second half of 1937 and into 1938 that better utilised industrial expertise, and finally overcame the barriers to progress that had slowed the earlier work of the CID's supply planning framework.

### 10.1 Brown, the Boilermakers & the Shipbuilding Consultative Committee, 1937-8.

Leading on from Lithgow's concerns over the future usage of Beardmore, Inskip was in increasingly regular contact with Brown in 1937. Brown had served as the Chairman of Supply Committee III (Shipbuilding) until September 1936, and thereafter serving as the Director General of munitions production in the War Office. It was he, it should be recalled, who played a significant role in the discussions to form the Advisory Panel of Industrialists in 1933. Brown, in 1937, was given latitude to work on a raft of proposals to turn over factories to armaments production, which included proposals for the restructuring of vacant space on the Clyde for gun mounting work for both the Admiralty and the War Office.<sup>753</sup>

Brown was thus keen to put the Beardmore plants to full use, but complained of a series of obstacles in his way which, perhaps predictably, had been raised by his own committee at Supply Board level in previous years, but had not been properly rectified. In the case of Beardmore, Brown noted the vacant Dalmuir yard had been stripped of equipment before 1933 and now required a complete re-tooling, but found the backlog on machine tool orders to be prohibitive. His experience brought him into full agreement with Lithgow, as he believed that there had been a general 'lack of appreciation [at Cabinet level] that building up effective capacity needed a long term programme', and thus sought closer cooperation with industry to achieve his supply goals.<sup>754</sup> Moreover, he was among a growing number of supply experts that

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<sup>753</sup> Brown, 'Reminiscences, vol. II', BLH: TB Box 1 p. 122. Brown's recollections are a very rare insight into the organisation and failings of supply machinery from someone that was involved since the outset.

<sup>754</sup> Brown, 'Reminiscences, vol. II', p. 155.

recognised that industry could never be fully efficient unless the National Government allowed rearmament to take priority over the normal business activity of the country. Weir had already advocated such 'semi-war' conditions in the summer of 1936 – but the DPR had shot down the idea, and as a result there had been little progress since.

Although now notionally working for the War Office, Brown was a naval officer first and foremost, and as such understood the issues – and leading figures – in naval armaments manufacture better than most. He compared the Admiralty favourably with the War Office, and believed that the existence of established armament industries and industrial experts meant the former could work to long-term plans while the latter was practically starting from scratch. Understanding that he would require any spare naval armament capacity for field artillery, and knowing full well the benefits industrial experts could bring, he helped form, under the aegis of his old SCIII, a Shipbuilding Consultative Committee (SCC) to bring together naval – and for the first time, merchant – shipbuilders. They were joined by Admiralty and Board of Trade figures, with the aim of working round longer-term problems and bottlenecks in shipbuilding supply – and thus potentially providing spare capacity for the War Office – and to better organise for war-time conditions.

The group, which presented its first report at the end of July 1937, was comprised of five representatives from shipbuilding: Craven, Lithgow, Denny and the presidents of the Shipbuilding Conference and Shipbuilding Employers Federation, Amos Ayre and Francis Pyman. This was supplemented by three Admiralty and three Board of Trade representatives, including J.S. Gillingham, who had also taken over from Brown at the helm of SCIII.<sup>755</sup> The SCC, like the Advisory Panel before them, were tasked with thinking about wartime conditions, and given access to the reports and work of SCIII on shipbuilding in preceding years.<sup>756</sup> The SCC's investigation found that while there were still plenty of available berths in British merchant yards, there was insufficient labour to staff them. For this reason, the SCC advised that reopening the merchant facilities closed under the NSS was not advisable, for 'if a surplus of labour becomes available it would be preferable to increase the output of existing yards'.<sup>757</sup> This was built upon by a later report from November that estimated that over

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<sup>755</sup> 'Interim Report of the Shipbuilding Consultative Committee', TNA: SUPP3/18, Appendix I.

<sup>756</sup> 'Interim Report of the Shipbuilding Consultative Committee', p. 5.

<sup>757</sup> 'Interim Report of the Shipbuilding Consultative Committee', p. 7.

400,000 *skilled* staff in over 200 specialisations would be needed for shipbuilding and naval engineering.<sup>758</sup> Moreover, the SCC calculated that compared with normal business conditions an extra 932,000 tons of capacity over and above the naval programme could be handled in non-naval yards, but only if the government allocated orders in the most efficient manner rather than allowing the ‘business as usual practice’ of competitive tendering. Taken together this would alleviate the significant bottlenecks and shortages that were already becoming apparent in the merchant and naval sectors alike.<sup>759</sup>

In theory, this suited both the shipbuilders and the supply planners: the yards would all be kept busy working on the type of vessel they understood best, the government would not have to revive defunct yards at great expense, and efficiency would be greatly improved. A second report, updating their estimates to factor in potential changes in the scale of future naval orders, was presented a year later in July 1938. The second report argued that anything up to 350,000 extra tons on top of the estimates could be produced within the first 12 months of an emergency if the industry was assisted during peace so that it was stronger when the emergency arose. Again however the focus was a *war* scenario, not preparations during peace, and remained so. The second report noted that despite these warnings, the SCC ‘was not directly concerned with the condition of industry in peace time’ and that it was ‘beyond their scope to do more than draw attention’ to problems. The maxim that the normal business cycle of the country should not be interfered with – as long as peace prevailed – still held, and left the proposals in 1937 and 1938 as merely hypothetical. This was especially ironic given that the WSBC had been interfering with a ‘normal’ business cycle in naval orders for more than a decade. Indeed when the report was discussed by SCIII its members declared that since this was a matter of ‘high policy’ the committee only had the power to escalate it to Inskip for consideration.<sup>760</sup> It should therefore be of no surprise that Brown and Lithgow were growing disillusioned with defence planning.

Nevertheless, the SCC was at least a step towards thinking about a more efficient type of organisation, and tackled a different set of questions from those which had been the focus of the original Advisory Panel (namely organisation during wartime, rather than provision for

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<sup>758</sup> ‘Categories of Staff and Workpeople’, PSO(SB)713, 30 November 1937, TNA: CAB60/45.

<sup>759</sup> ‘Interim Report of the Shipbuilding Consultative Committee’, TNA: SUPP3/18, p. 7.

<sup>760</sup> ‘Second Interim Report of the SCC’, 8 July 1938, TNA: SUPP3/18. Quotations from pp. 1-31-3.

war during peace). The industrial advice at Supply Committee level was consistently well informed, innovative, imaginative and provided solutions which genuinely offered new ways to organise the provision of warships and merchant vessels. It was perhaps not well utilised enough: its first two reports were a year apart, in July 1937 and July 1938, respectively.<sup>761</sup> Moreover, the constraints were not new: top level adherence to the economic and business orthodoxy still hindered progress. The timing of the formation of a new shipbuilding committee, some four years after the formation of the first Advisory Panel, highlights another important point, namely that it took until well into rearmament for other industrial experts to play any substantial role in supply planning. During the ‘secret’ deficiency phase, Weir, Lithgow and Balfour were unique, and ‘inside’ knowledge of CID practices and defence hypotheses was largely kept within this trio. The major naval armaments manufacturers – including the managing director of the largest of all, Vickers – were not invited in until rearmament was embedded within public knowledge.

Still, problems persisted. The DPR noted in September 1937 its concern at the ‘delays in gun production’ at Beardmore, and asked Weir to go and discuss the question with Lithgow, and inspect the factory. Beardmore had been given 25% of the entire gun order (both naval and anti-aircraft) and it was believed the delays would push the programme back by at least six months. Weir’s follow-up report noted to the committee that Lithgow was in the process of spending £2million on the plant, and was now spending five days a week at Beardmore to rectify the problem, and generally the response ‘appeared to him to be very satisfactory’.<sup>762</sup> The episode highlights some important recurring themes: the first is that planning had failed to overcome bottlenecks, the second is that the members of the DPR were, in part, replicating the work of the lower orders rather than fully utilising the available expertise, and third was that when all else failed, they had to rely on Weir – now their most senior industrial figure – to go and have a frank discussion with his friend. It is hard to conclude that this was the most efficient or professional way to cooperate with industry.

It was, as a result of the ongoing frustration at the lack of tangible outcomes that Harold Brown attempted to circumvent the CID system, and abandon the formal advisory networks which had been set up to supplement the work of established committees. Brown valued the

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<sup>761</sup> See First and Second Interim reports, above.

<sup>762</sup> ‘Minutes of 43<sup>rd</sup> Meeting of DPR’, DPR/43<sup>rd</sup> Mtg., 30 September 1937, TNA: CAB4/27.

advice he was receiving, but felt constrained by the system. The engineer Brown, by his own admission, preferred working problems out rather than talking about them ad infinitum in committees. Late one night in 1937 with the Controller of the Navy, Reginald Henderson, Brown had devised a plan between them and Craven to take over an entire site belonging to Vickers exclusively for War Office tank work, and allowing the Admiralty free rein over the rest. To assist, Craven put a substantial portion of the design department at Vickers at Brown and Henderson's disposal, and together they developed what Brown later described as a 'most valuable asset'. This was a glimpse of what industrial cooperation could achieve; two service departments and one industrialist reaching quick decisions on re-organising and dividing a facility for the benefit of all, free from political and financial controls. That it took until late in 1937 to develop that kind of network, and even then only because Brown could call upon his naval connections to assist the War Office, aptly illustrates the limitations of the CID sub-committee system that reported upwards to Cabinet.

Brown went on to call upon Craven, Weir, Lithgow, Balfour and Harry McGowan (from Imperial Chemical Industries) frequently from 1937. They helped with a wide range of problems – at one point in 1938 even suggesting clothing manufacturers for Territorial Army uniforms.<sup>763</sup> Brown remarked that

Amongst the many eminent industrialists who came in to help us at an early date, first and foremost stands out the name Lord Weir, whose sage advice had so long been available to the public service as industrial adviser... [He was] an outstanding example in the way in which such work could be done and for which his commercial contacts made him uniquely competent.<sup>764</sup>

Among other things, Weir was later noted by Brown for arranging a 'most effective unit' for the production of field artillery by a group of non-armament firms from 1938, of which his was the leader.<sup>765</sup> He was also brought in by Brown to advise the Army Council, perhaps repaying the earlier faith Weir had shown by supporting Brown's move to the War Office.<sup>766</sup> In marked contrast to the opinion of his assistant, Turner, Brown commented that the 'knowledge and ready assistance' of the industrialists 'proved invaluable' in the rearmament effort.

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<sup>763</sup> Brown, 'Reminiscences, vol. II', BLH: TB Box 1, p. 197.

<sup>764</sup> Brown, 'Reminiscences, vol. II', pp. 214-5.

<sup>765</sup> Brown, 'Reminiscences, vol. II', p. 183.

<sup>766</sup> Reader, *The Weir Group*, p. 129.

Weir, like Lithgow with Fairfield and Beardmore, profited financially from his connection with Brown and the Supply Organisation too. As a more or less direct result of these new orders, income from the land division of the firm increased by £135,000 in 1939 compared with four years earlier. The scheme to create a small group of 400 parent firms which would educate others – first proposed by Weir in 1933 – put his firm in a strong position once rearmament came. Admiralty orders jumped from £445,000 in 1935 to £944,000 in 1937 and then £1.9m in 1939 – between 40 and 70% of total orders by value. Similarly, the firm's profits grew from £172,000 to £462,000 in the same period. Total sales quadrupled to £2.8m. His firm undoubtedly did very well out of rearmament orders, but it did so because it was one of a few firms already capable of making large quantities of the specialised equipment the service departments required. Thus it could not accurately be labelled as one of the 'non-armament' firms of the kind Weir had described in his letter to *The Times* in 1933.<sup>767</sup>

Brown also remarked that he owed an 'eternal debt of gratitude to Craven' who 'gave every possible assistance, both as regards design and production' to him and his department in times of need. Lithgow gave 'ready and substantial assistance with gun production' and 'placed all of [Beardmore's] substantial assistance at the War Office's disposal', (other than that already hypothetically allocated to the Admiralty) and undertook considerable extensions to Parkhead works for naval and field artillery gun manufacture. He also assisted in 1938 with what Brown described as a 'very considerable expansion of production of bulletproof plate and gun forging capacity' at Beardmore.<sup>768</sup> Sir Andrew Duncan, ever more closely connected with Weir and Lithgow, offered 'invaluable guidance on all questions of steel and raw material supply'. The common theme – perhaps with Duncan excepted – was the connection with Supply Committee III. All of these men at one point or another had distinguished themselves to Brown during his period as chairman, and he was now making full use of his connections, and their talents. More strikingly still, when any defence supply matter or business acquisition occurred before rearmament, one from this very small group of men was never far from it. The 'web' of industrial influence always seemed to have Weir, Lithgow or Duncan near its centre.

Along with Henderson and Air Chief Marshal Sir Wilfred Freeman (Dowding's successor as the RAF member on the Supply Board), Brown developed a scheme to reach more

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<sup>767</sup> All taken from figures in Reader, *The Weir Group*, particularly pp. 134-5.

<sup>768</sup> Brown, 'Reminiscences, vol. II', BLH: TB Box 1, p. 143.



agreements of the kind he had worked out with Vickers. To this end, he lunched with Craven and Lithgow increasingly regularly, and formed an unofficial priority and liaison committee to settle the numerous competing claims on resources between the three services. Known somewhat obscurely as the 'Boilermakers', this small group, meeting in a hotel restaurant, discussed and helped overcome the pressing inter-service problems and functioned with, in the eyes of Brown, 'unvarying success' up until the war. Amusingly, after the war began, the Minister of Labour (appointed 1940) Ernest Bevin suggested that the heads of production for all three services should meet regularly. Brown graciously accepted Bevin's wisdom, for, in his own words, 'since this already happened with the Boilermakers... all that this meant was that Her Majesty's Government ended up paying the bill for lunch!'<sup>769</sup>

From this, Craven, Lithgow, Rebbeck (of Harland and Wolff) and Henderson began to informally allocate shipbuilding capacity as a 'shadow committee', and it would be to them Brown would go if he wanted use of some shipbuilding capacity that had been hypothetically allocated to the Admiralty.<sup>770</sup> This was not the same as tendering for contracts; instead it was about ensuring that enough capacity existed, theoretically, to meet the longer-term Admiralty programmes. Of course, one must assume that having three WSBC members working with the Controller of the Admiralty gave the WSBC even more information on likely requirements than they hitherto had, and it is likely through this route that the WSBC was able to accurately anticipate future naval orders (see chapter four) and invite the firms with the most spare capacity to place bids for them. Clearly, between March 1936 and the end of 1938 the lines between the WSBC members, the CID and the Advisory Panel of Industrialists crossed. As has already been discussed, it is far from certain that the WSBC knew anything of Weir, Lithgow and Balfour's work on supply bottlenecks before the second White Paper, and was thus left to second guess rearmament needs before 1936, while the Admiralty's dealings with armaments makers thereafter suggest that information flowed from the CID to the WSBC but rarely, if ever, in the other direction.

Like Brown's agreement for the plant at Vickers, these were more examples of leading industrialists offering their services willingly to the defence departments, and reaching amicable conclusions in a short space of time that benefitted all parties. Tendering expenses

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<sup>769</sup> Brown, 'Reminiscences, vol. II', pp. 199-200.

<sup>770</sup> Brown, 'Reminiscences, vol. II', p. 199.

aside, this was certainly an efficient way of working through problems without getting bogged down in inter-departmental disputes. However, the Boilermakers need never have existed at all. In essence, they were only duplicating the work of the Supply Board, insofar as they aimed to allocate resources for air, sea and land around the available armament making facilities. That Brown felt it necessary to bypass the CID committee structure to get things done in a timely manner without escalating the matter upwards, ultimately, to Inskip, speaks to the limitations of the system he worked with for so long.

Another aspect of this question was how Brown and the industrialists viewed Inskip. Brown appeared to generally respect him, but ‘always believed his appointment was political’, and that he primarily existed to ‘curb the demands of service ministries and to bring them into line with the government desire for a more limited war’.<sup>771</sup> In other words, he believed Inskip was chosen to be the Cabinet’s man in the CID, not the CID’s man in Cabinet. Lithgow, it has already been shown, felt unappreciated as an advisor throughout 1936. He had written to Inskip to complain about the lack of coherent planning on more than one occasion, but got no more than an apologetic reply and a reaffirmation of his valued role within the CID.<sup>772</sup> Weir is somewhat harder to read, but it is known that his relationship with Inskip noticeably cooled in early 1937 after Inskip decided to re-open the question of the Fleet Air Arm – essentially over whether the Admiralty or Air Ministry would control the development of aeroplanes for naval vessels – which Weir had previously advised on. Weir had made it clear to Baldwin he was not prepared to re-open the matter, so when Weir found out Inskip had written to Baldwin without consulting him, he was furious and threatened to resign from the government altogether.<sup>773</sup> Although Inskip later apologised profusely, resignation was not a step Weir, with lengthy public service – and loyalty – to the CID and Cabinet would have taken lightly, so it is hard to believe the relationship fully mended thereafter.<sup>774</sup> In sum, Inskip appeared to inhibit rather than facilitate the work of supply committees, so it is not surprising that Weir, Lithgow, Brown and some of the other supply experts decided they were better off solving problems informally

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<sup>771</sup> ‘Inskip Notes’, undated, BLH: TB Box 1.

<sup>772</sup> Inskip to Lithgow, 9 November 1936, GUAS: DC35/31.

<sup>773</sup> S. Greenwood, ‘Inskip and Defence, 1936-9’ in P. Smith (ed). *Government and Armed Forces in Britain 1856-1990* (Cambridge: Cambridge University Press, 1996), pp. 165-6.

<sup>774</sup> Inskip to Weir, 12 January 1937, CCC: WEIR19/14.

outside of Whitehall, rather than dealing with Inskip and the hierarchy of committees which led upwards to him.

### 10.2 The Inskip Report and financial control, 1937-9

The Treasury had stuck to the principle that the ‘word of the man in supply’ should carry, and took a light-touch approach to the negotiation and scrutinising of defence contracts in 1936 and 1937.<sup>775</sup> This freedom allowed for men like Brown to get on with the business of rearmament. The most efficient way of doing so was to cut through the red tape of the CID’s subcommittees, which although effective at identifying problems, were consistently hampered by their limited remits and constant referrals to other bodies for approval. The result was that Brown and industry operated informally, in the shadows, by gentlemen’s agreement in 1937. However the cost of the rearmament project was escalating rapidly. In February 1937 the National Government had brought forward the Defence Loans Bill, which sought to raise another £400 million for rearmament. This was only a small taste of things to come.

The Chancellor, Neville Chamberlain, succeeded Stanley Baldwin as Prime Minister at the end of May, 1937. Prior to this, in one of his last acts as Chancellor, he had insisted upon a ‘rationing’ of future defence expenditure, and pushed for Inskip to review defence policy in light of the burgeoning cost of rearmament. Part of the rationale behind this move was Chamberlain’s belief that Britain’s ability to wage a long war would be reduced if the rearmament programme undermined economic prosperity – the dilemma was that the more prepared Britain was militarily, the more resources were diverted from other areas of the economy and the weaker she was financially<sup>776</sup> – hence the demand that rearmament not interfere with the normal business activity of the country.<sup>777</sup> While on one level this was a rational view, adherence to ‘business as usual’ had the consequence of lessening the focus on industrial resources and inefficiently allocating them to civilian tasks.

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<sup>775</sup> Peden, *British Rearmament and the Treasury*, p. 46.

<sup>776</sup> G. C. Peden, ‘A Matter of Timing: the Economic Background to British Foreign Policy, 1937–1939’, *History*, 69/1 (1984), pp. 17.

<sup>777</sup> See section 9.4, and Meeting of the Cabinet, CC 8(37), 17 February 1937, TNA: CAB23/87/10.

However, as Peden has noted, this was also an attempt to re-establish a form of Treasury control over expenditure that had been slipping away.<sup>778</sup> As Cabinet was constantly conscious of being seen to be taking firm action on the excessive profits of armaments contracts, this was a review that the rest of Cabinet was happy to agree to. Inskip thus worked on an interim report on defence expenditure throughout the second half of 1937, before presenting his first set of recommendations that December. In the short term, the Treasury's request had some effect: no new increases in the defence programmes were to be undertaken until Inskip's review presented its findings. He ultimately concluded that total expenditure should 'not exceed' £1500 million in the five financial years that followed – although by February 1938 he had already revised this figure upwards by another £70 million – and soon after believed that £2000 million was a more realistic figure.<sup>779</sup> By way of comparison, the total for the five years to 1937 had been around £600m – or rather less than one third of what Inskip believed would now be needed. The Treasury had previously stated its belief that around £1100 million could be raised in that period through prevailing rates of taxation<sup>780</sup>, so there is perhaps an element of Inskip attempting to fit the square peg of rearmament into the round hole of the £1500 million that could be raised through a combination of taxation and the defence loan.

In terms of 'reasserting' the Treasury's control over expenditure, Inskip's report had a fairly limited effect. The *Anschluss* in March 1938 and the diplomatic crisis that followed overtook any serious attempt to cap costs. The increasing pace of German aerial rearmament prompted Cabinet to agree in April 1938 that the Air Ministry could order as many aircraft as it felt industry could provide before 1940 – and once war broke out any previous ideas of limits became irrelevant. The Admiralty was on a marginally tighter leash in 1938, but even still the First Lord of the Admiralty got some £10 million *more* than he expected when agreeing the naval share of the ration that summer.<sup>781</sup> So, despite bringing forward the idea that there should be a limit, even if loosely defined, on what Britain could afford to spend on rearmament, the 'rationing' of expenditure was not particularly prohibitive in the short term. This did not necessarily mean that Chamberlain's mind-set had changed though: in October

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<sup>778</sup> Peden, *British Rearmament and the Treasury*, p. 41.

<sup>779</sup> Peden, *British Rearmament and the Treasury*, p. 42.

<sup>780</sup> Peden, *British Rearmament and the Treasury*, pp. 78, 205.

<sup>781</sup> Peden, *British Rearmament and the Treasury*, p. 43.

1938 he reasserted that finance remained Britain's 'greatest asset' in a long war.<sup>782</sup> The problem was that a stage had been reached where Britain had little choice in the matter.

Moreover, in practice finance was less of a limiting factor than what industry could physically provide in 1938; the Treasury and CID both understood that even if the total sum over five years was adhered to, the individual departments were free to front load expenditure rather than spread it evenly, but that the level of spare capacity would mean that some of the money simply could not be spent fast enough.<sup>783</sup> However, in 1938 at least, there is some evidence that the mere existence of rationing as a concept was helpful within the individual service departments at forcing them to think about the ranking of expenditure priorities. However, this still meant that the word of the 'man in supply' was still carrying, and it was clearly not a return to the early DRC period in 1934 with Chamberlain attempting to revise the conclusions of the CoS and Hankey.

Indeed, it was at this point where another central tenet of government rearmament policy was abandoned. The CoS had been increasingly unhappy with the principle that normal business practice should not be interfered with. The heightening continental crisis prompted Cabinet to finally change tack in March 1938, and instructed (but did not compel) industry to give full priority to the rearmament effort.<sup>784</sup> This was a significant – although strikingly late – turning point, for it finally gave authorisation to all three services to place contracts, and in particular place the 'educational orders' that the Advisory Panel and Supply Board had advocated, in industries that were normally working on civil rather than military goods. In other words, the brakes were only fully turned off three years after the PSOC and industrialists had advised it would be necessary. Admittedly, the effect was less significant for the Admiralty, for it already drew upon a group of established manufacturers and where the technical bottlenecks could not easily be solved by education alone. It did, however, impact upon the work of Weir and Lithgow, who were by summer 1938 busy advising on new sources of supply from civilian manufacture – including, as already noted, everything from uniforms to field artillery.

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<sup>782</sup> Cabinet Conclusions, CC 49(38) 26 October 1938, TNA: CAB23/96/2.

<sup>783</sup> Gordon, *British Sea Power*, p. 258-60 & Parker, 'British Rearmament 1936-9: The Treasury, Trade Unions & Skilled Labour', *English Historical Review* 92 (2) (1981), p. 311.

<sup>784</sup> However, this stopped short of giving government controls over the means of production. See Gordon *British Sea Power*, p. 264.

From early 1939, what little Treasury financial control that remained broke down completely. Estimates for that year alone jumped by almost £200 million in a matter of four months, with the Cabinet swiftly agreeing to a series of additions to existing defence programmes without consulting the Treasury.<sup>785</sup> Throwing ever increasing sums money at the problem was not a particularly good solution in 1939, however, for there was precious little spare capacity in established industries to cope with demand, and as such the period between February and the war became as much about building whatever could be built with capacity available as it was about meeting strategic priorities. The Admiralty wanted the *Fiji*-class cruisers to have seven double-gun turrets, but had to make do with four triple-gun turrets instead, for there were insufficient mountings to complete even the guns on the *Dido*-class, its predecessor.<sup>786</sup> Naval shipyards warned of a lack of armour plate to complete vessels, prompting the Admiralty to issue instructions on how to store them until the parts and components arrived.<sup>787</sup> Moreover, in 1939 it ordered seventeen fishing trawlers in February, and would eventually order 200 more. At just 500 tons, these trawlers were a fraction of the size of even the smaller Destroyer classes, and were armed only with one 3-inch gun – essentially technology from the 1890s, firing a shell one two-hundredth the size of a modern battleship – and rudimentary armour and aircraft defences.<sup>788</sup>

Although of very limited use, these naval trawlers were to be used on minesweeping and harbour defence duties to allow larger ships to be deployed elsewhere, and, most importantly, could be built to a simple and standardised design in non-specialist and non-naval yards. Naval trawlers had first built to an Admiralty emergency programme in 1915 on an almost ad-hoc basis as a result of the demands of the ongoing Great War. However, the fact that so many were only ordered once again at such a late stage and not seriously considered during earlier defence schemes before 1938 suggests desperation on the Admiralty's part to get whatever it could from whoever it could. This illustrates both that Weir's earlier concerns were well placed, and, most aptly, what Harold Brown later described as 'a trickle...then a flood', of contracts; not enough to increase or even sustain capacity before 1936, and then, with the

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<sup>785</sup> Peden, *British Rearmament and the Treasury*, p. 44.

<sup>786</sup> 'Eight Thousand Ton Cruisers – Designs', 1936, TNA: ADM 1/9402.

<sup>787</sup> 'Minutes of Meeting', John Brown Papers, 17 February 1938, GUAS: UCS1/1/2.

<sup>788</sup> P. Elliot, *Allied Escort Ships of WWII* (London: MacDonald, 1977), pp. 293-5.

political situation deteriorating, too many to cope with by 1939.<sup>789</sup> In other words, this was the manifestation of the failure of policy: these problems had been spotted years earlier, but had not been solved by 1940.

Thus, when the Second World War began, most of Britain's major rearmament-era naval orders were not yet complete. The first two *King George V*-class ships, laid down on New Year's Day, 1937, were not commissioned until October 1940 and January 1941 respectively. The final ship did not enter into service until June 1942.<sup>790</sup> Similarly, none of the post-Treaty aircraft carriers, and very few of the cruisers were commissioned before summer 1940.<sup>791</sup> Indeed, the vast majority of the ships – and in particular the larger vessels – that were combat ready when war was declared were comparatively old; *Nelson* and *Rodney* were the youngest of all the battleships or battlecruisers, yet had been laid down back in 1922. The rest were relics of the Great War. The youngest of Britain's complement of heavy cruisers was laid down in 1928, while no ships of the first post-Treaty class of light cruisers, the *Dido*-class, were yet finished. Only one aircraft carrier out of seven, the *Ark Royal*, had been ordered since 1918. In terms of carrier development the age of the vessels is particularly important when one considers their collective fate: no pre-1936 aircraft carrier survived the war (five were sunk and two were deemed obsolete for combat and retired before 1945), compared with every post-1936 carrier, all fitted with armoured decks, which did.<sup>792</sup> Rearmament planning from 1932 did not mean a new, modern navy by the conclusion of 1939.

Structurally, the system was changing too. In 1939 the CID was wound up and replaced by a new 'Ministry of Supply', to coordinate the work of all three defence arms. This did not come entirely out of the blue: the Royal Commission first suggested the idea (Hankey quickly buried it, along with the rest of its recommendations), and Churchill and others had made significant speeches across the previous two years arguing for a new Ministry of Munitions<sup>793</sup> – like the organisation he had headed during the Great War. The underlying point was that the

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<sup>789</sup> Brown, 'Reminiscences, vol. II', BLH/TB Box 1, p. 153.

<sup>790</sup> Johnston and Buxton, *The Battleship Builders*, pp. 42-4.

<sup>791</sup> For an overview of the larger ships under construction and in commission as of 1942, see McMurtie (ed), *Jane's Fighting Ships* (1942 edition), pp. 16-45.

<sup>792</sup> This is not to suggest that the lack of armoured decks contributed to all of the sinkings – *Ark Royal*, for instance, was destroyed by a torpedo.

<sup>793</sup> *The Times*, 11 July 1937 & 1 June 1938 are two such examples, although more exist in the House of Commons.

CID had failed to have the ‘wit and foresight [to]...make the preparations in the factories which would...have in 1933 and 1934 enabled the whole business of making weapons get into its stride two years earlier’.<sup>794</sup> Indeed, the quote from the *Gathering Storm* which was used to introduce this thesis was another, later, example of Churchill’s later criticisms of supply organisation. However, for all of his criticisms, Churchill was oddly quiet in the matter between 1933 and 1936, and seems to have retrospectively changed his view.<sup>795</sup>

Moreover, while Churchill’s point that the pace of change could have been quicker is partially valid, he failed to account for the political difficulties and constraints of the day, or that Weir, Sir Arthur Robinson and Inskip had considered the question in 1937, and concluded it would have been politically very difficult, if not impossible to create a new ministry that had the power to compel industry to hand over production to the state.<sup>796</sup> Furthermore, as the position the Admiralty and War Office took in the Supply Committees in 1933 and 1934 illustrates, the defence departments all had different opinions on how to organise production, and were averse to handing over responsibility for their own areas to a central body.<sup>797</sup>

This impasse did not break down until spring 1939, when the German army occupied Prague. The need to put the army on an immediate war footing accelerated the issue of state control of industry, and the bill came into force in August of that year.<sup>798</sup> The new organisation was not as radical as one might at first believe, however. Despite more powers over industry, it kept the principals of inter-service cooperation which had been built up since the 1920s, and left the Supply Board (including Supply Committees) and Admiralty procurement channels untouched.<sup>799</sup> Though presented as a wholly new and fresh organisation ready to tackle the demands of war and a departure from the ‘talking shop’ that it replaced, the new Ministry was not the organisation that Weir and the Admiralty rejected. It was essentially a tweaked PSOC with enhanced powers, and was something that could and perhaps should have come into existence two years earlier.

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<sup>794</sup> *The Times*, 1 June 1938.

<sup>795</sup> Gordon, *British Sea Power*, p. 250.

<sup>796</sup> Discussion of ‘Report of Committee on Supply Organisation in War, 3 December 1936’, minutes of 309<sup>th</sup> meeting of the CID, 10 February 1938, TNA: CAB2/7.

<sup>797</sup> See section 5.8 & ‘Functions of the Supply Board in War and means by which they may be exercised’ PSO(SB)457, 4 October 1934, TNA: CAB 60/42.

<sup>798</sup> Shay, *British Rearmament in the Thirties*, pp. 273-4.

<sup>799</sup> *Ministry of Supply Bill*, May 1939, Cmd. 6034.



In sum, the system of supply organisation before 1937 did not fail to spot, but did fail to remedy, the industrial bottlenecks that existed in the naval armaments industry. It took until 1937 to properly begin the rearmament process and until the middle of 1938 to fully direct the industrial effort towards defence. Britain was better prepared than it might have been, but only thanks to the work of men like Lithgow, Weir, and Craven in industry and Brown and Henderson in the CID, essentially acting without official consent, to better organise resources from 1937. Nevertheless, despite thinking, investigating and reporting more or less constantly since Manchuria, and offering numerous sound recommendations and innovative suggestions, the top-level decision making machinery poorly utilised the lower-level planning machinery. This was, fundamentally, the failing within the CID during the years between Manchuria in 1931 and the outbreak of the Second World War eight years later, when the CID was wound up and replaced with a wartime administration.<sup>800</sup> The issue of state control of industry thus misses the point: it should not have been about compelling industry to turn over production to the government in 1938, but the government acting years earlier and utilising the concepts of shadow industries, educational orders and financing re-tooling so that this crisis point was never reached in the first place. So, as the concluding section argues, while the distinct political economy which prioritised planning was not without benefit to the British state in the shorter and longer-term, it also had adverse side-effects for industrial preparation.

### 10.3 Supply Organisers at War, WSBC & the Admiralty 1939-41

The spate of new contracts awarded in 1937 and 1938 played into the hands of the WSBC, who witnessed record profit margins on naval orders. This section considers the fortunes of the WSBC during the war itself, although a more detailed account of private industry during the first two years of war lies outside of the scope of this work. The reason the narrative concludes in 1941, not 1939, is that it offers a natural conclusion to the history of the WSBC, as well as a point in which to take stock of the development of supply organisation and industrial involvement within the British state across the preceding two decades. Moreover, as far as the private manufacture of naval arms is concerned, 1939 was not an end to rearmament; it should be recalled that Inskip's attempts to put a total cost upon equipping

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<sup>800</sup> Postan, *British War Production*, p. 76.

British defences was based on a calculation of the financial years from 1937-41.<sup>801</sup> Similarly, Weir and the DPR believed 1941 was the point by which industry could complete the defence scheme which had been first outlined in 1936.<sup>802</sup>

For private industry between 1939 and 1941 then, it was the business of rearmament that dominated proceedings – in the main working on finishing or fitting out ships which had been ordered some years earlier. Profits remained healthy, despite a new profits tax being introduced in late 1939. This tax attempted to claw back anything above ‘average’ profit rates in recent peace – which, for the WSBC, had been far higher than normal anyway.<sup>803</sup> The difference was that, from the end of 1940, the Admiralty began to take a much keener interest in the prices it was paying for equipment, which, for the first time, threw any significant light on the dealings of its industrial partners as a group.

As Treasury control broke down, however, Admiralty control over prices and profits was stepped up from 1939. As has been discussed, there has been an oft-held assumption – by contemporaries and historians alike – that the Admiralty held the most robust contract structure and was better prepared to deal with profiteering, for it utilised a group of ‘experienced firms, with a long record of Admiralty contracts behind them’ and possessed its own Royal Dockyards which ‘set a standard for costing purposes’.<sup>804</sup> In fact, the opposite was the case. The Admiralty possessed the basics of an effective structure, certainly in comparison to the ad-hoc nature by which the War Office negotiated contracts, but in reality the firms used their ample experience and track record to devise methods to elevate prices while avoiding detection. The existence of the Royal Dockyards gave the illusion of strength, for both firms and the Admiralty knew that effective comparisons between privately built and Dockyard-built ships were almost impossible to achieve with any accuracy.

This should not be confused with the formation of the Ministry of Supply, or it be assumed that the new structure was more robust than the CID/PSOC organisation it replaced. In truth, the Admiralty spent most of the period between 1922 and 1939 in a state of

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<sup>801</sup> Peden, *British Rearmament and the Treasury*, p. 42.

<sup>802</sup> Although, obviously, this scheme had been substantially expanded in 1938 and 1939.

<sup>803</sup> W. A. Thomas, *The Finance of British Industry, 1918-1976* (New York: Barnes and Noble Books, 1979), p. 231.

<sup>804</sup> Peden, *British Rearmament and the Treasury*, p. 50.

complacency: it possessed the ability to rigorously inspect and compare the books of any firms working on a government contract, but almost never did so. Despite the National Government's outward commitment to the prevention of profiteering, the systems in place to limit its effects were woefully inefficient in 1939. The National Defence Contribution – a 5% tax on all profits – barely dented the profits recorded on Admiralty vessels, while the later Armaments Profits Duty – 60% tax on the profits from rearmament contracts – was only in use for four months in 1939, before being replaced once war broke out.<sup>805</sup> As such, for the entire period of the WSBC's existence from 1926 until a matter of weeks before the outbreak of war, they were not effectively audited by the Admiralty or Treasury.

From surviving records, the earliest indication that the Admiralty intended to investigate the practices of the WSBC group is in November, 1940. In a letter to John Brown's Clydebank yard, the Director of Navy Contracts, E.C. Jubb (the same man who had in 1936 been so confident that competitive tendering and the existence of the Royal Dockyards provided adequate protection against profiteering)<sup>806</sup>, queried the overhead charges given by John Brown for a *Roberts*-class monitor, which had been tendered for that May. Brown claimed that the 'disturbance of work owing to the necessity of transferring workman to emergency work [i.e. war contracts]' necessitated an extra charge being included in the tender. The Admiralty believed that owing to Brown's 'current large output' and high levels of staff, the 40% increase in overhead charges should have been much lower. Jubb thus urged Brown to 'reconsider the amount quoted...with a view to a very substantial reduction being made'.<sup>807</sup> While it is not clear if the Admiralty succeeded in reducing the price for *Roberts*, it is clear that from this point it took its job of scrutinising contracts far more seriously. By the following February, the Admiralty had written to all WSBC firms noting that in light of the 'very considerable expenditure of public money now being incurred on the building of warships' it requested that the firms allow an accountant to visit to undertake investigations into the costs of building. While it did not propose alterations to contracts, this was the start of a much more rigorous attempt to gain a handle on how private manufacture had arrived at costs given for Admiralty contracts.

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<sup>805</sup> Rollings, 'Whitehall', pp. 530-1.

<sup>806</sup> 'Admiralty Contracts, Prevention of Profiteering' Templewood Papers, 17 July 1936, CUL: MS Templewood Part 9 File 5.

<sup>807</sup> Jubb to Piggot, 16 November 1940, GUAS: UCS1/21/17.

Typically though, the WSBC's communication structure meant its members were frequently able to keep abreast of developments. In an early example from April 1941, J.A. Milne a director of White wrote to Crease to circulate to the other WSBC members the details of the Admiralty accountant's visit to White's yard. In it, he noted the contracts which were being investigated (in this case *HMS Quorn* and *HMS Southdown*), the duration of his stay, and the files he requested to see. Milne noted that the accountant 'confined himself to asking for half a dozen invoices ...[and] finding a satisfactory system of internal check in operation, made no detailed investigation of the figures in the Cost Ledger'. Tellingly, he then reported that as the 'cost and financial accounts reconciled' then it was 'probable that the fact that this was possible had some influence in his decision to make no detailed investigation of the actual costs' and that 'he made no enquiry into the selling price or make up of the tender'. Finally, Milne expressed his concern over the Admiralty finding out about the WSBC's 'special fund' which the members had been adding to the last peacetime orders to assist merchant builders or to help win foreign warship work, and totalling £1500 per ship on the contracts the accountant had seen. Milne believed that if the 'special fund were disclosed...and the Admiralty asked for explanations, the Shipbuilding Conference should furnish a general statement on the subject, rather than leave the individual Warship Group firms to evolve the explanations'.<sup>808</sup> In other words, Milne's firm knew it had a lot to hide, and he knew White was fortunate that the Admiralty accountant did not pick up on it.

This clearly got the attention of WSBC firms, and evoked panicked responses. Crease first understood that the investigations would not involve ships started during peace time, but now believed these would be treated as war profits, and feared that the results would 'have a very disturbing effect throughout the Admiralty'. Moreover, he believed that 'there is very little chance that knowledge of the results would be confined to the Admiralty' and as such believed that they would 'come before the Select Committee on National Expenditure and thus to the Treasury and Parliament'.<sup>809</sup> His chief concern, therefore, was 'whether any action can be taken by the firms to improve the situation as it now exists' and 'for firms, where necessary, to amend their tenders in the light of experience that has now been gained of their costs under

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<sup>808</sup> Quotations from Milne to Crease, 5 April 1941, GUAS: UCS1/21/17.

<sup>809</sup> Crease to 'All Warship Group Firms', 18 August 1941, GUAS: UCS1/21/18.

war conditions'.<sup>810</sup> In August, Crease raised the idea of offering some form of rebate to the Admiralty – probably the clearest sign yet that the group accepted guilt – although Stephen Piggot of John Brown believed that such a scheme 'may be construed as being done solely due to the results ascertained from the cost investigation'.<sup>811</sup>

Another suggestion, this time by Cammell Laird, was to open up the books of all ships going back to Washington to the Admiralty, with the hope being that the lower profits – and indeed losses – in the 1920s and early 1930s would offset the later gains made in rearmament.<sup>812</sup> Cammell Laird noted that the average profit on all ships since *Rodney* in 1922 was a much more modest 12.5%, particularly because of losses incurred on earlier orders.<sup>813</sup> Crease suggested that this should be put before the committee first, and that Cammell Laird should not make this offer to the Admiralty before there was a chance for 'general consideration' for 'such action on your part might practically necessitate similar action by all the other firms'.<sup>814</sup> Moreover, he believed such an invitation for the period since 1923 would

Include amongst other things all the arrangements for pools [rotas], which persisted in the case of smaller ships, all the arrangements for the *York*-class cruisers in 1937, and the business with the purchase of the Dalmuir rights in 1934 and 1935. The possibility that any of these matters might be disclosed as the result of carrying back the investigations would give me great uneasiness, and the result might well be to increase our present difficulties.<sup>815</sup>

As a result, it was recommended that while a scheme to get the Admiralty to investigate ships that yielded lower profits was desirable, this was perhaps not the way to go about it.

In October, the Admiralty – while not threatening to go to parliament (presumably through the embarrassment it would also cause its own contracts department) – did ask for more detail of how costs were arrived at, and provided notifications to firms for the ships they proposed to investigate. It was through this that they attempted to push the Admiralty towards ships with lower profit yields. In the case of Harland and Wolff, the aircraft carrier *Formidable* was selected, and Crease asked other firms

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<sup>810</sup> Crease to Warship Group, 18 August 1941.

<sup>811</sup> Piggot Notes, 20 August 1941, GUAS: UCS1/21/18.

<sup>812</sup> Johnston to Crease, 11 September 1941, GUAS: UCS1/21/18.

<sup>813</sup> Crease to Committee, 17 September 1941, GUAS: UCS1/21/18.

<sup>814</sup> Johnston to Crease, 11 September 1941, GUAS: UCS1/21/18.

<sup>815</sup> Johnston to Crease, 11 September 1941.

...whether any benefit would result from investigation of *Illustrious*, *Victorious* or *Indomitable* [the other three ships of the same class in other yards] which are also available. It must be observed that the Admiralty stated that we must not select or nominate individual ships. We could therefore only ask that another carrier be investigated.<sup>816</sup>

This was clearly linked to Crease's suggestions in August and September, and highlights the WSBC's fear of the Admiralty's reaction if it uncovered an abnormally high result. The same was true for the *Hunt*-class cruisers. Crease believed that 'we might ask for the 3<sup>rd</sup> and 4<sup>th</sup> groups to be investigated' for these 'would show considerably reduced profits'. He noted that with profits of 35.4 and 33.7% respectively, 'none of [the first and second] group figures are very helpful to our case'. In an update the following week, he reported that he 'gathered the results on *Formidable* will not cause embarrassment, but I am doubtful about the other items'.<sup>817</sup>

In sum, the evidence for WSBC price fixing is plentiful and undeniable. That it took a major war with substantially tightened rules to uncover systematic overcharging – and even then only the excessive profits recorded immediately before and during the war itself, is testament to the sophisticated way in which WSBC firms devised their tendering scheme. It is known that by the end of the following year the Admiralty had got a much firmer grip on prices. In 1942 Swan Hunter won a contract for a floating dock valued at £150,000, and had the cost investigated by Jubb. He then made them an offer of 6% profit – a vastly reduced sum – to which Swan Hunter protested and asked for 10%. The final settlement was 7%.<sup>818</sup> Writing to John Brown, Swan Hunter's chairman noted despondently that 'it was rather a struggle, and I am afraid you may not be able to get any settlement at a higher figure, especially in light of their present attitude'.<sup>819</sup> There never was any parliamentary enquiry that forced a rebate for the profits generated in the war, nor was there a full enquiry into tendering going back throughout the years of disarmament. While this was probably some consolation to private industry, it was nevertheless clear that the era of warshipbuilders committee's profiteering cartel was over.

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<sup>816</sup> Crease to 'All Warship Group Firms', 13 October 1941, GUAS: UCS1/21/18.

<sup>817</sup> All quotations from Crease to 'All Warship Group Firms', 9 October 1941, GUAS: UCS1/21/18.

<sup>818</sup> Swan to Piggot, 23<sup>rd</sup> September 1942, GUAS: UCS1/21/18.

<sup>819</sup> Swan to Piggot, 23<sup>rd</sup> September 1942, GUAS: UCS1/21/18.

It remains now to return to the fortunes of this small coterie of industrialists in the early years of the war. Surprisingly, detailed and substantive accounts of their successes and failures are relatively sparse, although Weir, Lithgow, Duncan and others all moved quickly into senior supply positions in the wartime government. Weir was Director-General of Explosives, Lithgow took on the role of Director of Merchant Shipbuilding and Repairs at the Admiralty, while Duncan held the position of Minister of Supply for all but one of the six years of conflict.<sup>820</sup> The biographers of the foremost two men rather gloss over this period, stressing only the excellent service they gave to their country. In the case of Weir, his own personal role is almost entirely omitted, and just thirteen pages are given to the fortunes of the entire company between 1939 and 1945.

However, Brown's secretary at the War Office, Sir George Turner, who held rather lower opinions of Weir than most in the last years of peace, also kept a diary of supply organisation during the war itself, and offers a rare – and critical – insight into the role of these 'experts' within government. On Duncan, the man appointed as Minister of Supply at Weir's suggestion, and someone with 'a big name in business', he said

...how he got his name becomes a mystery when one contemplates his performance as a minister in charge of a department for which he was supposed to be specially fitted. He is afraid of the Prime Minister but at the same time a bully to his subordinates....<sup>821</sup>

Duncan ultimately did not last long in his position, and was asked to resign (he returned a year later, however). Turner was clearly delighted by this outcome, as he believed that 'Duncan wrecked the ministry by his vacillations and constant changes'. When he was replaced (with Lord Beaverbrook), Turner noted that Weir 'went off to Scotland, and declared his intention not to return', followed by Lithgow, which he put down to Duncan's previous career on the Clyde, with Weir and Lithgow as his original masters. Turner then noted that Weir had a track record of 'jobbing' his friends into jobs in the government, including his brother (James), whose only qualification for his job in tank design was 'his relationship with Lord Weir'. Perhaps most damningly of all, Turner concluded by noting that 'however able these 'imported ministers' may be, few of them really seem to have the necessary background...The fact is outside business experience rarely covers so wide a field. It puts too much emphasis on cash

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<sup>820</sup> Reader, *Weir Group*, p. 134 & Reid, *James Lithgow*, p. 193, p. 203.

<sup>821</sup> Turner Diary of 2 July 1941, Turner Brown Papers, BLH: TB Box 2.

values. This is one of the weaknesses of appointments from outside the parliamentary team.<sup>822</sup> Turner may have been a lonely dissenting voice, but this does not necessarily mean he was entirely wrong.

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<sup>822</sup> Quotations from Turner Diary of 2 July 1941, Turner Brown Papers, BLH: TB Box 2.



## Conclusion & Retrospective

Turner's comments offer a vantage point from which to evaluate the role of industrial influence within the state. While events after 1939 lie, in the main, outside of the remit of this work, the general questions throughout however have been to consider the role of industrialists and the private naval arms industry within supply planning, and how they influenced, and were affected by government policy. More generally, this thesis has sought to examine decision-making processes and the effectiveness of the supply planning machinery in the PSOC and related bodies of the British State throughout its development in the 1920s and 1930s. Therefore, the early phase of the war itself and the culmination of years of planning and organising are perhaps a better place to conclude this work than the outbreak of war two years earlier.

With this in mind, there are some general points to be made. The first is the role of an industrial elite within the state. As this work has shown and reiterated, in the case of naval arms there was both an elite group of 'insiders' and a defensive ring of 'outsiders' before 1936. There was no 'web' of well-connected individuals conspiring with government to profit from the kind of 'military-industrial complex' that subsequent theories have sought to prove. In the 1920s, the Admiralty and private industry certainly had shared interests in the preservation of capacity, and as such jointly devised methods to protect facilities as best they could in the circumstances, but this was the result of a lack of power and influence, not evidence of it. At any rate, it was not a particularly deep or well developed relationship – the schemes were small scale and extended no further than a work-sharing rota or minor subsidies. Indeed, before Manchuria in 1931, the Admiralty struggled to articulate the need for more or newer vessels in the face of Treasury opposition, leading to the long-term decline of the Royal Navy as an effective global fighting force, and to the unquestionable decline of private manufacturing capability.

In the case of the 'insiders' – Weir, Lithgow, Balfour and Duncan – it was not unlike the 1920s Admiralty-Industry relationship that brought about the WSBC. Again, it was not a vast shadowy network of industrialists influencing state decision making. Thus, the evidence presented here shows that Trebilcock's conclusions cannot and should not be applied to the period between the Wars. Instead, the PSOC turned to a handful of tried and trusted individuals, names which appeared and re-appeared in a variety of situations between 1920

and 1940. The ‘Advisory Panel’ of Weir – by far the most influential – Lithgow, Balfour and some close associates of them (particularly Andrew Duncan), in other words a handful of private businessmen, held access to the corridors of power in a way quite unlike the overwhelming majority of their peers. Unlike the work-sharing rota – a defensive ring motivated by self-preservation – these ‘insiders’ were well connected, influential and highly respected. Much of what later emanated from the PSOC and, in Weir’s case, the DPR, can be attributed to the advice these men gave willingly and freely, not least the ‘shadow’ armaments scheme and the concentration of financial resources in a nucleus of established firms (which, of course, they all represented).

The key turning point was Manchuria. For while it did not change the balance of power between Admiralty and industry, it was nevertheless a critical point in defence planning between the wars – more so than the formation of the DRC which has been taken by some as the ‘beginning of rearmament’. It was Manchuria which forced the new National Government to think seriously about the *possibility* of naval conflict in a way that had been unimaginable for most of the preceding decade. The Washington and London Treaties – which had balanced the competing demands of America and Japan at the expense of scope for further British naval construction – left the Royal Navy underprepared for action. The National Government still did not have the financial means or political will to take a decisive step, however, it did allow for the revocation of the Ten Year Rule and the move towards a ‘middle ground’ where Admiralty and Treasury disputes could be placed to one side and a full investigation into the condition of private industry was undertaken. It was essentially a stalling tactic to balance competing political, strategic and financial demands while fully satisfying none.

The result of Manchuria was, ultimately, the rehabilitation of the PSOC. Despite being formed to succeed the Ministry of Munitions, it remained a largely forgotten committee for several years after it was established. In marked contrast to the 1920s however, the years that followed the abolition of the Ten Year Rule witnessed the PSOC and its subordinate bodies gaining new-found significance, as direct orders now came from the Cabinet to fully examine the ‘position of the private armaments industry in our system of Imperial Defence’.<sup>823</sup> This

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<sup>823</sup> ‘The Position of the Private Armaments Industry in British Defence’, PSO 357, 8 March 1933, TNA: CAB60/13.

was essentially the first step in the collaboration with leading industrialists which lasted well over a decade, and into the Second World War.

This was about information sharing between two groups with much to gain from each other, not about preferential deals, contracts or kickbacks. The industrialists involved certainly had much to offer the CID, and, generally speaking provided thoughtful and innovative solutions to supply problems in the critical years between 1933 and 1936. Very few others could match this level of integration: with the possible exception of Harry McGowan at ICI, no other businessmen served for so long, from such an early point, or at such a senior level as Weir, Lithgow and Balfour. Although Vickers has often been the principal focus of previous studies of the private arms industry, it is clear from this thesis that Craven, Vickers managing director, had nowhere near the same level of access to the defence policy machinery before rearmament itself – and only joined as an advisor on shipbuilding in the summer of 1937. In short, the service of Weir – and to an extent Lithgow and Balfour – to the supply planning machinery of the British state in the 1930s was unrivalled in business circles.

This did not mean that Weir his associates suddenly stopped becoming businessmen, however, and when opportunities for influence and financial gain presented themselves, they usually grabbed with both hands. For despite repeatedly claiming personal disdain for their role, and justifying their work on the grounds of national security, the Advisory Panel found involvement within the CID and the information that came with it a powerful drug. They may have threatened to leave (and Weir had one such temporary walk-out in the early years of the war) from time to time, but ultimately all served more or less continuously as advisors and coordinators until 1945.

It is contended here that these men *did* indeed care passionately about British defence and the health of British industry, but that membership of the CID's subcommittees also allowed them money and power. Lithgow expanded his business empire substantially, taking controlling interests in two major armament concerns, despite no previous interest in such a line of work. Moreover, he bought Fairfield when its own directors felt the situation was hopeless and when no one else appeared interested, and purchased Beardmore from the Bank of England through his connections to Duncan and Norman, much to the anger of Lord Invernairn, who sought to regain control some weeks earlier, only to find the Bank apparently unwilling to sell. Weir, like Lithgow, benefitted from this arrangement, although perhaps more

through power – his full membership of the DPR being one such example – than money. He did, however, win several contracts for artillery, and like Lithgow was paid handsomely to retool his factories for wartime usage when rearmament began.

In short, this was a relationship that cut both ways. Lithgow and Weir undoubtedly helped preserve facilities, find new sources of supply, and set up British industry for a more rapid turnover to a war footing, such was their remit. In return, they were provided with information – not financial kickbacks or preferential contracts – which included likely bottlenecks, tendering procedures and key firms. They then acted like rational businessmen. It should be remembered that this happened in a period when the National Government did *not* want to order substantially more ships or weapons, and thus it was quite unlike the scenario dreamed up by conspiracy theorists of a government working with industry provide each other with monetary benefits. While this had elements of a ‘complex’ – both sides needed each other and worked closely together – it existed without any financial transactions. It was in reality a more or less optimal situation where, without any budget, the PSOC managed to point Lithgow towards the capacity both it and the supply subcommittees were previously so worried about losing. They may not have bargained with Lithgow’s later behaviour and his threats – a favourite tactic – to close the plant down if he did not get his own way, but generally speaking the arrangement worked well for both sides.

‘Outsiders’ responded in an entirely different way, and with different results. While Lithgow and Weir held the ear of those in supply organisation, the WSBC banded together and raised the price floor for vessels because they did not. This was a profiteering cartel by any measure, and although it ensured no more than a bare minimum of survival before 1935, thereafter it led to significant profit margins that eventually prompted Admiralty involvement. Shay has called profiteering ‘the final manifestation of the breakdown in cooperation [between firms and the state]’<sup>824</sup>, but such a view does not fit with the evidence presented here. Profiteering was a product of neglect of industry the 1920s, not failure to cooperate with industry in the later 1930s. The tools to prevent profiteering always existed, but were not used because of Admiralty complacency in its dealing with a trusted group of firms.

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<sup>824</sup> Shay, *British Rearmament*, p. 290.

While some of the WSBC scheme is still shrouded in mystery, it can nevertheless be argued that like the Advisory Panel, this was an arrangement, albeit with unintended results, that, over the piece, had benefits to both the firms involved and the British state. Industry preserved capacity for the state without a need for direct subsidy or increased construction schemes (which, if funding had been available the Admiralty were willing to provide), and were as a result allowed to milk handsome profits for some years afterwards. It can never really be known (owing one suspects to deliberate destruction of records) how much the Admiralty knew about the WSBC, but by the nature of the group's panic and eventual demise in the 1940s, one can suggest that the answer was probably very little indeed. There is little doubt, however, that this was a group of firms pushed together into a defensive ring, and, having failed to find alternative sources of finance (either through subsidies or new business ventures) understood that they could not influence or effectively lobby the governments of the 1920s on matters of naval policy. Like the Advisory Panel, this scheme yielded benefits for its members, but also broke official rules and at times behaved illegally. Nevertheless, as this thesis has shown, the truth behind its operation does not fit conventional pejorative descriptions of military-industrial complexes.

Part of the reason it does not fit is because of the *lack* of influence most of the major players in industry had over the decision-making process in naval arms before the mid-1930s. Definitions of such complexes have tended to stress good relationships with the major manufacturers, lucrative contracts and deals between government and industry. In the case of the WSBC, very little of this existed, particularly with regards to decision making around procurement.

This decision making process – taken here to include first the 1920s Admiralty-Treasury negotiations over spending and later the PSOC and its subordinate bodies – has been the other major element of this thesis. The argument presented here has been that the advisory structure of supply organisation that Weir helped create in the 1920s was broadly adequate for peacetime, but was hindered by a lack of teeth to make necessary changes and, most importantly, by the inertia of top-level defence and supply policy between 1934 and 1936. Moreover, had a sensible set of compromises been reached in the 1920s that allowed for the preservation of naval capacity, the issue of cartels and profiteering might never have occurred. Of course, one might well argue that the costs of doing so versus the extra costs of warships

through profiteering between 1937 and 1940 may have cancelled each other out. However, one could still argue that the behaviour of industry and industrialists can be explained in part by the failure of top-level supply *policy*, but not the failure of supply organisation within the CID, which spotted – but could not remedy – the problems before rearmament began.

Until 1934, one can at least understand the constraints on policy which existed and hampered the work of the PSOC and Supply Board. One should therefore not be too hasty to criticise the CID or characterise it as a ‘talking shop’ in the 1920s and early 1930s. Indeed, one of the great advantages of such a system was that it got different service departments to the negotiating table where they talked through competing visions and claims, and came to reasonably amicable conclusions. This system was sufficiently successful and desirable that it not only survived unaltered during 1924-39, but was transferred wholesale into the new Ministry of Supply during wartime. Despite these successes, in terms of rearmament and war preparation, time was ripe for action in 1935, but Baldwin and then Chamberlain balked at it. Rather than act, they leant on the advisory structure, and formed more committees. While one of these – the DPR – escalated Weir to being the most influential industrialist in the country, it also caused work to be repeated and questions already answered to be posed again. In this light, Inskip’s appointment in March 1936 was more of the same. Conciliatory and willing to take advice, he typified the National Government’s approach. Ironically then, the general failure to compromise between Admiralty and Treasury in the 1920s was replaced with too much compromise, over too long a period, in the post-Manchurian CID of the 1930s. Of course, the naval treaties were still in force until December 1936, but the underlying point is that a path existed to ease the identified bottlenecks before they became prohibitive, which they did from 1937, and this path was not taken. Indeed, the year following Abyssinia witnessed a repetition of earlier investigations by a totally new committee, not a period of building upon the foundations set by the PSOC. In short, in 1935 and 1936 the National Government listened, but when the time came, did not learn. .

Perhaps the most damning conclusion here is that, for all the planning, Britain was not ready to rearm in 1936. Much has been made of the spare capacity in naval shipbuilding and Britain’s strong warfare state by historians.<sup>825</sup> However, this thesis has argued that in some key

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<sup>825</sup> Edgerton, *Warfare State*, pp. 35-9 & Packard, ‘British State-Industry Relations’, p. 32.

respects, particularly with regards to the bottlenecks of guns, forgings, mountings, armour and skilled labour, Britain was remarkably underprepared and simply could not rearm fast enough: ships cost significantly more, took much longer to finish, and had to be supplemented by fitting out smaller vessels bought wholesale from non-naval yards. This was at a time when the private naval armaments industry was supposedly geared towards maximum speed and efficiency. Some of this can, of course, be attributed to the WSBC and the rise in the price of raw materials as a result of a rapid increase in demand, but that these were not pre-empted in earlier years points to a failure at the top-level of policymaking, and a failure to prepare industry in advance of rearmament. These were, after all, not unknown or unexpected by the Supply Committees in the early 1930s. Gibbs has argued that Britain ‘made the transition from apparently ill-prepared peace to total war smoothly and rapidly’, in the sense that this meant the ‘maximum mobilisation of human and material resources’.<sup>826</sup> This thesis takes a different view: that Britain took some sensible steps and made valuable preparations during peace, but that the move to war was not as smooth or as rapid as it could have been – especially with regards to private industry.

A lack of money was not the main issue, at least not after Weir recommended that ‘word of the man responsible for supply must carry’, but there is little doubt that a modest increase in expenditure between 1925 and 1935 would have eased the constraints that existed after 1936. There is a common misconception that the Royal Navy was starved of funds *during rearmament*, but this is not the case.<sup>827</sup> Simply put, Treasury control took far too long to break down, and the finger of blame here can be reasonably pointed at Cabinet for failing to heed Admiralty warnings about bottlenecks, or ignoring the recommendations over the desirability of a steady replacement programme. Even during the years of the DRC’s first reports, the standard Treasury response was to review findings, add up the figures, think about the implications, and present a conclusion some months later. This rather allowed the sting to be taken out of demands for increased funding (some of which was, in fairness, unreasonable) but this arrangement persisted for too long. There were, of course, understandable objections to ‘interfering with industry’, but the problem was not interference or compelling industry to turn over production to armaments. For too long, the National Government did not separate out

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<sup>826</sup> Gibbs, *Grand Strategy*, p. 782.

<sup>827</sup> See Gordon, *British Seapower*, pp. 259-60.

investment in private capacity, either through direct funding or educational orders, from the undesirable aspects of control over private industry. Moreover, the expansion of facilities and an increased pace of replacement would *not* have contravened the Washington Treaty (which was signed and adhered to with the best of intentions) either, and thus the fundamental point is that throwing money at the problem from 1937 did not make up for earlier mistakes. Given the long lead-in time, these failures are difficult to excuse.

Indeed, one can perhaps suggest that in the 1920s, the Admiralty's assistance in forming the WSBC was crucial in ensuring naval rearmament was not even further behind by 1939. On the whole, supply planners identified problems and utilised industrial expertise to devise methods to overcome them. The overriding problem was that it took far too long for the ideas to make their way through the advisory and sub-committee structure and take hold in the top echelons of government. A small group of businessmen effectively served this organisation, but profited from it too, financially and in terms of both secret information and political influence. On one level, the 'outsiders' in the WSBC were not so different from Weir and Lithgow as 'insiders': both groups played to their strengths for self-preservation and betterment of their businesses, and both of these had costs and benefits to the British government.

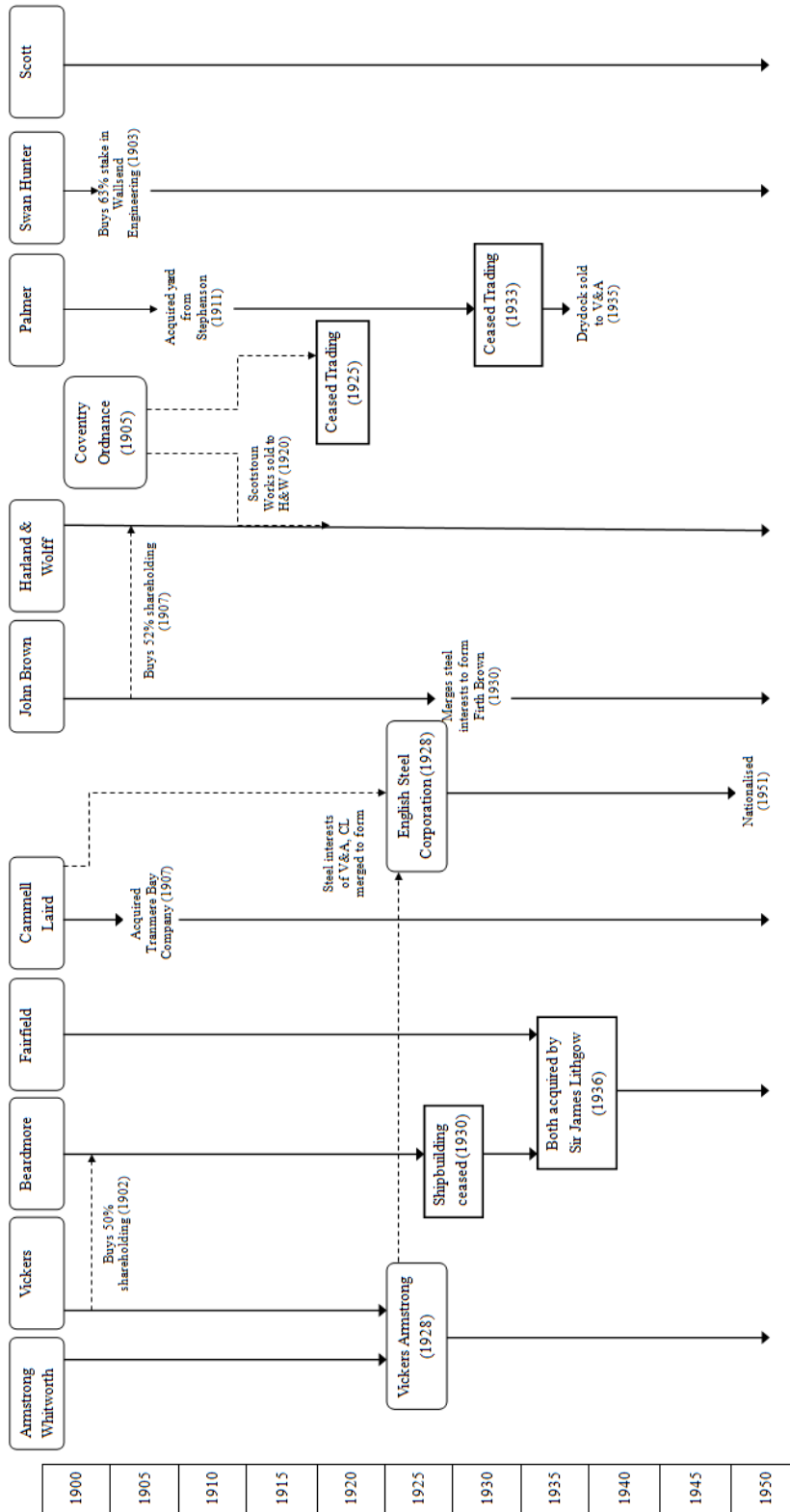
One can therefore conclude by returning to Turner's diary. In 1941, when Weir, Lithgow and Duncan's wartime powers were reaching their collective peak, Turner ended a section of his diary by noting that 'there are unfortunately at least a few cases in which men of business take government appointments for very good business reasons. Even the most kindly critic may be inclined to wonder how far the firms are getting something in return. Patriotism is not enough to explain all of this.'<sup>828</sup> In sum, this thesis has argued that while this was not necessarily 'unfortunate' for British supply organisation, for Weir, Lithgow and Duncan, patriotism without profit was indeed, not enough.

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<sup>828</sup> Turner Diary of 16 January 1941, Turner Brown Papers, BLH: TB Box 2.



## Appendix: Chart of Builders



Partial histories of some major naval arms manufacturers, 1900-50. A dotted line denotes a partial sale or spin-off. Compiled from Johnston & Buxton *Battleship Builders*

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