

PART I



Perspective

CHAPTER I PREVIOUS EXPERIENCE

(i)

The Tradition of War Finance

BEFORE the war of 1914-18, there was in the United Kingdom no discussion about the 'political economy of war'; nor had German professors delved very far as yet into the ponderous science of *Wehrwirtschaft*. Both in Britain and on the Continent men of theory and men of business still believed that the special economic activities associated with war were nothing more than an excrescence upon the ordinary economic system. The sequence of economic phenomena when war broke out remained relatively simple: governments expanded their armed forces, speeded up production in their own ordnance factories and dockyards, and for the rest of their military requirements went into the open market as purchasers. If the war were a large one and the demands upon industry were heavy, the governments might find that prices were raised steeply against them—a sign that private enterprise was not responding with sufficient speed to its new opportunities of profitable employment; but never, until the spring of 1915, did they find themselves face to face with a persistent general failure of private industry to feed the war machine. That failure opened a new chapter of experience. From 1915 until the end of the war the governments in all belligerent countries were compelled to deal disrespectfully with the orthodoxies of supply and demand. In their struggle against the scarcities that threatened their war-making power they built up elaborate structures of economic control, which governed—although they did not entirely supersede—the normal economic incentives. They built up the controls empirically, piece by piece, without a doctrine to guide them. The doctrine came later.

A recital of the main articles of this new doctrine might serve reasonably well to introduce the present history; but the introduction would be abstract. A more vivid, if possibly less comprehensive understanding of the economic content of war in the twentieth century will be achieved by looking behind the theories into the experience out of which the theories came. The British Government was not able in August 1914 to foresee the economic pattern of the future; but it was able to draw inspiration from the financial

practice of the past. Mr. Lloyd George, as Chancellor of the Exchequer, appealed to 'the heroic example of our ancestors'. It was his task to provide the means of payment; he had behind him a tradition of finance which led back through Gladstone to the younger Pitt. The tradition was deep and firm; it was not merely a notion of how things should be done, but the 'know-how' of doing them, the administrative capacity for action and the habit of action. How valuable these endowments were may be understood by reflecting upon the evil fortune of the nations which did not possess them: most notably the Germans, who had no other habit of war finance except that of winning their wars quickly and making the vanquished pay; in 1914 they did not even have an income tax. It was the income tax, that 'colossal engine of finance', so laboriously and so skilfully built in the days of Pitt, which Gladstone and every Chancellor after him believed to be the true fiscal reserve of the United Kingdom at war. In retrospect they may have exaggerated the services it had rendered the nation during the wars against Napoleon, for in the year of Waterloo it had returned only a third of the sum that came from customs and excise. They did not, however, exaggerate the services it was capable of rendering and would render in the future. Their preference was for direct taxes over indirect, and for taxes of any kind over loans. The tradition into which they were born was a resolute one: pay for your wars as you fight them, and pay in the frankest way; put up the taxes, keep down the deficits, keep down the nation's debt.

The tradition had not been created except by a most determined struggle; nor could it be painlessly maintained. Our heroic ancestors, in Gladstone's view, had been financially most unheroic at the beginning of their great war; it was only in the culminating years of supreme exertion that they fully redeemed their former sloth. Gladstone believed that they might have gathered the strength that overthrew Napoleon without adding a single penny to the national debt, if only they had shouldered the war taxes in 1793. From 1799 onwards, resolution was vouchsafed to them increasingly, and over the whole twenty-one years of struggle they raised from taxation nearly half of their public expenditure. This performance set too high a standard for the Britain of 1914-18. The Britain of 1939-45 maintained it, and improved upon it.

In the first great war against Germany there had been, once again, an early time of unheroic finance; the time did not begin to be redeemed until the third war budget, introduced by Mr. McKenna in September 1915. The financial performance in which the war effort culminated might have been judged resolute, with a standard rate of income tax which had risen from 1s. 3d. to 6s. and a heavy surtax on top of that, with an excess profits duty that from 1915 onwards had proved itself almost as great a revenue-getter as the

income tax itself, and heavy indirect taxation on beverages and other articles of popular consumption. The figures of total revenue, if they had been taken by themselves, would have seemed impressive; but when they were set against the figures of total expenditure they revealed deficits which in the peak period of the war reached almost two thousand million pounds in a year. Over the whole war period, the British Government had succeeded in paying out of taxation not much more than a quarter of its expenditure.¹

Did this great discrepancy matter very much? Did the financial tradition of the nineteenth century still retain its relevance in a war of twentieth-century scale? It must be admitted that the reasons Gladstone had stated did not any longer seem very relevant. He had acclaimed drastic taxation as 'a moral check . . . upon ambition and lust of conquest'; but twentieth-century Britain was not lusting after conquest. He had approved it as the way 'to avoid placing the burden upon posterity'; but twentieth-century pamphleteers were wont to assert that each generation must shoulder the economic burden of its own wars. Apart from these general considerations, the Gladstonian standard of financial virtue was in practice beyond full attainment by any government engaged in a great war. It was ingenuous even to suggest that Pitt might have imposed the war taxes in 1793; the marvel was that he persuaded a tax-hating Parliament and people to accept them in 1799. And when they had been voted, their legislative and administrative perfection was the task of many years; the early administrative development of the income tax was itself a second marvel, which has at last been fully revealed by a brilliant discovery of recent years.² Against the inevitable delays in

¹ The figures in £ millions were as follows:

<i>Financial Year</i>	<i>Revenue</i>	<i>Expenditure</i>	<i>Surplus (+) or deficit (-)</i>
1913-14	198	197	+ 1
1914-15	227	561	- 334
1915-16	337	1,559	-1,222
1916-17	573	2,198	-1,625
1917-18	707	2,696	-1,989
1918-19	889	2,579	-1,690
1919-20	1,340	1,665	- 325
1920-21	1,426	1,195	+ 231

Mr. Bonar Law, introducing the last war budget, estimated that from the beginning of the war to the end of the financial year 1918-19, taxation would cover 28.3 per cent. of central government expenditure. The corresponding figure for the Revolutionary and Napoleonic wars is (following Prof. Silberling) 46.8 per cent. The capital sum of the national debt was £650 millions before the war and £7,832 millions in 1920.

² A. Hope Jones, *Income Tax in the Napoleonic Wars* (C.U.P. 1939). Perhaps the writer should say that he is aware of the impediments to any close comparisons between British taxation in the Napoleonic wars and the twentieth-century wars—for example, the great differences in income per head and the length of time over which the wars were spread, not to mention modern developments of the taxation system. These paragraphs have only the limited purpose of sketching in the rough the background out of which modern British war finance came and indicating the long development of a tradition.

the voting of new taxes and the gathering-in of their yield, there must in every war always be set a steep rise of expenditure from the very day on which the Government sets itself in earnest to its war-time tasks. Adam Smith was no lover of public borrowing; but he knew that there was no escape from it 'in the moment of immediate danger'.¹ Those same necessities that constrained British Governments in the great war against France constrained them again in the first great war against Germany. They found that taxes took time to vote; they found that their administrative machine, superb though it was, would suffer if it were overstrained; they found that even a highly buoyant revenue could not keep pace with the swelling deficits. What else was to be expected, when British artillery could deliver 1½ million shells in a barrage preliminary to a single battle, and German artillery in one day and a half could fire as many rounds as all the German guns had fired in the entire Franco-Prussian war? A Chancellor of the Exchequer need not perhaps be too severely blamed if he lowered his sights a little and measured the financial performance of his nation, not against its own famous past, but against the present-day performances of its twentieth-century enemies and allies. To levy taxes covering not much more than a quarter of government expenditure might not seem heroic; but it was sufficient to maintain the solid structure of British credit. That virtue at least was contained in a precept enunciated by Mr. McKenna on the occasion of the fourth war budget:

. . . We never borrow a pound without making provision by new taxation sufficient to cover both interest and sinking fund.

How much happier German history would have been, in spite of military defeat, if the government of the Reich had followed the same precept!

Such a defence of British financial policy has great weight. From a strictly budgetary point of view, it might perhaps be accepted as a sufficient answer to those zealots of the Gladstonian tradition who from 1914 onwards accused British Chancellors of doing too little and doing it too late. However, the 'protesting economists'² of that time had an additional argument. They knew that what a war-time Chancellor does, or shrinks from doing, has far-reaching effects upon the supply of money and the general level of prices. They denounced the Government's borrowings, and the method of them, as the prelude and the cause of a disastrous inflation.

Once again it will be profitable to follow a doctrine back to the time of its self-conscious formulation during the Napoleonic wars. Protesting economists during that earlier struggle set out to demonstrate

¹ *The Wealth of Nations* (ed. Cannan) Vol. II, p. 395.

² cf. Edwin Cannan, *An Economist's Protest* (London 1927) p. v. "... "What did you do in the Great War?" ... "I protested." ..."

a thesis: the high price of bullion is a proof of the depreciation of bank notes; the paper pound has lost value through over-issue, and it will continue to lose value unless it is tied once again to gold. On the point of theory, Ricardo and his bullionist allies scored against the spokesmen of the Government and the Bank dialectical triumphs which economists continued to applaud for the next hundred years. Nowadays these triumphs seem pitifully irrelevant. Monetary theory itself has outgrown the one-sided cocksureness of the bullionists; historical and statistical research has revealed their inadequate command of relevant economic fact. No less important to twentieth-century minds (which have learned once again to take the measure of war) is the political irresponsibility with which the bullionists pressed their propaganda. Their wrong-headed advocacy would have forced the nation back to gold and a restricted war effort in the very month—so it turned out—when Napoleon was winning the opening battles in the great campaign in Saxony. It may be too much to say, as an American scholar has said,¹ that there would in all probability be no British Empire today if Ricardo and his friends had had their way; but it is impossible to ignore their apparent unconcern with the issue of the war. They wrote and spoke as if victory were an irrelevance.

It is not therefore to the economists of those days that we must go if we wish to see the problem of war-time inflation in its proper setting. We must go rather to the exponents of a more sober tradition which already had been native to England for more than a hundred years. This was the tradition of political arithmetic, the discipline which we today call economic statistics. Patrick Colquhoun was a statistician, a patriot, and a man of common sense. He fastened first upon the central fact: the nation was fighting a war of self-preservation. For such an object, no price could be too dear. Colquhoun reckoned up the superficial odds of the struggle: on the British side a population of 17 millions (allowing a problematical $4\frac{1}{2}$ millions for Ireland), on Napoleon's side a continental population of 100 millions. But the British were beating him! They had annihilated the navies of France and her allies, they had captured French colonies, now at last they were overthrowing Napoleon's armies on the soil of Europe itself! Colquhoun was a patriot who had no wish to conceal his 'wonder and exultation' at so mighty an achievement; he was also a calculator who wished to measure it in material terms. He found his measure in the 'New Property . . . annually created by the Labour of the people'. He found it—so we should say today—in the figures of the national income.²

¹ Prof. Silberling in *Quarterly Journal of Economics*, Vol. XXXVIII. Two articles on 'Financial and Monetary Policy of Great Britain during the Napoleonic Wars.'

² P. Colquhoun: *A Treatise on the Wealth, Power and Resources of the British Empire* (London 1814).

Here was a clue of central importance. Other like-minded investigators¹ followed it up, eliminating some of Colquhoun's double countings and pushing further his inquiry into causes. The immense increase of public expenditure since the beginning of the war (from £27½ millions in 1792 to £173½ millions in 1815) did not seem so inexplicable a marvel when it was measured against the immense increase of national productivity. Nor were reasons for the rising productivity hard to find. The censuses testified to a very rapid growth of population. Common observation revealed that many men 'who from deficient activity or mediocrity of parts would, in a state of peace, have necessarily remained unemployed, were brought by the war into situations attended with income'; as we today would put it, war had created conditions of full employment. Finally, much of the employment was found in industries of rapidly increasing technical efficiency.

The political arithmeticians were at the same time very well aware that the increase of physical output, great though it was, did not by itself account for the total rise in the national income. They understood that the swelling figures were due in part to a notable rise in prices. This they ascribed to two causes: to begin with, a war-created scarcity of goods and services, and after that—after 1809 particularly—a war-created abundance of money . . . Here at last, in proper perspective, appeared the monetary phenomenon that had so disproportionately excited the economists.

Here indeed could be found a whole habit and system of thought, sufficiently comprehensive and in its proportions sound enough to serve as a standard of reference for the makers of government policy—and its critics—even in wars of twentieth-century scale. An estimate of the national income could be made a guide to the progress of economic mobilisation; it could indicate the total sum of home-produced and imported resources from which the nation must draw its war-making power; it could thereafter reveal what proportion of this total was in practice appropriated by the government or switched over to the direct effort of war. It could measure the *size* of the war effort, which the time-honoured calculations of the relative proportions of tax and loan, important though they still remained, never pretended to do.

Unfortunately, this habit of calculation did not during the next hundred years win for itself a central place either in the Treasury or in academic thought. In his budget speech of May 1915 Mr. Lloyd George, still with his eye upon 'the heroic example', offered a brief comparative estimate of British national income in Napoleonic times and the proportionate yield from taxation; he then proceeded

¹ e.g. Joseph Lowe: *The Present State of England in Regard to Agriculture, Trade, and Finance* (2nd Edition, London, 1823).

to estimate the national income for the last peace-time year before August 1914. It seemed as if something important might follow from these calculations, but nothing important did follow; the illuminating idea flickered and went out. By and large, the makers of financial policy throughout the war confined themselves within the orthodox budgetary tradition; the critics of policy appealed, in the main, to the ideas of Gladstone and those of the Bullion Report.

Within these bounds there was, no doubt, fair scope for the critics. After August 1914, as after February 1797, government borrowing and a paper pound opened the way to inflation. This time the inflation was more dangerous; the pound fell faster and farther than it had done a century earlier. Measured against the indices of wholesale prices, its purchasing power after 1793 had been within two decades halved; after 1914 its purchasing power was reduced by two-thirds within a period of six years.¹ In both wars there were two causes of rising prices—the scarcity of goods and the abundance of money; but in the war against Germany the accent fell more heavily upon the second cause. The mechanisms of monetary expansion were possibly rather more complicated in the twentieth century than they had been in Napoleonic days. Although the bullionists painted a rather over-simplified picture, they were right in their time to concentrate their attention upon the issue of bank notes: a hundred years later, the majority of payments in Great Britain were made by cheque. Whereas in the six-year period from the end of 1913 to the end of 1919 the nation's paper money (Bank of England and currency notes) was increased from £57 millions to £459 millions,² its bank deposits in the same period were increased approximately from £1,000 to £2,800 millions. The first official explanation of the processes of this vast expansion was given in 1919 by the Cunliffe Committee on Currency and Foreign Exchanges.³ The Committee demonstrated that when the Government spent money which it had borrowed from the trading banks, it increased by a proportionate amount the deposits on which private people could draw cheques, and that it increased the volume of private purchasing power in extreme disproportion, when it borrowed from the Bank of England. No doubt the Government recovered by taxation and subscription to war loan (at an interest rate of approximately five per cent.) a considerable part of these inflated money incomes. But need the inflation have been so large in the first place? Were there not more economical methods of borrowing?

¹ By the Silberling index (1790=100) the peak was 211 in the first quarter of 1814; by the *Economist* index of wholesale prices (1913=100) the peak was 299½ in March 1920—i.e. a year and more after the war.

² It is to be noted that in the same period £123 millions of gold even went out of circulation, though silver coin rose from £34 to £77 millions.

³ Cd. 9182 of 1918 (Command Paper).

The protesting economists of the First World War paid less attention to the mechanisms of inflationary finance than to its injurious effects. They pointed out that the Chancellor, by seizing an easy short-term advantage, was storing up long-term trouble for himself and his successors. While the war lasted and the inflation continued, the original budgetary gap must become progressively more difficult to bridge, owing to the time-lag between the assessment of taxes when money was worth more, and their collection when money was worth less. After the war, when the inflationary process came at last to be reversed, an immense burden of debt that had been acquired in depreciated pounds would have to be carried by paying out more valuable pounds. These budgetary problems were formidable; but the economic and social consequences of inflation were more formidable still. It interfered with the war plan by stimulating private bidding for resources needed by the Services and supply departments. By the injustices it inflicted upon a section of the people, it damaged social morale and national unity. The violent disturbance of economic demand caused by the war was bound in any event to alter the relative economic rewards of different individuals and classes; inflation mischievously and capriciously aggravated these war-created inequalities. It raised the incomes of some capitalists and some workers, and imposed on others concealed taxation of the most damaging kind. It created conditions under which profiteering became an involuntary and inevitable state of grace, or disgrace. It made London a spectacle of ostentatious wealth and brittle pleasure at a time when the toll of slaughter was mounting in France and thousands of families were receiving every week the news of sons and brothers killed in battle. It branded upon a decent, patriotic people new and raw marks of inequality, vulgarity and callousness.

There was, nevertheless, something to be said on the other side. At the time, it was said only fragmentarily, or was acted upon piecemeal without being said; but later on, between the two wars, a systematic elaboration of doctrine was achieved, both in academic circles¹ and also (as the next chapter will show) within the Treasury. By 1939, a broader and firmer conception of the purposes and techniques of war finance had established itself. In the light of this conception, British financial experience and experiment during the First World War may be rearranged retrospectively into a clearer pattern.

In August 1914 two fundamental economic tasks confronted the British Government: first, to absorb into productive industry all employable resources of brain and muscle, material and plant; secondly, to switch over to immediate war purposes as large a

¹ cf. the growth of doctrine as exemplified in the successive editions of Professor Pigou's book, *The Political Economy of War*.

proportion of these resources as could be spared from their ordinary peace-time activities, or inactivities. In abstract theory, these tasks might have been tackled and mastered by sovereign command, by the universal conscription of men and wealth into a 'siege economy' where the Government would manage everything and pay everybody; in practice so ambitious an attempt, had it been made, would have collapsed into administrative and social chaos. Some zealous doctrinaires clamoured for it to be made a generation later, in the critical and exuberant summer of 1940; but even then it would have been a war-losing folly; even at the very end of the Second World War, the strain upon administration was relieved, and social efficiency was gained, by leaving some economic choices dispersed amongst private individuals and decentralised groups. At the beginning of the First World War, when huge administrative structures such as the Ministry of Munitions had not as yet even been dreamt of, the mainspring of industrial mobilisation was by necessity economic demand, not sovereign command. It was government expenditure that released the spring. The Government had to spend immense sums of money in order to achieve at maximum speed the maximum intensity of economic employment; it had to keep on spending them in order to feed the war machine's insatiable appetite for men and steel. Its expenditure swelled the money receipts of many classes and raised the total income of the nation at the very time when it was diverting national activity from production of the goods and services which ordinary people wished to buy. Thus was created a new gap: not this time the budgetary gap, so much denounced by the Gladstonian purists, between the expenditure and revenue columns of the public accounts; but an inflationary gap between the swelling supplies of purchasing power distributed—albeit unequally—among the nation and the diminishing supplies of purchasable goods available to the nation. The Government was face to face with a dilemma; it could not cramp its expenditure within the bounds of traditional orthodoxy without retarding and constricting the economic mobilisation necessary for victory; it could not build its 'paper bridge' without risking a collapse into an uncontrollable price inflation and eventual social chaos.

Policy was able to map out a practicable middle way between these two extremes of danger. There was virtue still in the established budgetary tradition; to take back in taxation the greatest possible amount of the newly created income was the simplest and best way of relieving the pressure upon prices. The same object would be immediately achieved (at the cost of a continuing budgetary burden) in so far as the receivers of income could be induced to lend directly to the Government money which they would otherwise have spent. It was, no doubt, too much to expect that any government engaged in a war

of twentieth-century scale would be able completely to satisfy its needs without having recourse to the banks, and thereby generating a surplus of purchasing power; but from 1916 onwards the British Government adopted a new borrowing policy which aimed at the reduction of purchasing power by drawing directly upon 'the genuine savings of the people'. That year saw the beginning of war savings certificates and the foundation of the National Savings Committee, a body which went into action again in 1939 with twenty-three years of continuous history behind it.

On the financial side, therefore, the design of a comprehensive policy to control inflation took definite shape before the close of the First World War. No doubt there still remained room for a more resolute drive behind the policy. There was, however, no possibility that finance alone could do the work that had to be done. There was no chance of bridging the inflationary gap unless the Chancellor's work was reinforced by measures of direct economic control. The best way of gathering in the nation's savings was to 'compel them to come in' by consciously drying up and levelling down the opportunities for private spending on consumption goods and capital goods. Direct rationing became essential, not merely for the blocking of redundant purchasing power but also to ensure 'fair shares' of scarce essential commodities.

This summary review of the tradition of war finance must, therefore, be followed by an inquiry into the origins of war-economic control.

(ii)

The Beginnings of Economic Control

'Business as usual', that slogan of economic endeavour which was trumpeted throughout the United Kingdom in August 1914, has provoked many retrospective sneers; it is so easy, and so flattering to our self-conceit, to be wise after the event. Set in its proper context, the slogan was not altogether absurd, for it reflected faithfully enough the experience of the previous hundred years, during which the mechanisms of supply and demand had been well adapted to meet the comparatively modest requirements of the war machine. The British people in their long nineteenth-century peace had forgotten how heavy the burden of war might be.

The episode of the Crimea did not remind them; for they bought their victory, such as it was, with a navy of 70,000 men and an army of 150,000, and a total differential war expenditure¹ of a bare

¹i.e. actual expenditure less what would have been the total annual expenditure assuming a constant normal growth based on previous increases.

£70 millions in two years. In the last phase of the Napoleonic wars a much smaller British population had sustained in a single year almost double this war expenditure, and had maintained a navy of 140,000 men and land forces of 350,000. Over the whole period of the war with France the nation had paid a toll in death which in proportion to its numbers was as great—though not, of course, so terribly concentrated in time—as the toll which it paid a century later in the first great war against Germany. All these facts were forgotten: many Englishmen read the novels of Jane Austen, few studied the sombre statistics of national achievement and loss.¹

Even if they had correctly measured the immense endeavours of their forefathers, they would have derived from their researches more inspiration and encouragement than practical guidance in their twentieth-century task. In the second German war, if not in the first, it was the destiny of the Jane Austens of England (if any existed) to become 'mobile women'. The absorptive capacity of war had been completely transformed during the intervening century by fundamental changes in the economic environment of the Western world. Europe in Napoleonic times was still primarily an agricultural continent, with a very high degree of local self-sufficiency. Even eastern Lancashire, the most highly industrialised district of the most highly industrialised country of Europe, returned under Schedule A of the Property Tax (rent and real property) double or three times the sum that it returned under Schedule D (the profits of trade, commerce and industry).² It would not have been quite true to say that there were no large war industries—there were the naval dockyards of the Channel and the Thames, the great ordnance establishments of Woolwich and Enfield, and those new prodigies of the iron industry such as Coalbrookdale and Carron: nevertheless, the time was still far distant when war would become *the* great industry, directing, distorting, and dominating the whole of the nation's economic

¹ The official estimates of the differential war expenditure for the whole Crimean war vary around £70 millions (S. Buxton, *Finance and Politics*, Vol. I, pp. 155-6; Mallet and George, *British Budgets*, p. 36). Professor Silberling reckons the average annual differential war expenditure of the United Kingdom at £120 millions in the period 1811-15 (op. cit.). The estimates of the fighting forces are taken from the relevant parliamentary papers. If forces of the East India Company, and the local militia, the volunteers and yeomanry were to be included, the total of British Empire forces under arms in January 1814, according to returns in the Adjutant General's office, would fall little short of a million (961,514). Half a million is a fair round figure for United Kingdom effective forces in 1814 (excluding local militia, etc. but including enlisted foreigners). The latest and best estimates of war mortality are by Professor Greenwood in *Journal of the Royal Statistical Society*, Vol. CV.

² Of course, Schedule A included urban rents and was with difficulty evaded, whereas Schedule D was widely evaded; but the main proposition remains true of a country in which the industrial concentration of east Lancashire was still unique. England, nevertheless, enjoyed, in a degree exceptional for those times, the important war-economic advantage of an export surplus on trading account—an advantage which in the twentieth century had been lost by England but gained by the United States. In Napoleon's day England ran a modest version of lend-lease; in the Kaiser's day and Hitler's she ran up debts.

resources and effort. The size of the campaigning armies was constricted in Napoleon's day by the transporting capacities of sailing ships, canal barges, and horse-drawn vehicles or pack animals. A careful contemporary student of Great Britain's economic effort against Napoleon came to the conclusion that it took the whole-time effort of one war-worker to maintain two men in the fighting services; he reported this conclusion with some awe.¹ A century later, British economists calculated that as many as three war-workers might be needed to maintain a single fighting man. Estimates of this kind are no doubt so variable, in accordance with the definitions at different times employed, as to possess no exact comparative value; but they do, nevertheless, give a true general impression of the enlarged economic dimensions of twentieth-century war.

For those who would desire some precise numerical reinforcement of this impression, details such as the following may serve. Between 2nd and 18th August 1914, 7,000 French railway trains going and coming continuously by day and by night transported to the battle front $3\frac{3}{4}$ million French soldiers. These French soldiers, like their German antagonists, went to the front expecting a swift and short war of movement, not that rigid embattlement of opposed millions which was the unforeseen curse of the four dreadful years ahead.

Behind the entrenched armies was an intricate mesh of railways, not to mention the roads on which petrol-driven vehicles would soon be crowding; the British Army, which in August 1914 had only 100 motor lorries, possessed 60,000 of them at the end of the war. More than anything else, it was these modern facilities of transport that differentiated the 'great' war of 1914-18 from wars of the pre-railway age, great though they, too, may have been when measured against the technical capacities of their own time. Twentieth-century transport could carry food, fuel and clothing sufficient to maintain in continuous array of battle, armies that were now reckoned by the million, and it could carry as much ammunition as the factories could produce to feed their modernised weapons. More men, more numerous, powerful and intricate equipment, a vastly increased rate of consumption and wastage—here was the immediate pull of demand which transformed the economic effort of war. Faced with this unprecedented demand, supply faltered and failed. From the failure of supply emerged something new: no longer the old order of war finance and voluntary economic effort, but the new dispensation of war economy, the total and combined efforts of entire nations, directed and controlled by governments newly equipped with large and complicated administrative mechanisms.

¹ Joseph Lowe, *op. cit.*

THE VERTICAL PENETRATION OF CONTROL

This new dispensation, it must once again be repeated, came unforeseen and unplanned; it emerged by stages from struggle and necessity. The manner of its emerging may be illustrated from the experience of the British War Office, beginning with the Quarter-Master General's needs. There was, for example, a quite unprecedented need for sacks.¹ Armies had always used large quantities of sacks; the supply services wanted them for packing and transporting stores and as nosebags for their horses, the infantry wanted them for the construction of earthworks and trenches. Towards the end of 1914 the infantry were beginning to dig as infantry had never dug before. They kept on digging throughout the war. By November 1918 the number of sandbags supplied by British makers to the British and Allied armies—chiefly for the construction of trenches and dugouts—had reached the dizzy total of 1,186 millions. A demand so fantastic had never been dreamt of at the beginning of the war. Towards the close of 1914, the army was calling for bags at the rate of about a quarter of a million a month. By May 1915, it was demanding six million a month—and even this figure fell short of the growing need.

When the War Office went into the market to buy sacks, it met with an unsatisfactory response. Either there was a real shortage; or else suppliers were holding back in expectation of a rise in prices. In March 1915, when the War Office made an urgent appeal to the trade, it received a swarm of unsatisfactory small offers, together with one large offer from a speculator who hoped to corner the whole supply of sacks and make a 100 per cent. profit by selling them to the Government at a price three times higher than the previous market price. This impudent proposal stung the War Office to direct action. It sent officials to Liverpool to requisition the stocks of the sack merchants there; it sent other officials to Dundee to get a lien on the production of the jute manufacturers. The business of the Liverpool merchants was soon settled; they were paid at a figure representing the market price of sacks before the demand of the Army had sent the prices rocketing. But the Dundee manufacturers had problems that required more patient and intricate handling. To begin with, they were choked up with private contracts at home and in the export trade. These contracts the War Office required them to break, so that they might be free to concentrate their whole effort of production, at least for the time being, upon satisfying the requirements of the Army. At what price? After dealing so summarily with the claims of the merchants and private consumers, it would have been absurd

¹ This paragraph and the next are based upon E. M. H. Lloyd, *Experiments in State Control* (Carnegie Endowment), Chapters iv, v, vii.

for the Government to allow the manufacturers supply-and-demand prices in a market that had been so completely transformed by its own abnormal demand. On the other hand, there were reasons of expediency as well as of justice prompting it to allow the manufacturers recovery of their costs and a reasonable margin of profit: otherwise it might find that it had aggravated the problem of supply by destroying the incentive to production. Along these lines the War Office officials opened negotiations with the jute manufacturers. Very soon they discovered that it would be futile to fix a price for the end-product only: some units of the industry were large enough to cover all its processes, but others confined themselves to a single process, such as sewing, or weaving, or spinning. It was therefore necessary to fix a price covering cost and a fair profit margin at every stage of production from the spinning of the raw jute to the despatch of the finished bags to the Army depots. Even this was not enough: supply was not safeguarded, nor the elaborate pyramid of prices and controls firmly based, until the British and Indian Governments took concerted measures to fix prices for and to ensure regular deliveries of the raw material itself.

Many similar stories could be told, all of them having an identical beginning under the original impulse of scarcity, but in their development combining some uniformities of practice with variations arising from the peculiar circumstances of particular industries.

Certain problems of administrative technique invariably repeated themselves: cost accountancy, which had not hitherto been part of the ordinary training and experience of the civil service, now became a necessary and normal part of its business operations. Sometimes the War Office employed independent firms of accountants on a commission basis; at other times it absorbed into its own administrative establishment the specialists it needed.

On the legal side of economic control, there gradually emerged, after some early improvisations under the Royal Prerogative, a standardised code of practice. The Government took to itself, by defence regulation, specific powers to requisition stocks of goods and materials, to pay manufacturers on the basis of cost and a fair profit, to license dealers, to enforce priorities of distribution, and in other ways to establish State control over trade. The regulations enumerating these powers had a hard modern ring; yet there were many lawyers who thought it a false one: for what had the fixing of prices for jute yarn and of priorities for raw wool to do with 'the public safety and defence of the Realm'—the governing purpose within which defence regulations were by law confined? A good many lawyers nourished these misgivings throughout the war; but very few laymen were disturbed by them. The real sanction behind the emerging war economy lay not in legal forms but in national consent.

a consent that flowed from the deep popular consciousness of peril and need.¹ Throughout the time of danger, British industries were ready to accept regulations that were necessary and fair, even if their legal basis were disputable: conversely, they disputed and usually in the end defeated unnecessary or unworkable regulations, no matter how sound they might be in strict law.

Economically, the vertical penetration of control downwards towards the sources of raw material supply repeated itself in all controlled industries, with differences in its speed of penetration and ultimate comprehensiveness. In general, it may be said that centralisation of purchase was pushed furthest where supplies were scarcest.² The method of purchase varied from industry to industry and country to country. Sometimes the British Government bought direct from another government; the most notable example of this procedure was the audacious deal of November 1916, when, 'by the exchange of half a dozen cables in the course of a fortnight', the War Office purchased the entire wool clips of the southern Dominions. The effect of this transaction was to eliminate completely all private trade in wool, both at the British end and in the exporting countries. Sometimes, however, the British Government operated commercially and competitively in the markets of the exporting country; either indirectly, by choosing a firm or group of firms to act for it on a commission basis, or directly, by absorbing into its own establishments persons possessing the necessary commercial competence.

Whatever the measures adopted for the control of imported supplies, there had to be parallel measures for the control of the corresponding home-produced supplies. An outstanding example is the meat trade; control began early, with the measures taken by the War Office to safeguard the Army's requirements of imported meat; it extended, late but at last, into the Ministry of Food's drastic refashioning of the entire meat industry and its organisation of rationing to safeguard essential civilian needs. This horizontal extension of control from the sphere of military requirements into the sphere of civilian needs is a theme of central importance to this chapter, and indeed to the whole book; but it may be postponed a little longer.

There is still something to be said about the vertical penetration of War Office controls; for the picture would be too much out of balance if no reference were made to the great industries—engineering,

¹ After the Second World War also, all economists of practical experience emphasised this fundamental truth. See, e.g., Lionel Robbins, *The Economic Problem in Peace and War* (1947), p. 45.

² An example of this tendency might once again be taken from Dundee, where purchasing arrangements for Russian flax, the raw material for the heavy linen industry, were much more centralised and stringent than for Indian jute, because the flax was much scarcer than jute.

metals, chemicals—with which the Master General of Ordnance was concerned. It was in this zone of munitions production that the pre-existing capacities of supply failed most signally to meet the requirements of the twentieth-century war machine. Nineteenth-century Britain had shown a steady bias against direct government participation in the munitions industries;¹ but the bias had not gone so far as to close down the state-owned ordnance factories, which in August 1914 were still providing the Army with about a third of its weapons. A principal role assigned to the ordnance factories was to assure supplies in the opening phases of a war; thereafter, it would be the task of private industry to shoulder the main burden of munitions production. Private industry, however, was given very little peacetime training for its war-time task. In August 1914 there were no more than sixteen firms (ten of them small) habitually tendering to meet War Office requirements of guns and shells, rifles and small arms ammunition; and there was virtually no industrial provision for the other munitions that the Army would be clamouring for in the coming years—trench mortars and grenades, the entire apparatus of chemical warfare, armoured fighting vehicles and unarmoured mechanical transport. Administrative arrangements were to scale: eighteen clerks in the Army Contracts Department were managing the commercial procurement of everything the Master General of Ordnance needed.

In May 1915 the administrative task was transferred to the new Ministry of Munitions. During the next 3½ years the Ministry spent more than £2,000 million, and by November 1918 it had built up its staff to more than 65,000. The challenge that it had faced during the first year of its existence had been an unprecedented one; for Army recruitment was then rising above three million and the forces at the front were expending ammunition at a rate never before imagined. To equip millions of British and Allied soldiers with weapons and keep them supplied with ammunition, the Ministry had to take control of the munitions industries exactly as the War Office had taken control of the textile industries—cancelling private contracts, arranging its own contracts without respect to the laws of supply and demand, estimating costs and fixing prices at every stage of production, purchasing and distributing the raw material. It had besides to do a great deal more. For the expanding war economy necessitated a great effort of investment which the mechanism of the market—even if the essential strategical and technical knowledge had been miraculously injected into it—was most unlikely to call forth. The purpose of the investment was a short-term one, destruction of the enemy's power; private enterprise could hardly be expected to

¹ cf. C. 5116 of 1887, *Committee on the Organisation and Administration of the Manufacturing Departments of the Army*. Vol. XIV. (Command Paper.)

accept the major financial risks of providing buildings and plant that would become redundant when peace returned. The Ministry of Munitions, therefore, had to expand the capital equipment of the old specialist firms. It had also to search out and mobilise the productive capacity of every firm, large or small, experienced or inexperienced, which was capable of being trained and switched over to munitions work.¹ On top of this it had to build and operate immense new factories of its own. These government factories played an essential part in filling out and balancing the total effort of British industry; they supplemented the private industrial production of 'traditional' stores such as guns and shells, they tackled sudden bottleneck items such as machine tools, they produced prototype equipment of a non-commercial and specialist kind, they drove forward the mass production of ultra-modern weapons of war such as aircraft and aero engines.

THE HORIZONTAL EXTENSION OF CONTROLS

The history of the Ministry of Munitions was recorded after the war in eleven volumes. No further allusion can be made to it here; for the theme of the present book is not war production, but war economy. The distinction between these two overlapping subjects of study has been mentioned in the preface and may be illustrated here by a brief reference to German experience. On the evidence available, it would seem that Germany's economic failure was not in the special province of war production, but in the allocation of economic resources amongst all claimants, including the civilian population. The Germans, after their original expectations of a short war of movement had been falsified, were quick to adapt their war industries to the requirements of positional warfare. They switched production, more quickly than the British did, over from field guns and shrapnel to heavy guns and high explosive shells. They found in Walter Rathenau a brilliant master of industrial organisation and applied science, and through his practical genius achieved sensational triumphs in producing substitute materials to replace the imported raw materials that the blockade denied them. But they failed to provide sufficient food for the people. It has been estimated that, at the end of 1918, the German people were consuming only sixty-four per cent. of the cereals, eighteen per cent. of the meat, and twelve per cent. of the fats that they had consumed before the war. When the war was over, German propagandists put the blame on 'the hunger blockade', and found gullible audiences both at home and

¹ Hence the great importance of the Ministry's regional organisation, which enabled it to acquire the detailed knowledge necessary for mobilising capacity in each industrial area.

abroad. The blame would have been more justly put upon the German Government. Before the war, the Germans were importing less than ten per cent. of their food. Their losses of overseas food imports were a small thing in comparison with the losses they inflicted on themselves by their failure to maintain home production. That failure had simple causes: decline in the number of draught animals and no compensating mechanisation of agriculture; inadequate production of fertilisers; insufficiency of farm labour. Each of these causes has its root in a deeper cause, the faulty balance of a war economy in which resources essential for maintaining the efficiency of the civilian population were engulfed by the armed forces and the industries most closely connected with them.

In the United Kingdom, there was at the outset of the First World War no clear conception of war economy as a unified structure in which military and civilian requirements must be kept in proper balance with each other: on the contrary, those piecemeal controls that have already been surveyed contained within themselves the possibility of cumulative and ruinous unbalance. When, for example, the War Office satisfied the Army's demand for jute, it did so at the expense of civilian demand: that is to say, by curing its own scarcity it created a new one. Somebody had to go short—meat packers, or flour millers, or the overseas grain exporters who were supplying British requirements. Such shortages, had they persisted, would have had injurious effects upon the nation's war effort, and would have called for government intervention in the field of distribution, so that the heaviest loss might be made to fall where it would do least harm. In this particular instance direct remedial action was not necessary because the British and Indian industries possessed between them sufficient productive capacity—once it was in full employment—to satisfy Army requirements of jute and the civilian demand as well. Circumstances were not always so easy. The British boot industry, with a moderate expansion of its capacity, was able to produce more than 60,000,000 pairs of boots for British and Allied soldiers: not, however, without considerable strain, which became manifest towards the end of the war in an excessive rise of prices and a no less excessive decline of quality in the civilian market. The Government, which had long since established such controls over boot manufacture and tanning as were necessary to safeguard Army supplies, began in August 1917 to do something for the civilians, and in 1918 it instituted a scheme for producing boots and shoes of good standard quality at a price considerably lower than that of 'non-standard' footwear. Towards the end of the war it introduced a standard clothing scheme also. However, this scheme had one fundamental weakness; there was no compulsion behind it; manufacturers and distributors need not enter this line of business unless they

wanted to. Since the business was a comparatively unprofitable one, not many of them entered it.

Civilian requirements of food demanded more drastic safeguards. By a series of administrative improvisations that can be traced back to the institution of the Sugar Commission in the very first month of the war, the Government in the end brought under its control 'nearly everything that men could eat or drink without being poisoned, and many things outside that category, such as feeding stuffs and beehive sections'. Rationing was imposed late in the war; it was not systematically and comprehensively introduced for sugar, fats and meat until July 1918. There may perhaps have existed in retrospect a tendency to magnify the achievement of the first Ministry of Food. It did nevertheless bequeath to its successor of 1939 a coherent body of administrative experience—a comprehensive divisional and local organisation, an elaborate costings machinery, the technique of rationing and the very form of the ration book itself. It also bequeathed a coherent body of doctrine, in which price control and rationing were two mutually supporting principles: for just as scarcity without price control must allocate supplies to the richer people, so also must price control, if unsupported by rationing, allocate them to the luckier, or the more cunning and pushful ones. Some of the men who had tested, proved and applied this doctrine in the latter years of the First World War were summoned, more than a decade later, to make preparations for applying it, at the very outset, in the event of a Second World War.

THE FUNDAMENTAL SCARCITIES

The purpose of the policies that have been outlined above was to ensure that military demands did not engulf supplies essential for maintaining civilian efficiency and that among civilians themselves these supplies were distributed equitably and efficiently. What we have called 'the horizontal extension of controls' aimed thus at a just equilibrium between the military and civilian sectors of the war economy and within each respective sector. Such an equilibrium could not be achieved merely by controlling end-products. The factors of production—materials, machinery, factory space, labour—had to be employed in a manner well calculated to satisfy at the same time both the expanded military demand and also the civilian demand, scaled down though the latter might sometimes be. If, in a particular instance, raw material appeared to be the immediate shortage, the larger or more pushing claimants upon it had to be prevented from over-riding other claims which, though more modest, were from the national standpoint equally valid. At the beginning of the war, the Services had thought themselves entitled to snatch the lot. Later on, the Service departments and the Ministry of Munitions

issued schedules of priority to guide manufacturers: class A, government orders: class B, orders for the export trade and other orders certified to be of national importance: class C, orders for civilian consumption at home. In an endeavour to make the classification effective, the officials issued priority certificates to manufacturers in respect of the contracts assigned to them. But the system worked badly. As scarcities grew more acute, the classifications of priority had to be refined—A₁, A₂, A₃ and so on. This refinement signified a more intense competitive scramble among claims of high priority, and at the same time made it all the more likely that claims in category C would get no attention at all. Yet these claims could not be set aside without ruinous effects upon the balance of the national economy; after all, the young women who were making army uniforms would themselves sometimes need new underwear and the farmers would need new machinery if they were to make a success of the food production drive.

The most effective answer to these problems was found in the allocation system, which was instituted, for example, for steel. To make the system work, each department had to state its total needs in respect of the production for which it was responsible and distribute what it received amongst all the producers. But what would happen when the statements of need submitted by all the departments exceeded the total of available supplies? Obviously, some departments or all of them would have to scale down their requirements and resign themselves to less ambitious programmes of production. Who would persuade them to do this? Who would define the magnitudes and proportions of comparative sacrifice? The system of allocation assumed the existence of a central, representative and impartial authority with competence to take decisions in the national interest upon the conflicting claims of rival departments. Such an authority could be derived only from the War Cabinet itself. The institutional adaptation of the Cabinet system in response to challenges of this nature will be explained in the concluding section of the present chapter.

For the present, it is the problem of scarcity that calls for further analysis. Those scarcities of raw materials that have been already discussed were, very frequently, derivative. Sometimes they could be traced to a deficiency of importing capacity, sometimes they were chiefly due to the scarcity of labour.¹

Defective importing capacity was a fundamental scarcity, a cause of many production bottlenecks and the cause of most of the food

¹ The falling production of coal was due both to a diminished labour force and to its diminished productivity. In 1913, approximately 1,107,000 British miners produced 287 million tons of coal; in 1918 approximately 990,000 produced 228 million tons. Annual output per man was 259 tons in 1913; 230 in 1918. Output per man shift (as estimated by the Mining Association) fell from 1.02 in 1914 to 0.86 in 1918.

shortages. It might be resolved into two elements, inability to pay, inability to transport—as the Americans put it a generation later, ‘cash and carry’. In the First World War the British were able to pay for a great deal, chiefly from the proceeds of their visible and invisible exports:¹ nevertheless, they were in the second half of 1917 seriously embarrassed by shortage of the means of payment, and were only relieved by the newly-found willingness of the United States Government, now a direct partner in war, to lend dollars without stint. Under these circumstances it seems in retrospect rather surprising that exporters of capital were handled very gently by the Treasury,² and that exporters of goods retained unrestricted freedom to use as they thought fit the foreign currencies accruing to them from their overseas sales. But in those days the rigours of exchange control had not yet been invented.

Still more serious than the shortage of foreign currencies was the shortage of shipping space. Between the beginning and end of the war the British Empire lost $7\frac{3}{4}$ million gross tons of shipping, which was more than a third of the tonnage which it possessed in August 1914. It failed to make these losses good by capture and new building: within the war period its total tonnage fell from approximately 19 millions to $13\frac{1}{2}$ millions. On top of this were the substantial losses of Allied and neutral ships.³ Attacks and sinkings by enemy submarines reached their peak in the spring of 1917, when they pushed the nation close to the margin of defeat; after that the danger was warded off by relentless fighting on the Navy’s part and by the imposition of drastic control over all the shipping serving the Allied cause. From the beginning of the war, the evolution of control had followed the growth of scarcity. In the first year, gains of tonnage had exceeded losses; there was a pressure of demand upon supply which was reflected in a sharp rise of freights, but on the whole the United Kingdom suffered inconvenience rather than danger. During this year British shipping, unless requisitioned for military and naval purposes, was allowed to run free. In the second year of the war, sinkings rose sharply until they reached the danger point, and the Government was driven by successive crises to requisition successive blocks of tonnage—first for meat, then for wheat, then for other essential supplies. In the third year of the war, the submarine attacks reached their climax and so did the Government’s measures of control. The

¹ Total British imports, 1915–18, were approximately £3,800 millions. For the same period, and in round figures, visible exports were £2,000 millions and invisibles £1,000 millions (between them three-quarters the value of the imports). Sales of securities amounted to £1,000 millions, export of gold stocks to the small sum of £40 millions.

² Remittance of money for investment abroad was not prohibited until November 1917, and even then the prohibition was not effectively policed.

³ New building in the U.S.A. to make good the losses did not get into its stride until the last months of 1918.

Ministry of Shipping was established in December 1916, universal requisitioning was proclaimed in February 1917, and by the end of the year the Ministry was sufficiently equipped with knowledge and administrative capacity to be the master of its task.

Yet the Ministry of Shipping was itself in search of a master. It had taken complete control of the ships ; but it had no desire to take on its own shoulders the entire responsibility for allocating shipping space amongst all the competing claimants : that surely was a matter for high political decision, for it affected in the most crucial way the distribution of the nation's economic resources and the balance of the national war effort. So long as tonnage had remained relatively plentiful, the Services had been able to get all they asked for ; but it was now high time to invite them, and if necessary compel them, to exercise rigorous economy. There were besides four ministries—the War Office, the Ministry of Munitions, the Ministry of Food, the Board of Trade—that had competing claims upon the diminished total of shipping available for United Kingdom imports. Of these four, it was the Ministries of Food and Munitions that demanded most. But how were their demands to be balanced one against the other, and against the demands of the two smaller competitors? The Ministry of Shipping was not itself equipped with the knowledge to estimate in fine quantities the nation's comparative needs of wheat or timber, palm oil or fertilisers or cotton. It might, and it did, invite each importing department to construct a reasoned programme of its own needs ; but to measure the total needs of all departments, and to scale them down to the level of the available shipping space—in other words, to construct a *national* import programme—was too complicated and too responsible a task to be left to the arbitrary decisions of the Ministry of Shipping. It called for an impartial central authority, representing all interests but standing above the narrower conflicts of interest. Like other problems of the inter-departmental allocation of scarce resources, it could not be completely mastered without new institutional development within the framework of the British Cabinet system.

A review of the manpower problem will lead to a similar conclusion. The manpower problem has a universality peculiar to itself, all the more so because it represents something more than the basic factor of production : it is the fighting power no less than working power, it is the men and women of the nation. The search for the best methods of distributing it and using it to satisfy the requirements of war is not merely a technical problem of war economy ; it is also a political problem of national consent.

The experience of 1914–18 showed that the manpower problem had two main aspects : first, how to strike a balance between the requirements of the rapidly expanding fighting services and those

of industry: secondly, how to strike a balance within industry itself. The immense importance of the first question may be illustrated by recalling the classically inept answer which Czarist Russia gave to it. The Russian population at the outbreak of the First World War has been estimated at about 175 millions, of whom the immense majority were peasants. Russia was pitifully poor in the industrial resources necessary for modern war; her output of steel was approximately five million tons as against Germany's 18 million, her output of coal 36 million tons as against Germany's 190 million. Her total industrial population was barely five million—three million in the factories, one million in the mines, and 800,000 railway workers. A realistic appraisal of the needs of war would have revealed the futility of building a fighting army excessively disproportionate in size to the industrial army; yet by 1917 the Czarist government had called to the colours thirty-seven per cent. of the male population of working age. It thereby condemned thousands and even millions of its soldiers to fight without adequate clothes, boots, and weapons, and it pushed large sections of the Russian people over that narrow line across which lay, even in time of peace, almost unendurable physical want.

No British Government could possibly have made such fantastically costly errors; for the British population, small though it was in comparison with the Russian, represented a much broader and deeper concentration of war-making power. Yet some of this power could be and was frittered away by haphazard allocation between the armed forces and industry. In August 1914 the principle of private decision was still unchallenged both in the military and in the industrial sphere; voluntary enlistment was the rule in the former, a free labour market in the latter. Before the end of 1914 the patriotic impulse had swept into the armed forces scores or hundreds of thousands of volunteers who would have served their country more effectively if they had remained in industry. The Service departments themselves were compelled to recognise that expansion of the numbers of men in uniform was of no use to them unless it were accompanied and backed-up by a corresponding expansion of war industry—an expansion that indiscriminate recruiting had already put in jeopardy. As early as December 1914 the Admiralty began to issue badges for distribution among the men whom its production managers wanted to protect from the recruiting drive; in March 1915 the War Office followed the Admiralty's example; later in the year the Ministry of Munitions took over the badge-issuing business. Meanwhile, other techniques for the protection of industry were being worked out—the listing of trades whose members were debarred from enlistment in the armed forces and the listing of firms whose employees were similarly debarred, unless an employer chose to issue a certificate testifying that such-and-such a man might be

spared. All these devices were extended by the Ministry of Munitions until they covered not only the men and the firms directly engaged in the production of weapons, but the men and the firms engaged upon the early and intermediate processes of war production—machine tools, iron and steel, gas, electricity and the like. By the summer of 1915 the balance had excessively shifted and had become too heavily tilted against the recruiting sergeant. The armed forces needed 1,500,000 recruits and Lord Derby was given the task of bringing them in. He brought in no more than 800,000. This failure was the prelude to military conscription, introduced in May 1916 by the National Service Act. Even then, a year was still to pass before effective means were found of striking a balance between military and industrial manpower in accordance with the major policies adopted by the War Cabinet. The work was taken in hand during 1917 by the newly-established Ministry of National Service. It straightened out the tangled systems of departmental exemption and established a unified and rationalised Schedule of Protected Occupations. This schedule listed all the civilian occupations deemed essential to the war effort, and at the same time varied the degree of protection granted to the listed occupations by appropriate special treatment of different age groups and medical classes. The flexibility of the system was increased in February 1918 by the introduction of withdrawal orders, which could be used to diminish the protection given to individual occupations, or to remove it altogether.

Here at last was a rational and effective arrangement for maintaining the just equilibrium between military and industrial demands upon manpower. The principles of the Schedule of Protected Occupations were kept between the wars as the basis for detailed planning of the new Schedule of Reserved Occupations that was introduced in 1939. But no correspondingly firm code of practice was handed down from the First World War to regulate allocations of manpower within industry itself. On the military side, the principle of compulsion had since 1916 been accepted as the basis for all regulative policies; on the industrial side, the First World War ended, as it had begun, with allegiance to the principle of a free labour market. In practice, that principle had been subjected to some important qualifications; indeed, some expert students of British war experience were inclined to believe that it had been too much tampered with. In the winter of 1939–40 most people interpreted the experience of the First World War as proving that ‘Britons’—and in particular British workmen—‘go farther led than driven.’¹

The control of labour during 1914–18 had been far more a matter of prohibitions than of positive commands. The shortage of skilled

¹ Sir William Beveridge, *Some Experiences of Economic Control in Wartime* (Sidney Ball Lecture, February 29, 1940), p. 9.

munitions workers had brought about quite early in the war a fairly wide-spread agreement to three general propositions: first, that labour must not be wasted in strikes and lock-outs: secondly, that it must not be permitted to shift at will from job to job without regard to the relative importance of the jobs and to the need for continuity in production: thirdly, that skilled labour must be diluted. Each of these conditions set a limit to the traditional peace-time freedom of employers and workers by telling them that they must not do certain things. Together, the three conditions added up to an important limitation upon the normal operation of the labour market. But they did not abolish the market. There was a world of difference between telling labour that it could no longer shift about at will, and telling it that it would be shifted about according to the will of the Government and the need of the nation. Moreover, even the three negative conditions referred to above were never applied in their entirety. A beginning was made in the 'Treasury Agreement' of March 1915, whereby the trade unions of munitions workers accepted the first and third conditions; that is to say, they agreed to give up strikes in favour of arbitration, and to relax trade practices that hampered the dilution of skilled labour, in return for undertakings safeguarding the long-term rights of labour and imposing short-term restrictions upon employers' profits. All these provisions were repeated and expanded in the Code of Labour Regulation contained in the Munitions of War Act, 1915. In the same act was contained the first serious attempt¹ to fulfil the second condition of labour economy, namely to control the disorders arising from the continuous shift of workers from job to job. A workman's freedom of movement would henceforth be limited by requiring him to obtain from the employer he was leaving a certificate testifying to the employer's consent; if he failed to obtain this certificate, he would not be permitted to take a new job on munitions work within six weeks of his leaving the old one. This clumsily drafted prohibition was later improved upon; but the more it was improved upon the more resentment did it provoke among the workers. In August 1917 it was revoked, for the sake of industrial peace. So ended the only serious attempt to impose a negative control upon the right of British workers to change their jobs. The positive business of getting the right workers into the right jobs was left throughout the war to the ordinary economic incentives, reinforced by some advertisement and patriotic drama.² To conclude: 'pulls' were a much stronger motive power than 'pushes' in the labour migration of 1914-18.

¹ Employers had since April 1915 been restricted in their 'poaching' activities.

² e.g. the War Munitions Volunteers Scheme of 1915 and the War Work Volunteer Scheme of 1917: the former was for skilled men only, the latter for skilled and unskilled; both reinforced the patriotic appeal with various practical inducements.

Ch. I: PREVIOUS EXPERIENCE

It was, nevertheless, by all previous standards of comparison, a great migration. Between the beginning and the end of the war voluntary enlistment and conscription had between them raised the armed forces from below half a million to above $4\frac{1}{2}$ million men, and economic incentive had increased the labour force in the munitions trades from approximately two million to three million men and women, despite the heavy losses of men to the Services. There had been correspondingly heavy shifts of labour within and between the other industrial groups, and a large intake into industry from the non-industrial section of the population. Detailed measurement of all these changes is not possible, owing to the absence before 1914 of the statistics that became available later through the unemployment insurance scheme; but a fairly comprehensive enumeration can be given for the last year of the war. It is summarised here to give a basis of comparison with the more intense effort of the British people during the Second World War: to make the comparison easier, the classifications of that later time are followed, so far as the figures permit.

Mobilisation of Manpower in 1918

(Men 14-64, Women 14-59)

	MEN		WOMEN		TOTAL	
	Millions	%	Millions	%	Millions	%
Armed Forces and Civil Defence	4.60	34.1	0.10	0.7	4.70	16.9
Group I industries	2.12	15.7	0.91	6.3	3.03	10.9
Group II industries	3.05	22.6	0.70	4.9	3.75	13.5
Group III industries and non-industrial population	3.72	27.6	12.64	88.1	16.36	58.7
Total	13.49	100.0	14.35	100.0	27.84	100.0

NOTES:

- Group I covers metal manufacture, engineering, motors, aircraft and other vehicles, shipbuilding and ship-repairing, metal goods manufacture, chemicals, explosives, oils, etc.
- Group II covers agriculture, mining, National and Local Government services, gas, water and electricity supply, transport and shipping.
- Group III covers food, drink and tobacco, textiles, clothing and other manufactures, building and civil engineering, distribution trades, commerce, banking and other services.

2. See also Table 2(b) on p. 78.

Source: Ministry of Labour

The intensity of effort which these figures signify would have seemed 'beyond all credibility' to Patrick Colquhoun, the statistician who measured the British effort against Napoleon—a mighty one

also, in its own time; but between 1815 and 1918 had been dug the deep gulf of industrial change. No such gulf separated 1918 from 1945—or the early months of 1945, one ought perhaps to say: the portent of Hiroshima changed many things. Until Hiroshima, there was a similar tale to tell of the two wars. Similar, but not identical; for in the second war all the magnitudes of British endeavour were larger, and the cost heavier in everything except young life.¹

The methods, also, were in the Second World War more workman-like, more professional. In 1940, liberty's year of crisis, the British people surrendered to the Government as their trustee those lesser liberties that their fathers a generation back had clung to as inalienable rights. Economic control was enabled henceforward to penetrate the national life more deeply, even to the very roots of manpower scarcity. Moreover, there was in this second and sterner testing time a conscious doctrine of means and ends, a coherent explicitness of purpose informing and unifying the wide-spreading pattern of controls. The men of 1914-18 had not possessed such clarity of intellect and purpose. How, indeed, could they have possessed it? If in imagination one looks forward from August 1914 to November 1918, one is impressed by the utter strangeness of the economic country into which the nation had marched—or been marched—during those four years. There had been no map to guide the march. The political economy of war came into existence as a fact before it was conceived as an idea. Hundreds of improvisations originating in shortages of sand-bags or shells or food, and the more fundamental scarcities of shipping and manpower, had fallen together into a pattern. Very few people saw them as a pattern; fewer still understood the logic that informed it.

(iii)

Towards Co-ordination

To conclude this chapter, it is necessary to change the angle of approach and write straight constitutional history. Hitherto the approach has been from the particular to the general; the growth of war economy has been apprehended as the accumulation of those particular concrete problems of supply and distribution that vexed individual departments. This has been the most realistic method of approach, because it follows very closely the actual processes of growth. The officials who were responsible for the procurement of

¹ For an attempt to compare the respective magnitudes of British economic effort in 1914-18 and 1939-45 by the measurements of national income estimation, see A. J. Brown, *Applied Economics* (London, 1947), pp. 46-54.

sand-bags and a thousand other articles of military use found themselves compelled to substitute administrative control for the self-regulating mechanisms of supply and demand: as trustees of public money, they took action to combat the inordinate rise of prices; as trustees for the lives of British soldiers and sailors, they took action to ensure that necessary supplies were produced in the necessary quantities. Their successes in the field of military procurement created shortages in the field of civilian supply: other officials were thereby compelled to take action to supersede the ordinary mechanisms of production and distribution, if need be substituting rations at a fixed price for effective monetary demand, which in conditions of severe scarcity would have condemned to starvation the poorest classes of the population. In the old departments of government, and in new departments specially created to meet the needs of the time, the control of particular products, productive processes and instruments was extended vertically and horizontally until the activities of the multitudinous controllers overlapped and conflicted with each other. Indeed, so soon as the scarcities that vexed individual departments were identified as shortages common to them all, it became apparent that the unchecked competition of departmental administrators would cost the nation no less dear than the unchecked competition of individualist buyers and sellers. When shipping became a fundamental and universal shortage, a new and impartial authority of control, the Ministry of Shipping, was established to requisition all ships. But this was only a partial remedy, for the new ministry found itself faced with competing departmental demands for more shipping space than it was able to supply. Its own inexpert decisions upon the rival claims of wheat and timber and steel and the rest satisfied neither the claimants nor itself: the need was for a representative and authoritative body that could promote agreed decisions on the basis of a complete balance sheet of resources and claims. This body came into existence, towards the end of 1917, as a committee of the War Cabinet under the chairmanship of Lord Milner. But it could never have come into existence—nor could those other War Cabinet committees which tackled other crucial problems—unless there had first occurred a modernisation of British Cabinet government in response to the challenge of war. This modernisation is a matter of supreme importance for the British war economy. Its origins must be traced back into the decade before 1914.

THE COMMITTEE OF IMPERIAL DEFENCE

At the opening of the twentieth century the theory of the Cabinet system was clearly understood, but the growing burdens and complexities of government were endangering the system's practical efficiency. The Cabinet had three main functions to perform: final

determination of the policy to be submitted to Parliament, supreme control of the national executive in accordance with the policy prescribed by Parliament, co-ordination and delimitation of the activities of the separate departments of state.¹ The Cabinet had also its theory of procedure. Its responsibility was collective; its decisions were decisions to advise the King, and could not therefore be published without the consent of the King. These theories of procedure expressed themselves in an extreme sketchiness, not to say haphazardness, of business method. The Cabinet met without any agenda papers or memoranda listing and setting forth the issues it would have to decide; it separated without leaving any systematic record of its decisions. It had no other secretary than the Prime Minister himself, who brought to each meeting a list of the main items that he and his colleagues wished to discuss, and after each meeting wrote a letter to the King, informing him of the main conclusions.

No doubt the Cabinets of Mr. Gladstone's day were able to get through their business efficiently with these traditional procedures; the Cabinets of Mr. Asquith's day were not. The serious disorders that were apparent even before the First World War have been described by Lord Haldane:

. . . The Cabinet was organised on an old system which I hope will never be restored. It was a congested body of about twenty, in which the powerful orator secured too much attention. The Prime Minister knew too little of the details of what had to be got through to be able to apportion the time required for discussion. Consequently, instead of ruling the Cabinet and regulating the length of the conversations, he left things much to themselves. We had no Secretary, no agenda, and no minutes in these days . . .

. . . The result of this and the want of system which it produced was that business was not always properly discussed, and the general points of view that vitally required clear decision almost never.²

Lord Haldane, it is true, had a mind unusually strong in system; not all his ideas about the reconstitution of the government machine have won universal acceptance. Nevertheless, it would be generally agreed that the words quoted above give a true general impression of the amateurishness of Cabinet procedure early in the twentieth century. Exponents of the British system of government were accustomed to praise its judicious combination of the amateur and the expert; but the experts were all in the departments, none of them at the centre. The Admiralty had its experts on naval warfare, the War Office had its experts on land warfare; but there did not exist any staff of experts charged with the duty of aiding the Cabinet in the

¹ Here we follow closely the words of the *Report of the Machinery of Government Committee*, 1918 (the Haldane Report), p. 5.

² Lord Haldane, *An Autobiography* (London 1929) p. 216.

formulation of a defence policy that would combine the efforts of these two departments and all the others that had a part to play—the Foreign Office, which in peace and war alike had to secure diplomatic combinations conducive to the safety of the Empire, the Treasury, which had to provide the finance for British wars and mitigate as best it could their disturbing effects on economic life, the India Office and the Colonial Office, which were immediately concerned in the peace, order and good government of the King's Dominions overseas. In theory, the ministers in charge of these departments could make their views effective in the general policy of the Cabinet: in practice, the Cabinet had no means of bringing into focus all these scattered elements in the intricate problem of defence. By the standards of the harsh world that encompassed states and nations in the twentieth century, Great Britain was an inefficient performer in the tasks of national and imperial defence. This was the verdict of an authoritative committee appointed under the chairmanship of Lord Esher on the conclusion of the South African War. The committee declared roundly that the Cabinet had entered upon the war without possessing 'adequate means of obtaining reasoned opinions on which to base a war policy'.¹

This was not the first occasion on which the evils of military departmentalism had been denounced, and remedies for the evils propounded. In 1890 Lord Randolph Churchill had put forward a scheme for bringing the Admiralty and the War Office together under a single Minister of Defence.² The Government had rejected this proposal and had tried instead to achieve co-ordination by means of a defence committee of the Cabinet; but the Esher Committee pronounced this compromise a failure. Its own diagnosis and recommendations led to the institution of a very different body, the Committee of Imperial Defence.³ This was a 'Prime Minister's Committee' working within the orbit of the Cabinet. The Prime Minister himself, as the Committee's invariable president, had unfettered freedom to choose his collaborators, both on the main Committee and on the numerous sub-committees which it proliferated. The Committee was in consequence an institution of infinite flexibility; it was able to absorb into its service the best experts in any and every branch of defence policy. It had at the same time a hard centre of continuity, a permanent nucleus consisting of half a dozen ministers

¹ *Report of the War Office (Reconstitution) Committee (1904) Part I, p. 3.*

² Lord Randolph's memorandum was attached to the report of the Hartington Commission (Command Paper 5979 of 1890).

³ In this chapter and the next, the Committee of Imperial Defence will be called simply the Committee, with a capital letter. Its sub-committees will usually be called committees, without the capital. The purpose is to make the text simpler, and also to avoid using in it the letters C.I.D., which, to most readers of English newspapers and detective fiction, suggest a different institution.

and the permanent heads of the fighting services.¹ Moreover, in accordance with the recommendations of the Esher Committee, it had been equipped with a secretariat specifically charged to perform the following duties: to preserve a record of all deliberations and decisions; to collect and co-ordinate information on all aspects of the defence problem; to prepare such memoranda or other documents as the Committee might require; and in general to make possible 'continuity of method' in the treatment of every question that came before the Committee.² In fulfilment of these responsibilities, the secretariat built up a business-like code of practice. Before each meeting of the Committee, an agenda paper was printed and circulated with accompanying memoranda covering the main items of business. After each meeting draft minutes were printed, circulated among those who had been present, and then reprinted after correction. The meetings of the sub-committees were prepared and recorded with corresponding care. All the records were carefully indexed and cross-referenced: in consequence, it is now possible to trace from its first appearance up to the present day the origins and development of every problem that has come within the purview of the Committee of Imperial Defence—not only the main Committee, but the subordinate committees also.

In addition to the full copies of minutes sent to the persons who attended meetings, relevant extracts from the minutes and memoranda were sent to all the departments that would have to take action if the Committee's recommendations were to be made effective. Only a minority of the recommendations involved matters of high political significance, calling for decision on the collective responsibility of the Cabinet; the great majority could be implemented by departmental action on the responsibility of individual ministers. The Committee did not in any way trench upon the doctrine of ministerial responsibility. It could only recommend; it possessed no executive powers whatsoever. 'It has no power', Mr. Arthur Balfour explained to the House of Commons, 'to give an order to the humblest soldier in His Majesty's Army, or the most powerless sloop under the control of the Admiralty.'³ These limitations upon its formal powers became the foundations of its real authority. Because it could do no more than advise, it was permitted and indeed encouraged to extend the range and depth of its investigations; because its investigations were comprehensive and

¹ In addition to the Prime Minister, the following ministers attended regularly: the Secretary of State for War, the First Lord of the Admiralty, the Chancellor of the Exchequer, the Secretaries of State for Foreign Affairs, India, and the Colonies. Lord Esher also attended regularly from 1906 to 1914.

² These functions of the secretariat were defined in the Treasury Minute establishing it, 4 May 1904.

³ H. of C. Deb. 1904, Vol. 139, Cols. 618-19.

thorough, it tendered advice which was authoritative and difficult to reject. Statesmen from the self-governing Dominions would have refused to participate in the work of the Committee if it had claimed 'the smallest authority to impose obligations'; but in 1911 they attended its meetings with the feeling that they were entering as equals into the *arcana imperii*. Departmental ministers and officials who would have resisted any invasion of their legal responsibilities collaborated freely with the Committee in the study of those innumerable problems of defence that spread across departmental boundaries. If any department had shown itself unreasonably recalcitrant there would, of course, have been a remedy; the Committee's permanent nucleus of senior ministers was a guarantee that its recommendations would not be in serious discordance with government policy; in cases of dispute, the Cabinet could be invited to give a binding decision. The very existence of a reserve power to settle disputed issues at the highest level is a guarantee that the majority of issues will be settled by amicable discussion at a lower level.

The greater part of the Committee's investigations was devolved upon its subordinate committees: from July 1909 to August 1914 approximately thirty of them were set up for the study of specific problems.¹ Their total membership was about 130 persons, not counting all the experts who were summoned before them to give evidence. It was the function of the secretariat and the main Committee to bring their specialised findings into focus with the central plan of strategy. The results of all this work were written into the Government War Book and the departmental war books. In this way the Cabinet had before it a complete picture covering the short-term war plans of all departments. Departmental ministers and their senior officials knew precisely what buttons they would have to press upon the imminent approach of war and upon its outbreak.

But after that? Since 1907, the Committee had based its planning upon the strategical hypothesis of German attack; but no more than the German General Staff had it forecast the full strategical and economic implications of warfare in the twentieth century. Of the five assistant secretaries who served in the secretariat of the Committee, each one held army or naval rank—a sign that the study of war was still confined too narrowly within the sphere of interest of the fighting services. The Committee in all its studies had never envisaged the unprecedented scale of effort that would be demanded

¹ The majority were committees *ad hoc*; but there were also some standing committees, e.g. Overseas Defence Committee, Home Ports Defence Committee, Standing (Technical) Sub-Committee, and Standing Sub-Committee on the Co-ordination of Departmental Action on the Outbreak of War.

from British military and industrial manpower and the radical reshaping of British economic life that this effort would make necessary. Nor had it made any suggestions for reshaping the executive government of the country to meet the strain and challenge of war.

THE WAR CABINET

In the summer and autumn of 1914, the supreme direction of the war still lay with a Cabinet of twenty or more persons, meeting and deliberating in the old haphazard way, without agenda papers or memoranda or a precise record of their conclusions. So long as action was able to run along the lines laid down in the War Book, this diffuseness of the supreme control was endurable; but the need for a firmer grip upon war policy was felt increasingly as 1914 drew towards its close. The first effort at reform was made in November 1914, when the Prime Minister instituted a War Council. This body gave place in the following May to the Dardanelles Committee, which, in its turn, gave place (November 1915) to the War Committee. The names changed more than the things. War Council, Dardanelles Committee and War Committee—all three signified an attempt to reinforce the system of Cabinet government with the mechanisms of the Committee of Imperial Defence. All three took over the secretariat of the Committee, with all its procedures and techniques. They took over also the same principle of membership. An inner group of ministers sat regularly with the Service chiefs—here was the nucleus of knowledge and authority—but other influential and well-informed persons were also called in, even from the opposition party.¹ One serious mistake was made, despite a conscious effort at amendment: this was the excessive puffing out of membership. Probably the mistake arose from the desire to reconcile the contrary principles of swift action through a committee of the Cabinet and collective responsibility of the whole Cabinet.² The attempt failed. Everything of any importance was gone into twice, first by the War Committee, which had excellent information but no power of final decision; secondly by the Cabinet, which had the power of decision but inadequate information. The fundamental flaw of this arrangement was the divorce between study and action, deliberation and decision. 'Every operative decision', Mr. Churchill wrote later, 'was obtained only by prolonged, discursive, and exhausting discussions.'

¹ Mr. Balfour attended regularly; other opposition leaders (Lord Lansdowne and Mr. Bonar Law) were called in on a special occasion.

² Mr. Asquith put the dilemma thus: (H. of C. Deb. 1915, Vol. 75, Col. 526) 'I think a Committee such as I have indicated ought to be clothed with power to take such decisions and to act upon them. On the other hand, I am very jealous of the maintenance of collective Cabinet responsibility for large changes and new departures in policy; . . .'

Far more often we laboured through long delays to unsatisfactory compromises.¹

The change of government in December 1916 marked the end of these frustrations. From that time onward the nation was served by a really modernised instrument of government. Of course, the value of mechanisms must not be overrated: in times of crisis, personality reasserts its rights: it is motive power, not the machine, which counts for most. But the motive power will in large measure run to waste if the machine works badly. Mr. Lloyd George knew that. He gave himself a good machine. In his War Cabinet of four to six members was vested the supreme power of decision. The War Cabinet took into its own direct service the organisation and techniques and procedures built up during the past dozen years by the Committee of Imperial Defence and its war-time heirs. So at last were gathered together all those elements of power that hitherto had been dispersed—power to know, to plan, to decide.

At that time, and later, one special feature of the War Cabinet made a deep impression: the fact that most of its members were free from departmental responsibilities and able in consequence to concentrate their undivided attention upon war policy. In this arrangement there was, however, a danger that a new gap might appear between functions which ought to be integrated—not, this time, a gap between deliberation and decision, but one between decision and execution: for might it not happen that the ministers in the War Cabinet, since they had no departmental responsibilities, would make decisions that the departmental ministers would find unrealistic and difficult to embody in executive action? This danger was mitigated by the practice of summoning departmental ministers into joint session with the War Cabinet whenever their special departmental responsibilities were likely to be affected by its decisions. Often, the ministers attended with their senior officials, or with any other experts they cared to bring along—another mark of the flexibility inherited from the Committee of Imperial Defence.²

To place most of the emphasis upon the freedom of War Cabinet members from departmental responsibilities betrays a lack of proportion. Later, in the Second World War, a different system was adopted. It may be left to the professional students of government to argue with each other as to which system is ideally the best: the historian perceives continuity of method, in the more essential things, between the War Cabinets of 1916, 1939 and 1940. Common to them all was the

¹ *The World Crisis*, Vol. II, p. 384.

² In the first year of its existence, the War Cabinet held 300 meetings; in the same period, 248 persons, other than members of the War Cabinet, are listed as attending. Command Paper 9005 of 1918, p. 2.

efficient centralisation of knowledge and decision. Yet even this was only part of the institutional reformation achieved in December 1916. Parallel with the concentration of supreme authority there occurred a hardly less striking devolution and functional regrouping of administrative responsibility. The Ministries of Labour, Shipping, and Food were all created in that same December: they were followed next year by the Ministries of Air, National Service, Pensions and Reconstruction. In this way ministerial responsibility was concentrated at new focal points of national danger and need. Some of these focal points have been identified already from the angle of economic inquiry: they stand in close relation to the fundamental scarcities of the war economy. And, since these scarcities were the common preoccupation of groups of departments, it would be natural to expect constitutional provision to associate the interested departments in the business of studying and handling them. As has been stated earlier,¹ this association in the handling of the shipping problem was in fact achieved in 1917 through a committee of the War Cabinet under the chairmanship of Lord Milner. Subject where necessary to review by the War Cabinet, this committee had devolved upon it full authority to allocate shipping space among claimant departments in such a way as to fulfil the strategic and economic policies that the War Cabinet laid down. A similar association of the agencies most immediately concerned with war production was achieved by instituting under the chairmanship of General Smuts a committee of the War Cabinet to determine production priorities—a problem that broke up into a large number of particular technical problems which were devolved upon many expert sub-committees. It would be out of place here to attempt to survey in detail the luxuriant growth of War Cabinet committees and their sub-committees in 1917 and 1918. Suffice it to say that they were an essential part of the constitutional pattern of a modernised war government: concentration of decision in the War Cabinet, decentralisation of operative function among the departments, co-ordination of related functions through committees of the War Cabinet.

The problem of liaison between the War Cabinet, its committees, and the executive departments was extensive and intricate. The record of all decisions needed to be exact; each responsible authority had to be informed promptly of every decision in which it was concerned; a check had to be kept upon action taken to implement decisions. These were some of the duties of the greatly expanded secretariat, a body that still conformed to its original nature, made no invasions of executive territory, but made itself instead a specialist in sign-posting and clearing the traffic of government business. The

¹ See above, p. 30.

secretariat now had a strong civil side—another sign, among so many, that modern war was rubbing out the sharp lines of division between ‘Service’ and ‘civil’ activities.

CO-ORDINATION AMONG ALLIES

Modern war was at the same time smudging over, if not rubbing out, some of the lines that normally divided the national administrations of the Allied countries. At the highest level, this tendency expressed itself in the Supreme War Council, which was instituted in November 1917 by an agreement of Great Britain, France, and Italy, to which the United States gave, later on, a limited adherence. The Council was constituted by the Prime Ministers and one other minister from each of the three Allied Governments, meeting at monthly intervals with their military advisers and other attendant experts. Its work was given continuity by a secretariat operating on the British model and was reinforced by other elements built up from the national administrations. For example, from the Service staffs was constituted ‘the Permanent Military Representatives’, a planning body which, before the appointment of Marshal Foch as Generalissimo, was the chief instrument for the co-ordination of Allied operational studies and plans. Attached to it were inter-Allied technical committees for such subjects as aviation and tanks. Later on, a Naval Council was constituted with its headquarters in London; it consisted of the ministers and chiefs of naval staff of the co-operating countries. Side by side with it was set up a Blockade Council, similarly composed. Neither these subordinate Councils nor the Supreme War Council itself had executive powers. They could not transmit orders to the national governments. However, the policies they authorised had in practice the effect of government decisions because the highest political authorities of the participating countries were parties to them: when the Prime Ministers came to an agreement at Versailles they could make the agreement effective in a decision taken by their own Cabinets; when the naval ministers and their staffs accepted a common policy at London they could put the policy into effect through action of their own national administrations. What was taking place was not the constitution of a new supra-national administration, but the mutual interpenetration of national administrations, acting in concert with the aid of pooled information for the realisation of common aims.

On the economic side, a similar system came gradually into existence.¹ It was foreshadowed early in the war by the *Commission Internationale de Ravitaillement*, an inter-Allied committee of technical

¹ The system was founded primarily on the work of the British shipping administration, and the best exposition of its development and character is Sir Arthur Salter's book on *Allied Shipping Control* (Oxford, 1921).

officials which met in London to ensure orderly procurement of British and overseas supplies instead of a competitive scramble. In virtue of their commercial connections and shipping predominance, the British had special responsibilities towards their Allies. A narrowly nationalist economic policy which secured the United Kingdom's stocks of wheat but left Italy to starve would have been inconsistent with strategical policy; there had to be some pooling of resources for the sake of the combined strength of the Allied war effort. The difficulty was to find an objective measurement of comparative needs. When the shipping shortage became acute, the heaviest strain of decision fell upon the British shipping authorities. From the early days of the war they had been making doles of tonnage to reinforce the mercantile marines of the Allied nations; by the end of 1917 they were ready to apply in the inter-Allied sphere the principles of allocation which had recently been worked out at home. The pooling of shipping resources was accepted in principle and an Allied Maritime Transport Council was set up to make the principle effective. Its members were the appropriate ministers in the participating countries, meeting periodically with their attendant experts, and its work was given continuity by a permanent 'Executive' in which senior officials of the national shipping administrations worked in continuous association with each other. Once again, this was not the creation of a supra-national administration but the interpenetration of national administrations, the bringing together of men and minds and the consequent creation of genuinely combined estimates of requirements and resources.

In the inter-Allied, as in the national sphere, precision of the estimates depended not merely upon the careful reckoning of available tonnage but upon the reckoning and adjudication of competing claims upon the tonnage. The techniques of national programming had to be adapted to the wider requirements of the alliance. One valuable precedent was available. A Royal Commission on Wheat Supplies had been set up in 1916 to safeguard the nation's bread. It had imposed a firm control over all sources of supply, and very soon it had become the basis for an inter-Allied body called the Wheat Executive, responsible for measuring and meeting the grain import requirements of all the Allied nations. In the spring of 1918 a whole series of inter-Allied 'programme committees' was instituted on the same model—for textiles and timber, for petroleum and coke, for sugar and meat and oil seeds, for metals and chemicals—indeed, for all the chief categories of imports: there were in all twenty distinct programme committees. Later in the year, the majority of them were gathered into two groups—one under a Food Council, the other under a Munitions Council. Seen from the British angle, these two Councils reflected in the international sphere the grouping of

commodity controls under the Ministers of Food and Munitions. The new Councils, like their predecessors, were constituted by the appropriate ministers of the participating countries and they were given the same continuous expert service. By their constitution, the design of inter-Allied economic administration was made almost complete. Formal completeness was attained when the Supreme Economic Council was constituted in the early months of the armistice. By that time, however, the war-time dominance of the shipping shortage was already giving place to peace-time difficulties of payment, and the war-time conviction of a community of need was rapidly withering away. The imposing structure of economic collaboration did not survive for long.

But the memory of its war-time achievements survived, and so did the painfully acquired mastery of principles and methods. Some of the men survived. In the autumn of 1939, Frenchmen and Englishmen who had shared the experience of a great constructive partnership set to work to renew and extend that partnership in the second testing time of their two nations. When France fell, the same experienced heads—not only British but French¹—found that they had still the same constructive work to do in laying the foundations of economic partnership between the United Kingdom and the United States. The story of their work will be told in later chapters of this book. It will give an impressive illustration of the continuity of historical experience in this century.

¹ See below, p. 196.