CHAPTER XI MANPOWER

(i)

Dimensions of the Task

In 1940 the world wondered whether Britain could bear almost the whole burden of the fight against the Axis or whether she would collapse beneath it. Once the immediate threat of invasion had subsided, there seemed two main sources of weakness. Could her ships bring—and her ports receive—the food and raw materials from abroad without which her war-making capacity would be reduced to a pitiable level? If she got these supplies, could she ever mobilise her manpower to compete with the vast resources of the enemy?

The summer disasters had indeed brought down the balance of manpower in favour of the Axis. Crude comparisons of populations were, of course, highly misleading. If all the heads of the British Empire were counted, the balance was still weighted in favour of Britain: the 400 millions and more in India and the Colonies were decisive. But the economic and social structure of the Colonial Dependencies could not sustain a ponderous mobilisation and the productive effort of India was as yet barely in its initial stages. A more realistic comparison would emphasise rather the combined strength of Britain and the Dominions, pitted against the Europe over which Germany sprawled—some 75 millions against more than 200 millions. This comparison also was very crude. For example, output per head in many of the agricultural communities of Europe was notoriously low. On the other hand, the United Kingdom was separated from the Dominions by thousands of miles of ocean. For these and similar reasons, there could be little statistical refinement in the comparisons of strength. One thing, however, seemed clear. Provided the Germans were sufficiently ruthless, their war effort could not fail for lack of labour. But how could Britain ever hope to arm, and place in the field, forces large enough to conquer? In fact it became clear during 1941 that Britain and the Commonwealth would not bear the burden alone. In June, when the Germans attacked Soviet Russia, and in December, when the Japanese attacked Pearl Harbour, the balance of manpower and industrial potential came down in favour of the Allies.

In 1940, such mighty alliances seemed very remote. The struggle, first for survival and then for victory, depended primarily on the

efforts of the British themselves. If the other problems of production such as machine tools and raw materials were solved, every brain and every pair of hands which could fight or work would be needed. The manpower demands would be immense. And if under such conditions confusion was not to achieve its masterpiece, manpower requirements and supplies must be carefully measured and balanced against each other. The balance sheet must then be made effective by deliberate and detailed allocation of the available supplies.

In May 1940, the new Minister of Labour had shown himself fully aware of the necessity for this forward planning. Even before the new Emergency Powers Act had put into his hands the instrument of industrial conscription, he had demanded and had been given full responsibility for the control of the total labour supply. But he could not by himself determine all the purposes that the nation's manpower must serve; while he strengthened his department by setting up inside it a Labour Supply Board to study requirements of manpower against available supplies, he expected the new Production Council to plan programmes according to the materials and labour available. The War Cabinet imposed upon the Production Council the two tasks—among others—of seeing that the manpower budget balanced in the short run and of working out a long-term budget.

However, the establishment of mechanism for the measurement of demands and the allocation of supplies presupposes some degree of certainty about the prospects of existence for some twelve months ahead. In the summer of 1940, such certainty did not exist. The Government must think not in terms of months but of weeks and days. The need for aircraft and weapons to drive enemy invaders from the skies and coasts of Britain took precedence over all else. Demands were accordingly formulated in terms not of programmes but of priorities. The War Cabinet's directive in May that a general priority should be given to weapons which could be used against the enemy within three months, and that every possible step should be taken to hasten the production of anti-aircraft equipment, bombers and fighters, was translated by the Production Council into a more precise Priority of Production Direction. Three priority classes were defined:

Class r(a): Four groups of products and their components⁴ which were to have overriding priority.

¹ To be composed of a new Director of Labour Supply, plus three or four persons of 'practical experience' drawn from the ranks of employers and trade unions.

² See Chapter VIII, p. 217.

² The Production Council, however, had no jurisdiction over the demands of the Services for recruits.

⁴ i.e. fighter, bomber and trainer aircraft and their instruments, A.A. equipment, small arms and S.A. ammunition, and bombs.

Class r(b): Some five groups of products and their components¹ which were to have the first claims after r(a).

Class 2: This class contained articles for the vital needs of the Services which could be completed by 1st September 1940, plus work specifically certified by the Central Priority Department.

Production of Class 2 goods was not to be disturbed except as a last resort and then only after consultation with the Ministry concerned.

By any long-term calculations, strict adherence to such a rigid priority system must make the orderly and flexible progress of war production well-nigh impossible. In the summer months of 1940, long-term considerations were not the most weighty; but even then it was clear that the Priority of Production Direction could only be a temporary expedient. So long as the Direction remained the basis for the formulation of labour requirements, concentrating attention on the demands of only a limited section of war industry, it obscured the question which sooner or later had to be faced and answered: what were the total demands on British manpower and what resources were there to meet these demands?

This question began to be asked as soon as the future began to lengthen.² In the middle of August, the Minister of Labour sent a paper to the Production Council emphasising the need for revised estimates of the manpower necessary to fulfil the production programmes of the Services. The figures in the Humbert Wolfe report² were now completely out of date; moreover, experience had proved that they were greatly inflated. Without some new estimates, were they never so rough an approximation, the Ministry of Labour was working in the dark. The Production Council did its best to shed light; indeed, its conclusions on Mr. Bevin's proposals marked the genesis of systematic manpower planning in Great Britain. Orderly planning of production, the Council declared, would be possible only if the production departments were informed at an early date of the requirements of the fighting services for equipment and of the merchant navy for tonnage. These requirements must then be translated into terms of labour. 5 Similar arithmetic must be produced by the Board of Trade for exports and essential home trade. When all these demands, plus the demands for fighting manpower, had been added

¹ Anti-tank weapons, field artillery, tanks, machine-guns, ammunition.

See Chapter VIII.

³ See Chapter V, Section (ii), p. 141.

⁴ e.g. the manpower expansion required in the aircraft and motor vehicle industry between June 1939 and June 1940 had been estimated at 117 per cent. The expansion actually achieved was something over 22 per cent. 'And yet,' said the Minister of Labour, 'the programme up to date has, I understand, been substantially achieved.'

And into terms of materials.

up, their sum total must be compared with available supplies. Here was a new and urgent task, the first comprehensive investigation of the nation's manpower demands and resources. It was entrusted to an inter-departmental Manpower Requirements Committee with Sir William Beveridge as chairman. The conclusions of the Manpower Requirements Committee were as follows:

Thousands of men and women

110 mailes of men and women					
	Services and Civil Defence	Munitions ¹	Total		
Existing strengths (Aug. 1940)	2,977 ²	3,535 ³	6,512		
Required increase ⁴ (for Forces, Sept. 1940 to end Dec. 1941; for munitions, Sept. 1940					
to end Aug. 1941)	1,825	1,465	3,290		
Total strengths (Forces at end Dec. 1941:					
Munitions at end Aug. 1941)	4,802	5,000	9,802		

The logic of this arithmetic was inescapable. It meant a 'famine of men'. By the end of 1941, over 81 million men would be required in the Forces and munitions industries where there had been scarcely more than 3 million men in June 1939. This calculation assumed however that the proportion of women in the munitions industries would remain as at August 1940—at about twenty per cent. The assumption could not be allowed to stand. The famine of men would breed a hunger for women. Accordingly, the Manpower Requirements Committee concluded that fifty-eight per cent. of the net increase in the munitions labour force up to August 1941 must be provided by women.6 When the requirements were thus divided by men and women they emerged as follows:

-									nousands	
				Increase over Aug. 1940			Resulting strengths7			
				Men	Women	Total	Men	Women	Total	
Services and	Civil	Defend	e:	1,741	84	1,825	4,611	191	4,802	
Munitions			•	606	859	1,465	3,399	1,601	5,000	
TOTAL				2,347	943	3,290	8,010	1,792	9,802	

¹ i.e. engineering and allied industries, fitting and other shipbuilding, metal manufactures and chemicals

² It should be noted that this figure includes Civil Defence and is not therefore comparable with the figure for the armed forces in Table 2 (b) of the statistical summary.

³ Including clerical and administrative workers. These figures are not comparable with the figures in Table 2 (b) of the statistical summary.

⁴ To supply the requirements of Forces at a given strength by December 1941 the munitions industries needed to have their labour available by August 1941.

⁵ This allowed for an extra 385,000 workers who would be needed if there was heavy land fighting in 1941. In addition to this net increase of workers in the munitions industries another 100,000 workers in the industries would need to be transferred from home and export to government work.

By August 1941, thirty-two per cent. of the munitions workers would be women.

⁷ Forces at December 1941, munitions industries at August 1941.

How could these demands be met? The famine of men came first and its first element was the appetite of the armed forces. That appetite, though fierce, was discriminating; the Forces would only take men between eighteen and forty years of age. Of these, there were approximately eight millions; but nearly four millions were in reserved occupations and nearly half a million—the under-twenties—were still excluded from the call-up. Sooner or later this exclusion would have to be cancelled. And the net of reservation must be immediately loosened if the Forces were to obtain the recruits they needed. The withdrawals for the Forces proposed by the Manpower Requirements Committee ranged from twelve per cent. in the mining industry to fifty per cent. in services such as hotels, laundries and distribution. From the munitions industries the estimated withdrawals amounted to eighteen per cent.

But how could the munitions industries give up eighteen per cent. of their men when they were required by August 1941 to add over 600,000 men to their total labour force? The answer was that they must take in many more new men-older men, youths below military age or men physically unfit for military service—than the number they would surrender to the Forces. In the general post recommended by the Manpower Requirements Committee, specific estimates were made of the percentage contributions which various industries could make to the men needed for the munitions labour force.2 Thus, while the railways and coal-mining could make no contribution at all, an industry such as distribution must yield up ten per cent of its men to munitions as well as its fifty per cent. to the Forces. Each particular percentage might perhaps be subject to argument; but the Committee stood fast by the total. But withdrawals of this size could not be made unless every industry sustaining the life of the community replaced men by women in every job that women could do and for which they could be secured. In addition to the 940,000 extra women needed for the Services and Civil Defence and the munitions industries, non-munitions industries and services would want another 750,000 or so women. The total of women to be recruited—not

tions—was 1,690,000.

Was so great an army of women available? At first sight the answer seemed prompt and encouraging. There were 174 million women and girls of the ages fourteen to sixty-four and only 6½ million of them

counting the transfers from less essential to more essential occupa-

¹ i.e. total withdrawals from June 1939 to August 1941 expressed as a percentage of the June 1939 labour force. The percentages were suggested after considering e.g. the importance of the industry in war, how far women could replace men, the proportion of men of military age, unemployment in June 1939, the contraction since June 1939, the experience of the 1914–18 war.

² See Note ¹ on previous page.

gainfully occupied.¹ But of the 'unoccupied,' only 2½ millions were single or widowed, and many of those would have small children or elderly relations whom they could not abandon. The demands for women could not therefore be met without drawing largely on married women. They might well be less readily available than in 1914–18, for the competing claims upon them were this time more intense. A larger proportion of them had husbands in reserved occupations, eating and sleeping at home, while many had to cope with the problems of evacuation or civil defence or some other toilsome war duty. In the statistical tables, the women were available; but to mobilise them would demand good organisation—a wisely controlled location of war work, a vigorous administrative effort and welfare arrangements on a scale hitherto unknown in most industries.

So far, the calculations had been about total numbers; but the calculators were well aware that the totals could only be made up if particular persons in their millions were put into the particular jobs which they were fit to do. In the munitions industries, the estimate of total requirements would never be matched by achievement unless sufficient persons were found for those particular jobs that were called 'skilled'. The committee estimated that 250,000 additional skilled workers were required in the engineering and allied industries. Unless they were supplied, or unless devices could be found for making do with a smaller number, these industries would not be able to absorb the 700,000 new workers² who made up their total labour requirement for the period. There were moreover other important demands, for example by the fighting services, upon the supply of skilled labour. The supply could be enlarged by training; but training took time. There was an immediate shortage which could only be overcome by arrangements that would enable three skilled men, with suitable assistance, to do the work hitherto done by four skilled men. So great a dilution was easier to aim at than to achieve. There was, for example, the special problem of skilled toolmakers and machine-setters. The number available could not be put above 90,000 nor the number required below 130,000.3 Here in truth was the 'hard core of the manpower problem'. It was a problem that dilution could not solve. The solution, therefore, must be sought by

¹ This figure is not necessarily comparable with other figures in this book for the number of 'gainfully occupied' women. In this case, it includes private domestic servants and women aged sixty to sixty-four, neither of whom are included in the normal Ministry of Labour figures.

² This figure is for demands on the assumption that there would be no large-scale land fighting in 1941.

^a Use of a larger proportion of semi-skilled and unskilled labour depended upon a greater use of machines, and therefore of people making tools and setting machines. The development of design of munitions also involved a high proportion of tool-making.

a ruthless scaling down of demand. This might be achieved through a combination of measures—by reducing variations of design to the minimum, by persuading firms to co-operate with each other in pooling their key men, by an intensive programme of up-grading and training.¹

The Manpower Requirements Committee had provided for the makers of policy and plans a background far more comprehensive than anything hitherto available to them. Its work became a valuable influence pervading government thought and action. For it had foreseen and attempted to measure the impending famine of men and hunger for women, and had at the same time shown the possibility of satisfying this appetite and achieving an immense war effort. It had concluded that the existing programmes of the Service and supply departments were from the manpower angle quantitatively possible. If this were true, there was no longer a valid case for refusing to meet those genuine claims on manpower that were not covered by priorities I(a), I(b) and 2. Henceforward, the priority system gradually faded until it became in the end merely a subordinate device for modifying or controlling the order in which particular demands were met.

These surveys, however, were not action nor even the starting point for action. They did not become, like the manpower budgets of after years, the basis of government planning for twelve months ahead. Indeed, their very timing made this impossible; the second report was not ready before mid-December 1940, and the estimates for demand and supply in the munitions industries were for the period ending in the next August. And how could the immense movements of men and women be achieved by then, when there was as yet no machinery for identifying workers and then for transferring them?² So the second and major report of the Manpower Requirements Committee did not even go to the War Cabinet. Nor were its figures ever set before the ministries as the target of their endeavour.

There were good reasons why this was so. The famine of men and the hunger for women were approaching but had not yet arrived. It was certainly salutary for the War Cabinet and the departments to adjust their minds to its impending advent and to consider the policies with which they must go forward to meet it. But there were other decisions to be made as well, decisions that might invalidate the basic statistical premises of the Manpower Requirements Committee. That body had accepted without question the official departmental

¹ See section (ii) of this chapter.

^{*} i.e. no machinery for workers as a whole. There existed the rough and ready methods of the Labour Supply Inspectors for withdrawing skilled workers from non-priority employment.

estimates of Service strengths and war production. Should not all claimant departments be required to criticise these estimates and recast them?

There were, to begin with, the estimates of the men required in the fighting services. Most important of all were the claims of the Army; for while the Navy and the Air Force demanded their hundreds of thousands, the Army demanded its millions. 'At the root of all questions of manpower', said Mr. Churchill, 'lies the size of the Army.'1 It was demanding a million new recruits between September 1940 and October 1941 with another million and a half to follow in the next twelve months. There were suggestions that it might demand still more. Such heavy claims might prove to be a good deal more than the industrial structure of the country could support. As early as September 1940, the Minister of Labour expressed his doubts at a meeting of the War Cabinet. In December, the Prime Minister informed the War Cabinet that he had invited the War Office to submit proposals for a more economical use of the manpower already serving in the Army. He wanted an Army with stronger teeth and a smaller tail. Such a refashioning of its proportions would make it a better fighting instrument and would also curtail its claims upon the nation's manpower.

The negotiations between the Prime Minister and the War Office extended up to March 1941 when a Directive on Army Scales was issued. It imposed a 'ceiling' on Army strength. This did not mean any change in the proposed number of divisions. In September 1940 the War Office had not been sure that more than fifty divisions would be equipped to form a field force by the spring of 1942, but the Secretary of State for War was proposing to base his recruiting plans on a more optimistic basis so that if it were found possible to equip fifty-five divisions the supply of trained men would be adequate. Of the fifty-five divisions, thirty-four would be United Kingdom troops and the rest from overseas. During the winter this figure was altered to fifty-seven divisions, thirty-six of them manned from the United Kingdom. The doubts and obscurities about Army manpower arose not over the number of divisions but over the conception of divisional strength. The War Cabinet had not realised, when it approved a field Army of fifty-five divisions, that a division as contemplated by the War Office with its share of corps, army, G.H.Q. and line of communications formations would require 42,000 men, exclusive of all training establishments and of all garrisons, depots, or troops not included in the field Army.

Mr. Churchill's directive showed what this meant. In the home forces Army there were thirty-two divisions,2 some of them still in

¹ H. of C. Deb., Vol. 368, Col. 265 (22nd January 1941).

⁴ The other four British divisions were abroad.

process of formation. These divisions, plus various independent brigades and battalions, accounted for 735,000 men in actual tactical formations at home. But the total ration strength of the Army at home was 1,800,000 men. That left over a million men 'to be explained as corps, army and G.H.Q. troops, and A.D.G.B.,¹ or as training establishments, depots, etc., and as part of the rearward services of the forces overseas '. Here was the Army's capital fund of manpower. It would be replenished every year by the inflow of young men reaching call-up age; but it would not be further increased at the expense of the industrial labour force unless or until invasion or heavy casualties overseas made new provision essential.

It is upon this pool of 1,064,500 [Mr. Churchill declared] that the Army must live... In other words, the Army can rely on being kept up to something like their present figure of about two million British and they will be judged by the effective fighting use they make of it.²

'About two million' was in fact defined as 2,195,000 and later in 1941 the ceiling was raised by another 158,000.

This decision was a landmark of manpower history. The Army—the largest single claimant on manpower—had been set bounds which it might not pass. The bounds had been fixed in relation not merely to strategic necessities and desirabilities, but also to manpower resources as a whole and to the production of equipment. Moreover, the urge to husband well its resources had been implanted in the Army.

Fixing the Army ceiling did not, of course, end the troubles of the Military Recruitment Department of the Ministry of Labour. The strength of the Army had still to be brought up to the ceiling and thereafter had to be kept there. With normal wastage at the rate of 55,000 men a quarter, even when casualties were still light, this was no easy task. Despite what the Prime Minister had written, the task could not be mastered by drawing upon the regular inflow of men reaching call-up age. As the Minister of Labour had foreseen in the previous September, the demands of the Army had to be met largely from men hitherto reserved in industry.³ The problems of the timing of Army intakes—how many men should go in one quarter and how many in another—were perpetually thorny. The Minister of Labour recommended to the War Cabinet that the rate of calling up should be adjusted to the rate of equipment. This point, though

¹ i.e. Air Defence of Great Britain.

^{*} The conclusion was interesting. 'These considerations', wrote Mr. Churchill, 'make it impossible for the Army except in resisting invasion to play a primary role in the defeat of the enemy. That task can only be done by the staying power of the Navy and above all by the effect of air predominance.' The directive did not look beyond 1942.

 $^{^{\}rm 3}$ The modifications of the Schedule of Reserved Occupations will be considered in Section (ii).

never specifically approved by the War Cabinet,¹ was apparently accepted.² In fact, the limiting factor to calling up men to the Services seems to have been not the supplies of equipment, but the number of men who could be made available at any particular moment. This in turn depended upon the time-table for the release of men from industry through modifications in the Schedule of Reserved Occupations, upon whether older men could decently be called up before substantial numbers of younger men had been dereserved and upon whether the eighteen and nineteen year olds³ should be called up.

It was very difficult to achieve the Army ceiling. New demands—replacements of battle casualties in the Middle East, aerodrome defence, fire-watching at the western ports—were coming in fast. And the Army had accepted the ceiling on its male strength on the condition that it obtained large numbers of women for the A.T.S. Moreover, the demands of the other Services for men and women, though smaller, were no less urgent than the Army's. A committee of ministers which was set up by the War Cabinet under the Lord President's chairmanship in July 1941 added up the total demands of the Services during the next twelve months to 720,000 men and 270,000 women. There would be the greatest difficulties in meeting such demands; indeed the whole manpower position must be examined anew. The famine seemed to have arrived.

We shall return to the new manpower review. In the armed forces, however, no less than in industry, the demand was not merely for crude numbers but also for skill. In a war far more highly mechanised than any of its predecessors it was not enough to produce the machines of war. They had also to be continuously maintained in action. Here indeed was the top priority for skilled men. The machinery of registration for military service had made elaborate provision for supplying them to the Forces and up to the spring of 1941 the supply had been sufficient. Thereafter, new arrangements became necessary for matching supply and demand. In June, the Minister of Labour appointed a committee to inquire into the use and training of skilled men in the Services and the Service demands for such men up to

¹ The War Office had by then been asked to submit its proposals for a more economical use of manpower and consideration of the Minister of Labour's paper had been deferred.

² See for example statement by Mr. Bevin, H. of C. Deb., Vol. 368, Col. 91 (21st January 1941). 'In calling up the numbers now required it has been arranged that this is to keep step with the supply of equipment.'

³ During the passage of the National Service (Armed Forces) Act a pledge had been given that men under twenty would be among the last classes to be called. By January 1941, when men of thirty-six had been called up, the Minister of Labour felt the pledge had been fulfilled. The War Cabinet then agreed to the call-up of the nineteen year olds. In November 1941 the War Cabinet agreed to call up men at 181.

⁴ These figures excluded Civil Defence, replacement of battle casualties and the W.R.N.S.

March 1942. The committee, while praising the Services for the economies they were practising, found new ones to recommend. As a sequel to the report, Service demands for skilled men during the period were scaled down from 26,000 to 8,660, of whom over half had already been supplied. Even so, to remove from industry a further 4,000 skilled workers was no easy task.²

It is now time to consider the demands that war industry was making on the national fund of manpower. Once again, they did not develop according to the forecasts of the Manpower Requirements Committee. The Army ceiling, for example, changed the industrial programmes of the Ministry of Supply. But in any case, when the Manpower Requirements Committee had accepted the existing programmes of the supply departments and their translation into a manpower equivalent, they were on a very shaky basis of fact.³ The Ministry of Supply could produce 'labour certificates' for its main products, but the Admiralty could produce no definite figures at all and the Ministry of Aircraft Production at this time never intended its programmes to bear too close a relationship with reality. In the view of the Minister, aircraft programmes were 'goals to strive for'. They were therefore always set higher than the possibilities.⁴

Even had all the labour requirements been statistically irreproachable estimates related to realistic programmes, they would have overstated the immediate demand for labour. For that was largely governed by other factors, such as the extent and growth of factory capacity and the supply of materials and machine tools. 5 Late in 1940 inquiries into these matters were initiated contemporaneously with the manpower inquiry. The results were intimidating. If they had been compared—as they should have been—with the reports of the Manpower Requirements Committee, they would have made it clear that labour was not yet the fundamental shortage in British war industry. Industrial facilities of various kinds had to be provided before the potential capacity of munitions production to absorb labour could develop its full strength. To pick out a few examples: until the middle of 1941 the machine-tool position was acute and certain specialist tools remained scarce for some time afterwards; throughout 1941 the supply of fabricated alloys was a matter of grave concern to the

¹ Sir W. Beveridge was chairman. The main report of the committee was in two parts. Part I was completed in October 1941 and later published as Second Report of the Committee on Skilled Men in the Services. Cmd. 6339, February 1942. Part II contained the confidential figures of demand and was not published.

² The men were found from volunteers.

³ These questions are more fully discussed in British War Production, pp. 145-152 and 218-220.

⁴ The M.A.P. demands for labour were based on floor space—the only factor of production that was then in plentiful supply.

⁵ See British War Production, Chapter IV, Section 6 and Chapter V, pp. 201-207.

Ministry of Aircraft Production and for some fabricated items—first extrusions and then castings—the shortages were really acute; the steel position was generally difficult and drop forgings and alloy steel—especially armour plate—were seriously scarce.

Yet, even had the land flowed with machine-tools, light alloys and steel, total demand for labour would not have developed on the scale anticipated by the Manpower Requirements Committee. For there had been no complete solution of the special problem of skilled labour. Here, the scale of demand was comparable to expectations; but the demand could not be met. This was a serious brake upon expansion. Existing factories could not work extra shifts nor employ fully the new extensions to their works. Nor could the great new aero engine factories and ordnance factories that were completed at the end of 1940 and the beginning of 1941 move quickly into full activity. 'It has been impossible in some cases,' said the Minister of Supply in January 1941, 'to secure the nucleus of skilled men without which an undertaking can neither begin work nor train the semi-skilled and unskilled labour.'

The situation improved gradually. In July 1941 the unfilled vacancies for skilled workers were 10,000, a serious shortage still, but less serious than six months earlier. Partial mastery of the skilled labour problem and the other production problems referred to above began at last to liberate the much-prophesied torrent of demand for labour of all kinds. Tightness in the market for unskilled labour was at first local. It was noticeable in the Birmingham and Sheffield areas as early as January 1941. By March, the President of the Board of Trade, introducing his proposals for the concentration of industry, told the House of Commons² that it would soon become nation-wide. By that time women were already wanted in large numbers for the new filling factories. By July, factories in many parts of the country were finding themselves undermanned on second shifts owing to labour shortages of all kinds-not only of skilled men but of strong and able-bodied unskilled men, of women to be trained for semiskilled occupations, of women to be employed in unskilled capacities. The period of severe and general manpower stringency had arrived.

The labour demands of the munitions industries had grown more slowly than had been forecast, but were now rising to flood levels. At the same time, labour shortages in other scarcely less essential industries were leaping into prominence. Back in the winter of 1940-41 the building industry had been hard set to find the men it needed badly to fulfil its programmes. Men were wanted for iron-ore mining

¹ He instanced Hooton and Ellesmere Royal Ordnance Factories which had only eighteen skilled workers; forty-eight were urgently required and none had been recruited since the end of November.

² H. of C. Deb., Vol. 370, Col. 731 (27th March 1941).

where low pay and dirty conditions made it very difficult to secure them. The increased demand for agricultural labour, which had been expected in 1940, materialised in the spring of 1941, when the second ploughing campaign was under way. The great extension of production to meet near-siege conditions called for large numbers of unskilled able-bodied men for land drainage. And lastly, there dawned for the first time the suspicion that coal production might prove a dangerously weak spot in the British war economy. When export markets had been lost after the fall of France, coal-miners had been allowed to go into the Forces and war factories. Nine months later, with war production well under way, a rate of coal output equal to that of July 1940 was needed. This meant 65,000 more coal-miners and in 1941 they proved very difficult to find.

The omens were everywhere the same. By July 1941 the general shortage of man and woman power had arrived. Alarmed at the demands of the Services, the War Cabinet then agreed that it was time for a new survey of total requirements and resources.² In the late summer, the Ministry of Labour made the following estimate of requirements up to June 1942:³

-	_		_		Men	Women	Total
Armed forces and	Civil	Defen	ce ser	vices	829,000	462,000	1,291,000
Munitions and other	4 indu	ıstries	(inclu	ding			
clerical labour)	•	•	` •	•	315,000	460,000	775,000
					1,144,000	922,000	2,066,000

These figures were formidable enough; but even before they were out the aircraft programme had been raised, increasing the munitions labour demand by another 100,000 men and women, and a supplementary programme was under discussion which might raise the labour requirements by yet another 200,000.

As before, the demands of the Services were the central problem. Under the call-up arrangements, 468,000 men were available compared with the required total of 829,000 men. This left 361,000 men to be found from the remaining 3½ million fit men of military age still in industry. The additional 315,000 men for vital industries must come from less important industries. The women for the Forces and for munitions must come from less essential industries and from the 'unoccupied'. The Ministry of Labour offered the following statistical

¹ The subject of coal will be dealt with more fully below. See Chapter XVI, Section (ii).

² See p. 290 above.

³ The figures for the Forces represented gross intake, i.e., the number required to achieve target figures to make good wastage except battle casualties above the 20,000 for whom the Army were already asking for replacement. The figures for munitions represented net intake, i.e., additional to labour required to replace men and women taken into the armed forces.

⁴ Mining and metal manufactures, timber production and land drainage.

picture of the general post that would be needed to meet the demands of the Services and war industry:

Thousands

	Transfer to			
	М	Women		
Transfer from	Services	Munitions	Services and Munitions	
Munitions Other industries and services Others (retired, married women, domestic servants,	199 630	50 ¹ 240	50 ¹ 345	
etc.)	_	44 50	527 —	
Totals	829	3842	922	

These figures caused great anxiety and concern. By now about eight million men and women, or a quarter of the total population of working age, were in the armed forces, civil defence and the munitions industries. All the reserves of labour which could be easily drawn upon had now been absorbed. Each successive entrenchment upon civilian industry and home life was becoming progressively more difficult. And here were demands for two million more men and women! By now there was a complete transformation of the atmosphere in which manpower problems were envisaged. Investigation was no longer a speculative exercise; it was the immediate prelude to action. The famine of men and women was no longer an unpleasant possibility which would emerge if and when the scarcities of machinetools and raw materials were overcome. An acute shortage of manpower was part of the present, painfully afflicting every department which had any dealings with any industry or service.

The departments were pessimistic in their judgment of the new Manpower Survey. In their opinion the men needed by the armed forces could not be found in the time without very serious consequences, and it was impossible to satisfy the voracious appetite of war industry by June 1942. The economists in the War Cabinet Offices were more hopeful. They did not think the restrictions on civilian industry would be excessive nor the burden intolerable. They did not even consider that the new programme, if adequately administered, would prove to be the maximum of possible achievement.

Nevertheless, the position was already so tight that all claims on manpower must be scrutinised and demands and supplies carefully adjusted. The manpower survey of 1941 was in fact the starting point of the first real attempt at manpower budgeting. The Humbert

¹ It was proposed to transfer these people to government work from export and civilian work, etc., in the munitions industries.

 $^{^{2}}$ i.e., the net requirement of 315,000 plus the replacement of 69,000 of the men to be withdrawn for the Forces.

Wolfe Report¹ had not aspired to be a budget; it had simply tried to discover from an assembly of doubtful statistics what a given programme of equipment for the Forces involved. The 'Beveridge Reports' had covered a far wider field; they marked indeed a considerable advance in the technique of industrial manpower investigation. But the statistics were still far too unreliable and questions of timing still too uncertain to make the reports more than a very general guide to action. By the time the 1941 manpower survey was constructed, the supply of statistics was more plentiful and more accurate. These improved statistics became an instrument of action. Manpower surveys of the 1941 pattern did not merely state a problem; they indicated means of solving it. They provided the occasion for cutting down demands that departments could not fully justify and then for depressing civilian standards to satisfy Service and supply programmes, reduced though these were. All this required deliberate decisions of the War Cabinet and sometimes of Parliament.

It was not only the manpower survey that made the last half of 1941 a time of such great progress in the history of manpower budgeting. There had been other significant moves in the Ministry of Labour. Until June 1941 there had been three departments of the Ministry dealing with the mobilisation of manpower and no one person wholly responsible. In that month, a Director General of Manpower was appointed so that henceforward the problems of mobilisation were seen as a whole and focused on one person. From this time, the Ministry of Labour had a definite plan and worked out for twelve months in advance the measures necessary to achieve the manpower aims set by the War Cabinet after they had considered the surveys. Mobilisation was a planned operation rather than a series of disconnected steps.

The operation was not, of course, simple. Inevitably, proposals for the transfer of workers and for cuts in labour requirements or, if necessary, in programmes, involved difficult negotiations with the departments concerned. Much of the work of reconciling conflicting views at the highest level and placing the central issues before the War Cabinet devolved upon Sir John Anderson. First as Lord President and then as Chancellor of the Exchequer he remained one of the central figures in manpower budgeting until the end of the war.

The manpower problem that the Lord President put before the War Cabinet at the end of 1941 was clear. Substantial savings had been achieved in the original requirements put forward. But even so, the still formidable total of Service demands could not be met without lowering the calling-up age and refashioning completely the principles and procedures of reservation. A new National Service Act would also be necessary.

¹ See Chapter V above.

The content of this Act will be more fully understood after a survey of the evolution of the principles and mechanisms of manpower policy between Dunkirk and Pearl Harbour.

(ii)

Methods of Achievement

The previous section has shown the Government and its officials constantly looking forward to take the measure of the effort to which the nation must screw itself up. Later in the war, as programmes became more stable and scientific and the shortages of other resources by comparison less acute, the forward calculations of manpower demands became far more accurate. But amidst the uncertainties of the months between Dunkirk and Pearl Harbour, prophecies of the immense movements that lay ahead necessarily changed rapidly. It is possible that the account of these changes has produced some confusion. Let us therefore retrieve clarity by recalling the outline of what actually happened.

Since labour statistics always relate to June, it is unfortunately impossible to show the movement of the population over the whole of a period that begins in June 1940 and ends in December 1941. Table 2 (b) on p. 203, however, shows the changes in the distribution of the labour force of working age between the middle of 1940 and the middle of 1941. Between June 1940 and June 1941 the numbers in the armed forces and auxiliary services rose by 1,110,000. The labour force in the munitions industries rose in the same period by 680,000, and the numbers employed in civil defence and the Group II industries rose by 265,000; the increase in the Group II industries was accounted for by an increase in those employed in government services. There had thus been a total increase in the Forces and in the numbers in the industries most directly concerned with the war which amounted to about 2,056,000. Where had all these people come from?

The Forces and war industries had been fed from three sources. The first was a reduction in unemployment; between mid-1940 and mid-1941 the numbers of unemployed in Great Britain fell by 447,000. From the second source there was a much larger flow of manpower; this was the great transfer from the Group III industries—textiles, building, distribution and a widerange of miscellaneous industries and services—where the labour force fell by 953,000. It was these immense transfers, continuing every year until 1944, that had such an important influence on the nation's standard of life and which were to characterise the British manpower effort when compared with that

of the United States.¹ The third source of inflow into the Forces and war industry was the non-industrial section of the population.² Between mid-1940 and mid-1941 the total population of working age decreased by about 36,000, largely because of casualties; but within this slightly smaller population of working age, there had been a transfer of men and women from the non-industrial sector to the Services and industry. Between mid-1940 and mid-1941 the total of men and women in the Services and industry increased by about 656,000;³ of this number over half a million were women.

This global arithmetic and the account of 'net' changes greatly over-simplifies the manpower movements that actually occurred. Despite the great transfers to the Services, the total industrial labour force fell by only 45,000; but this figure was composed of a net loss of 640,000 men and an increase of 595,000 women. Some of the men and women coming from the non-industrial sector probably went straight into the Forces and the munitions industries; but a great many women—and perhaps many men hitherto unemployed—helped the manpower problem by taking some humdrum job in Group II or Group III, thereby releasing a man for direct war work. Meanwhile, wastage from the Forces was considerable and most of the men discharged would have found a job somewhere in industry. The net increases in the Forces and in war industry were thus achieved only by continuously complex movements.

Movements of manpower into the Forces and war industry do not of course tell the whole story about the devotion of manpower resources to the war. During 1941, an increasing proportion of the workers not only in munitions but in the other industrial Groups was engaged on government production and government services and fewer upon civilian and export work. The Ministry of Labour calculated that by July 1941 about forty-nine per cent. of the total occupied population was employed upon government work of one kind and another.

Between mid-1941 and mid-1943, Great Britain was to add another two million men and women to the Forces and munitions industries;⁴ the screw was to turn much tighter. Yet six months before Pearl Harbour, the nation was already, by any standards except its own, very highly mobilised. It had rather more men and women in the Forces, Civil Defence and munitions together than there had been in 1918 after four years of war.⁵ And as late as the middle of 1944 the

¹ See below, pp. 370-373.

² See above, p. 138 for definition of this class.

³ This figure also includes recruits to the armed forces from Ireland, etc.

⁴ See Table 2 (b) on p. 203.

 $^{^5}$ In 1918, there were about $7\frac{3}{4}$ million men and women in these sectors in Great Britain; in 1941 just over eight million. In 1941 however the population of working age was $4\frac{1}{2}$ millions greater than in 1918.

United States had no more than forty per cent. of their total labour force in the Forces and civilian war employment. The figure of forty-nine per cent. which we have given for the proportion of Great Britain's labour force immediately devoted to the war in July 1941 is not strictly comparable with this United States figure and may be an over-estimate. But the margin of error is small enough to keep the comparison striking and to emphasise the manpower achievements of Britain between Dunkirk and Pearl Harbour.

How had this mobilisation been carried out? The method that springs first to mind is the Defence Regulation² made under the Emergency Powers Act of May 1940, which armed the Minister of Labour with powers undreamed of in the philosophy of any previous British Minister. He might direct through his National Service officers any person in the United Kingdom to perform any service required in any place.³ He might prescribe the remuneration and conditions of such services and the hours of work. He might require persons to register particulars of themselves; he might order employers to keep and produce any records and books. Into his hands had been given the unrestricted powers of industrial conscription.

The powers were drastic but for some time they were used not ruthlessly but with great moderation. The visionary ideal of war organisation which the legislation of May 1940 nurtured—each single citizen in his appointed war station—did not approach realisation for another two years. In 1940 and the early part of 1941 it would have profited the war effort nothing to shift millions of unskilled, untrained men and women about the country even had the Minister of Labour been willing to do so, and even had some machinery of transfer existed. Such people were still wanted only in small numbers in only a few parts of the country. It was for skilled labour that the factories were begging and the chief task of labour supply policy at that time was to produce a sufficiency of skilled men for munitions work and to distribute them wisely.

There were only two ways of producing more skilled men—by training and by making sure that no skilled men were being used on unessential work or work where their special skill was not needed. Neither way was easy. Training, for example, meant that skilled men had to be diverted from current production to work as instructors. And the people most likely to learn quickly were those already very busy on less skilled work. The Minister of Labour, in co-operation

¹ Table 4: The Impact of the War on Civilian Consumption. London, H.M.S.O., 1945.

² S.R. & O. (1940) 781 (22nd May 1940).

³ The Regulation however said that the services to which a person might be directed must be services which that person was capable of performing. In practice this imposed an age limit to industrial conscription.

⁴ This is discussed below, p. 311.

with the production departments and the Engineering and Allied Employers' National Federation, had to use his persuasive powers to the utmost to induce hard-pressed employers to train and upgrade workers. The factories were the main training ground, but well-equipped technical colleges were also used for higher skills. The Ministry of Labour's own training centres dealt mainly with the semi-skilled worker and even then not on a grandiose scale.

High skill could be won only after lengthy training. Training was therefore important for the future rather than the present. Some immediate increase in skilled workers was possible by seeking out those whose skill was being wasted. This was done through a series of special Industrial Registration Orders. In August 1940, men in certain general engineering occupations who were not already wholly on government work, or men who had followed these occupations for at least a year during the last twelve years had to register at the exchanges. Subsequently this register was combed to fill specially important needs-tool-makers and skilled fitters, for example, and men with experience of electrical or wireless work. There were, too, fresh registrations—for ex-shipyard workers in March 1941,2 and for marine engineers in May.3 Identification of the men was only a beginning, for almost invariably there followed protracted negotiations with other interested departments to secure releases from work which was also of national importance.

The Industrial Registration Orders, important though they were, could in any case only touch the fringe of the skilled labour shortage. As time went on the chances of finding skilled labour at work outside the munitions industries became negligible. The only hope of preventing the shortage of skilled men from holding up production was by making far better use of those already at work in the munitions industries. The fundamental need was for dilution; as the Manpower Requirements Committee emphasised in November 1940, three skilled men must do the work hitherto performed by four. Such an achievement was not impracticable; the possibilities of breaking down and 'de-skilling' work were indeed immense. But before these possibilities could be realised, various difficult conditions had to be fulfilled. In the first place, as skilled labour was upgraded to more highly skilled work, less skilled labour must be ready to take its place right down to the 'green labour' coming in at the factory gates. Until the general labour shortage arrived in the summer of 1941, this condition was not too difficult. But secondly, the skilled men of the whole engineering industry must be treated as an industrial army to

¹ S.R. & O. 1940, No. 1459 (3rd August 1940).

² S.R. & O. 1941, No. 239 (24th February 1941).

³ There was also a special registration in May of men with seafaring experience to find recruits for the merchant navy.

be allocated to the best possible use in the general interest and not hoarded by individual employers or production departments. Every firm in the country must dilute, even at the cost of temporary dislocation of production. And the men released must be mobile; for whereas the greatest reserves were in London, the South East and the Midlands, the greatest needs were in the North West.

This principle of pooling the nation's skill was clearly excellent, but the Ministry of Labour had to struggle hard and long to persuade the skilled men, their employers and production departments to respect it, not only with their lips but in their actions. When the Ministry's officials decided that a firm must give up some of its skilled men for transfer, individual workers had to be selected. For reasons that will be discussed later,1 the Minister of Labour was firmly resolved to rely mainly on persuasion and to keep in the background the compulsory powers bestowed on him by Parliament. Sometimes men would volunteer to move to other work in distant towns, but more often they had to be asked to go in the face of separation from their families, and perhaps lower wages and additional expense. While the workers were often loth to go, their employers were usually no less reluctant to release them. The clamourings of the supply departments for their contracts convinced firms that they had not too much skilled labour but far too little. When it was clear that demands for skilled men would not be met from outside sources, firms would upgrade and dilute to meet their own needs, but all too few were sufficiently altruistic to offer freely men for work elsewhere.2 Yet the big new shadow factories that were completed at the end of 1940 could not begin work without a nucleus of highly skilled labour.

In these difficult dealings with the skilled men and their employers the Ministry of Labour looked for the support of the production departments. But for a long time these departments seemed no readier than their contractors to sacrifice their own immediate claims in the interests of the efficient distribution of skilled labour. The Ministry of Supply, for example, would not wish to lose its labour to aircraft production. And even within each department there were many directorates, all anxious to push on with their own production and increase the resources at their disposal; an airframe directorate, say, would strongly defend its labour against the ravages of aero engines. In the Britain of late 1940 and early 1941, these difficulties were inevitable. Much of the slack in the British economy had been absorbed and there were signs of tautness and strain. Impressed with the national danger and fired with enthusiasm for production,

¹ See below, p. 312.

² As late as November 1941, the Director of Labour at the Ministry of Aircraft Production was complaining of 'the almost completely negative attitude displayed by contractors to the many appeals to release skilled labour'.

supply departments, like their contractors, were anxious not to fall down on their own particular duties. They were apt neither to know, think nor care about any other part of the programme than their own.

But however understandable these private wars might be, it was supremely important that they should be subdued and that supply departments, instead of fighting each other and the Ministry of Labour, should combine their efforts and concentrate all their malice upon the enemy. Britain's expansive ability was limited and the scale of her war effort would largely depend on efficient organisation. By the time of Pearl Harbour, the supply departments had learnt enlightenment and the administrative techniques for distributing scarce resources had been mastered. No other war-making country acquired the same skill in co-ordination. The United States, with their colossal reserves of productive power, could achieve a mighty war effort in spite of the jurisdictional quarrels that persisted in the administration right up to the end of the war. In Germany, the shortcomings of planning and co-ordination were much greater; that was not least among the reasons why Germany lost the war.¹

In Britain a steady effort was made from the autumn of 1940 to substitute an allocation system for the general priority directions that were ruling the distribution of raw materials, capacity and labour. These directions, necessary in a moment of great urgency, were on any long term view clumsy and dangerous. Certainly this was true of labour. We have already seen the beginnings of manpower budgeting which meant in effect the allocation of manpower. Allocation was combined right to the end of the war with a system of priorities; but the priorities became temporary and flexible rulings applied to individual firms instead of the rigid general priority direction promulgated in 1940. This method of allocation and priority would have been unworkable without day-to-day inter-departmental collaboration at all levels in the distribution of manpower. By the time of the first manpower budget, departments had painfully learnt the blessings of collaboration through their struggles for skilled labour during 1941.

Even before the summer of 1940 was over, it was clear that the general priority direction made it impossible for the Ministry of Labour to eke out the supplies of skilled men. As long as the Ministry of Aircraft Production could flourish its 1(a) priority, maximum training and dilution of skilled men could not be forced on aircraft firms. And as long as the labour requirements of the priority groups were unsatisfied, Ministry of Labour officials had no legal power to exercise discretion and common sense in the local distribution of

¹ See *United States Strategic Bombing Survey*, 'The Effects of Strategic Bombing on the German War Economy', passim.

scarce labour. Lord Beaverbrook's contention that though these methods wasted labour, they produced aircraft, was little comfort to Mr. Bevin who also had to think of guns and shells and ships and who believed that there was standing idle in aircraft factories skilled labour that other war contractors desperately needed.

At the end of September 1940, the War Cabinet decided that henceforth available resources of labour, material and industrial capacity must be allocated proportionately to existing supply programmes. The Minister of Aircraft Production alone among the members of the Production Council maintained that this did not mean the abolition of the general priority directive. A note from the Prime Minister was necessary to make the position clear. Aircraft production must retain the 1(a) priority, he said, but only for executing approved programmes. This priority must not be abused nor needlessly hamper other vital departments. Requirements of labour and material for aircraft were to be specified in advance and surpluses be made available for others immediately. If approved M.A.P. demands absorbed the total supply of a particularly scarce commodity, a special allocation must be made, even though the M.A.P. were prejudiced, to provide for other minimum essential needs. From time to time, temporary priorities would have to be granted to other 'laggard elements' in the war production programme.

This did not satisfy the Minister of Aircraft Production, who was still insisting in January 1941 that he would cling to his labour priority in spite of inconveniences and disturbances, however regrettable, to other departments. But though the general priority lists remained, the Prime Minister's minute turned them into a guide rather than a directive. The Ministry of Labour hastened to instruct its local officials that henceforth priority for any product did not confer on undertakings engaged in its manufacture any exclusive right to available supplies of skilled labour. Labour should be distributed in accordance with production programmes, and to firms where raw material was available. The first aim of local officials should be to break down bottlenecks in the production of essential war materials.

If these new principles for allocating skilled labour were to be successful, it was clearly necessary to strengthen day-to-day interdepartmental collaboration, both in the regions and at headquarters. The local officials of the Ministry of Labour needed a continuous and up-to-date flow of information about the firms with which it had to deal, about the importance of their production, their contract position, and so forth. This information could only be conveyed through competent and well informed regional officers of the supply

¹ e.g. a firm manufacturing excavators, sixty per cent. of them for coastal defence and forty per cent. for iron-ore mines, had no priority and no means of keeping its labour.

departments in daily contact with headquarters and their contractors. For a long time the Ministry of Labour strove almost in vain for the establishment of efficient regional organisations. The supply departments were persistently reluctant to decentralise responsibility to local officials or to provide them with adequate knowledge of programmes and priorities. The supply departments as a whole did not show any real willingness to cooperate in the regions until September 1941, when the Minister of Labour startled them into it by announcing that any new vacancies for skilled men could be filled only by removing them from existing contracts.

Similarly, machinery for headquarters collaboration was not really working until September of 1941. The Prime Minister's instructions in the previous October about priorities had mentioned special arrangements for 'laggard elements'. At first the Ministry of Labour made itself responsible for identifying these elements. In part the Ministry followed directives from the Prime Minister, one of which, for example, gave overriding priority to skilled men for radio. In part it was guided by discussions at the Production Executive and the inter-departmental Labour Co-ordinating Committee. For the most part, however, the special priorities for laggard elements were granted at the request of individual supply departments. These dispensations inevitably produced recriminations. The Minister of Aircraft Production objected to special priorities for royal ordnance factories which were thereby ranked with aero engines, the Minister of Supply objected to the priorities for aero engines and the Admiralty wanted assurances that none of these priorities would interfere with any of its contracts. In September 1941 the selection of special priorities was turned over to an inter-departmental committee,1 which was soon dealing with non-skilled labour and non-munitions industries instead of simply with skilled labour for munitions industries. Before the end of 1941, the industrial basis of priority of labour had been abandoned and priorities were henceforth given only for individual establishments.

Discussion of the distribution of skilled labour has taken a good many pages, but they have been necessary. For if war factories could not get a minimum of skilled labour they could not make their demands for unskilled labour effective. The rising tide of general labour demands in the autumn of 1941 was proof that the worst of the skilled labour difficulties had been conquered. Moreover, the machinery and principles for distributing skilled labour were equally valuable for coping with the large-scale movements of the unskilled. But there were also other much wider problems in the mobilisation of the general population, and it is to these that we must now turn.

¹ Known as the Sub-Committee on Preferences.

The year 1940 closed, it will be recalled, with the threat of a famine of manpower. Other shortages—of skilled men, machine-tools and particular raw materials—might postpone the day, but if the war programmes were ever to be fulfilled it was only a question of time before the threat became reality. During the last weeks of 1940, the Ministry of Labour was preoccupied with ways and means of meeting this general manpower shortage. The fruit of its discussions was a paper called 'Heads of Labour Policy' which the Minister of Labour put before the War Cabinet in January 1941. This dealt with three main problems. First, there was a clear prospect of a shortage of recruits for the armed forces; men of military age must be reallocated between industry and the Forces. Secondly, men outside military age and women must be brought into the war factories. Thirdly, once men and women were in essential work, they must be kept there.

The recruits for the armed forces could not be found unless the Schedule of Reserved Occupations was drastically modified. The Schedule had been invaluable in preventing wholesale misapplication of manpower early in the war, but it was far too inclusive and lavish for more stringent days. Men reserved through their age and occupation were exempt from the Forces even though they were idle or engaged on unessential work. Under the Minister of Labour's proposals to the War Cabinet, the scheme of reservation was to be recast, and reservation was to be increasingly based on the actual work done by each man and not simply on his age and occupation. The Ministry of Labour would prepare a Register of Protected Work and men in scheduled occupations employed on such work would be reserved at specially low ages. 'Block' reservation was not yet discarded, but the new scheme refined it.

The mobilisation of women and of men outside military age was perhaps the biggest task. It would be an impossible one unless the Ministry of Labour provided itself with a register of people suitable and available for transfer to war work. Apart from men registered for military service and for engineering occupations, the population as officially known at the end of 1940 was still only so many figures. The Ministry of Labour did not know whether any particular man over forty was a railway signalman who must stay at his work or a maker of, say, pianos who should be transferred. And at the composition of the millions of 'unoccupied' women on whom so many hopes rested the Ministry could barely guess. How many were in fact free and mobile and how many looked after an invalid parent? Unless the Ministry of Labour knew the answers, it could not begin to shift people from industry to industry and from town to town. Registration, therefore, was the indispensable prelude to transfer. Neither process could be left to voluntary methods. Compulsion was necessary, it was fair, and the support of say ninety-five per cent. of the population, without which it would be dangerous or useless, now seemed assured. The Minister of Labour therefore sought the War Cabinet's approval for the use of his powers of registration and direction to whatever extent might be necessary to ensure adequate labour for essential work. The Minister would not, however, direct people to work where wages and working conditions, or housing, feeding or transport arrangements were unsatisfactory. The wage for directed work would be the rate for the job in the place in which the work was to be performed, plus lodging and travelling allowances where appropriate. Directions would be subject to appeal.

The third of the Minister of Labour's problems—to keep put workers in essential jobs—was not new. High turnover, wastage and poaching had been conspicuous, and sometimes flagrant, from the beginning of the war. In June 1940, Mr. Bevin had made the Undertakings (Restriction on Engagement) Order¹ under which all new engagements of labour in general engineering and in the building and civil engineering industries, were to be made through the employment exchanges: it was also made an offence for an employer in any other industry to engage men from agriculture or coal-mining.2 These methods prevented the more obvious forms of poaching by advertisement and enticement; but this was not enough. For example, workers could not as yet be stopped from dismissing themselves. Nor could they be stopped from removing themselves from bombarded cities, such as London and Coventry. In short, the Restriction on Engagement Order was inadequate and the supply departments grew increasingly restive. A new method had to be found which would have the effect but not the unpopularity of the leaving certificates of the 1914-18 war.3 The Minister of Labour's proposal to the War Cabinet was that he should have power to declare, after consultation with the supply departments, that the work of any undertaking was national work. No employee might leave such work nor be dismissed without the permission of a National Service officer. The Minister might also prescribe proper arrangements for personnel management and workshop consultation.

This then was the Minister of Labour's three-pronged policy for meeting the general labour shortage. The War Cabinet accepted it in January 1941 as a 'bold and comprehensive scheme' and for the next few months the Ministry of Labour was occupied in working it out into detailed administrative terms. Providing recruits for the armed forces was the most urgent of the tasks. The principles of the

¹ S.R. & O. 1940, No. 877.

² When unemployment in coal-mining rose with the cessation of exports to France, the Order as it applied to coal-miners was very loosely administered.

See p. 27 above.

changes to the Schedule of Reserved Occupations were soon clear. Men were to be combed out of industry by raising the ages of reservation by stages. In the vital occupations for which there were two ages of reservation—the lower one for 'protected' work—men were not to be called up immediately they became dereserved; the Ministry of Labour was thus to have the opportunity of allocating them in the most appropriate way between war factories and the armed forces. The process of wringing acquiescence in every schedule change from the interested government departments and industries was inevitably lengthy and the revised Schedule was not ready until April. This revision by itself could not yield sufficient recruits for the Services. It was impossible to find the numbers required without calling up men for the Forces at nineteen instead of twenty; this step was agreed in January 1941.

The plans for getting more men into the Forces applied only to able-bodied men between the ages of nineteen and forty and they were therefore much more manageable than the plans for industrial mobilisation. The two Orders giving effect to the industrial side of the labour policy that the War Cabinet had agreed were both ready in March 1941; one was the Essential Work Order¹ and the other the Registration for Employment Order.²

The Essential Work Orders were effective as a method of keeping workers in their jobs and yet they did not incur the odium of the old leaving certificates. This was because they established mutual obligations between the employer and his workers. Undertakings engaged on work essential to the defence of the realm, the efficient prosecution of the war or the life of the community could be scheduled under the Orders. No employee of a scheduled undertaking could leave, be discharged or be transferred without the permission of a National Service officer except for serious misconduct. Workers who were absent from work for no good reason or were persistently late could be formally directed to attend work during specified hours. On the other hand, undertakings were not scheduled unless their terms and conditions of employment and welfare arrangements were satisfactory. Scheduled undertakings, moreover, had to guarantee their workers' weekly wages even if there was temporarily no work for them. Some opposition to the various clauses from one side of industry or the other was inevitable; but generally the Orders were accepted and their purposes were served. Scheduling in consultation

¹ S.R. & O. 1941, No. 257 (28th February 1941) amended Defence Regulation 58A to give the Minister of Labour power to make the Order. The first main Order was the Essential Work (General Provisions) Order, S.R. & O., 1941, No. 302 (5th March 1941). Subsequently other Orders were made for particular industries on the basis of the main Order.

^{*} S.R. & O. 1941, No. 368 (15th March 1941).

with the interested departments and industries went on apace and by the end of 1941 some 29,000 undertakings, employing nearly six million workers, were covered by the Orders.

At the same time as the Ministry of Labour was tying essential workers to their jobs, it was busy drawing more men and women into the munitions industries. Soon after the Registration for Employment Order was made (March 1941) men aged forty-one to forty-three and women of twenty and twenty-one were called to register. Other age groups followed through the year in accordance with the Ministry of Labour's plan to produce the numbers required at the right time. Men and women who, from their registration particulars, seemed suitable for transfer were then interviewed to discover any individual circumstances that might make transfer to war work difficult. At first the Ministry handled compulsory interviews and transfer with extreme caution, convinced as it was that it could not safely outstrip public opinion. For the time being it hoped to confine the process of interview to people not in full-time employment. Local officials moreover were explicitly instructed to make every man and woman feel that his or her case was being treated individually and with sympathy. It was indeed most important not to antagonise men and women, many of whom were becoming acquainted with the inside of a labour exchange for the first time in their lives. Women in particular might be sensitive to questioning and must be treated with the greatest friendliness, patience and understanding.

Compulsory transfer through directions was handled even more carefully. Ever since the fall of France, the Ministry had been trying to transfer numbers of skilled men and numbers of workers in special industries. But what with wage differences, domestic problems, bombing, a plethora of medical certificates and suspicion of victimisation by employers, National Service officers had been very sparing with directions, and the Minister himself refused to authorise directions to work where conditions were bad or the wages exceptionally low. During the early months of 1941 the Ministry was indeed progressing from a desire to avoid accusations of callousness to a conviction that without it men could not be transferred in adequate numbers. But this regretful ruthlessness was not applicable to the men and women called upon under the Registration for Employment Order. Instead, the Ministry of Labour found itself with a whole new range of transfer complications—the domestic problems of women and the financial liabilities of professional men and men in businesses on their

The Registration for Employment Order was important during 1941 primarily as a means for mobilising women. Before long it became apparent that the early cautious methods made interviewing slow and the yield for transfer small. The existence of a large reserve of transferable 'unoccupied' women had proved a mirage; they were mainly, it seemed, running households for other people. The women already in employment were the only group likely to provide a substantial number of women for transfer. In June, as the munitions industries' needs for women became pressing, the Ministry of Labour decided to call for interview every registered woman in full-time paid employment unless her work came under the Schedule of Reserved Occupations or seventy-five per cent. of her firm's work was for government and export. But this attempt to by-pass lengthy negotiations proved ill-fated. Employers were outraged when they found that, without their knowledge, their women workers had been interviewed and persuaded to transfer themselves elsewhere. A general stop was for a time imposed on interviewing women outside the clothing and 'concentrated'2 industries. New arrangements were then hastily made providing for consultations with employers and with the headquarters and local officials of interested government departments.

As more women were brought into the interviewing net, a much stiffer interpretation was put upon availability for transfer to war work away from home. Women would be exempted only if they could prove serious domestic hardship or if their employers could prove that they could not be withdrawn from their jobs. The new policy was announced in August with a flourish of publicity about the seriousness of the womanpower shortage. At the same time older women were urged to come forward for local war work and to replace women who were being transferred.

So far we have been considering general industrial mobilisation. The organisation of an immense transfer of men and women into direct war work was the biggest task of all. But in addition, special arrangements had to be made to solve the labour difficulties of a variety of individual industries that were vital to the war effort. In the summer of 1941, for example, there came the first manpower crisis in coal-mining. An Essential Work Order was made for the industry³ and as a result of a special registration of ex-coal-miners in July, 25,000 men went back to the mines by the end of October. Recruiting for the Forces from the mines was stopped. Other industries were dealt with through 'Ring Fence' schemes. In shipbuilding and ship-repairing, the docks, building and iron and steel, the labour

¹ By the end of the third week of August 1941, 1,560,500 women had registered, and 427,900 interviews had taken place, from which 46,400 women had gone to war industries and 15,000 to the women's Services.

^{2 &#}x27;Concentration' is explained below, p. 310.

⁸ S.R. & O. 1941, No. 707 (15th May 1941).

⁶ Certain conditions were necessary for the introduction of these schemes: 1. all the important firms had to be scheduled under the Essential Work Order.

^{2.} the industry must be controlled by one government department.
3. the industry must depend on specialised types of labour.

force was tied to the industries by variations of the Essential Work Order. The responsible government departments, in collaboration with the industries, were then charged with the day-to-day distribution of labour between individual firms—a duty that gave them a powerful incentive to economy in the use of labour.

In retrospect, the most significant feature of manpower policy in the months between Dunkirk and Pearl Harbour is the development of industrial conscription. It has therefore been essential to examine its foundations carefully and at some length. But, as we have seen, compulsory transfer up till the summer of 1941 was proceeding but slowly. Its influence in the big migration into war industry between mid-1940 and mid-1941 must not therefore be overestimated. Most of this migration had in fact been voluntary. In the nation's most dangerous hour, much of the effort which wrought salvation was made without compulsion. The pilots who fought the Battle of Britain were volunteers. Service in the Home Guard and Civil Defence was given freely. Military conscription had built up the armed forces; but industrial conscription was operating as yet only on the difficult margins of the war economy. The award of government contracts, fortified by grants of priority for materials and labour, was perhaps the most important of all the forces that were building up munitions employment. For many workers, perhaps for the majority, transfer from civilian industry to war industry did not mean either a change of neighbourhood or of factory or of occupation; it was the factory itself that was switched over, by the contracts issued to it, from production for the civilian market to production for the war machine. The change was frequently a matter of the product, rather than of the processes upon which labour was engaged. Workers did also, of course, change their jobs, their factories and their neighbourhoods. A variety of 'pulls' and 'pushes' moved them. Patriotism drew many into war work, the desire to shelter from the Forces drew a few. Higher wages, as the next chapter will show, were often a powerful incentive. Meanwhile, the decline of the unessential industries exerted a steady 'push'.

The next chapter will discuss more fully the policies by which this decline was accelerated; but some of them must be briefly mentioned here. Most important of all were the restrictions imposed by the Raw Materials Department and the Board of Trade. In the summer and autumn of 1940, when continuing unemployment was still an embarrassment, the Ministry of Labour had viewed with some alarm the increased restrictions that the Board of Trade was imposing in order to save raw materials and to conserve stocks. At this time, therefore, discussions centred on arrangements for mitigating the results of Board of Trade policy—by spreading supply departments' contracts,

¹ See below, pp. 339 f.

by better location of war factories and, as a last resort, by issuing temporary licences for increased home production.¹

However, after the manpower survey of 1940, economy in labour became almost as important as economy in materials as a reason for cutting down civilian supplies still further. One instrument of economy was the Limitation of Supplies Orders under which, in December, quotas for a whole range of miscellaneous goods were drastically reduced and, in the following March, the textile quotas were cut to a very low level.2 But the main contribution of the Board of Trade towards solving the manpower problems of 1941 was its concentration policy. In January 1941, the Ministry of Labour had invited the Board of Trade to consider the whole scope and method of the Limitation of Supplies policy in order to maximise labour releases. The Concentration of Industry white paper of March 19413 was the result. According to the policy announced in this white paper, the reduced volume of civilian production, instead of being thinly spread over many factories, was henceforward to be concentrated into a few factories working full time. The policy was to be operated in such a way as to make the greatest possible contributions of labour and factory space by the closing down of firms. The firms that were allowed to continue civilian production were called 'nucleus' firms; provided they fulfilled their obligations, their labour, raw materials and premises would be safeguarded.

The policy of concentration of industry will be examined in detail in a later volume in this series. We shall have something more to say about it in the next chapter of this book.⁴ Its labour effects, with which we are at present concerned, were sometimes rated very high. The Board of Trade estimated, for example, that between March 1941 and March 1944, nearly 290,000 workers were released as a direct result of concentration; most of these releases would have belonged to 1941, which was the most active phase of concentration. But such claims must be viewed sceptically; for in the contraction of civilian industry other processes besides concentration were at work and the effects of them all cannot be disentangled. By and large, concentration turned out to be a means, not of securing large releases of labour but of making orderly the releases which did for other reasons occur. Many industries, moreover, proved unsuitable for any form of concentration; in others, effective schemes never really operated.

As we have seen, the motives and forces that sent workers into war industry in the twelve months after Dunkirk were many. Except for the skilled men, most of the workers went there without the intervention

¹ A new 'Keeping Step' section of the Board of Trade was formed for this work,

² See below, pp. 321 f.

³ Cmd. 6258.

⁴ See below, p. 323.

of the Ministry of Labour. Contemporaries were highly critical of these methods of mobilisation. Apart from a lone voice or two crying that the Government was proceeding too fast, and apart from unrewarding debates about the relative pace of the conscription of labour and property, the main burden of the criticism was that the Minister of Labour was too cautious in using his power to compel. From November 1940 into the early summer of 1941, Members of Parliament and newspapers were continually asking when the Minister was going to make drastic use of his powers; they were still asking the same question in September 1941. The vigour, efficiency and boldness of manpower policy were deemed inadequate.

The criticisms must be considered first against the background of labour demands sketched in this chapter. There was very little sign of unfulfilled demands for unskilled labour in war industry before the spring of 1941,3 and the demands had not grown insatiable until the autumn. Voluntary movements were in fact generally sufficient until at least the summer. Only then did the strain of demand on supply make it imperative to comb the population for every man and woman able to work. Manpower policy it seems kept well abreast of demand.4 The framework of policy to cope with a severe labour shortage had been laid in January 1941 and by August was being administered with the firmness necessary to meet demands. The critics claimed too much credit when they implied that the development of labour policy was a response to their complaints. But, although there was no general failure of war production through the Minister of Labour's reluctance to use his powers, it is true that skilled labour was not moved about quickly enough and that there were vacancies in war factories in the summer which directed women could have filled. In part, this was due to the difficulties of enlisting the co-operation of employers and supply departments. But, as we have seen, Ministry of Labour officials did indeed hesitate over issuing directions.

Mr. Bevin spoke often of the psychological problems which were involved. 'Whatever may be my other weaknesses,' he said, 'I think I

¹ e.g. H. of C. Deb. Vol. 370, Col. 745 (27th March 1941); Sir H. Williams' speech.

² See e.g. H. of C. Deb. Vol. 367, Debate of 27th November 1940; Vol. 368, Debate of 21st January 1941; Vol. 370, Debates of 27th March 1941 and 2nd April 1941; the Economist generally and the issue of 6th September 1941.

³ The specific shortages of unskilled heavy male labour which appeared early were more akin to those of skilled labour; supplies were inelastic and the problem was one of allocation.

⁴ See e.g. the statement of the Parliamentary Secretary of the Ministry of Supply that, broadly speaking and with possibly one exception, the Ministry of Labour had provided labour at a rate approximate to the Ministry of Supply's power to absorb it; H. of C. Deb. Vol. 373, Col. 264 (9th July 1941).

⁵ See e.g. H. of C. Deb. Vol. 376, Col. 1061 (and December 1941), Mr. Horabin: 'When the Minister of Labour first took office the critics begged him to exercise compulsion over labour which he is now going to do. He indignantly refused on the ground that he was "a leader and not a dictator". A tardily growing appreciation of what is required has since forced him to introduce compulsion piecemeal...'

can claim that I understand the working classes of this country.'

Psychology, unfortunately, is not an exact science. But the essential truth remains that the Labour of which Mr. Bevin was Minister was not a mere collection of 'hands' nor simply the figures in a statistical table, but a vast multitude of men and women with human bodies and human hearts, both of which are breakable commodities. In some of these hearts the years of pre-war depression had left a bitterness and suspicion which ruthless compulsion would only have hardened. And although the methods of interviewing women were at first cumbrous, they paid rich dividends by winning the confidence of parents and of the women themselves. It was well that critics in Parliament and the press should be ahead of the Ministry of Labour over the use of directions, for, when it became essential to use them drastically, the nation's consent was assured.

The Ministry of Labour's realisation that it was ordering the lives of human beings had other important implications. It meant, for example, that the Ministry could not direct men and women to go to or stay in work where physical conditions were intolerable. In the days just after Dunkirk these questions had not been greatly heeded. Men and women worked excessively long hours. But it was soon found that 'to toil and not to seek for rest' was a precept of very limited application. Before long the Minister of Labour was insisting again on strict administration of the Factory Acts and was recommending maximum hours of work. Concern about hours of work widened into a general pressure for better welfare arrangements. The Minister of Labour would not direct men to work, however vital it might be, in establishments where the conditions of work were bad. The principle of proper welfare provision became enshrined in the Essential Work Order. The Ministry of Labour led a ceaseless campaign for better canteens, cloakrooms and lighting. Transport and buses had to be provided for new factories in remote places and hostels had to be organised in overcrowded towns where there was a shortage of billets. This policy-industrial conscription conditional on welfaremight seem a curious counterpart to a military conscription that sent men off to fight the Battle of the Atlantic or swelter in Libyan deserts. The antithesis was frequently made; but it was false. For the State itself employed the soldiers and stood in a clear contractual relationship with them; in industry, equivalent obligations had to be built up between the State, the employers and conscripted workers. Moreover, all the evidence emphasised the importance of welfarethe weekly rest, good meals, swift transport-in increasing the workers' output.2

¹ H. of C. Deb., Vol. 367, Col. 284 (27th November 1940).

^{*} See e.g. Twenty-first Report from the Select Committee on National Expenditure, Session 1940-1941 (6th August 1941).

Even if all these considerations had not counselled moderation in the pace of industrial conscription, another might well have enforced it. The mobilisation of the population demanded a large and efficient administrative machine. At headquarters, general policy had to be embodied in legal orders and instructions to local officials and the structure of interdepartmental co-operation had to be built up. In the regions, competent and wise officers had to be recruited and appeal tribunals and advisory panels established, while the local exchanges, often dingy and obscure, had to become centres for interviewing and transferring vast streams of men and women. Days of imminent peril are not the most suitable for developing large. streamlined organisations. Yet during 1941 the Ministry of Labour and National Service, which had not been born great and which had successfully avoided having greatness thrust upon it in the first six months of war, achieved its greatness. The department had expanded its slender functions and had become the keystone of the war effort.

Up to the autumn of 1941, then, manpower policy had overcome political and administrative difficulties remarkably well. By then, the Government was conscious that a new phase was beginning. Complaints of labour shortages were frequent and in October the Government's new manpower survey¹ forecast enormous new demands for the Services and war production during the next year. Throughout November, the Government was discussing how to meet requirements on this scale. The first necessity was a still more drastic use of powers that already existed. The reserves now consisted very largely of women, and the Prime Minister emphasised that the campaign for directing women into the munitions industries must be pressed forward. Married women without children were to be directed to industrial jobs near their homes and those with children should be encouraged to volunteer for part-time work. Meanwhile, the most rigorous economy in the use of manpower was to be enforced in the Services and in essential industry.

But a more drastic application of existing powers was not enough. It would not solve the most difficult problem of all, which was to find the men and women needed by the Services. Under existing arrangements the men simply were not available and the women could not be persuaded into the Auxiliary Territorial Service. The War Cabinet decided upon three measures. First, young men were henceforward to be called up at 18½ instead of nineteen. Secondly, the system of reservation from military service by occupations was to be changed gradually to individual reservation. This was a heavy administrative task which was to be achieved by raising at monthly intervals the age of reservation for all occupations by a year at a time: each individual case would then be examined and deferment, amounting

¹ See above, p. 293.

to reservation, granted only to the men engaged on vital national work. The third and most important measure was the introduction of a new National Service Act.

The Minister of Labour and National Service asked the War Cabinet to approve the introduction of legislation imposing on all persons between the ages of eighteen and sixty the obligation to undertake some form of national service. This would have two effects. The age for compulsory military service for men would be raised from forty-one to sixty-one, which would enable the Minister of Labour to find older men to undertake non-combatant duties in the Services instead of young women who were more adaptable and could be more profitably engaged in industry. The second, revolutionary effect was to institute compulsory service for women in the women's Services and Civil Defence. The War Cabinet gave anxious thought to these proposals. It agreed to the extension of compulsory military service to older men, although the upper limit was reduced from sixty to fifty. It also agreed that power should be taken under the new Bill to direct men to join the Home Guard in case this became necessary. But some Ministers could not conceal their distaste for compulsory recruitment of women to the Services. They expressed especial misgivings about the feelings of airmen and sailors² if their sisters, daughters or sweethearts were conscripted. Prolonged discussions took place in the War Cabinet and informally between the Prime Minister and the other ministers involved. The subject was settled and then reopened. Finally, it was agreed that the Minister of Labour's case was incontrovertible and that there was no possible alternative. Military conscription was to apply to women between twenty and thirty, but women who were called up were to be given an option between the Auxiliary Services, Civil Defence and such specified jobs in industry as the Minister of Labour might direct.

The Government's proposals for the new National Service Bill were introduced into the House of Commons early in December and were gladly accepted. By the time of Pearl Harbour, therefore, the system was in all its essentials complete. It was a system which demanded for the State the services of men and women on a scale that Britain's totalitarian enemies never dared ask of their own people. Nevertheless, it was founded upon a rock; for it had carried with it the consent of the nation.

¹ The great volume of work arising was to be decentralised to fifty new District Manpower Boards.

² Curiously enough, similar misgivings were not expressed on behalf of the soldiers.