IMPRIMERIES RÉUNIES S. A., LAUSANNE
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INTRODUCTION

The question dealt with in this study has been the subject of consideration by the International Labour Organisation from the very beginning of its existence. At the First Session of the Conference held in Washington in 1919 a Recommendation on Unemployment was adopted, of which Clause IV read as follows:

"The General Conference recommends that each Member of the International Labour Organisation co-ordinate the execution of all work undertaken under public authority, with a view to reserving such work as far as practicable for periods of unemployment. . . ."

The matter was raised at various subsequent sessions and in 1926 the Eighth Session of the Conference adopted a Resolution including the following passages:

". . . The International Labour Conference . . . (1) Requests the International Labour Office to increase to the utmost its efforts to secure wider adoption of the measures proposed in the Recommendations and Conventions on unemployment adopted at previous sessions of the Conference, i.e. . . . (d) the organisation of public works so as to counteract the fluctuations of private business, . . . (5) In particular requests the International Labour Office . . . to seek the advice of the Joint Committee on the financial obstacles to the putting into operation by public authorities of the Recommendation referred to above concerning the organisation of public works. . . ."

The question was referred to the Joint Committee on Economic Crises appointed by the Economic and Financial Committees of the League of Nations and the International Labour Office. The International Labour Office submitted a memorandum to that Committee, which on 2 May 1927 drew up a list of points it was desirable to investigate. It is on the basis of this plan that the Office pursued its research and has prepared this study.

The terms of the Recommendation adopted by the Washington Conference of 1919 on the subject of utilising public works as a remedy for unemployment are very wide in scope. The Recommendation suggests that all work undertaken under public authority should be co-ordinated by the Government of each State with a view to reserving such work as far as practicable for periods of unemployment. The phrase "all work undertaken by public authority” includes not only work carried out directly or through

1 See Appendix.
contracts by the various departments of the central Government and by the many local authorities, but also the work of private or semi-private bodies operating public utilities (where these are not publicly owned) such as railways, road transport, gas and electricity supply, etc. Such public utilities are generally operated under statutory control, and the public authority can exercise a very considerable influence on the time at which they undertake work of various kinds.

On the other hand, the Washington Recommendation tends to be restrictive in that it speaks not of the organisation of public works generally as a remedy for unemployment when the crisis comes but only of the special policy of co-ordinating the execution of work undertaken under public authority with a view to reserving such work as far as practicable for periods of unemployment. This is an entirely different thing from the institution of relief works the main purpose of which is to give work to unemployed persons, and it involves more than merely deciding to put public works in hand after the crisis has already developed. The object of such a policy is to provide a definite stimulus to the economic system as a whole in periods of depression by concentrating the economic demand of public authorities as far as possible in such periods, and thus providing employment for labour which would otherwise be idle — providing it, be it noted, through ordinary economic channels, not through relief organisations. The complement to this is, of course, by reserving public work for periods of depression to avoid heightening the preceding boom. If public authorities follow the example of private businesses and place their orders when demand is outstripping supply and prices are rising, they will merely intensify the competition for labour, capital, and materials which are already adequately employed, heighten the boom, and precipitate the consequent depression. By the advance planning of public works, public authorities would deliberately adopt a policy more or less the inverse of that pursued by private business.

Such a plan is especially suitable for dealing with unemployment brought about by the fluctuations of the business cycle, of which the world-wide depression of 1929–1930 may be considered an example, but it is less useful in dealing with unemployment affecting only a single industry or group of industries as a result of special causes. Such unemployment takes place from time to time in consequence of changing fashion, rationalisation or other causes, as, for instance, among textile workers in New England owing to the fact that the industry moved to the Southern States.
It will be seen later on that only certain public works can be postponed or advanced in time; others must necessarily be carried out immediately. Consequently, there is a danger that if public works are put in hand every time a particular industry is depressed because of a change in fashion, or for some other similar reason, no works will be available when a widespread depression affecting most industries arrives. Moreover, it would be very difficult to put skilled workmen in certain industries, such as watchmakers, for instance, on public works, without tending to make them less able to resume their former employment when conditions improve. But there are obviously cases in which the argument does not apply. Thus, if a depression should occur in an industry which normally does work for the public authorities it would be somewhat foolish for the latter to say that they would not increase their orders because the depression was partial and not general. Examples of such industries are the building, clothing and printing industries. Moreover, as will be seen in the Introduction to Part II, in connection with the cotton trade depression in Great Britain in 1863, public works may be a means of permanently transferring workers from one trade to another.

Before the war there was a fairly regular succession of booms and depressions, and the idea was then put forward that when unemployment was already going up but not yet very serious public works which had been postponed during the boom should be put in hand. Since the war, however, economic conditions have been different. In the United States, it is true, there has been a long period of prosperity accompanied by what looks like a business cycle. At any rate there has been a succession of depressions of short duration, though this is not true of the depression of 1930. In France there has also been sustained prosperity disturbed by a break at the time the franc was revalued before stabilisation. In most other industrial countries, however, there has been prolonged and widespread unemployment due to a number of factors which it is unnecessary to analyse here. This has been the case particularly in Germany and Great Britain, and consequently there could be little question in those countries of reserving public works and orders to a later period. On the contrary all possible works that could be advanced in time were carried out in order to provide some employment for the unemployed. Reference is also made to this aspect of the problem in later chapters.

1 Page 105.
In addition to the cyclical fluctuations taking place over a period of years certain industries also suffer from seasonal fluctuations which take place each year. Thus, the building trade is busy in summer and slack in winter, with the result that a number of workmen are regularly thrown out of work at that season. Many people think that a great deal more could be done by private industry itself to put an end to seasonal unemployment by securing advance orders, by trying to alter consumers' habits and by diversifying their production. The extent to which winter building work can be carried on is a technical problem which is outside the scope of this report, but it is interesting to note that much progress has already been made in overcoming the difficulties. It is claimed that all-the-year-round construction work has economic advantages, such as earlier returns on investments, reduction of construction costs, increased profits for contractors; it certainly has social advantages in the more settled employment for the workmen and consequent diminution, or even elimination, of the seasonal unemployment in the building industry. Very successful efforts have been made in recent years to stabilise employment by a more systematic organisation of work in particular factories or industries. This is a task for private undertakings and not for public authorities, and is not considered in this report.

Governments can do something in the matter of a suitable distribution of their orders in the different seasons and reference will therefore be made to this subject in the following pages. It must be borne in mind, however, that the two problems of cyclical and seasonal unemployment are essentially different and that the greatest value of a carefully planned public works policy is to be found in its effect on the former.

To sum up, it may be said that there are three kinds of unemployment in the post-war world, namely (1) unemployment of a more or less permanent character; (2) cyclical unemployment; and (3) seasonal unemployment. It is with the second of these forms of unemployment that we are mainly concerned in this study.

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1 See for instance the pamphlets on Cold Weather Construction issued by the Portland Cement Association in the United States.
PART I

ADVANCE PLANNING

CHAPTER I

THE EFFICACY OF ADVANCE PLANNING

It will be convenient in the first place to consider the economic arguments that can be brought forward for and against the advance planning of public works and to make an effort to determine how far such a policy can really achieve its object, namely, to further the regularisation of the demand for labour over a period of years.

One of the earliest advocates of this policy was Professor Bowley, the eminent British statistician, who suggested it to the Poor Law Commission in Great Britain in 1909. He explained that his policy differed from that of relief works which had been pursued at different times during the nineteenth century.

A scheme of this kind would differ from a crude form of relief works in four important ways:

(a) the work concerned would be started before unemployment became acute, say, when the percentage unemployed index reached 4 per cent.;

(b) there would be no artificial demand made for labour but only an adjustment in time of the ordinary demand;

(c) the unemployed as a class would not be attracted, for the demand would come from ordinary trade sources and before there was any considerable dearth of employment;

(d) the wages paid would be measured only by the work done, being contracted out on the ordinary commercial basis.

Such a scheme need involve no expenditure save of thought and of forethought; it is in the nature of prevention rather than of cure, and in proportion as the scale of its operation was sufficient would remove the principal legitimate cause of dissatisfaction of the genuine workman with industrial conditions.

The postponement of a certain amount of public construction to periods of industrial stagnation would have two main results. In the first place, the Government would be removed as a competitor of private business in the market for building materials and labour during times when industry is already having difficulty in securing sufficient material to meet the demands of its consumers. Secondly, Government orders, coming at the psychological moment, would have a tendency to stimulate business activity at times when other orders are not available.

It will be admitted by everybody that any policy which really succeeds in diminishing unemployment and in improving the situation of the labour market is worthy of very careful consideration. Even if the policy cost money, it would be worth while paying something to have workmen employed steadily at their jobs rather than to have them idle and dependent on relief or insurance benefits. An unemployed man tends after a time to deteriorate in character and to find it more difficult to take up work again. Moreover, it must be remembered that an unemployed man always costs the community something. If there is an unemployment insurance scheme in operation, the benefits payable have to be raised by payments of workmen and employers, and also as a rule by the general taxpayers. If there is no such scheme in operation, the unemployed workman must either live on his savings — a very bad thing, not only from the individual point of view, but from the point of view of the community — or he becomes a charge on private charity or on public relief funds. In each case, the community is feeding and housing him and his dependants, and he is producing nothing in return.

If there is an unemployment insurance scheme, this is obvious to everyone; if private charity has to step in, it is not obvious, and people are liable to forget that unemployment costs the community something in relief. In the United States, for instance, the Family Welfare Association of America stated in March 1930 that a tremendous strain on the financial resources and staffs of charity and family welfare societies had accompanied the unemployment prevailing at the end of 1929 and the beginning of 1930. Statistics from agencies in 32 States reporting to the Association showed an increase of 200 per cent. in the number of families in which "unemployment due to lack of work" was a factor in the families need of the help of a welfare society during January 1930 as compared with January 1929. In January
1930, the number of such families was 21,600 as compared with 7,300 in January 1929, and 17,000 in December 1929.

One or other method of relieving the unemployed workman has to be applied, of course, especially in these days of severe and often prolonged unemployment, but work is always better than pecuniary relief if it can be provided, and that is why some countries such as Germany and Austria, for instance, have associated relief works (the so-called productive unemployment relief) very closely with their unemployment insurance schemes. Something is said of these measures in Part II. In the meantime we may conclude that employment is preferable to relief in any of the above forms, even at some cost to the community.

Cost

There has been some controversy on this question of cost. Professor Bowley says there would be no expenditure save of thought and of forethought. Mr. Otto T. Mallery, who presided over the Committee of the President's Conference on Unemployment in the United States which examined this question in 1921, goes even farther, and says "that the total cost of public works would be less over a ten-year period containing both prosperous and depressed years" than it would if there were no advance planning. Yet throughout the replies of the Governments to the request for information sent out by the International Labour Office runs the statement that public works which had been postponed or advanced in time have cost more than they otherwise would have done. This difference of opinion really seems to rest on a misunderstanding. What we are discussing here is advance planning over a period of years, and if certain public works are carried out during an economic depression rather than during a period of prosperity, the tendency will be for them to cost less. Prices are normally lower during a depression than during a boom. Rates of interest are lower if the time be well chosen and wages may also be lower (at any rate they will certainly not be higher). The Swedish Government refers more than once to the fact that in periods of depression the cost of labour and materials is less. What the other Governments in their replies refer to is seasonal unemployment

1 Communication from the Family Welfare Association of America. There is now (Déc. 1930) a widespread system of "doles" of this kind in the United States.
and the distribution of works and orders over each year so as to improve that particular situation. That is quite a different question. It is clear that if building work is carried out in the winter in cold countries it will cost more. It has been estimated that it may cost as much as 20 per cent. more. It may, of course, be worth while incurring the additional cost, for, as already stated, there is bound to be some saving elsewhere; indeed, it will be clear from what is said later on that many Governments and local authorities think it is. Each case must be considered on its merits.

So far as advance planning over a period of years is concerned, Professor F. G. Dickinson, of the University of Illinois, made a careful investigation into this question of cost. Examining the figures for actual public works construction in the United States in 1919 to 1925, and the effect of postponing or advancing such construction according to the situation of the labour market with the assistance of the construction cost index of the Engineering News Record, he comes to the conclusion that there would have been a saving over the seven-year period. It is, of course, possible that the construction cost index would have been changed by the very fact of redistributing the public works in time; there would have been a certain increase in the cost. But there is no evidence to show that that increase would have eliminated the saving noted above. Another possible source of increased cost is the fact that the rate of interest may be particularly high when money is urgently needed for public works, that is to say, in a year of high unemployment. But this would be very unlikely to offset the saving already referred to and, as a matter of fact, it is much more likely that the rate of interest will be low at such a time, and therefore contribute to lower costs. It would depend very much on the method of financing public works whether there was any increased cost from this cause or not. This problem is dealt with in Chapter IV.

**Effect on Industry**

We may wonder, however, whether a reservation of public works and orders to periods of unemployment would really have much effect on industry as a whole. A number of questions suggest themselves. For instance, what do we mean by a depression, and

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2 Cf. table on p. 13.
by how much does industry decline at such a time? What proportion of industrial activity is represented by public works and orders for supplies given by public authorities? Here we are largely in the land of conjecture. But there is much evidence in favour of the view expressed by Mr. Henry N. Dennison, President of the Dennison Manufacturing Company (stationers’ supplies and paper), to the effect that the psychological factor in industrial fluctuations is an important one. Small things, he said, such as additional building thrown in on top of a boom like the industrial building of 1919 and 1920 in the United States, caused reverberated effects, in that case for evil; in the case of public works undertaken systematically at the beginning of a depression, they would be for good. He pointed out that a 2 or 3 per cent. fluctuation in consumers’ buying would be sufficient to cause merchants to tighten up. This would lead to the purchasing agent cutting his purchases by 5 or 10 per cent. This would affect the manufacturer, who would stop buying completely from his main sources of raw material. Thus, a small fluctuation in the retail store leads to a much larger fluctuation in the merchant’s business, and a still larger one in the manufacturer’s business. A very severe depression in business, he added, is seldom more than 15 per cent. less than normal, as was the case in the United States in 1921. A mild depression, which, nevertheless, affects business materially, is about 5 per cent. less than normal 1.

The inter-dependence of different industries was emphasised by Mr. Otto T. Mallery in testimony before the Senate Committee on Education and Labour. Who could guess, he asked, that the fruit crop determines the demand for manicure sets? But a wholesale hardware house made a fortune by finding this out.

A hundred travelling salesmen were required to report weekly on the condition of the by-product fruit crop in grain territory. The house had observed that when grain crop was profitable, the farmer bought tools and machinery, but if the fruit crop was good, the proceeds were the wife’s perquisite; she bought manicure sets and kitchen utensils, and this house was ready with the goods in the neighbourhood store. Industries lean on one another like the walls in a house of cards—to hold one another up or to push one another prostrate 2.

1 Hearing before the Committee on Commerce, United States Senate, on S. 2475, April 1928. Cf. also Prof. Wesley Mitchell’s estimate that production in North America in depression periods is about 15 to 20 per cent. less than in the best years (see next page).
2 Hearings before the Committee on Education and Labour, United States Senate on S. Res. 219, Dec. 1928, Jan. and Feb. 1929.
Dr. Werner Stephan, Ministerialrat in the German Ministry of Labour, taking an estimate made by the Federal Economic Council that the amount of the orders given annually by public authorities in Germany is 6½ milliards of marks, considers that this may be as much as 5 to 10 per cent. of the total industrial activity of the country. He adds that almost all industries benefit from these orders, although, of course, in different proportions. Those which are most closely concerned are those engaged in building, metal work, the construction of machinery, and the electrical industry. It is clear that the orders issued by public authorities play a very important part in the industrial activity of the country, and that a suitable distribution of these orders over a period of time might have a considerable influence on the labour market.

Dr. Ernst Bernhard estimates that in 1927 the Federal and State Governments in Germany, including the Post Office and the Federal Railway Company, gave orders to the value of 3.4 milliard marks; including the local authorities the amount was 6 milliards. If we take for the upward movement of the business cycle a period of two years and consider postponement of only 10 per cent. of the orders of public authorities, there would be 1.2 milliard marks available for the depression period. According to Professor Wesley Mitchell production in North America in depression periods is about 15–20 per cent. less than in the best years and about 8–12 per cent. less than in the moderately good years. On the basis of the above figures, says Bernhard, it should be possible in Germany to even out fluctuations of 4–5 per cent. by postponing 10 per cent. of the orders of public authorities.

In the United States it is estimated by the Committee on Recent Economic Changes of the President’s Conference on Unemployment in their report on Planning and Control of Public Works that about 3,500,000 dollars are expended each year on public construction and that about 900,000 men are directly employed. These public expenditures on permanent improvements in the United States are held to represent from 35 to 40 per cent. of the total volume of expenditures for all private and public construction. Because of the difficulty of making satisfactory estimates of the total expense for repairs and maintenance which

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1 Reichsarbeitsblatt (Unofficial Section), 5 Sept. 1929.
2 Soziale Praxis, 1928, No. 28.
4 Published by the National Bureau of Economic Research in 1930.
are increasing from year to year and of the total outlay of towns and townships it is thought probable that these figures understate the total outlay on public works in the United States.

The post-war situation in Great Britain is abnormal and is not a fair test of the efficacy of the advance planning of public works. As for what might be done in more normal circumstances, Professor Bowley has compiled interesting figures showing the sums expended on public works by the principal authorities before the war. In 1913 this expenditure was as follows:

<table>
<thead>
<tr>
<th>TABLE I</th>
<th>In thousands of £</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local authorities</td>
<td>17,457</td>
</tr>
<tr>
<td>Central Government, public works and buildings</td>
<td>2,356</td>
</tr>
<tr>
<td>Road Board</td>
<td>583</td>
</tr>
<tr>
<td>Port of London Authority</td>
<td>197</td>
</tr>
<tr>
<td>Development commissioners</td>
<td>982</td>
</tr>
<tr>
<td>Railway companies</td>
<td>4,854</td>
</tr>
<tr>
<td>Post office, telegraph and telephones</td>
<td>2,054</td>
</tr>
<tr>
<td>Total</td>
<td>28,483</td>
</tr>
</tbody>
</table>

Professor Bowley and Mr. F. D. Stuart also compare the figures of annual expenditure with the course of unemployment, as indicated by the trade union percentage, from 1906—1913, and show how this expenditure should ideally have been distributed to correspond with the volume of unemployment.

<table>
<thead>
<tr>
<th>TABLE II</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1906</td>
</tr>
<tr>
<td>1907</td>
</tr>
<tr>
<td>1908</td>
</tr>
<tr>
<td>1909</td>
</tr>
<tr>
<td>1910</td>
</tr>
<tr>
<td>1911</td>
</tr>
<tr>
<td>1912</td>
</tr>
<tr>
<td>1913</td>
</tr>
<tr>
<td>Average</td>
</tr>
</tbody>
</table>

1 There is a slight discrepancy between this figure and the one given above, but it does not affect the argument in any way.
These figures, which of course require revision for the changed values of post-war years, give an indication of what might be accomplished in Great Britain in times more normal than the present.

Professor F. G. Dickinson, Ph. D. of the University of Illinois, has made a careful study of the effect of shifting public construction on factory employment, volume of construction and costs in the United States in the years 1919-1925. He considers that the value of large contracts let for streets and roads and for educational buildings represents as a rule about five-eighths of the total public works programme, and both these items can be postponed for a certain length of time. He assumes, therefore, that about one-half of the public works programme can, without great difficulty, be postponed to periods of bad trade. Professor Dickinson tabulates as exactly as possible the annual factory wages paid in the United States, and puts these figures side by side with the factory employment index of the Federal Reserve Board. He finds that in three years during the period considered the employment index was below the average. He estimates the required amount to which factory wages would have to be increased in those years in order to bring the employment index up to 100. His next operation is to consider the total value of public construction, and he assumes that wages account for 80 per cent. of this amount. Thus, he is able to determine the ideal allocation of public construction from the point of view of smoothing out variations in employment. As already stated, it is impracticable to postpone more than one-half of the normal construction programme, and he shows how a new allocation of that proportion of the construction programme would work out. The conclusions may be seen in the following table and chart, which are reproduced from Professor Dickinson's study:

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3 The actual figure differs from that given by the Committee on Recent Economic Changes, but the discrepancy does not affect the argument.
4 Bowley and Stuart also consider that in public expenditure wages may be taken to be 80 per cent. of the cost (cf. *Is Unemployment Inevitable?* p. 368); see also MUND: "Prosperity Reserves of Public Works," in *Annals of the American Academy of Political and Social Science,* May 1930.
### TABLE III. — ESTIMATED EFFECTS OF SUGGESTED SHIFTS IN VOLUME OF CONSTRUCTION UPON FACTORY EMPLOYMENT, VOLUME OF CONSTRUCTION AND COSTS

<table>
<thead>
<tr>
<th>Year</th>
<th>Total factory wages (millions)</th>
<th>Factory employment index, 1919-25 (av. = 100)</th>
<th>Required increase in &quot;A&quot; (millions)</th>
<th>Total public construction (millions)</th>
<th>Construction wages (80% of &quot;D&quot;) (millions)</th>
<th>Best allocation of &quot;E&quot; (millions)</th>
<th>Best allocation of &quot;D&quot; (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1919</td>
<td>10,461</td>
<td>105</td>
<td>$</td>
<td>674</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>1920</td>
<td>12,153</td>
<td>108</td>
<td>—</td>
<td>852</td>
<td>539</td>
<td>16^2</td>
<td>20</td>
</tr>
<tr>
<td>1921</td>
<td>8,202</td>
<td>86</td>
<td>1,335</td>
<td>859</td>
<td>$</td>
<td>1,335</td>
<td>2,527</td>
</tr>
<tr>
<td>1922</td>
<td>8,759</td>
<td>94</td>
<td>1,034</td>
<td>$</td>
<td>$</td>
<td>559</td>
<td>1,732</td>
</tr>
<tr>
<td>1923</td>
<td>11,009</td>
<td>108</td>
<td>1,223</td>
<td>818</td>
<td>$</td>
<td>54</td>
<td>19</td>
</tr>
<tr>
<td>1924</td>
<td>10,109</td>
<td>99</td>
<td>1,111</td>
<td>$</td>
<td>$</td>
<td>94</td>
<td>1,229</td>
</tr>
<tr>
<td>1925</td>
<td>10,409</td>
<td>100</td>
<td>1,283</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Total</td>
<td>71,102</td>
<td>—</td>
<td>1,988</td>
<td>6,835</td>
<td>2,039</td>
<td>2,039</td>
<td>6,835</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Effect of shift on employment, 1919-25 (av. = 100)</th>
<th>Best allocation of &quot;E&quot; if only 1/3 is shifted (millions)</th>
<th>Best allocation of &quot;D&quot; if only 1/3 is shifted (millions)</th>
<th>Effect of 1/3 shift upon employment, 1919-25 (av. = 100)</th>
<th>Construction cost index, 1919-25 (av. = 100)</th>
<th>&quot;M&quot; X &quot;D&quot;</th>
<th>&quot;M&quot; X &quot;E&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1919</td>
<td>100</td>
<td>$270^3</td>
<td>$338</td>
<td>103</td>
<td>95</td>
<td>64,006</td>
<td>32,119</td>
</tr>
<tr>
<td>1920</td>
<td>100</td>
<td>341</td>
<td>426</td>
<td>104</td>
<td>120</td>
<td>102,240</td>
<td>51,120</td>
</tr>
<tr>
<td>1921</td>
<td>100</td>
<td>891</td>
<td>1,972</td>
<td>96</td>
<td>97</td>
<td>83,323</td>
<td>191,284</td>
</tr>
<tr>
<td>1922</td>
<td>100</td>
<td>128</td>
<td>1,194</td>
<td>96</td>
<td>84</td>
<td>86,856</td>
<td>100,296</td>
</tr>
<tr>
<td>1923</td>
<td>100</td>
<td>409</td>
<td>511</td>
<td>104</td>
<td>102</td>
<td>104,244</td>
<td>52,122</td>
</tr>
<tr>
<td>1924</td>
<td>100</td>
<td>—</td>
<td>1,111</td>
<td>99</td>
<td>103</td>
<td>114,433</td>
<td>114,433</td>
</tr>
<tr>
<td>1925</td>
<td>100</td>
<td>—</td>
<td>1,283</td>
<td>100</td>
<td>99</td>
<td>127,017</td>
<td>127,017</td>
</tr>
<tr>
<td>Total</td>
<td>—</td>
<td>2,039</td>
<td>6,835</td>
<td>—</td>
<td>—</td>
<td>682,119</td>
<td>668,391</td>
</tr>
</tbody>
</table>

^1 Prof. Dickinson considers only the good years for the purposes of this column, that is to say, those years for which the index of employment (column D) is more than 100, and for which in consequence there was a surplus of wages paid.

* Source of construction wages:

** Million $**

- 1919 retains 16 of the total for 1919.
- 1920 retains 20 of the total for 1920.
- 1921 obtains 523 from 1919.
- 1921 obtains 662 from 1920.

* Source of construction wages:

** Million $**

- 1919 retains 270 of the total for 1919.
- 1920 retains 341 of the total for 1920.
- 1921 obtains 281 from 1923.
- 1922 obtains 128 from 1923.
- 1923 obtains 409 of the total for 1923.
Table III and fig. 1 show that it is possible, by a systematic distribution of one-half of the ordinary public works programmes, to reduce the fluctuations in employment from a minimum of 86 and a maximum of 108 to a minimum of 95 and a maximum of 104. Moreover, the cost will be reduced in the proportion of 682,119 to 668,391.

Mr. Otto T. Mallery told the Committee on Education and Labour that the income of the United States as a going concern was about 90,000,000,000 dollars.

A 10 per cent. industrial depression would be a drop in our national overturn of $9,000,000,000. All construction is about $7,000,000,000; public works are about one-quarter to one-third of all construction. If public works were doubled in a year of depression, the increase would
therefore fill one-fifth to one-fourth of the hole made by a 10 per cent. industrial depression. So, even according to a purely mechanical theory of the business cycle, now out of date, public works are an important factor.

It is clear that arguments based on the total number of unemployed in all industries must be used with care. It is one of the most serious objections to the establishment of relief works, as we shall see later on, that skilled workmen are likely to be employed on unskilled work, and that, generally speaking, men are transferred to work for which they are not at all fitted. This danger is not entirely absent in the case of the advance planning of ordinary public works. How great it is depends a good deal upon the mobility of labour. If labour were entirely immobile, the fact of making the demands of the public authorities less regular as between one year and another would create unemployment rather than alleviate it. Of course, labour is never entirely immobile, but it is very much more so in some places than in others. For instance, it is much more mobile in the United States than in European countries, while, other things being equal, it is more mobile in countries with a good system of employment exchanges than in countries which have no such system, and consequently the success of a policy of public works planning may be said to depend, at any rate to some extent, on the existence of a network of exchanges.

The figures of actual public works put in hand in various countries during the last ten years (see Part II), and of the number of workmen to whom employment has been given in that way, show that a big influence has been exerted on the labour market. It is true, of course, that in many countries severe unemployment has persisted in spite of the public works policy as, for example, in Germany and Great Britain. But these countries are suffering from abnormal conditions, and it will hardly be disputed that, especially in the early days of the depression, unemployment would have been still worse if the public works had not been put in hand earlier than they would have been in more normal circumstances.

A further influence which may be exerted by the policy advocated lies outside the sphere of concrete results to be measured in terms of employment and expenditure, but is none the less of

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1 Hearings before the Committee on Education and Labour; United States Senate, pursuant to S. Res. 219; Dec. 1928, Jan. and Feb. 1929.
considerable importance. The postponement or advancement of public works may act as a check or stimulus to the whole economic system in somewhat the same way as a change in bank rate acts as a warning or encouragement beyond its actual effect on the price of money. At the beginning of a boom, when the market becomes feverish, a stoppage in Government orders may prove a salutary warning to private business. This was shown by the action of the United States Government in 1923, when the sudden reduction of Government enterprise, with the published explanation of its causes, was an important contributory factor in checking a boom. Similarly in depression the lead given by public authorities in expanding their capital expenditure may encourage private business to follow suit, as is illustrated by the programmes of capital extension initiated by the British railways in 1923–1924 with very definite encouragement from the Government.

Moreover, when public works are instituted or orders for supplies are given by public authorities, not only is employment given to the men and women immediately concerned but also to other persons engaged in making materials for the works in question. How much additional employment is given in this way is a matter of conjecture, but it is generally thought to be about equal to the direct employment.

These are not the only indirect effects of putting public works in hand. The men engaged on them will be in receipt of wages which will certainly be considerably higher than any money they could possibly receive as beneficiaries under an unemployment insurance scheme or from the public assistance authorities or from private charity. Their purchasing power will therefore be increased and a stimulus thus given to trade as a whole.

On this point, Mr. Andrews, Secretary of the American Association for Labour Legislation, told the Senate Committee on Commerce that he considered the plan of a reserve fund would, when applied, furnish immediate employment to a good many thousand workers, and, what was equally important, it would, because of the increased demand that would be made upon materials from at least twenty-seven different industries, result in the employment of at least double that number of men. Moreover, the stimulus that is given to these twenty-seven different industries would give a purchasing power to many thousands of men employed in them, and would thus stimulate a large number of other industries.
As these men wear out gloves, for example, and clothing, it indirectly stimulates the textile industries and others in that way, and that . . . is one of the things which we think ought to be most carefully considered, one of the great values of this initial stimulus of the Federal Government reaching out finally to the States and the city governments in their plans, and at the same time reaching out to the private industries as a stimulus to employment; and then finally wider into the other industries which furnish materials for construction, materials used up by the workers who are employed and give this new purchasing power.

When the public works policy in Great Britain was under discussion in 1929, Messrs. J. M. Keynes and H. D. Henderson estimated that 5,000 men would be employed directly and indirectly per annum for every million pounds of total expenditure on roads. This point had formed the subject of considerable controversy, and the Minister of Transport in the Conservative Government, replying to a question in the House of Commons, said that if the works were undertaken permanently in urban areas on the most economical terms, a figure of 2,000 men employed directly on the work for a year for each million pounds expended would probably be a reasonable estimate. In rural areas the figure might be increased to 2,500. He added, however, that it was commonly assumed that for every man employed on the actual works, another man would be indirectly employed in producing and transporting materials, and in other ways.

Mr. Vernon Mund tries to work out a velocity of money technique in order to measure the effects of public work. He says that "the ultimate effect on the annual wage total of the multiple spending of the construction payments will be determined by the total amount of consumers' goods thereby called for. This amount will in turn be determined by the number of times that the construction money is spent, and by the extent to which it is spent for consumers' goods."

He accepts Professor Wesley Mitchell's estimate that the average velocity of bank deposits in the United States varied from 28.8 times a year in 1919 to 25.1 in 1925, and of coin and paper money approximately 26. It may therefore be assumed that the velocity of circulation of money as a whole in a year of depression is about 25 times a year. An estimate has also

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1 Hearing before the Committee on Commerce, United States Senate, on S. 2475, April 1925.
2 Can Lloyd George Do It?
3 MUND, op. cit.
been made of the proportion of income received in the United States which is spent in retail shops. This is the so-called Nystrom-Mann estimate which Professor Mitchell thinks is representative. If it is accurate, the percentage was 54 per cent. in 1919, 58 per cent. in 1920, 61 per cent. in 1921, 57 per cent. in 1922 and 50 per cent. in 1923. It may, therefore, be assumed that 50 per cent. of individual incomes is spent on consumers' goods in retail shops.

Mr. Mund adds that "when money incomes of individuals flow back through the retail shops, they generally flow from the consumer to the retailer; from the retailer to the wholesaler; from the wholesaler to the manufacturer; from the manufacturer to the producer of raw materials; and from the producer of raw materials to the consumers. On this basis, money has a turnover of 5 in ripening one lot of consumers' goods. Inasmuch as money normally has a turnover of 25 per year, it follows that there will be five batches of consumers' goods ripened in a year, as a result of the payments made for public works.

Mr. Mund concludes:

First, that the construction appropriation means income to the recipients thereof; second, that these recipients will spend 50 per cent. of this income for consumers' goods in retail shops; third, that 80 per cent. of the value of a given batch of consumers' goods will be paid out to labour in the form of wages; fourth, that five batches of consumers' goods will be ripened in one year.

On the basis of these findings a general conclusion may be deduced. The recipients of the construction appropriation will spend 50 per cent. thereof for consumers' goods; and 80 per cent. of the value of consumers' goods goes to labour. Hence, 80 per cent. of 50 per cent. of the construction appropriation will equal the wages that result from one batch of consumers' goods. There are five batches of consumers' goods ripened in one year; hence, the total wages resulting from ripening consumers' goods will be five times 80 per cent. of 50 per cent., or 200 per cent. of the construction appropriation.

It is true, as Mr. Mund himself points out, that an allowance must be made for the facts that some purchases will simply involve existing stocks and not necessitate any new output and that some of the money may be used to pay off indebtedness. But he considers it probable that the greater part of any expenditure on construction will produce an annual wage increase of about twice that amount in the course of a year.

In conclusion it may be said that the facts and figures brought forward in this section all point to the conclusion that the advance planning of public works can exert a considerable influence on the situation of the labour market as affected by industrial fluctuations. There are differences in the estimates made as to the
amount of public works that can be postponed or accelerated and as to the extent to which the policy of advance planning is influencing the unemployment situation, but these differences affect the argument only slightly. Even if the influence were a small one, it would be worth while. In reality, however, in smaller depressions, at any rate, the influence would probably be very great and in the larger depressions it would certainly be quite appreciable.

LIMITS TO THE OPERATION OF THE POLICY

It can hardly be claimed that the total expenditure of Governments, local authorities and public utility companies is so inconsiderable that its incidence in time has no effect on private industry. The large sums spent annually by public authorities constitute a huge demand for goods and services, and the transference of this demand, or a large part of it, from one year to another could not fail to react on employment and industrial activity.

It must nevertheless be admitted that the proposed policy could operate only within certain limits, though these would not necessarily render it ineffective. In practice, not all public expenditure can be postponed or advanced to correspond inversely with the volume of industrial activity and employment.

All the regular administrative work of central and local authorities must be carried on continuously by permanent officials, and this at once cuts out a large proportion of public expenditure from the scope of the proposed policy. Again, the very considerable demand of public authorities for consumption goods, such as clothing, stationery and food, cannot be deferred or advanced for any length of time owing to the perishable nature of such goods, difficulties of storage or other causes. While this is no doubt true, however, there may nevertheless be some scope even here for compensating action over shorter periods. A suitable distribution of orders each year would do much to diminish seasonal unemployment in the trade concerned.

It is further objected that certain public work cannot be postponed because it is urgently needed in the interests of public health and safety. If a bridge is definitely unsafe for traffic it must be strengthened or rebuilt at once. If a new centre of population has grown up, the inhabitants cannot be left without drains, light, or roads because at the moment industry happens
to be prosperous and unemployment slight. There is no doubt that an actual emergency must be met as speedily as possible, but the frequency of such sudden and urgent needs is less than is sometimes thought. In the first place urgency is always relative, particularly where public expenditure is involved. New works, extensions, and improvements are generally debated for some time before they are actually carried out, and old works, such as roads and buildings, in fact continue to be used for some time after they are recognised as inadequate. A further and more solid argument is that, although an emergency must be met once it has arisen, it can often be foreseen and provided against. Bridges do not as a rule suddenly become unsafe; the increase of traffic gradually increases the strain up to the danger point. New centres of population do not spring up overnight. A policy framed with a view to future as well as present needs would take into account the probable growth of population, traffic, etc., and if the present state of industry and employment calls for an expansion of public work it should be possible to put in hand work which will be required in a few years' time. It may be repeated that a long-period policy involves both anticipation and postponement.

These considerations are emphasised by Dr. Werner Stephan, Ministerialrat in the German Ministry of Labour, who is, generally speaking, in favour of the advance planning of public works. His argument may be summarised as follows. He says that in certain cases as, for example, in connection with transport, it is precisely in periods of great general activity that the needs increase, while in the period of depression they diminish. So far as seasonal fluctuations are concerned, the most important works to be considered are building works. It has been suggested that work on public buildings should be carried out in the winter months and reference is made in this connection to American experience. But it is sometimes forgotten that the climatic conditions in Germany are not the same as in North America and they sometimes make such work impossible. On the other hand, something can be done and it would certainly be very useful to know exactly what has been done elsewhere. Difficulties arise when it is proposed to postpone work which has already been begun. In the first place, such half-finished works are liable to deteriorate and special

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1 *Reichsarbeitsblatt* (Unofficial Section), 5 Sept. 1929.
financial arrangements would have to be made for their maintenance until the work is resumed. On the other hand there would be a considerable loss of interest.

Another consideration has to be taken into account, says Dr. Stephan. There are certain industries which are practically entirely occupied in working for public authorities, such as those engaged in building railway carriages, cloth for uniforms, and the basalt industry (for road construction). Then there are undoubtedly in other industries certain factories which for many years have been similarly engaged. For these industries and factories the proposal to advance or postpone the giving of orders would be senseless. It would indeed mean bringing these factories to a standstill during a part of the year and at other times giving them so much work to do that they would hardly be able to do it. It might be said that from the point of view of industry as a whole this might not be a bad thing. If these industries and factories received fewer orders during periods of favourable economic conditions capital and labour which would otherwise be utilised in these factories would have no difficulty in finding employment elsewhere. On the other hand during a period of depression these industries would have no difficulty in drawing capital and labour from other industries. This, however, overlooks the fact that such considerable movements of capital and labour are not so easily carried out as might seem likely at first sight. So far as the labour is concerned, moreover, such movements would not be desirable from the social and demographic points of view. What public authorities can do is to ensure as far as possible that these industries are able to work more regularly throughout the year.

This point is also dealt with by Mr. Edgard Milhaud, of the University of Geneva. He is quite favourable to the idea of advance planning, but he asks:

Do we not thereby overlook another series of measures that might possibly be of importance for the regularisation of economic life? An example will make our meaning clear. It relates to orders for rolling stock and contrasts the opposite policies followed before the war by the French railway companies and the railway administrations of the German States. The first, influenced by the economic circumstances of the moment, gave now trifling and now enormous orders, and accentuated thus any difficulties in the French industry of mechanical construction, whilst the other, by the regularity of its orders, ensured the normal development of these industries in Germany. What role shall we assign in a policy of orders and public works aiming at the
regularisation of the general economic life, on the one hand, to the method of constancy or of regular and continuous progression and, on the other, to the method of compensatory fluctuations?¹

It has, indeed, been suggested that a public works policy should aim entirely at regularising the orders of public authorities, thus setting a good example to private industry, and that a policy of postponing or advancing public works implies recognition of the inevitable nature of industrial fluctuations, and will thus tend to perpetuate them. This suggestion is based on a logical misconception by creating a false antithesis between stabilisation and compensation. The proposal discussed in this report is for compensation of fluctuations in private industry by inverse fluctuations in public work, thus giving a general stimulus or check to the economic system as a whole. The public works policy would be a force acting in the opposite direction to the forces of the trade cycle and would vary with them. The less private industry fluctuates, the less will the volume of public work vary. One may look forward to a progressive flattening out of industrial fluctuations, through the operation of many factors besides the policy here discussed, and pari passu the inverse fluctuations of public work will flatten out until ideally the fluctuations in both will disappear. The two curves oscillating about each other will eventually arrive at a straight line. There is thus no real antithesis between the two policies, compensation being merely a more vigorous method of stabilisation than mere regularisation of public orders.

When every objection has been met, there remains a great deal of building and construction work such as the erection of new public buildings, schools, railways, post offices, and electrical development, road work, slum clearance, land drainage, orders for office and school equipment and so on, which can without insuperable difficulty be planned over a period of years.

THE IMPORTANCE OF PLANNING IN ADVANCE

It is an essential feature of the policy that provision should be made in advance, because otherwise it may take many months after the need has arisen before the necessary work can be started. Dr. Lubin referred to the testimony of a witness before the Committee on Education and Labour of the United States Senate to the effect that in Massachusetts, during the

depression of 1914, an attempt was made to drain one of the swamp areas of the State in order that employment might be given to jobless men.

In this case, the absence of engineering reports and the need for the formulation of plans made it impossible to do anything for a year and a half. Without advance planning of this type, (anything) from six months to a year is taken up before any work can be done.\footnote{\textit{Hearings before the Committee on Education and Labour, United States Senate, pursuant to S. Res. 219, Dec. 1928, Jan. and Feb. 1929.}}

Column D of the table reproduced on page 13 above gives an estimate of the value of public construction in the United States from 1919 to 1925. It shows that during the crisis of 1920-1921 after the War the significant increase in public works in that country did not come until 1922.

This delay was inevitable. The cities had not been following a plan of deferred or advance planning, and all of the preliminary work had to be done after the decision had been made to expand the new construction work. The year 1921 was the year of severe depression and unemployment, and to have been most helpful the expansion of public work should have taken place in that year. Nevertheless, the belated work probably shortened the depression and assisted in bringing about the revival of business in 1922.\footnote{\textit{MUKD, op. cit.}}

An even more striking statement on this subject is that of Mr. Otto T. Mallery before the Senate Committee on Education and Labour. He asked:

Why is it that after ten years of effort, when in 1927 unemployment was almost half as great as in 1921, no special effort can be reported by New York, Chicago, Philadelphia, Detroit, Boston, San Francisco? How is it that Wisconsin, though willing, found itself without quickly available funds? Why is it that California, with an Emergency Public Works Commission, made no use of it? Professor F. G. Dickinson, of the University of Illinois, reports these facts, and that in general in the first half of 1928, in spite of many attempts to persuade public officials, there was no appreciable result.

Even in New York State, where an energetic and convinced attempt was suddenly made, the net increase in public works was only 8 per cent. or less than the average 10 per cent. increase for the whole country for the same period, which cannot be attributed to a policy of long-range planning of public works.

Planning in advance is necessary for another reason, namely that the efficacy of a public works policy on the lines discussed in this report depends to a very large extent on correct "timing". The Committee on Recent Economic Changes of the President's
Conference on Unemployment in the United States, in its recent report ¹, considers the timing factor the most important of all:

The amount of public construction which it is possible to push forward in order to influence employment and the trend of business in a period of recession is less important than the timing of the acceleration. The psychological effect of advancing public construction at the right time suggests that here is to be found an important factor in the problem of maintaining a reasonable economic balance. If properly timed as the pendulum of employment starts to swing in an unfavourable direction, the influence of the prompt expedition of public works is effective out of all proportion to its size. Timeliness multiplies the effectiveness of each project accelerated.

**DO PUBLIC WORKS DIVERT MONEY FROM INDUSTRY AND TRADE ?**

A serious objection has been raised by some people to any policy of public works as a remedy for unemployment, namely, that it is economically unsound because it merely diverts money from industry and trade to the public works and does not add to the sum total of employment at all.

This argument has been used even in connection with a strict policy of planning public works in advance in such a way as to provide employment during a depression. Yet in that case it would seem that the very object of the policy is to divert money from Government purposes to industry and trade during prosperity and to divert it back to Government purposes during the depression.

Professor Bowley, when he first proposed the advance planning of public works to the British Poor Law Commission in 1909 received much support from Professor Pigou, who dealt with the question in his *Wealth and Welfare* (published in 1912). Professor Pigou returned to the subject after the war in a chapter on "Correctives of the Trade Cycle", which appeared in a book entitled *Is Unemployment Inevitable?* In this chapter he referred to the argument that reserved public works can only be carried out during a depression at the cost of raising more money from the public and so causing private expenditure to contract as much as public expenditure is expanded. To this he has two replies:

1. that a proportion at least of the funds required would be provided by the reduction of unemployment relief; and
2. that, in so far as new funds are wanted, they can be obtained by creating new bank credits or rather by preventing the net volume of these credits from being cut down so far as they would otherwise have been.

¹ National Bureau of Economic Research: *Planning and Control of Public Works.*
This argument brought Mr. R. G. Hawtrey into the field. Professor Pigou's first argument, he says, begs the question, for it is not certain that unemployment will be decreased at all, and if it is not, no funds can be diverted from relief. The second argument is sound, viz. that expenditure on public works, if accompanied by a creation of credit, will give employment. But then the same reasoning shows that a creation of credit, unaccompanied by any expenditure on public works, would be equally effective in giving employment. The public works are merely a piece of ritual convenient to people who want to be able to say they are doing something, but otherwise irrelevant.

But if unemployment continues for a long period the situation becomes different. Sooner or later a point is reached at which there are no more public works on the programmes of the authorities concerned. What is to be done then? In several countries during the post-war depression special works have been undertaken which either would not have been undertaken at all in normal circumstances or at any rate would only have been undertaken at a very much later date year by year as resources became available. At this point the question arises whether it is economically desirable to continue with the public works programme, or whether such a programme interferes with the gradual improvement in the general economic situation of the country concerned. It is of course clear that where, as in Great Britain and Germany in the post-war period for instance, a prolonged depression occurs due to deep causes, such as the loss of markets, the disproportion between costs and prices, out-of-date equipment, shortage of capital, the only real remedy is to re-establish the industry and trade of the country and if there are certain industries, like the great export industries in Great Britain, which remain nevertheless depressed, steps must be taken to find alternative means of employing the labour displaced. Public works cannot provide this alternative employment permanently, but it is maintained that they can and should provide it temporarily while other measures are being taken to deal with fundamental causes.

A big controversy has taken place on this question, especially in Germany and Great Britain. Thus Professor Gustav Cassel, writing on the situation in Germany, considers that in general, money taken for the purpose of financing relief works (he gives

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no definition of this term) is simply diverted from other purposes equally beneficial from the point of view of the labour market, and therefore it has no effect on the situation at all. He points out, however, that as some industries require more capital in relation to the labour employed than others, it may be possible for the public authorities, by directing capital to those industries requiring comparatively little capital, to increase the total demand for labour. Work undertaken in this way should consist of the production of consumption goods which can be sold and thus money will be available for further works of a similar character 1.

In Great Britain, some confusion was caused by a belief that an extensive programme of public works was being proposed as the real remedy rather than as a temporary palliative. It seems desirable to get this point quite clear — that public works are not a cure for deep-seated causes of unemployment, but are a desirable means of providing employment for as large a number as possible of the unemployed while other steps are being taken to improve the economic situation, such as rationalisation, lowering of costs, international trade agreements, tariff agreements and so on. But if public works are not in themselves a cure for economic depression they may help in bringing about a permanent revival of industry by keeping in use money which is otherwise lying idle or causing the central bank to create credit or to refrain from curtailing credit.

It is interesting to review briefly the principal arguments brought forward in the course of the discussion in Great Britain just before and after the general election of 1929.

A memorandum "prepared by the Treasury on the directions of the Chancellor of the Exchequer", which forms part of the Conservative reply to the Liberal proposals 2, criticises the financial aspects of those proposals and maintains that funds could only be prevented from going abroad "by offering the inducement of higher rates at home, and the harm that such higher rates would inflict on trade and employment would certainly counterbalance any benefit they got from diverting funds from foreign to home investment". It seems clear, in these circumstances, adds the memorandum, that "a very large proportion of any additional Government borrowings can only be procured without inflation by diverting money which otherwise

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1 Soziale Praxis, 21 Oct. 1926.
2 The Liberal Party proposed the spending of £200,000,000 on special public works during a period of two years (see p. 145).
would be taken soon by home industry. That being so, the prospects of adding largely, by the means suggested, to the existing volume of employment, practically disappear. If, however, it were possible to secure for home development funds at present going abroad, that would stimulate internal consumption and tend to raise the level of wages and prices, and it would encourage imports and make things more difficult for the export trades, which are most susceptible to the competition of foreign goods. Admittedly, adds the memorandum, in the exceptional economic circumstances of the present time, these arguments must not be overstressed, but the reactions to which they draw attention should not be overlooked.

Mr. Keynes has since dealt with this point at some length in a letter to The Times, published in the issue of 7 August 1929. He said there were a number of different sources from which the resources for a development programme of say £1,000,000 gross outlay might be derived. They are as follows:

(1) An unemployed man probably spends about 50 per cent. of what he would spend if employed. About half the wages bill would be provided through that 50 per cent. no longer having to be obtained from the insurance fund, etc.

(2) Part of the additional expenditure of the newly employed will serve to increase employment in home industries which produce consumption goods, and this additional home production will be a net addition to the national resources available to meet the additional consumption of persons becoming directly or indirectly employed.

(3) Not the whole of the gross outlay on development schemes eventuates in increased consumption. Part comes back to the Treasury in additional receipts from taxation, part takes the form of contractors' profits with which the latter can finance themselves, etc.

(4) The development schemes will involve some increase in the importation of raw materials and food, most of which must be provided either by a reduction in foreign lending, by export of gold, or by Great Britain borrowing abroad as an offset to the gross amount of foreign lending.

(5) In so far as the greater volume of employment and business means that wage earners carry in their pockets increased purchasing power in bank notes and that business men keep at their banks an increased purchasing power in bank deposits, there can be an increased volume of credit of an entirely innocent and non-inflationary description.

(6) Finally, there is the expedient of an increase of credit which would have the effect of causing prices to rise or of preventing them from falling. The former would mean bringing about a certain redistribution of consuming power in the community.

Mr. Keynes maintains that no single one of these sources has any clear tendency to divert employment from the previously

1 Cmd. 3331.
employed. Not even does the last expedient have this effect, for although it diverts consumption it does not divert employment. Diversion of employment would only occur if the banking system refused to allow the expansion of credit under (5) which is in all circumstances a *sine qua non* of increased industrial activity, and the expansion under (6) necessary to make good the deficiency of resources after allowing for what accrues under (1), (2), (3), (4) and (5), plus additional voluntary savings. Mr. Keynes estimates that sources (1), (2), (3) and (5) would furnish not less than 75 per cent. of the gross outlay on development schemes of a type which do not involve exceptionally large imports of raw material. This would leave a balance of 25 per cent. to be obtained from (4) and (6). The execution of these ideas does absolutely require some moderate increase in the basis of credit. For without some such increase the diversion of employment which many people fear might quite possibly occur, at least to some extent. Moreover, while an increase of credit unaccompanied by a development programme might become dangerous by rendering the bank rate ineffective, an increase of credit accompanied by borrowing for development purposes, and only permitted to occur in so far as it was required as an adjunct of such borrowing, need have no such effect.

A reply to these views was made by Mr. Frank Morris, who said that an alternative method of obtaining the money required for the public works was that of taxation. All these methods, however, simply meant that while the unemployed were to be given work the rest of the nation would suffer loss of purchasing power. Mr. Keynes, he says, admits that his scheme would involve some increase in the importation of food; he thinks that this can be financed by reduced foreign lending. Mr. Morris replies to this that any reduction in foreign loans, the proceeds of which are spent at home, involves reduced trade for the export industries. Moreover, in paragraph (6) Mr. Keynes agrees that any increase in credits, unless such increase is balanced by voluntary savings, has the effect of causing prices to rise. Mr. Morris thinks that the same result would be achieved by a policy of taxation and that that method would be preferable, but he also considers that any assistance which development schemes may give to the production resources of the community in the distant future can only be given by an immediate reduction in the standard of living of the community who have to provide the wherewithal directly or indirectly for the financing of these schemes.
Mr. Keynes, in his reply to this, states that there are only two means open to Britain to get its national economy into better equilibrium; one is an all-round reduction of real efficiency wages, the other is an increase of home investment. The former is impracticable for political and social reasons; therefore the latter should be tried. It is true that national development schemes will cause a certain rise in prices, but their effect in this direction is likely to be small and innocuous as compared with their effect on employment.

Professor Henry Clay, although he does not share Mr. Keynes’ optimistic views as to the cumulative effects of public works on trade activity, also thinks that the Treasury objection does not appear to be well-founded. If the ordinary methods of credit expansion have been applied, he says, that is to say “the effect of a low bank rate reinforced by purchases of securities on the part of the bank in the open market, and proved insufficient restoratives, there would be a case for having recourse to Government borrowing”. As a matter of fact, he continues, Great Britain has a superfluity of liquid resources, unlike certain other countries, such as Germany, for instance, and this superfluity “is used to finance speculative issues and to sustain an inflated level of industrial security prices”. Moreover the ordinary inducements to credit expansion cannot be used. “It is impossible for the bank to lower bank rate or supply the market with money by purchase of securities because the money so provided would simply be drawn away to New York.” He therefore goes back to the need for Government borrowing and points out that “the accumulation of bank deposits suggests that openings for investments are lagging behind savings. If a series of Government development loans did divert some savings from the type of speculative issue that has found most favour with investors in recent years, it would be a benefit to the investors, who would be less likely to lose their investment, and to the country, which would have something, even if only roads and houses, to show for the expenditure of the savings.”

Mr. P. W. Martin, while pointing out that public works will be useful even if they do no more than attract idle bank balances, maintains that they would be very much more effective if used to being about an absolute increase in purchasing power.

1 The Times, 5, 7, 9, 15 and 16 Aug. 1929. The theoretical basis of Mr. Keynes’ argument that public works may constitute not merely a palliative but a positive remedy for trade depression is set out in detail in his Treatise on Money, which appeared just as this report was going to press.

Supposing, however, that these difficulties were surmounted, the influence of an extensive public works programme would still not appear to be very great. Such works are ordinarily paid for out of taxation or public loan. This means, in effect, that purchasing power is taken from certain members of the community (the taxpayers and the subscribers to loans) and handed over to other members of the community, viz. the men employed on the works in question. There is, therefore, no direct influx of new purchasing power and the deficiency of purchasing power basic to the recession in business activity is not offset. This is not to say that the situation remains totally unchanged as a result of a large extension of public works. In a variety of ways one of the factors influencing the relation between purchasing power and goods for sale may be affected. For instance, a Government loan for the purpose of enlarging the public works programme, by attracting idle bank balances, may have the effect of reducing the volume of purchasing power held up in the community and so bring into action one of the factors making for a superabundance of purchasing power and consequent revival of business activity.

But for all that an insufficiency of purchasing power is hardly likely to be directly counteracted by such means as these, and even if it were counteracted it would only be in part and, necessarily, late in the day.

What would appear to be wanted is some means of bringing about not merely a transfer of purchasing power from one group of individuals to another, but an absolute increase in purchasing power when such increase is required. What we need, in fact, is: (a) the ability to increase the total quantity of money in circulation, (b) some mechanism for injecting this new money into circulation on the buying side of the market, and (c) some means of knowing when and to what extent purchasing power should be thus injected.

Finally, it is interesting to note what the experience of Governments has been in this matter. Generally speaking, this has been to the effect that it has been possible to raise money in the capital market for public works without increasing the difficulties of other enterprises in raising capital for their own purposes.

The British Government, however, informed the International Labour Office in 1927 that "while it is not possible to give any specific indications that competition arose with other enterprises owing to the raising by the State of moneys for the various State-assisted unemployment projects, the decision taken by the Government at the end of 1925 to restrict grants for relief schemes was based mainly on the view that, the supply of capital in the country being limited, it was undesirable to divert any appreciable proportion of this supply from normal trade channels".

The Danish Government stated that no doubt difficulties of this kind had been met with in Denmark at times, but hardly to any great extent, for when special methods had been adopted

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1 P. W. Martin: The Problem of Maintaining Purchasing Power, Chapter XV (to be published shortly).
to raise loans, care had usually been taken to obtain funds not only for unemployment works, but also for other works and purposes for which loans were considered necessary.

In South Australia "no special instances can be cited where public works have been put in hand at a period earlier than was originally anticipated, thus involving competition with other enterprises in the money market. It is known, of course, that Government loan works must to some extent compete with private enterprise for the supplies of money that may be available from time to time and in framing the Government loan programmes regard is had to the effect which the prosecution of such programmes might have in the direction of draining the local money market of available supplies of money."

**SUMMARY**

It appears possible to draw certain conclusions from the facts set forth in this chapter which explain the economic justification for the policy of advance planning.

In the first place, the policy is one of suitably distributing in time the execution of the ordinary works and orders for supplies required by public authorities and public utility undertakings. In connection with seasonal variations this policy may sometimes be more costly, but in connection with cyclical fluctuations it would almost certainly be more economical than would be the case if no systematic planning took place.

The orders of public authorities are very considerable, and any action taken with regard to them must have a decided effect on the labour market. If, as has been estimated, production in a depression is about 15 to 20 per cent. less than in the best years, and if the orders of public authorities are from 5 to 10 per cent. of the total production, the result of shifting these orders from one period to another must be appreciable.

There are, however, certain limits to the operation of the policy for not all the orders of public authorities can be postponed or advanced, but it has been shown that sufficient can be done in this way to make a real difference to the labour market. It is essential, however, that the necessary steps should really be taken in advance and not left until the crisis arrives, for by that time it will be too late to have an effective influence on the labour market.

There has been a great deal of controversy as to whether public works do not merely divert money from private industry to
Government purposes without adding in any way to employment. But if the public works are of such a kind that they would be carried out in any case, this argument is inoperative, and if they are not, they are merely relief works. Of course, in a long-continued depression there is a point beyond which doubts may be legitimately expressed as to the desirability of continuing the execution of public works which would not be put in hand for a long time in the ordinary course of events. But as long as there is useful development work to be done, there does not appear to be any sound economic reason for not doing it, and the benefit to the labour market in that case depends more on the policy pursued by the banking system than on anything else.
CHAPTER II

GENERAL SURVEY OF MEASURES ADOPTED

The measures which have been adopted by the various Governments and other authorities are of two kinds:

(1) postponing public works in times of great activity with a view to reserving them for a subsequent period of slackened economic activity, and

(2) putting in hand during a period of unemployment public works which would under ordinary circumstances have been undertaken at some later time.

The former are by far the most important from the point of view of the advance planning of public works. It is fairly common to find Governments during periods of unemployment putting in hand public works which would normally have been undertaken at some later time, but it is only if public authorities postpone some of their works and orders for periods of unemployment that there is evidence of systematic planning.

In fact, comparatively little has been done on these lines so far as planning over a period of years is concerned. On the other hand, certain Governments and local authorities distribute their orders over each year in such a way as to even out to some extent seasonal fluctuations in unemployment. This may perhaps be considered as an experiment and, if it proves successful, may be the forerunner of a wider application of the policy to cover a longer period.

A brief summary of the more important measures of this kind which have been adopted is given below; it is based for the most part on information supplied by the Governments concerned. It shows that there is a certain confusion in many people's minds between the postponement and acceleration of ordinary public works and the establishment of relief works. It must therefore be emphasised once more that what we are mainly concerned with in this report are public works in the strict sense of the term, and that relief works are an entirely different matter 1.

1 Cf. Part II.
The earliest example of national measures known to us is to be found in France, where a systematic distribution of public works was first made the subject of Government circulars dated 23 February 1897 and 26 November 1900. Moreover, in 1902 and again in 1908 the Minister of Public Works invited the railway companies to establish their programmes well in advance so as to be able to distribute their orders more satisfactorily. Special reference may be made to a Presidential Decree of 31 March 1908 issued on the initiative of M. René Viviani, then Minister of Labour, setting up "a commission to enquire into the unemployment situation resulting from periodical economic crises and the steps to be taken to improve it". In the memorandum accompanying this Decree, it was stated that the Commission "would above all be entrusted with the task of examining the possibility of distributing the work to be carried out by public administrations or on their behalf in such a manner as to balance to a certain extent the depression in the labour market occurring in times of crisis." It was further stated that there existed certain public works "which might either be adjourned or advanced without causing excessive inconvenience, and which could be carried out much more easily and economically during periods of depression than during periods of great commercial and industrial activity."

Certain recommendations were made by this Commission affecting more especially the financial aspects of the problem and these are referred to elsewhere in this report.¹

Little beyond this seems to have been done until February 1927, when the National Economic Council, at the request of the Government, drew up a programme especially designed for the possibility of general unemployment, to which it attached a plan of the works ready to be put in hand should the crisis, then in its early stages, show signs of developing.

Towards the end of November 1929, a Bill for "the improvement of the national equipment" was presented by the Government for the purpose of authorising, in addition to the expenditure provided by the Finance Acts, an expenditure of five thousand million francs for various purposes in connection with agriculture, public welfare, education, industry and commerce. According to the memorandum accompanying the Bill, the greater part of the expenditure provided for was to be used for the immediate carrying out of a certain number of public works, some of which

¹ See Chapter IV.
were already under way or under consideration, particularly in seaports.

At the request of the Government, the National Economic Council gave its opinion on the Bill at the beginning of January 1930. It stated that the Government programme had been drawn up with the object of clearing off arrears of fifteen years in respect of public works, and that such a situation justified the application of exceptional financial measures such as the use of Treasury funds.

The Council further declared itself in favour of a programme capable of being rapidly terminated. The cost of undertaking an enterprise of this kind would be less in proportion to the time occupied in its construction and the rapidity with which it could be put into full working order.

The Council added, however,

It is none the less essential that in deciding the time in which the works are to be carried out, the public authorities should bear in mind the economic state of the market. The occurrence of economic crises must not be lost sight of, and the possibility of diminishing the ill-effects of such crises by putting in hand extensive public works should be borne in mind.

The Council further emphasised the necessity for doing away with "red tape" if full effect were to be given to the financial effort of the Government, for urgent works should not be held up by the complicated procedure usually followed.

Moreover, on 3 February 1930, a superior consultative committee for fortifications was set up in the War Ministry by an inter-Departmental Decree. The task of this committee is to give advice with regard to the possible influence which the carrying out of the programme of fortifications voted by Parliament might have on the national economy, on the cost of works, material, etc., as well as on the interests of organisations and individuals, and on the possibility of recruiting and organising the necessary labour. The committee includes, among other members, a representative of the Ministry of Labour and two representatives of the National Economic Council.

According to a letter from the Mayor of Lyons, dated 24 October 1927, the municipal council of that town approved, as early as 1909, successive programmes of public works (construction of municipal buildings, and various installations and improve-

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ments) of which the total cost reached 238,000,000 francs in 1927. The necessary funds were raised by a series of loans. Moreover, considerable other expenditure along these lines was paid for as it arose out of the general budget funds. According to the same letter:

Without losing sight of its chief objective, which is to improve as rapidly as possible the standard of living of its population, the municipality of Lyons has always endeavoured as far as possible to exercise a stabilising influence on the labour market. Thus, in times of depression, the labour force employed on work for the town is considerably increased. Further, in order to increase the efficiency of these measures, works which in other circumstances might have been postponed, have been specially put in hand in order to absorb the unemployed. . . . There remains much to be done along these lines, but it must be borne in mind that many unemployed workers are not qualified to carry out the work offered. The financial situation of the communes, too, has become so difficult that for the most part they are not in a position to constitute reserve funds for the purpose of meeting expenditure which might be incurred in times of economic depression 1.

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In 1904 the Prussian Minister of Commerce issued a circular concerning the organisation of the provision of employment, which ran as follows:

We further request you to have the goodness to direct your attention to those measures which are calculated to prevent the occurrence of want of work on a wide scale or to mitigate its effects when it is unavoidable. Not only the State, but also the provinces, districts and communes, in their capacity as employers, are bound to do their utmost to counteract the evil in question by paying general and methodical attention to the suitable distribution and regulation of the works to be carried out for their account. In almost every industrial establishment of importance there are tasks which do not absolutely need to be performed at a fixed time; just as in every State and communal administration there are works for the allotment of which the time may, within certain limits, be freely chosen according to circumstances. If all public administrations, in making their arrangements, would take timely care to choose for such works times in which want of employment is to be expected, and if, especially, works in which unemployed people of all kinds, including, in particular, unskilled labourers, can be made use of, were reserved for such times of threatening want of employment as have almost regularly recurred of late in winter in the larger towns and industrial centres, the real occurrence of widespread want of employment could certainly be prevented in many cases and serious distress warded off 2.

It was not until 1927 that the question was again considered systematically by an official body in Germany. In that year discussions took place in the Provisional Federal Economic Council, which, on 26 July, adopted the following resolution presented by its Economic Committee:

The Economic Committee of the Provisional Economic Council referring to its resolution of 24 March 1926 invites the Federal Government to get into touch with the administrations of the Federal railways, Federal post office and all other Federal authorities which give important orders to industry and also with the State Governments and the representatives of municipalities, with a view to finding ways and means of rendering the distribution of orders by the authorities to industry more systematic from a general economic point of view. In particular, a serious effort should be made to prevent a too considerable piling up of hasty orders and to ensure greater regularity in those branches of German industry which are more especially concerned with the orders of public authorities.

A special Sub-Committee of the Council (Arbeitsausschuss) was set up under the chairmanship of Dr. Reipert. It drew up a questionnaire which was sent to the various ministries and other public authorities concerned. Replies were received from these bodies and evidence was also given by employers' and workers' representatives. A report was prepared which was unanimously adopted by the Provisional Economic Council on 23 April 1928.

The report was very favourable to the idea of the advance planning of public works and made a number of practical recommendations to the Government, some of which have already been carried out.

In consequence of the considerable improvement in the economic position and in the situation of the labour market in the spring and summer of 1927, the Federal Ministry of Labour requested the most important Departments, both Federal and provincial, which have orders to place for construction or supplies, to postpone their orders as far as possible till the winter months. A similar request was sent to the Federal Railway Company. The Government also requested provincial and municipal authorities to interrupt, or at least to slow down, public relief works as far as possible while employment was plentiful, and, on the other hand, to prepare for extensive relief works during the winter.

As a result, no doubt, of the recommendations of the Provi-

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1 See below Chapter III.
sional Economic Council, the German Minister of Labour at the beginning of 1930 requested the various Government Departments to take account of seasonal and cyclical fluctuations in the placing of contracts. It is also interesting to note that in the Rhineland the principal public authorities have entered into direct negotiations with the employers in the basalt industry with a view to a suitable distribution of orders in time.

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In Finland, the House of Representatives considered in 1908 a resolution for the better organisation of public works by the State with a view to such works being undertaken during different years and seasons so as not to increase unemployment, but on the contrary to mitigate it. This question was studied by a commission composed mainly of the chiefs of the Central Administration. In a report presented in 1914 this Commission observed that the stabilising effect of public works on the labour market could not be considered as very important in Finland in view of the fact that only a very small proportion of the workmen there, namely, approximately 4 per cent., were engaged on public works. The Commission proposed, however, certain measures with a view to dealing with this question. Then the war broke out and the whole matter was adjourned sine die.

As a result of the Washington Recommendation of 1919, the question of introducing permanent regulations with regard to the postponement or advancing of public works was considered. In a communication presented to the House of Representatives on 26 January 1921, the Government stated that it had decided to organise State works as far as possible in harmony with the methods laid down in the Washington Recommendation. The necessary measures which in the meantime were taken directly by the central administrations concerned were confined as a rule to organising in different places works which had already been provided for in the budget or special reserve works which it had been intended to carry out in times of unemployment.

It was not, however, possible to establish in this way a special system for the reservation of public works to periods of unemployment. Consequently the Council of Ministers decided on 1 February 1927 to give the central administrations instructions to follow the lines of the Washington Recommendation in the public works programmes which they presented at the time
of the annual budget, and, with this object in view, to present two estimates for all public works to be carried out in case of unemployment. These two estimates would show the cost of carrying out the works at a time of unemployment and at a more suitable time from the point of view of the work itself respectively. The result has been seen mainly in connection with seasonal unemployment. Thus certain works which were carried out by the railway administration were inscribed in the budget for a sum necessary to enable the work to be done in winter.

On the other hand, in rural districts no public works have been adjourned from one year to another, and not many examples can be given of works postponed from one season to another. The construction of bridges and the stone cutting necessary for them are done during the winter. In Northern Ostrobothnia and in Lapland the carting of gravel for the repair of main roads is also carried out during the second half of the winter, when the work in the forests is finished. The work of wood-cutting, which is done by order of the Forestry Administration, and which is fairly important from the point of view of the labour market in the northern part of Finland, is mostly carried out during the second half of the winter, when wood cutting by private individuals and firms is already practically finished.

The more important urban communes also do their best to carry out their work during the winter, especially the making of roads and any other work which it is possible to do at that time of the year. There have also been occasions on which urban communes have adjourned the execution of public works from one budgetary period to another owing to the fact that anticipated unemployment did not make its appearance.

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In Great Britain, the Royal Commission on the Poor Law of 1909 issued both a majority and a minority report and in both of them recommendations on the subject were made. The majority proposal was as follows:

So far as it may be inevitable to employ occasionally other than their own regular workers, or to place contracts, we think that it may be desirable for public authorities to arrange such irregular work so that, if possible, it comes upon the labour market at a time when ordinary regular work is slack. This point has been well put by Professor Chapman, who suggests that, so far as the public authorities' demand for labour fluctuates, it is desirable to liberate such demand from the
influences of good and bad trade and seasonality, and then deliberately to attempt to make it vary inversely with the demand in the open market ¹.

The minority of the Commission on the Poor Law went much further in their recommendations. They considered that out of the 150 millions sterling annually expended by the national and local authorities on works and services, it would be possible to earmark at least £4,000,000 per year to be expended "out of loan, on a ten years' programme at unequal annual rates to the extent even of 10 or 15 millions in a single year at those periods when the National Labour Exchange (recommended elsewhere in the Report) reported that the number of able-bodied applicants for whom no places could be found anywhere in the United Kingdom was rising above the normal level. . . . At the same time the local authorities could be incited to undertake their ordinary municipal undertakings of a capital nature, whether tramways or waterworks, public baths or electric power stations, artisans' dwellings or town halls, drainage works or street improvements, to a greater extent in the years of slackness than in the years of good trade." ²

A policy on similar lines won the approval of the Royal Commissioners on Afforestation. They were concerned to satisfy themselves that "that part of sylvicultural work which requires most labour, namely, the establishment of the forest, is of a sufficiently flexible character to be capable of being pushed on when labour is abundant, and suspended when labour is scarce", and they advised that it should in fact be pushed on, and suspended, on these principles ³.

Great Britain is one of the few countries which have placed laws relating to advance planning on their statute books. Very little use has, however, been made of the relevant clauses.

The Development and Road Fund Act, 1909, made provision for the establishment of a Development Commission with power not only to assist in the execution of public works, but also to draw up plans beforehand having regard to the general state of employment. Section 1 of the Act lays down that:

¹ Report of the Royal Commission on the Poor Law, p. 41. Quoted in Pigou: Industrial Fluctuations, Chapter XII.
The Treasury may, upon the recommendation of the Development Commissioners appointed under this Act, make advances to a Government department, or through a Government department to a public authority, university, college, school or institution, or an association of persons or company not trading for profit, either by way of grant or by way of loan . . . for any of the following purposes:

(a) Aiding and developing agriculture and rural industries . . . ;
(b) Forestry . . . ;
(c) The reclamation and drainage of land ;
(d) The general improvement of rural transport . . . ;
(e) The construction and improvement of harbours ;
(f) The construction and improvement of inland navigation ;
(g) The development and improvement of fisheries ; and for any other purpose calculated to promote the economic development of the United Kingdom.

The last clause, it will be noted, is extremely wide.

Further, section 4 (4) empowers the Commissioners to "frame schemes with respect to any of the matters for which advances may be made under this Part of this Act with a view to their adoption by a Government department or other body or persons to whom an advance may be made ".

Section 18 adds an important proviso:

In approving, executing, or making advances in respect of the execution of any work under this Act involving the employment of labour on a considerable scale, regard shall be had so far as is reasonably practicable to the general state and prospects of employment.

This provides the framework required for the full application of a policy of advance planning of public works with a view to counteracting fluctuations in employment. It will be noted, however, that the Act is permissive only, and the Commission is not compelled to take action. The practical effects of the Act have in consequence been less far-reaching than might have been expected.

Early in 1914 the Development Commission set aside a reserve for use in depression years, and, when war broke out, drew upon it for works in localities where unemployment prevailed. Arrangements were perfected for £2,000,000 of additional road work in case unemployment should require it, but this reserve was not drawn upon because war activities soon changed the situation 1.

The question of the advance planning of public works was again examined by the British Government in 1919, but the

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The commencement of the post-war depression put an end to practical considerations of this policy.

The Labour Party, then in opposition, introduced a Prevention of Unemployment Bill into Parliament in 1925, the object of which was to make provision for the fullest possible application of the Washington Recommendation. The Bill proposed that the responsibility for studying causes of unemployment and for devising schemes of relief should be centralised in a permanent body to be called "the National Employment and Development Board." One of the principal activities of the Board would be that of preparing in advance schemes of national development for application in times of depression. Clause 3, paragraph 1, of the Bill was as follows:

3. (1) In order so far as may be practicable to maintain at an approximately constant level the national aggregate demand for labour by public departments, local authorities and private employers, the Board shall pursue continuous investigations into the nature of and remedies for unemployment, and acting in consultation with the several departments competent to order works or services, shall prepare schemes for the execution of works or services, to come into operation at such times as the state of unemployment then prevailing may require, and approve schemes made by local authorities under section 4 of this Act for the like purpose.

In addition, the Board would be required to co-ordinate the activities of local authorities to the same end, insisting on such authorities preparing in advance schemes of development to be put into effect during periods of depression.

As regards finance, an annual sum of £10,000,000 would be placed at the disposal of the Board. Any unexpended portion of this grant would be accumulated year by year, for use whenever the state of employment should demand the introduction of emergency works.

The Bill was, however, rejected, the Conservative Minister of Labour opposing it on account of the administrative and financial difficulties which would be involved. On the one hand, it was feared that there might be overlapping of functions between the Board and the Cabinet or Parliament. On the other hand, it was thought undesirable that an autonomous fund should be established as it would lead to a certain decentralisation of the financial system.

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In 1926 the Bill for the Prevention of Unemployment was again introduced and again rejected.

The question of advance planning has been investigated by a number of bodies in recent years. Thus, the Committee on Industry and Trade (Balfour Committee), which was an official Committee of investigation appointed by the British Government in 1924, wrote in its final Report issued in 1929 as follows:

We do not doubt that the exercise of care and foresight on the part of public authorities in arranging beforehand, and if possible over a fairly long period, their programme of necessary public work may sometimes enable them to postpone until a time of depression work which in the ordinary course might have been undertaken in a period of active trade. Alternatively (though within much narrower limits) they may in times of depression be able to accelerate work which would eventually be necessary, but which otherwise would have been deferred. Subject to the qualifications mentioned below, some contribution may be made by such methods towards diminishing the violence of trade oscillations; and where such possibilities exist and the inconvenience and extra cost of retardation or acceleration are not excessive, the arguments are all in favour of such a policy. Nevertheless, it would be wrong to expect too great results from action of this kind. A large part of the public work which is susceptible of postponement or acceleration is work of special kinds which could not provide employment in their own trades for any considerable number of unemployed persons. Moreover, the experience of the post-war depression, when considerable inducement was held out by the Government year after year to local authorities and others to expedite necessary work in order to provide immediate employment, shows that in a long continued depression the possibilities of bona fide anticipation become rapidly exhausted. In these circumstances employment so provided may tend to lose its economic character and to become hardly distinguishable from ordinary relief work.

It is also interesting to note that the Conference of employers and trade unionists on Industrial Reorganisation and Industrial Relations (known generally as the Melchett-Turner Conference) in its interim joint report on unemployment, adopted on 12 March 1929, proposed as one of a number of special measures for immediate adoption the establishment of a development fund. Such a development fund was started in Britain before the war on a small scale for the purpose of having a State reserve fund to stimulate industry and to provide employment particularly during times of depression. Such an idea has recently been proposed in the United States of America and both there and here such a fund would have some effect upon the operation of the trade

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1 Ibid., Vol. XVIII, No. 1, p. 25.
cycle. In order to carry out this suggestion it is considered that
the Government should create and maintain a fund large enough
to be used for financing important national schemes.”

Recommendations have also been made on the subject by a
Special Committee of the Liberal Party, which, under the chairmanship
of Sir W. T. Layton, made an enquiry into the industrial
situation in Great Britain. The Report, which was published in
1928\(^1\), in dealing with periodical unemployment due to cyclical
fluctuations, says:

If fluctuations cannot themselves be eliminated altogether, their
effects can to some extent be counteracted by the action of the State
and local authorities, in adjusting their expenditure and concentrating
it in those periods when private orders are slack. This proposal, which
dates from pre-war days, and has ample support from many quarters,
but has never seriously been put into practice, is the counterpart on
a small scale of the more comprehensive programme which we set out
in the next chapter (and which refers to the post-war depression).

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In Sweden, as early as 1910 and 1911, the question of adapting
the execution of public works to conditions in the labour market
was discussed both in the communes and in the Riksdag, where
proposals for enquiries on the subject were put forward. In 1912
in connection with a seven years’ railway construction scheme
prepared by the Railway Board, the Riksdag adopted a recom-
mendation inviting the Government to examine the possibility
of planning the carrying out of State and communal works in
such a way that employment might be provided for the largest
possible number of workers at times when private enterprise
is reducing its commitments and unemployment is increasing.

The Memorandum which accompanied the recommendation
drew attention principally to two types of unemployment, viz.
seasonal unemployment and cyclical unemployment. With regard
to seasonal unemployment, the Memorandum thought it possible
to improve the situation considerably, particularly in the building
trades. The postponement of public works to the winter, it was
pointed out, is to some extent limited by climatic conditions,
but it is believed there should be no serious difficulty in carrying
out during the winter such works as demolition, levelling, rock
blasting, excavations, and pile driving. The systematic organisa-

\(^1\) Britain’s Industrial Future : being the Report of the Liberal Industrial Enquiry.
London, Ernest Benn, Ltd., 1928.
tion of winter work of this kind would, in the first place, counteract unemployment among unskilled labourers in the seasonal trades.

With regard to cyclical unemployment, the Memorandum of the Riksdag pointed out that extraordinary measures had been taken both in Sweden and elsewhere during periods of crisis, and that unemployment could, to some extent, be prevented if work in those fields where State influence could be felt were planned in advance. The industries most dependent on economic fluctuations were considered to be building in general, the construction and equipment of railways, tramways and canals, the exploitation of water power, etc. It was proposed to devote special attention to the building and construction industries as it was believed that economic fluctuations originated there, and that the effects of depression in other branches of industry were, comparatively speaking, secondary phenomena, which might be avoided if the primary causes were removed.

The Riksdag considered therefore that both Government and communal authorities should prepare their schemes for their more important undertakings in advance and for periods of some length. Reference was made to the scheme for organising State railway construction which was to extend over several years, and it was held that no serious difficulty should be experienced in preparing similar schemes for other Government departments and State business undertakings. As regards the communes, the Government had no power to dictate terms, but it was expected that the Government's example, as well as the interests of the communes themselves, would contribute to substantial results.

The above recommendation was circulated among the various Government business undertakings and departments, and also among the provincial committees through which the communal authorities became acquainted with it. The discussion which was provoked showed that the authorities concerned were quite ready to pay more attention to the situation of the labour market in carrying out public works.

In 1920, the Riksdag again considered the matter, and proposed a further enquiry to investigate whether, and if so how, legislative and other measures might be adopted with a view to counteracting as far as possible irregularity in the demand for labour with its consequent unemployment. These enquiries did not lead to any legislation, but the Swedish authorities have given careful consideration to the matter, and have applied a policy of advance planning in a number of cases.
A scheme was drawn up by the Railway Board for the construction of State railways during the period 1912 to 1918. It was found necessary to prepare this scheme in order to obviate the disadvantages resulting from alternations of speeding up and practically closing down railway construction. An examination of the sums allocated by the Riksdag for State railway construction during the period 1877 to 1911 had shown considerable variation from year to year. Such fluctuation must have an extremely harmful effect on the employment situation of the workers concerned, particularly as the larger sums were available in times of prosperity and not in times of economic depression. It is pointed out in the memorandum sent in by the Swedish Government to the International Labour Office that in periods when railway construction was being speeded up, it was extremely difficult to raise again the necessary staff of engineers, foremen and workers. Fully competent men are more easily obtained if they can enjoy some degree of certainty of employment over a number of years. Moreover, if the construction is speeded up during a period of general economic prosperity, the increase in the cost of labour and materials would be such as to upset entirely the estimates made for normal conditions. So far as the workers themselves are concerned, if railway construction is cut down at times when, owing to economic depression, there is a marked lack of employment, by far the greater proportion of the dismissed staff would have no other means of earning their livelihood. Moreover, as it would be uncertain if and when there would be a resumption of railway construction on a larger scale, a considerable proportion of the equipment which had been required when the work was at its greatest would have to be disposed of for a comparatively small amount.

The Railway Board maintained that all these disadvantages which are an inevitable consequence of an unsystematic organisation of work might be removed if construction of the State railways were organised according to a plan prepared in advance and extending over a period of years. They pointed out that due consideration must, of course, be given to the capacity of the country to bear the cost of the new railway undertakings, and the decisions as to such undertakings must to some extent be influenced by financial considerations. It was evident, however, that certain deviations from any plan drawn up would be necessary, and that, in particular, adjustments would have to be made as a result of the conditions in the labour market. Thus, it was
said that the sums allocated would have to be somewhat reduced in periods of increasing prosperity and increased in periods of approaching depression. It is true, however, that the Board urged at the same time the importance of deviating as little as possible from the prepared scheme as regards the total sum estimated for the construction during each of the seven years covered by the scheme. This course was urged, not only in the event of the new State railway enterprises being constructed by direct labour, but also in the event of the construction being handed over to general contractors to a greater extent than had hitherto been the case.

Although the easiest course during periods of depression and the accompanying reduction in State income might appear to be that of reducing the State expenditure, the Railway Board considered it more suitable that precisely during such periods those undertakings should be vigorously prosecuted and financed out of loans. In addition to the fact that during periods of depression unemployment is on the increase and might be considerably reduced by a more vigorous prosecution of public works, it was pointed out that the cost of both labour and materials would be comparatively low. It was therefore urged that unemployment due to economic depression might best be dealt with by deciding, when there was reason to believe a period of depression was setting in, to start construction of railway lines already proposed, and when there was reason to believe that conditions were improving, by avoiding decisions as to the carrying out of such new work except in so far as was necessary to provide constant employment for the nucleus staff of engineers, foremen and workers. In the opinion of the Board a variation of about 30 per cent. in railway construction as a whole need not be feared, but in taking a decision as to the construction of a railway, care should be taken not to deviate very considerably from the scheme drawn up in respect of annual allocations if the work is to be organised properly.

Although this seven years’ scheme for the organisation of State railway construction prepared by the Railway Board was generally recognised to be a step in the right direction towards the planning of public works, it was for various reasons never carried out. The outbreak of the world war and the conditions prevailing during that period made it impossible to organise State railway construction in accordance with a scheme prepared several years in advance.
Fluctuations in prices and financial difficulties were disturbing influences. On the other hand, the growth of motor traffic after the war has very largely altered the fundamental conditions of railway policy. The extension of the general road system became a more important matter than the continued operation of railway construction. In so far, however, as railway construction has been planned and carried out during the last few years, the Government authorities in dealing with it have always taken the labour market factor into account.

With regard to the number of workers employed by the Traffic Department of the State railways, considerable seasonal variations occur. It is, however, pointed out that most of the work of the Traffic Department is of such a nature that it has to be carried out in a suitable season of the year, and, moreover, it is often necessary that such work should be completed as soon as possible, so that it does not seem as if measures could be taken to create steadier employment for the workers dependent on the Traffic Department.

The Swedish authorities have also done a good deal on similar lines in other fields. It is stated that in connection with Post Office works the number of cases in which the supply of work can be regulated in accordance with conditions on the labour market is not very great. The conditions due to economic fluctuations have been taken into account so far as the number of postal services is concerned to the extent that during periods of increasing prosperity an attitude of some reserve has been adopted with regard to the demands for extension. This is due partly to the high cost of labour in boom periods, and partly to a wish not to make binding arrangements during a temporary increase in activity, as these may prove too great and costly for the traffic in normal times. The State has, however, in this way refrained from competing for labour which can well be employed by private enterprise in periods of prosperity. The consequence has been, on the other hand, that in periods of depression, it has been possible to limit the number of withdrawals and dismissals.

The Post Office also makes considerable purchases of fixtures and consumption goods. It is in the nature of things, says the Swedish Government, that with the kind of business run by the Post Office, it is very difficult to adapt purchases to conditions on the labour market. On the other hand, the Post Office has from time to time to construct new premises for postal purposes, but building undertakings of this kind have not been on such
a scale that they could offer an opportunity for more detailed
study of the problems at present in question.

With regard to new installations made by the Telegraph and
Telephone Department, these seem mostly to be of such a nature
that they have to follow the fluctuations in economic conditions
fairly closely and it would appear to be difficult to try to reduce
unemployment caused by depression in industry as a whole by
postponing to such periods the works undertaken by the Telegraph
Department. In the new construction work of the Department,
the cost of material plays a much greater part than that of labour,
and this applies particularly to lines and cable work as compared
with pole work. For financial reasons work is sometimes postponed
or advanced and thus may incidentally assist the labour market.
With regard to maintenance work, it is possible when the employ­
ment situation is good to postpone work which is not too urgent, and
in this way to maintain a constant staff of workers from year to
year. With regard to seasonal unemployment, the Telegraph
and Telephone Department has for many years organised its
work in such a way as to keep as large a staff of workers as possible
employed throughout the year. Thus the greater part of the
work involved in the installation of new lines, as well as of tele­
phone lines, where permanent workers are not employed, is carried
out in winter, while the summer is reserved for earth works, the
largest and most important of which is work with poles; this
cannot be done in winter.

The activities of the Water Power Board may be divided into
two parts, viz. :

(1) the works for the exploitation of the waterfalls belonging
to the State, and

(2) the construction of canals, particularly in so far as this
is connected with the exploitation of water power.

Normally decisions as to power works must be taken when
these are found necessary owing to the increase in consumption
of power, that is to say, during periods of prosperity; and when
a period of prosperity is followed by one of serious depression,
a decision is sometimes taken to suspend the work which has
already been begun, and to await a period when there is a greater
demand for power. It may, however, be possible to continue or
resume fairly soon the work already started when the depression
begins provided there is a marked fall in the prices of material
and labour, or a capital subsidy is obtained from funds for which
the installation is not expected to yield a profit. During the crisis which followed the end of the war the Water Power Board found occasion to apply the above method at the Lilla Edet Power Station. It was not possible to continue the work there unless funds were raised out of the proceeds of taxes owing to the reduced consumption of power. But the Riksdag decided that a credit should be granted corresponding to about 25 per cent. of the estimated total capital expenditure, and in this way work was continued, with the result that something was done to prevent additional unemployment. Moreover, this power station has since been used to provide power for the electrified railway from Stockholm to Gothenburg, and for various other purposes, so that its completion during a period of unemployment was found of value when conditions improved. Generally speaking, however, owing to the long period of preparation required for a power station, such works cannot be suitably classified as undertakings which the State can take in hand when unemployment increases.

On the other hand, with regard to canal construction, the question arises in quite a different way. The canals cannot count on obtaining a large enough surplus in the form of canal dues over the cost of working to pay full interest on the capital invested, and consequently the carrying out of works of improvement cannot be considered to be dependent on the economic conditions prevailing at a particular moment. Work on the improvement of the national canal system may therefore to some extent be organised in such a way that it is carried out in a period of unemployment on condition that the plans of improvement are prepared well in advance.

With regard to the work in the State forests, it is pointed out that this work consists mainly of tree felling, and it is impossible to counteract unemployment to any great extent by concentrating this work in time of unemployment. On the other hand, there is a certain amount of road construction and ditching which are normally of less importance than tree felling, but they are of such a nature that they can comparatively easily be extended or reduced, and consequently are suitable for advance planning.

Road construction, as in most countries, occupies a prominent place among the undertakings which are considered in connection with the unemployment problem. The increased use made of roads in Sweden during the last few years owing to the growth of motor traffic has markedly increased the demand for road construction and improvement, and there is a very large amount
of work to be done. When local authorities apply for State grants a report is in the first place made by the Provincial Committee, which decides to carry out the works in a particular order. This order is not altered by the Road and Bridge Construction Board unless conditions subsequently arise which require more rapid completion of the work, such as, for instance, the existence of serious unemployment, which may be largely relieved by such work.

All the above remarks apply to State works. As a matter of fact, however, the adoption of measures for dealing with unemployment is regarded as primarily a communal affair. The public works of the communes are, however, based mainly on seasonal fluctuations, and not on cyclical fluctuations. This may be partly explained by the fact that seasonal unemployment, being a local and recurring problem, has a more direct influence on the communal authorities and their obligations to relieve unemployed citizens, whereas unemployment due to cyclical depression, which is both more widespread and more prolonged, requires the intervention of the State.

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In Norway, during the temporary crisis at the outbreak of the war, the Storting, on the proposal of the Government, voted 15,000,000 kroner for such extraordinary measures as might be found to be required by the existing situation, including expenditure for the prevention of unemployment, and measures were taken for a considerable increase in the employment of labour on Government works.

At the beginning of 1920 the Storting increased the road budget by a million kroner over and above the Government proposals. This led to the resignation of the Government, which considered that the labour estimates should be kept down somewhat in favourable times in order to keep something in hand for periods of depression. Towards the end of the same year the Storting voted about 4,000,000 kroner to be used if unemployment rendered it necessary. This amount, together with other sums assigned for the same purpose, some of them at an earlier date, constituted a total of 6,400,000 kroner which was available at the outbreak of the unemployment crisis at the end of 1920.

Another example may be referred to from the communal

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1 Communication from the Inspectorate of Public Employment Exchanges and Unemployment Insurance.
administration of Oslo. This commune had in the periods 1917–1919 and 1920–1922 assigned considerable sums to a fund for the building of dwellings and schools, alteration and repairing of streets, etc., and in the subsequent period of depression made substantial use of this fund, which altogether amounted to considerably over 100,000,000 kroner. Other communes have possibly carried out similar operations, but as to this no information is available.

The Government Unemployment Committee, which was constituted in 1914, has on several occasions taken steps for the introduction of measures for the regulation of the labour market (in 1914, 1917, 1918, 1921, etc.). It cannot be said, however, that this has led to the introduction of any systematic arrangement applicable over a lengthy period.

An effort in this direction was made by the Committee for the revision of unemployment legislation, which in its report for 1923 proposed the constitution of an Unemployment Fund and the empowering of the Government Unemployment Committee and the Communal Unemployment Committees, which were to be established by law as permanent bodies, to take steps among other things to promote stable conditions of employment, to investigate the causes and extent of unemployment prevailing from time to time, and to consider and put into operation the most effective measures available for the temporary or permanent reduction of unemployment. This idea was officially put forward in the Royal proposal (Ct. Prp. No. 23) which was submitted on 26 February 1926. This stated that the unemployment authorities should regard it as their task, in times when the supply of labour was deficient, to endeavour to secure the postponement of public works until changed conditions made them more necessary. The arguments for the establishment of an unemployment fund furnished the background for these provisions. The proposal has since been withdrawn, and there is accordingly at present no Government proposal on the subject.

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In Switzerland, although there no longer exists any legal provision by virtue of which the Confederation may take action with regard to the postponement or acceleration of public works according to the state of the labour market, in practice the execution of certain public works is reserved by the federal administration for periods of unemployment. The same procedure is followed by the cantons and the communes, and certain cantonal depart-
ments request the services under their control and the communal authorities to take the state of the labour market into consideration as far as possible when establishing their programme of public works. In one canton, the Department of the Interior calls a meeting each autumn of the directors of other departments and the representatives of the communal authorities in order to discuss the programme of works to be carried out during the winter. In another canton, the Department of Public Economy makes recommendations to the other departments and administrative services from time to time, with regard to the postponement or acceleration of certain works. In the same canton, an Order of 1906 with regard to the submission of tenders lays down that works which can be carried out at any time should be tendered for sufficiently far in advance to permit of their being put into execution during periods of depression; this Order also provides that contracts may be placed for relief works without being first submitted for tender. Further, in the same canton, the cantonal authorities subsidise relief works carried out during the winter, thus exercising a certain influence with regard to the postponement or acceleration of these works.

The Swiss Federation of Trade Unions proposed in September 1930 the adoption of certain measures by the Federal Council. These include the holding of an enquiry in order to determine what public orders are given out in Switzerland and how far it would be possible to distribute these orders in accordance with the economic situation. The essential point is to consider the possibility of entrusting an office within the Federal Department of Industry, Arts and Crafts and Labour with the duty of receiving periodical notice of proposed public works or works due to official influence and of seeing that these works are distributed in such a way as to balance as far as possible seasonal and cyclical fluctuations.

There is no legislation in Italy which expressly stipulates that the authorities may reserve the execution of public works and the placing of orders for material for periods of unemployment, but the Minister of Public Works may, in virtue of Act No. 2359 of 25 June 1865 and Act No. 5198 of 18 December 1879 confirmed by Royal Decree No. 2874 of 28 November 1928, divide the plans

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1 *La Sentinelle*, 3 Sept. 1930.
for public works submitted to him into three classes: those which cannot be postponed, or even suspended; those which are urgent, i.e. the immediate need for which is slightly less than the former class; and finally, those which can be postponed, or which can be started at any time, and suspended if necessary. This classification facilitates stability by making it possible to put works in hand according to the situation of the labour market. Thus, indispensable work may be performed in periods of normal unemployment, urgent work in periods of seasonal unemployment, and other work in periods of crisis.

Dr. Ernesto Campese, Director of the Unemployment Office in the National Fund for Social Insurance, gives strong support to the desirability of planning public works in advance. He says that the programme of public works should be undertaken, not as a remedy for unemployment, but at the same time not without regard to that problem. In reply, he says, to the question whether a policy of public works is necessary to combat unemployment, the Italian Government replies that a wise policy of public works is necessary in itself and that this will of course involve considerable advantages from the point of view of unemployment. There is need for a careful organisation of any programme which may be adopted and a rapid application of that programme when the situation of the labour market requires it. Such a programme should lay down technical details, probable cost, number of workers required, scales of wages, etc., so that it is possible to proceed at any given moment with the work to be performed.

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In the United States repeated efforts have been made since the war to place on the Federal Statute Book legislation dealing with the advance planning of public works. In January 1921, Senator Kenyon introduced a Bill to create a United States Emergency Public Works Board to co-operate with Federal, State and municipal agencies in stimulating public work during the period of demobilisation and industrial readjustment.

As a result of the National Unemployment Conference held in 1921 at Washington, where the principle of advance planning was discussed and strongly recommended, Mr. Kenyon introduced in the Senate in December 1921 another Bill providing for the

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Federal Government to exercise a stabilising influence during periods of industrial depression and over-expansion by undertaking or postponing the execution of public works.

In February 1923 Mr. Zihlman submitted a Bill to the House of Representatives proposing to set up a commission on unemployment to investigate the nation’s needs for public works to be carried on by Federal, State and municipal agencies in periods of business depression and unemployment.

In December 1925 another Bill was introduced into the House of Representatives, providing for an appropriation of 150 million dollars for the construction of public buildings at the rate of 25 million dollars per year for the following six years; the Bill had as its object the incorporation in the public buildings policy of the principle of advance planning of public works as an aid in stabilising employment.

In February 1928 Senator Jones introduced a Bill stipulating for the creation of a prosperity reserve to stabilise industry and employment by the expansion of public works during periods of unemployment and industrial depression. In addition to funds normally provided for public works, an appropriation of $150,000,000 was to be provided for this purpose. The public works which were to include rural post roads, river and harbour improvements, flood control and public buildings, were to be undertaken out of the prosperity reserve whenever the volume of general construction based upon value had fallen 20 per cent. over a three months’ period below the average of the corresponding three-month periods of 1926 and 1927.

The Senate Committee on Commerce modified this Bill so as to make the fall in the volume of general construction based upon value 10 per cent. instead of 20 per cent. over a three months’ period below the average of the corresponding periods of the preceding three years. The Bill was reported favourably to the Senate, but it failed to pass into law.

On 12 April 1928 hearings were held before the Senate Committee on Commerce in connection with the Jones Bill. On that occasion Mr. John B. Andrews, Secretary of the American Association for Labour Legislation, stated that there had been striking agreement among those who had considered the matter on the desirability of accepting the principle of the long-range planning

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1 Hearing before the Committee on Commerce, United States Senate, on S. 2475, April 1928.
of public works. It had been widely endorsed by leading organisa-
tions such as, for example, the American Engineering Council, the
Associated General Contractors of America, the American Institute
of Architects, several Chambers of Commerce, and the American
Federation of Labour. The idea of the Jones Bill, he said, had
been worked out in the National Conference on Unemployment,
which met in Washington in 1921 on the initiative of the President,
by a special committee under the chairmanship of Mr. Otto T.
Mallery. The principle had, moreover, been endorsed by President
Coolidge, Mr. Mellon, as Secretary of the Treasury, and Mr. Hoover,
as Secretary of Commerce.

On 21 November 1928, Governor Brewster of the State of
Maine announced at the Governors’ Conference that Mr. Hoover,
who was then President-elect of the United States, had conceived
a far-reaching plan of stabilisation which would provide for the
creation of a national public works construction reserve of 3,000
million dollars to be released at times of over-production and un-
employment.

In the 1928–1929 Session of Congress, Mr. Macleod introduced
a resolution into the House of Representatives, to provide for
the appointment of a Commission to study thoroughly the problem
of maintaining sufficient aggregate income to consumers, to support
steady progressive production, equalise prosperity and prevent
unemployment as far as possible, and to advise Congress as to the
feasibility of creating a Government agency for these purposes.
He explained that the resolution did not contemplate any inter-
ference with private business, but merely the establishment of a
Federal agency similar to the existing Federal Reserve Board,
through which the Federal Government could regulate intelligently
its own operations such as appropriation for public works, etc.,
so as to keep as nearly as possible a steady increase in the volume
of income flowing to consumers, and consequently to support
steady production and employment.

In December 1928, and in January and February 1929, the
Senate Committee on Education and Labour held hearings on this
subject. The report of this Committee dated 25 February 1929,
contains a section relating to “the planning of public works with
regard to stabilisation”. It states that the Committee did not
devote a great deal of time to this topic because no one disagreed
with the suggestion that the Government and all other public
agencies should so order their public works that they would offer
a buffer in time of unemployment.
The evidence is very clear, the report continues, that "the Federal Government may set a valuable example to the States in the adoption of a practical scheme for the planning of public works. Of course, the States and the other divisions of Government will have the greatest opportunity to provide this buffer because the expenditures by the Federal Government for public works are not large as compared with the expenditures by the States and other civic divisions. There should be no delay on the part of the various Governments, Federal, State, city, and other minor subdivisions in the adoption of such plans."1

On 23 April 1929, Senator Jones reintroduced his Bill, but it again failed to pass.

In the Session of 1929-1930, Senator Wagner introduced a further Bill dealing with the subject. It provided for the appointment of a Federal Employment Stabilisation Board whose duty it would be to advise the President from time to time of the trend of employment and business activity and of the existence or approach of periods of business depression and unemployment in the United States, or in any substantial portion thereof. Whenever the President should find that there exists or that there is likely to exist a period of business depression and unemployment, he is requested to transmit to Congress such supplementary estimates as he deems advisable for emergency appropriations to be expended upon public works in order to prevent unemployment and permit the Government to avail itself of the opportunity for speedy, efficient and economic construction during the depression period. These emergency appropriations would be authorised for Federal highways, the preservation and maintenance of existing river and harbour works, the prosecution of flood control projects and the application of the Public Buildings Act of 26 May 1926. Moreover, the Secretary of War, the Secretary of the Treasury and the Secretary of Agriculture would be directed to accelerate as far as possible the prosecution of all public works within their control. A particularly important clause was included in the Bill (section 10) declaring the policy of Congress to be the arrangement of the construction of public works so far as practicable in such manner as will assist in the stabilisation of industry and employment through the proper timing of such construction, and that to further this object there shall be advance planning and detailed preparation

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1 Hearings before the Committee on Education and Labour, U.S. Senate, pursuant to S. Res. 219, Dec. 1928, Jan. and Feb. 1929.
of public works to be accomplished "by means of preliminary reports as to the desirability of the projects and of annual authorisations of projects, the total estimates for which are sufficiently in excess of the annual appropriations made for the work thereon to result in uncompleted projects being available for the expenditure of public works emergency appropriations when made." Finally, it was proposed to authorise the appropriation of such sums as were necessary for the expenditure on public works to prevent unemployment during any period of business depression not in excess of 150 million dollars in any one fiscal year. This Bill was passed by the Senate in April 1930.

It also passed the House of Representatives on 1 July, but in a much modified form, and there the matter rests until the next Session of Congress which commences in December 1930.

In spite of the absence of legislation, however, the Federal Government has on some occasions acted on its own initiative on the lines of the ill-fated Bills mentioned above. A particularly striking case occurred in 1923. In the spring of that year when a want of labour was experienced in the building trades, President Coolidge applied to Mr. Hoover, Secretary of the Department of Commerce, for advice as to the time when it would be opportune to put in hand Federal construction works. The answer of Mr. Hoover was as follows:

DEAR MR. PRESIDENT:

I am in receipt of your letter of 3 March as follows:

"The Administration, in one way or another, has the direction of Congress to carry on a very considerable volume of construction work. I would be glad to have the advice of the Department of Commerce as to the policy which ought to be pursued in view of the present economic situation in the building industries, with a view to determining how much to speed up on the construction program to which we are committed."

In response thereto I directed that the Department should conduct a survey of the situation in the construction trades, a summary of which is attached hereto. I shall not trouble you with the vast amount of detailed data, but these conclusions bring out several fundamental facts:

1. The year 1922 was a year of very large employment and activity in the construction trades and at the end of the year stocks of construction materials were very much reduced. Since the beginning of the present year there has been even more activity

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1 Hearings before a Sub-Committee of the Committee on Commerce, United States Senate, on S. 3059, 18 and 21 March and 21 April 1930.
2 United States Daily, 17 April 1930.
3 Ibid., 2 July 1930.
than in the same period last year and the contracts let in the past few months are of larger volume than any hitherto entered into in a similar period. Advance orders for construction materials are upon a very large scale.

2. Labour in the construction trades and in the manufacture of material is not only at full employment, but there is actually a shortage in many directions.

3. Transportation facilities available for the building materials are fully loaded and almost constant car shortages are complained of with consequent interruption in production.

My conclusion from all this is that, at least for the next several months, the trades will be fully occupied in private construction, all of which is generally needed by the country.

For the Government to enter into competition at the present moment will give no additional employment to labour and no additional production of materials but must in the broad sense in the end displace that much private construction. The Governments, nationally and locally, are in a much better position to hold construction work in abeyance than are private concerns, and are in a better position to speed up in times of less demand as we did in the last depression as the result of the Unemployment Conference. We can by this means contribute something to a more even flow of employment not only directly in construction work but in the material trades.

I would recommend, therefore, that you direct the different divisions of the Government to initiate no new work that is not eminently necessary to carry on the immediate functions of the Government and that there should be a slowing down of work in progress so much as comports with real economy in construction, until after there is a relaxation in private demands.

The effect of this letter, says Mr. Otto T. Mallery, was the postponement of large amounts of private construction. The halt in the rise in volume of municipal bond sales for public work which occurred at the same time was probably not due to this warning, for municipal authorities generally are not yet aware of their responsibilities as part of the nation’s economic defence reserve. However, in this instance, private construction alone was able to accomplish much. Private building operators who postponed work until 1924, a year of business recession, first avoided adding to the high peak of 1923, thus stabilising at both ends the building industry, its twenty-seven tributary industries, and the general economic situation.” Another result of the letter of the Secretary of Commerce was that the Federal Government did not start its building programme until 1926, and then on a very small scale. The Senate Committee on Public Buildings, of which Senator Furnald was Chairman, agreed to an amendment calling upon the Secretary of the Treasury to take into consideration the relative

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1 Hearings before the Committee on Education and Labour, United States Senate, pursuant to S. Res. 219, Dec. 1928, Jan. and Feb. 1929.
activity of private construction and to be prepared to expand public building work when private construction should fall off.

Legislation on the subject of advance planning has been adopted in a small number of States. According to the Monthly Labour Review of October 1929, the first Act of this kind was that of Idaho (Acts of 1915, Ch. 27), which authorised the Board of County Commissioners to provide emergency employment for unemployed United States citizens who had resided in the State uninterruptedly for six months and in the county for ninety days, and who did not possess property of a total value of more than $1,000. The emergency employment was to consist of work on the public highways "or such other work as they (the County Commissioners) may determine". The Act contained a clause to the effect that 50 per cent. of the amount disbursed under its provisions should be deducted by the State from the taxes levied by it upon the counties. This clause resulted in the Act being held unconstitutional in 1916 on the ground that it diverted State funds for expenditure by the counties in violation of the State Constitution.

In 1917, the Pennsylvania Legislature passed an Act (No. 411) "to provide increased opportunities for employment in useful public works . . . during periods of extraordinary unemployment caused by industrial depression. For this purpose an Emergency Public Works Fund was established. The measure provided for an Emergency Public Works Commission composed of the Governor, State Auditor, State Treasurer, and State Commissioner of Labour and Industry to administer the Act." It was the duty of the above-mentioned Commission to proceed to ascertain and secure from the various Departments, bureaux, boards and commissions of Pennsylvania, tentative plans for such extension of the public works of the State as were best adapted to supply increased opportunities for advantageous public labour during periods of temporary unemployment. It was the duty of the Industrial Board of the Department of Labour and Industry to keep constantly advised of industrial conditions throughout Pennsylvania affecting the employment of labour; and whenever it was represented to the Board by the Governor of the State, or whenever the Board had any other reason to believe, that a period of extraordinary unemployment caused by industrial depression existed in Pennsylvania, it was the duty of the Board immediately to hold an

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1 Proceedings of the Academy of Political Science in the City of New York, July 1927. Article on "Federal Expenditures and the Construction Industry", by the Hon. Wesley L. Jones, Chairman of the Senate Committee on Commerce.
enquiry into the facts. If it was found that a period of extraordinary unemployment caused by industrial depression did in fact exist in Pennsylvania, the Commission was authorised to make such disposition and distribution of the said Emergency Public Works Fund for the necessary extension of the public works programme. The Bill, as passed by the legislature, provided a sum of $50,000 to constitute the emergency fund, but this was cut to $40,000 by the Governor, because of "insufficient State revenue".

In March 1922 the appropriation was expended in an effort to alleviate the serious unemployment that was then current, but as the amount of money available was very small the results were disappointing. The law was repealed in 1923 by Act No. 274, which provided for the reorganisation of the executive departments of the State, and which, by section 1710, gave the Department of Labour and Industry the power to bring together employers and unemployed workers "to report on the extent of unemployment, the remedy therefor, and the means for the prevention thereof", and to aid in the "intelligent distribution of labour".

In 1921 the California legislature passed a measure (Ch. 246) almost identical with the 1917 Pennsylvania Act. In the California law, however, the State Bureau of Labour Statistics is named as the fact-finding body, and the State Board of Control given the administration of the Act. As to the persons to be given employment under the Act, the measure provides that preference shall be given first to the citizens of the State, then to citizens of other States, and finally to aliens.

In Louisiana a special Act (No. 15) was passed in the extra session of 1921 for the purpose of relieving the unemployment then existing by expanding public works. This Act directed the State authorities to proceed at the earliest possible date with all contemplated public work and improvements.

In Wisconsin an Act practically identical with the California measure of 1921 was passed in 1923 (Ch. 76). The State Industrial Commission was named as the fact-finding body under the Act.

In Utah, Chapter 101 of the Laws of 1929 created a State Building Commission consisting of five citizens appointed by the Governor with the advice and consent of the Senate for

1 Mund, op. cit.
four-year terms. The work of the Commission is to plan for new buildings and other work for the State, to make contracts to carry out the work, and to be responsible for the spending of the money involved. The legislature limited the work of the Commission to a trial period of two years, specifying a large group of buildings which the Commission was authorised to construct during the period at any time and in the order which it should choose.

In Massachusetts a Bill was introduced in 1924 providing for an expansion of public works in periods of depression so as to increase the possibilities of employment. The Bill was, however, rejected. Another Bill was presented to the Senate of Massachusetts on 23 November 1928. Under the provisions of this Bill, a State Reserve Fund was to be established, and cities and towns were to be authorised to appropriate and borrow money for reserve funds for providing employment on public works in times of business depression. The State Fund would be controlled by the State Treasurer, and would be set up through appropriations by the legislature. The Governor and Council would be authorised to spend the money when they deemed it advisable. This Bill does not appear to have passed.

The problem of how to stabilise employment as far as possible has also engaged the attention of a number of city authorities and other bodies, and in practically every case the advance planning of public works figures in the programmes put forward. Thus, for example, the City Manager of Cincinnati towards the end of 1929 appointed a Citizens' Committee, which recommended that a permanent committee on stabilising employment be set up. It was suggested that the investigations of this Committee should include the preparation of a public works programme. Moreover, in Philadelphia about the same time the Industrial Relations Committee of the Chamber of Commerce appointed a sub-committee to consider the matter, and this sub-committee recommended, among other things, that the Department of Industrial Research of the University of Pennsylvania should be requested to study how best Philadelphia could plan its public works in order to regularise and stabilise employment.

With regard to actual measures adopted by States and local

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1 The American Labour Legislation Review, March 1930.
authorities, valuable information is contained in a paper presented at the meeting of the Academy of Political Science in New York on 8 April 1927 by Mr. E. O. Griffenhagen. Mr. Griffenhagen had, in March 1927, circularised each of the forty-eight United States Governors, and also the mayors of the larger American cities, asking for information as to what had been done to expand construction at times of unemployment and business depression, or to restrict it in boom times.

From the replies received Mr. Griffenhagen summarised the practice in thirty-one States as follows:

Twenty-two do nothing.

Three have made attempts to adjust construction in a measure.

One says that more construction is naturally done in hard times because bids are low.

Two have made it the policy, although there is no formal procedure for it, and no reserve set up.

One of these States is Massachusetts and refers to statistics proving that the volume of work has varied inversely as business prosperity has varied. This, it should be noted, is a State that has a clean-cut functional organisation of departments, a central financial agency (the Commission on Administration and Finance), good budget habits, and wise executive direction.

Three States, Pennsylvania, California and Wisconsin, have legislation on the subject. But there seems to be a note of scepticism in the comments of the officials in each case. Pennsylvania says that the initial $40,000 appropriated in 1917 was spent in 1921 and "no other effort has been made". Wisconsin says "there has been a theoretical effort to expand State construction during periods of unemployment . . . however, the construction work is carried on in specific projects authorised by the legislature biennially." Wisconsin, referring to its law, says "there are those who think that a finance and construction programme covering a period of years would have to be provided for before this law would be effective."

In nineteen large cities the practice in this same connection is that:

Eight do nothing.

Two try to provide employment in winter.

Four expand construction in dull times but do not restrict it, consciously, in boom time.

Five say they do conform to business conditions and cite examples of their action during the recent depression to prove it.

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2 See above, pp. 60-61.
In Australia, there does not appear to be any definite provision made for the postponement of public works during periods of economic activity with a view to reserving such works for periods of slackness in employment. The general opinion of the heads of departments approached for information is that the reservation of certain public works for periods of severe unemployment would be most desirable, but the tendency in the past has been to proceed with public works as the funds became available, so that on occasion Government works on a large scale are being carried on during periods of economic activity, while on other occasions, when trade and industry are depressed, public authorities have been forced to economise, thereby aggravating the depression.

In South Australia it is stated that the postponement of public works for the purpose mentioned is exceedingly rare. In Tasmania, on the other hand, the Government seems to do the exact opposite of the planning of public works in relation to unemployment, for it states that in times of great economic activity there is usually a greater demand for the execution of public works than in normal times, and such works are generally carried out as expeditiously as the labour market will permit. As another example of the same tendency, it may be mentioned that in January 1930 the New South Wales Treasurer announced that unless the financial situation improved there would have to be a further extensive curtailment of public works.

In 1928 the Development and Migration Commission investigated the problem of unemployment and business stability and it recommended that the Commonwealth and State Governments, public undertakings and civic authorities, adopt as a common policy the principles of planning programmes of public work ahead over terms of years, of regulating expenditure on works within yearly periods, and of placing ahead their orders for stores, and that they confer at regular intervals in order to apply their policy as far as practicable. The Loan Council would have to play a large part in the planning of public works, and it would need to be informed upon the trend of business conditions in order that it might adjust its policy accordingly. This recommendation does not appear to have been carried out so far, except on the point mentioned below.

Something has been done in Australia to deal with seasonal

unemployment by varying Governmental orders in a suitable way. Thus, the various Australian States, on the recommendation of the Premier's Conference, set up, in the early part of 1929, Industrial Stability Committees, whose task is to bring industry, labour and private organisations into closer touch with a view to relieving unemployment. These committees are presumably the outcome of the recommendation made by the Development and Migration Commission in the report referred to above. According to that recommendation, the purpose of these committees should be "to study the incidence of seasonal fluctuations and to formulate plans for their correction".

The Government of Western Australia states that in a very large measure public works of a Government nature, and, to a lesser extent, those put in hand by municipalities are reserved for periods of unemployment. In particular it makes provisions for the reservation of a sum of money each year for certain works which are put in hand during the period May-September, in order to provide employment for men who are released from their usual occupations in the country districts — that is, the period between the end of the work for one wheat season and the beginning of that for another. Thus, the State Government has in its employ during this period a greater number of men than during any other portion of the year.

In New South Wales the situation, as affected by seasonal unemployment, has been met by the provision of employment for increased numbers during the winter months, while to cope with periods of acute unemployment relief works have been made available as an emergency measure.

It is also understood that it is the practice in Western Australia to distribute expenditure on extensive works, such as railways, roads, bridges, harbours, etc., as evenly as possible over the financial year. This practice, however, does not appear to be in operation in other States. The degree of urgency of public works and the availability of departmental funds are the controlling factors. At the beginning of each financial year the works to be constructed are determined, the amount of funds required during the year is allocated, and the works are then proceeded with regularly, provision not being made for any deferment to meet prospective unemployment.

* * *
The Netherlands Government stated that no steps had been taken to reserve public works and orders for supplies to periods of unemployment and they explained that the reason for that was to be found, in the first place, in the fact that, as there was a surplus of labour available, the authorities had been obliged to put in hand a programme of public works without reference to what the situation might be in the future. On the other hand, the conditions imposed by the State on the grant of subsidies have militated against the carrying out of any large programme of relief works.

The Minister of Labour stated in October 1927, in a communication to the International Labour Office that the Government was studying the question carefully and intended to act on the lines laid down in the *Suggested Basis for the Supply of Information*, unless that should prove impossible. He added that it was not within the powers of the Netherlands Government to give strict instructions to provincial or communal authorities concerning the measures to be taken for the carrying out of public works, their postponement to a later date, or their organisation in any way whatever. In addition, the employers’ organisations and the trade unions in the painting industry try, with the support of the Government, to distribute their work in a suitable way over the different seasons.

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In the *Irish Free State*, the Committee on the Relief of Unemployment, 1927-1928, recommended a continuous programme of house building spread over a period of about ten years, the reconstruction or renewal of school buildings, the acceleration and extension of the Government’s programme of afforestation, agricultural improvement works, the construction of roads, and arterial drainage.

* * *

In *Denmark*, the Government which came into power in consequence of the election of 24 April 1929 issued a programme which included measures for dealing with unemployment and economic depression, among these being, in particular, the organisation of public works in relation to economic fluctuations.

On several occasions, both the Ministry of the Interior and its Labour Committee have pointed out to other State authorities and to the communes the desirability of postponing the organisation of works to periods of severe unemployment, and particularly
to the winter half year. In particular, it often happens that works which are specially organised for counteracting unemployment are interrupted in summer, and resumed in the autumn, when unemployment becomes more marked.

* * *

In Austria, according to a report of the Ministry of Commerce early in 1930, steps have been taken to distribute the orders of all public authorities in the country in a suitable manner throughout the year. The object of this measure is to prevent certain industries from being obliged to work overtime for some months owing to the large number of public orders, while at other times they become so slack that they have to discharge workpeople.

* * *

In preparation for the Fourth International Congress of Towns and Public Authorities which met in Seville and Barcelona in March 1929, a number of questionnaires were sent out to the participating members in each country. One of these questionnaires, dealing with the extent of the economic activity of the municipalities concerned, included the following questions:

Do the municipalities follow a policy concerning public works and orders for supplies aimed at exercising a stabilising influence on the labour market? If so:

(a) Do they draw up for this purpose programmes of works covering a long period (eight to ten years, for instance)?
(b) Do they make it a rule to carry out these works with the greatest possible regularity?
(c) Or, on the contrary, do they follow the principle of slowing down their public works in a period of great economic activity, so as by means of the reserves constituted in that way to intensify them during a period of unemployment?
(d) What are the financial methods adopted (such as constitution of autonomous funds for public works in order to make them independent of fluctuations in budgetary receipts, use of credit, etc.)?

On these points please give information concerning the measures adopted and the results obtained.

The replies to the above questions were both scanty in number and very brief. With regard to the Netherlands and the City of Zurich, the answer was a simple negative. In Belgium it was said that such a policy is not, as a rule, adopted, but during periods of depression the municipalities carry out certain works for the

1 Arbeit und Wirtschaft, 1 May 1930.
special purpose of giving work to the unemployed. In England and Wales also the local authorities do not, as a rule, apply such a policy but during periods of depression certain authorities are in the habit of carrying out public works in excess of the needs of the moment and, moreover, they have undertaken special works owing to the existence of unemployment. On the other hand, the reply adds that the policy of local authorities depends so much on local considerations that any generalisation is liable to give a false picture. In Italy the reply was to the effect that the municipalities do try to distribute their public works in time in accordance with the state of the labour market.

The most detailed reply was that given on behalf of the Central Bureau of the Union of German Towns and Local Authorities. The Government has consulted representatives of the Union of German Towns on the possibility of adopting a policy of advance planning. Already a number of towns try to place their contracts in such a way as to take account of the economic conditions. It is felt, however, that the effect of such purely local measures cannot be very great. The first thing to do is to determine what public works and orders can be postponed or advanced, for there are obviously many that must be carried out at once. Close contact is maintained between central and local purchasing departments, and it is hoped to establish closer relations between the local authorities and the State and federal authorities in connection with their more important contracts and orders. The local authorities do their best to distribute their orders suitably throughout the year with a view to mitigating seasonal unemployment. The usual procedure followed for this purpose is to anticipate an expenditure to be included in the budget for the following year and to transfer any surplus from one year to the other. Nothing has been done to create reserve funds for this purpose on account of the municipalities' unsatisfactory financial situation.

SUMMARY

In this section a brief account has been given of actual legislative and administrative measures adopted in different countries for planning public works programmes in advance. It is noted in the first place that even before the war such measures were taken in several countries. Since the war, the economic situation has been abnormal and many countries have been unable to undertake

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1 *IVe Congrès International des Villes et pouvoirs locaux, 1929*, Vol. II.
advance planning either because they had so much leeway to make up, or because they had so much unemployment, that they put in hand all the works for which they could find money. Apart from this, however, it is too often true that nothing is done, or, what is still worse, that more orders are given during periods of prosperity than during periods of depression. On the other hand, considerable attention has been paid to the relation of public works to employment conditions in a number of countries, and in particular, the measures adopted in Sweden have been set out in some detail as they show what kind of works can be postponed, and give an idea as to the effect of such postponement or advancement on the labour market.
CHAPTER III

ADMINISTRATIVE PROBLEMS

MULTICIPICITY OF AUTHORITIES

The advance planning of public works is rendered very difficult owing to the multiplicity of authorities responsible for public orders. Within the central Government, as a rule, some half-dozen different departments control public work on a large scale and every department places orders at some time or other. Then there are the scores of local authorities, from the council of a large region or province to that of a small municipality. The degree of financial autonomy varies, but all local authorities are responsible for some public work, and in the aggregate their capital expenditure is very considerable. Then again there are the public utility companies, numerous and unco-ordinated, with their very considerable expenditure on new works, extensions, renewals, and maintenance.

How, it may be asked, can any coherent policy be devised, let alone a policy securing consistent variation in the volume of public work in inverse relation to the volume of private business?

Several countries have made an effort to grapple with this question, but it will be seen from the following information that for the most part the initiative in the matter of public works is still in the hands of a number of separate authorities without any co-ordinating body. Attention will, however, be drawn in the first place to those countries in which some efforts at co-ordination have been made. Some of these efforts relate rather to relief works than to ordinary public works, but that is not a very material point in this connection because the experiment which has once been made in a limited field may point the way to the application of a similar policy in a wider field.

In Austria decisions in connection with public works carried out under the productive insurance scheme are taken by the Minister of Social Administration in agreement with the Minister of Finance and after the provincial government has declared in
favour of the works. The local authorities, however, have the right to take part in the procedure laid down in the Unemployment Insurance Act with regard to obtaining financial assistance.

Authorities which intend to undertake works have to put in a request to the Industrial District Commissions at least four weeks before the work starts.\(^1\)

The Industrial District Commissions then submit a report to the Minister of Social Administration with regard to the number of unemployed to be absorbed, the approximate length of time that the work will take, and the location of the work. On the basis of this report the Minister takes his decision. As soon as the financial assistance is approved, the Minister draws up a contract laying down certain conditions. If the contractor agrees, he informs the Minister accordingly, in writing.\(^2\)

The necessity for the simplification of this procedure soon made itself felt, and an Act of 5 December 1924 (thirteenth amendment to the Unemployment Insurance Act) authorised the local authorities to decide upon the execution of certain works without applying to the central authorities for permission, as long as the amount required by such works did not exceed the sum of 40,000,000 kr. (now 4,000 schilling).

In Canada the purchase of supplies for the Federal Government is supervised by a Purchasing Commission. When unemployment is slack in a particular industry, this Commission is advised of the fact by the Director of the Employment Service, so that orders may be placed where employment is most needed.\(^3\) No information is available with regard to the work of this Commission.

The Canadian Congress Journal states that under existing conditions political pressure very often has considerable influence in the allotting of money for public works. The Trades and Labour Congress have therefore proposed that a lump sum, earmarked for the construction of unspecified public works to be

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\(^1\) These commissions are composed of an equal number of employers and workers. They are nominated by the Minister of Social Administration, who also appoints the president and vice-president. These nominations are made on the recommendation of the occupational organisations concerned and of the provincial Government. The commissions are instituted for the purpose of supervising the various unemployment insurance organisations and particularly the employment exchanges. It is also their duty to give all necessary explanations and information to the bodies concerned in public works schemes in order that the latter may submit plans which are in conformity with the law.

\(^2\) Lederer and Suchanek: *Arbeitsrecht und Arbeiterschutz*. Vienna, 1925.

\(^3\) Labour Gazette, Jan. 1921, p. 42.

\(^4\) Canadian Congress Journal, 1922, p. 231.
undertaken during periods of unemployment and in districts
most affected by it, should be voted and that this money
should only be expended upon the advice and recommendation
of the Employment Service Council of Canada, an advisory body
consisting of representatives of each of the provinces and of
several important non-political national organisations.

In France the memorandum accompanying the Bill presented
by the Government on 19 November 1927 for the purpose of
reorganising the National Economic Council states that the Council
is a council of enquiry set up to establish the principles of the
national economy, and composed of delegates of the various
national economic organisations. In 1928, the Council conducted an
enquiry with regard to the national equipment, which also covered
the means of financing the public works then under consideration.
At the end of 1926, when signs of an unemployment crisis began
to appear, the Government had already considered the measures
that might be taken to diminish its effects, and the National Eco­
nomic Council was asked to draw up a programme of works which
could rapidly be put in hand, in order to occupy the unemployed
workers on tasks of direct utility to the national prosperity ¹.

It is not generally admitted, however, that the Council
should itself determine the most suitable time for putting the
works in hand. Thus, according to a report presented to it in
February 1927 on the problem of navigable waterways, by Mr.
Pierre Richemond, President of the Union of Metallurgical and Min­
ing Industries, the National Economic Council has to pronounce
upon the economic situation, and to consider what methods to
follow in order to meet the necessities of that situation. But the
details for the carrying out of such a plan, and the choice of the
favourable moment for the carrying out of certain works in the
place of certain others, should belong to the administration. The
administration calls together its chief engineers each year, and
weighs and compares the urgency of the various works, and the
more or less favourable conditions which exist in the various
districts; and only the administration is capable of knowing, at a
given moment, the best use to be made, within the scope of the
plan drawn up for it, of the amounts placed to its credit by
Parliament in the national budget ².

¹ Journal officiel, 1927; Documents Parlementaires, Chambre des Députés,
No. 5067.
In Germany, the administrative authorities which carry out public works and give orders for supplies are the Ministry of Finance, the Army, the Ministry of Transport, the Federal Railway Company, the Postal Administration, the Administrations of States, Provinces and Municipalities and Municipal Unions. Moreover, within each department there are different sections which give orders for public works and supplies. Until recently, says Dr. Werner Stephan, systematic co-operation of these various authorities hardly existed at all. In order, however, that public works and orders may be distributed as equally as possible among the various provinces, so-called provincial offices dealing with contracts (known as Landesauftragsstellen) have been established in the separate provinces. These offices are co-ordinated by a central office (Ausgleichsstelle der Länder) which is attached to the Federal Ministry for Economic Affairs.

The report adopted by the Provisional Economic Council on 23 April 1928 pointed out, among other things, that the inadequate use of public works and orders for the evening out of cyclical and seasonal fluctuations was due above all to the lack of cooperation among the authorities in the giving out of orders. Moreover, side by side with very strict centralisation in one authority, there was far-reaching independence on the part of the local branches in other authorities and any kind of co-operation of the various organisations having orders of a similar character to give was practically non-existent. The Committee which studied the public works problem, considered whether it would be desirable to centralise the giving of orders for public works or supplies on the part of public authorities in one department or at least to set up some central body which would be able to make representations to the various departments concerned. The representatives of industry who gave evidence before the Committee were decidedly opposed to such an idea. It would, moreover, be difficult to carry out within the limits of the present constitution of Germany. The Federal Economic Council found itself, therefore, unable to make any suggestion on this point, but it proposed that there should be a much closer cooperation between the various departments concerned and a stronger influence by some central Federal office on the distribution of the orders given by the various departments. On the basis of this preliminary declaration the Federal

1 Reichsarbeitsblatt (unofficial section), 5 Sept. 1929.
2 See above, p. 37.
Economic Council made a series of recommendations to the Government which may be summarised as follows:

That the Federal authorities should inform the Ministry for Economic Affairs of all important orders which are given by them;

to see that the various spending departments of the Federal Government and of the States, together with the Federal railway company, the postal administration and the German union of towns should engage in discussion with the representatives of the economic interests concerned from time to time in order to prepare an economically desirable distribution of public works and orders;

to do everything possible so that in the larger municipalities similar discussions should take place between the town administrations and the different Federal and State administrations, the Federal Railway Company, the Post Office, and representatives of employment offices and of industry.

Since 1 January 1929 the different branches of the Federal Government, including the postal administration and the railway company have informed the Federal Statistical Office monthly of orders exceeding a value of 20,000 marks; from 1 April 1929 the State administrations have done the same. Negotiations have also taken place with the larger municipalities and groups of municipalities. It is recognised that the limit of 20,000 marks is rather high and only the most important particulars are given. It is not yet possible to know how far these orders can be adapted to the general economic situation. In addition, the Federal and State administrations have for some years regularly informed the Ministry for Economic Affairs at the beginning of each budget year of the orders they intend to issue for work and supplies.

For a number of years the Ministry of Labour and the Ministry for Economic Affairs have consulted with the other spending departments of the Federal Government and of the States with some regularity, and in 1926 a special inter-Departmental Committee was set up for the purpose. Later on this Committee ceased to exist, but it has now been revived. Its purpose is to consider the above-mentioned statistical information and to make proposals to the spending departments for a suitable distribution of their orders. It is hoped at a later date to arrange regular meetings with non-official economic organisations for a similar purpose. Consultations in Berlin alone, however, are not sufficient, and on 23 October 1928 the Administrative Council (Verwaltungsrat) of the Federal Institution for Employment Exchanges and Unemployment Insurance expressed a desire to be associated with the consultations of the Federal Government, and invited the latter to bring in the State labour offices also. The Federal Ministries for Labour
and Economic Affairs agreed to this, and a Decree on the subject was issued on 28 June 1929. A Decree was issued by the President of the Federal Institution on 20 July 1929 on the same subject.

The State labour offices have in fact got into touch with the spending authorities. In some cases the negotiations with the latter, so far as purely local matters are concerned, have been left in the hands of the local employment exchanges, on the grounds first that the small works are in the aggregate more important than the large ones, and secondly, that a satisfactory arrangement is more likely to be arrived at locally, owing to the common interest in relieving the labour market as far as possible. The spending authorities, generally speaking, agree that it is desirable to distribute their orders in such a way as to take account of the situation of the labour market, but at the same time they have pointed out that various difficulties of a technical, budgetary and industrial nature arise.

A number of suggestions have been made in the course of these negotiations in order to facilitate the distribution of orders in accordance with the situation of the labour market, at any rate from the point of view of seasonal unemployment. Thus, it is proposed to determine the budget for two years at a time, so far as the building programme is concerned, to empower authorities to borrow and spend money which will only be available in the following budget year, etc. As the postponing of public works and orders for more than a year is very difficult at present, the State labour offices have practically confined their efforts, so far, to bringing about an improvement in winter unemployment. This has met with the difficulty that building during the winter involves an increase in cost estimated in certain cases to be as much as 20 to 40 per cent. Various proposals have been made to prevent this increase in cost from taking place.

One of the points dealt with by the Provisional Economic Council on 23 April 1928 was the desirability of the authorities, in giving orders, allowing as long a time as possible for delivery, so that the firms concerned might thus adapt the work to some extent to their other jobs. It is pointed out that this is rarely the case at present, and in many instances the time for delivery is so short that overtime has to be worked in order to get the work done. This question has on several occasions been discussed by the departments concerned. It would naturally be of great assis-

1 *Der öffentliche Arbeitsnachweis*, July 1930.
tance to the employers themselves if they could know beforehand what orders are likely to be given during a particular period.

In Great Britain the general decision to initiate State assisted programmes of relief works was taken by the Government. The Government policy was conveyed to local authorities, etc., by means of circular letters from the grant-making departments. It is the local authorities which for the most part have to undertake the works and which apply to the Government for assistance. For this purpose the Unemployment Grants Committee was appointed to examine all applications for grants, and in 1929 a second committee was appointed to examine similar applications from public utility undertakings working for profit. Only works in respect of which the Government is asked to advance money come before the committees.

It is of interest to note that the Unemployment Grants Committee expressed the opinion at the very beginning of its activity "that provision should be made for a closer working relationship between the central government and local bodies.

Under the trades facilities guarantee schemes the Government encouraged certain private enterprises to undertake work which they would otherwise have been unable to do.

In the description of the public works schemes organised in Italy since the war frequent reference is made to the appointment of inter-departmental committees or to special commissions in certain cases to co-ordinate the work of the different departments which have the power to decide to carry out public works or to give orders for supplies.

In the United States the need for the centralisation of a public works policy is indicated by Mr. Mallery's estimate that within the Federal Government alone public works are carried out by thirty-nine different departments and offices; sixteen federal agencies are authorised to build roads, nineteen to do hydraulic construction, sixteen to work on rivers and twenty-two on engineering and research.

A Federal purchasing board has been established with a view to co-ordinating the purchase of supplies for the Federal departments but has not yet itself a purchasing agency. In connection with the encouragement of public works by the Federal Government during

1 See article by Rudolf Schirmel in Industrie und Handelszeitung, 29 Dec. 1929.
2 UNEMPLOYMENT GRANTS COMMITTEE: First Interim Report for the period 20 December 1920 to 2 March 1922, p. 20.
3 See Part II.
the depression of 1929-1930, a new Division of Public Construction was established in the Department of Commerce to aid in co-ordinating the efforts of Federal, State and local governments to expedite public works projects. It may also be noted that in the Bill presented to Congress by Senator Wagner in the Session of 1929-1930, it was proposed to establish a Federal employment stabilisation board to be composed of the Secretary of the Treasury, the Secretary of Commerce, the Secretary of Agriculture and the Secretary of Labour.

The adoption of the policy of advance planning has been greatly facilitated by the recent trend towards city and regional planning in general. City planning commissions, bureaux of municipal research and special committees appointed by the heads of local governments, city, county and State, have contributed to this development. In all, eight States have laws permitting central purchase of supplies but they are said to lack the organisation to make these effective. Thus, in 1922, New York set up a central department for the purchase, control and distribution of all supplies needed by the State. This organisation can be used to concentrate orders as far as possible in periods of depression. In California and Wisconsin, where laws providing for the advance planning of public works are on the statute books, the decision to put in hand public works lies with the respective State Boards of Control.

For the most part, however, when a crisis develops, the Federal and State Governments simply invite the local authorities and other bodies to undertake public works. Thus, in the early months of 1928, the Governor of the State of New York invited the mayors and governors of counties to undertake public works, and in the crisis of 1929-1930, both the President and State governors did the same thing.

In other countries no co-ordinating authority has been set up, and the Government has therefore to rely on the force of example, on grants of money and on loans for the purpose of stimulating local authorities and public utility companies to put public works in hand.

Thus, in South Australia, when the Government desires local bodies to adopt a policy similar to its own, it communicates with

1 National Bureau of Economic Research: Planning and Control of Public Works: A Report of the Committee on Recent Economic Changes of the President’s Conference on Unemployment.
the local bodies concerned in writing and by conferences. In *New South Wales*, local government authorities have been encouraged to co-operate in a public works policy to the fullest extent possible; in some cases this has taken the form of a joint contribution by the Government and local authorities to meet the cost of works of local character and benefit which are at the same time calculated to relieve to some extent the general pressure of unemployment. In *Tasmania*, assistance is sometimes given either to local authorities or to private enterprises by the Government in the form of a grant amounting to 50 per cent. of the total expenditure on public works which are in the nature of public utilities.

In the *Irish Free State* the responsibility for carrying out public utility works for local requirements rests with the local authorities, but where the works involve the exercise of borrowing powers the plans, specifications and estimates of costs are submitted for approval before sanction is accorded to the raising of loans. The principal public utility services administered by local bodies for which borrowing powers are required are the provision of houses for the working classes, public water supplies, sewerage schemes, and the provision of burial grounds. The county, county borough and urban district councils are also charged with the reconstruction and maintenance of public roads.

So far as local bodies are concerned they have full power over their own funds and it rests with them to decide whether the financial position of their district would permit of additional expenditure on public services. Where improvements are desirable in the interests of public health, local bodies are encouraged to undertake them by the offer of long term loans repayable over a period varying from twenty to thirty years, according to the nature of the works undertaken. These loans are advanced by the Central Government. As already stated, works of any considerable size are generally undertaken by aid of loans and if any policy of restriction of public works by local bodies be desirable, control over the power of borrowing can be exercised by the central authority.

The *Polish* Government states that decisions with regard to postponing or advancing communal works are taken by the local authorities, district committees, etc. Decisions with regard to Government works, with the exception of railway, mining and military constructions, are taken by the Ministry of Public Works and the Ministry of Finance.

As a result of the federal Constitution of *Switzerland*, which
leaves extensive powers in the hands of the cantons and communes, all kinds of different authorities are empowered to take decisions with regard to postponement or acceleration of public works. The communal or cantonal authorities are competent to decide with regard to communal or cantonal works. For work organised by the Federal Government, such decisions are taken by the administrative services for the works under their charge, and by the Government or the Parliament for works of a wider scope.

Although the Confederation cannot force the local authorities to take similar decisions to its own, it may encourage them to do so by means of subsidies, statements with regard to results obtained, discussion of appropriate measures to be taken, etc.

With regard to the intervention of the Government in semi­official or private enterprises, it may be recalled that subsidies have been granted to the Federal Railways in order to accelerate the electrification of certain portions of the line.

**Recruitment of Labour**

The best way of recruiting labour for public works is clearly to apply to the employment exchanges. If workmen are taken on directly by the authorities or by the contractors the door is open to all the evils of unorganised recruiting, namely, the tramp for work from factory to factory or from workplace to workplace, the presence of unemployed workmen in one town unaware of an unfulfilled demand for workmen in another, the movement of large numbers of workmen from districts where work is scarce to those districts in which public works have been started, thus throwing great burdens on the districts concerned and causing unnecessary hardship to the workmen, and the establishment of special employment offices, either fee-charging or otherwise. In all countries which have a system of employment exchanges, recruiting through the exchanges is now the normal method of obtaining workmen for public works. In those which have not, or which have an inadequate system, the evils referred to above are inevitable. In Federal States particularly there is a danger that any State which undertakes a large public works programme at a given moment may be invaded by large numbers of unemployed from other States, and measures are generally taken to guard against this. Thus, in New York State, Chapter 689 of the Laws of 1930 requires the preference to be given in employment to citizens of the State in all public works construction.
The attention of all contractors is also called to the necessity of keeping on file lists showing whether workers are citizens. A point of greater importance in this connection is that of the criteria used in selecting the men. It is clear that workers will in the first place be engaged primarily because of their fitness for the job. As by hypothesis the recruiting will take place at a time of unemployment, this should not be difficult up to a point.

On the other hand, there are cases in which, owing to the decay of a particular industry, it is desirable to transfer workers from one kind of work to another with a view to their permanent absorption in a new occupation. This was true of the cotton workers during the British cotton trade crisis of 1863, and it is true of certain depressed industries in Great Britain to-day. Recruiting for this purpose is best done through the employment exchanges, as in the more normal case of recruiting workers who are already accustomed to the work required.

If workers are recruited for a new kind of work, it is important that they should be trained to some extent for it. Even for the most unskilled labour some adaptation is needed, and in this way the danger of increasing the cost through incompetent work is very much reduced or may be eliminated altogether.

As will be seen below, the employment exchanges in Japan have in some cases undertaken the actual supervision of the public works. No other example of this kind is known.

In South Australia the majority of the men employed on public works are engaged through the Government Labour Exchange.

In France somewhat elaborate arrangements have been made from time to time to ensure that the need of labour for public works put in hand at a time of unemployment should be communicated to the employment exchanges, although there was no obligation to recruit labour in this way. At the request of the Minister of Labour, the Minister of Public Works sent instructions, on 31 October 1921, to all Prefects whose duty it is to invite tenders for public works, to the effect that three copies of any poster or advertisement asking for tenders for works involving an expenditure of 100,000 francs or more should be sent to the Ministry of Labour. The Ministries of War, of the Navy and of the Interior and the Postal and Telegraph Services were also requested to take similar steps. As soon as the copies of the advertisements arrived at the Ministry of Labour, the Central Employment Office despatched

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copies to the employment exchanges of the districts in question, in order that they might get into touch with contractors and offer to obtain for them the necessary working force. Further, several Government departments inserted in their specifications in 1921, at the request of the Ministry of Labour, a clause to the effect that contractors must notify the local employment exchanges, and more particularly the central divisional employment exchange in the district where the work was to be carried out, of their labour requirements. The contractor thus remained free to take on or not, as he chose, the workers sent him by the employment exchanges, but by this means the exchanges were enabled to put opportunities in the way of the unemployed workers inscribed on their own books or the books of other exchanges with whom they were in constant touch.

At the end of 1926, in view of the fresh economic depression then threatening, the Ministry of Labour reminded the various Government departments of the instructions which had been issued. In a circular dated 30 December 1926, the Minister requested his colleagues to issue instructions to their sub-departments to the effect that not only should copies of the advertisements of tenders involving an expenditure of 100,000 francs, or more be sent to him, but also details of any contracts of similar importance placed either as the result of agreement or of the submission of tenders, and giving the names and addresses of the contractors. In another circular dated 7 January 1927, the Minister requested the Prefects to recommend the insertion in their specifications of a clause binding contractors to notify the employment exchanges of their labour requirements, it being understood that this practice should be followed not only for works undertaken by Government departments, but also by district and communal authorities, in order to absorb the unemployed.

According to information supplied by the German Ministry of Labour, any fresh labour required for public works, undertaken at an earlier period than was anticipated, is recruited through the public employment exchanges. In the negotiations which have recently taken place between the State Labour Offices and local spending authorities, the latter are always urged to make use of the public employment exchanges, particularly with a view to preventing the drift of labourers from the country to the towns. Many of the authorities have agreed to this.

In Great Britain it has generally been made a condition of the grant of assistance to local authorities and others undertaking...
public works in the post-war depression that labour should be engaged through the public employment exchanges. The object of this is to enable the grant-making departments to ensure that the maximum amount of employment is afforded to bona fide unemployed men.

In the Irish Free State, all labour required for public works is recruited through the employment exchanges, and in connection with relief works preference has been given to ex-service men of the National Army.

In Japan in enlisting labourers for the public works, priority has been given to those who registered their names at the employment exchanges, to the exclusion of skilled workers. In this way the labour markets in those places where public works were started were protected from the danger of being swamped by labourers from rural districts. As a matter of fact, the task of the employment exchanges was not necessarily limited to the registration and supply of labourers. The exchanges also took the responsibility of supervising the works. At first doubt was expressed as to whether they would be able to do this, but the result proved to be very satisfactory and the works were very economically carried on.

In Switzerland, in cases where public works have been advanced in view of a threatened increase in unemployment, the employment exchanges have been called upon to furnish workers for the execution of such works.

**Effect on Contracts of Postponing and Accelerating Works**

One of the points in the *Suggested Basis for the Supply of Information* was the following:

In the case of postponement of public works previously decided on, what are the difficulties experienced in connection with:

(a) interruption or slowing down of work in the hands of contractors, and the legal recourse open to such contractors against the Government on account of its annulling or modifying their contracts;

(b) the effects of the slowing down of contract work on the financial situation of such contractors or firms supplying them?

Very little information is available on this subject.

The German Government states that no difficulties of the kind referred to have been experienced in Germany. When there
are definite contracts with contractors the works or orders may only be postponed upon agreement with the contractors.

In Poland private contractors who have undertaken construction work cannot be obliged to postpone or to anticipate the carrying out of such work unless a special clause is inserted in the contract.

The Swiss Government says that, generally speaking, works which are placed out on contract are subject to the Code fédéral des Obligations and no special legal provisions exist to regulate cases of postponement or slowing down of public works — with the exception, of course, of derogations from the Federal Code specifically mentioned in the contract. When the authorities have decided in certain cases that work has to be adjourned, this action has not resulted in any consequences to the contractors, as the postponement usually occurs before the work has got to that stage.

This paucity of information would seem to indicate that the problem hardly exists at all; and it will be noticed that those Governments which are quoted above agree in saying that once a contract is made it is adhered to. It is true that the German Government suggests that works can be postponed in agreement with the contractors, but it is not assuming too much to suppose that the case very rarely arises.

How does this affect the policy of planning public works in advance? Hardly at all. This policy involves drawing up a programme of public works which are not of immediate urgency, and then putting them in hand to a smaller or greater extent according to the state of the labour market. When unemployment is rising, more roads, more schools, more public buildings are started, and more repairs are undertaken. Even with careful planning, such works cannot be put in hand over night, but they can be started very rapidly. Some of these works will last only for a few months; there will be no need to stop them prematurely. But others will continue for many months, perhaps for years. Clearly it is possible that before these works are completed the business cycle may again be on the upward grade; but even then it would not be necessary to stop works which have already been started, for it should not be forgotten that in normal times certain new public works are put in hand every year, and that it is sufficient to refrain from giving fresh orders for works or supplies for the moment.
Any policy which involved the stopping of works in a half-finished state would be fraught with serious difficulties. We are not considering relief works which are set up solely for the purpose of giving employment, and which might perhaps (though by no means always) be stopped at very short notice; we are considering public works which are needed in any case, and which are merely shifted a little forwards or backwards in time. If such works as these are suddenly stopped, buildings or materials for which the Government or municipality is waiting will not be completed. Moreover, as Dr. Werner Stephan points out in the article which has already been quoted, half-finished works are liable to deterioration, and special financial arrangements would have to be made for their maintenance until the work is resumed. At the same time, there would be a considerable loss of interest on the capital invested in the works. Thus, from both a financial and a practical point of view, an abandonment of half-finished works would be most undesirable. If it is found that industrial activity is increasing while an exceptional number of men are engaged on public works, equilibrium can be re-established not by stopping those works but by putting less and less work in hand.

In conclusion, it may be said that the advance planning of public works does not involve any interference with contracts or any interference with works which are already in hand.

When Should the Public Works Be Put in Hand?

Assuming that the State and local authorities have made plans for putting in hand public works to prevent or, at any rate, to mitigate unemployment, how are they going to decide at what moment to do it? This question is one of great importance and some difficulty.

It seems natural to use an index of employment or unemployment for this purpose. Thus, when unemployment reaches a certain level, a progressive expansion of public works would be initiated and, as it falls again, there would be contraction. This, of course, presupposes a reliable index of the intensity of unemployment. Statistics of employment or unemployment are now compiled in an increasing number of countries and their quality is being steadily improved. The first essential step towards preventive action on the lines suggested is thus being taken.
In point of fact, an index of employment or unemployment is the one used in most countries, although it is indicated in the information sent in to the International Labour Office by various Governments that general business conditions are often taken into consideration as well.

Thus, in South Australia economic factors are taken into consideration but no particular index numbers are used.

In Germany, the decision to postpone or advance public works depends upon the general state of the labour market and the economic situation. The Government bases its decision partly on statistics of the general economic situation and partly on statistics of employment and unemployment, and more particularly on the numbers of unemployed in receipt of relief and of applicants and vacancies on the books of the public employment exchanges.

In Palestine, statistics of unemployment and of immigration are considered.

In Poland, the responsible authorities base their public works policy on the statistics of the public employment exchanges concerning the situation of the labour market.

In Switzerland, the Government states that the responsible authorities take account of the economic situation and the labour market.

In the United States, the Wagner Bill prescribes in the first place "the volume based upon value of contracts awarded for construction work in the United States, or in any substantial portion thereof during the three months' period preceding action, in comparison with the corresponding three-month periods of the two previous years". One of the arguments advanced in favour of this index was that it was a simple one and that it was indispensable that any index chosen should be simple.\footnote{Cf. Hearing before the Committee on Commerce, United States Senate, on S. 2475, April 1928.}

The Wagner Bill adds that account should also be taken of the index of employment prepared by the Department of Labour and any other available information concerning employment. It is not possible in the United States to take an index of unemployment, because no such index exists. Consequently, there is a choice there, so far as the situation of the labour market is concerned, between an index of employment and an index of payrolls. The
latter is the more sensitive because it takes account of short time, whereas a man is counted as employed even though he has employment for only a few hours or a day or two a week. As Mr. Vernon A. Mund points out, "the most significant factor making for good or for bad times is the income that people receive. Therefore, the index of payrolls presents itself as the better indicator of the need of an addition to the income stream of society".

Mr. D. H. Sawyer, Secretary of the Associated General Contractors of America, states that in his office the materials shipped — that is to say, under construction — are used for purposes of statistical compilation. The disadvantage of this, from the point of view of the advance planning of public works, is that the materials shipped lag behind the contracts awarded by an uncertain period.

Mr. Sawyer gave the following index numbers to show the volume of construction by quarters in the years 1922 to 1927:

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<td>Average</td>
<td>142</td>
<td>165</td>
<td>173</td>
<td>189</td>
<td>191</td>
<td>200</td>
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1 Mund, op. cit.
He pointed out, moreover, that in 1920 this index of materials of construction shipped, based on 1913, was 95. The corresponding index for 1921 was 90. In 1922, however, the index rose to 135.

The objections to these indices is that they do not show the turn of the business cycle soon enough. This is more especially true of an index of employment or unemployment for if no steps are taken to advance the putting in hand of public works until unemployment has really made its appearance, the works can at best only act as a cure for unemployment, and not as a means of preventing it.

In spite of the most efficient planning it must inevitably take some time before works which have been decided upon can actually be started. In so far as the work is undertaken directly by the public authority concerned, the delay need not be very great, but in most cases the work will be given to contractors, and in that case tenders have to be asked for and examined, and the contracts awarded to particular contractors. This can hardly take less than a month and may even take longer.

Some people consider that this delay is a good thing, because it gives time to industry to eliminate the unhealthy elements which occur in a boom period. Mr. Mund, for instance, says that during a period of prosperity labour becomes relatively inefficient and administrators become "lax and careless in the grand rush". Thus costs rise and tend to overtake the rise in prices; secondly there is a tendency to produce a surplus of goods which cannot be sold at the current market prices; and thirdly a period of prosperity is marked by much speculative activity in securities and commodities. Mr. Mund considers it inevitable and beneficial that readjustments should take place at the close of a period of prosperity.

On the other hand, it may be argued that by the adoption of certain measures, of which the advance planning of public works is one, booms and depressions may become less marked than hitherto, and industrial production more stabilised. In that case the need for such readjustments will diminish. They will not, perhaps disappear, but it must be recalled that the policy of advance planning of public works aims primarily at preventing

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1 Hearing be/fore the Committee on Commerce, United States Senate, on S. 2475, April 1928.
2 Mund, op. cit.
unemployment and in order to have the maximum effect in this
direction it must be applied as early as possible in the depression,
the ideal being that public works should absorb workers, pari
passu with their discharge from private employment.

What is really needed, therefore, is a warning index that
will forecast the coming depression, and this brings us to the question
of economic barometers. It is clearly impossible to enter into
that big and important question here. It has already been con­sidered by the Joint Committee on Economic Crises and a report
on the subject has been published by the International Labour
Office. There is clearly a need for further research on the
subject before a satisfactory index can be determined and
the importance of such an index for the advance planning of
public works is an additional reason for pushing forward with the
investigations as rapidly as possible.

It is desirable to have not merely a general index for industry
as a whole but also, if possible, an index for each industry and
perhaps even for each locality. While it has been pointed out
elsewhere in this report that the advance planning of public works
is mainly useful in connection with a general depression, there
are occasions, as was shown by the experience of the cotton crisis
in Great Britain during the American Civil War, on which it
can be applied successfully in a depression which hits one industry
particularly. It would in any case be interesting to have an
indication of the situation in each industry and locality, as well
as in industry as a whole, throughout each country, and even in
a general depression it might be useful to apply the public works
policy in such a way as to take account of those industries and
localities which are most severely affected.

Summary

In this chapter a number of administrative problems have
been examined. It has been seen that great difficulties in the
way of advance planning arise from the large number of depart­ments which undertake public works both in the central government
and in the various local authorities. The labour necessary for
public works which are speeded up is normally recruited through
the employment exchanges, and thus ensures the best possible

1 International Labour Office. Economic Barometers. Studies and Reports,
Series N, No. 5. Geneva, 1924
situation in the labour market. The policy of advance planning does not involve any interference with works already started. All that is required is that in a period of prosperity fewer contracts, and in times of depression more contracts, would be entered into. It is necessary to have a reliable index to indicate the best time to speed up or slow down public works, as the case may be. An index of employment or unemployment, supplemented by an index of general business conditions, is generally used.
CHAPTER IV

FINANCIAL PROBLEMS

One of the most important difficulties in applying a policy of advance planning is that of funds. How is successful expansion and contraction of public works to be financed? Most discussions of public works programmes centre to a large extent round this question.

Taxation

Money may be raised for the purpose of public works either by taxation or by borrowing. It is always preferable to use the method of taxation whenever that is possible, but it is obviously not possible beyond a certain point in connection with public works. Many of these works are a form of capital expenditure and should therefore be financed out of savings rather than out of income, a sinking fund being, of course, provided for the amortisation of the loan. It remains true, however, that taxation can be used in a great many cases and this question will therefore be considered first of all. An increase in taxation, whether central or local, in order to finance public works during a depression, is generally regarded as inopportune, if not impossible. When industry is already depressed, unemployment rife, and purchasing power deficient, it is said to be most undesirable to increase the burdens of taxation. If what is spent on providing employment and wages is merely taken out of the taxpayers' pockets at the moment, the sole result, it is argued, would be to transfer purchasing power from one body of consumers to another, with no net advantage.

The actual effects of increased taxation are by no means as simple as this, however. If taxation is drawn from what would otherwise be savings, and spent largely in wages for the workers employed on public work, there is a definite change in the direction of spending. Private savings would probably be devoted to investment, while wages are spent generally on consumption goods. At the same time the investment of savings really means the payment of wages (inter alia) to workers employed on producing capital goods, and it may again be argued, therefore, that taxation
to finance public works is merely an unnecessary diversion of funds. It should be remembered, however, that one of the characteristic features of a boom is probably over-investment in private industry, and that during the depression the demand for capital is slack, so that savings will be lying temporarily idle. Taxation to finance public works will therefore secure productive use of savings as well as employment of labour.

From the political standpoint, however, a heavy increase in taxation would be most inopportune, and probably suicidal to the party in power. It is this political difficulty which has frequently led to a curtailment of public works during any depression of long duration.

A practical objection to the use of simultaneous taxation to finance public works is the delay involved. Plans may have been drawn up before hand but if they cannot be carried out until taxation has been voted the depression will have been in existence for some time before any steps can be taken to counteract it.

Moreover, if Parliament or a local authority votes money for particular public works and these works are later postponed because the economic situation is particularly favourable, it may very likely happen that when the works are ultimately put in hand the money is no longer available. Credits voted for any purpose usually lapse at the end of the financial year, though exceptions are sometimes provided for.

In South Australia, if the provision for a loan work is not used in any financial year, the provision lapses, and the amount would have to be revoted in the ensuing financial year.

In France the Commission appointed by Mr. Viviani in 1908 noted that with regard to money budgeted for certain public works Parliament had from time to time authorised the carrying forward from year to year of any credit balance remaining. A Decree of 12 July 1893 in fact expressly stipulates that such balances may be carried forward in the budgets of Departments. With regard to the State, however, the principle of yearly budgets may not be departed from and no funds may as a rule be carried forward. An Act is however passed each year relating to the carrying forward of credit balances and these balances are thus at the disposal of various Government departments in addition to the usual yearly credits for the purpose of meeting their liabilities in regard to works and supplies.

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1 Cf., on this point, Chapter II.
A Bill was introduced into Parliament at the end of 1929 for the purpose of changing the date of the beginning of the financial year and in this connection several speakers emphasised the importance which attached to the date of voting the yearly programme of public works. The Chairman of the Senate Finance Committee stated on 27 December 1929 that when the financial year coincided exactly with the calendar year it was possible for the Government departments, if the budget was voted in time, to begin to prepare their programme of public works as early as 1 January and thus have them ready for putting in hand at the beginning of the summer. As the Government proposed to make the financial year begin on 1 April the Committee requested that measures should be taken to enable the Government departments to prepare their programmes at the beginning of the calendar year, within the limits of the sums standing to their credit in the current budget. The Minister of Finance drew attention to the fact that for public works extending over several years Parliament was in the habit of voting credits which extended over several financial years (Lois de Programme) or of voting amounts in each yearly budget permitting contracts to be placed or subsidies to be granted several months or even years before the works are put in hand. He further declared that towards the end of each calendar year the Government would ask for credits to be voted by a simple Act to which would be attached a plan containing a certain number of special authorisations within the limits of those laid down by Parliament in the preceding budget.

In Germany if public works are postponed beyond the end of the financial year the credits originally provided generally lapse and must be provided for again in the next year's budget. An exception is made, however, in virtue of section 30 of the Budget Order of 31 December 1922, in the case of credits for exceptional and unusual expenditure and also for certain funds which, in accordance with the Budget Act, may be carried over to the following financial year.

Dr. Werner Stephan draws attention to this point and says that a postponement of orders is difficult because when it is desired to undertake them the necessary money may no longer be available. In countries with a less rigid financial administration and an elastic capital market, these difficulties would probably not arise.

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but in the majority of countries, including Germany at the present
time, such difficulties certainly would arise.

The Provisional Economic Council, in its report of 23 April
1928, recommended the Government to examine whether, by
the postponement of expenditure from one budget period to
another, or by allowing the use of moneys in one budget period
which would normally only be voted in a later budget period,
it would be possible to facilitate an economically more desirable
distribution of orders, and whether such changes are feasible.

The Federal Government has studied this problem. It is
recognised to be a very delicate question, because the tendency
of the Reichstag is to keep an increasingly tight hold on all
expenditure. Negotiations have, however, taken place among the
different departments on this subject, and it was intended, in the
event of their being successful, to approach the State Governments
on the matter.

In Great Britain the sums needed are voted each year by
Parliament. The public works undertaken since the war have
been paid for partly by loans and partly by rates and taxes, and
Government assistance, in cases where no provision has been
made for it in one financial year, is raised by means of supple­
mentary credits granted by Parliament at the request of the
Government.

In Switzerland, as a general rule, credits which have not been
employed during the financial year for which they were provided
are not carried over to the next year. In certain cases, however,
they have been carried over. Moreover, the credits for certain
works have not been included in the ordinary budget, but have
been specially voted by Parliament. These credits do not, there­
fore, expire at the termination of the financial year. When public
works are advanced in time, the authorities request Parliament
to take immediate steps for the provision of the necessary funds.

On the other hand, in Italy, credits accorded for the execution
of public works which are not exhausted at the end of the financial
year may be carried forward to the following financial year.

In Tasmania the necessary credits, once voted, are held by
the Treasury Department until required.

In the United States it is said that local authorities have in
many instances resorted to planned budgets of expenditures for
permanent improvements. For instance in Cincinnati, where
such a programme has been in operation for three years, expendi­
tures are planned for a period of five years, and machinery thus
exists for exercising considerable control over the prevailing volume of public works. The plan of budgeting over a period of years in this way is rapidly being adopted throughout the United States.

**Borrowing**

The obvious alternative to taxation is borrowing. There is considerably more to be said for this, since during a depression capital as well as labour tends to be unemployed and is therefore comparatively cheap. From the purely financial standpoint public authorities would do better to float their loans in times of depression.

Professor Copland, Dean of the Faculty of Commerce, Melbourne University, in a special report which he prepared for the Development and Migration Commission on the control of the business cycle with special reference to Australia, said that an objection was sometimes made that the advance planning of public works would involve raising a loan on the money market at a time when trade is depressed and credit conditions stringent. He considers, however, that the difficulty is by no means insuperable. In the first place, he says, there is a natural tendency during a period of depression for certain funds to flow into public securities and the raising of a public loan would doubtless provide an outlet for some funds which would not be placed in private business when an element of uncertainty prevailed. Secondly, Australia borrows heavily abroad and this borrowing should be at a maximum in periods of local business depression. This would have a beneficial effect in two directions. It would increase the volume of employment in Australia and, by raising funds abroad, it would improve the exchange position and strengthen banking reserves, thus leading to a better credit situation. From this point of view Professor Copland considers that advance planning of public works has much to recommend it.

Dr. Bernhard, in the article already quoted, thinks that if public works are postponed they should not be undertaken at the very beginning of a depression but at a somewhat later stage. The effect would then be much greater and there would be more liquid capital available. This view is supported in two articles written by Rudolf Schirmmer, in *Industrie und Handelszeitung*,

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1 National Bureau of Economic Research: *Planning and Control of Public Works*.

28-29 December 1927, in which he says that at the beginning of a crisis the situation on the money and capital market is so bad that any withdrawal of capital for a public works programme would only tend to increase the difficulties of private industry. Experience shows, however, that the money and capital market becomes more fluid immediately after the crisis so that the financing of public works, by means of which depression might be mitigated by a fresh impulse given to industry generally, should no longer be difficult. The public authorities would then have the advantage of obtaining capital at a favourable rate of interest and at the same time of getting the work done at favourable prices.

It may be objected that the investing public will suffer from the prevailing pessimism and be unwilling to subscribe to the loans. But, on the other hand, public loans rank so high as securities and the element of risk is so small that there is little danger of their not being taken up even during a severe depression.

Local authorities as a rule can either issue a public loan or borrow from the Central Government. The latter may be the more rapid and simple course for them but it simply transfers the financial problem from the local authority to the Central Government.

In Italy, for instance, advances can be made promptly through the Deposit and Loan Fund whenever the Government has taken a decision with regard to special public works (Royal Decree No. 1698 of 17 November 1918 and Royal Decree No. 1704 of 19 November 1921, which have been referred to above). Advances are also made, if necessary, by the National Social Insurance Institute and the savings banks administered by the Banks of Naples and Sicily (Act No. 1177 of 20 April 1921). Finally, the Government decides in cases of urgent public works where it is necessary for advances to be promptly made (Royal Decree No. 1698 of 17 November 1918 and Royal Decree No. 1182 of 20 September 1928).

With borrowing, as with taxation, however, a practical difficulty arises, namely, the delay involved in securing authorisation for the loan and raising the money. Between the time when it is clear that the state of employment requires an expansion of public works and the time when such works can be put in hand on the strength of a loan, there is an interval when unemployment may increase unchecked. This difficulty is, however, by no means so great as in the case of taxation, for loans are raised more quickly than taxes.

In effect, however, financing by borrowing at the time of the
depression is "post-financing", since the loans have to be repaid later, presumably in periods of prosperity. It may well be argued that it is better to provide for the evil day beforehand, rather than mortgage the always uncertain receipts of future prosperous times. Advance financing, in fact, is almost as essential to an effective public works policy as advance planning.

**Advance Budgeting**

Mr. Otto T. Mallery, in the volume *Business Cycles and Unemployment*, published as a result of the President's Conference on Unemployment of 1921 in the United States, makes a proposal which, though it would not actually provide funds in advance, provides the necessary machinery for securing them, and avoids the delay noted in the preceding paragraphs. He suggests that the legislature should authorise "contingent bond issues", i.e. the Treasury would be authorised to issue bonds up to a certain amount whenever a state of industrial depression rendered the execution of public works necessary. Thus without waiting for special sanction in each case the Government could raise funds by the quickest method of borrowing. This system is not unlike that in current use by which the Treasury anticipates the receipts of future taxation and meets a temporary deficiency by the sale of Treasury Bills or other short-term Government paper without requiring special authorisation in each case.

A similar suggestion is put forward by Dr. Benjamin M. Anderson, the economist of the Chase National Bank of New York. He considers that:

It should not involve a wide departure from existing constitutional procedure for the legislature to authorise construction and to make appropriations out of the future proceeds of bond sales, leaving it to a Board of the executive officers of the State to determine the precise time when the bonds should be issued and the construction undertaken. Such a Board should be required to justify this course by a subsequent report to the legislature, in which it would present evidence based on figures for unemployment, commodity prices, and other relevant indices of prosperity or depression.

Dr. Anderson also suggests that a policy of rapid amortisation of State and municipal borrowings should be followed. Such borrowings, he says,

... should be used not to increase the aggregate of State and municipal expenditure, but rather to give flexibility to the financial programme, and to permit concentrated expenditure at the most appropriate times. ... The principle of pay-as-you-go, rigorously interpreted, involves a loss of flexibility in public expenditure.

If State expenditure for construction and other purposes is to be
concentrated in periods of depression, the State must spend more in certain years than it collects in taxes in those years. It must ordinarily borrow for this purpose. If the borrowing follows the conventional line with an amortisation period approximately as long as the life of the improvements to be made, public debt will inevitably grow. If, however, the amortisation period is brief, say, approximately, the length of an average business cycle — six or seven years — then the effect of the borrowing is primarily to give flexibility to public expenditure rather than to increase public debt, and to increase the total of public expenditure.

What is really called for is that the State should have an effective fund of working capital, so that it can concentrate expenditure, otherwise spread through several years, into a period of one or two years. It would be particularly desirable, of course, that it should concentrate these expenditures in periods of depression when construction can be done most cheaply and when public expenditure will benefit the general business situation.

The desirable policy would be a policy of rapid amortisation and reissue. The State should have a revolving fund of credit. It should seek to maintain a reserve of bond issuing power. It should use its borrowing power not for the purpose of increasing its total expenditure over a period of seven or eight years, but rather for the purpose of concentrating parts of its expenditure in short periods when unusual expenses are necessary in the interests of economy or when depressed business conditions make such concentration of expenditure a helpful stimulus to business.

Professor Bowley proposes an ingenious method of linking public works finance to the redemption of the National Debt. A certain amount of money would be voted yearly for purposes either of debt redemption or public works. When business was good and unemployment slight, all or most of the vote would go to debt redemption. As unemployment increased, a growing proportion would be expended on public works, the proportion falling again as business revived. The following hypothetical figures illustrate the scheme for a ten-year trade cycle:

<table>
<thead>
<tr>
<th>Year of cycle</th>
<th>Percentage of unemployment</th>
<th>Expenditure on public works (million pounds)</th>
<th>Debt redemption (million pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.5</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>3.5</td>
<td>9</td>
<td>91</td>
</tr>
<tr>
<td>3</td>
<td>4.5</td>
<td>18</td>
<td>82</td>
</tr>
<tr>
<td>4</td>
<td>5.5</td>
<td>27</td>
<td>73</td>
</tr>
<tr>
<td>5</td>
<td>6.5</td>
<td>36</td>
<td>64</td>
</tr>
<tr>
<td>6</td>
<td>7.5</td>
<td>45</td>
<td>55</td>
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<tr>
<td>7</td>
<td>6.5</td>
<td>36</td>
<td>64</td>
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<td>8</td>
<td>5.5</td>
<td>27</td>
<td>73</td>
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<td>9</td>
<td>4.5</td>
<td>18</td>
<td>82</td>
</tr>
<tr>
<td>10</td>
<td>3.5</td>
<td>9</td>
<td>91</td>
</tr>
</tbody>
</table>

1 Is Unemployment Inevitable 1, pp. 373-374.
In this way funds would be devoted to debt redemption at the most favourable time, when business was good, and would be available for public works when most needed.

One aspect of the problem has already been examined in Chapter II, namely whether raising money for public works on a large scale interferes with the financing of industry and retards industrial revival. The conclusion was reached that while it might do so in a long continued depression like that from which Great Britain has been suffering since the war, and even then only if there were undue restriction of credit on the part of the banking system, it would not do so in a comparatively short-lived depression due to fluctuations of the business cycle.

If it is desired actually to secure the funds beforehand it would be necessary to establish a permanent fund for financing public works. This fund would be fed by taxation year by year by a regular annual amount, or, what would even be better, by larger sums in good years than in bad. One difficulty here is that adversity always seems remote when times are good and parliamentary or local bodies might be unwilling to vote adequate means for a future and as yet unrealised contingency.

The Commission appointed by Mr. Viviani in France in 1908 devoted special attention to the creation of a "fonds de concours". This is a fund subject to a special system of budgeting which was set up by ministerial decision of 6 June 1863. It is subscribed to in agreed proportions by the State and by individuals or corporations such as municipalities, communes, public utility enterprises, Chambers of Commerce, etc., directly interested in carrying out a particular programme of public works. The amount expended under this head each year between 1901 and 1910 varied from 8½ million francs to 21½ million francs, and the credits carried forward from year to year varied from 3½ million francs to 9 million francs. The amounts corresponding to these credits were duly paid into the treasury, but it was not possible to utilise them for public works purposes. The Commission, after considering cases in which the parties were not obliged to pay their contribution to the fonds de concours in advance (in connection, for instance, with maritime ports and canals), expressed the opinion that the Government might draw on this fund to a larger extent. In times of prosperity the State would bear the cost out of the budget. On the other hand, in periods of depression when it becomes necessary to give more opportunity for employment, the State
would be able, in the absence of funds under the ordinary budget, to obtain from the other subscribing parties cash payments in advance.

In Great Britain another method has been adopted, namely, the creation of a road improvement fund derived from the proceeds of motor taxation. This has the advantage that receipts are likely to be larger in good years than in bad ones.

A modification of the public works fund idea is proposed by Mr. Mallery, who suggests the creation of large reserve funds. When money is voted for public works over a period of years a clause should be added to the Appropriation Bill reserving a certain proportion of the annual appropriation (say 10 per cent.) to be expended only in times of depression. Or the total appropriation for say a five-year period would be voted in a lump sum and the distribution of expenditure over each of the five years be determined by the executive in the light of general business conditions.

In very few cases does anything on these lines appear to have been done.

In France the Commission of 1908 noted that attempts had been made in connection with the management of monopoly and other industrial enterprises undertaken by the State to constitute reserve funds in order to permit of greater elasticity in the placing of orders and the distribution of work. Subsequently the Finance Act of 1911 provided for the constitution by means of a bond issue of certain reserve funds for the State railways to enable them to purchase rolling stock and to carry out work. This Act expressly stipulated that the balance for certain items might be carried forward from year to year provided that it were not expended upon items other than those for which it had originally been budgeted.

The Bill concerning the improvement of the national equipment, which was presented to Parliament at the end of November 1929, proposed to create a special fund into which the credit balances outstanding on account of public works from year to year should be paid and which should also receive the treasury grants. The works to be carried out and the payments to be made were to be spread over a five-year period in order to avoid any difficulties which might arise in the way of monetary circulation or a rise in prices.¹

In Switzerland in 1917 a special unemployment fund was constituted by the Federal Government and a certain proportion of the war profits tax paid into it. During the post-war period this fund, together with the credits voted by Federal Decrees, was used to cover expenditure for unemployment relief. It still exists for the same purpose. Special funds have been constituted in certain cantons and communes, destined to serve a double purpose. They are used firstly to supplement the moneys voted as subsidies to the unemployment insurance funds, and secondly to finance measures taken to remedy intense unemployment when it arises. No uniform regulations exist for the administration of these funds. In many cases they are incorporated with the communal funds and administered with them.

The suggestion has also been made that at least part of the money for public works should be obtained by means of a loan from the banks, thus leading to an increase in the amount of money in circulation and an increase in the volume of purchasing power, rather than a mere transfer of purchasing power from one set of persons to another.

Productive Unemployment Relief

In certain European countries the funds available for unemployment insurance or relief have been used for the purpose of financing productive enterprise. This is the case, for instance, in Austria, Denmark, Germany and Italy.

The so-called productive insurance in Austria aims at providing the necessary financial assistance for the execution of public works, and although this assistance does not actually constitute a reserve fund, it is designed for the same purpose, for, according to section 29 of the Unemployment Insurance Act, the Ministry of Social Administration may make advances in the form of grants or loans where it is possible to absorb a certain number of unemployed in the execution of public works which could not otherwise be undertaken.

This financial assistance comes under the heading of unemployment relief, and may not exceed the total amount that would otherwise have been distributed in the form of unemployment relief to the workers employed. The amount of the financial assis-

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1 This point has already been referred to on pp. 29 and 30. Cf. P. W. Martin: The Problem of Maintaining Purchasing Power. See also Foster and Catchings: The Road to Plenty.
tance may not exceed one quarter of the total expenditure on unemployment insurance.

Such advances are subject to the condition that the unemployed absorbed shall be guaranteed the same number of working days as that represented by the grants or loans. The advances are based on the average of the benefits due to unemployed workers with dependants and those due to those classes of the unemployed who are recruited in the greatest numbers. The reason for this is that in Austria the benefits vary in accordance with the wages usually earned by the unemployed workmen. The amount of the financial assistance was fixed in practice at 2 schilling per day per unemployed worker; this rate was raised to 3 schilling by the Decree of 19 May 1927 in order to encourage further development of productive insurance.

Financial assistance may be accorded in the form of loans or grants. Loans may be granted up to a maximum of 300 per cent. of the amount of relief payments saved; grants may attain 5 per cent. of that amount. Loans are repayable as soon as possible, but they may not remain outstanding more than two years, and they must be repaid immediately if the conditions laid down by the law are not fulfilled. Interest is charged at 5 per cent.

Finally, it may be noted that failure to repay loans either at the end of the period of two years or in cases in which the conditions to which they were subject are not fulfilled entails a legal right of seizure on the buildings in respect of which the advances were made. These liabilities take precedence of all other civil liabilities, and, if legal action is taken to recover, are dealt with in the same way as taxes on real estate or public taxes (section 120, subsection 1, section 124, subsection 2, section 216, subsection 2, section 217, subsection 1, of the Act concerning seizure; section 29, subsection 4, of the Unemployment Insurance Act).

In Denmark by an Act of 1 December 1925, the Treasury was empowered to grant loans through the medium of the unemployment fund to a total amount of 8 million kroner for works started before 1 June 1926 by communes or private institutions in receipt of public support, with a view to counteracting unemployment. Of this sum 2 million kroner might be used for works other than relief works properly so called if they were of such a nature that they could not suitably be organised in accordance with the rules applying to relief works. The Act also provided that in addition to the ordinary subsidies for relief
works a special grant of not more than 20 per cent. of the costs of materials for such works might be made on condition that the materials were of Danish origin or manufacture and their provision thus gave employment to Danish industrial workers.

In Germany, the original Decree of 26 January 1920 authorised the Minister of Labour to replace pecuniary assistance by grants or loans and to organise relief workshops or other works. In most cases, the assistance was given in the form of loans which, in the early days, were made at a rate of interest of 5 1/2 or 6 per cent. according to whether the undertaking in question was public or private. The total amount of the assistance to be given was not fixed, each case being considered on its merits. On the other hand, each grant or loan was determined in accordance with the number of unemployed workmen to whom employment was given. They were not, as a rule, to exceed a sum varying from 30.50 marks to 41 marks per workman and per day, according to the commune concerned, the differences representing differences in the cost of living. They might, in exceptional cases, be 25 per cent. higher. The above-mentioned sums represented the unemployment benefits payable on 1 August 1921 to unemployed workmen with two dependants. In the particular case of building works, the amount of the grant or loan was calculated according to the number of cubic metres constructed, being from 40 to 56 marks per cubic metre according to the commune concerned. For the relief workshops the basis taken was the number of unemployed workmen to whom employment was given, provided that the sum did not exceed half the total expenses per day and per workman. The cost of the grants or loans was borne to the extent of one-half by the Federal Government, one-third by the State and one-sixth by the commune.

In 1927, this system was reorganised and it now forms part of the unemployment insurance scheme in accordance with the Act of 16 July 1927 concerning employment exchanges and unemployment insurance. Assistance may still take the form of loans or grants. Loans must be repaid, both principal and interest, by quarterly payments within a period not exceeding fifteen years from the completion of the work.

The total amount of the grants is determined by the savings represented for the insurance or relief institution by the employment of unemployed workmen at an average rate of 3 marks per day per person thus employed. In the case of unemployed persons in receipt of normal insurance benefit, the grant is to be charged
against the insurance funds. In the case of those receiving emergency allowances (*Krisenunterstützung*) four-fifths of the cost is borne by the federal authorities and one-fifth by the local authorities concerned. In the case of persons in receipt of public relief, the public relief funds bear the cost.

In Italy, the law with regard to unemployment insurance (Royal Decree No. 3158 of 30 December 1923), provides that in order to combat, relieve and prevent unemployment, advances may be made from the unemployment insurance funds for the execution of public works up to one-fifth of the total funds available.

The Regulations issued under the law provide, in particular, that public works subsidised shall be designated for this purpose by the Minister of National Economy, in agreement with the Minister of Public Works, preference being given to such works as will absorb the greatest number of workers, to works of general or local interest, and to works of an urgent nature.

**Summary**

In conclusion it may be said that there seem to be various methods of providing for the effective financing of advance planning. To a limited extent taxation is adequate if steps are taken to carry forward credits from one financial year to another and to give the public authorities some discretion as to the time at which the money is to be used. More important works are, however, financed by means of loans. Difficulties may arise because the necessary funds are not available soon enough and various suggestions have therefore been made for the creation of special public works funds or other reserve funds, the rapid amortisation of loans, the raising of a loan from the banks. A few examples are given in which more or less satisfactory solutions of the problem appear to have been found.

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1 See also p. 128.
PART II

ADVANCE EXECUTION

INTRODUCTION

The severe and prolonged depression which overwhelmed a number of industrial countries after the war, and the difficult financial conditions which have for the most part prevailed in the money markets of the world, have rendered impossible the carrying out in those countries of any systematic advance planning of public works. On the other hand, these countries have tried to mitigate the worst effects of the economic crisis on the labour market by carrying out necessary public works earlier than would otherwise have been the case. This is generally the first measure which Governments adopt when unemployment becomes severe, on the ground that it is better to give work to the unemployed than to give pecuniary relief. The cry of Labour has always been for "work, not doles", and, moreover, it is obviously a cause of moral and physical deterioration for a man to be out of work for a long period, with nothing whatever to do but to search for employment, which in too many cases simply does not exist.

The policy of putting in hand public works at a time when unemployment is already apparent is psychologically and politically much easier to carry out than the advance planning of public works. The latter needs foresight at a time when prosperity reigns, and is a measure of prevention rather than cure; the former is merely the application of a remedy when the disease has appeared.

But is the usual public works policy pursued under such circumstances an effective remedy for unemployment? On this point opinion is divided. No doubt it depends very much on the purpose for which the public works are undertaken and on the way in which they are carried out. In the early days of the post-war depression, little criticism was heard of the principle of a public works policy. But, as time passed and unemployment continued, criticism became louder and louder, and ultimately
a big controversy raged round the question whether public works are efficacious or whether they are not rather positively harmful, by hindering the normal development and recovery of industry. Some of the arguments used in this controversy have already been given above ¹.

The reasons are indeed pretty clear. In the first place, immediately after the war there obviously were a considerable number of works that required to be done, and which had been neglected during the war years. Then it was believed that the crisis would be of short duration — and, indeed, that it was no more than one of the ordinary cyclical fluctuations with which we had become familiar before the war. Thirdly, a Government gains a certain amount of political kudos in engaging in a big public works programme, because people feel that it is doing something, and it is of course true that such a policy is one of the most obvious things that a Government can do to deal with unemployment. Public works which are put in hand earlier than they would otherwise have been are, however, at the best a mortgage on the future. In the case of a short depression, that is just their special value, but in a long-continued depression, the cause of which must be sought in more permanent factors than those causing the business cycle, the desirability of mortgaging the future becomes less and less, and it is suggested that such a policy may perhaps in time become positively harmful. For what is spent to-day cannot be spent to-morrow, and if to-morrow the depression still continues, what then?

On the other side it is pointed out that the application of a public works policy should not exclude the search for more fundamental remedies in the field of rationalisation or elsewhere, but that it does provide employment for a number of persons who would otherwise be unemployed and stimulate an industrial revival. Money is at a time of depression lying idle in the banks. The wages earned represent increased purchasing power in the hands of those who receive them and the public works require equipment and machinery which has to be made by other industries. Moreover, from the social point of view, every man and woman who is given employment is being helped to avoid the moral deterioration inseparable from prolonged unemployment.

It must not be forgotten that the public works we are discussing in this report include special development works

¹ Cf. pp. 24 et seq.
designed to improve the national equipment, such as those which have been carried out in Great Britain, Italy and other countries since the war. Such works are the easiest of all to postpone or advance according to the situation of the labour market, because they do not as a rule require to be put in hand at a particular moment but, on the contrary, lend themselves to advance planning over a period of years.

It is important to draw a distinction between public works and mere relief works. It is sometimes said that all undertakings put in hand by public authorities for the express purpose of creating employment are relief works; but that would rule out a large number of undoubtedly useful public works which are undertaken during a period of unemployment because that is the most convenient time from the financial and social points of view. The real distinction between the two depends on the way in which the works are carried out. During the nineteenth century a number of schemes of so-called relief works were undertaken at different times with varying success. One of the most successful of these schemes was that adopted in Great Britain in 1863 at the time of the cotton famine consequent on the American Civil War. It was a comparatively small scheme, for during the three years of its existence never more than 8,000 workers were provided with employment at wages, but it owed its success mainly to the fact that the work was done on ordinary commercial principles. This meant that the men were chosen not because they were unemployed but because they were fit for the job, and in many cases were specially trained for it; they were paid the customary wages; and they were reasonably efficient because otherwise they would have been discharged. It often happens that these conditions are not complied with, and then we have pure relief works which are quite different from normal public works with which this report is primarily concerned.

Thus we find that men are chosen for the work not because they are fitted for the job but because they happen to be unemployed at the moment, and it is especially bad that skilled workmen should be put on to unskilled work with the risk that they may lose their skill unless employment in their own trade comes along fairly quickly. Thus, the Finnish Government, in their communication to the International Labour Office, refer to the comparative costliness of relief works and to the unsuita-

1 Cf. Davison: The Unemployed, p. 23.
bility of many of the workers. On the other hand, the German Government has laid down the principle that as far as possible unemployed persons should be given work at their own jobs. It is not of course certain that it has always been possible to do this.

Another feature of many relief works is the institution of a relay system. Men are engaged for a short time and are then turned off, irrespective of their efficiency, in favour of other men, so as to give as many of the unemployed as possible a chance of employment. This relay system is a feature of the productive unemployment relief in Germany, for instance, and it has also formed part of some of the public works undertaken in Great Britain since the war. The result of the system is that the men have no interest in the work they are doing except to make the job last as long as they can so that when their turn comes round again there may still be work for them to do.

In the Irish Free State the Committee on the Relief of Unemployment appointed by the Government, which made its final report on 13 February 1928, came to the following conclusion on the subject of relief works:

The evidence which we have taken from various witnesses goes to show that relief works are generally demoralising and excessively costly. By relief works we mean works of a public nature undertaken for the immediate relief of distress and unemployment. These works have been carried out in past years for the most part by the local authorities, generally with the aid of relief grants made available for the purpose by a vote of the Dáil. In order to spread the relief over as large a number of the unemployed as possible, local authorities have found it necessary to adopt a system of employing workers without any attempt at selection for short periods of a half-week, a week or a fortnight at a time, replacing them at the end of such periods by other workers in need of employment. The inevitable result of such a system is that the output of work is exceedingly poor. When it is borne in mind that a great number of the men employed on relief works are persons who have been idle for a considerable time, many of them in a state of semi-starvation or otherwise in poor physical condition, it will, we think, be agreed that employment for short terms on relief work can have nothing but unsatisfactory results.

A variation of the above system is to consider the relief works themselves as of so little intrinsic importance that they are abandoned as soon as there is alternative employment available for those employed on them. This is the case in Czechoslovakia and Finland for example.

The remuneration of workmen engaged on relief works is often regarded as a form of relief, and not as wages, and is therefore less
than that customarily paid for the same kind of work, a system to which there are obvious objections. In the first place, if the work would be done in any case, and has merely been advanced in time, it is unfair competition with men who might have been engaged in the ordinary way at normal wages; in the second place, it is a cause of inefficiency, and the work will either be badly done or will take longer to do than it should have done, thus costing more in the long run. This system was applied in Germany in the earlier stages of the productive unemployment relief scheme, but was later abandoned.

A variation of this system is the payment of wages at a rate lower than that customary in the district for the same kind of work. This was done in Great Britain for certain kinds of work. Thus it was laid down in the Regulations of 1923 that where the local authority undertook the work by direct labour, the rate of wages for unskilled labourers must for a probationary period of six months not exceed 75 per cent. of the local authority’s lowest rate for unskilled labour for the particular class of work undertaken, or 87½ per cent. of such rate if the men were employed for an average of not more than three days per week. This system was abolished in 1924.

In New Zealand the Industrial Conciliation and Arbitration Act, 1925, contains a clause (155b) to the effect that the provisions of any award or industrial agreement, or any agreement entered into under the Labour Disputes Investigation Act, 1913, shall not apply to or affect any local authority or public body in respect of any relief work carried out by special resolution of such local authority or public body. This means that the wages paid on relief works may be less than those customarily paid. It appears, in fact, that this provision has been applied in certain cases, particularly by the Wellington City Council in connection with the building of the approaches to the Victoria tunnel in 1928-1929.¹

Finally, reference should be made to the fact that relief works carried out under conditions such as those mentioned above are more costly than public works carried out under ordinary commercial conditions of employment. This is noted by the Danish and Finnish Governments in their communications to the International Labour Office. The Danish Government states, for instance, that recourse to relief works has not been very widespread, and

¹ New Zealand Worker, 22 Jan. 1930.
the reason given is that the special conditions applying to these works may hamper their organisation by making them more expensive than if they were carried out under ordinary conditions. In addition, the 15 per cent. deduction from wages which has to be paid into the Unemployment Fund makes the workers disinclined to engage in such work. Many communes which have wished to place works in hand to counteract unemployment have therefore preferred to organise them without subsidies and under the ordinary conditions, but in this case no general survey of the works in question is available.

Increased cost is also caused by the fact that relief works are frequently required in the winter, and in many countries winter construction work is more expensive than the same work would be if done in summer. On this point the Finnish Government writes that the increased cost of relief works was due partly to the winter season,

. . . . the earth being frozen in this northern climate to a very considerable depth, and partly to the fact that the workers employed were not skilled in the kind of work they were called upon to perform. The work undertaken on the railways was carried out at normal cost, as skilled workers were available, but in one case, where preparatory work for the enlargement of a railway station was undertaken, the cost was as much as 50 per cent. above what it would have been in the normal season. Further, winter work on canals, harbours and bridges was found to be considerably more costly than would have been the case in summer. Quarrying and stone-breaking for building purposes is work usually carried out during the winter, but the extra cost involved where unskilled workers were employed was approximately 20 per cent. Work on the roads in winter instead of summer cost 10 to 20 per cent. more in South Finland, and 25 per cent. more in the interior. In the north, work on the foundations of buildings was found to cost 48 per cent. more than if the work had been postponed for two or three months. Where canal digging had to be done by machinery, it was found that when unskilled workers were employed costs increased as much as 100 per cent. On the whole, the Ministry of Public Works was of the opinion that where work usually performed in summer had to be performed in winter by workers such as factory workers, unused to working in the open and to the kind of work involved, costs were increased by 30 to 50 per cent.

Generally speaking, it would appear possible to say that relief works as described above are undesirable and have more disadvantages than advantages.

There still remain, however, public works of undoubted utility which would be undertaken in any case and which are merely advanced in time owing to the prevalence of unemployment, including special measures the main object of which is the general
development of the country concerned, and which are put in hand at a particular moment because of unemployment. Such works can be undertaken by labour recruited in the ordinary way through the employment exchanges, receiving wages at the customary rate and enjoying security of tenure for the duration of the job except in the case of inefficiency. Workmen engaged under these conditions can no longer be considered as unemployed workmen, and their names are therefore removed from the registers of the employment exchanges.

To wait until the situation develops into a crisis before taking steps to elaborate a programme of public works is not of course advance planning. As a rule in such cases the plans are not ready, the money has to be voted by Parliament or some other elected body, and there are so many delays of one kind or another that it is almost impossible to put the public works in hand at all at the time when they are most needed. But if the depression is rather long-lived, a policy of this kind is undoubtedly a valuable means of providing employment for a number of men and women who would otherwise be unemployed, and of helping materially an industrial revival. Such measures have been adopted in many countries both before and since the war and some of the latter are described in the following pages. It is, of course, impossible to make such a record complete, and the particulars contained in the following pages must be taken merely as examples of what has been accomplished. Practically nothing is said of the numerous measures adopted in the latter part of 1930, because the information arrived too late. Details of these measures can be found in various issues of Industrial and Labour Information ¹.

AUSTRALIA

In Australia in order to provide employment during periods of acute unemployment, an endeavour is generally made by the State Governments to expedite the putting in hand of public works by providing special votes to be expended on relief works. The necessity for such action is generally brought to the notice of the Governments by deputations representing the unemployed.

In addition to providing employment on special relief works, the Governments urge such local bodies as road boards, water and sewerage boards, and local authorities generally to endeavour to relieve distress by putting in hand any available work. Municipal councils and other local authorities frequently proceed with road construction and other

¹ See, for instance, Vol. XXXV, Nos. 2 and 6, and Vol. XXXVI, Nos. 2 and 6.
important work, the cost of which is paid for in co-operation with the
Government on a £1 for £1 basis, that is, for every £1 expended by
the local authority, the Government advance £1. The adoption of
this plan for providing funds has enabled large numbers of men to be
given temporary employment on works which otherwise would have
been deferred.

In New South Wales the public works policy is conditioned by
the development needs and financial resources of the State during any
year rather than by considerations of counteracting fluctuations of
private business. It is, however, applied through a programme designed
to absorb as many as possible of the unemployed. The public works
which have been undertaken in times of severe unemployment have
included the construction of railways, tramways, roads, bridges, harbour
works, electrical works, sewerage and storm water channels, water
supplies, irrigation, the levelling of Crown lands for building sites,
scrub clearing, etc.

In South Australia public works have been undertaken during
periods of unemployment at different times by the Government of
the day. They have consisted of the construction of railways, roads,
embankments, reservoirs, water reticulation, irrigation and reclamation
works, and renovation of buildings.

In Tasmania, the expenditure of such moneys as are available
within a reasonable distance of the localities in which unemployment
is severe is expedited. A number of road works have thus been under-
taken.

In Queensland, the Government has endeavoured at times of exces-
sive unemployment to relieve the position by creating employment
opportunities which in other circumstances might have remained in
abeyance or been deferred. The works put in hand have been mainly
railway construction and maintenance, main road work.

In Parliamentary debates which took place in South Australia,
Western Australia, and Victoria early in 1929, expression was given
to a general desire to provide work for the unemployed by means of
relief works and development schemes. The main suggestions put
forward so far as public works are concerned related to railway develop-
ment, especially in South Australia, land settlement by the improve-
ment of transport, cultivation and irrigation, the building of roads as
feeders to existing railways, and the development of hydro-electric
power in harbour works in Adelaide and Brisbane. Partly influenced,
no doubt, by the clearly expressed opinion of the British Economic
Mission to Australia that the Australian Governments should proceed
very cautiously in the matter of the initiation of new schemes involving
expenditure of borrowed money and should submit them to the most
rigorous scrutiny with a view to their being self-supporting at a rea-
sonably early stage, the Parliaments hesitated to vote supplies for several
of the works suggested. The Opposition in some States urged that
relief works provided no solution for unemployment, and in other

1 COMMONWEALTH BUREAU OF CENSUS AND STATISTICS: Labour Report,
1928, No. 19.
States urged the Government to increase public works beyond the programme they had suggested 1.

The Federal Government seems during the severe unemployment crisis of 1929-1930 to have decided against a policy of relief works, but in favour of pushing on with useful public works. It was announced in the press of 26 November 1929 that the Federal Government had decided not to start any unnecessary public works as it was believed that they did not improve the position permanently, but tended to accentuate it eventually. On the other hand, there would be no wholesale dismissals from the Government departments, and where useful work could be found in those departments, it would be authorised, but it must be of real value to the country. It was understood that extensions of telegraph, telephone, and postal facilities generally were among the works which the Government had in mind 2.

AUSTRIA

In Austria no legislative measures have been adopted either to postpone works to a period of unemployment or to accelerate works which would normally have been put in hand at a later date. In this connection it should be remembered that Austria has suffered from severe unemployment ever since the end of the war, so that a systematic planning of public works has not been possible. The Government has had to face considerable economic and administrative difficulties, but it has made every effort to carry out a programme of public works by making the necessary funds available, taking particularly into account the fact that unemployment is most severe during the winter months. There is a lack of statistical data concerning public works other than those undertaken in connection with the unemployment insurance scheme, which will be dealt with later, and this is to be regretted because the amounts advanced by the Federal Government for the carrying out of such works are considerably greater than those provided for by “productive insurance”.

The amounts spent by the State in such public works during the last few years have been as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1926</td>
<td>157,696,510</td>
</tr>
<tr>
<td>1927</td>
<td>179,786,150</td>
</tr>
<tr>
<td>1928</td>
<td>181,107,985</td>
</tr>
</tbody>
</table>

These works consisted principally of dredging and the maintenance and construction of roads and railways.

Apart from the works just referred to, public works in Austria are closely bound up with the unemployment insurance scheme, and for the most part consist of the so-called “productive insurance”.

---

1 Parliamentary Debates, South Australia, Fourth Session, Nos. 5, 6, 8 ; Victoria, Second Session, Nos. 1, 2, 3 and 4 ; Western Australia, Fifth Session, No. 1.
2 Melbourne Age, 26 Nov. 1929.
The original Act of 24 June 1920 concerning unemployment insurance did not contain any provisions with regard to "productive unemployment insurance"; these provisions were added by the Fifth Amendment dated 29 July 1922, and subsequently modified and supplemented by the sixth, eleventh and thirteenth amendments. According to section 29 of this Act:

If a financial subsidy would make it possible to take in hand works of public utility which would otherwise not be undertaken and which would supply fresh opportunities for work for the unemployed who would otherwise be in receipt of benefits under this Act, the Federal Ministry of Social Administration in agreement with the Federal Ministry of Finance, may make loans or grants for this purpose (productive provision for the unemployed) on the proposal of the appropriate Industrial District Commission at the place of work. The sums used for loans and grants less the sums repaid shall be included in the total expenditure of unemployment benefit.

According to this system a certain proportion of the funds set aside for unemployment insurance is reserved for the execution of public works instead of being distributed to the unemployed in the form of benefit. Its object is to provide fresh opportunities for unemployment by means of relief works. Thus the necessary financial aid is only granted on condition that unemployed workers who would otherwise be a charge on the unemployment insurance fund are absorbed.

There are certain restrictions in the application of the system. The employment of workers who do not come under the provisions of the Unemployment Insurance Act is permitted only in exceptional cases. Further, the work must be of public utility, and grants are only made in cases where the work would not otherwise be carried out. Moreover, grants are not made unless the work planned will absorb at least twenty unemployed workers, or if the time the work will take cannot be calculated in advance, or will take too long to be financed otherwise. Where, however, importation of raw materials, particularly coal, is involved, these latter restrictions are less strictly applied.

There are also restrictions concerning the amount of the grant which must not as a rule exceed the amount saved on account of unemployment insurance benefit; grants of a larger amount may however be made up to a quarter of the total expenditure on unemployment insurance. In fact, grants and loans were fixed in practice on a basis of 2 schilling per day per worker. This was raised to 3 schilling per day by the Decree of 19 May 1927.

Finally it should be noted that according to section 29 of the Unemployment Insurance Act mentioned above, grants may as a general rule only be accorded to provinces, districts or communes, as the funds at the disposal of unemployment relief would hardly be

---

1 Legislative Series, 1922, Austria 7.
2 See Regulations dated 12 May 1924 issued by the Ministry of Social Administration with regard to the allocation of grants provided for by section 29 of the Unemployment Insurance Act as analysed by Dr. Max Lederer and Dr. Viktor Suchanek in Arbeit urecht und Arbeiterschutz, Vienna, 1925.
3 Arbeit und Wirtschaft, 1 July 1927.
4 Amtliche Nachrichten, May and Dec. 1923.
sufficient for the demands which might be made upon them by a large number of private contractors, and employers might not always be in a position to give the necessary guarantees for the employment of a sufficient number of unemployed workers. This constitutes an important restriction on the development of the policy of public works.

Section 30 of the Unemployment Insurance Act provides for grants to private enterprises, but these grants do not apply to public works.

By Order of 24 February 1930 the Federal Ministry of Social Administration decided in agreement with the other Ministries concerned that unemployed workers should be employed on all works carried out on behalf of the Government or in receipt of Government subsidies. The Industrial District Commissions and employment offices are instructed to pay special attention to this matter and to take steps to establish the necessary relations with contractors and to prevent the employment of agricultural labourers. The contractor is obliged to take 50 per cent. of his workmen for the works in question from among the unemployed, and these workers are to be obtained through the employment offices. The other 50 per cent. he can recruit as he likes, but it is intended that these workers shall be mainly skilled workers. The Industrial District Commissions are now able to insist that in the cases mentioned unemployed workers shall be employed almost exclusively. The works with Government subsidy referred to in the Order include all those carried out either by the Federal Government or by other public bodies, whether undertaken by direct labour or through a contractor (roads, bridges, railways, surveying, laying of cables, waterways, afforestation, etc.). Only those works which receive a subsidy of less than 5 per cent. are excluded from the provisions of the Order.

The policy of public works in connection with productive insurance has not permitted the application of the principle to such an extent as to prevent unemployment altogether, but the adoption of the scheme has almost certainly prevented an even greater depression in the labour market than that which actually took place.

Productive insurance which was introduced in 1922 did not give satisfactory results until 1925. Although the amount available was equal to one-quarter of the total expenditure on unemployment insurance, the claims made seldom exceeded a hundredth part of that expenditure, its development being hampered by the restrictions mentioned above. Public works in Austria are normally carried out by the provincial, municipal and communal authorities, but during the first few years after the introduction of productive insurance, the financial situation of these bodies did not enable them to contract loans for any considerable amount. Moreover, owing to the compli-

1 *Arbeit und Wirtschaft*, 1 April 1930.
3 *Amtliche Nachrichten*, May and Dec. 1923.
cated procedure necessary to obtain loans, it was impossible to take decisions promptly for the rapid putting in hand of work. The procedure was therefore simplified by a new law adopted in 1924.

TABLE VI. — NUMBER OF WORKERS EMPLOYED ON PUBLIC WORKS UNDER THE PRODUCTIVE INSURANCE SCHEME EXPRESSED AS A PERCENTAGE OF THE NUMBER OF WORKERS IN RECEIPT OF BENEFIT

<table>
<thead>
<tr>
<th>Month</th>
<th>1923</th>
<th>1924</th>
<th>1925</th>
<th>1926</th>
<th>1927</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>0.7</td>
<td>0.6</td>
<td>0.3</td>
<td>0.3</td>
<td>0.2</td>
<td>0.4</td>
</tr>
<tr>
<td>February</td>
<td>0.8</td>
<td>0.1</td>
<td>1.2</td>
<td>0.5</td>
<td>0.8</td>
<td>0.6</td>
</tr>
<tr>
<td>March</td>
<td>4.0</td>
<td>0.1</td>
<td>2.5</td>
<td>1.9</td>
<td>0.8</td>
<td>1.9</td>
</tr>
<tr>
<td>April</td>
<td>0.6</td>
<td>0.3</td>
<td>1.5</td>
<td>0.7</td>
<td>1.8</td>
<td>1.0</td>
</tr>
<tr>
<td>May</td>
<td>0.3</td>
<td>1.0</td>
<td>1.7</td>
<td>1.3</td>
<td>0.8</td>
<td>1.0</td>
</tr>
<tr>
<td>June</td>
<td>3.2</td>
<td>1.1</td>
<td>1.6</td>
<td>1.1</td>
<td>0.9</td>
<td>1.6</td>
</tr>
<tr>
<td>July</td>
<td>7.3</td>
<td>0.9</td>
<td>7.3</td>
<td>0.7</td>
<td>0.6</td>
<td>3.4</td>
</tr>
<tr>
<td>August</td>
<td>0.3</td>
<td>0.1</td>
<td>0.3</td>
<td>0.7</td>
<td>1.1</td>
<td>0.5</td>
</tr>
<tr>
<td>September</td>
<td>0.8</td>
<td>0.5</td>
<td>0.6</td>
<td>0.7</td>
<td>1.2</td>
<td>0.8</td>
</tr>
<tr>
<td>October</td>
<td>1.9</td>
<td>0.8</td>
<td>0.5</td>
<td>1.0</td>
<td>1.3</td>
<td>1.1</td>
</tr>
<tr>
<td>November</td>
<td>1.1</td>
<td>0.4</td>
<td>1.2</td>
<td>0.6</td>
<td>0.7</td>
<td>0.8</td>
</tr>
<tr>
<td>December</td>
<td>0.3</td>
<td>3.8</td>
<td>0.1</td>
<td>0.7</td>
<td>0.2</td>
<td>1.0</td>
</tr>
<tr>
<td>Average</td>
<td>1.7</td>
<td>0.9</td>
<td>1.6</td>
<td>0.8</td>
<td>0.8</td>
<td>1.2</td>
</tr>
</tbody>
</table>

The table given above shows the development of productive insurance as compared with fluctuations in the labour market. The ratio of the number of workmen engaged on public works to the number in receipt of benefit varies considerably; in other words, a far larger proportion of the unemployed are engaged on public works at certain times of the year than at others, and this fact may be explained by the influence of seasonal fluctuations on the labour market and on the method of application of the public works policy. In the summer, diminished unemployment coincides with increased activity with regard to public works, whereas in winter, on the contrary, the period of severe unemployment is accompanied by a total or partial suspension of the public works programme.

The seasonal factor is particularly important in Austria because it is the object of productive insurance to absorb the greatest number of unemployed and every effort is therefore made to avoid the use of the available funds on works which call for the expenditure of considerable sums on material or for other overhead charges. The works, however, which are the most economic from this point of view are road-making and repairing, dredging, etc., which it is difficult to carry out in winter owing to weather conditions.

1 Act of 5 Dec. 1924 (thirteenth amendment to the Unemployment Insurance Act).
TABLE VII. — ACTIVITY OF PRODUCTIVE INSURANCE FROM OCTOBER 1922 TO DECEMBER 1927

<table>
<thead>
<tr>
<th>Period</th>
<th>Number of works</th>
<th>Number of unemployed engaged</th>
<th>Number of days of work</th>
<th>Amount of expenditure (million kr.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1922:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4th quarter</td>
<td>7</td>
<td>1,499</td>
<td>122,942</td>
<td>1,465.5</td>
</tr>
<tr>
<td>1923:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st quarter</td>
<td>41</td>
<td>8,849</td>
<td>621,688</td>
<td>6,613,336</td>
</tr>
<tr>
<td>2nd quarter</td>
<td>68</td>
<td>4,109</td>
<td>304,354</td>
<td>3,262,562</td>
</tr>
<tr>
<td>3rd quarter</td>
<td>55</td>
<td>7,248</td>
<td>492,104</td>
<td>5,592,976</td>
</tr>
<tr>
<td>4th quarter</td>
<td>56</td>
<td>2,747</td>
<td>300,239½</td>
<td>4,128,315</td>
</tr>
<tr>
<td>Total</td>
<td>220</td>
<td>22,953</td>
<td>1,718,385½</td>
<td>19,597,189</td>
</tr>
<tr>
<td>1924:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st quarter</td>
<td>539</td>
<td>991</td>
<td>74,504</td>
<td>1,007,940</td>
</tr>
<tr>
<td>2nd quarter</td>
<td>66</td>
<td>1,709</td>
<td>223,694</td>
<td>5,127,120</td>
</tr>
<tr>
<td>3rd quarter</td>
<td>44</td>
<td>1,089</td>
<td>140,502</td>
<td>4,073,236</td>
</tr>
<tr>
<td>4th quarter</td>
<td>71</td>
<td>7,118</td>
<td>1,912,099</td>
<td>21,988,565</td>
</tr>
<tr>
<td>Total</td>
<td>220</td>
<td>10,907</td>
<td>2,350,699</td>
<td>32,196,861</td>
</tr>
<tr>
<td>1925:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st quarter</td>
<td>148</td>
<td>7,550</td>
<td>820,946</td>
<td>2,407,187½</td>
</tr>
<tr>
<td>2nd quarter</td>
<td>158</td>
<td>6,647</td>
<td>615,836</td>
<td>1,848,292½</td>
</tr>
<tr>
<td>3rd quarter</td>
<td>92</td>
<td>9,774</td>
<td>2,566,525</td>
<td>2,831,642½</td>
</tr>
<tr>
<td>4th quarter</td>
<td>114</td>
<td>3,061</td>
<td>286,615</td>
<td>701,660</td>
</tr>
<tr>
<td>Total</td>
<td>512</td>
<td>26,932</td>
<td>4,289,922</td>
<td>7,788,782½</td>
</tr>
<tr>
<td>1926:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st quarter</td>
<td>140</td>
<td>5,881</td>
<td>718,279</td>
<td>1,424,475½</td>
</tr>
<tr>
<td>2nd quarter</td>
<td>131</td>
<td>5,025</td>
<td>653,533</td>
<td>1,553,960½</td>
</tr>
<tr>
<td>3rd quarter</td>
<td>116</td>
<td>3,415</td>
<td>485,664</td>
<td>1,069,528½</td>
</tr>
<tr>
<td>4th quarter</td>
<td>135</td>
<td>4,141</td>
<td>1,869,601½</td>
<td>2,463,336½</td>
</tr>
<tr>
<td>Total</td>
<td>522</td>
<td>18,462</td>
<td>3,736,977½</td>
<td>6,211,287½</td>
</tr>
<tr>
<td>1927:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st quarter</td>
<td>141</td>
<td>3,741</td>
<td>899,388</td>
<td>1,819,702</td>
</tr>
<tr>
<td>2nd quarter</td>
<td>194</td>
<td>6,094</td>
<td>568,167½</td>
<td>1,352,693½</td>
</tr>
<tr>
<td>3rd quarter</td>
<td>189</td>
<td>3,969</td>
<td>514,477½</td>
<td>1,194,209½</td>
</tr>
<tr>
<td>4th quarter</td>
<td>195</td>
<td>3,472</td>
<td>565,966</td>
<td>1,487,563½</td>
</tr>
<tr>
<td>Total</td>
<td>719</td>
<td>17,276</td>
<td>2,547,998</td>
<td>6,854,167½</td>
</tr>
</tbody>
</table>

Table VII shows the general development of productive insurance, from which it will be seen that this reached its height in 1925 and that since then, although the number of works undertaken has increased, the number of workers employed on the works has decreased and the total amount of loans granted has been far below the maximum allowed by the law.

The above figures may be compared with the total number of unemployed in receipt of benefit during the same period.
TABLE VIII. — NUMBER OF UNEMPLOYED IN RECEIPT OF BENEFIT
JANUARY 1923 TO DECEMBER 1927

<table>
<thead>
<tr>
<th>Month</th>
<th>1923</th>
<th>1924</th>
<th>1925</th>
<th>1926</th>
<th>1927</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>187,417</td>
<td>125,783</td>
<td>189,919</td>
<td>228,783</td>
<td>244,257</td>
</tr>
<tr>
<td>March</td>
<td>152,828</td>
<td>106,914</td>
<td>176,441</td>
<td>202,394</td>
<td>208,348</td>
</tr>
<tr>
<td>April</td>
<td>132,226</td>
<td>82,525</td>
<td>148,434</td>
<td>173,115</td>
<td>181,175</td>
</tr>
<tr>
<td>May</td>
<td>107,965</td>
<td>68,969</td>
<td>130,786</td>
<td>154,821</td>
<td>158,322</td>
</tr>
<tr>
<td>June</td>
<td>92,789</td>
<td>63,556</td>
<td>118,366</td>
<td>150,981</td>
<td>145,136</td>
</tr>
<tr>
<td>July</td>
<td>87,155</td>
<td>66,457</td>
<td>117,183</td>
<td>152,495</td>
<td>136,909</td>
</tr>
<tr>
<td>August</td>
<td>83,890</td>
<td>74,191</td>
<td>116,365</td>
<td>151,054</td>
<td>135,938</td>
</tr>
<tr>
<td>September</td>
<td>79,289</td>
<td>77,550</td>
<td>119,004</td>
<td>148,111</td>
<td>129,948</td>
</tr>
<tr>
<td>October</td>
<td>75,810</td>
<td>89,016</td>
<td>130,021</td>
<td>151,183</td>
<td>127,352</td>
</tr>
<tr>
<td>November</td>
<td>79,290</td>
<td>113,484</td>
<td>159,250</td>
<td>168,757</td>
<td>159,783</td>
</tr>
<tr>
<td>December</td>
<td>98,050</td>
<td>154,491</td>
<td>207,834</td>
<td>205,350</td>
<td>207,120</td>
</tr>
</tbody>
</table>

The period under consideration is perhaps too short to permit of precise conclusions being drawn. Nevertheless, it may be said that the development of the policy of public works has not followed the development of the labour market very closely.

Table IX shows the works undertaken under the system of productive insurance classified into categories. It will be seen that the greater part of the public works carried out consists of road maintenance and dredging.

Besides the initiative taken by the Federal Government several towns have put building work in hand with a view to diminishing unemployment, but this activity has not been very satisfactory owing to unfavourable economic and financial conditions.

CANADA

In Canada, on 7 October 1921, when unemployment was severe, an Order-in-Council was issued (P. C. 3831) providing for the Federal Government’s participation in the case of work specially undertaken by municipalities during the winter season to relieve unemployment, the Federal Government undertaking to bear one-third of the actual disbursement of the municipalities in excess of the estimated cost of the undertaking during the normal working season, the Federal grant being made conditional on the provinces participating on an equal basis. The Order-in-Council laid down certain principles as a basis for the Federal grant: (1) that unemployment relief is primarily a municipal responsibility; (2) that owing to the situation in 1921 being due to causes beyond the power of local or even national control, the provincial and Federal Governments should co-operate with the municipal authorities in helping to create and provide employment and aiding in the provision of food and shelter for unemployed workers and their dependants; and (3) that Federal funds used for unemployment relief or for relief work must be disbursed only through responsible municipal authorities.
### TABLE IX. WORKS CARRIED OUT UNDER THE PRODUCTIVE INSURANCE SCHEME

<table>
<thead>
<tr>
<th>Period</th>
<th>Roads and gravel quarrying: Percentage of workers employed</th>
<th>expenditure</th>
<th>Works carried out owing to floods: Percentage of workers employed</th>
<th>expenditure</th>
<th>Building works: Percentage of workers employed</th>
<th>expenditure</th>
<th>Hydraulic works: Percentage of workers employed</th>
<th>expenditure</th>
<th>Works on railways: Percentage of workers employed</th>
<th>expenditure</th>
<th>Other works: Percentage of workers employed</th>
<th>expenditure</th>
<th>Total: Percentage of workers employed</th>
<th>expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1922 (4th quarter)</td>
<td>8.3</td>
<td>10.1</td>
<td>13.3</td>
<td>14.3</td>
<td>2.0</td>
<td>1.7</td>
<td>74.8</td>
<td>73.8</td>
<td>-</td>
<td>-</td>
<td>1.6</td>
<td>0.1</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1923</td>
<td>14.6</td>
<td>11.0</td>
<td>24.9</td>
<td>32.5</td>
<td>7.9</td>
<td>5.7</td>
<td>7.4</td>
<td>11.7</td>
<td>1.3</td>
<td>3.1</td>
<td>43.9</td>
<td>36.0</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1924</td>
<td>12.1</td>
<td>10.2</td>
<td>18.2</td>
<td>13.7</td>
<td>18.1</td>
<td>15.9</td>
<td>5.7</td>
<td>7.8</td>
<td>-</td>
<td>-</td>
<td>45.9</td>
<td>52.4</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1925</td>
<td>31.3</td>
<td>26.7</td>
<td>14.5</td>
<td>14.7</td>
<td>13.4</td>
<td>15.1</td>
<td>5.7</td>
<td>8.2</td>
<td>4.6</td>
<td>3.8</td>
<td>30.5</td>
<td>31.5</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1926</td>
<td>47.5</td>
<td>33.1</td>
<td>25.8</td>
<td>26.6</td>
<td>12.2</td>
<td>7.2</td>
<td>5.4</td>
<td>5.4</td>
<td>4.8</td>
<td>2.1</td>
<td>4.3</td>
<td>25.6</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1927</td>
<td>47.3</td>
<td>47.6</td>
<td>21.8</td>
<td>21.8</td>
<td>22.7</td>
<td>17.5</td>
<td>8.0</td>
<td>5.4</td>
<td>-</td>
<td>7.4</td>
<td>0.2</td>
<td>0.3</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Average 1923-27</td>
<td>30.6</td>
<td>25.7</td>
<td>21.1</td>
<td>21.9</td>
<td>14.9</td>
<td>12.3</td>
<td>6.4</td>
<td>7.7</td>
<td>2.1</td>
<td>3.3</td>
<td>24.9</td>
<td>29.1</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
A further Order-in-Council of 25 January 1922 (P. C. 191) continued the above system with certain modifications. For instance, in the case of relief work undertaken by a municipality, the Federal proportion of the excess cost was increased to 50 per cent., payment of the Federal grant being conditional on the province assuming the responsibility for only one-sixth of the excess expenditure. It was further stated in this Order-in-Council that municipal undertakings in the nature of public works were important factors in meeting unemployment conditions, but that such undertakings could not be proceeded with during the winter months save at a considerably increased cost, which was in many cases beyond the financial resources of the municipalities.

On 2 March 1926, an Order-in-Council was issued (P. C. 315) providing for Federal assistance to the extent of one-third of the excess cost of work undertaken by municipalities to provide employment, effective from 1 January 1926 to 31 March 1926, on the following basis: (a) municipalities to bear the normal cost, that is to say, the cost of carrying on the said work in the normal working season; (b) estimate of normal cost to be approved by the Federal Government’s engineers in the Department of Public Works; and (c) that municipal, provincial and Federal grants bear equally and jointly the actual cost over the estimated normal cost, thereby encouraging the creation of employment where possible.

In the Province of Quebec, steps have been taken at various times to lessen winter unemployment among lumber workers by allowing a temporary reduction of the timber dues levied by the Provincial Government on the exploitation of timber on Crown lands. In this way it was possible, for example, in the winters of 1921 and 1922, to encourage the cutting of timber during the winter months, and thus ensure the provision of work for numbers of lumbermen who would otherwise have been unemployed.

In May 1919, Mr. W. Clifford Clark, of Queen’s University, sent a questionnaire to fifty Canadian cities, and from thirty-six replies learned that at least eight of these cities construct sewers or water-mains during the winter months as a definite policy. Thirteen of the other cities had adopted this plan on occasion to relieve unemployment. The kinds of work pronounced highly or fairly successful in winter were sewer work in rock, tunnelling, deep excavating, heavy cuts and fills in grading work, concrete construction in large bulk (such as heavy bridge abutments), and construction work in swamp sections where sub-surface water prevails. The degree of success is often dependent on preparation made before the ground is frozen, especially in some construction work where shafts should be sunk before the extreme cold weather.

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1 Labour Gazette, May 1928.
CZECHOSLOVAKIA

In Czechoslovakia public works have been organised as a part of the unemployment relief scheme. Works of public utility carried out in accordance with the Act of 17 October 1919 (No. 569 of the Collection of Laws and Orders) and with a decision of the Permanent Committee of the National Assembly of 1 December 1920 (No. 519 of the Collection of Laws and Orders) were intended to provide an opportunity of employment for unemployed workmen during the serious unemployment crisis prevailing at that time.

Under the Act of 17 October 1919, public works of considerable importance were undertaken, and the employment made available in that way was of fairly long duration. The workmen on these works received wages, and the State made a grant to the contractor for each workman who would otherwise have been entitled to unemployment benefit; this grant equalled two-thirds of the customary local wage.

On the other hand, the works carried out as a result of the decision of 1 September 1920 were confined to matters of small importance — as, for instance, clearing away snow, the unloading of firewood for the public offices, the cleaning of roads, etc. These works only afforded a relatively small amount of employment for the unemployed. Every unemployed workman who was entitled to relief from the State was obliged to carry out any of the above-mentioned works to which he was assigned without having the right to any additional payment.

The measures referred to above came to an end on 1 April 1925, when the Act of 19 July 1921 (No. 267 of the Collection of Laws and Orders) concerning the payment of unemployment benefit by occupational organisations came into force.

Tables X and XI show the kind of work carried out.

**Table X. — Summary of the Public Works Carried Out in Accordance with the Decision of the Permanent Committee of the National Assembly on 1 September 1920**

<table>
<thead>
<tr>
<th>Year</th>
<th>Quarter</th>
<th>Average daily number of unemployed engaged on the works</th>
<th>Number of days of work performed by the unemployed workmen during the quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1921</td>
<td>I</td>
<td>2,464</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>9,104</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>9,523</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>5,299</td>
<td>7</td>
</tr>
<tr>
<td>1922</td>
<td>I</td>
<td>5,635</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>5,476</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>4,002</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>8,382</td>
<td>19</td>
</tr>
<tr>
<td>1923</td>
<td>I</td>
<td>14,348</td>
<td>15½</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>8,450</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>4,324</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>4,440</td>
<td>15</td>
</tr>
<tr>
<td>1924</td>
<td>I</td>
<td>6,882</td>
<td>11½</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>2,991</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>959</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>1,291</td>
<td>22½</td>
</tr>
<tr>
<td>1925</td>
<td>I</td>
<td>1,662</td>
<td>12½</td>
</tr>
</tbody>
</table>
TABLE XI. — WORKS OF PUBLIC UTILITY UNDERTAKEN IN ACCORDANCE WITH THE ACT OF 17 OCTOBER 1919

<table>
<thead>
<tr>
<th>Year</th>
<th>Quarter</th>
<th>Number of works of public utility</th>
<th>Average daily number of unemployed engaged on the works</th>
<th>Total amount of State subsidy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>I</td>
<td>186</td>
<td>3,000</td>
<td>1,545,013.46</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>III</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1921</td>
<td>I</td>
<td>150</td>
<td>3,964</td>
<td>1,994,779.00</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>175</td>
<td>5,681</td>
<td>1,475,381.00</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>136</td>
<td>3,400</td>
<td>1,685,222.00</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>140</td>
<td>4,227</td>
<td>1,916,025.00</td>
</tr>
<tr>
<td>1922</td>
<td>I</td>
<td>150</td>
<td>4,100</td>
<td>1,885,612.48</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>215</td>
<td>7,116</td>
<td>3,078,491.00</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>210</td>
<td>8,441</td>
<td>4,290,902.00</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>241</td>
<td>10,979</td>
<td>5,294,455.00</td>
</tr>
<tr>
<td>1923</td>
<td>I</td>
<td>380</td>
<td>14,525</td>
<td>6,488,479.00</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>691</td>
<td>23,156</td>
<td>11,295,294.00</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>749</td>
<td>24,551</td>
<td>13,919,496.00</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>771</td>
<td>25,193</td>
<td>13,314,690.00</td>
</tr>
<tr>
<td>1924</td>
<td>I</td>
<td>665</td>
<td>23,873</td>
<td>10,670,784.98</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>999</td>
<td>28,284</td>
<td>13,596,565.54</td>
</tr>
<tr>
<td></td>
<td>III</td>
<td>945</td>
<td>24,265</td>
<td>16,338,634.85</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>880</td>
<td>21,016</td>
<td>15,769,330.58</td>
</tr>
<tr>
<td>1925</td>
<td>I</td>
<td>915</td>
<td>22,889</td>
<td>11,671,593.25</td>
</tr>
</tbody>
</table>

DENMARK

In Denmark the positive measures taken by the authorities for the promotion of public, and to some extent also private, works in periods of unemployment have found expression in the following Acts and administrative regulations:

(a) Act of 12 March 1915 on the creation of a provisional loan fund for communes which, in accordance with section 1, aimed at providing loans for communes, among other things, for "works intended mainly to relieve unemployment".

(b) Appointment in 1917 of the "1917 Labour Committee of the Ministry of the Interior", whose duty it was "to promote the organisation of works to counteract unemployment, by the State authorities and communes, and also private persons".

(c) Act No. 48 of 5 February 1918, Act No. 562 of 1 November 1918, Act No. 685 of 21 December 1918, and Act No. 362 of 30 June 1919 on State subsidies for communal works, etc.

(d) Act No. 694 of 22 December 1920 on State support for the organisation of works.

(e) Act No. 529 of 22 December 1921 on Employment Exchanges and Unemployment Insurance, etc. Section 32 of this Act contains provisions on relief works. Cf. Act No. 47 of 4 March 1924, section 32, and Act No. 151 of 1 July 1927 on Employment Exchanges and Unemployment Insurance, etc., section 30.

(f) Notification No. 31 of 1 February 1922 on relief works. Cf. Notification No. 122 of 31 March 1924, and Notification No. 242 of 19 September 1927.

(g) Act No. 295 of 1 December 1925 on measures for countering unemployment.

(h) Act No. 101 of 31 March 1926 on measures for maintaining employment in undertakings affected by the crisis.
The measures taken by the State in periods of unemployment to advance the organisation of works which normally would not have been placed in hand until later have consisted mainly in the provision of loans and the grant of State subsidies for carrying out the works in question.

By virtue of the Act of 12 March 1915, a loan fund was accumulated to the total amount of about 20 million kroner which was to be used for loans to the communes at 5 per cent. per annum, the redemption period being fixed at five years, and later being extended to eight years. Under the Act of 5 February 1918, this sum was increased to about 50 million kroner. By far the greater part of the fund was used to place in hand communal works, of which many were advanced for the special purpose of counteracting unemployment. The afore-mentioned Act of 1918 also empowered the communes to obtain a State subsidy towards the payment of 1½ per cent. interest a year on the amount of the loan. This subsidy could be granted not only in respect of the loans obtained from the State fund, but also of loans obtained in other ways. On the other hand, it could be granted only in respect of loans to be used for works which were deemed suitable for the relief of unemployment. The Acts of 1 November 1918, 21 December 1918, and 30 June 1919, prolonged the right to grant such subsidies and increased the amount of the subsidy to 2 per cent., 2 per cent., and 3 per cent., respectively, of the amount of the loan, such an increase having been made necessary by the rise in the rate of interest. If the work consisted in the construction of buildings with dwellings for the use of the less well-to-do sections of the population, even the first of these Acts empowered the granting of subsidies up to 2½ per cent. and 3 per cent., besides which the subsidies could be granted not only to communes but also to building societies, and, under certain conditions, to private house builders.

The Act of 22 December 1920 finally increased the subsidy for communal works to 4 per cent. a year for ten years, and, in addition, empowered the State to guarantee a large communal loan of about 70 million kroner to be used for unemployment works. On the other hand, this Act did not deal with house building, which since then has been made the subject of special legislation.

The incentive to organise works contained in these Acts was of great importance in the fight against the severe unemployment of 1918 to 1922, but on the other hand, owing to the nature of these works their direct use in the first place was only that of helping to reduce unemployment in building trades, among navvies, etc., and they were not of great importance in other industrial occupations. These works consisted of public buildings (schools, hospitals, administrative offices, gas works, electrical generating stations, almshouses, etc.), dwellings for the poorer section of the population, and especially the laying of streets, sewers, roads and other constructional work and drainage. In addition there was special relief work consisting almost entirely of road and other constructions, stone-crushing works, etc. The Government states that all these works benefited industry only to a slight extent.
Under the various laws already referred to State subsidies amounting in all to about 12 million kroner a year have been granted during eight to ten years for works entailing an aggregate expenditure of several million kroner.

Complete statistics of the extent of the works are not available, but it may be stated that from 1 September 1925 to 30 June 1926, 373 relief works were approved with something over 634,000 working days, and from 1 July 1926 to 31 March 1927 93 works with 70,000 working days were approved.

Relief works have also been undertaken in connection with the unemployment insurance scheme. When the Unemployment Insurance Act came up for revision in 1920-1921 the idea of relief works was introduced as a permanent feature and provision was made for the unemployment fund to be used under certain conditions for the granting of a subsidy towards the organisation of such works. Among the conditions it was provided that either lower hourly wages than those current in the locality concerned were to be paid, or the hours of work were to be reduced below the normal working period. Moreover, the employer was instructed to deduct 15 per cent. of the wages due on each pay-day and to send this sum to the Central Unemployment Fund. As the above regulations did not prove a sufficient incentive for the organisation of works, an Act of 1 December 1925 gave the treasury power to grant loans through the medium of the unemployment fund. The expenditure in 1926 and 1927 under this Act was about 4,640,000 kroner for loans for relief works, and about 1,985,000 kroner for loans for other undertakings, about 675,000 kroner for grants towards the cost of materials for relief works and about 475,000 kroner for other undertakings.

FINLAND

In Finland, the attention of Government departments, more particularly of the Office of Roads and Bridges and the Railway Board, was drawn by the Government early in 1927 to the desirability of carrying out their construction programmes so as to reserve the major part of the work for periods of unemployment. They were in fact instructed, in preparing their budgets, to submit to the Government two kinds of estimates: estimates of the cost of public works to be undertaken in times of depression, with a view to relieving unemployment, and estimates of the cost if the same works were carried out when the conditions on the labour market are favourable.

In practice cases have arisen where it has been considered necessary to anticipate the carrying out of certain work such as road improvements, the building of new roads, stone bridges and canals (undertaken by the Office of Roads and Bridges) quarrying and stone-breaking for building purposes, repairs to docks and harbours and the laying of foundations for buildings. On the railways preparatory work for the construction of new lines, which is, as a rule, done in the fine weather, has also

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1 See p. 101 above.
been deferred until the winter, advance orders have been placed for railway material and works put in hand which were not at the moment of immediate necessity. The work on roads, etc., has been mainly of an intermittent character being carried on over periods of a few months at a time and as long as credits were available, and the workers have usually been able to find other and better paid work, even before the termination of the work in hand. Operations have then been suspended until unemployment again occurred and the credits still being available have been used at a later date. In the case of more serious unemployment additional credits have in some cases been voted from unemployment relief funds to other departments for work already in the course of execution in order to permit of the employment of additional workers.

It is difficult to estimate the number and categories of workers thus employed as no record is kept. Those engaged on work in connection with roads and bridges are usually given unskilled work; with regard to skilled workers such as stone workers and others there has been no unemployment in their trades for the last few years. With regard to emergency relief work undertaken by the railways, about 150 stone workers and others have been employed for approximately three months during the winter; in 1925 376 workers were employed for six months on the construction of a new line, approximately 600 workers for four months on wood cutting, and about thirty workers for four months on the manufacture of nuts, bolts, etc.

The organisation of public works with reference to the labour market is governed by rules set forth by the Government. These rules have been modified from time to time. Those at present in force, supplemented by detailed instructions from the Ministry of Communications and Public Works, date from 25 July 1930, and provide for three kinds of public works:

(a) State relief works, which are paid for entirely by means of the unemployment credits, or works for which a sum has been allocated in the budget for the year in question and which would normally be carried out in summer, but which can also be carried out in winter provided the additional cost involved is met out of the unemployment credits;

(b) relief works organised by local authorities for which State subsidies may be granted up to half the total wages bill;

(c) local works organised in co-operation with private bodies and subsidised by the State.

According to the regulations, State relief works should consist preferably of road construction, railway construction and drainage work. They should, moreover, satisfy a number of conditions. In the first place they must be compatible with the public welfare and unimpeachable from the economic and agricultural standpoint. Thus, they should preferably not be such as are likely to be carried out in the near future by recourse to the open market. In other words, relief work must not interfere with the demand for labour in the ordinary labour market. In the second place they must be of such a nature that wages form a comparatively large proportion of the total cost. Works in which
the cost of material forms a large proportion of the total are therefore unsuitable for relief works. Thirdly, they must be such that their performance does not require any high degree of skill and of such nature that they can be carried out during periods of unemployment. Finally, in planning relief works preference must be given to those which can be extended or restricted according to fluctuations in the volume of unemployment and which can even be closed down.

Relief works organised by local authorities which apply for a subsidy out of the unemployment credits must satisfy the same conditions as State relief works. For this reason a subsidy is usually not granted for such work as the laying and repairing of sewers and water mains or for road work unless it is shown that the work is intended solely to relieve unemployment in the locality. Moreover, a local authority which wishes to obtain State assistance is required to have already taken all the measures for the relief of unemployment that may reasonably be expected of it in view of its economic situation, and to appoint an Unemployment Board which must keep a card index of unemployed workers in need of assistance.

The rate of wages paid on all relief works must be 20 per cent. below the wage rate usually paid in the locality to unskilled workers, but may be increased or reduced by 10 per cent. according to local conditions and the degree of skill of the worker in question. This, however, does not apply to skilled workers whose number is fixed by the central administrative department in respect of each project. The work must be done by contract whenever possible so that the work is given out to sub-contractors to be done by small gangs.

Among the conditions the workers must satisfy before being entered on the unemployed register are: that they are able and willing to work, that their economic position is so unfavourable that it makes it indispensable that the community should come to their assistance to ensure their livelihood, and that they are in need of assistance owing to unemployment for which they are not themselves responsible and which has lasted for at least 6 days. An unemployed worker who has become unemployed owing to a strike or lock-out may not be entered on the unemployed register.

FRANCE

In France, at the end of 1926, the Minister of Labour undertook, in co-operation with other public authorities, a sort of inventory of public works which might be speeded up in order to absorb the unemployed as quickly as possible. Thus, a circular dated 30 December 1926 requested the other Government departments to inform the Ministry of Labour of any important orders for work or material which might be placed immediately or in the course of a few months, and emphasised the importance of issuing instructions to the departments concerned in order to speed up the formalities and enquiries necessary before placing such orders. The Government departments were also requested to inform the Minister of Labour whether it was necessary to carry out these works or place these orders in any particular region, so that if possible the Minister of Labour might designate, according to the
labour situation, the district in which it would be preferable to have them carried out.

The Minister of Public Works issued two circulars, dated 4 and 5 January 1927, addressed to the Administration of Navigable Waterways and to the Maritime Services respectively, drawing their attention to the programme of maintenance and other works laid down for 1927, which, as they did not call for skilled or specialised labour, might be of use in absorbing the unemployed. With regard to works in connection with the maintenance of navigable waterways which might be carried out by unemployed workers (repairs to towing paths, locks and river ports, canal cuttings, hedges, plantations, dredging of ditches, etc.) and which are usually carried out by auxiliary helpers, the only works to be undertaken were those which, though necessary, had been postponed or slowed down owing to lack of funds. Further, the maritime services were invited to put in hand immediately maintenance and other works, particularly works on large-scale repairs, provided for in the 1927 programme, and to develop these works as much as possible in order to absorb a greater labour force than would be required in the usual way. Steps were also to be taken to induce contractors to put works in hand without delay, and to speed them up as much as possible.

With regard to works duly authorised and already under way on navigable waterways, the circular of 4 January 1927 provided that the Administration should endeavour to persuade contractors to employ as large a labour force as possible. With regard to works of which the plans were already approved, these were to be placed out on contract as soon as possible, particularly those works which would employ a large number of workers. The Administration was also urged to pursue actively the preparation of plans for works which did not require to be certified as public utility works, and which would employ a large unskilled labour force, and to pay special attention to clauses in the specifications with regard to the employment of unemployed workers. Finally, works were to be split up, in order that as much work as possible should be put in hand at once to absorb the unemployed.

With regard to works duly authorised and already under way on navigable waterways, the circular of 4 January 1927 provided that the Administration should endeavour to persuade contractors to employ as large a labour force as possible. With regard to works of which the plans were already approved, these were to be placed out on contract as soon as possible, particularly those works which would employ a large number of workers. The Administration was also urged to pursue actively the preparation of plans for works which did not require to be certified as public utility works, and which would employ a large unskilled labour force, and to pay special attention to clauses in the specifications with regard to the employment of unemployed workers. Finally, works were to be split up, in order that as much work as possible should be put in hand at once to absorb the unemployed.

The information available is insufficient to give a precise idea of the results of the Government's public works policy. The official statistics concerning the state of the labour market during the two periods of depression (1921 and 1927), however, furnish an index to the development of unemployment, which in both cases came to an end very shortly. Moreover, a report presented to the National Employment Council at the end of 1927 by Mr. François Fagnon, Chief of the Central Employment Office, contains interesting indications relating to the extent of public works effected and the number of unemployed absorbed during 1927. Information furnished to the Ministry of Labour shows that a sum of 1,351,000,000 francs was expended on works and orders provided for in the 1927 budget the execution of which was speeded up by the various State administrations in accordance with the measures prescribed by the Government at the end of 1926. Of...
this amount 457,000,000 francs were spent by the Ministry of Public Works, 400,000,000 francs by the Ministry of War (Engineers and Ordnance), 242,000,000 francs by the Post Office, 100,000,000 by the Ministry of Agriculture, etc.

Each time that a contract was placed, the Central Employment Office informed the local employment exchanges, which immediately got into touch with the prospective employers.

The orders placed by the various State services contributed, especially during the first six months of the year 1927, to give employment to numerous industrial establishments, particularly in the metal, wood, textile and clothing industries. Further, the orders placed by the principal railway companies considerably stimulated the activity of undertakings engaged in the manufacture of rolling stock, permitting them not only to occupy their own workers fully, but to take on unemployed workers as well.

Local and district authorities, further, exercised a similar activity to that of the Government. A certain number of municipal and general councils, especially in the great industrial centres, provided in their budgets for amounts to be set aside for the carrying out of public works, or other constructional or maintenance works. In February 1927, when the period of depression had reached its lowest point, 10,000 workmen were thus employed. In October 1927 only 538 were employed.

In January 1927 the Prefecture of the Seine, in agreement with the Ministry of Public Works, decided to put in hand three months earlier than usual the annually recurring works of construction and maintenance (roads, water supply, etc.). The programme for 1927 provided for an expenditure on these works of 175,000,000 francs in excess of the usual yearly expenditure, and it was estimated that of this amount, works to the value of 50,000,000 francs could be put in hand at once.

GERMANY

In Germany, a Decree of 26 January 1920 concerning assistance to the unemployed authorised the Minister of Labour to take suitable measures for the purpose of replacing pecuniary assistance by grants or loans for the organisation of relief workshops or of other works. This was the beginning of the system known as productive unemployment relief (Produktive Erwerbslosenfürsorge). Its purpose was to provide creative work for the unemployed. Money, instead of being paid directly to the unemployed, was paid to undertakings able to employ them or to technical instruction courses which might facilitate their employment later on. In other cases unemployed workers were helped by the payment of their travelling expenses to obtain employment at a distance from their homes.

This system was to apply to works of public utility which could not otherwise be carried out for financial reasons, such as the construction of roads, canals and railways, agricultural improvements, etc., and the money was to be given primarily to local authorities and public utility institutions, but it might also be given sometimes to semi-

1 Le Temps, 12 Jan. 1927.
private undertakings, and even, in exceptional cases, to undertakings working for profit. Grants were also to be given to special relief workshops. Stress was laid on the fact that the relief measures were not to result in competition with existing undertakings working with their own resources, and no assistance was to be given to undertakings which could quite well be carried on without it.

The work done was to have an economic value and to provide employment for at least five workmen during at least one month. Otherwise there was great variety in the kind of work for which assistance was given. It was desired to facilitate the employment of as many men as possible at their own jobs, it being pointed out that there were serious economic and moral disadvantages in employing skilled workmen, for instance, on unskilled work.

Assistance having been given in the construction of roads, canals and railways, it was then given to building operations, particularly for the construction of houses in the country districts. Here it had the advantage of facilitating a transfer of labour from the large centres to small towns and to agricultural districts.

Various changes were made in this system. In particular an Order of 15 October 1923 reduced the rate of pay for relief work, and provided that such pay should not be considered as wages, but as relief. A further Order of 30 April 1925 provided that work under the productive unemployment relief scheme was still to be considered as a form of relief, thus precluding, for instance, the establishment of works councils in connection with such work, but on the other hand the workmen were to be considered as wage earners, and as such were insured against sickness, invalidity and industrial accidents. The rate of wages was to be that payable to workmen of the same category in the locality concerned, and was calculated according to the work actually done. In order to avoid attracting workmen already employed, the State central employment offices were empowered to fix a maximum rate of pay. The maximum period during which the unemployed person might be employed in productive unemployment relief work was three months per annum, or in exceptional cases six months.

On 16 July 1927 the Act concerning employment exchanges and unemployment insurance was passed. This Act provided for the continuation of the above methods in a modified form under the name of Wertschaffende Erwerbslosenfürsorge. The nearest English equivalent of this would still seem to be ‘productive unemployment relief’. The guiding principles of this relief were laid down by the Administrative Council of the Federal Institution for Employment Exchanges and Unemployment Insurance. It was provided that the works must be of public utility. In granting subsidies, preference was to be given to such works as might help to increase the possibilities of employment, or to lead to a better distribution of labour throughout industry. The works must employ a large amount of labour and a small amount of material. Assistance was to be given only to work which could not otherwise be carried out, and only to public institutions or mixed or private under

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1 The financial nature of this scheme has already been explained (see p. 102).
takings recognised as being of public utility. Private undertakings conducted for profit were excluded.

Assistance might take the form of loans which were repayable or of grants which were not repayable. Loans must be repaid, both principal and interest, by quarterly payments within a period not exceeding 15 years from the completion of the work.

The assistance given depends on the number of days worked by persons who would otherwise be in receipt of unemployment insurance benefits, the maximum contribution of the Federal Institution being 3 marks per workman per day. For larger works, which constitute about two-thirds of the total and for which Federal and State subsidies have to be provided, these combined subsidies may not as a rule exceed four times, or in exceptional cases five times, the amount saved by the Federal Institution. The whole contribution from all governmental sources must not exceed 80 per cent. of the entire cost of the work; generally it does not, in fact, exceed 50 per cent.

In the case of unemployed persons in receipt of normal insurance benefit, the grant is be charged against the insurance funds. In the case of those receiving emergency allowances (Krisenunterstützung), four-fifths of the cost is borne by the Federal authorities, and one-fifth by the local authorities concerned. In the case of persons in receipt of public relief, the public relief funds bear the cost.

As a rule, public bodies were not to carry out the subsidised works directly, but in the agreement with contractors they were to ensure that the various conditions laid down by the guiding principles of the Federal Institution were observed.

On 23 March 1928 the Ministry of Labour issued an Order intended to increase the assistance given to the works mentioned above by means of resources derived from the Federal and State budgets. Such support was not to be granted except in areas where the number of unemployed in receipt of benefit was at least 1 per cent. of the population, and did not seem likely to fall below this level within a reasonable period.

On 1 August 1930 a limited company was formed on the initiative of the German Government for the promotion of public works under State control, the special purpose of the company being to obtain German or foreign capital to be used for productive unemployment relief. As a matter of fact, as a result of the difficult financial position of the Federal Government, the sums earmarked in the budget for productive relief have had to be progressively reduced during the last few years. From 1926 to 1928 these sums amounted to an average of 100,000,000 marks; in the 1929 budget to only 77 millions; and in the 1930 budget to only 45 millions. It is therefore desired to obtain money from other sources.

The works undertaken are of two kinds, namely, emergency works (Notstandsarbeiten) and other works which aim not at temporary employment of the unemployed but at permanent employment. The great majority of the works are of the former kind. They consist mainly of agricultural improvements, flood protection works, power works (particularly water power works, pipes for conveying gas, etc.), road construction and other underground work.
It is possible to get an idea of the number of workmen employed on emergency works since the beginning of 1925 from the following table, which shows monthly averages in each of the years 1925 to 1929.

**TABLE XII. — WORKMEN ENGAGED IN EMERGENCY WORK**

<table>
<thead>
<tr>
<th>Period</th>
<th>Unemployment relief or insurance</th>
<th>Emergency benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of workmen in receipt of benefit</td>
<td>Number of workmen on emergency work</td>
</tr>
<tr>
<td>1925</td>
<td>446,624</td>
<td>51,919</td>
</tr>
<tr>
<td>1926</td>
<td>1,678,095</td>
<td>128,974</td>
</tr>
<tr>
<td>1927</td>
<td>880,254</td>
<td>93,286</td>
</tr>
<tr>
<td>1928</td>
<td>800,051</td>
<td>49,467</td>
</tr>
<tr>
<td>1929</td>
<td>1,275,184</td>
<td>45,457</td>
</tr>
</tbody>
</table>

1 Including special benefits (Sonderfürsorge).

It will be seen that an average of about 83,000 have been employed during the period covered. On the other hand, after a certain time has elapsed (generally three months, but occasionally six months), the workmen have to be changed and others taken on, so that in reality about 250,000 workmen found employment per annum for shorter or longer periods on emergency works. In justification of these frequent changes it may be noted that one of the main advantages of the whole scheme, according to the annual report of the Ministry of Labour for 1929, lies in its effect on the individual workman. Employment, even for a short time, helps to prevent the moral deterioration and material loss inseparable from enforced idleness, gives the workman once more the will to work, as well as the opportunity, and revives his confidence in his own strength and ability.

A number of conditions are prescribed for the emergency works. First, those workmen are taken who are, for personal reasons, most in need of the "breathing space" represented by a job; secondly, an effort is made to make the works available for as many different occupations as possible; and thirdly, special attention is paid to districts with particularly heavy unemployment. The workmen are chosen, in the first place, from among those who have been unemployed for the longest time and especially those who are in receipt of emergency benefits after having exceeded their right to ordinary benefits. Married men with families are preferred to single men except where a transfer to another district is involved.

The number of workmen employed on works under the scheme from October 1927 to December 1928 may be seen from the following table, which shows the total number of workmen engaged as a result of contributions (a) from the regular unemployment insurance fund and (b) from the emergency benefit fund (Krisenunterstützung), while in each case those engaged on works for which assistance had to be obtained from the Federal and State Governments are distinguished from the remainder.
TABLE XIII. — NUMBER OF WORKMEN ENGAGED ON PRODUCTIVE UNEMPLOYMENT RELIEF IN GERMANY

<table>
<thead>
<tr>
<th>Date</th>
<th>From the Unemployment Insurance Fund</th>
<th>From the Emergency Benefit Fund</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Number on works supported by Federal and State Governments</td>
</tr>
<tr>
<td>1927:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 October</td>
<td>52,855</td>
<td>43,422</td>
</tr>
<tr>
<td>15 November</td>
<td>44,152</td>
<td>35,777</td>
</tr>
<tr>
<td>15 December</td>
<td>32,871</td>
<td>27,642</td>
</tr>
<tr>
<td>1928:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 January</td>
<td>22,515</td>
<td>17,833</td>
</tr>
<tr>
<td>15 February</td>
<td>43,832</td>
<td>30,578</td>
</tr>
<tr>
<td>15 March</td>
<td>53,795</td>
<td>35,446</td>
</tr>
<tr>
<td>15 April</td>
<td>67,349</td>
<td>44,014</td>
</tr>
<tr>
<td>15 May</td>
<td>70,358</td>
<td>46,480</td>
</tr>
<tr>
<td>15 June</td>
<td>66,434</td>
<td>42,973</td>
</tr>
<tr>
<td>15 July</td>
<td>58,388</td>
<td>39,477</td>
</tr>
<tr>
<td>15 August</td>
<td>52,860</td>
<td>36,755</td>
</tr>
<tr>
<td>15 September</td>
<td>51,819</td>
<td>37,089</td>
</tr>
<tr>
<td>15 October</td>
<td>45,721</td>
<td>32,324</td>
</tr>
<tr>
<td>15 November</td>
<td>41,270</td>
<td>29,704</td>
</tr>
<tr>
<td>15 December</td>
<td>34,260</td>
<td>24,888</td>
</tr>
</tbody>
</table>

For 1929 the figures are as follows, classified a little differently from the above. They do not show the works supported by the regular unemployment insurance fund and the emergency benefit fund separately.

TABLE XIV

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of workmen engaged</th>
<th>Of these</th>
<th>Column (4) as a percentage of column (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>1929:</td>
<td></td>
<td></td>
<td>On works supported by Federal and State Governments</td>
</tr>
<tr>
<td>15 January</td>
<td>18,386</td>
<td>12,896</td>
<td>5,470</td>
</tr>
<tr>
<td>15 February</td>
<td>4,636</td>
<td>2,771</td>
<td>1,865</td>
</tr>
<tr>
<td>15 March</td>
<td>8,768</td>
<td>6,473</td>
<td>2,295</td>
</tr>
<tr>
<td>15 April</td>
<td>66,973</td>
<td>46,911</td>
<td>20,062</td>
</tr>
<tr>
<td>15 May</td>
<td>104,003</td>
<td>70,834</td>
<td>33,169</td>
</tr>
<tr>
<td>15 June</td>
<td>103,375</td>
<td>72,866</td>
<td>30,509</td>
</tr>
<tr>
<td>15 July</td>
<td>85,201</td>
<td>61,155</td>
<td>24,046</td>
</tr>
<tr>
<td>15 August</td>
<td>69,632</td>
<td>51,412</td>
<td>18,220</td>
</tr>
<tr>
<td>15 September</td>
<td>58,318</td>
<td>40,785</td>
<td>17,523</td>
</tr>
<tr>
<td>15 October</td>
<td>48,404</td>
<td>33,078</td>
<td>15,326</td>
</tr>
<tr>
<td>15 November</td>
<td>40,611</td>
<td>26,449</td>
<td>14,162</td>
</tr>
<tr>
<td>15 December</td>
<td>31,410</td>
<td>16,308</td>
<td>15,104</td>
</tr>
</tbody>
</table>
It will be seen that in both years, 1928 and 1929, and particularly in the latter, the number of workmen employed on these works was greatest in summer and fell off in the autumn. On this the Federal Institution for Employment Exchanges and Unemployment Insurance comments as follows. It is recognised as regrettable from a labour market point of view that this autumnal decrease should have taken place, for that is just the period of the year when unemployment tends to increase owing to seasonal factors. Moreover, the weather conditions were favourable for the carrying on of outdoor work. The reason for the decrease was that the Reichstag curtailed the amount of money available for the subsidies to the unemployment insurance funds. This was done at a time when plans had already been made and could not be changed. They had simply to be abandoned and it was even necessary to stop work on certain undertakings which had already been started.

The second category of works under the productive unemployment relief, namely, those which aim at permanent rather than temporary relief of the labour market, consists mainly of housing schemes in agricultural districts, which, it is hoped, will do something to stop the drift from the land to the cities. Such schemes receive financial assistance from the Federal Government and the States but not from the Federal Institution for Employment Exchanges and Unemployment Insurance. The assistance is given in the form of loans without interest and these loans amount to an average of 6,000 to 7,000 marks for single homes (Eigenheime) and 4,000 to 5,000 marks for collective homes (Werkwohnungen). From 1921 to the end of 1929, 24,624 collective homes and 31,635 single homes were built with the assistance of subsidies from the Federal and State Governments.

Houses are also built on similar conditions in industrial districts in order to facilitate the transfer of workmen to places where work is available. Since 1926 about 2,670 such houses have been built. In June 1926 a special programme of public works (independent of the productive unemployment relief scheme) which would in the ordinary course have been undertaken at a later date was initiated by the Federal Government. The bulk of the work comprised in the scheme consisted in the placing of large orders by the postal and railway administrations and the construction of navigable waterways and houses, especially in agricultural districts.

A memorandum was submitted in 1927 by the Minister of Labour to the Reichstag showing the situation with regard to this programme. In order to ensure its rapid execution, a special Inter-Departmental Committee for the Development of Employment was set up by the Government, under the chairmanship of Dr. Weigert, of the Ministry of Labour. One of the sessions of this committee was devoted to the problem of how to obtain the best social and economic results from the programme in hand. It was decided to lay down as a condition

for the execution of work undertaken in connection with the Government programme that overtime should in no case be resorted to, and that workmen should be engaged through the medium of the public employment exchanges. Part of the work outlined in the programme was postponed for performance during the winter months, when unemployment is usually at its height.

Much difficulty was encountered in putting into effect the principle of placing contracts as far as possible in those areas where the greatest percentage of unemployment existed. The Inter-Departmental Committee, however, in planning the regional distribution of the works endeavoured as far as possible to take account of the various aspects of unemployment.

So far as the railway administration was concerned, the measures adopted produced a marked improvement in the situation, particularly in the metal and engineering industries. Moreover, by 15 October 1926 the greater part of the work undertaken under the Post Office scheme had been carried out; this called for the expenditure of altogether 300 million marks, half of which had been raised by a loan. The measures taken by the Government with regard to the development of the building industry were also successful. The figures given below show that unemployment among workers in the building industry decreased in most districts:

<table>
<thead>
<tr>
<th>TABLE XV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>July</td>
</tr>
<tr>
<td>August</td>
</tr>
<tr>
<td>September</td>
</tr>
<tr>
<td>October</td>
</tr>
</tbody>
</table>

Out of the 200 million marks voted for housing schemes by the Act of 26 March 1926, the following amounts were drawn upon by the States:

<table>
<thead>
<tr>
<th></th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>For 2nd mortgages in Prussia</td>
<td>60,000,000</td>
</tr>
<tr>
<td>For 1st mortgages in all States (excluding Lübeck)</td>
<td>45,558,910</td>
</tr>
</tbody>
</table>

From the fund of 50 million marks (advances on account of house rates (Hauszinssteuer) the States had drawn 27,966,000 marks, and required a total of 49,674,000 marks (inclusive of the 27,966,000 marks already drawn).

A sum of 60 million marks was available for housing schemes for agricultural workers.

Further, with regard to road development, those States and provinces which were considered as necessitous areas within the meaning of the Act of 14 August 1926 might receive a grant towards the payment of interest on their road fund of 4 per cent. in the first year, and 3 per cent.
in the two following years. This grant was later extended to areas which, though themselves not necessitous, procured their road-making material from areas which were necessitous. Full advantage was taken of these facilities, and road-making activities to the amount of 80 million marks were under way in 1927.

The German Government established an undertaking for the improvement of land cultivation called "Deutsche Bodenkultur A.-G." and 35 million marks were placed at its disposal out of the surplus left over from the Government Grain Office. By means of loans made by this organisation to land improvement companies, approximately 200,000 hectares\(^1\) were developed, and approximately 7 million man-days worked. In the same year, moreover, the German Ministry of Labour granted loans and advances for land development to the amount of 40 million marks.

Fifty million marks were allotted for colonisation schemes in 1926, and a further 15 million marks remained available for this purpose from the Government Grain Office surplus.

For the financial year 1926 the German Government had to budget altogether for the sum of 630 million marks for the financing of employment development schemes.

The Government programme also included measures for the development of the export trade, including Government guarantees covering the possibility of deficit in the case of trade with Russia, and a scheme for export credit insurance\(^2\).

The number of unemployed fell between 1 July and 1 November 1926:

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of unemployed</th>
<th>Percentage of trade union members unemployed</th>
<th>Number of workers on short time</th>
<th>Percentage of trade union members on short time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1926 :</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 June</td>
<td>627,287</td>
<td>18.1</td>
<td>596,793</td>
<td>17.2</td>
</tr>
<tr>
<td>31 July</td>
<td>599,917</td>
<td>17.7</td>
<td>563,823</td>
<td>16.6</td>
</tr>
<tr>
<td>28 August</td>
<td>567,541</td>
<td>16.7</td>
<td>511,685</td>
<td>15.0</td>
</tr>
<tr>
<td>25 September</td>
<td>513,364</td>
<td>14.2</td>
<td>343,380</td>
<td>10.2</td>
</tr>
<tr>
<td>30 October</td>
<td>476,952</td>
<td>14.2</td>
<td>343,303</td>
<td>10.2</td>
</tr>
<tr>
<td>27 November</td>
<td>484,978</td>
<td>14.2</td>
<td>284,774</td>
<td>8.3</td>
</tr>
</tbody>
</table>

This table shows very clearly the particularly heavy decrease in the number of workers on short time. It cannot, of course, be said that the improvement in the situation which is brought out by this table was due entirely, or even mainly, to the public works programme outlined above, but the Government claims that that programme did a good deal to help industry over a very difficult time, and contributed appreciably to the revival which took place.

\(^1\) 1 hectare = 2.471 acres.

\(^2\) Extract from Denkschrift über die Arbeitsbeschaffungsmaßnahmen der Reichsregierung, 1926.
In 1930 further measures were adopted for the purpose of hastening the carrying out of public works programmes. They are estimated to cost 1,000 million marks, of which 350 millions are for the railways, 200 millions for the post office, 250 millions for housing, 100 millions for roads and 250 millions for emergency works (Notstandsarbeiten). The Federal Government did not itself provide the money, but was indirectly of assistance in raising it. It is hoped that the measures in question will lead to a fall in prices, though how this is to be achieved is not clear. It is prescribed that firms receiving orders under the scheme must as far as possible use German materials.

The details of the scheme are as follows. The Federal Railway Company has agreed to spend 80 million marks on the reconstruction of the permanent way, 20 millions on rails, 80 millions on rolling-stock, 10 millions on bridge-building, 2 millions on safety measures, 50 millions on new constructions and 30 millions on the workshops, etc. Of the total sum of 350 million marks, 272 millions are to be spent in the financial year 1930. The works will be financed in the first place by means of Treasury Bills to the extent of 150 million marks, and from resources which would normally become available only in the following year.

The Post Office works will consist of low tension electrical works (132 millions), machinery (23 millions), buildings (20 millions) and various improvements (25 millions).

The housing programme is to consist of the building of small houses 32 to 45 square metres in area, and the money will be made available through mortgages by banks and insurance institutions.

By an Order of 26 July 1930 the Federal Government is empowered in the period 1 July 1930 to 31 March 1936 to guarantee loans to the Deutsche Bau- und Bodenbank A.-G. and the Reichskredit A.-G., provided that the total amount of the loans does not exceed a present value of 100 million marks. With this assistance the above-mentioned institutions will provide 100 million marks for the building of roads.

The emergency works will be carried out through the productive unemployment relief scheme with the assistance of the limited company referred to above (Deutsche Gesellschaft für öffentliche Arbeiten A.-G.).

GREAT BRITAIN

Great Britain has, since the war, had a big unemployment problem to deal with, and during the whole period from 1920 to the present time the Government of the day has pursued a policy of encouraging and aiding local authorities in carrying out public works earlier than they would otherwise have been undertaken and in some cases works which would not have been undertaken for a long time to come. The prolonged unemployment which has prevailed in Great Britain since 1920 cannot, of course, be considered as an ordinary trade depression. It is clearly due to special causes which affect mainly the coal-mining, engineering, iron and steel, shipbuilding and textile industries, and

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1 square metre = approximately 10.80 square feet.
does not yield to treatment which would be suitable in more normal circumstances.

The measures which have been taken since 1920 with Government assistance to provide work for the relief of unemployment may be grouped as follows:

(i) schemes assisted through the Unemployment Grants Committee;
(ii) schemes assisted through the Development (Public Utility) Advisory Committee;
(iii) schemes under the Development and Road Fund Act, 1909, and the Roads Act, 1920;
(iv) trade facilities schemes;
(v) schemes under the Colonial Development Act, 1929;
(vi) miscellaneous schemes.

In 1930 an Act (the Public Works Facilities Act) was passed to introduce a simpler procedure for obtaining parliamentary sanction for works, when that is necessary, to enable land to be acquired compulsorily by means of an Order confirmed by the appropriate Minister and to give similar powers to highway authorities in certain cases in connection with easements for bridges.

(i) Schemes Assisted through the Unemployment Grants Committee

The work of the Unemployment Grants Committee during the post-war depression has been by far the most important part of the whole emergency programme for the relief of unemployment. This Committee, which is composed largely of business men and is presided over by Lord St. Davids, was originally appointed on 20 September 1920 with an initial grant of £3,000,000 "for the purpose of assisting local authorities in the United Kingdom in carrying out approved schemes of useful work other than work on roads and on housing schemes". For the guidance of the Committee it was laid down that works were to be approved for assistance only in areas where unemployment was severe and not otherwise provided for; and that the works must be approved by the proper Government Department as suitable works of public utility. The grant that was to be made in each case was not to exceed a certain percentage of the wages bill of additional men taken on for work 1.

Various changes were made from time to time in the conditions applicable to different schemes and in 1923 grants might be given only for works which would not be proceeded with at that time apart from the pressing need for relieving unemployment and which were approved by the appropriate Government Department as being of public utility. Moreover, they were only to be given in areas where the existence of serious unemployment not otherwise provided for was certified by the Minister of Labour. Not less than 75 per cent. of the unemployed men taken on for the work were to be ex-service men and the labour was to be recruited through the employment

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1 Unemployment Grants Committee: First (Interim) Report for the period 20 December 1920 to 2 March 1922.
exchanges or from boards of guardians. The rate of wages was for a probationary period of six months to be less than the customary rate in certain cases.

In 1924 the conditions were made somewhat easier. Grants were no longer to be limited to areas with serious unemployment. Moreover, the obligation to pay a rate of wages lower than the customary rate in certain cases was abolished. In direct labour schemes payment had to be made at the local authorities' rate for their own workmen for similar work or the recognised district rate if that was lower.

From 1925 to 1928 the conditions for grants were again made more severe. Grants were given only where unemployment was exceptional and for work which would not otherwise be undertaken for a considerable period (ordinarily more than five years). On the other hand, on 9 November 1928, revised conditions for grants were issued to local authorities prepared to recruit 50 per cent. of the workers from among unemployed men transferred from the depressed areas.

During the whole period 1920-1929, the Government gave assistance in the carrying out of public works by administrative decision and no legislation on the subject existed. In 1929, however, the Labour Government decided to place this work on a statutory basis and at the same time to enlarge the scope of the public works policy. On 26 July 1929 two measures were adopted by Parliament, having as their main object the relief of unemployment, namely, the Development (Loan Guarantees and Grants) Act and the Colonial Development Act.

The first of these Acts provides, among other things, that the Minister of Labour, with the approval of the Treasury, and on the recommendation of a committee appointed by the Minister (the Unemployment Grants Committee), may make grants to local authorities and such statutory bodies as carry on undertakings under statutory powers otherwise than for profit, towards any expenditure incurred for the purpose of carrying out works of public utility calculated to promote employment in the United Kingdom.

New regulations for the Unemployment Grants Committee were issued under this Act to local authorities on 26 July 1929. The Government decided that modifications in the conditions were desirable with a view to: (1) enabling a larger number of local authorities to qualify for grants, including authorities which had hitherto been debarred by reason of the fact that the level of unemployment in their area, though high, was not exceptional in the sense of the committee's circular letter of 15 December 1925, and (2) furthering the policy of transferring unemployed men from the depressed areas to other areas. The Government further desired that the Committee should take into consideration the extent to which the proposed schemes of work were calculated to promote economic development.

After a year's experience in the working of these regulations the Government convened a conference representing local authorities throughout Great Britain, to consider what further measures could be taken in co-operation between the Government and the local authorities to deal with the problem of unemployment. As a result of this conference
new regulations were again issued by the Unemployment Grants Committee in circular U.G.C. 26 July 1930. They are as follows. The work must be of public utility. In approving any scheme the Committee will take into consideration the extent to which it is calculated to promote economic development in the United Kingdom, and will not recommend a grant unless they are satisfied that there is substantial acceleration. All men must be engaged through the employment exchanges, with certain small exceptions; and the workmen taken on remain on the registers of the employment exchange, and are regarded as available for suitable employment if such employment can be offered to them by the exchange. The local authority or its contractor is at liberty to employ for controlling and supervisory purposes a number of permanent employees not exceeding 10 per cent. of the total number of men engaged on the work. All materials used must as far as practicable be of United Kingdom origin. The recognised district rate of wages must be paid.

The following rates of grant are available:

(1) Schemes Financed by Way of Loan

(a) Non-revenue-producing schemes. — Seventy-five per cent. of the interest and sinking fund charges on any loan raised to meet approved expenditure for the first half (up to fifteen years) of the loan period, and 37½ per cent. of the interest and sinking fund charges for the remainder (up to fifteen years) of the loan period.

(b) Revenue-producing schemes. — Fifty per cent. of the interest on any loan raised to meet approved expenditure for fifteen years or for the period of the loan, whichever is the shorter.

Special grants may also be given for schemes of a substantial character and high economic value, and for the construction of a rural water supply, public baths and municipal wash-houses.

(2) Schemes Financed Otherwise than by Way of Loan

The grant will be:

(a) in areas where the average monthly rate of unemployment among adult males during the twelve months ending 16 June 1930 exceeded 15 per cent., 90 per cent. of the wages of the unemployed men taken on for the work;

(b) in other areas, 75 per cent. of the wages of the unemployed men taken on for the work.

There are certain special necessitous areas where it is out of the question for the local authority to undertake further capital commitments even for essential services. To meet this situation the Government asked Parliament to vote a limited sum for schemes to be put in hand during the winter 1930-1931. A grant will be made to the local authority concerned equal to the closely estimated cost of approved works, the execution of which is left to the local authority.

Schemes dealt with by the Unemployment Grants Committee include work in connection with roads and footpaths, sewers and sewage disposal, docks, electricity, water, tramways, parks and recreation
grounds, gas, public institutions, sea defence, tennis courts, bowling greens, land development, cemeteries, sanitation, conveniences, etc.

During the period October 1921 to 30 June 1928, "loan schemes," approved by the Unemployment Grants Committee for grants in assistance involved the raising of loans to an amount of approximately £78,500,000, of which 27.3 per cent. was to be spent on roads and footpaths, 21.1 per cent. on sewers and sewage disposal, and 13.5 per cent. on docks. Approximately £31,500,000 of these loans was to be spent on revenue-producing works (including 33.9 per cent. on docks, 22 per cent. on electricity undertakings, 17.1 per cent. on water undertakings, 12.1 per cent. on tramways, and 6.8 per cent. on gasworks, etc.).

In addition, grants approved on the basis of a percentage of the wages bill amounted during the period December 1920 to 30 June 1928 to approximately £5,000,000 (28.6 per cent. for roads, 25.9 per cent. for parks, recreation grounds and cemeteries, 17.1 per cent. for gas, water, sewers and sewage disposal).

The Eighth (Interim) Report of the Unemployment Grants Committee, which deals with the year 1928-1929, states that the total estimated cost of the schemes approved by the Committee for grants since its formation in December 1920 up to 30 June 1929 amounts to approximately £113,000,000 and the estimated cost of the schemes approved between that date and 31 July 1930 is £41,700,000, making a total of £154,000,000.

The number of man-months of direct labour provided by schemes assisted by the Unemployment Grants Committee during the period December 1920 to June 1929 is estimated at approximately 4,500,000. The Committee stated in its report for 1926-1927 that approximately the same number of man-months of labour is provided in the preparation of materials as is provided in the form of direct labour.

(ii) Schemes Assisted through the Development (Public Utility) Advisory Committee

The Development (Loan Guarantees and Grants) Act, 1929, also gives power to the Treasury to guarantee loans, or to make grants towards meeting interest charges on loans, raised by a public utility undertaking (other than local authorities and statutory bodies not working for profit) in Great Britain for purposes of development, reconstruction or re-equipping, providing that the aggregate capital amount of the loans shall not exceed an amount sufficient to raise the sum of £25,000,000.

A second Committee, known as the Development (Public Utility) Advisory Committee, was set up for this purpose. The assistance may take the form of a guarantee of payment of the principal of, or the interest on, any loan to be raised and applied for the purpose of meeting capital expenditure on the scheme. Alternatively a grant may be made to assist in defraying the interest payable on such loan in whole or in part during a period not exceeding 15 years from the raising of the loan.

In considering applications regard is to be paid to (a) the extent to which the capital expenditure in question is calculated to promote employment in the United Kingdom, and (b) the probability or not
of the scheme not being proceeded with in the near future if assistance is not given.

The power of giving guarantees or of making grants is exercisable only within a period of three years from 31 August 1929.

Schemes were approved for grant on the recommendation of the Development (Public Utility) Advisory Committee up to 29 November 1929 amounting to £7,645,000. The undertakings receiving the grants were railway, gas, and water supply companies.

(iii) Schemes under the Development and Road Fund Act, 1909, and the Roads Act, 1920

The Development and Road Fund Act 1909 instituted a Road Improvement Fund under a Road Board which was empowered to construct and maintain roads or advance money to highway authorities for the same purposes. The execution of such road works is also governed by section 18 of the 1909 Act requiring consideration of the general state of employment. In 1919 the functions of the Road Board were transferred to the new Ministry of Transport and the Roads Act of 1920 placed the Road Improvement Fund on a new basis. Thenceforth it was constituted by the proceeds of taxes on motor vehicles which rapidly reached very large amounts.

The various unemployment programmes carried out by the Ministry of Transport by means of grants from the Road Fund have involved the construction of trunk and arterial roads and the widening and reconstruction of existing roads and bridges.

The expenditure of the Road Fund (Ministry of Transport) since the War has been very large and represents a great volume of work and of employment, especially as grants from the Road Fund are frequently additional to expenditure by local authorities. The severity of unemployment in Great Britain since the war has been taken into account and a great deal of work has been pushed forward, with a view to relieving unemployment.

The total Ministry of Transport road and bridge programmes, which were initiated in 1920-1925 for the relief of unemployment, involved an expenditure of about £57,000,000, and of this the payments to be made from Government funds (including Road Fund and Exchequer contributions) amount to approximately £37,000,000. No further programmes were initiated up to 31 March 1928. In the 13 months ending 31 July 1930, a trunk road programme amounting to £13,000,000 and other programmes of road development amounting to £31,400,000 were approved. As from 31 March 1926, the Unemployment Grants Committee have made no further grants towards the cost of road and bridge works, and all outstanding liabilities incurred by the Committee in connection with road and bridge works have been assumed by the Road Fund. Payments made during the year ending 31 March 1928 on account of these liabilities amounted to £998,729.

Under the 1909 Act a Development Commission was appointed but its work has been distinctly limited in extent. Its activities have been

2 An outline of the provisions of this Act is given above on p. 40.
confined to the purposes specifically enumerated in the Act (forestry was subsequently withdrawn) and few steps have been taken towards "any other purpose calculated to promote the economic development of the United Kingdom". Consequently, the influence of the Commission on the public works programme has been small. Not much use has been made of the Development Fund and no attempt seems to have been made to use it as a means of relieving unemployment.

(iv) Trade Facilities Schemes

The trade facilities schemes were of two kinds (1) export credits and (2) guarantees under the Trade Facilities Acts of 1921 and 1922.

Under the export credits scheme, which was intended to facilitate the resumption after the war of the ordinary means whereby traders can obtain facilities from their bankers to enable them to finance export trade, the Government guaranteed loans against shipments of goods exported from Great Britain to approved countries abroad.

Under the scheme in operation from 1919 to 1922 advances were made to the extent of about £1,750,000. Under the scheme in operation from 1919 to 1923 and under the Guarantee Scheme in operation from July 1921 to June 1926, advances were guaranteed to the extent of approximately £6,200,000. In accordance with the provisions of the new guarantee scheme operative from 1 July 1926, bills were guaranteed up to the end of October 1927, to the sum of about £550,000.

Under the Trade Facilities Acts, 1921 and 1922, the Treasury was empowered on the advice of an Advisory Committee to guarantee payment of either interest or principal on loans raised in connection with capital undertakings, provided the loans were expended in such a way as to relieve unemployment in Great Britain. These Acts expired on 31 March 1927.

Under the trade facilities schemes the Treasury agreed to give guarantees to the extent of about £74,250,000.

(v) Schemes under the Colonial Development Act, 1929

The Colonial Development Act, 1929, authorises the Treasury, on the recommendation of a committee appointed by the Secretary of State, to make advances either by way of grant or of loan to the Governments of certain colonies, protectorates and mandated territories for the purpose of aiding and developing agriculture and industry in those colonies or territories, and thereby promoting commerce with or industry in the United Kingdom. The money resolution in connection with this Act, which was adopted by the House of Commons, authorises the payment of sums not exceeding one million pounds in any one year and of any expenses incurred in connection with the Committee.

(vi) Miscellaneous Schemes

Miscellaneous schemes have included land drainage, water supply and reclamation schemes, afforestation schemes, light railway schemes and acceleration of Government contracts. The approximate amount of expenditure in connection with these miscellaneous schemes which have now ceased to operate is given in the following table:
In connection with the acceleration of Government contracts during the winter of 1923-1924 about £2,000,000 was expended.

* * *

Such statistics as are available as to the number of men employed on all the principal State-assisted programmes from 1924 to 1927 are given in the table below. These figures are obtained from returns made by local authorities and other bodies carrying out the works. In the case of Unemployment Grants Committee and Ministry of Transport schemes the figures relate to the number of men employed on the site of the works and take no account of the indirect relief to unemployment afforded by the manufacture and transport of materials, etc. The figures as to Trade Facilities Acts schemes indicate men employed on the work itself and include part only of the men employed in the manufacture of the materials used. They do not take account of the labour involved in winning, transporting, etc., raw materials

TABLE XVIII. — NUMBER OF MEN EMPLOYED ON PUBLIC WORKS PUT IN HAND FOR THE RELIEF OF UNEMPLOYMENT WITH STATE ASSISTANCE

<table>
<thead>
<tr>
<th>Works assisted by</th>
<th>Average number of men employed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1924</td>
</tr>
<tr>
<td>Ministry of Transport: Road and Bridge Schemes</td>
<td>13,358</td>
</tr>
<tr>
<td>Unemployment Grants Committee</td>
<td>35,752</td>
</tr>
<tr>
<td>Guarantees under the Trade Facilities Act</td>
<td>35,054</td>
</tr>
<tr>
<td>Average total</td>
<td>84,164</td>
</tr>
</tbody>
</table>

The duration of the various State-assisted schemes has varied considerably, and detailed information as to the average duration of the work is not available. Many of the schemes were specifically
intended to relieve unemployment during the winter months and their duration was limited to short periods. In other schemes, the work extended to periods as long as four or even five years.

* * *

The policy of putting in hand during a period of unemployment public works which would under ordinary circumstances have been undertaken at some later time has formed the subject of enquiry by numerous bodies in Great Britain, and it will be of interest to give a brief summary of the principal conclusions reached.

The official Committee on Industry and Trade of 1924-1928, generally known as the Balfour Committee, was of opinion that in a long-continued depression the possibilities of bona fide anticipation become rapidly exhausted and works put in hand then tend to lose their economic character and to become hardly distinguishable from ordinary relief works.

On the other hand, the report of the Sub-Committee of the Liberal Party, generally known as the Liberal Industrial Enquiry 1, stated that for the abnormal unemployment of a quasi-permanent character which has prevailed in Great Britain since 1920...

...we need an enlightened, energetic and statesmanlike policy of development and reconstruction in other fields, proceeding side by side with the improvement in our industrial efficiency... We put, therefore, in the forefront of our proposals a vigorous policy of national reconstruction, embracing within its scope inter alia the rehabilitation of agriculture, still the largest of our national industries, an intensive programme of highway development, afforestation, reclamation and drainage, electrification, slum clearance and town planning, and the development of canals, docks and harbours.

The report claims that there is an ample supply of capital for this purpose provided that it is rightly guided; the nation, it says, is creating new capital at the rate of £500,000,000 a year and "it is sheer waste to avoid using a part of this capital for the purpose of utilising our labour resources in the improvement of our national equipment". Since a large programme of national development "would impinge upon several departments of State, it should be placed under the control of a committee of the Privy Council directly responsible to the Prime Minister. A Board of National Investment, which is proposed elsewhere in the report, should organise the means of financing this policy".

The official Labour Party policy which was approved by the annual conference in October 1928 2, and formed the basis of its election programme, contains proposals on somewhat similar lines. The report suggests the carrying out of development schemes, including a national drainage scheme, measures against coast erosion, afforestation, electrical development, slum clearance, housing, the building of new "satellite towns", and the building of roads and bridges. To carry out this policy it was proposed to set up: (1) a National Economic Committee acting

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under the directions of the Prime Minister to keep both him and the
country informed as to the economic situation and its tendencies; and
(2) an Employment and Development Board which would have at its
disposal each year a Treasury grant to be drawn upon as required;
it would be the duty of the Board to bring development schemes to
the point of execution in readiness for the time when they should be
pushed ahead in the interest of employment and trade.

The Liberal pamphlet *We Can Conquer Unemployment* which
repeated in a more popular form the principal items concerning public
works contained in the Liberal Industrial Enquiry, and which proposed
spending over £200,000,000 in two years on these public works, brought
replies both from the Labour and Conservative Parties. The Labour
Party stated that at the end of two years the situation would be
exactly the same as it was at the beginning, unless other steps were
taken at the same time to bring about a revival in industry. They
did not dispute that public works were necessary, and they acknowledged
that the Liberal proposals were sound in certain cases. They stated,
however, that the Liberal proposals put too much emphasis upon road
development, and that other public works, such as housing, the building
of schools, etc., were equally important. Moreover, the Liberal proposals
would be very costly.

The Conservative Government, which was in office at the time,
replied in the form of a series of memoranda by the heads of the various
departments concerned. In the first of these memoranda the Minister
of Labour stated his objections to the Liberal scheme as follows:

1. Of 1,144,400 registered unemployed in Great Britain on 22 April 1929,
only 250,000 to 300,000 could be regarded as available for direct employment
in State-aided schemes of road work, land drainage and other public works involving
manual labour in the open under commercial conditions of employment and rates
of wages. In particular, if the different parts of the programme were to be carried
through simultaneously, "the force of unemployed labour available, that is,
willing to take the work, and reasonably capable of executing it, is quite inadequate
to meet the demands for the roads and land drainage.

2. A big programme of State-aided public works would have a disturbing
effect on the general industrial position. "If it is a long programme, with continuity
of work promised to the personnel, it draws off labour which would otherwise
have found employment, though perhaps with less regularity, in normal industry,
without being able to ensure replacement... It is liable to produce lazy work, or
a disregard on the part of the contractors of the need for economy... It thus
tends to degenerate into 'relief works'."

3. A big programme of public works "is justifiable only on one of three
grounds: (a) that the works are urgently required; (b) that they will so
improve productive efficiency that their cost will be repaid by a corresponding
revenue; or (c) that they are wanted to keep from demoralisation a valuable
labour force temporarily out of work, but confident of reabsorption in its own
industry within a short period.". This last point is considered as fundamental.
The objections to any programme of public works are less strong, said the Minister
of Labour, if it can be shown that it will result in a transference of men from the
distressed areas to more prosperous areas.

4. The programme would simply create a problem of demobilisation at the
end of the period.

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1 *How to Conquer Unemployment*, with a preface by the Rt. Hon. J. Ramsay
MacDonald, M.P.

2 *Memoranda on Certain Proposals relating to Unemployment*. Cmd. 3331.
Mr. Davison\(^1\), whose book had nothing to do with the general election, is very critical of the whole policy of public works carried out by successive Governments since the end of 1920. He considers that this policy did more to relieve the rates in certain necessitous areas than to relieve the unemployed. Certain hard-pressed boards of guardians, he says, "received extra loans from the Government after their claims had been examined and approved by a Committee under Sir Harry Goschen, but early in 1926 another Goschen Committee reported that they were unable to find any sound method by which such subventions to local rates could be distributed, and indeed that the whole principle of such assistance was open to question". Through the "relief works", however, the Government did in fact assist local rates.

Mr. Davison adds:

It is clearly difficult, if not impracticable, for the State to raise the level of employment or to stem abnormal unemployment by inventing or expediting public works for the needy unemployed. Nothing less than the stimulation of ordinary industry and business is of any real good. If, under a non-Socialist economy, this can be done at all, it would be by the expansion of credits through the agency of the central bank. Capital could thus be made to flow into the main channels of industry, employing more men and women in their own trades, instead of being diverted from them and injected into specialised undertakings which are temporary and mainly of an unproductive character. Or if, as is inevitable in these days, a dose of Socialism is not to be ruled out, it is always open to the State to accelerate or guide the industrial evolution of the country by the judicious application, under State control, of a portion of the nation's savings in fruitful schemes of internal development.

But relief work, as usually conducted, has been proved over and over again to be unhelpful to the State and actually lowering in its effects on the unemployed. So far as the treatment of the latter is concerned, the problem is to keep them fit for some potential wage-earning employment, not to make them work for work's sake. Industry consists of specific kinds of work, each kind demanding some specific fitness whether mental (technical), physical, or moral in the workers. Any relief that is worthy of the name should take the form of providing the potential worker with that "fitness" if he has not got it, and of maintaining it in him if he has.

Finally, a further pamphlet was issued entitled *Can Lloyd George Do It?* by J. M. Keynes and H. D. Henderson, two members of the Committee which carried out the Liberal Industrial Enquiry. These authors claim that the works proposed in the Liberal programme were undoubtedly useful and would prove very advantageous to the industry and trade of the country. They add that there would be as much indirect employment as direct employment given and that the workmen employed would find their purchasing power increased, thus adding to the demand for services and goods in the community. These points have already been dealt with at some length in a previous section of this study\(^2\).

**ITALY**

In Italy, public works have hitherto been determined more by the need for carrying out general development works than by considerations of labour market policy\(^3\). While measures have been taken for the

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\(^1\) Davison: *The Unemployed.*

\(^2\) See pp. 24 et seq.

\(^3\) For the new policy adopted in 1930, see p. 153.
immediate execution of certain work, it cannot be said that the Government has deliberately put forward work which it had originally been intended to carry out at a later date. Certain sums have, however, been made available for the immediate execution of public works, and inter-departmental committees and special commissions have been set up in order to further the execution of economically useful work.

A Decree, No. 1698, of 17 November 1918, authorised an expenditure of 3,300 million lire for work and material of public utility. It also authorised the Loan and Deposit Fund to advance money for public works to provincial and communal authorities and other bodies up to an amount of 500,000,000 lire at 3 per cent. interest. The same Decree set up an inter-departmental committee in order to co-ordinate the work of the different departments.

These provisions did not have the effect hoped for by the Government, owing to the unfavourable financial situation of the local authorities, which were not in a position to contract loans of any kind, even long-term loans, and even at such a low rate of interest. Only 42,000,000 lire of the 500,000,000 lire available were advanced.

The above Decree was framed principally with a view to the execution of works of economic utility, rather than with a view to diminishing unemployment, but the situation of the labour market was more explicitly dealt with by Decree No. 2405 of 28 November 1919, which provided that the provinces, communes and consortia should be exempted from the payment of interest on such loans; that the sums to be advanced should be immediately available; and that the technical and administrative formalities in connection with the loans should be reduced to a minimum. It also set up another special inter-departmental committee authorised to decide upon the work to be carried out and the grants to be accorded, preference being given to work which would absorb the greatest number of workers, which was calculated to add to the national resources, and which could be carried out in a fairly short space of time. The Committee decided upon the execution of various works, and a considerable number of unemployed were absorbed as a result of the consequent increased demand for labour. Over a period of nine months 3,500 grants were accorded, amounting to a total of 468,866,739 lire.

A new inter-departmental committee, assisted by a technical committee, was set up by the Decree of 20 April 1921, No. 1177 for the purpose of co-ordinating the programme of public works and administering the expenditure under this and other Decrees providing for the improvement of conditions in various parts of Italy. This expenditure included a sum of 500,000,000 lire to be advanced by the National Unemployment Insurance Fund, by the National Insurance Institute and by the Savings Banks administered by the Bank of Naples and the Bank of Sicily.

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1 Cf. E. Campese: Il Fascismo contro la disoccupazione.
2 E. Campese, op. cit.
The resources placed at the disposal of the committee were considerable, and would have stimulated the development of public works and brought about a diminution in unemployment figures. But the advances which should have been made during the winter when unemployment was at its height, were delayed, a lengthy procedure being necessary before the money could be made available. Requests for grants had to be made in the first place to a special financial committee representing the Funds mentioned above, and the special financial committee could only make grants on the proposal of the technical committee. Only when the decision of this financial committee was made could the inter-departmental committee decide upon the carrying out of the work.

The inter-departmental committee continued to function until February 1923, when it was abolished by the Royal Decree No. 254 of 4 February 1923, and its functions transferred to the Ministry of Public Works.

Other provisions with regard to public works include the Royal Decree No. 1704 of 19 November 1921 which authorised grants up to a total of 800,000,000 lire to be made from the Loan and Deposit Fund to local organisations for the construction of schools, water-pipes, etc. In exceptional cases loans were also authorised to be made from the State budget, but rather on the ground of the urgency of the work to be accomplished than on that of diminishing unemployment; the Royal Decree No. 1182 of 20 September 1928, for instance, authorised an expenditure of 237,750,000 lire for the execution of such work throughout all the provinces.

In all these cases the decisions taken by the Government only concerned the financing of certain urgent or specially productive work from other funds at a time when the amount necessary could not be obtained from the State budget.

During the last few years, particularly, the Italian Government has given much assistance and encouragement to private enterprise. The Government's activity in this respect has consisted of: (1) the encouragement of agriculture and other works which can offer employment to the greatest number of workers; and (2) the transfer of the necessary labour to the places where it is required. Thus the Government has given considerable assistance during the last few years to both private persons and companies for the execution of productive work, and a number of legislative measures have been passed dealing with the improvement of agriculture and the stimulation of work on uncultivated land.

A Decree No. 3256 of 30 December 1923 dealt with the reclamation of marsh land; a Decree No. 753 of 18 May 1924 authorised the State to assist in the development of land which had become depopulated owing to economic and geological conditions; a circular was issued by the Ministry of Public Works on 19 November 1925 for the purpose of encouraging the construction of buildings for the housing of, (1) workers employed on public works, and (2) agricultural workers;

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1 E. Campese, op. cit.
a Decree No. 1154 of 20 March 1926 encourages the formation of undertakings for irrigation work, and a Decree No. 1042 of 16 January 1927 authorised the State to participate in the cost of land improvement, building and road-making; finally, a Decree dated 29 July 1927 dealt with the reorganisation of the system of agricultural credit.

The principal stimulus to land improvement, however, has been the general development scheme (bonificazione integrale). It has been instrumental in the development of approximately two and a half million hectares which, owing to unhealthy situation or the condition of the soil, were uncultivated and deserted. The expenditure on this scheme has been estimated at 7,000,000,000 lire distributed over a period of thirty years. The Associazione Nazionale fra i Consorzi di Bonifica e di Immigrazione was set up to deal with the financial administration of the work.

The Decree concerning the general development scheme only came into force on 1 July 1929, as a long period of administrative and technical preparation was necessary. The participation of the State in the expenditure involved was laid down as follows: for irrigation work 35-50 per cent.; for the construction of water-pipes in rural districts 75 per cent.; for the construction of agricultural villages, 10-30 per cent.; for the construction of temporary housing accommodation, 10-30 per cent.; for the construction and improvement of roads in rural districts, 40 per cent.; for the provision of drinking water, 40 per cent. The contribution of the State towards expenditure for the supply of electricity varies according to the length of cable necessary and the voltage. Further, it was decided that the State and the provinces should contribute from 68 to 87.50 per cent. of the total expenses for the development of water-power and 87.50 per cent. for road construction in Southern Italy and the islands.

A Decree-Law No. 416 of 18 March 1929 set up a National Labour Bank for the purpose of developing the economic resources of the country and of advancing money to organisations which are of economic and social value to producers and workers. A special autonomous section of this bank deals with mortgage loans on housing schemes, and advances to co-operative associations, agricultural associations and universities, irrigation undertakings, and other schemes for agricultural development. This section of the bank will have a separate reserve fund constituted by the Treasury, the National Social Insurance Fund, the National Insurance Institute, the Ex-Service Men's Organisation, the Mont de Piété at Rome, and the Federal Institute and Savings Bank of Venice 1. Moreover, a special section has been set up in the Ministry of Forestry and Agriculture (formerly the Ministry of National Economy) to deal with the co-ordination and execution of the general development scheme.

It may be mentioned that from 1 November 1928 to the end of February 1929, 864,000 hectares of land had been improved at a total cost of 1,094,226,000 lire.

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1 Ministero del Lavoro: Bollettino del Lavoro, July-Aug. 1919.
With regard to State action dealing more directly with the unem­
ployment problem, a great stimulus to public works and agricultural organisation has been given by the Decree No. 2874 of 28 November 1928, which favours those able to employ the largest number of workers. In addition to the faculty of declaring certain work to be “ urgent ”, of which mention has been made above 1, the Decree provides that, in order to facilitate the temporary employment of workers, part of their travelling and housing expenses may be met out of funds allotted for the work. The Ministry of Public Works is further authorised to contribute to expenditure on “ agricultural villages ”.

Among the duties of the inter-departmental committees already referred to is the encouragement of welfare and aid associations by means of the allocation of contributions to their funds. Further, contributions may be allocated to settlement schemes amounting to from one-sixth to one-third of the total cost. Moreover, small farmers who employ immigrant labour and who have made certain improve­ments on their land may also receive subsidies up to one-third of their expenditure.

The Ministry of Public Works is also authorised to take over for a maximum period of thirty years up to 4 per cent. of the interest incurred on loans contracted for land improvement 2.

The various public works are divided into four categories, as follows:

(1) Work carried out directly by the State ;
(2) Concessions carried out by other bodies for the State ;
(3) Work carried out by local authorities or private undertakings to which the State contributes by means of subsidies or loans ;
(4) Administrative concessions, such as the supply of water, which are handed over in the public interest to institutions specially constituted for the purpose.

The last category has not been included in the statistics of the present report, as it comprises very few undertakings.

In addition to the above categories must be mentioned work carried out by the Azienda autonoma statale della strada created about the middle of 1928 with a view to dealing with the upkeep and repair of the Italian roads.

In January 1926, when unemployment reached a very high peak, the number of workers employed on public works was small. The same thing happened at the beginning of 1927 and 1928. On the other hand, about the middle of each year when unemployment diminishes public works absorb a larger number of workers.

An important cause of these fluctuations is to be found in the seasonal character both of unemployment and of public works. Unemployment increases in winter on account of the weather, and it

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1 See p. 53.
2 Gazzetta Ufficiale, 29 Dec. 1928.
<table>
<thead>
<tr>
<th>Class of work</th>
<th>1926</th>
<th>1927</th>
<th>1928</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st half-year</td>
<td>2nd half-year</td>
<td>1st half-year</td>
</tr>
<tr>
<td></td>
<td>Workers employed</td>
<td>Percentage</td>
<td>Workers employed</td>
</tr>
<tr>
<td>Roads</td>
<td>18,728</td>
<td>26.5</td>
<td>23,612</td>
</tr>
<tr>
<td>Hydraulic works</td>
<td>11,653</td>
<td>16.6</td>
<td>11,133</td>
</tr>
<tr>
<td>Agricultural improvements</td>
<td>13,610</td>
<td>19.3</td>
<td>12,454</td>
</tr>
<tr>
<td>Maritime works</td>
<td>6,264</td>
<td>8.9</td>
<td>7,047</td>
</tr>
<tr>
<td>Building work</td>
<td>2,619</td>
<td>3.7</td>
<td>3,258</td>
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<tr>
<td>Railways</td>
<td>11,130</td>
<td>15.7</td>
<td>11,959</td>
</tr>
<tr>
<td>Earthquakes</td>
<td>3,314</td>
<td>4.7</td>
<td>5,361</td>
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<tr>
<td>War</td>
<td>257</td>
<td>0.4</td>
<td>482</td>
</tr>
<tr>
<td>Various</td>
<td>3,022</td>
<td>4.3</td>
<td>4,582</td>
</tr>
<tr>
<td>Total</td>
<td>70,597</td>
<td>100.0</td>
<td>79,888</td>
</tr>
</tbody>
</table>

1 Bollcalino Statistico del Ministero dei Lavori Pubblici.
is precisely at that time that, for the same reason, public works are partially suspended. The exact opposite occurs in summer. There would seem to be room for a better distribution of public works throughout the year.

Table XIX shows the fluctuations in average employment during each half-year, and the kind of work done.

It will be seen that for certain categories of workers the period of fullest employment occurs during the first half-year, and for others during the second half-year. Work which offers the greatest possibilities of employment during the first half-year is chiefly maritime work, hydraulic work and work on the railways. Work on the roads, and buildings, and agricultural work, etc., are carried out during the second half-year.

However, both the divergence between the fluctuations of the labour market and the fluctuations in the number of workers employed on public works, and the failure to co-ordinate the period of greatest unemployment with that of increased activity on public works cannot be entirely attributed to seasonal causes.

Since the middle of 1927 the predominant factor has been the monetary policy of the Government. The policy of deflation, begun in 1927, was accompanied by a fall in prices and a decrease in the general activity of the country, and its effects were soon felt in the labour market. The fall in prices during 1927 and the beginning of 1928 was accompanied by an increase in unemployment. In April 1927 the unemployed figure stood at 215,315 and the wholesale price index at 521. During the remainder of the year prices continued to fall and unemployment to increase. In January 1928 unemployment reached a high figure and the wholesale price index was 463\(^1\). Towards the middle of 1928 unemployment tended to decrease, and prices to be stabilised at their new level.

It was not, however, possible for the authorities to develop a programme of public works in order to diminish the intensity of the unemployment crisis, as the deflation policy of the Government tended to tighten credit; thus the number of workers employed on public works was much less, owing to the slowing down of general economic activity. The number of workers thus employed fell from 102,323 in April 1927 to 77,547 in January 1928, and only when business began to pick up towards the middle of 1928 was it possible for public works to increase and absorb a greater number of unemployed workers.

The fact that the value of bonds invested in public works in the course of execution was 3,929,875,000 lire at the end of June 1927, dropped to 3,749,320,000 lire at the end of December, and was still only 3,871,063,000 lire at the end of June 1928\(^2\) illustrates the influence of monetary policy on the programme of the Government and local authorities.

The Deposit and Loan Fund, following the policy of the Government, restricted loans and grants for public works. In 1925 grants accorded

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\(^1\) Bachi’s Index. (Cf. League of Nations: Monthly Bulletin of Statistics.)

\(^2\) Bollettino Statistico del Ministero dei Lavori Pubblici.
by this fund amounted to 518,140,488 lire, in 1926 to 226,144,966 lire and in 1927 to 212,064,762 lire. This policy of restriction is still more evident with regard to loans, which amounted to 68,832,186 lire in 1925, to 7,957,169 lire in 1926 and to 3,109,825 lire in 1927.

Altogether during the ten years 1920-1930 the National Social Insurance Fund has set aside a sum of 3,770 million lire for public works undertaken as a remedy for unemployment. It was announced during the summer of 1930 that certain public works were being reserved for the winter, as it was anticipated that unemployment would increase considerably at that time. It was estimated that these works would give employment to about 200,000 unemployed. The total amount necessary for these works was estimated at 250 million lire. Part of this sum was obtained from the budgets of the different government departments (public works, communications, agriculture, war, navy); another part was provided for by laws which had previously been adopted, such as the Act concerning the general development scheme; a third part was derived from the tax on sales which the Government recently increased. It is intended in future regularly to pursue a policy of reserving public works for the winter season.

Some figures relating to the number of works carried out, the percentage of expenditure on the various kinds of work, the number of workers employed at different times and the total expenditure of the State on public works will be found in the following tables.

Table XX shows the number of works carried out during 1927 and 1928. Table XXI shows the percentage of funds expended on each class of work. In comparing these figures, it should be borne in mind that a great difference exists in the cost of the various classes of work. The cost of work on roads, for instance, is less than work on railways. Thus, the greatest number of workers are absorbed by work on roads, agricultural improvements and hydraulic works.

Table XXII shows the approximate cost of various classes of public works. From this data it is possible to form an idea of the amounts expended for this purpose.

Table XXIII shows State expenditure on public works. It will be seen that the programme of public works took on a considerable extension during the post-war period.

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1 Informazioni Corporative, 10 June 1930.
2 Corriere della Sera, 3, 10, 17, 19 Aug. 1930.
3 Bollettino Statistico del Ministero dei Lavori Pubblici.
TABLE XX. — NUMBER OF PUBLIC WORKS UNDERTAKEN AND NUMBER OF UNEMPLOYED DURING 1927 AND 1928

<table>
<thead>
<tr>
<th>Date</th>
<th>Works undertaken directly by the State</th>
<th>Works by other bodies on behalf of the State</th>
<th>Works undertaken by local organisations</th>
<th>Works undertaken by the A. A. S. S.</th>
<th>Total</th>
<th>Number of unemployed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1927</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>3,354</td>
<td>122</td>
<td>2,159</td>
<td>5,635</td>
<td>225,346</td>
<td></td>
</tr>
<tr>
<td>February</td>
<td>3,457</td>
<td>126</td>
<td>2,168</td>
<td>5,751</td>
<td>259,059</td>
<td></td>
</tr>
<tr>
<td>March</td>
<td>3,632</td>
<td></td>
<td>2,212</td>
<td>5,890</td>
<td>215,316</td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>3,647</td>
<td>131</td>
<td>2,228</td>
<td>5,908</td>
<td>216,441</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>3,545</td>
<td>135</td>
<td>2,279</td>
<td>5,497</td>
<td>214,603</td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>3,134</td>
<td>84</td>
<td>2,304</td>
<td>5,388</td>
<td>263,091</td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>2,998</td>
<td>86</td>
<td>2,333</td>
<td>5,423</td>
<td>291,821</td>
<td></td>
</tr>
<tr>
<td>August</td>
<td>2,001</td>
<td>89</td>
<td>2,362</td>
<td>5,472</td>
<td>305,930</td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>2,961</td>
<td>89</td>
<td>2,386</td>
<td>5,348</td>
<td>332,240</td>
<td></td>
</tr>
<tr>
<td>October</td>
<td>2,869</td>
<td>93</td>
<td>2,372</td>
<td>5,281</td>
<td>375,734</td>
<td></td>
</tr>
<tr>
<td>November</td>
<td>2,817</td>
<td>92</td>
<td>2,381</td>
<td>5,289</td>
<td>414,283</td>
<td></td>
</tr>
<tr>
<td>December</td>
<td>2,814</td>
<td>94</td>
<td>2,381</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1928</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>2,907</td>
<td>100</td>
<td>2,336</td>
<td>5,343</td>
<td>439,211</td>
<td></td>
</tr>
<tr>
<td>February</td>
<td>3,030</td>
<td>100</td>
<td>2,293</td>
<td>5,423</td>
<td>413,383</td>
<td></td>
</tr>
<tr>
<td>March</td>
<td>3,084</td>
<td>101</td>
<td>2,285</td>
<td>5,470</td>
<td>411,785</td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>3,097</td>
<td>101</td>
<td>2,292</td>
<td>5,490</td>
<td>356,795</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>3,149</td>
<td>103</td>
<td>2,285</td>
<td>5,537</td>
<td>306,629</td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>2,425</td>
<td>116</td>
<td>2,240</td>
<td>302</td>
<td>5,083</td>
<td>247,021</td>
</tr>
<tr>
<td>July</td>
<td>2,343</td>
<td>115</td>
<td>2,251</td>
<td>634</td>
<td>5,343</td>
<td>234,212</td>
</tr>
<tr>
<td>August</td>
<td>2,372</td>
<td>127</td>
<td>2,301</td>
<td>717</td>
<td>5,617</td>
<td>248,100</td>
</tr>
<tr>
<td>September</td>
<td>2,354</td>
<td>127</td>
<td>2,303</td>
<td>774</td>
<td>5,558</td>
<td>268,583</td>
</tr>
<tr>
<td>October</td>
<td>2,277</td>
<td>138</td>
<td>2,259</td>
<td>818</td>
<td>5,492</td>
<td>282,379</td>
</tr>
<tr>
<td>November</td>
<td>2,278</td>
<td>140</td>
<td>2,276</td>
<td>778</td>
<td>5,472</td>
<td>321,123</td>
</tr>
<tr>
<td>December</td>
<td>2,306</td>
<td>147</td>
<td>2,244</td>
<td>784</td>
<td>5,481</td>
<td>363,551</td>
</tr>
</tbody>
</table>

1 *Azienda Autonoma Statale della Strada.*
TABLE XXI. — PERCENTAGE OF PUBLIC FUNDS EXPENDED ON VARIOUS CLASSES OF PUBLIC WORKS

<table>
<thead>
<tr>
<th>Class of work</th>
<th>Works undertaken directly by the State (half-yearly percentages)</th>
<th>Works by other bodies on behalf of the State (yearly percentages)</th>
<th>Works undertaken by local organisations (half-yearly percentages)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1925</td>
<td>1926</td>
<td>1927</td>
</tr>
<tr>
<td></td>
<td>1st half-year</td>
<td>2nd half-year</td>
<td>1st half-year</td>
</tr>
<tr>
<td>Railways</td>
<td>36.5</td>
<td>34.8</td>
<td>30.2</td>
</tr>
<tr>
<td>Roads</td>
<td>21.0</td>
<td>20.5</td>
<td>19.4</td>
</tr>
<tr>
<td>Maritime works</td>
<td>12.0</td>
<td>11.4</td>
<td>17.0</td>
</tr>
<tr>
<td>Hydraulic works</td>
<td>10.0</td>
<td>10.4</td>
<td>8.9</td>
</tr>
<tr>
<td>Works consequent upon earthquakes</td>
<td>6.6</td>
<td>7.3</td>
<td>9.7</td>
</tr>
<tr>
<td>Building work</td>
<td>5.4</td>
<td>6.8</td>
<td>5.8</td>
</tr>
<tr>
<td>Agricultural improvements</td>
<td>5.0</td>
<td>4.8</td>
<td>4.5</td>
</tr>
<tr>
<td>Works consequent upon war</td>
<td>1.1</td>
<td>0.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Various</td>
<td>2.4</td>
<td>3.3</td>
<td>3.9</td>
</tr>
</tbody>
</table>
### TABLE XXII. — NUMBER OF DAYS WORKED AND NUMBER OF WORKERS EMPLOYED ON PUBLIC WORKS

<table>
<thead>
<tr>
<th>Date</th>
<th>Works undertaken directly by the State</th>
<th>Works undertaken by other bodies on behalf of the State</th>
<th>Works undertaken by local organisations</th>
<th>Works undertaken by the A.A.S.S.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of days worked</td>
<td>Number of workers employed</td>
<td>Number of days worked</td>
<td>Number of workers employed</td>
<td>Number of days worked</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1926</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>791,594</td>
<td>40,328</td>
<td>283,876</td>
<td>14,885</td>
<td>61,142</td>
</tr>
<tr>
<td>June</td>
<td>1,708,164</td>
<td>74,866</td>
<td>448,621</td>
<td>19,364</td>
<td>160,260</td>
</tr>
<tr>
<td>1927</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>1,307,159</td>
<td>64,154</td>
<td>350,887</td>
<td>16,333</td>
<td>68,966</td>
</tr>
<tr>
<td>February</td>
<td>1,390,998</td>
<td>66,104</td>
<td>390,298</td>
<td>17,888</td>
<td>72,836</td>
</tr>
<tr>
<td>March</td>
<td>1,681,924</td>
<td>74,574</td>
<td>503,748</td>
<td>20,447</td>
<td>81,417</td>
</tr>
<tr>
<td>April</td>
<td>1,751,481</td>
<td>79,369</td>
<td>543,901</td>
<td>22,754</td>
<td>101,255</td>
</tr>
<tr>
<td>May</td>
<td>2,013,673</td>
<td>87,150</td>
<td>629,302</td>
<td>25,832</td>
<td>169,281</td>
</tr>
<tr>
<td>June</td>
<td>1,928,309</td>
<td>82,865</td>
<td>642,789</td>
<td>25,943</td>
<td>152,355</td>
</tr>
<tr>
<td>July</td>
<td>1,976,816</td>
<td>83,531</td>
<td>383,481</td>
<td>16,200</td>
<td>148,864</td>
</tr>
<tr>
<td>August</td>
<td>2,208,307</td>
<td>90,599</td>
<td>439,744</td>
<td>16,967</td>
<td>179,591</td>
</tr>
<tr>
<td>September</td>
<td>2,024,348</td>
<td>85,676</td>
<td>421,774</td>
<td>16,733</td>
<td>167,048</td>
</tr>
<tr>
<td>October</td>
<td>1,831,094</td>
<td>80,652</td>
<td>426,553</td>
<td>17,198</td>
<td>160,239</td>
</tr>
<tr>
<td>November</td>
<td>1,567,213</td>
<td>76,828</td>
<td>401,960</td>
<td>17,217</td>
<td>100,388</td>
</tr>
<tr>
<td>December</td>
<td>1,208,571</td>
<td>64,886</td>
<td>316,229</td>
<td>15,340</td>
<td>89,830</td>
</tr>
<tr>
<td>1928</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>1,267,788</td>
<td>59,826</td>
<td>404,514</td>
<td>17,721</td>
<td>82,748</td>
</tr>
<tr>
<td>February</td>
<td>1,432,337</td>
<td>66,617</td>
<td>436,932</td>
<td>18,967</td>
<td>68,960</td>
</tr>
<tr>
<td>March</td>
<td>1,281,172</td>
<td>67,321</td>
<td>327,765</td>
<td>18,872</td>
<td>88,842</td>
</tr>
<tr>
<td>April</td>
<td>1,409,437</td>
<td>68,232</td>
<td>312,991</td>
<td>15,066</td>
<td>89,742</td>
</tr>
<tr>
<td>May</td>
<td>1,751,256</td>
<td>79,268</td>
<td>612,527</td>
<td>26,985</td>
<td>120,982</td>
</tr>
<tr>
<td>June</td>
<td>1,959,307</td>
<td>83,950</td>
<td>606,915</td>
<td>24,765</td>
<td>133,767</td>
</tr>
<tr>
<td>July</td>
<td>1,664,591</td>
<td>71,296</td>
<td>617,433</td>
<td>23,935</td>
<td>131,505</td>
</tr>
<tr>
<td>August</td>
<td>1,662,539</td>
<td>68,888</td>
<td>603,740</td>
<td>20,224</td>
<td>151,394</td>
</tr>
<tr>
<td>September</td>
<td>1,582,687</td>
<td>68,759</td>
<td>621,206</td>
<td>24,852</td>
<td>133,298</td>
</tr>
<tr>
<td>October</td>
<td>1,493,889</td>
<td>63,476</td>
<td>560,887</td>
<td>24,684</td>
<td>128,979</td>
</tr>
<tr>
<td>November</td>
<td>1,236,811</td>
<td>59,263</td>
<td>533,943</td>
<td>24,229</td>
<td>110,412</td>
</tr>
<tr>
<td>December</td>
<td>1,014,156</td>
<td>50,575</td>
<td>505,600</td>
<td>23,425</td>
<td>75,655</td>
</tr>
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</table>
TABLE XXIII. — STATE EXPENDITURE ON PUBLIC WORKS DURING THE POST-WAR PERIOD

<table>
<thead>
<tr>
<th>Financial year</th>
<th>Paper lire¹ (thousands)</th>
<th>Gold lire² (thousands)</th>
<th>Index No. Paper lire (1918-19 = 100)</th>
<th>Index No. Gold lire (1918-19 = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1918-1919</td>
<td>239,933</td>
<td>175,121</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1919-1920</td>
<td>461,147</td>
<td>179,988</td>
<td>192</td>
<td>103</td>
</tr>
<tr>
<td>1920-1921</td>
<td>837,308</td>
<td>214,623</td>
<td>349</td>
<td>123</td>
</tr>
<tr>
<td>1921-1922</td>
<td>1,315,992</td>
<td>325,594</td>
<td>548</td>
<td>186</td>
</tr>
<tr>
<td>1922-1923</td>
<td>1,459,829</td>
<td>349,133</td>
<td>608</td>
<td>199</td>
</tr>
<tr>
<td>1923-1924</td>
<td>1,374,235</td>
<td>310,800</td>
<td>573</td>
<td>177</td>
</tr>
<tr>
<td>1924-1925</td>
<td>1,208,908</td>
<td>262,671</td>
<td>504</td>
<td>150</td>
</tr>
<tr>
<td>1925-1926</td>
<td>1,274,319</td>
<td>258,425</td>
<td>531</td>
<td>147</td>
</tr>
<tr>
<td>1926-1927</td>
<td>2,068,528</td>
<td>433,853</td>
<td>862</td>
<td>259</td>
</tr>
<tr>
<td>1927-1928</td>
<td>1,976,863</td>
<td>548,709</td>
<td>823</td>
<td>313</td>
</tr>
<tr>
<td>1928-1929</td>
<td>2,082,000</td>
<td>563,116</td>
<td>868</td>
<td>323</td>
</tr>
<tr>
<td>Total</td>
<td>14,298,832</td>
<td>3,644,033</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual aver-</td>
<td>1,299,894</td>
<td>331,276</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ Corriere della Sera, 30 Aug. 1929 (Agencia di Roma).

JAPAN

In Japan as early as April 1919, the Minister of Home Affairs issued instructions to the prefectural governors to attempt to remedy seasonal unemployment by regulating the undertaking of public works, and further instructions of a similar kind were sent out at a later date. It was not, however, until 1925 that the Government took more active steps. In view of the acute unemployment prevailing at that time, the Government formulated a scheme in August 1925, to encourage the organisation of public works for the purpose of giving direct relief to unemployed persons. According to this scheme the central Government made grants from the national Treasury equivalent to half the labour costs of public works carried out during the winter in six cities, namely, Tokyo, Osaka, Kyoto, Yokohama, Nagoya, and Kobe, and the neighbouring districts. Further, the Government provided means for facilitating the floating of loans to raise the necessary funds for these works. In particular the Deposit Department of the Government, which controls the postal savings funds, assisted by accepting low rates of interest. In succeeding years similar schemes were adopted.

The principal object of these works was to give immediate relief to unskilled manual labourers who were out of work. Only such public works as required a large amount of unskilled labour were put in hand and the State grants were limited to those undertakings in which the cost of unskilled labour exceeded 30 per cent. of the total cost of the works and in which the wages bill of technical and skilled labour was less than 15 per cent. of the total labour cost. This last figure was raised to 20 per cent in 1927.

The works were started in December of each year and were continued until the end of March in the following year, that is to say, the end
of the fiscal year. If the works were not finished within a given fiscal year on account of bad weather or other reasons and if the continuation of the works was desirable in view of the unemployment situation, State aids were carried forward to the following fiscal year when the works were completed. The termination of the works was carefully planned and the number of workmen employed was gradually reduced so that no new problem of unemployment should arise.

In 1929 the Japanese Government made some important changes in this policy. Firstly, it was decided by the Government that financial aid for public works undertaken to relieve unemployment would be extended to other parts of the country besides the six large cities and their vicinities wherever the question of unemployment became serious enough. Secondly, the inauguration of public works for the relief of widespread unemployment among intellectual workers was encouraged by the Government; for instance, such workers were able to assist in the classification of material collected in the course of special investigations made by the Government, indexing, etc. Lastly, the Government set up central and local Industrial Regulation Boards the functions of which are to investigate industrial conditions and to regulate governmental and municipal expenditure so as to improve the employment situation in the country.

The following table shows the total expenditure on public works in various cities, from 1925 to 1928, the amount of State aid granted in each year and labour costs.

**TABLE XXIV. — TOTAL EXPENDITURE ON PUBLIC WORKS FOR RELIEVING UNEMPLOYMENT, THE AMOUNT OF STATE AID GRANTED AND THE LABOUR COSTS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Expenditure for public works</th>
<th>Amount of State grant</th>
<th>Labour costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1925</td>
<td>5,770,071</td>
<td>892,842</td>
<td>1,785,684</td>
</tr>
<tr>
<td>1926</td>
<td>3,431,737</td>
<td>648,470</td>
<td>1,367,297</td>
</tr>
<tr>
<td>1927</td>
<td>3,522,021</td>
<td>721,241</td>
<td>1,500,929</td>
</tr>
<tr>
<td>1928</td>
<td>2,757,832</td>
<td>569,415</td>
<td>1,148,570</td>
</tr>
</tbody>
</table>

The kinds of work carried out were as follows: (1) construction of roads and bridges; (2) dredging and improvement of rivers and other waterways; (3) sewage work; and (4) reclamation works.

**POLAND**

In Poland the Government and the local authorities have, as a result of unemployment, accelerated the execution of certain public works. This was first done in 1919, but this early experiment was accomplished

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1. These functions have been taken over by a newly established Commission for the Prevention of Unemployment.

2. **Industrial Regulation Board**: Shitsugyo Kyosaijigyo Gaiyo (Outline of Unemployment Relief Works), p. 3. Tokyo, 1930.
hurriedly, under the pressure of the unemployed, who were demanding work. The executive organs consisted of local committees working under the Office of Public Works. Owing to the absence of any definite scheme, it is almost impossible to state what results were achieved at that time. It is only since 1926 when the Minister of Labour and Social Welfare took the matter in hand that public works have been carried out in a systematic way.

With a view to facilitating the execution of large-scale public works, the Bank of National Economy is authorised to grant long-term loans at 8 per cent. to the local authorities in the form of communal bonds. In addition to this, however, the Council of Ministers decided early in 1926, when unemployment was severe, to set up an Inter-Departmental Committee of seven ministers to deal with the question under the chairmanship of the Minister of Labour and Social Welfare. On the proposal of this Committee the Government decided to stimulate the carrying out of public works by the Government and the communes, and to grant the latter to that end three-year loans at a very low rate of interest with the faculty of renewing them, if necessary. The Committee was later transformed into a permanent body in order to supervise the application of this policy in co-operation with the Minister of Public Works.

By an Order of 1 April 1928 the Ministry of Labour provided a special system of loans in order to assist the communes to absorb the unemployed. The Order prescribed that loans might be granted to communes, to public and private undertakings for the construction of houses, improvement works, etc., and to undertakings employing not less than seventy-five workers in order to enable them to increase their staff by at least 25 per cent. The loans were granted for a period of six years at 6 per cent., and must be used for no other purpose than the payment of wages to the workers concerned. If any other use is made of them the authorities may require immediate repayment. The workers employed as a result of such loans must be selected from among the unemployed persons registered at the public employment exchanges.

The immediate supervision of the work is undertaken by the local public works departments, while the Bank of National Economy supervises the spending of all money borrowed from it.

In 1926 the Union of Polish Towns took the initiative in organising public works and representations on this subject were made to the various authorities concerned.

Works carried out by the State comprised the construction of bridges and roads, river harbours, school buildings, railway and military buildings; those undertaken by the communes with the assistance of grants included road repairing and paving, construction of bridges, docks, canals, waterpipes, houses, schools, barracks, hospitals and industrial establishments, the laying out of parks, levelling of land, etc.

The long-term 8 per cent. loans granted by the Bank of National Economy to the local authorities in the form of communal bonds amounted to 117,003,696 gold zlotys in 1925 and 1926; 41,237,520 in 1927; 43,724,320 in the first half of 1928; total up to that time, 201,965,536
gold zlotys. The total value of bonds outstanding on 30 June 1928 was 118,000,000 gold zlotys.

In connection with the three-year loans granted by the Government to the communes for speeding up public works the necessary funds were furnished by the Ministry of Labour and Social Welfare which placed at the disposal of the Inter-Departmental Committee set up to supervise the application of the Government’s policy a certain proportion of the funds included in the budget for unemployment insurance. A sum of 23,783,000 zlotys was lent in this way up to the end of 1926. From 1927 onwards the necessary resources were drawn from the funds of the Ministry of Finance and by the end of June 1927, 9,040,000 zlotys had been advanced. The Committee then decided to transfer these transactions to the Bank of National Economy and from 1 July 1927 long term loans at 8 per cent. were granted to the communes by the Bank. By the end of November 1927 loans granted under this system amounted to 9,580,000 zlotys. Certain facilities were granted by the Government to the communes in order to encourage them to take advantage of these loans.

In addition to the above, supplementary taxes were imposed on railway tickets and stamps in order to cover the expenditure on certain public works. By this means 16,090,000 zlotys were raised in 1926 and 12,210,000 zlotys during the first eleven months of 1927. Work was carried on under this system until the spring of 1928 when a considerable number of unemployed were absorbed by the commencement of the building season. The amount advanced on these works from November 1927 to March 1928 was 3,080,000 zlotys.

Thus loans for the prevention of unemployment drawn from public funds amounted in all to 64,203,000 zlotys in 1926, 1927 and 1928 of which half is due to be reimbursed by the communes before 1 May 1931.

No statistical data are available to show the exact amount of money spent by the municipalities themselves for public works. The only figures are those referring to loans raised by towns for building work and repairs. They are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount of the loans (in thousands of zlotys)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1923</td>
<td>2,587</td>
</tr>
<tr>
<td>1924</td>
<td>6,414</td>
</tr>
<tr>
<td>1925</td>
<td>89,596</td>
</tr>
<tr>
<td>1926</td>
<td>53,971</td>
</tr>
<tr>
<td>1927-1928</td>
<td>212,738</td>
</tr>
</tbody>
</table>

The approximate daily number of workers employed on public works in Poland during the years 1925-1928 was as follows 1.

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1 These figures are obtained from the *Statystyka Pracy* (Labour Statistics).
TABLE XXVI. — APPROXIMATE DAILY NUMBER OF WORKERS
EMPLOYED ON PUBLIC WORKS

### 1925

<table>
<thead>
<tr>
<th>Months</th>
<th>Total</th>
<th>Ministry of Public Works</th>
<th>Municipalities</th>
<th>Other institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>3,992</td>
<td>1,534</td>
<td>1,824</td>
<td>634</td>
</tr>
<tr>
<td>February</td>
<td>7,242</td>
<td>1,923</td>
<td>4,679</td>
<td>640</td>
</tr>
<tr>
<td>March</td>
<td>8,564</td>
<td>1,752</td>
<td>6,334</td>
<td>483</td>
</tr>
<tr>
<td>April</td>
<td>11,726</td>
<td>2,288</td>
<td>8,505</td>
<td>933</td>
</tr>
<tr>
<td>May</td>
<td>17,682</td>
<td>4,382</td>
<td>12,040*</td>
<td>1,260</td>
</tr>
<tr>
<td>June</td>
<td>21,239</td>
<td>4,540</td>
<td>15,221</td>
<td>1,478</td>
</tr>
<tr>
<td>July</td>
<td>23,086</td>
<td>4,413</td>
<td>16,665</td>
<td>1,988</td>
</tr>
<tr>
<td>August</td>
<td>21,050</td>
<td>3,980</td>
<td>16,067</td>
<td>1,063</td>
</tr>
<tr>
<td>September</td>
<td>21,500</td>
<td>4,337</td>
<td>15,351</td>
<td>1,812</td>
</tr>
<tr>
<td>October</td>
<td>18,501</td>
<td>3,262</td>
<td>13,861</td>
<td>1,378</td>
</tr>
<tr>
<td>November</td>
<td>13,789</td>
<td>2,365</td>
<td>9,770</td>
<td>1,654</td>
</tr>
<tr>
<td>December</td>
<td>6,691</td>
<td>1,284</td>
<td>5,078</td>
<td>329</td>
</tr>
</tbody>
</table>

### 1926

<table>
<thead>
<tr>
<th>Months</th>
<th>Total</th>
<th>Ministry of Public Works</th>
<th>Municipalities</th>
<th>Other institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>7,538</td>
<td>1,704</td>
<td>5,232</td>
<td>602</td>
</tr>
<tr>
<td>February</td>
<td>13,614</td>
<td>1,030</td>
<td>11,538</td>
<td>1,064</td>
</tr>
<tr>
<td>March</td>
<td>20,195</td>
<td>2,482</td>
<td>15,404</td>
<td>2,309</td>
</tr>
<tr>
<td>April</td>
<td>32,316</td>
<td>6,576</td>
<td>23,162</td>
<td>2,578</td>
</tr>
<tr>
<td>May</td>
<td>39,250</td>
<td>8,305</td>
<td>28,428</td>
<td>2,023</td>
</tr>
<tr>
<td>June</td>
<td>44,274</td>
<td>5,919</td>
<td>32,454</td>
<td>5,710</td>
</tr>
<tr>
<td>July</td>
<td>43,739</td>
<td>7,283</td>
<td>30,419</td>
<td>5,994</td>
</tr>
<tr>
<td>August</td>
<td>44,798</td>
<td>8,058</td>
<td>33,181</td>
<td>3,559</td>
</tr>
<tr>
<td>September</td>
<td>44,541</td>
<td>8,582</td>
<td>32,903</td>
<td>3,478</td>
</tr>
<tr>
<td>October</td>
<td>44,091</td>
<td>8,752</td>
<td>30,623</td>
<td>4,715</td>
</tr>
<tr>
<td>November</td>
<td>37,568</td>
<td>8,738</td>
<td>25,137</td>
<td>3,693</td>
</tr>
<tr>
<td>December</td>
<td>24,121</td>
<td>4,252</td>
<td>15,230</td>
<td>4,589</td>
</tr>
</tbody>
</table>

### 1927

<table>
<thead>
<tr>
<th>Months</th>
<th>Total</th>
<th>Ministry of Public Works</th>
<th>Municipalities</th>
<th>Other institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>20,978</td>
<td>3,719</td>
<td>12,396</td>
<td>4,863</td>
</tr>
<tr>
<td>February</td>
<td>20,735</td>
<td>3,041</td>
<td>12,325</td>
<td>5,369</td>
</tr>
<tr>
<td>March</td>
<td>29,233</td>
<td>6,934</td>
<td>17,116</td>
<td>5,183</td>
</tr>
<tr>
<td>April</td>
<td>35,888</td>
<td>7,095</td>
<td>22,526</td>
<td>6,267</td>
</tr>
<tr>
<td>May</td>
<td>45,949</td>
<td>6,788</td>
<td>24,477</td>
<td>6,684</td>
</tr>
<tr>
<td>June</td>
<td>49,255</td>
<td>13,252</td>
<td>30,446</td>
<td>5,557</td>
</tr>
<tr>
<td>July</td>
<td>43,197</td>
<td>8,896</td>
<td>29,619</td>
<td>4,691</td>
</tr>
<tr>
<td>August</td>
<td>41,562</td>
<td>7,075</td>
<td>30,648</td>
<td>3,839</td>
</tr>
<tr>
<td>September</td>
<td>40,546</td>
<td>9,490</td>
<td>27,940</td>
<td>3,116</td>
</tr>
<tr>
<td>October</td>
<td>40,026</td>
<td>9,201</td>
<td>26,879</td>
<td>3,946</td>
</tr>
<tr>
<td>November</td>
<td>26,622</td>
<td>4,250</td>
<td>18,026</td>
<td>4,346</td>
</tr>
<tr>
<td>December</td>
<td>16,168</td>
<td>2,092</td>
<td>10,834</td>
<td>3,242</td>
</tr>
</tbody>
</table>
SWITZERLAND

A great deal has been done in Switzerland to provide work for the unemployed by the acceleration of public works and the Confederation has granted subsidies to the Cantons for this purpose. In addition, the Confederation itself has undertaken certain relief works on its own account.

The subsidies granted and the orders given by the Confederation related to works some of which had been postponed on account of high prices, while others might in normal circumstances not have been undertaken at all, or at any rate would only have been undertaken in the somewhat distant future.

All the exceptional measures which were taken in order to deal with unemployment have gradually disappeared as the economic situation and the situation of the labour market improved, and since 1924 no such measures have been taken by the Confederation at all.

The most important feature of the public works programme has been the acceleration of the electrification of a considerable part of the railway system. As this was done to a large extent on account of unemployment, the Confederation gave subsidies amounting to 60,000,000 francs. Other works which have been undertaken included the laying of telegraph wires, the manufacture and construction of material for the Post Office administration, the straightening of water courses, construction of bridges and roads, canalisation, the cutting of roads through forests, repairs to buildings, etc.

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1 Cf. in particular, Decree of the Federal Council concerning measures for dealing with unemployment by the carrying out of certain works, in particular so-called relief works, 23 May 1919; Decree of the Federal Council for the encouragement of building, 15 July 1919; Decree of the Federal Council to mitigate the shortage of houses by encouraging building, 11 May 1920; Decree of the Federal Council concerning measures for dealing with unemployment, 19 Feb. 1921; Decree of the Federal Council concerning measures for dealing with unemployment, 20 Sept. 1921; Decree of the Federal Council concerning measures for dealing with unemployment, 14 Nov. 1922; Decree of the Federal Council bringing to an end the measures taken by the Confederation to deal with unemployment, 4 March 1924.
Certain services of the Federal administration, such as the Post Office, continue to place their orders for material each year sufficiently early, and with sufficiently elastic delivery terms, for the orders to be carried out in winter, when seasonal unemployment increases. The Federal railways do the same for some of their work.

A great deal was done by the Swiss authorities during the post-war crisis to institute relief works of all kinds, both public and private, in order to alleviate unemployment. The Federal Labour Office estimates at approximately 100,000,000 francs the grants made by the Confederation for relief works undertaken by the various cantons, while the cantons spent about the same amount themselves. The works in question were not exclusively public works but also included works of a non-official character capable of giving employment to unemployed workmen.

The following table shows the kind of works undertaken, cost of the works and the amount of the Federal subsidy:

**TABLE XXVII — SUBSIDIES OF THE FEDERAL GOVERNMENT FOR THE ENCOURAGEMENT OF WORKS TO MITIGATE UNEMPLOYMENT AND THE HOUSING SHORTAGE FROM 1919 TO 1926**

**A. — Classification according to Kind of Work**

<table>
<thead>
<tr>
<th>Kind of Work</th>
<th>Total amount spent</th>
<th>Amount of the Federal subsidy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential buildings</td>
<td>424,977,080</td>
<td>32,563,650 (33.1 %)</td>
</tr>
<tr>
<td>(45.1 %)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public buildings</td>
<td>124,868,210</td>
<td>15,341,030 (15.6 %)</td>
</tr>
<tr>
<td>(13.2 %)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repairs</td>
<td>16,018,790</td>
<td>1,401,410 (1.4 %)</td>
</tr>
<tr>
<td>(1.7 %)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial and commercial buildings</td>
<td>19,803,510</td>
<td>1,652,550 (1.7 %)</td>
</tr>
<tr>
<td>(2.1 %)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural buildings</td>
<td>8,817,600</td>
<td>921,870 (0.9 %)</td>
</tr>
<tr>
<td>(0.9 %)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridges, roads, etc.</td>
<td>165,628,340</td>
<td>25,405,120 (15.8 %)</td>
</tr>
<tr>
<td>(17.6 %)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buildings for railway and shipping purposes</td>
<td>23,405,770</td>
<td>2,979,160 (3.0 %)</td>
</tr>
<tr>
<td>(2.5 %)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water supply</td>
<td>61,882,900</td>
<td>6,544,940 (6.6 %)</td>
</tr>
<tr>
<td>(6.6 %)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canalisation and river corrections</td>
<td>52,392,230</td>
<td>6,297,940 (6.4 %)</td>
</tr>
<tr>
<td>(5.6 %)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land drainage, agricultural improvements, etc.</td>
<td>23,841,140</td>
<td>2,140,510 (2.2 %)</td>
</tr>
<tr>
<td>(2.5 %)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shooting stands</td>
<td>5,555,340</td>
<td>557,190 (0.8 %)</td>
</tr>
<tr>
<td>(0.6 %)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>15,475,910</td>
<td>2,630,540 (2.7 %)</td>
</tr>
<tr>
<td>(1.6 %)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>942,636,920</td>
<td>98,435,910 (100.0 %)</td>
</tr>
<tr>
<td>(100.0 %)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
B. — Classification according to Those who Received Subsidies

<table>
<thead>
<tr>
<th>Subsidy Paid to</th>
<th>Total amount spent</th>
<th>Amount of the Federal subsidy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frs.</td>
<td>Frs.</td>
</tr>
<tr>
<td>Individuals</td>
<td>229,318,900</td>
<td>13,676,210</td>
</tr>
<tr>
<td></td>
<td>(23.4 %)</td>
<td>(13.9 %)</td>
</tr>
<tr>
<td>Co-operative societies</td>
<td>295,091,880</td>
<td>28,252,230</td>
</tr>
<tr>
<td></td>
<td>(31.3 %)</td>
<td>(28.7 %)</td>
</tr>
<tr>
<td>Communes</td>
<td>283,451,710</td>
<td>33,951,200</td>
</tr>
<tr>
<td></td>
<td>(30.1 %)</td>
<td>(34.5 %)</td>
</tr>
<tr>
<td>Cantons</td>
<td>138,316,210</td>
<td>20,938,740</td>
</tr>
<tr>
<td></td>
<td>(14.6 %)</td>
<td>(21.3 %)</td>
</tr>
<tr>
<td>Confederation</td>
<td>5,458,220</td>
<td>1,617,530</td>
</tr>
<tr>
<td></td>
<td>(0.6 %)</td>
<td>(1.6 %)</td>
</tr>
<tr>
<td>Totals</td>
<td>942,636,920</td>
<td>98,435,910</td>
</tr>
<tr>
<td></td>
<td>(100.0 %)</td>
<td>(100.0 %)</td>
</tr>
</tbody>
</table>

In addition, 11,000,000 francs were advanced by the Confederation on mortgage for the purpose of encouraging the building of houses. Moreover, between May 1919 and March 1924, 110,000,000 francs were expended on relief works undertaken directly by the Confederation.

It has not been possible to estimate the approximate number of workers employed daily on such work, nor the length of time they were employed. All categories of wage earners have been included. Unemployment in industry is now much less than it was shortly after the war, but it is still found during the off season in the building trade. Building workers are therefore those who are above all employed on relief works.

By a decision of 19 September 1930 the Federal Council instructed the Federal Department of Public Economy to inform the different departments of the Federal and Cantonal Administrations that in view of the present conditions, which have again become less favourable as a result of the world crisis, it was desirable that the execution of public works should be hastened as much as possible. In the circular which the Federal Department of Public Economy addressed to the cantonal authorities on this subject, the latter were in particular invited to choose those works which would employ the largest number of workmen. As a matter of fact a certain number of cantons have already on their own account distributed their public works and orders for supplies in such a way as to take account of industrial fluctuations and considerable credits have recently been voted for this purpose.

UNITED STATES

In Part I particulars have been given of the extent to which public works have been systematically distributed over a period of years and some details have also been given of the public works actually put in hand without advance planning during successive economic depressions. Very little additional information is available.
According to an important study of the facts relating to public works in the United States carried out by Mr. Leo Wolman, such works constitute between 35 and 40 per cent. of all construction, both public and private, in that country, and in 1928-1929 amounted to roughly $3,500 million dollars a year; about 900,000 men are directly employed on these works. The largest single category of public construction is road building, which in 1928 accounted for an expenditure of more than $1,500 million dollars. Outlays by the Federal Government on public works are less than 10 per cent. of the total.

It is very difficult to know what emergency works have been undertaken in times of depression. During the slump in 1921 the Federal Government made grants to the States in aid of road building, Congress voting $75 million dollars for this purpose. These grants required the voting of an equal amount by the States concerned. The result was that 6,261 miles of roads were constructed by about 30 States at a cost of approximately $40,000 dollars a mile, or $250 million dollars altogether. It is estimated that this expenditure furnished employment for about 200,000 workers during the year 1922. In addition, the States and principal cities undertook a large volume of public works locally.

With the reappearance of unemployment at the beginning of 1928 the Federal Government speeded up the execution of its naval construction programme, flood control projects and other public works such as building and road construction. Certain States likewise hastened the execution of public works with a view to alleviating unemployment. Thus, the Governor of the State of New York speeded up the putting in hand of public works to the value of $37 million dollars for the construction of bridges, roads, avenues, etc., and at the same time he invited mayors and county governors to follow his example.

At the end of 1929 when the depression occurred, President Hoover took steps to induce local authorities and industrialists to put in hand such work as was possible in order to mitigate unemployment. He held a series of conferences with representatives of finance, trade, industry, agriculture and labour in November 1929 for this purpose.

According to a statement made by the Acting Chief of the Division of Public Construction of the United States Department of Commerce on 12 June 1930, the Federal Government had made the following contribution to the public works programme in view of the unemployment crisis of 1929-1930:

1. Congress increased the amount of Federal aid to the States for highway construction from $75 million to $125 million dollars a year for three years, and liberalised the terms for its use.
2. The Federal building programme for post offices and other structures in cities and towns throughout the country was increased by $230 million dollars.
3. The river and harbour improvement work carried out by the War Department was so expanded on account of the unemployment situation that a deficiency appropriation of $12 million

1 National Bureau of Economic Research: Planning and Control of Public Works.
dollars was granted by Congress in order to sustain active operations.

(4) A 15 million dollar Veterans' Bureau hospital building programme was provided by Congress and put under way immediately on passage of the Act.

Highway construction contracts amounted to 197 million dollars in thirty-seven eastern States during the first four months of 1930 showing an increase of 38 per cent. over the same period in 1929.

Moreover, the railways and other public utilities had provided for an expenditure of 3,500,000 dollars on new construction and other capital improvement.

The Postmaster-General certified to the United States Shipping Board thirteen new ocean mail routes the successful bidder for which would be required to build within the next ten years forty vessels aggregating 460,000 tons gross at an estimated cost of about 2,500 million dollars. It was stipulated that work should begin on seventeen of these vessels within the following six months.

Public works were also expedited in a large number of States and in the more important cities. Thus, for instance, contracts awarded in thirty-seven States during the four months January-April 1930 for the construction of public works and public utilities were estimated at 453 millions dollars, as compared with 348 million dollars in the corresponding period of 1929.

The report of the National Bureau of Economic Research states that in the business cycle 1919-1921:

... contracts of public works and public utilities turned down at recession and continued to decline all the way through the revival of the next cycle. But of the other groups, residential, commercial and industrial building, only industrial contracts showed the same type of behaviour, although they ceased declining during the last period of business contraction. Again, in the cycle 1921-1924, public works and utilities began to decline early and continued to decline through the first phase of the next revival. In this cycle both commercial and residential building revived earlier. During the cycle 1924-1927, however, when there had been a large and persistent increase in the volume of public works, the revival of public works and utilities preceded the revival of general business.

It would appear from this that a good deal still remains to be done to adapt public works programmes to the labour market.

UNION OF SOCIALIST SOVIET REPUBLICS

In the Union of Socialist Soviet Republics (U.S.S.R.) the organisation of public works in connection with unemployment was first undertaken after the Revolution in 1918. Up to 1922 this organisation existed locally and only when required. The funds were obtained from local sources and no general system was applied. Only since the fiscal year 1922-1923 have public works been systematically organised by the State, and Government funds made available for such works. The credits allocated for that purpose are set forth in the following table:

Ibid., and United States Daily, 10 Feb. and 30 April 1930.
TABLE XXVIII. — SUMS GRANTED FOR ASSISTANCE BY PUBLIC WORKS
(In Chervonetz Roubles)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total amount granted for assistance by public works</th>
<th>Of which</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>On the State budget</td>
</tr>
<tr>
<td>1922-23</td>
<td>735,000¹</td>
<td>—</td>
</tr>
<tr>
<td>1923-24</td>
<td>4,350,628</td>
<td>3,349,334</td>
</tr>
<tr>
<td>1924-25</td>
<td>16,033,200</td>
<td>7,963,000</td>
</tr>
<tr>
<td>1925-26</td>
<td>19,127,000</td>
<td>6,000,000</td>
</tr>
<tr>
<td>1926-27</td>
<td>25,401,400</td>
<td>8,100,000</td>
</tr>
</tbody>
</table>

¹ Taken from the funds of the Central Committee for the struggle against the consequences of the famine of 1921.

The column representing "other sums" in the above table includes money obtained from the sale of materials as, for example, when houses are demolished (at Moscow this amounts to about 300,000 roubles per year), from so-called monthly collections, from philanthropic sources, etc. In the Ukraine, these sums also include those coming from the repayment of long-term loans which have been granted on the basis of budgetary resources. These loans are granted to the local economic organisations by the local labour sections.

In the fiscal years 1922-1923 and 1923-1924 funds for unemployment relief through the provision of work were provided only for public works, but from the fiscal year 1924-1925 onwards an important part of the credits was spent for other forms of assistance (productive associations of unemployed, the constitution of night refugees and houses for young persons, and the employment of young persons in undertakings above the normal number).

Of the above resources the following sums were spent for public works:

TABLE XXIX

<table>
<thead>
<tr>
<th>Year</th>
<th>Amounts spent (in chervonetz roubles)</th>
<th>Man-days of work carried out</th>
<th>Number of unemployed assisted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1922-23</td>
<td>735,000</td>
<td>1,418,455</td>
<td>30,000</td>
</tr>
<tr>
<td>1923-24</td>
<td>4,350,628</td>
<td>2,438,257</td>
<td>48,000</td>
</tr>
<tr>
<td>1924-25</td>
<td>10,459,000</td>
<td>5,613,027</td>
<td>114,000</td>
</tr>
<tr>
<td>1925-26</td>
<td>11,358,800</td>
<td>4,212,000</td>
<td>90,000</td>
</tr>
<tr>
<td>1926-27</td>
<td>13,000,000</td>
<td>6,000,000</td>
<td>100,000</td>
</tr>
</tbody>
</table>

By dividing the total amount of the expenses for wages by the total number of man-days of work the actual average wages paid for

¹ For information concerning these associations, see "The Provision of Work for the Unemployed in the U.S.S.R." in the International Labour Review, Vol. XXII, No. 1, July 1930.
public works can be determined. Thus the average for the whole of
the U.S.S.R. in 1924-1925 amounted to 1.5 roubles and in 1925-1926
to 1.77 roubles per day.

Up to 1925-1926 public works in the U.S.S.R. were mainly in towns
and were carried out by the municipal economic departments (communal
sections of the local councils of workmen's deputies). Since 1925-1926
the public works have been extended, including in particular the
construction of roads and work done by the economic services of the
sanitary departments and the departments of public instruction.

The following table shows certain particulars of the public works
carried out during the months of January to August 1926, at Moscow
and Leningrad:

TABLE XXX

<table>
<thead>
<tr>
<th>Kind of public works</th>
<th>Amount of expense for wages in roubles</th>
<th>Man-days of work carried out</th>
<th>Average wage in roubles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gardens and parks</td>
<td>752,225</td>
<td>369,924</td>
<td>2.04</td>
</tr>
<tr>
<td>Regularisation of watercourses and</td>
<td>455,078</td>
<td>156,905</td>
<td>2.9</td>
</tr>
<tr>
<td>cleaning of ponds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levelling of ground</td>
<td>220,175</td>
<td>197,182</td>
<td>2.23</td>
</tr>
<tr>
<td>Roads</td>
<td>188,751</td>
<td>87,970</td>
<td>2.14</td>
</tr>
<tr>
<td>Demolition of buildings, etc.</td>
<td>163,115</td>
<td>86,318</td>
<td>2.09</td>
</tr>
<tr>
<td>Drainage</td>
<td>108,116</td>
<td>44,266</td>
<td>2.44</td>
</tr>
<tr>
<td>Stonecutting</td>
<td>107</td>
<td>101</td>
<td>1.06</td>
</tr>
</tbody>
</table>

Since 1926-1927, the public works on instructions from the Commis-
sariat of the People for Labour have included industrial constructions.
Thus various auxiliary works have been carried out, such as, for
example, the levelling of ground for the construction of factories, the
construction of dykes, etc.

The labour utilised on public works is mostly unskilled (approxim-
ately 90 per cent.). Women constitute up to 30 per cent. of it and
young persons about 5 per cent. The workmen are provided with
gloves, aprons and, in case of need, other special clothes.
PART III
SUMMARY AND CONCLUSIONS

It will perhaps be useful at the outset of this Part to recapitulate the principal points which have been dealt with in this study.

The present report owes its existence to an Article in the Washington Recommendation on Unemployment, to a Resolution of the International Labour Conference in 1926 and to the desire expressed by the Joint Committee on Economic Crises that more information on the subject should be obtained. The essential feature of the policy recommended at Washington in 1919 and at Geneva in 1926 is the co-ordination of works undertaken under public authority "with a view to reserving such work as far as practicable for periods of unemployment ", or, as the 1926 Resolution put it, "the organisation of public works so as to counteract the fluctuations of private business ". Part I of the study has therefore been devoted mainly to this aspect of the question. Since 1919, however, while economic fluctuations have continued to prevail, a number of industrial countries, principally in Europe, have suffered from a long-continued economic disequilibrium involving more or less severe unemployment. There has been no period of boom in which those countries could postpone their public works for a later depression period and they have been obliged to put in hand after the crisis had already arrived extensive public works which would not ordinarily have been undertaken until a later period. Part II of the study is devoted to works of this kind.

With regard to advance planning, we have seen that a distinction must be drawn between measures to deal with seasonal unemployment and measures to deal with cyclical unemployment. It is with the latter that we are mainly concerned at the present moment. There has been controversy as to the cost of public works postponed or advanced but it appears that the cost would not be increased but might even be reduced by a suitable redistribution of works. The total value of public works forms a
considerable proportion of the total industrial activity of a country and consequently any redistribution would have an appreciable direct effect on the labour market. There are also indirect effects, as, for example, that additional employment in one industry gives additional employment in other industries, and that increased activity exercises a stimulating influence on industry as a whole. On the other hand, only certain public works can be postponed or advanced while others must be put in hand immediately. It is sometimes suggested that a public works policy should aim not at compensating industrial fluctuations but at regularising the orders of public authorities from year to year, in the hope that private industry will follow this example. In many countries where public works and orders for supplies have hitherto followed a parallel course to the fluctuations of private industry, and have consequently aggravated those fluctuations, the situation would be considerably improved if the orders of public authorities came on to the market in a steady stream. On the other hand, a policy of advance planning would go much further in the direction of regularising the general industrial fluctuations. As private industry makes its own production more and more regular, the orders of public authorities will also become more and more regular. It is clear that Governments cannot refrain from giving employment on public works to some of the unemployed during periods of depression, and for that purpose it is essential that the public works should be planned in advance, because otherwise they would be put in hand too late to exercise their full influence on the employment situation.

It is often asked whether public works undertaken at a time of depression do not merely have the effect of diverting money from private industry without adding to the volume of employment in any way. This is a very important question. While the main purpose of advance planning is precisely to use less capital for Government purposes and to leave more for private industry in periods of prosperity and vice-versa when private industry is at a low state of activity, in a long-period depression there are prima facie reasons for thinking that a continued expenditure of Government money on public works may fail to expand industrial employment. On the other hand, various considerations are put forward in favour of the opposite view and the conclusion is reached that public works do in effect increase the volume of employment.

During a depression money is lying idle in the banks and this is accompanied by a decrease in the quantity of money in circu-
lation, and a restriction of credit. In so far as this is a deliberate policy pursued by the central bank it may of course neutralise the good effects of a public works policy. What ought to be done is the exact opposite of this, and the suggestion has been made that the money to finance the works should be provided by means of loans from the banks. The works would enable this money to reinforce purchasing power.

In Chapter 2 of Part I there is a general survey of the measures of advance planning actually adopted, from which it is evident that a certain number of Governments do try to distribute their orders in accordance with the labour market situation. A great many countries, however, do not appear to apply a policy of this kind, and even in those which do a great deal still remains to be done. In particular, there is practically no evidence at all that local authorities pay attention to the labour market situation in giving out their orders. The paucity of the information obtained by the organisers of the Fourth International Congress of Towns and Public Authorities from their affiliated organisations speaks volumes on this subject.

The policy of advance planning raises a number of administrative problems which are considered in Chapter 3. At present there is usually a multiplicity of authorities responsible for public works. A co-ordinating body of some kind is required in order to ensure the application of a unified policy. Labour for public works must be recruited through the employment exchanges. Relations with contractors are not disturbed by the policy of advance planning since once the contract is concluded it must be carried out unless there is agreement between the authority and the contractor, and the policy of advance planning can be applied by withholding or hastening new contracts rather than by annulling existing contracts. It is difficult to know exactly at what moment to start hastening or postponing public works. Most countries which apply such a policy use the unemployment index or some other index of economic conditions. It is important to continue the search for a more sensitive economic barometer which might be used for this purpose among others.

The real crux of the problem is the financial side. The money can be raised by taxation or loans. Taxation, however, besides involving considerable delay in obtaining the money, can only be used to a limited extent. The authorities can borrow the money they require and thus spread the payment for it over a number of years, but this is also rather a slow method. Various suggestions
have been made with the object of giving the authority concerned power to raise the necessary loan at short notice or of creating reserve funds of one kind or another. Some such device seems indeed to be indispensable if the policy of advance planning is to be effectively applied, but we must recognise that little has been done on these lines so far.

In Part II, it is explained that a clear distinction between public works and orders for supplies on the one hand and relief works on the other must be drawn, the latter being defined as works subject to special conditions, such as the employment of men because they are unemployed rather than because they are fitted for the job, the adoption of a relay system so as to employ as many men as possible, and the payment of wages at a rate lower than the customary rate. A survey is given of a large number of works which have been put in hand during the last ten years, on account of unemployment, earlier than would normally have been the case. It is very difficult to determine precisely what effect these works have had on the labour market because so many influences are at work. Unless, however, we accept the view that public works involve a mere transfer of capital from private industry to the State, without adding to the volume of employment in any way, we can affirm with certainty that the public works have contributed to the relief of the labour market and have provided the various local and national communities and public utility enterprises concerned with valuable capital resources, making for increased efficiency and reduced cost. There are also social advantages, such as the prevention of moral deterioration, which should not be forgotten. Reference has been made in this survey to the productive unemployment relief schemes in Austria, Germany and other countries. In reality, however, these are schemes for pure relief works and not for public works as we have defined them.

It remains now to be seen what conclusions can be drawn from the facts set out in the preceding chapters, and in doing so it will be convenient to follow the order set out in the Suggested Basis for the Supply of Information drafted by the Joint Committee on Economic Crises and consider each point mentioned there.

I. — Legislative or other provisions in force requiring more or less explicitly the reservation, to some extent, to periods of unemployment of public works and orders for supplies given by public authorities.
There are very few provisions in force requiring the reservation to periods of unemployment of public works and orders for supplies given by public authorities. There are occasional laws like the Development and Road Fund Act of 1909 in Great Britain, the Italian Acts of 1867 and 1879, which were confirmed in 1928, and a few State laws in the United States, but that is all. Bills have been presented on the subject in Great Britain and the United States, but have failed to pass. On the other hand, the Federal Economic Council in Germany passed an important resolution on 26 July 1927 which has led to a number of administrative measures in that country.

The importance of advance planning has been shown in the earlier pages of this report, and it seems to be very desirable that Governments should take an early opportunity of passing legislation dealing with works undertaken by the Government departments themselves and works which are subject to governmental influence of one kind or another, including those carried out by public utility undertakings. The essential provisions which ought to be inserted in such legislation will be dealt with point by point in the following pages.

II. — Details as to measures which have been taken:

(a) in times of great economic activity to postpone public works, with a view to reserving them for a subsequent period of slackened economic activity;

(b) during a period of unemployment to place in hand public works which would under ordinary circumstances have been undertaken at some later time.

III. — Information as to:

(i) the nature of the public works so postponed or advanced;

(ii) the approximate amount of expenditure so postponed or advanced;

(iii) in each of the cases II (a) and II (b) above, the approximate daily number of workers which would have been or were employed, classified if possible according to occupations;

(iv) the duration of the works.

A great part of the present study is devoted to the details of measures which have actually been adopted either to postpone or to advance public works. It has been shown in the first place that the idea of advance planning is not so new as is sometimes thought and that attention has been paid to this question in a
number of different countries, but our information as to works really postponed is very meagre. Far too often, as Professor Aftalion points out:

... it is during periods of prosperity that the public administrations or railway companies are tempted to expand, because they have the means at their disposal in the shape of increased receipts, because of the fiscal situation, and because of the pressure of necessity. Such expansion in times of depression, when resources are at their lowest, and when the need is not pressing, requires not only real courage, but a confidence in the regularity of the economic rhythm which may risk being qualified as ridiculous theorising 1.

The particulars available, however, show that postponement of certain works with a view to reserving them for periods of slackened economic activity is quite feasible and has had good effects. Examples of such a policy are to be found in Austria, Finland, France, Germany, Italy, Norway, Sweden, Switzerland and the United States. In Sweden, particularly, advance planning has been carefully studied, and the communication of the Swedish authorities which is summarised above is of great interest. No doubt similar examples could be found in other countries. From the Swedish communication it is evident that large-scale works such as railway construction can be adapted to the situation of the labour market, and it is a matter of indifference in this connection whether the railways belong to the State or to private companies. In the latter case the company is a public utility undertaking, and is just as much in a position to apply a system of advance planning as a public authority. Other works which have been treated in a similar way are those connected with the postal administration, the extension of telegraph and telephone equipment, hydro-electric installations and electrical equipment generally, canal construction and maintenance, and road and bridge construction. Most of the above works are in the majority of countries either under the direct control of the State or are subsidised by the State. To them must be added the numerous works for which local authorities (councils of counties, districts, communes, towns, etc.) are responsible. In the United States the most notable case of postponement of public works was that of 1923, when the Federal Government refrained from initiating any new construction work that could possibly be put off; and they did not expand their building programme again until 1926. The decision of the Government in 1923 had a direct influence

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1 *Le Capital*, 17 April 1929.
in slowing down private construction also. There is a certain amount of conscious adaptation to labour market conditions in a few of the States and larger cities in that country.

When we turn to works which have not been held over during a previous period of prosperity, but which are put in hand in anticipation of strict economic needs when the crisis arrives, the situation is quite different. There are few countries which have not done something on these lines in recent years, and in some of them the amounts spent and the number of men employed during the last ten years have been considerable. It is obvious, of course, that unemployment has continued, and in some cases increased, in spite of the public works. But that is no argument against a policy of this kind. Unemployment is a symptom of an economic disequilibrium for which there is no single remedy. But a suitable programme of public works can mitigate some of the worst consequences of unemployment and can at the same time contribute to the revival of industry.

It is not, of course, contested by any one that such a policy is feasible; the opposition to it is based on the argument that the use of capital for public works is merely to transfer it from one purpose to another and not in any way to increase employment possibilities. We shall return to this point in a moment.

In the meantime it may be noted that there is no lack of suitable work available. As Mr. Leo Wolman says, "the testimony is overwhelming that nearly all local and State Governments (in the United States) are always far behind in their programmes of permanent improvements" ¹, and the same thing could certainly be said of all other countries. The preceding pages give evidence of various kinds of work being undertaken by public authorities and public utility undertakings, such as the construction of roads, bridges, wharves, schools, hospitals, prisons, post offices, water supply and sewage systems, hydro-electrical installations, electricity stations and railways, drainage, the reclamation and improvement of land for agricultural purposes, etc.

It is certainly possible to conclude that there is work to be done and, as a rule, workmen to do it. The difficulties in the application of a public works policy are considerable, but they do not lie here.

It is important, if the work is to be done on a sound economic basis, that it should be carried out in accordance with the rules

¹National Bureau of Economic Research: Planning and Control of Public Works.
normally governing public works contracting, and should not develop into mere relief works with lower rates of wages, relay systems and other special conditions.

One other thing emerges clearly from the preceding pages. There is far too little systematic adjustment of public works to the labour market situation. A crisis is allowed to develop. Public works are advanced in time, but with a considerable delay, and the effect of such works is far less than would be the case if the works had been put in hand more promptly. As the Committee on Recent Economic Changes in the United States says, the timing of public works is even more important than the volume of the works undertaken. That, of course, brings us back to the need for advance planning, and we can now take up the consideration of the administrative and financial problems which constitute the real difficulty to be overcome.

IV. — Method of subsequently utilising labour set free owing to postponement of works; method of recruiting labour more rapidly in the case of work which is speeded up.

No problem arises in connection with labour set free owing to postponement of works. By hypothesis, private industry is active at such a time and offers openings to any unemployed labour available.

On the other hand, it is the practically universal practice of public authorities to recruit labour for public works through the employment exchanges, and thus the evils of unorganised recruiting are avoided. If workers are recruited for a kind of work other than that to which they have been accustomed, they should be given some training for it, otherwise inefficiency and increased cost will result, and, moreover, it is unreasonable to expect a man or woman to take up at a moment's notice a job for which he or she may not be fitted.

V. — In the case of works which have been postponed beyond the end of the financial year, what has been done with the credits originally provided for them.

On this point the practice in different countries is not uniform. As a rule money voted by Parliament in any financial year and not used in that financial year is not carried over to the following year. There are, however, exceptions in certain cases in France,

1 National Bureau of Economic Research, op. cit.
Germany and Switzerland. On the other hand, in Italy and Tasmania, the money is held by the Treasury until required. It has been suggested that budgets for public works should be established for a period of two years, but a longer period would be necessary if any effect on cyclical unemployment is desired. In Sweden plans for railway construction were drawn up on a seven-year period, but the money for this purpose would presumably be voted year by year as required. This has been the practice followed in Great Britain in connection with the post-war public works programmes.

The problem discussed here is mainly important in respect of money raised by taxation. It would be useful if the system practised in Italy and Tasmania were extended so that the Treasury could keep money in hand for public works purposes. This does not mean that the Treasury should decide when the public works should actually be put in hand. That point will be considered later. But it means that the Treasury would in prosperous years have certain sums in hand, which could be placed in a bank invested in easily realisable securities, or possibly held in the form of bank notes and would thus be available when a period of depression occurred.

VI. — In the case of works which have been put in hand at a period earlier than was originally anticipated, and for which no provision had been made in the current financial year, how the necessary money has been obtained.

This raises the important question as to how far public works should be financed by taxation, how far by borrowing, and how far by an uninvested balance held by the Treasury. The arguments have been set out in earlier pages. It is clear that for the purchase of consumption goods the money will be derived from taxes, but where capital expenditure is involved borrowing must be resorted to. In either case some money will have to be raised by taxation, since interest has to be paid on the loans.

Hardly any information has been obtained by the International Labour Office as to the method employed in raising such money. Attempts have been made in France, Germany, the United States and elsewhere to budget for several years at a time in connection with public construction, or to borrow for one year at the expense of resources anticipated in the following year. Budgeting for several years at a time is certainly to be recommended, and will certainly facilitate the planning of public works.
VII. — In the case of postponement of public works previously decided on, the difficulties experienced in connection with:

(a) interruption or slowing down of work in the hands of contractors, and the legal recourse open to such contractors against the Government on account of its annulling or modifying their contracts.

(b) the effects of the slowing down of contract work on the financial situation of such contractors or firms supplying them.

This point does not seem to give rise to any difficulty. It is not as a rule practicable to interfere with contracts already made, and it is not at all essential to the policy of advance planning. New works are put in hand every year, and it is these which may be varied from year to year in accordance with the labour market situation.

VIII. — Any indications that, where money for public works which have been put in hand at a period earlier than was originally anticipated has been raised by taxation or borrowing, this procedure may have involved competition with other enterprises in the capital market which, being likely to increase their difficulties, is undesirable at such a time.

This is, perhaps, the most important question of all in connection with the policy of public works, for it involves not only the possible technical difficulties of raising money on the capital market in competition with private industry, but also the whole problem as to how far the capital raised by public authorities is merely a diversion of resources from private industry to the public authorities, without adding to the amount of employment.

These points have been discussed at some length in this study. So far as the first is concerned, there is generally during a depression a superabundance of money seeking investment, and the rate of interest falls. This is therefore a particularly favourable moment for raising money for public works purposes. Not only is it cheaper, but the fact that private industry is unable to make use of it is a very good reason for public authorities to do so. There can then be no suggestion that the latter are merely transferring spending power from private to public bodies. On the contrary, the public bodies would be using capital which would otherwise not be used for industrial purposes. This must inevitably lead to increased employment both directly and indirectly, and to the extent to which the depression is due to psychological causes must lead to a general revival.
The moment at which the capital is borrowed must of course be carefully chosen. Dr. Bernhard points out, for instance, that at the very beginning of a depression there is not so much liquid capital available as is the case at a later stage. This is quite true, of course. On the other hand, the beginning of a depression is just the time for increasing the volume of public works, but these may be financed by means of a reserve fund, and no new capital need be raised until a later date.

Of course, if the central bank believes that a restriction of credit is necessary the benefits anticipated from a public works policy may be seriously compromised. There can be no doubt, as Mr. J. M. Keynes says, that an active public works policy involves an increase in credit facilities, or at any rate an absence of restrictions, and the efficacy of a public works policy depends, therefore, very largely on the monetary policy pursued by the central bank.

IX. — Any arrangements which have enabled the accumulation by the authorities, during periods of prosperity, of reserve funds for financing public works the execution of which is left to a time of depression.

The way in which the funds held in reserve have been invested while awaiting utilisation.

This is also a question of the greatest importance in the organisation of public works. Advance planning is quite impossible without a reserve fund. A perusal of the chapter devoted to financial problems shows that several proposals have been made for the rapid provision of funds, and that one or two measures of a tentative character have actually been adopted. Thus, it is suggested in France that a "fonds de concours" be created for the purpose; in Great Britain that money which would normally go to the reduction of the national debt should in depression years be used for public works; and in the United States that the Treasury or a special Board should be authorised to issue bonds when necessary, that a revolving fund should be obtained by rapid amortisation of the loans, and that a percentage of the annual public works budget should be kept in reserve and expended in depression years. This latter suggestion has also been made in France. Actual measures adopted include a reserve fund for the State Railways in France, the Road Fund in Great Britain, fed by the proceeds of motor taxation, and reserve funds which have been constituted both in the Confederation and in certain cantons.
and communes in Switzerland. The particular method most suitable in each case must be decided by the authorities in the country concerned. The differences in the financial organisation of the various countries are too great for any uniform rule to be laid down. But if the advance planning of public works is really to be applied it is quite certain that some kind of reserve fund must be created so that money may be available at short notice when required.

X. — The economic effects of the utilisation of the reserves referred to in the preceding Article.

The Governments which have communicated information to the International Labour Office on their public works organisation have said very little about this matter. There does not in point of fact appear to be any economic reason for not constituting a reserve fund. Money accumulated in this way would probably be invested in gilt-edged securities or deposited in a bank and might therefore be used to finance private industry by a roundabout method. From an economic point of view, therefore, the money would still be at the disposal of private industry during the period of prosperity and would only be fully at the disposal of the authorities when they actually used their reserves. On the other hand, as already pointed out, the authorities would be able to obtain the money at very short notice.

It is sometimes suggested that the reserve should not be invested, but should be held in the form of banknotes. This would have the effect of withdrawing money from circulation during the boom and releasing it during the depression, and would therefore seem likely to help in bringing about the stabilisation of industry. A similar result, from an economic point of view, might be attained if the public works were financed by means of loans from the banks instead of from private individuals.

XI. — Information as to whom belongs the initiative in making decisions to postpone or advance the construction of public works or the placing of orders by public authorities:

Local authorities;
The Government;
The several ministerial Departments which place orders for construction or supplies; or,
Some central administrative or consultative co-ordinating authority.
XII. — Methods employed by the Government requiring or encouraging local bodies to adopt, when such is considered desirable, a policy similar to that of the Government.

XIII. — Any similar steps which may have been taken with regard to private or semi-public bodies operating public utilities under statutory control, or with regard to private enterprises.

These three points are grouped together because no co-ordination can be satisfactory which does not embrace at the same time the central Government, the local authorities and non-official public utility undertakings. In both the central Government and the local authorities several different departments have as a rule public works to carry out so that there is a multiplicity of authorities whose action requires to be co-ordinated. Surprisingly little of a practical character seems to have been done to remedy this state of affairs. So far as our information goes, the most advanced country in this respect is Germany where, during the last few years, serious negotiations have been conducted with a view to a co-ordinated public works policy. In the United States there is a new Division of Public Construction which partially fills the gap, but there is very little else.

The usual method employed by a central Government to induce local authorities and public utility undertakings to follow the same policy as themselves is to make grants or loans on condition that the public works are put in hand at the time desired by the Government. This is quite satisfactory up to a point, but a system of this kind cannot be used to induce such bodies to postpone works. It is mainly of service in persuading them to advance their works.

It is of great importance that in each country a Public Works Committee or Board should be established. This body should be informed of all public works which it is intended to carry out in any particular year and should recommend that certain specified public works be held over for a later date, or, in different circumstances, that the execution of works should be accelerated. A similar Committee should be set up by the more important local authorities and work in harmony with the Committee of the central Government. Any recommendations made by these bodies would carry great weight not only with the affiliated authorities but also with public utility undertakings and even with private enterprises to some extent. Such recommendations would, moreover, be backed by an appropriate policy of loans and grants so that it
would be in the financial interest of the local authorities and other bodies to follow the lead of the Central Public Works Committee.

There is one difficulty which even a Public Works Committee might not be able to overcome. This is the fact that a Government or local authority, when framing its policies for public works as for anything else, may be too much influenced by electoral considerations, and may hesitate to draw up a scientific policy allowing of contraction or expansion to meet the needs of industry when in a year or two another party coming into power may reverse these decisions and entirely change the policy. This factor is perhaps of special weight in local government, since the influence of electoral opinion is more direct and the costs and effects of a policy more immediately felt.

The most hopeful way out of this difficulty would be to arrange that the Public Works Committee should be a permanent and non-political body. It might be more difficult to arrange this in connection with local authorities than in connection with the central Government, but the administrative difficulties are not insurmountable and anything done on these lines would represent a great step forward towards a more adequate co-ordination of public works and orders for supplies from the point of view of the labour market situation.

XIV. — Index numbers or other economic indicators employed by the authorities responsible for making decisions to postpone or advance public works.

The ideal index number would probably be one showing general business activity. It is doubtful, however, whether by itself such an index number is sufficiently reliable and sensitive at the present time to justify Governments and other bodies basing their public works policies entirely upon it. If an index of business activity is used, it must be checked by reference to an employment or unemployment index. Unemployment statistics are, under the influence of unemployment insurance, becoming more and more accurate and we naturally turn to such statistics in connection with a public works policy since we are seeking a remedy for unemployment. We cannot always be sure, however, that when unemployment is rising it will continue to rise; such a movement may be purely seasonal or, on the other hand, a seasonal movement may hide a more long-lived cyclical movement which it is difficult to see until it is too late. Employment or pay-roll figures are even
less reliable indices, but if no unemployment statistics are in existence they are the next best thing.

It seems desirable, therefore, that, in the first place, an index of unemployment, or in default of that an index of employment, be used, supplemented by an index of general business activity and any other available information, and that in the second place the search for a better business barometer be continued with redoubled vigour.
APPENDIX

Suggested Basis for the Supply of Information on the Organisation of Public Works in connection with Unemployment, Drawn Up by the Committee on Economic Crises on 2 May 1927

I. — Legislative or other provisions in force requiring more or less explicitly the reservation, to some extent, to periods of unemployment of public works and orders for supplies given by public authorities.

II. — Details as to measures which have been taken:
(a) in times of great economic activity to postpone public works, with a view to reserving them for a subsequent period of slackened economic activity;
(b) during a period of unemployment to place in hand public works which would under ordinary circumstances have been undertaken at some later time.

III. — Information as to:
(i) the nature of the public works so postponed or advanced;
(ii) the approximate amount of expenditure so postponed or advanced;
(iii) in each of the cases II (a) and II (b) above, the approximate daily number of workers which would have been or were employed, classified if possible according to occupations;
(iv) the duration of the works.

IV. — Method of subsequently utilising labour set free owing to postponement of works; method of recruiting labour more rapidly in the case of work which is speeded up.

V. — In the case of works which have been postponed beyond the end of the financial year, what has been done with the credits originally provided for them.

VI. — In the case of works which have been put in hand at a period earlier than was originally anticipated, and for which no provision had been made in the current financial year, how the necessary money has been obtained.

VII. — In the case of postponement of public works previously decided on, the difficulties experienced in connection with:
(a) interruption or slowing down of work in the hands of contractors, and the legal recourse open to such contractors against the Government on account of its annulling or modifying their contracts;
(b) the effects of the slowing down of contract work on the financial situation of such contractors or firms supplying them.
VIII. — Any indications that, where money for public works which have been put in hand at a period earlier than was originally anticipated has been raised by taxation or borrowing, this procedure may have involved competition with other enterprises in the capital market which, being likely to increase their difficulties, is undesirable at such a time.

IX. — Any arrangements which have enabled the accumulation by the authorities, during periods of prosperity, of reserve funds for financing public works the execution of which is left to a time of depression. The way in which the funds held in reserve have been invested while awaiting utilisation.

X. — The economic effects of the utilisation of the reserves referred to in the preceding Article.

XI. — Information as to whom belongs the initiative in making decisions to postpone or advance the construction of public works or the placing of orders by public authorities:

- Local authorities;
- The Government;
- The several ministerial Departments which place orders for construction or supplies; or,
- Some central administrative or consultative co-ordinating authority.

XII. — Methods employed by the Government requiring or encouraging local bodies to adopt, when such is considered desirable, a policy similar to that of the Government.

XIII. — Any similar steps which may have been taken with regard to private or semi-public bodies operating public utilities under statutory control, or with regard to private enterprises.

XIV. — Index numbers or other economic indicators employed by the authorities responsible for making decisions to postpone or advance public works.