



Work Creation Policy in Germany, 1932-1935 : I

by

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In recent years the policy of public investment to increase the possibilities of employment (or, as it is currently called in Germany, "work creation" policy¹) has somewhat receded into the background, owing to the improvement in the economic situation of many countries. A slackening of business activity in the future might, however, make it necessary to consider a revival of such a policy and to prepare for it in the light of past experience. Moreover, the question of the planning of public works in relation to employment is one of the items on the agenda of the 1937 Session of the International Labour Conference. It thus seems useful to give a comprehensive survey of the German work creation policy from 1932 to 1935, not only because of the important contribution made by it to the German recovery, but also because the experiment throws some light on the general principles and problems of measures of this kind. From this point of view the first part of the following article gives a detailed account of the German work creation programmes, of their scope, duration, organisation, and financing. In the second part of the article, their effects on the German economy as a whole and on the labour market in particular will be briefly examined.

THE German work creation policy came to an end towards the close of 1935. At the end of that year the balance of the funds still remaining from the important programmes of 1932 and 1933 amounted at the most to 50 million RM.² It is true that only a small part of the national motor roads

¹ *Arbeitsbeschaffung.*

² DEUTSCHE BAU- UND BODENBANK A. G. and DEUTSCHE GESELLSCHAFT FÜR ÖFFENTLICHE ARBEITEN A. G. : *Die Entwicklung der deutschen Bauwirtschaft und die Arbeitsbeschaffung im Jahre 1935*, p. 87. The present article is based largely on the reports for 1932-1935 of these two nationally owned financial institutions.

programme had been completed at that date, but this was planned to spread over a considerable number of years and did not form an integral part of the work creation programmes of 1932 and 1933, which were intended to produce immediate effects over a limited period of time.

Now that the programmes have been terminated it seems useful to give an account (based on official and semi-official information from German sources) of the measures taken in Germany to create work, and to try to assess their direct and indirect effects, since the German experiment is entitled both by its scope and by its completeness to a prominent place among the similar schemes adopted in various countries during recent years.

THE SITUATION IN 1932

A large-scale work creation policy was first inaugurated in Germany in the summer of 1932. A few isolated measures to create work and to organise relief works had indeed been adopted before that date, financed partly out of the Reich Budget and partly by the Federal Institute for Employment Exchanges and Unemployment Insurance¹. But apart from the fact that these measures were restricted in scope, they were carried out at a time when a deflationary budgetary and monetary policy was the order of the day. It was not until the middle of 1932 that a systematic work creation policy, co-ordinated with an appropriate financial and monetary policy, was set on foot.

It is important to fix the exact date at which this work creation policy was initiated because the time when public works schemes are introduced has a very definite influence on their objects, their possibilities, and their effects. In the summer of 1932 the depression appeared to have reached its lowest point both in Germany and in the world in general. There had been a marked slowing down in the shrinkage of production; the fall in prices, reckoned in terms of the national currencies, had come to a standstill in many countries; the shock of the Central European credit crisis of 1931 had been overcome; the problem of reparations had been finally settled by the Lausanne Conference; and in general the psychological tension had relaxed.²

¹ Subsequently referred to as the "Federal Institute".

² For an analysis of the world economic situation, cf. LEAGUE OF NATIONS : *World Economic Survey 1932-33*, pp. 11, 12, and 17-18. Cf. also INSTITUT FÜR KONJUNKTURFORSCHUNG : *Vierteljahrshefte zur Konjunkturforschung*, 7th year,

A work creation policy may take three forms, according to the stage of the business cycle at which it is introduced: the first aims at preventing a down-swing in the cycle, the second at stopping a downward trend that has already set in, and the third at overcoming the depression in its final stages and facilitating the up-swing. The German work creation policy, like nearly all similar policies adopted during recent years, belonged to the third of these types. According to the most authoritative interpretations in 1933 and 1934, the essential object of the policy was to reduce and ultimately to abolish unemployment, and the creation of work by the State was the means by which it was proposed to reach this end. The programmes were designed to give a stimulus to the upward curve of the business cycle, that is, to fulfil a temporary function. It was intended to give a fresh start to the whole economic system, to stimulate private investment, which was still hanging back, and thus serve to kindle the initial spark, after which private industry would be able to carry on by itself the process of recovery initiated by State action.¹ In some quarters, however, the work creation policy was also expected to bring about permanent changes in the national economic structure.²

The currency policy adopted in Germany facilitated, or at least did not impede, the application of a large-scale work creation programme. In a country where there are no restrictions on the international movement of capital, any big schemes for creating work must necessarily affect the balance of pay-

1932, No. 2, Part A (describing the economic situation at the end of August 1932), p. 60: "The world economy as a whole, therefore, now seems to be preparing to emerge from the depths of the depression." And, lastly, see also the report of the *Deutsche Bau- und Bodenbank* and *Deutsche Gesellschaft für Öffentliche Arbeiten* on building and work creation in 1932, with reference to Germany: "Even during the first half of 1932 certain signs were visible which indicated that the bottom of the depression had been reached. Above all, credit confidence increased from month to month under the reassuring influence of the standstill agreements on short-term foreign debts. A further contributory factor was the settlement of the reparations problem in the middle of the summer, which eased the prevailing tension in nearly every direction. The time had therefore come to try to bridge the trough of the depression by setting on foot work creation schemes on a rather large scale and by reviving activity in as many branches of industry as possible to relieve the labour market as well."

¹ Cf. the speeches delivered by Mr. HITLER on 23 September 1933 (*Frankfurter Zeitung*, 25 Sept. 1933), and 30 January 1934 (*Idem*, 31 Jan. 1934). Cf. also the statement made to the press by the Reich Minister for Economic Affairs, Mr. SCHMITT, on 12 December 1933 (*Idem*, 12 Dec. 1933).

² As an instance of this, Mr. REINHARDT, Secretary of State, protested against the theory that the policy was intended merely to give a start to industry, noting, among other measures, the permanent changes in the structure of the population and of the labour market which the marriage loans were intended to bring about (*Arbeitertum*, 15 Jan. 1934).

ments and are likely to result in an outflow of gold and/or a depreciation of the currency. In Germany this effect on the currency was neutralised. The work creation policy could be put into effect under the shelter of the exchange restrictions introduced in the summer of 1931 during the credit crisis, and subsequently greatly intensified, and of a general transfer moratorium.

THE SEPARATE WORK CREATION PROGRAMMES

A short account is given below of the nature and scope of the various work creation programmes arranged as far as possible in chronological order, a distinction being made between direct work creation through public works and indirect work creation through relief from taxation and other measures to encourage investment.

(1) *Work Creation Programme of 1932, First Instalment* (called the Brüning Programme). Legal basis: Emergency Order of 14 June 1932. Public works, costing 165 million RM. in all.

(2) *Work Creation Programme of 1932, Second Instalment*. Legal basis: Emergency Order of 4 September 1932. This programme consisted of two parts, the first containing direct and the second indirect measures to create work.

The direct measures consisted of public works to a value of 182 million RM.; this part of the programme was subsequently merged with No. 1 above, and called the "Papen Programme".

The indirect measures consisted in the issue of tax remission bills (*Steuergutscheine*). These bills were of two kinds. The first kind entitled the holder to a reduction of certain specific taxes on industry for a period of one year from 1 October 1932 to 30 September 1933, amounting to 40 per cent. of the turnover tax, the trade tax, and the land tax, and the whole of the tax on freights and fares (on the National Railways). Employers received tax remission bills for the specified percentage; they could either turn these into cash by discounting them immediately on the market, or set them aside to pay specified taxes during the years 1934 to 1938. The second type of tax remission bills represented bonuses for the engagement of additional workers. For every worker newly engaged between 1 October 1932 and 30 September 1933 the employer was entitled, under certain conditions, to a tax remission bill to the value of 100 RM., which could be used in the same ways as those of the first type. These employment bonuses were not claimed to anything like the extent that had originally been anticipated, and the practical application of the system—more especially the prevention of abuses—also proved difficult. A further objection was that the bonuses tended to penalise employers who had previously done their best to keep on as many workers as possible when employment was falling, and to reward those who had shown less sense of social responsibility and had dismissed their staff when business first began to fall off. For these various reasons the system of employment bonuses was soon abandoned (Order of 7 April 1933), new measures

of direct work creation having been introduced in the meantime. During a period of about six months, tax remission bills for employment bonuses were issued to a value of about 100 million RM., as compared with an estimate of 700 million RM. for a full year. The total value of all tax remission bills issued was about 1,500 million RM.¹

(3) *Subsidies for the Reconstruction and Repair of Dwellings, 1932-1933.* Two sums of 50 million RM. each were allocated to this purpose out of the Reich Budget by Orders of 4 September 1932 and 24 January 1933. A further sum of 100 million RM. was also earmarked to guarantee private loans for the same purpose, but no data are available as to the use made of this facility (cf. No. 8 below).

(4) *Work Creation Programme of January 1933* ("Immediate" (Sofort) Programme). Legal basis: Orders of 15 December 1932, 6 January 1933, and 28 January 1933. Total value: 500 million RM., increased to 600 million RM. on 13 July 1933. Public works only.

(5) *Work Creation Programme of June 1933* (Reinhardt Programme) Legal basis: Act of 1 June 1933 to reduce unemployment. This scheme comprises both direct and indirect measures to create work. The total appropriations for direct measures amounted to 1,000 million RM., to which must be added a further 70 million RM. for goods vouchers (relief in kind for the indigent), which represents expenditure on pure consumption. The indirect measures included in the Reinhardt Programme are described together with certain others under No. 6 below.

(6) *Indirect Work Creation Measures, 1933.* These consisted in taxation relief and other similar forms of relief intended to stimulate investment and increase consumption, or to lead directly to the removal of workers from industrial production. The following may be specially mentioned:

(a) Exemption of all newly licensed private motor-cars and motor-cycles from the tax on motor vehicles (Act of 10 April 1933).

(b) Permission for the owners of old cars to compound for the annual tax by paying a lump sum (Act of 31 May 1933). This measure brought in composition payments amounting to 55 million RM.²

(c) Exemption from specified taxes in respect of replacements of machinery and the like effected within 1½ years, later extended to 2½ years (Reinhardt Programme).

(d) Reduction of income tax and company tax in respect of repairs and extensions of industrial buildings within 1½ years, later extended to 2½ years (Act of 15 July 1933).

(e) Exemption from taxation for new undertakings, provided that their products meet a recognised vital need of the national economy (Act of 15 July 1933).

(f) Exemption from taxation for newly-built dwelling houses (Acts of 15 July and 21 September 1933).

(g) Remission of arrears of taxation on condition that the taxpayer spent an equivalent sum on replacements, repairs, extensions, etc. (Decree of 28 November 1933). Under this Decree arrears of taxation amounting to 200 million RM. were remitted, thus enabling the same sum to be invested in work of the kinds specified.³

¹ INSTITUT FÜR KONJUNKTURFORSCHUNG: *Vierteljahrshefte*, 9th Year, 1934, No. 3, Part A, p. 111.

² Mr. REINHARDT, Secretary of State, in *Arbeitertum*, 15 Jan. 1934.

³ *Ibid.*

In this connection, too, various forms of taxation relief for agriculture must also be mentioned, although the primary purpose of these measures was not to create work but to assist agriculture.

(h) Exemption of female domestic servants from unemployment insurance and reduction of their invalidity insurance contributions (Act and Orders of 12 and 16 May 1933).

(i) Granting of marriage loans up to 1,000 RM. when the woman had been in employment during a specified period previously (Reinhardt Programme). Up to the end of 1935 about 523,000 loans were granted, amounting to a total of some 300 million RM.¹ This amount may be regarded as forming part of the appropriations for work creation in so far as the loans were used by the recipients to equip their homes. The loans were not issued in cash but in the form of vouchers for goods, which were accepted in payment by tradesmen. The loans are repayable at the rate of 1 per cent. per month; one-quarter of the sum is remitted for each legitimate child born of the marriage.

(7) *National Motor Roads*. Legal basis : Act of 27 June 1933. The monopoly for the construction and management of the motor roads system was conferred on a National Motor Roads Company formed by the German National Railway Company. The total cost was originally estimated at 1,400 million RM., and was later increased to 3,500 million RM.²

The motor roads system was planned to cover a total of 6,900 km. Of this, about 3,460 km. were ready for construction, about 1,808 km. were under construction, and 112 km. were open to traffic by the end of 1935. At the same date, 350 million RM. had already been paid for the motor roads out of the appropriations for work creation, besides further amounts from other sources, making a total of 450 million RM. actually paid out and total commitments of 700 million RM. A further expenditure of 600 million RM on the road construction scheme was planned for 1936.³

(8) *Subsidies for the Reconstruction and Repair of Dwellings, 1933-1934*. In continuation of the scheme introduced in 1932, providing for subsidies up to a total of 100 million RM. (see No. 3), a further sum of 500 million RM. was allocated for the conversion of houses into smaller dwellings and for repairs and extensions. These funds were used to grant capital subsidies. Besides this, however, houseowners were also granted interest subsidies at the rate of 4 per cent. for six years, with a view to helping them to obtain capital, either from their own resources or by borrowing, for that part of the cost which was not covered by the State subsidy. The total amount granted in the form of interest subsidies was 332 million RM. ; the State has to pay this off during the period 1934-1939 at the rate of 55 million RM. per year. As the capital subsidies include a further sum of 67 million RM. appropriated for the same purpose under the Reinhardt Programme (No. 5), their total amounted to 667 million RM. In this case it is possible to estimate the extent of the investments to which these subsidies led. The grant of the subsidies was made conditional on a specified expenditure of private money. The subsidies were at the rate of 50 per cent. of the total cost for reconstruction and 20 per cent. for repairs, so that

¹ INSTITUT FÜR KONJUNKTURFORSCHUNG : *Wochenbericht*, 21 March 1932.

² *Wirtschaft und Statistik*, 1935, Nov., 1st part.

³ *Die Entwicklung der deutschen Bauwirtschaft und die Arbeitsbeschaffung*, 1935, p. 30.

in the first case the houseowner himself had to meet 50 per cent. and in the second 80 per cent. of the total cost out of his own or borrowed capital. According to official estimates¹, about one-fifth of the total of 667 million RM. of capital subsidies, or 133 million RM., was spent on converting houses into smaller dwellings, so that the houseowners must have spent the same amount themselves. The remaining four-fifths, or 534 million RM., was used for repairs, so that the houseowners must have spent four times as much, or 2,136 million RM. In this case, therefore, an original outlay for work creation of 667 million RM. in capital subsidies and 332 million RM. in interest subsidies, making a total of nearly 1,000 million RM., led to a total expenditure of 2,936 million RM., or nearly three times as much.

(9) *Work Creation Programmes of the National Railways and National Post Office, 1932-1934.* Besides the Reich Government itself, the two largest public undertakings under its control also carried out work creation programmes. The cost of the National Railways programme was 991 million RM. and that of the National Post Office programme 111 million RM. Unlike the appropriations for the other work creation programmes, these funds were entirely exhausted by the end of 1934.

However detailed the foregoing catalogue may appear, these nine items give only a bare outline of the work creation programmes of 1932 and 1933. A series of separate measures in which work creation was an incidental object have been omitted from the list: for instance, the national loans for small house building, the continuation of the suburban settlement scheme, and the provision of a number of guarantees of all kinds. Special reference must also be made to certain other measures which had the effect of removing workers from industrial production, and consequently of reducing unemployment:

- (a) the marriage loans, already mentioned under No. 6 above²;
- (b) the Labour Service;
- (c) the system of "agricultural assistants"³;
- (d) the so-called "Year on the Land";
- (e) the increase in the military forces resulting from rearmament and the introduction of general compulsory military service.

The characteristic feature of all these measures is that they represent an absorption of labour, not, however, by integrating it into the industrial system—that is, by creating work—but in the great majority of cases either by removing employed

¹ *Idem*, 1933, p. 13.

² These loans had a twofold effect. They helped to create work directly in so far as they were spent on the equipment of the home, and at the same time they removed a number of women workers from the labour market.

³ Young persons employed on farms with the help of a subsidy from the State.

persons from industrial production or by finding work for the unemployed outside the normal processes of production.

To sum up, the German work creation programmes were characterised by a number of diverse measures all directed to reducing unemployment by a concentrated attack from many different angles. Until the middle of 1933, the greatest prominence was given to indirect work creation measures (the tax remission bills of the Papen Programme), and after that date to direct measures. The measures can be grouped under four heads, as follows :

- (1) Public works in the narrower sense ;
- (2) State subsidies to private investments ;
- (3) tax remission and other similar measures to stimulate private investment ;
- (4) employment of workers outside the processes of industrial production.

Only in the case of the first two groups of measures is it possible to assess their money value. The effects of the fiscal measures to promote investment or consumption cannot be isolated from those of other factors which operated at the same time ; these measures will therefore be dealt with only in connection with the general economic effects of the work creation policy.

SCOPE AND DURATION OF DIRECT WORK CREATION MEASURES

The aim of the following table is to show the total amount of State expenditure on direct work creation measures and the period over which it extended. It will be seen that the total cost of these measures was 5,092 million RM., to which must be added a further sum of 150 million RM., under the head of " Expenditure to promote national work " (Act of 1 June 1933), as to the use of which no particulars are available.

An analysis of the date and duration of the direct work creation schemes is important for two reasons. In the first place, such an analysis shows the volume of public expenditure on work creation within given periods, an important factor in assessing the effects of the policy, which will be further discussed below. Secondly, it shows the time needed to set the schemes on foot and carry them out. In nearly all countries in which a work creation policy has been applied, it has been found that

TABLE I. EXPENDITURE ON DIRECT WORK CREATION MEASURES UP TO THE END OF 1935 ¹

(Million RM.)

Programme	Date of Decree	Total cost	Expenditure up to:		
			31 Dec. 1933	31 Dec. 1934	31 Dec. 1935
Suburban settlements building programme:					
1st instalment	Dec. 1931	48	67	79	80
2nd instalment	July 1932	25			
3rd instalment	Feb. 1933	10			
Papen Programme (aggregate)	June and Sept. 1932	288	236	282	286
Subsidies for repair of dwellings	Sept. 1932	50	50	50	50
National loans for small house building	Sept. 1932	20	4	17	20
"Immediate" Programme	Jan. 1933	500	350	560	589
Extension of "Immediate" Programme	July 1933	100			
Subsidies for repair of dwellings	Jan. 1933	50	50	50	50
Reinhardt Programme	June 1933	1,070	95	765	960
Subsidies for repair of dwellings:					
Capital subsidies	Sept. 1933	500	—	465	675
Interest subsidies	" "	332			
Total expenditure of Reich Government		2,993	852	2,268	2,710
National Railway Company	1932-1934	991	530	991	991
National Post Office	1932-1934	111	65	111	111
National Motor Roads Company ¹	June 1933	350	8	202	350
Federal Institute ²	1932-1935	647	100	432	646
Total		5,092	1,555	4,004	4,808

¹ SOURCE: DEUTSCHE BAU- UND BODENBANK A.G. and DEUTSCHE GESELLSCHAFT FÜR ÖFFENTLICHE ARBEITEN A.G.: *Die Entwicklung der deutschen Bauwirtschaft und die Arbeitsbeschaffung*, 1933, 1934, 1935. The data given in the table differ slightly from the particulars given above in the text because the table covers certain measures not mentioned in the text and also because changes were made in the programmes in the course of their execution.

² Including emergency relief works and a sum of 7 million RM. for small house building.

between the planning of the schemes and their execution there is a surprisingly long time-lag which delays the desired effects.¹ The German work creation programmes were no exception in this respect. Most of them were hastily improvised; in many cases the technical plans for the separate schemes were not yet

¹ Cf. INTERNATIONAL LABOUR OFFICE: *Public Works Policy*. Studies and Reports, Series C, No. 19. Geneva, 1935.

ready; the administrative difficulties arising out of the collaboration of a number of different authorities and financing bodies had to be overcome; and the machinery in general had first to be run in. There was also the further difficulty that most public works can only be carried out in the fine season, so that, for instance, it was often impossible for a programme planned in November to be carried out immediately. It was this question of the seasonal nature of public works which gave special importance to the State subsidies for the conversion and repair of dwelling houses, since this was largely indoor work which could be carried on throughout the winter.

Unfortunately, details of the rate at which the funds for work creation were spent are available only for the end of 1933, the end of 1934, and the end of 1935, that is, for dates lying somewhat far apart (see table I above). For the initial period 1932-33, unofficial estimates place the expenditure at between 500 and 600 million RM. up to the middle of 1933.¹ The following sums had accordingly been paid out at the various stages up to the end of 1935:

	To middle of 1933	To end of 1933	In 1934	In 1935	Total
Amount (million RM.)	500-600	1,555	2,450	803	4,808
Per cent. of total	10-12	30	48	16	94

Thus the principal effects of the direct work creation measures were felt in 1934, nearly half the total State expenditure falling in that year. In 1935 the pace had already slackened considerably, the expenditure being one-third of what it had been in the previous year, and probably even less than that of 1933.²

A clearer view of this aspect of the question is given by a separate consideration of the three largest work creation programmes, since the date when these began can be definitely stated, whereas the aggregate figures in table I are more difficult to interpret owing to the overlapping of the various programmes.

¹ *Frankfurter Zeitung*, 13 Aug. 1933; "Zwischenbilanz der Arbeitsbeschaffung".

² A balance of 300 million RM. was carried over to 1936. The interest subsidies payable during the coming years on account of work already completed must, however, be deducted from this amount, and it must also be remembered that as a rule two or three months elapse after the completion of a scheme before the last payment is made. The total amount of the funds remaining is therefore only about 50 million RM., as stated at the beginning of this article. The time-lag between the completion of the schemes and the last payment shows that the payments only approximately indicate the actual rate of progress of the schemes.

TABLE II. EXPENDITURE ON PRINCIPAL PROGRAMMES UP TO THE END OF 1935

(Million RM.)

Programme	Date of Decree	Total cost	Expenditure			Balance
			Up to 31 Dec.1933	In 1934	In 1935	
Papen Programme	June and Sept. 1932	288	236	46	4	2
"Immediate" Programme	Jan. 1933	600	350	210	29	11
Reinhardt Programme	June 1933	1,070	65	629	195	181

It will be seen that 80 per cent. of the total appropriations for the Papen Programme had been paid out by the end of about a year and a half and 60 per cent. of those for the "Immediate" Programme by the end of a year. In the case of the Reinhardt Programme, which was put in hand on 1 June 1933, less than 10 per cent. of the total cost was paid out during the seven remaining months of the year, and even a year and a half later only 60 per cent. had been paid out. This last programme may perhaps have been purposely delayed in favour of the previous ones in order to spread out the work; the initial difficulties, however, were on the other hand much less owing to the experience gained from previous schemes.

Generally speaking, it appears that a period of from one to two years was necessary to complete the large-scale public works undertaken with a view to immediate effects, and that the major part of the expenditure involved was made from nine to eighteen months after the drawing up of the programmes, which, as already noted, had usually not had all their details worked out beforehand. This is a strong argument for having fully worked-out technical plans for work creation programmes ready for execution at any time they may be required. The emphasis is here deliberately laid only on the need for *technical* preparation, because the financing of the schemes often depends on the general economic conditions prevailing at the time.

ALLOCATION OF THE APPROPRIATIONS FOR DIRECT WORK CREATION

Table III shows the various purposes to which the appropriations granted up to the end of 1934 (which cover nearly all the funds allocated to direct measures of work creation) were applied.

TABLE III. ALLOCATIONS OF THE APPROPRIATIONS FOR DIRECT WORK CREATION MEASURES ¹

(Million RM.)

Category	Papen Pro- gramme	"Imme- diate" Pro- gramme	Rein- hardt Pro- gramme	Ordinary Budget	Total
I. Civil engineering, etc. :					
(a) Construction of water-ways	46.6	5.8	77.7	—	130.1
(b) Roads	98.7	103.8	57.5	—	260.0
(c) Bridges	9.0	17.3	20.1	—	46.4
(d) Municipal public utilities	6.1	56.4	116.5	—	179.0
(e) Maintenance and extension of public buildings, bridges, etc.	—	—	169.2	—	169.2
(f) Other civil engineering work (dams, harbours, river correction, etc.)	18.2	10.8	25.7	—	54.7
(g) Miscellaneous measures	—	95.0	68.0	—	163.0
Total	178.6	289.1	534.7	—	1,002.4
II. Housing, etc. :					
(a) Repairs	—	—	67.0	952.0	1,019.0
(b) Suburban settlements	19.9	19.2	69.1	80.8	189.0
(c) Small house building	—	—	19.1	26.5	45.6
(d) Emergency, make shift, and refugees' dwellings	—	—	12.0	—	12.0
(e) Improving slum quarters	—	—	5.0	9.4	14.4
Total	19.9	19.2	172.2	1,068.7	1,280.0
III. Transport undertakings, etc.:					
(a) National Railways and Post Office, navigation, narrow-gauge railways, etc.	24.1	110.6	97.2	165.0	1,333.9 ²
(b) National motor roads	—	—	—	50.0	350.0 ³
Total	24.1	110.6	97.2	215.0	1,683.9 ^{2, 3}
IV. Agriculture and fishing :					
(a) Land improvement, river correction, etc.	49.9	178.8	107.9	—	336.6
(b) Agricultural settlement	10.0	—	34.1	—	44.1
(c) Miscellaneous measures	5.0	—	3.5	—	8.5
Total	64.9	178.8	145.5	—	389.2
V. Goods vouchers ⁴	—	—	—	70.0	70.0
VI. Initial contributions from the Federal Institute	—	—	—	568.5	568.5
Grand total	287.5	597.7	949.6	1,922.2	4,994.0 ^{2, 3}

¹ Source : *Die Entwicklung der deutschen Bauwirtschaft und die Arbeitsbeschaffung*, 1934.² Including 860 million RM. of the National Railways and 77 millions of the National Post Office, initially financed by institutions of their own, and not included in the preceding columns.³ Including 300 million RM. for the national motor roads, initially financed by bills and not included in the preceding columns.⁴ For relief in kind to the indigent.

According to this table, about 60 per cent. of all the appropriations for the Papen Programme and 50 per cent. of those for the "Immediate" and Reinhardt Programmes were spent on civil engineering work in the narrower sense (*Tiefbauarbeiten*). If it is remembered that many of the other categories of works also properly belong to this group (e.g. the national motor roads, some of the railway and navigation schemes, etc.), and that the grants from the Federal Institute were also mainly devoted to work of this type, it is clear that it accounts for the major part of the schemes.

The magnitude of the sum spent on housing is mainly due to the subsidies granted for the reconstruction and repair of dwelling houses. Most of the expenditure in this category was applied to the repair of existing housing accommodation and its adaptation to the changes in demand rather than to the production of new dwellings. The net increase in the number of dwellings as a result of reconstruction was comparatively small, since only one-fifth of the total subsidy was used for subdividing larger dwellings. Table IV shows that during the years 1933-1935, when State subsidies were being paid for repairs and reconstruction, there was an increase of about quarter of a million dwellings as a result of reconstruction. This number fell far short of the results that had been anticipated from the subsidy. German experience has shown that for technical reasons the possibilities of turning large dwellings into small ones are strictly limited, even with the assistance of large subsidies.

TABLE IV. NET INCREASE IN NUMBER OF DWELLINGS, 1932-1935

Kind of dwellings	1932	1933	1934	1935
Newly-built dwellings	131,160	132,870	190,257	213,227
Reconstructed dwellings	27,961	69,243	129,182	50,583
Total increase in number of dwellings	159,121	202,113	319,439	263,810

Generally speaking, building is seen to be the most important angle of attack on unemployment in the German work creation policy, which thus neutralised the most important causal factor

in the previous slump, namely, the decline in building activity.¹ This is illustrated by the figures in table V.

TABLE V. PERCENTAGE OF EMPLOYMENT IN SOME IMPORTANT INDUSTRIAL GROUPS, 1929-1935¹

Industrial group	1929	1932	1934	1935
Building	53.8	13.4	48.9	60.0
Building materials	65.4	28.2	57.1	59.6
All industries	70.4	41.9	58.5	63.9
Capital goods	70.3	35.8	57.4	66.0
Consumption goods	70.6	49.8	59.8	61.3

¹ Number of man-hours worked per cent. of employment capacity. These figures can only be used to illustrate the movement of employment and are not suitable for showing the actual extent to which the employment capacity was used.

A characteristic of the German work creation schemes is the fairly high percentage (25 per cent.) spent on renovation and repairs as compared with the erection of new buildings.

A question which arises in connection with all public works is how far they can really be regarded as "additional" works. Very often they merely represent a transfer of expenditure from the ordinary budget of the public authorities, whose current expenses are reduced by approximately the increase in the expenditure on public works, for which a kind of special account is kept. This probably applies to some of the German work creation schemes. It is true that since 1933 there has been no further contraction of the ordinary expenditure of the Reich Budget, but the separate States, and still more the local authorities, were still in very difficult financial circumstances in 1933 and 1934, so that they may very well have transferred some of their ordinary capital expenditure to the account of the work creation programmes. This applies particularly to the repair and extension of public buildings (Reinhardt Programme, 169 million RM.), and to all the works carried out on behalf of local public utility undertakings (about 180 million RM.). Even in the case of repairs to private dwellings it is possible that much of the work would have been carried out by private money even without the State subsidies.

¹ Cf. John M. CLARK : *Economics of Planning Public Works* (Washington, 1935), p. 39. This author notes as an argument in favour of public works that they divert purchasing power into the field where the decline is most pronounced.

The work creation programmes of the National Railways and Post Office are especially open to doubt on this point. Real "additional" capital expenditure was more or less out of the question for the National Railways owing to the diminishing importance of the railways in the national transport system. The movement of the total expenditure of the National Railways on capital improvements, including both ordinary and "additional" work, is shown by the following figures¹:

Year	Million RM.	Year	Million RM.
1929	2,072	1933	1,300
1930	1,851	1934	1,500
1931	1,414	1935	1,500
1932	1,148		

The work creation programmes of the National Railways thus brought their total investments during the last three years approximately up to the 1931 level, though leaving them still far below the level of 1929 and 1930. These work programmes can probably only be regarded as "additional" in the sense that without the financial facilities granted in connection with them the expenditure of the Railways would presumably have remained at the low level of 1932. Neither the National Railways nor the National Post Office submitted an additional work creation programme for 1935; in spite of this their expenditure in that year remained at the same level, the improvement in their earnings having enabled them to meet it out of current income.

Generally speaking, the choice of the works to be done under the work creation programmes was greatly facilitated by the fact that during the foregoing years of depression the public authorities and undertakings had more and more restricted their current expenditure on capital improvements, so that there was a large accumulation of work requiring to be done. The extent of the decline in this kind of capital expenditure, which was due to a purely fiscal view of the public finances that ignored considerations of economic policy, may be illustrated by the following figures. The expenditure of all public authorities on economic production (including purchase of materials, building, loans for the building or purchase of houses, and subsidies) fell from 7,200 million RM., or 35.6 per cent. of their

¹ Figures for 1929-1932: INSTITUT FÜR KONJUNKTURFORSCHUNG: *Vierteiljahrshefte*, 8th Year, No. III, Part A, p. 180; figures for subsequent years: *Die Entwicklung der deutschen Bauwirtschaft und die Arbeitsbeschaffung*, 1934 and 1935.

total expenditure, in 1928-29, to 4,500 million RM., or 29.6 per cent. of their total expenditure, in 1931-32. Thus the decline in this branch of expenditure was higher proportionately than the decline in the total expenditure.¹ There was a similar accumulation of repairs to private buildings waiting to be done ; here again in many cases it was a question of making up the arrears of work that had been neglected owing to the depression. On the other hand, it is also quite possible that here and there work was undertaken which was not immediately necessary but for which an inducement was offered by the financial facilities of the work creation programmes.

A glance at table III above showing the allocation of the work creation credits shows that the requirement that public works should not compete with commercial production—i.e. that the goods produced should not circulate on the market—has been very largely fulfilled. Most of the work done has consisted of the construction or improvement of permanent equipment which does not compete with commercial production (the transport companies are monopoly undertakings), and whose subsequent services are not likely to change the flow in income to any considerable extent.

ORGANISATION AND FINANCING OF DIRECT WORK CREATION MEASURES

The organisation and the financing of the direct creation measures were so closely related that they must be described together. Both were highly decentralised. There was no central planning authority for public works nor was there a central financing institution. Instead, the existing public authorities and several of the available financial institutions were used and developed for this purpose. The only central organisation formed was for the national motor roads. The Office of the Reich Commissioner for Work Creation which was set up in December 1932 was closed almost at once.

As has already been pointed out, for want of time the work creation programmes were not based on plans which had been worked out in detail beforehand, but on hasty assessments of possible schemes and of their urgency. Thus they provided only a framework to be filled in by the public authorities (the

¹ Cf. INTERNATIONAL LABOUR OFFICE : *Public Works Policy*, p. 37.

Reich Government itself, the States, provinces, districts, municipalities, etc.) and public undertakings which wished to have work carried out under the programmes. These public authorities and undertakings were referred to as the "principals"¹ (*Träger der Arbeit*). The work was carried out by private contractors, who had to comply with certain rules in regard to the selection and remuneration of labour, profits, preference for German building materials, etc.

The work creation schemes proposed by the "principals" ordinarily had to be approved by several authorities or institutions: with regard to technical and economic considerations and in particular to the financial position of the "principals", by the State authorities; with regard to social policy, by the State labour offices or the Federal Institute for Unemployment Insurance; and lastly, with regard to general economic policy and financial considerations, by the financial institutions which would have to grant the necessary credits. The final decision lay with the credit committees of these institutions, on which the Reich Government was represented. The financial institutions concerned, all of them publicly owned, were the following: the *Deutsche Gesellschaft für Öffentliche Arbeiten A.G.*, the *Deutsche Rentenbank Kreditanstalt*, the *Deutsche Boden-Kultur A.G.*, the *Deutsche Siedlungsbank*, and the *Deutsche Bau- und Bodenbank A.G.*

Public works may be financed either by taxation, by the issue of loans, or by the creation of credit. Germany chiefly had recourse to the third method. In 1932 the possibilities of taxation had been completely exhausted; in any case taxation is generally regarded as a questionable method of financing work creation schemes, since as a rule it leads only to changes in the distribution of income, but not to any increase in its volume. It was impossible to issue loans, in view of the complete disorganisation of the German capital market in 1932 and 1933. At first, therefore, the only means of reaching the end in view was the creation of credit.

It was not, however, the only means employed. Both the Reich Budget and the budget of the Federal Institute, i.e. to all intents and purposes the proceeds of taxation, and also the

¹ Private persons and contractors (usually houseowners) were allowed to act as "principals" only in the case of subsidies for the reconstruction or repair of dwellings.

independent resources of the National Railways, played a fairly important part in the work creation schemes. Out of the total of 5,092 million RM. allocated to direct work creation measures, 1,967 million, or nearly 40 per cent., were derived from the source just mentioned, while 3,125 million, or over 60 per cent., were found by the issue of short-dated bills, i.e. by the creation of credit. As the direct creation of work by means of public works was only a part of the general scheme and a large number of indirect measures were also taken, it is clear that the creation of credit was only one factor in the general work creation policy, though, as regards economic effects, it was the decisive factor.

The fact that the work creation policy was so largely financed out of the ordinary Budget and the resources of the Federal Institute is to be explained by the improved yield of taxation and the reduced expenditure on unemployment benefit, which resulted from the business recovery from 1933 onwards, and which considerably eased the budgetary position.

The Budget resources were not allocated to the same purposes as the proceeds of the creation of credit. The former were used almost exclusively to grant non-repayable subsidies, whereas the latter were used to grant loans. The non-repayable subsidies, including the grants (*Grundförderungsbeiträge*) from the Federal Institute, probably amounted to about 1,800 million RM. The various public works were financed in several different ways; a typical plan for financing an expenditure of 2.2 million RM. would be somewhat as follows:

	Million RM.
Short-dated bills	1.5
Non-repayable subsidy from the Federal Institute	0.4
"Principal's" own resources	0.2
Bank credit from a financial institution	0.1
Total	2.2

Some account may next be given of how the short-term bills were used to create credit and finance the German work creation schemes. The creation of credit does not necessarily take the form of bills. There is always an expansion of credit when there is an increase in the total credits granted without a corresponding increase in savings. This may happen simply

by the banks giving book credits to their customers. In Germany, there were special reasons for choosing bills as the method of financing the work creation schemes. The chief effect of mobilising the credit of the State in this way was that the Reichsbank was able to take a large share in financing the work creation measures by rediscounting the bills without any special legislation being needed. Neither the German banking system nor the German money market (in the narrower sense of the term) would have been able to create credit on such a large scale without the support of the Reichsbank's rediscount operations. In practice all this was equivalent to increasing the State's indebtedness to the Reichsbank.

The work creation bills were brought into line with ordinary trade bills by being drawn at three months, although in fact their currency was much longer, and by being endorsed by the firms supplying building materials and services to the works in question. The usual form was for the bills to be drawn by the original contractors, accepted by the financial institutions, endorsed by the "principals" (public authorities or public undertakings), and re-endorsed by the firms supplying goods or services to the drawers. They were then discounted by the credit banks¹ and rediscounted by the Reichsbank.

The next stage is to show where the individual work creation bills went and how they influenced the German credit system.

The currency of the work creation bills was fifteen months for the Papen Programme, three years for the national motor roads scheme, up to five years for the "Immediate", Reinhardt, and Post Office Programmes, while the bills for the National Railways Programmes will mature from 1940 onwards, so that their currency is at least six or seven years.² The most usual period of currency, therefore, was under five years.

At maturity, the bills are paid by the Reich Treasury, or by the National Railways or Post Office in the case of their

¹ In connection with the first work creation programmes special banking consortiums were formed to discount the bills, so as to avoid overloading the Reichsbank more than was necessary. Later (for the Reinhardt Programme and the motor roads scheme) this practice was dropped.

² Cf. Dr. PÖRSCHKE and E. WILDERMUTH in: *Wirtschaftsheft der Frankfurter Zeitung*, No. 10, 1934: "Arbeitsbeschaffung".

own programmes. According to official information, the charge on the Reich Budget was or will be as follows ¹:

TABLE VI. WORK CREATION CHARGES ON THE REICH BUDGET, 1933-34 TO 1938-39
(*Million RM.*)

Fiscal year	Direct work creation measures	Tax remission bills	Total
1933-34	143	—	143
1934-35	395	312	707
1935-36	556	324	880
1936-37	478	336	814
1937-38	461	348	809
1938-39	444	360	804

Additional guarantees were provided by the Reich Government for these bills, but only in the form of undertakings given by the Government itself. For the Papen Programme they were Government guarantees, for the "Immediate" Programme tax remission bills, and for the Reinhardt Programme special Treasury Bills issued for the purpose. These securities were deposited with the Reichsbank.

The preliminary financing of the Railways, motor roads, and Post Office programmes was on similar lines to that described above in the case of the Reich. Special companies were formed in these cases in order to have a further endorsement on the bills which would make them eligible for rediscount by the Reichsbank. By the end of 1935, the amounts raised were as follows:

Programme	Bills Million RM.	Own resources, credits, etc. Million RM.
National Railways	860	131
National Post Office	77	34
National motor roads	300	50

Generally speaking, therefore, this complicated mechanism may be described as the financing of public works by the creation of new short-term State credit. As has been shown, the burden of the preliminary short-term financing is borne by the Reich Government. This, however, was only intended to be a

¹ *Ibid.*

temporary arrangement. The ultimate liability rests with the "principals", that is to say, the public authorities, etc., for whom the work has been carried out. Their financial liability arising out of the work creation schemes, unlike that of the Reich Government, is a long-term liability; it is in the form of a loan from the same financial institutions as were responsible for the short-term financing. The "principals" had to take over the responsibility for payment of the interest and sinking fund charges. These are paid in to the Treasury, and to that extent reduce the charges on the Reich Budget. "The financial effect of the three work creation programmes on the Reich Budget is a short-term one, with correspondingly high annual charges; their effect on the budgets of the 'principals' is a long-term one, with correspondingly low annual charges for the service of the annuities."¹ In practice, therefore, the "principals" have taken on a long-term indebtedness to the Reich Government for the amounts which the latter raised for the work creation schemes by short-term operations.

The interest and sinking fund payments of the "principals" vary with the nature of the works undertaken, and in particular with their value as reproductive capital investments. As a rule, the rate of interest was between 3 and 5 per cent. and the sinking fund charges between $\frac{1}{2}$ and 2 per cent. per annum. A frequent provision was that no payments should be made to the sinking fund for the first few years after the work had been carried out. The period of the loans was usually fifteen to thirty years, or longer for land settlement and land improvement schemes.

REARMAMENT : A SECOND WAVE OF WORK CREATION

It would be interesting to investigate the importance for the economic system as a whole of a work creation policy on the scale here considered, and the effects set in motion by its stimulus, in order to verify in a concrete case the theoretical estimates that have been made of the secondary effects of public works.²

¹ PÖRSCHKE : *loc. cit.*, p. 10.

² Cf. in particular R. F. KAHN : "The Relation of Home Investment to Unemployment", in *Economic Journal* (London), June 1931, and F. NEISSER's criticism in *Review of Economic Statistics*, Feb. 1936; cf. also STATISTISCHES REICHSAMT : "Auswirkungen der unmittelbaren Arbeitsbeschaffung", in *Wirtschaft und Statistik*, Sonderbeilage, 1933, No. 21, and M. MITNITZKY : "The Effects of a Public Works Policy on Business Activity and Employment", in *International Labour Review*, Vol. XXX, No. 4, Oct. 1934.

Unfortunately this is out of the question, for the wave of work creation described above was followed in Germany by a second wave, generated by the rearmament programme, which in many cases obscured the primary effects of the former programmes, and forcibly and deliberately hindered some of their secondary effects.¹ "The expenditure on armaments has become part of the great work creation policy to which the economic recovery is due."² The *Institut für Konjunkturforschung*³ has given the following schedule of the time relation between the work creation programmes and rearmament :

(1) Autumn 1932 to the middle of 1933. The depression passed its lowest point. The first work creation measures began to take effect. The monthly increase in the number employed was about 67,000.

(2) Middle of 1933 to middle of 1934. The full effects of the work creation programmes made themselves felt. Employment increased from month to month, in October 1933 by about 214,000, and thereafter by about 168,000, on an average, every month.

(3) Middle of 1934 to October 1934. The effects of the work creation measures became less pronounced. The increase in employment slowed down to an average of about 69,000 per month.

(4) Since November 1934. *The effects of the armaments contracts began to be noticeable, and from the spring of 1935 onward they dominated economic activity.* In consequence, employment again began to increase more rapidly.

The general importance of armaments will not be discussed here.⁴ It will suffice to say that, as far as can be seen at present, this second series of work creation measures in the form of rearmament coming on top of the former measures had the following effects : (1) it probably helped to prevent the initial stimulus from having the effect originally intended, which was to convert a process of recovery stimulated by the State into one carried on by private initiative ; (2) it increased the difficulties of foreign trade by giving rise to special import require-

¹ On this last point cf. in particular : *Frankfurter Zeitung*, 6 Dec. 1935 : "Der Grundzug dieser Konjunktur".

² Speech by the Reich Minister of Finance, Count SCHWERIN VON KROSIGK, at the Leipzig Autumn Fair in 1935 (*Frankfurter Zeitung*, 26 Aug. 1935).

³ *Wochenbericht*, 19 Sept. 1935.

⁴ The following passage may be quoted from the *Report of the Director of the International Labour Office*, 1936, pp. 6-7 : "In so far as industrial prosperity is founded on warlike preparation, it is not only sinister but hollow and unreal. The manufacture of arms adds nothing to national wealth. As a form of national expenditure it is sterile and unproductive. Though its effect on the economy of a nation may be more stimulating than that of public works in proportion as the outlay is greater and more variegated, its economic consequences are far less beneficial, as nothing is added to the nation's permanent assets."

ments ; (3) it increased the anomalies which the work creation measures had already brought about in the relative volume of production of certain commodity groups.

Further reference will be made later to these points. We shall next describe the effects of the work creation and re-armament programmes on the economic system as a whole, as far as space permits, beginning with their effects on the volume of credit and the Reich Budget. In this way some light will also be thrown on the probable extent of the expenditure on armaments. Here, too, the information used is taken from German sources.

(To be continued.)