



REPORTS AND ENQUIRIES

Rationalisation and the Decasualisation of Dock Labour in the Port of Rotterdam

by

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Reference has often been made to the relation between rationalisation and the employment of casual labour, and it has been suggested that the effect of rationalisation, which enables savings to be made in the employment of permanent staff, has been to encourage the employment of casual labour and so to increase the number of semi-unemployed workers. The statistics of the port of Rotterdam throw an interesting light on the incidence of measures of rationalisation upon an occupation in which casual employment plays an important part all over the world—that of dockers.

The eight-hour day was introduced in the port of Rotterdam by a collective agreement concluded in 1919, and has been a potent factor in the promotion of technical improvements. It has led not only to greatly extended use of mechanical loading and unloading devices (floating cranes, loading platforms, etc.) but also to the renovation and modernisation of existing plant. This applies particularly to piece-goods cranes, not to mention the electric and motor trucks introduced in transport ashore. New sheds were built, working floors improved, and all kinds of technical ameliorations introduced, making for greater ease and speed in the handling of goods. Finally, improvements in the equipment of the vessels using the port contributed to the same result, permitting economy in the employment of labour.

What were the repercussions of these developments on the employment of dock labour? They may be seen, in the first place, in the statistics published by the State Port Inspection Service. Section 5 of the Dockers Act formerly stipulated that anyone desiring to work as a docker must first obtain an employment card issued by the Inspector, subject to certain conditions, for a small fee; but these

cards ceased to be compulsory in 1932, and the figures based on them refer only to the years preceding that date.

Another set of relevant statistics is provided by the *Scheepvaart Vereeniging Zuid* (Shipping Association of Rotterdam). This Association, though holding a predominant position in the port, does not comprise all the undertakings engaged in the loading and unloading of vessels. Nevertheless, while the exact number of permanent workers in undertakings not affiliated to the Association cannot be stated, it is so small in relation to the total as to be negligible for our purpose.

A combination of these two sets of figures gives us a first table relating to the dockers employed in the port of Rotterdam. The year 1922 is taken as the starting point because in that year the figures were only very slightly influenced by stoppages of work or other special circumstances. The years 1923-1926, however, are omitted, since the figures for those years might give a false impression owing to the labour disputes of varying extent which marked that period.

TABLE I

Year	Number of employment cards issued under section 5 of the Dockers Act ¹	Average number of permanent workers per week ²	Number of workers seeking casual employment as dockers (obtained by subtraction)
1922	10,852	4,181	6,671
1927	17,221	5,026	12,195
1928	17,028	5,018	12,010
1929	16,747	5,137	11,610
1930	13,994	4,975	9,019
1931	11,163	4,389	6,774

¹ The figures in this column relate to the whole business of loading and unloading sea-going vessels.

² The figures in this column were supplied by the *Scheepvaart Vereeniging Zuid*, which as already stated does not include all the undertakings engaged in loading and unloading ships in the port of Rotterdam.

From 1919 onward, as we have seen, a large number of measures of rationalisation and improvements in methods of work were introduced. What would have been the result if, other circumstances remaining unchanged, these measures had not been taken? What would have happened to the figures contained in the last column of the above table?

An answer can be obtained by multiplying the figures of that column for each year by a coefficient obtained by dividing the quantity of goods handled in that year by the quantity of goods handled in the basic year, 1922. The result is shown in column 4 of the following table.

TABLE II

Year	Quantity of goods loaded and unloaded on sea-going vessels (metric tons)	A Number of workers seeking casual employment (from table I)	B Number of workers who would have been seeking casual employment if there had been no change in methods of loading and unloading since 1922	Ratio of A to B (percentage)
1922	19,499,055	6,671	6,671	1.00
1927	41,344,219	12,195	14,143	0.86
1928	36,147,467	12,010	12,368	0.97
1929	38,453,004	11,610	13,155	0.88
1930	34,702,749	9,019	11,874	0.76
1931	28,394,382	6,774	9,713	0.70

This table shows that the number of dockers seeking casual employment has not increased but fallen considerably in relation to the quantity of goods loaded and unloaded. In other words, there has been a decline in casual employment.

Our analysis has hitherto been based on a combination of the statistics of the State Inspection Service and those of the *Scheepvaart Vereeniging Zuid*. The same results, however, are obtained if the figures contained in the annual reports of the *Vereeniging* are taken alone. This method has the advantage of permitting the extension of the period under examination to the year 1936. Table III (p. 229) shows, against the figures for the quantity of goods handled each year, the number of casual workers employed as dockers by the *Scheepvaart Vereeniging Zuid* and the number who would have been employed if there had been no change since 1922 in methods of work. This last series of figures is obtained, as in table II, by multiplying the number of temporary workers in employment each year by a coefficient obtained by dividing the quantity of goods handled in that year by the quantity of goods handled in 1922.

It will be seen that table III, like table II, reveals a considerable decline in casual employment. To what is this decline due?

It might be suggested that it was caused by the entry of large numbers of temporary workers into permanent employment. But an examination of the annual reports of the *Scheepvaart Vereeniging Zuid* compels us to reject this hypothesis; the average weekly number of permanent workers on the Association's registers was 4,181 in 1922, and in the years 1927-1936 respectively 5,026, 5,018, 5,137, 4,975, 4,389, 3,810, 3,210, 3,116, 2,942, and 2,801. There was thus a marked decline in permanent as well as casual labour.

TABLE III

Year	Goods loaded and unloaded on sea-going vessels (metric tons)	A Average number of workers employed temporarily as dockers by the <i>Scheepvaart Vereeniging Zuid</i> ¹	B Average number of dockers who would have been employed temporarily by the <i>Vereeniging</i> if there had been no change since 1922 in methods of handling goods	Ratio of A to B (percentage)
1922	19,499,055	3,685	3,685	1.00
1927	41,344,219	4,027	7,812	0.63
1928	36,147,467	5,025	6,832	0.74
1929	38,453,004	5,011	7,267	0.69
1930	34,702,740	4,164	6,559	0.63
1931	28,394,382	3,585	5,365	0.67
1932	20,865,335	2,997	3,943	0.76
1933	23,115,436	2,981	4,367	0.68
1934	27,324,240	3,122	5,163	0.60
1935	28,191,430	2,736	5,324	0.51
1936	33,223,802	2,867	6,276	0.46

¹ The considerable difference between the figures in this column and those of the corresponding column of table II is due to the fact that table II includes undertakings not affiliated to the *Scheepvaart Vereeniging Zuid*. The number of workers employed by these undertakings, which often recruit their labour wherever they can, fluctuates much more than in the case of the *Vereeniging*, which has its own employment agencies. It should further be noted that the casual workers covered by table II include workers who are not regularly employed as dockers, such as those employed by undertakings which may be responsible only for the loading or unloading of single vessels. Finally, table III gives average figures, and the total number of workers may actually have been much larger, if many fell out during the year owing to death, sickness, invalidity, dismissal, change of post, etc.

Nor can the decline be explained by an increase in hours of work, for the changes in hours which occurred in the period under review were too slight to affect our conclusions—a fact which makes the decline of casual employment the more remarkable.

Have we been too hasty in drawing conclusions from our statistics? Have there been changes, of which we have failed to take account in the character of the goods handled during the period? Has, for instance, the proportion of ore and coal to the total undergone any change?

In order to reach absolutely reliable conclusions, it would be necessary to classify the goods handled according to their nature, and to obtain figures for each class as regards both the quantity handled and the amount of work involved. A detailed enquiry would

also have to be made into the equipment of the vessels, methods of work, and other factors. Nevertheless, it is possible, even without this information, to formulate reliable conclusions of a general character. Actually, the quantity of ore and coal handled in the years 1922 and 1927-1936 respectively formed 63, 63, 53, 60, 58, 49, 41, 44, 50, 55, and 57, per cent. of the total, which shows that this factor cannot have played a predominant part.

It may therefore be concluded that the decasualisation that has taken place in the port of Rotterdam is a direct consequence of rationalisation.

One of the purposes of rationalisation is to secure a larger output of work with a smaller amount of labour. This purpose has been achieved at Rotterdam. Apart from the permanent workers, who perform the greater part of the work, only a relatively small supply of casual labour is needed. Moreover, the periods of unemployment of these workers are not now long enough to justify their being termed "casual" workers in the strict sense; they should rather be regarded as semi-permanent workers.

It is a matter for satisfaction that though rationalisation may reduce temporarily the amount of employment available it nevertheless contributes, in the long run, to the reduction of chronic semi-unemployment.

Factory Inspection in South Africa, 1932-1936

INTRODUCTION

The supervision of factories in South Africa is a function of the Department of Labour. Factory legislation dates from the passage of the Factories Act of 1918. The primary purpose of the Act was to provide machinery for the registration of factories and the regulation of their operation with a view to the welfare and safety of employees, but it also laid down limitations in the matter of hours of work for all employees in factories and provided for the payment of overtime when the prescribed limits were exceeded.

The Act of 1918 did not apply to machinery, the inspection of which was a responsibility of the Department of Mines till 1931. In that year, however, an amending Factories Act was passed transferring from the Department of Mines to the Department of Labour the supervision of all boilers, elevators, and other machinery, used for purposes other than in connection with agriculture, mining, or the manufacture of explosives, and not under the control of the Administration of Railways and Harbours. According to the report of the Chief Inspector