



TI 2001-061/1

Tinbergen Institute Discussion Paper

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Tracing the changing Measures of Unemployment in Dutch Unemployment Statistics 1900-1940

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JEL classification: J, N

Keywords: Statistics of unemployment, Measurement, Unemployment, Labour movement 1900-1940

1 Introduction

The first attempts to measure unemployment in the Netherlands were made at the end of the 19th century. In the winter of 1893 and the winter of 1894/1895 unemployed workers were counted by order of the City councils of Utrecht and Amsterdam. Another investigation was done in 1894 by the Centrale Commissie voor de Statistiek (CCS) [Central Commission of the Statistics], the governmental installed forerunner of the official bureau for statistics. In a letter, the Maatschappij tot Nut van 't Algemeen [Society for the benefit of the public interest] requested the Commissie voor de Statistiek to investigate the extent and nature of unemployment in Holland. The Commission replied that:

¹ This paper was prepared for the workshop "Measuring the labour force; Labour statistics and the National State, 19th-20th centuries" (Gent, Belgium, April 28th 2000) at the invitation of Eric Vanhaute of the Department of Contemporary History, University of Gent. I would like to thank Mary Morgan, Jeff Biddle, Marcel Boumans, Harro Maas and the participants and organisers of the Gent University workshop for their helpful comments.

"For a statistical investigation (..), which would be able to understand unemployment, to its full extent in a given point in time, our Commission regrets to say, that in practise there is no executable method known" (my translation), (CCS, 1893: 27).

Measurement of unemployment was considered to be very difficult and according to the CCS research should be focused instead on its effects, namely the family-income in a certain time period:

"A completely correct impression of the economic consequences, which the fluctuating demand for labour has for the workers, is only to be obtained, when one investigates their (the workers) income and resources for a period of at least one year" (my translation), (CCS, 1893: 26).

It seems that the idea is to avoid an operational definition of unemployment by focusing the investigation on the family-income rather than on unemployment: the earnings of family members do not affect the employment status of workers. The investigation that was followed by the request of the Maatschappij tot Nut van 't Algemeen was therefore not an investigation into unemployment in total, but investigated the nature and numbers of unemployed in trade unions, for which figures were much more easily obtained.

It will be obvious from this example that measurement of unemployment was indeed a doubtful enterprise since there was no clear consensus about the method of measuring or the definition of unemployment to be used. Yet official figures of unemployment emerged. In this paper I will focus on these official figures of unemployment. They were constructed by the official statistical bureau of the Netherlands, the Central Bureau of Statistics (CBS). This bureau was established in 1899 and, soon after its establishment, it started to collect data of unemployment systematically in the Netherlands. For the construction of statistics of unemployment, the Dutch Bureau for Statistics relied on the use of establishment data rather than on collecting their own data. Two primary sources of information were used: the Dutch trade unions and the labour exchanges. The figures were published monthly and in public and in economic policy discussions these figures were considered to be the official figures of unemployment. In this paper I will analyse these indicators of unemployment the CBS developed. I will investigate how they were established and what they represent. I will make clear that the definition of unemployment and the interpretation of unemployment figures were not always the same and changed over time.

The outline of this paper is as follows. In section 2 I will analyse the trade union statistics for the period 1900-1940, and I will point out how two important changes in the interpretation of trade

union statistics can be distinguished. The first one occurred in 1911, when the CBS introduced a new set of indicators, which presented ratios of unemployment rather than absolute numbers. The second one is in 1917 when the government passed the Unemployment Resolution 1917, and became actively involved in unemployment insurance. In accordance with these 'break points' or 'transition points' I subdivided this section into the subsequent intervals: 1900-1911, 1911-1917 and 1917-1940. In section 3 the labour exchange statistics are considered and again, some important 'transition points' can be distinguished. For this statistic the mayor breakpoints are 1917, because of the acceptance of Unemployment Resolution 1917, and 1930 when the government passed the Employment Assistance law 1930. I therefore divided the analysis of labour exchange statistics into three intervals: 1900-1917, 1917-1930 and 1930-1940. Of course, these divisions are in some sense arbitrary and other subdivisions are possible, but in my opinion these are the most helpful ones to illustrate changes in the interpretation of the indicators of unemployment. Finally, in section 4 comparisons and conclusions are drawn.

2 Dutch Trade Union Statistics of Unemployment

2.1 THE PERIOD 1900-1911

For a good understanding of the genesis of statistics of unemployment in the early 20th century one needs to have some background knowledge of the social and economic situation in the 19th century. In those days, the dominant economic thinking in the Netherlands remained classical and unemployment was not considered a serious economic problem for two reasons. First of all, population growth was regarded as an endogenous variable and able to adjust to the long term equilibrium state of the economy. If for example, wages decreased, i.e. as a result of lack of demand of labour, than the population growth would decrease as well, on the one hand because of an increase in the mortality rate (caused by malnutrition, poor hygienic living conditions etc.) and on the other hand as a result of a fall in the birth rates. In this way the labour population adjusted to the capital accumulation and unemployment was ruled out in the long run. Thus Dutch economists, like C.A. Verrijn Stuart, saw unemployment in essence as a wage problem (Vries, 1976: 6-7). The second reason for not considering unemployment as a serious problem was the confidence in the doctrine of Say's Law. According to this doctrine the value of production is always equal to the value of commodities bought. By definition, therefore, there could be no underutilisation of resources: 'supply created its own demand'.

On grounds of these considerations involuntary unemployment was ruled out. Apart from some unemployment of those who changed jobs, unemployment could only be created as a result of individual shortcomings, like shirking, drunkenness, laziness etc. The government was advised not to interfere in economic life, especially in the case of self-chosen unemployment. Financial support to the unemployed would cause not only disadvantages for the public interest but for the interest of the unemployed as well, since financial support would only encourage shirking and laziness. Viewed in this light, it is obvious that the interest of the government in developing statistics of unemployment was only modest. For example, though censuses had been held in the Netherlands since 1849 it was only in 1900 that the minister of internal affairs asked the Central Bureau of Statistics to investigate the feasibility of reliable statistics of unemployment (Leunis and Verhage, 1996: 60). As Garraty puts it:

It is not surprising that the jobless had seldom been counted systematically before the idea "unemployment" was conceived (Garraty, 1978: 167).

Though unemployment was considered as a minor problem in classical economic theory, it was not for those who became jobless. Since there was no financial support for them from the government (apart from assistance of the poor), organised labourers started to arrange unemployment insurance for themselves in the late 19th century. This kind of private unemployment insurance was (usually) set up by occupational organisations, the forerunners of trade unions. Members that became jobless, not as a result of their own acting and who had always paid their contribution, were entitled to a benefit from their organisation for a certain period. The professional organisation of typographers established the first unemployment fund in the Netherlands around 1860 (Velthuisen, 1948: 2). Benefits were primarily based on the number of days of unemployment in a week. According to Velthuisen, the primary aim of unemployment insurance was not to support unemployed members, but to prevent unemployed colleagues accepting work under poor conditions that might affect the interests of other members (Velthuisen, 1948: 3). This worry can be supported by the fact that the unemployment insurance was not insurance to the full extent. For example, there was not an official agreement between insurer and insured which included all rights and obligations. Neither was there a separate fund for the payments of benefits. Furthermore, no economic calculations were made. Benefits were paid out of the contributions of the members, therefore there was no guarantee that the unemployment funds could keep to their obligation.² As a result, the unemployment funds got

² The absence of official statistics of unemployment made the business of calculations of the risk of unemployment of course very difficult.

into severe financial troubles when unemployment increased sharply during the First World War. However, as a by-product of the unemployment funds' benefit payments, the first registers of unemployed were created.

In the 20th century the government gradually became involved in unemployment care. This process started in 1906 when local authorities established the first municipal unemployment funds, which subsidised trade unions' unemployment funds. The first one that was established in 1906 was in Amsterdam and by 1912, 32 municipal funds were active. The municipal unemployment funds were mostly established at the request of trade unions to the city council for financial assistance. The municipal unemployment funds supplied additional benefit payments to unemployed union members that received a benefit from the trade union. Unorganised workers didn't benefit from this arrangement. Municipal subsidy was a local affair, i.e. with respect to such subsidy, the municipal unemployment funds had their own regulation with regard to minimum age of the unemployed, duration of unemployment, minimum number of members of the trade union unemployment fund etc. The interference of the municipals was approved by the central government. The government however didn't consider a national insurance arrangement nor the subsidising of private unemployment funds of trade unions as a governmental duty. Subsidising unemployment funds, which pursued only the interest of union members would implicitly support and benefit workers at the expense of employers (Velthuisen, 1948: 10). The central government therefore kept aloof from any interference.

In 1906 also the first official statistics of unemployment were published by the CBS. The CBS requested the municipal unemployment funds to provide once a month reviews of the week about the number of subsidised unemployed union members, the number of persons unemployed during each week, the number of days of unemployment and the total benefit payments. Of course, only the subsidised trade unions could be taken into account. Trade unions without an insurance arrangement were not considered. The data were reported in *Maandschrift*, the monthly publication of the CBS, and each trade union unemployment funds was mentioned separately, i.e. there was no sense of the aggregate absolute level of unemployment.

2.2 1911-1917

The way figures of unemployment based on trade union data were presented and constructed changed radically in 1911. Three indicators were developed by the CBS, based on trade union data:
- Index Number of Unemployment (INU)

- Percentage Unemployed (PU)
- Number of Days of Unemployment per Unemployed per Week (DUW)

The most important and most often used indicator was the Index Number of Unemployment. It was defined as the ratio between the real number of days of unemployment and the number of days all workers (counted in the statistic) could have worked. This figure was published each month and was based on the average of four (or five) weekly returns. An example will illustrate how this index number was calculated. I will use the figures of the four-weekly period 1 to 27 August 1927:³

- A. Number of insured persons 285,035 (in persons; average per week)
- B. Number of unemployed 18,730 (in persons; average per week)
- C. Number of days of unemployment 92,360 (in days; average per week)

Now the index number of unemployment was calculated by dividing the number of days of unemployment (C) by the total number of days which could have been worked by the insured workers, i.e. the average number insured, multiplied by the number of working days per week, namely 6. The Index Number of Unemployment (INU) is thus:

$$\frac{\text{The number of days of unemployment (in days)}}{\text{Number of potential days of employment (in days)}} = \frac{100 * C}{6 * A} = 5.4 \text{ percent}$$

The INU is represented by a number between 0 and 100. In the case when all insured workers were unemployed the index number would have been 100 and in the opposite case, that none of the workers were unemployed, the index number is obviously 0. In fact INU indicates the fraction of insured workers being unemployed. Figure 1 shows the monthly index numbers of unemployment in the Netherlands for the period 1911 – 1925.

The second indicator was the Percentage Unemployed (PU). It was defined as the percentage of the trade union members being unemployed, though it was calculated slightly differently than the percent unemployment used in other countries. In other countries the percentage of unemployed is usually defined as the number of workers unemployed on a given day divided by the number of workers (exposed to the risk of unemployment). In the Netherlands however, the percentage unemployed was based on the number of persons who *have been unemployed at any time during a*

³ This example is taken from (Nixon, 1928: 643), and based on figures published in CBS *Maandschrift* of 31 October 1927.

given week (ending on Saturday). It does not represent therefore the number of cases of unemployment. For example, a worker who got out of work twice a week was counted as *one case* of unemployment. On the other hand, a worker who was unemployed on Friday and again on Monday of the following week was counted again as a case in the following week (since unemployment was reported by trade unions in weekly reports provided once a month).

	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec.
1911	4.2	3.2	1.8	1.9	2.1	1.9	2.0	2.1	1.8	2.0	2.7	4.6
1912	6.1	5.2	4.3	5.0	2.9	2.8	2.6	2.4	2.3	2.3	4.7	7.7
1913	7.5	5.4	3.2	3.3	4.2	3.8	3.6	4.7	4.7	4.7	6.3	8.8
1914	10.4	6.6	4.9	4.7	5.8	6.7	7.4	22.2	27.2	24.5	21.7	20.7
1915	20.3	17.5	15.9	12.8	11.1	10.6	11.1	11.0	10.0	9.3	8.1	8.5
1916	8.4	7.1	5.8	5.3	4.7	4.4	4.1	4.3	4.4	4.2	4.2	5.2
1917	7.1	11.4	7.6	6.7	6.0	5.6	5.0	5.3	4.9	4.9	6.0	7.9
1918	9.7	7.9	6.4	7.0	6.3	6.3	6.3	6.6	7.0	6.8	8.2	10.9
1919	12.2	16.1	12.2	10.3	8.8	7.8	6.1	4.8	4.0	3.1	4.4	7.1
1920	8.7	6.9	6.4	6.7	6.2	5.0	4.2	4.2	3.3	3.2	5.2	10.2
1921	13.8	13.5	11.5	9.6	7.7	6.6	6.2	6.0	5.6	5.7	8.1	13.7
1922	17.0	18.8	12.0	10.1	8.9	8.1	8.3	8.1	8.0	8.4	10.0	13.4
1923	17.1	15.8	11.9	9.0	8.5	8.2	9.4	9.7	10.0	9.6	10.0	13.7
1924	19.7	13.4	9.5	6.3	5.4	5.0	6.1	6.8	7.1	7.2	8.3	10.9
1925	12.8	10.8	8.0	6.6	5.9	5.7	7.0	7.2	6.5	6.2	7.9	13.8

Figure 1: Monthly index number of unemployment in the Netherlands 1911 –1925.
Source: De statistiek van het arbeidsloon en van de werkloosheid, G. Lubbers, H.J. Paris, Amsterdam, 1926, p. 171.

For the example of the four weekly period 1 to 27 August 1927, the Percentage of Unemployment can be calculated as follows. Recall the figures presented above.

- A. Number of insured workers 285,035 (in persons; average per week)
- B. Number of unemployed 18,730 (in persons; average per week)
- C. Number of days of unemployment 92,360 (in days; average per week)

The Percentage Unemployed (PU) is: $\frac{B * 100}{A}$ (in persons) = 6.6 percent
(in persons)

The third indicator was "the number of days of unemployment per unemployed per week" (DUW). From the example above it can be calculated:

"Number of days of unemployment:
per unemployed per week" $\frac{C}{B} = 4.95$ days (per person)

The maximum number of days of unemployment/person was six, of course, but the ratio varied across industries.

It can be seen that these three indicators were a well-thought out, systematic set of indicators since the indicators were related to another in the following way:

$$\frac{100 * B}{A} * \frac{C}{B} = \frac{100 * C * 6}{6 * A} \quad \text{thus: } PU \times DUW = INU$$

It will be clear that these measures of unemployment will be more accurate when the employment status of more workers was reported, i.e. when more trade union members were subsidised. It is therefore important that the number of people of whom the employment status was reported increased sharply in 1914.

Soon after the outbreak of the First World War in August 1914, unemployment in the Netherlands increased sharply. The index number of unemployment amounted up to 22.2 % in August and 27.2 in September. As a result the benefit payments of the trade union unemployment funds rose sharply and the unemployment funds, not equal to their task, ran into financial problems. Already in 1909 a state committee on unemployment had been established, which had to advise the government with regard to unemployment. In their final report in June 1914 they concluded that the government should encourage voluntary insurance of workers, in the first place by subsidising trade unions and other organisations that intended to insure workers. Unemployment insurance was still considered to be based on private initiative. When two months after the presentation of the report of the state committee, the First World war broke out, implementation of the recommendations of the committee was speeded up. The government started to subsidise the trade unions on a *temporary* basis by passing the "Emergency Resolution 1914". In this arrangement, also known as "Emergency Arrangement Treub" (named after the minister of agriculture, industry and trade) or "emergency arrangement for relief of municipal unemployment funds", the trade union unemployment funds and some unemployment funds of trade unions without insurance were subsidised directly by both the municipal unemployment funds and the central government. In the Circular of 26th of August 1914

the government requested municipals without municipal unemployment funds but with trade union unemployment funds to establish temporary municipal unemployment funds.

The results of this emergency arrangement were twofold. First, information of unemployment of members of occupational organisations without insurance arrangements, which was previously not available, now became available. The CBS started to request the municipal unemployment funds and occupational organisations without insurance arrangements for reviews of the week about the unemployment of their members. Second, the emergency arrangement initiated a sharp rise in the number of municipal unemployment funds, which rose from 32 in July 1914 to 87 in December 1914 and 119 in early 1917.⁴ As an overall result, the number of unemployed counted in the statistic rose from 73,000 in Augustus 1914 to 120,000 in December 1914 and to 167,000 early 1917, and the statistics of individual funds were discontinued.

2.3 1917-1940

After 1917 government interference changed from a temporary one into a permanent interference.

The government had got engaged in unemployment insurance in 1914 as a result of the prevailing emergency situation with respect to unemployment. By 1916 unemployment was fallen to more or less to 'normal' and the necessity of governmental support was factually superfluous. However, the call for a permanent role for the government in unemployment insurance became louder from, among others, the *Vereeniging van Gemeentelijke Werkloosheidsfondsen* (Association of Municipal Unemployment funds), *Nederlandsch Verbond van Vakverenigingen*, (Dutch Union of Trade Unions), and the *Nederlandschen Werkloosheids Raad* (Dutch Unemployment Council). Of course, there was criticism of the 1914 Emergency Arrangement since only specific groups (union members) were supported, while others, like small independent workers had to eat into their capital. But since the later were not organised in a professional organisation they were not a factor of significance.

The government realised that an abolishment of unemployment subsidy would be a step back in the development of a system of unemployment insurance and the transformation of the emergency arrangement into a definitive organisation of unemployment insurance came up for discussion. Moreover, the hazard of a renewed crisis was not inconceivable. Previous attempts in others

⁴ CBS, *Documentatie Statistiek van de Werkloosheid, part III*. Map 408 in CBS archive, page 8. This is an undated, anonymous report in four parts about the establishment of Dutch labour market statistics, written before and during the Second World War.

countries to set up an insurance system without the involvement of trade unions, like in St. Gallen in Switzerland in 1894, had turned out to be unsuccessful. For a successful unemployment insurance there needs to be:

a) an equal risk to unemployment for the associated workers,

b) a system of supervision in order to rule out abuse,

and the trade unions unemployment funds were the only organisations that met these requirements.

For the transformation of the temporary unemployment care into a permanent one the government could either set up their own system with their own supervision system or co-operate with the trade unions. Since the government didn't wanted to set up their own system of unemployment insurance, the co-operation of trade unions was inevitable. If the government were to expand the system of unemployment insurance, they would have to rely on the trade unions. And so they did.

In 1917 the government passed the 'Werkloosheidsbesluit 1917' (Unemployment Resolution 1917) which established a permanent role for the government and introduced the so-called 'Danish' system of unemployment insurance. With this measure, unemployment insurance became partially a governmental affair; though the insurance arrangements were still left to the trade unions. Thus, this resolution was not the start of a compulsory insurance arrangement. With its subsidy, the government wanted to encourage participation in voluntary insurance.

In this new system the central management of unemployment insurance was in the hands of the *Rijks Dienst der Werkloosheidsverzekering en Arbeidsbemiddeling* (DWA), [National Service of Unemployment Insurance and Employment Assistance]. The municipal unemployment funds were discontinued and the unemployment funds were subsidised directly by the state. Obligations were imposed on the funds to supply statistical data to the DWA. The data, which the unemployment funds had to supply to the DWA in their reports of the week, concerned:

- the number of unemployed members that received a benefit
- the number of days over which benefits were paid
- the total number of unemployed members, including the ones not entitled to a benefit
- total days of unemployment, including the ones over which no benefits were paid.

The CBS agreed with the DWA to receive this data from them and used it for calculating and publishing the unemployment statistics i.e. the index number of unemployment and the other two indicators.

The government however had a suspicious position with respect to the supervision system of the trade unions and therefore attached several conditions to the subsidy transfer. The union regulations for benefit payments had to be approved by the Minister (article 2 of the Unemployment Resolution

1917). The decision to supply benefits to unemployed members was up to the trade unions regulations, though under supervision of both the government and the municipality of the union (article 7). The government and municipality could also give notice of appeal in case benefits were supplied in a way not permitted by the rules (article 5). The trade unions themselves adjusted their regulations for benefit payment in order to be considered for government subsidy. The DWA played an active role in this process: they designed a model-regulation with 54 articles, which was adopted by practically all unions, though some deviations were allowed (Velthuisen, 1948: 32). As a result of the government involvement and inference, however, the trade unions came to similar regulations for supplying benefits and a more or less uniform, though implicit, definition of unemployment was established

Another major change concerned the arrangement of the subsidies from the public purse. In the old system (Gentian system) subsidy was granted on the payments of the funds to unemployed members, whereas in the new system subsidy was granted on the contributions the funds members had to pay⁵. This new arrangement, the Danish system, opened the possibility of capital accumulation for the funds, which encouraged the participation in unemployment funds and speeded up the process of centralisation of the funds. As a result of the implementation of this new system the number of insured workers increased and therefore also the number of workers involved in the statistic of unemployment and unemployment insurance.

The insurance system remained the same throughout the 1920s and 1930s and also the method of subsidising by the government. In 1929 the CBS made proposals to change the method of calculating the index number of unemployment and the percentage of unemployment. The 1929 annual report mentions these intentions of the CBS. Later annual reports however don't show evidence of a change in methods of calculation. It seems to me that the method of calculation wasn't altered and remained the same throughout the 1930s. However, the name of the index number of unemployment was changed in the 1930s to: 'days of unemployment in percentages', though it still presented the average number of days of unemployment relative to the potential number of days of employment.

The trade union statistic of unemployment was finally terminated in 1943, as a result of the Second World War. All unemployment funds were united in one unemployment fund of the national-socialistic *Nederlandse Arbeidersfront* in 1942. One year later this unemployment fund was discontinued and the money was transferred to the Dutch government⁶. The trade union

⁵ A comprehensive comparison between both systems can be found in Velthuisen (1942).

⁶ A detailed description of this ending can be found in Velthuisen (1948).

unemployment funds had ceased to exist. After the war in 1945, the trade union statistics of unemployment were never re-established since the unemployment funds were never re-established. The government developed a system of compulsory unemployment insurance after the war and the unemployment insurance became a governmental affair entirely. The Index Numbers of Unemployment, the Percentage Unemployment and the Number of Days of Unemployment per Unemployed per Week, are therefore available only for the Netherlands for the period 1911 –1943.

2.4 WHAT DID THE TRADE UNION STATISTICS REPRESENT?

In public and policy discussions in newspapers and economic literature, the trade union statistics were taken to be representative for the total working population. For example, when the index number of unemployment rose to 22,2 % in August 1914, it was taken to represent the unemployment rate of all Dutch workers. Trade union members however, were a specific group of workers and are *not* a random or a representative sample of the labour force. In order to interpret the meaning of the trade union statistics, it is important to analyse the characteristic features this group of workers in closer detail.

First of all, most workers were not members of a trade union. Kloosterman estimates the share of organised workers to vary between 10 - 15 % of the total labour force for the period 1920-1939 (Kloosterman, 1985: 25). The CBS reports in the 1925 annual report:

Most unorganised fall out of scope of investigation, except the few that are members of unemployment funds that are not associated with trade unions. Not organised is the greater part of persons being employed (my translation), (CBS, 1925:) .

Second, some specific groups of workers were absent or overrepresented. In the Dutch trade unions educated workers were overrepresented and workers, who were self-employed, like small independents or practitioners of free trades (shopkeepers, farmers, handicraftsmen, lawyers, doctors etc.), were completely absent (Kloosterman, 1985: 19). Some other groups of workers that were excluded as well were new entrants in the labour market and working family members.

Furthermore, trade unions were in some industries much more strongly represented than in other industries. In 1930, the highest percentages of insured could be found in the diamond industry and the printing industry with respectively 89.4 % and 70.0 % (Kloosterman, 1985: 17). This is not surprising since workers in these industries were the first to organise in the Netherlands. In three major industries, at least a quarter were insured: the building industry (45.2 %), the metal industry

(36,0 %) and the food industry (26.6 %). In other industries, the insurance rate was far less: agriculture (9.7 %), commerce (9.0 %), transport (20.5%) and clothing (10.6 %). In the clothing industry the low insurance rate was caused by the structure of the industry: most of the labour was done by home workers, or in small firms and most of the workers were women. Women were as a rule underrepresented in trade unions data.

Finally, there seems to be a regional aspect involved in the measurement of unemployment by means of a trade union sample group. Most union members lived in the western part of the Netherlands, which was (and is) the most urbanised and industrialised part of the country and there also the industries with high insurance rates were found. Industries with low insurance rates, like agriculture and clothing, were found in the more rural, eastern part of the country. In his research on the regional distribution of unemployment for the Dutch inter-war period, Kloosterman finds structural regional differences (Kloosterman, 1985: 280). According to him, the western part of the country experienced a structurally higher level of unemployment, even after a correction for differences in industries. But, since unemployment in industries in the western part of the country was more often counted (because of higher insurance rates), the index number of unemployment was as a result likely to overestimate unemployment. Van Zanten already mentions this uneven distribution of unemployment in 1928 (Zanten, 1928: 315).

It will be clear from the above, that the sample on which the index number of unemployment was based, was not a *random or a representative sample* from the total population. In general, the workers for whom the employment status was reported could be characterised as male, skilled and salaried employees working in the urbanised part of the country. There was an obvious disproportional representation of certain industries and sex.

The CBS was of course aware of the fact that this sample of the population was not a representative one and investigated this in 1925. Trade unions were questioned about how representative their unemployed members were for total unemployment. Since they of course didn't have insight into unemployment among non-union members, they could only answer this question with 'considerations of a general nature' (CBS, 1925:). The CBS however concluded:

An investigation, undertaken in the year 1925 by the Central Bureau of Statistics, made plausible that, in general, unemployment among unorganised workers is not smaller compared to organised, though at least as big (my translation), (Velthuisen, 1936:).

On this base the CBS considered the unemployment among trade union members to be representative for all workers! Velthuisen argues:

Based on this investigation, it would allow considering the unemployment figures applicable for all workers (my translation), (Velthuisen, 1935: 359).

I will clarify now what this sample group (union members) was supposed to represent; i.e. what was the "population" and how was it counted? First, the group of workers for which the unemployment measures seem to be representative, might be thought to be limited to those workers who were exposed to the risk of unemployment. That is, the relevant "population" at issue is those who might become unemployed. For the insurance rate for example, the number of insured workers is related to the workers exposed to risk of unemployment, (Kloosterman, 1985: 26), but these were not all workers in the labour force. For example, civil servants, railway employees, domestic servants, teachers, medical and nursing employees and priests, were considered to have only a very small (or 'no') risk of unemployment. We can decompose the labour force now in the following way. The total labour force could be thought of as either workers or self-employed. Both of them are exposed to the risk of unemployment. A fraction of the workers, described above, is considered not to be subject to the risk of unemployment. When this group is subtracted from the total labour force - as the CBS did - the workers who were exposed to risk of unemployment remains. The self-employed were included in this category but seemed to be ignored in the analysis. As we saw, the largest fraction of the workers exposed to risk were neither a member of a trade union nor another insurance arrangement and the employment or unemployment status of this large group was thus unclear because there was no count of their numbers. For the unemployed union members the employment status was clear for those members that received a benefit. A sizeable fraction of unemployed union members however, was not entitled to a benefit since their entitlement had expired. They were not counted, but had to be estimate by the trade union in order to meet the requirements of the CBS. An example will illustrate that this latter group was the largest part of unemployed union members. In 1923 for example, the average number of unemployment per week that received benefits was 15,600, while the number of unemployed members without benefits was 22,000 (Rijksdienst der Werkloosheidsverzekering en Arbeidsbemiddeling, 1925: 5). The number of days over which benefits were paid amounted to 72,000. The number of unpaid days of unemployment was 124,800. Estimation of the number of unpaid unemployed members of course made the statistic more unreliable, but there are good reasons to assume that the trade unions were pretty well informed about these members. Usually the trade unions offered certain facilities to unemployed members without benefits like partly or complete exemption of contribution payment. Unpaid unemployed therefore had an incentive to report themselves to trade unions as being unemployed, which made the estimations more accurate.

Labour force (3,185,816) ^a	Self-employed (671,816)		Non trade union member	Employed		
				Unemployed (C3)		
	Workers (2,514,000) ^a	At risk of unemployment (A) (2,551,816) ^a	(2,104,841)		Employed	
					Unemployed (C2)	
				Union members (B) (446,975) ^b	Employed	
					unemployed (C1) (81,204) ^b	Unemployed with benefit (D1)
		'No' risk of unemployment (634,000)	Non trade union members (634,000)	Employed	Unemployed without benefit (D2)	
				(C4) Unemployed		

Figure 2: Decomposition of the Dutch labour force, 31 December 1930.

^a Kloosterman, 1985: 24, based on census 1930

^b CBS Maandschrift February 1931, p.356; Numbers are averages over the month December.

Figure 2 illustrates which part of the total labour force was assumed to be represented by the unemployed union members. The graph is based on CBS data of unemployment and the ten-yearly census of December 1930 and the graph represents the relative size of groups of workers. It turns out that the number of unemployed union members (small grey area C1), consisting of both registered unemployed with a benefit (D1) and estimated unemployed without a benefit (D2), were taken as a sample of all unemployed (total area C = C1+C2+C3). The union members (B) were taken to represent all the workers at risk of unemployment (large grey area A). As said before, the absence in the sample group of self-employed seems to be ignored in this consideration and also the possibility that workers with 'no' risk of unemployment occasionally became unemployed (area C4). They were not present in the sample group. In short, the ratio C1 / B, which the trade union statistics of unemployment represent, was assumed to correspond with the ratio (C1+C2+C3+C4) / A. And, while D2 was a correct figure, D1 was estimated, so that C1 was itself partly an estimated figure.

Another problem with the trade union figures was not only that the sample group was a biased one, but also that the sample/population device was not a stable one. The statistic depended not only on the sample of unemployment used, but also on the population of trade union members from which was drawn and, in addition, on the relationship between trade union membership and the total labour force. That is, not only were C1 and B changing, but also B relative to A so that the ratio C1/B changed as did B/A. As trade union membership expanded the sample population was not stable over time and the specific features of the sample group could change. This became apparent in the period

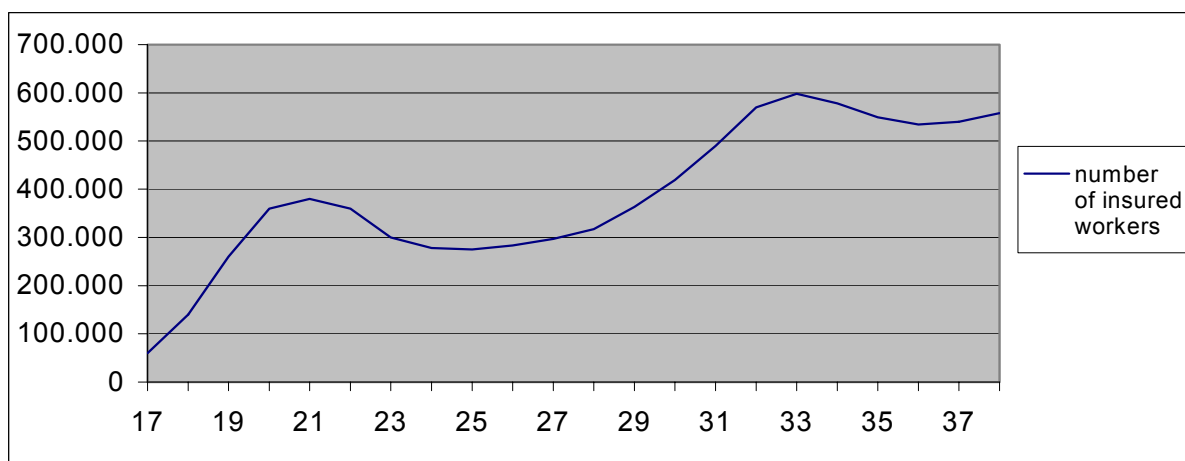


Figure 3: Dutch union membership, 1917 - 1938
 Source: Rijksdienst der werkloosheidsverzekering en arbeidsbemiddeling,
Jaarverslag 1938 (Annual Report 1938), Algemeene Landsdrukkerij, Den Haag, p.16

1917-1940 when, as can be seen from figure 3, there was a rapid expansion of union membership for the periods 1917–1921 and 1929-1932. For the period 1921–1929 and 1932-1939 there was a relative stable membership size.

On the other hand, it is often argued that if the sample size of union members increases, an upward trend in union unemployment percentages will arise. The argument runs like this. Skilled craftsmen usually are the first to organise in a union. They are disproportional represented in the early years. Since they are usually less subject to the risk of unemployment, there is an upward trend in unemployment when the union membership expands and more (unskilled) labourers join the union. The rate of changes in inaccuracy of the index numbers is therefore unknown.

2.5 SUMMARY

The trade unions figures of unemployment were not created as measures of unemployment. They were records of unemployed members and were kept for 'bookkeeping' and administrative ends only.

Trade unions only registered unemployed members that could not find a job at the given wage levels and had set up an insurance system not on social grounds, such as the avoidance of poverty of members, but on economic grounds: namely to maintain a wage level above the market clearing level. Some of the union members did not received benefits though they were unemployed; they had been unemployed for too long or too short and were therefore not registered. The government used the trade union as an indicator of unemployment and this had several consequences.

For the period 1906-1911, only a small fraction of the unemployment funds supplied data considered that in that period about 2800 trade unions were active. The trade union statistics for 1906-1911 presented therefore a very *incomplete picture of local unemployment*, and mainly cover unemployment in the bigger cities. It didn't present an absolute or a relative measure of unemployment. By introducing the new set of measures in 1911, the indicators changed from a local indicator of unemployment to an indicator representing, albeit very approximately, the total Dutch labour force.

Second, it will be clear that a uniform definition of unemployment was absent from this way of collecting data. The definition of unemployment was left to each trade union separately, i.e. all the trade unions had to judge according to their own regulations whether a union member was to be considered for benefit payment or not. Unemployment therefore was not defined in a uniform way, though in a rough sense, trade unions applied more or less the same concept of unemployment. The concept of unemployment was limited to involuntary idleness due to lack of work, excluding idleness

due to labour disputes, illness, and vacations. Union members, for example, that had quit their job under the impression that they could earn more elsewhere and failed to find a job were not considered for benefit payments. But clearly, unemployment was defined by the trade unions regulations and the government adopted this definition implicitly. It was only after 1917 when a more uniform, though implicit definition of unemployment was established, when the government started to interfere in unemployment insurance permanently.

Third, by adopting trade union figures of unemployment certain kinds of workers were more or less systematically excluded from the count of unemployment rates. This was particularly the case for self-employed, new entrants in the labour market and working family members.

The most important characteristics of the trade union statistics are summarised in figure 4.

	1900-1911	1911-1917	1917-1940
Definition of unemployment	not uniform, determined by trade unions	not uniform, determined by trade unions	implicit, uniform definition determined by government
Insurance arrangement	private	private	private
Interference in insurance	subsidy by municipals	subsidy by municipals temporary subsidy by state (Danish system)	permanent subsidy by state (Gentian system)
Basis of count	individual trade union records	individual trade union records via DWA	individual trade union records via DWA
Statistics published	number of unemployed trade union members	INU PU DUW	INU (later: days of unemploy. in %) PU DUW
Presentation of data	totals	calculation of ratios (adjustment for seasons and some professions)	calculation of ratios (adjustment for seasons and some professions)

Figure 4: Characteristics of Dutch trade union statistics.

3 Labour Exchange Statistics

3.1 HISTORY OF LABOUR EXCHANGE STATISTICS

Besides trade unions, the labour exchanges were another important source of data of unemployment. The measure based on this, the statistic of registered unemployment, was officially called by the CBS 'the Statistic of Unemployment and Employment Assistance'.

The CBS started to collect data of unemployment assistance soon after it was established in 1899. As soon as the first labour exchanges were established, the CBS requested them to supply data. The labour exchanges were free to supply the data in the form they wanted. When new labour exchanges were founded, the CBS requested them to make a regular report, and they usually complied. The provision of data was voluntarily until 1917. The CBS published the data of each labour exchange separately in the CBS monthly *Tijdschrift*, later named *Maandschrift*. The unemployment figures were simply copied from the reporting exchanges. As the number of exchanges increased it became inconvenient to publish data of each exchange separately, and the need was felt to unify the data. The foundation of the *Vereeniging van Nederlandsche Arbeidsbeurzen* [Association of Dutch Labour Exchanges] in 1908 is therefore important. The CBS conferred with them in 1910 in order to unify the data. This resulted in the introduction of a new paper form for collecting data in 1916, to be used by the labour exchanges.

During the First World War unemployment rose sharply in Holland and the government started to interfere in the process of employment finding. The resolution of 14 April 1917 no. 43, known as the Unemployment Resolution 1917, established permanently the *Rijksdienst der Werkloosheidsverzekering en Arbeidsbemiddeling* (DWA) [National Service for Unemployment Insurance and Employment Assistance]. With the introduction of this service, Holland was divided into 30 districts, with exchanges in major places and agencies in minor ones⁷. As a result more insight was obtained into the spreading of unemployment across the country. The agencies however, supplied only aggregate numbers of unemployment, without subdivision in occupational categories. The result was that the statistic gave only an incomplete impression of overall unemployment and did not provide a classification per industry or per occupation.

In 1924 the CBS was confronted with severe budget cut backs. The statistic of unemployment and employment assistance was transferred to the DWA, which was now responsible for the collecting and processing of the data until 1933. In 1930 unemployment started to rise again because of the economic crises of 1929. The Dutch government was in need of reliable statistics of

⁷ The statutory difference between a labour exchange and an agency is that in a labour exchange a director is in charge.

unemployment and cancelled the budget cut-backs of the CBS. From the 1st of January 1933 the CBS became responsible again for the processing of the data. The CBS immediately extended the labour exchange measure of unemployment by introducing a classification per occupation, which could be presented for the country as whole in 1936, since from that year also agencies supplied data classified per occupational group.

The statistic of Unemployment and Employment Assistance was considered to give a complete overview of unemployment in 1940⁸. But, during the Second World War the statistic became more and more incomplete, since the unemployed withdrew from registration because of fear of deportation to Germany. In 1945, the last year of the war, the CBS suspended all activities. These restrictions however, had no lasting effect and the statistic was re-established after the war. Basically, the method of measuring an absolute level of unemployment remained the same until the 1970s, when surveys were introduced as a measurement method.

3.2 DUTCH LABOUR EXCHANGES

In order to analyse what this measure of registered unemployment represents it is important to take account of how job-finding assistance took place in the Netherlands. At the turn of the 20th century the vast majority of the workers had to look for work by themselves; this activity was not mediated in any sense at all. Only a small fraction of workers found a job by a form of employment assistance. Five forms of employment assistance can be distinguished for the period of our analysis (1900-1940).

1. Private employment assistance

The first one was private employment assistance with the sole aim of profit making. Private agents were active in small, local parts of the labour market, usually for one or only a few occupations. According to an investigation by C.A. Verrijn Stuart in 1895 this was the most used method of employment assistance. The mediators of labour usually were landlords and cafe owners who did not keep any registration. After the acceptance of the resolution of 19 September 1917 and the establishment of public employment assistance, the share of private employment assistance declined gradually. In 1927 for example, 168 mediators were active, mainly for employment assistance of maidservants, agricultural workers, shipping and harbour workers, hotel personnel and musicians (Kort, 1940: 192). In 1937, the number of private mediators had declined to 65. Private employment assistance therefore, though gradually declining, existed throughout the 1920s and 1930s.

2. Trade unions and employers organisations

Another form of employment assistance was by trade unions and employers organisations. In fact, all trade unions at end of the 19th century offered some form of employment assistance, but like private mediators they didn't kept records and there was no official bureau for employment assistance. This made their share in employment assistance hard to estimate. Employment assistance was offered in order to make union membership more attractive to workers but it was also seen by unions as way to level out wage differences and, more in general, as a means in the class struggle. This form of employment assistance however was not open to all; only union members were mediated.

3. Associations of trade unions and employers organisations

Dedicated labour exchange bureaux were established in the late 19th century by associations of trade unions and employers organisations. They both had a common interest in employment assistance. Both parties acted out self-interest and no particular social goal was pursued and as with private employment assistance and individual trade unions there was no well-developed registration of workers. In 1896 for example 10 labour exchanges were in existence. Their share in employment assistance however, was and remained small, as can be seen in figure 5.

4. Public employment assistance

The fourth form of employment assistance was by public labour exchanges. The first calls for public assistance go back to newspaper articles in 1885⁹. The underlying idea was to end ignorance about supply and demand on the labour market in order to stimulate the free working of the market. Other advocators of a governmental role in employment assistance, like C.A. Verrijn Stuart¹⁰, emphasised the economic benefits of employment assistance which in his view could not be pursued by employment assistance on moral or philanthropic grounds. The first public labour exchange bureaux however were established, not by the government, but by municipalities in the 1910s, as a reaction to the social abuse involved in the private employment assistance. The conditions for the workers involved in private employment assistance were very poor; workers had to pay large mediation fees or were forced to consume their wage in the cafe or shop of the mediator; mediators lent money at extortionate rates, etc. Public labour exchanges mainly focused on casual workers and domestic

⁸ CBS unpublicised undated paper p. 13

⁹ Kort, 1940: 231. This was done by civil engineer De Koning, who also published on this topic in *De Economist* in 1885.

¹⁰ Chairman of the influential 'Nederlandsche Vereeniging voor Staatshuishoudkunde en Statistiek' (Dutch Association for Political Economy and Statistics)

Year	Municipal labour exchanges		Non-municipal	
	Number	Attachments	Number	Attachments
1903	1	108	5	5,240
1904	1	68	9	5,850
1905	2	473	9	6,567
1906	6	8,609	10	9,063
1907	8	10,664	9	9,146
1908	10	15,602	7	5,388
1909	14	22,419	10	2,038
1910	18	31,925	6	1,666
1911	17	40,374	4	1,775
1912	21	50,782	7	2,947
1913	21	66,082	5	3,724

Figure 5 Number and attachments of municipal and non-municipal labour exchanges in the Netherlands, 1903-1913.

Source: Kort, de W.L.P.M. (1940), *De arbeidsbemiddeling in Nederland*, N.Samson N.V., Alphen aan den Rijn, p. 240.

servants. To give an impression of extent of public employment assistance, in 1913 the 21 known labour exchanges mediated for 25,157 men and 34,170 women. Figure 5 summarises the development of municipal and non-municipal labour exchanges. Also the number of workers who found a job, the "attachments", is presented. The municipal labour exchanges were run by civil servants for whom reporting to their superiors about their activities was part of their work and hence, much better records of mediated workers were kept.

5. Charitable institutions

Apart from these four ways of employment assistance some charitable institutions (like the Salvation Army) were involved. Their aim was to relieve the social burden of unemployment but their share in employment finding was almost negligible.

As a reaction to the economic crisis of 1907/1908 a state committee was established on the 30 July 1909 which had to investigate the causes of unemployment and the means to avoid it. The report of the committee was published in 1914. The committee concluded that government interference in employment assistance was necessary on two grounds:

- 1 to establish an unobstructed functioning of the labour market
- 2 protection of workers from the abuse of private employment assistance.

The first, (main) ground was assumed to be of general interest and was in fact, an economical argument. The second ground was in the interest of only particular group, namely the workers, and was a social argument.

The committee noticed the smooth functioning of the municipal labour exchanges but argued that a governmental role should overcome the shortcoming of these exchanges, namely they engaged in local activity only. The committee therefore suggested establishing regional labour exchanges for places where there was no urban labour exchange. In fact, they suggested leaving the system of (urban) municipal labour exchanges unaltered and expanding employment assistance to non-urban regions. In 1914 unemployment rose sharply and the government speeded up the implementation of the proposals of the committee. The country was divided into 30 districts in 1916 and a central service, the *Centrale Arbeidsbeurs* [Central Labour Exchange] was established which co-ordinated national employment assistance. The Unemployment Resolution 1917, in which subsidies for unemployed union members was arranged, had a clause that subsidised unemployed union members had to register at a labour exchange in order to receive benefit. As a result, the number of yearly registrations rose (see figure 6).

Year	Registered workers (yearly total)		Applications of Employers		Attachments	
	Men	Women	Men	Women	Men	Women
1914	210,693		108,043		82,239	
1915	147,932	68,956	70,413	64,805	51,043	41,274
1918	251,914	96,774	83,392	86,514	68,185	58,431
1919	319,149	101,555	113,178	100,836	89,540	62,358
1922	496,156	103,007	124,631	81,725	101,776	55,850
1923	520,780	103,752	141,194	74,099	132,137	52,677
1926	485,185	109,380	171,310	96,916	151,385	63,433
1927	512,609	110,017	186,972	103,997	164,252	64,955
1931	830,175	145,239	217,712	112,719	203,490	77,240
1932	928,241	148,740	171,618	96,061	165,144	68,842
1935	896,386	154,335	177,720	99,501	169,616	66,597
1936	862,949	161,043	199,499	105,238	191,836	67,735
1938	943,990	140,089	252,384	125,140	239,282	70,928

Figure 6 Development of registration and applications Dutch labour exchanges, 1914-1938

Source: Kort, de W.L.P.M. (1940), *De arbeidsbemiddeling in Nederland*, N.Samson N.V., Alphen aan den Rijn, p. 284

The economic crisis of 1929 caused an increasing demand for reliable figures of unemployment in order to establish anti unemployment measures. In 1930 it became compulsory for every municipal in the Netherlands to establish a labour exchange or an agency. This, among others, was arranged in the Employment Assistance Law 1930, which came into effect on 1 January 1932. As a result of this law 1064 labour exchanges or agencies were active in 1935 and the number of registered unemployed increased drastic, as can be seen from figure 6. Employment assistance had grown into a structural anti-unemployment measure.

3.3 WHAT DID LABOUR EXCHANGE STATISTICS REPRESENT ?

Now with this in mind let us turn to the statistic of registered unemployment and see how this statistic can be interpreted as a measure of unemployment. In my opinion, the period 1900-1940 can be subdivided into three periods in which the interpretation of the labour exchange statistic is roughly the same. These periods are 1900-1917, 1917-1930 and 1930-1940. The year 1917 is chosen because of the introduction the Unemployment Resolution 1917, which had a profound impact on the measure of registered unemployment, and in this sense functions as a sort of 'transition point'. The other 'transition point' is the outbreak of the economic crisis and the introduction of the Employment Assistance law 1930. I will analyse these periods in detail.

3.3.1 1900-1917

The statistic of registered unemployment gave only a very limited impression of unemployment for the period 1900-1917. At the turn of the century the number of labour exchanges was only small, and so was the number of attachments. The vast majority of the workers had to look for employment themselves and were not mediated at all. Of all ways of employment assistance, private employment assistance was perhaps the most used one, though the public municipal labour exchange were very successful since registration was free and the conditions much better compared to private employment assistance. The number of workers registered at public employment assistance offices increased therefore steadily and public assistance became the dominant method of employment assistance. Non-public labour exchanges discriminated between union members and non-union members. Some exchanges only mediated for union members and in almost all cases non-union members had to pay a mediation fee.

The Dutch government had adopted the doctrine of "laissez faire", which denies the need of governmental inference in the process of employment finding. The local authorities however, interfered in the process of employment finding on social grounds and established municipal labour exchanges. The economic grounds were secondary. However, an examination of the terms of

reference showed that the main priority of labour exchanges was not relief work as the founders had in mind, but the matching of supply and demand of labour. De Kort therefore concludes that though public labour exchange started from a social perspective the local authorities established an economic institution (Kort, 1940: 269). Over time, the emphasis slowly shifted towards an economic role for the labour exchanges.

As by-product of public employment assistance, unemployment records were kept by the civil servants running the public labour exchanges, but since the labour exchanges were in a pre-mature stage in the period 1900-1917, it is not easy to see exactly what the numbers represented. As in the case of the trade union statistics in the 1910s, labour exchange statistics were published for individual labour exchanges. They were operating only locally and only a very small fraction of the unemployed working population was registered. And like the trade union statistic, specific groups of workers were more represented than others, even in later periods as long as registration was voluntary. Typical workers who registered voluntarily were manual workers, while formerly self-employed did not register and were therefore excluded in the statistic. Also, clerical workers not in receipt of benefits often did not register. Married women who were not the sole support of their family were not included among the unemployed, even though they may be able and willing to work. When their husband was employed, they were not allowed to register. Working family members, usually women and children were also not considered. The share of women in registered unemployment was therefore very low. Figures for unemployed agricultural workers are considered incomplete. (Galenson and Zellner, 1958: 540).

Another group that was excluded in the index number of unemployment but was counted in the statistic of registered unemployment was young workers seeking their first jobs. And finally, persons who were partially unemployed were, in general, excluded from the count of unemployment. A person without a labour contract must be able and willing to work for a full day in order to be included. It will be clear that, as in the case of the index number, some groups of workers were excluded more or less systematically in the statistic even though registration was voluntary. Galenson and Zellner argue, not on this particular ground, but in general, that:

When registration is voluntary, employment exchange data are of much more limited value. In such cases rates of unemployment calculated from them cannot be compared internationally; they can only be used to measure differences in trend from a common base year for which comparative rates of unemployment are available from other sources (Galenson and Zellner, 1958: 542).

Registered workers were only a small fraction of all unemployed. Most unemployed did not register and were looking for employment by themselves. The statistic therefore didn't represent an absolute or even relative measure of unemployment and the statistic was rightly considered by the CBS as incomplete. In fact, it did not even presented unemployment at all but the number of *job seekers*. A problem in the registration was that also employed worked looking for another job registered themselves at labour exchanges and the distinction between them and unemployed was made only later in the 1930s by a separate registration of the 'employed registered'. Since it is not clear to what extend the early labour exchanges made a clear distinction between these in their records, the number of job seekers may falsely be taken as a good measure of unemployment.

3.3.2. 1917-1930

The interpretation of registered unemployment changed quite considerable after the acceptance of Unemployment Resolution 1917.

As we have seen, the government interfered in employment assistance, basically on economic grounds and the success of municipal labour exchanges and a national network of both public municipal and non-public labour exchanges was set up. In this period public employment assistance became by far the dominant way of employment assistance. Private employment assistance was disapproved on normative grounds by the government and governmental policy with respect to private employment assistance was to encourage their gradual disappearance by limiting concessions and by absorption into other labour exchanges.

Though the country was divided in 30 districts, which enabled a national coverage, and the labour exchanges were supplying data now on a compulsory base, there was still an incomplete impression of unemployment. Still not all unemployed worker registered. Most unions accepted the standard regulation developed by the DWA which involved registration in labour exchange as evidence of being unemployed, in order to receive benefit. But as we saw before most workers were not members of unions. So, those registered were either unemployed union members or voluntary job seekers. And though the registration of unemployed was improved and notice was made of registered workers who were still employed, some occupations were still more or less absent in the statistic; in particular those with low union membership like agricultural workers, working family members and self employed.

Furthermore, the data supplied by the agencies were incomplete in the sense that only total numbers of registered persons was given. There was no further classification of the data. However, one can conclude that the registration of unemployment became an important element of the function of labour exchanges and the collection of data was set up much more systematically than in the

previous period. The role of the labour exchanges therefore had changed. No longer was mediating between supply and demand of labour the only important role of the labour exchanges, the compulsory provision of data to the state made registration an ends itself and an important aspect of the function of labour exchanges.

3.3.3 1930-1940

In 1930 the Employment Assistance Law 1930 was accepted by the government and the national network of labour exchanges was expanded since all municipalities must have at least a labour exchange agency. On the proposal of the CBS it was arranged in the Employment Assistance Law that all public labour exchanges must count the registered unemployed once a month (on the last working day).

As a result of the mass unemployment of the 1930s the number of registered workers increased sharply as can be seen in figure 6. Though the coverage of the statistic was enlarged and registration was compulsory for some groups of workers, registration remained low by contemporary standards. The main reason was that large majority of the workers had low incentives to register as unemployed (and even less to report as employed again). They were not compelled to register and some groups of workers, like agricultural workers, had to travel great distances to labour exchanges to register. Since they also had a low union membership rate (and therefore a low financial incentive to register) they were therefore very incompletely registered. A civil servant of the DWA estimated the mediation by labour exchanges for agricultural workers at most at 2 % (Kort, 1940: 329). The share of registered women remained very small. On the 31st of December 1930 for example, only 9,604 women were registered against 146,617 men; only 6.1 percent. Usual jobs for registered women were housemaid or cleaner and married women were not expected to look for employment at all when their husband was employed.

Registration at labour exchanges was compulsory only for four categories of workers in the 1930s:

1. Unemployed trade union members had, according to the Unemployment Resolution 1917, the duty to register at labour exchanges in order to receive benefit payment.
2. Non-trade union members, who were considered for unemployment benefit payment via private unemployment insurance and, in some municipalities, unemployment workers supported by assistance of the poor had to register.
3. Workers involved in unemployment relief work also had the duty to register.

4. And, from 21 June 1935 on, family members of the above mentioned categories had to register, provided that they were capable to work, i.e. that they were older than 15 years old¹¹. Registration was voluntary for the remaining workers. I will now illustrate that in the 1930s the majority of the total number of registered unemployed had to register compulsorily.

In order to get a better impression of registered unemployment figures, I analysed them in closer detail for the 31st of December 1930 when the ten-yearly census was held and combined the census data with CBS figures of registered unemployment. It turned out that of the total labour force of 3,185,816 only 136,228 people were registered as unemployed at a labour exchange; approximately 4.3 percent of the labour force. The Percentage of Unemployment however for that date was according to the CBS-figures 18.2 percent and 81,204 trade union members were unemployed and received a benefit at that specific date (CBS, februari 1931, 356-367). The Index Number of Unemployment (which counted the number of days of unemployment) was 15.3 on that day. Unemployed trade union members had registration duty, in order to receive a benefit, and had to report themselves daily at the insurance fund. Article 41 of the Unemployment Resolution 1917 mentions:

"The unemployed members are obliged to put their name on a reporting list daily, on a point in time determined by the fund committee" (my translation).

In return the unemployed worker got a stamp on his ticket card (article 42). This was the well known 'stamping'. If we now assume that all unemployed trade union members registered themselves as such at the labour exchanges (since this was a necessary condition for receiving a benefit), we find that they form 59.6% of the registered unemployment (see figure 7). The remaining 55,024 (44,5 %) consists then of non-trade union members. It seems therefore that the majority of the registered unemployed was a member of a trade union since it was compulsory for them to register and voluntary for non-trade union members.

Finally, at the end of the 1930s attempts were done to overcome the incompleteness of unemployment registration and proposals were made to implement a system in which every worker, whether employed or not, had to carry a so-called "labour booklet" which reported the employment status of the worker at issue. The breakout of the second World War hindered the introduction of such a system.

¹¹ Though exceptions were permitted for example when family members were indispensable in the household.

		Employed (unknown)			
Total labour force (3,185,816)	Not registered at labour exchange (3,041,216)	Unregistered unemployed (unknown) ^a	Unregistered unemployed non-trade union members (unknown)	(no registration duty)	
			Trade union members (81,204)	(registration duty)	
	Registered at labour exchange (156,221) ^c	(136,228) ^b	Registered unemployed	Registered unemployed non-trade union members (55,024)	(no registration duty)
			registered & employed (19,993)		(no registration duty)

Figure 7: Decomposition of the registered unemployment in the Netherlands on 31 December 1930¹².

^a The trade union statistics suggest that this number should be at least 4 times the number of registered unemployed.

^b CBS Maandschrift February 1931, p. 362

^c CBS Maandschrift, January 1931, p.118

¹² The areas correspond with relative size of the different groups.

3.4 SUMMARY

Several forms of employment assistance existed at the turn of the 20th century. The most successful one was public employment assistance set up by municipalities. This became the dominant form during the First World War when the government started to interfere in the process of job seeking. The central government was in favour of public employment assistance on economic and social grounds, since it helped to avoid social exploitation and turned out to be successful in employment assistance. As a by-product, a fairly accurate registration of job seekers was realised. The meaning of the figures of registered unemployment changed with the spread of the labour exchanges, and changed from a local indicator to a national indicator when a national network of labour exchanges was set up. Figure 8 summarises the major changes in the characteristics of the registered unemployment as a measure of unemployment.

	1900-1917	1917-1930	1930-1940
Collection of data	non-systematic	systematic	systematic
Reason for labour exchanges	social	social / economic	economic
Interference	municipal	government	government
Coverage of labour exchanges	local	regional / national	regional / national
Extent of employment assistance	small	considerable	large
Co-operation in data collection	voluntary	compulsory	compulsory
Responsibility for data collection	CBS	DWA (1924-1933)	CBS (1933-1940)
Basis of count	voluntary	voluntary + compulsory	voluntary + compulsory
Processing of data	'unprocessed'	aggregation	aggregation + classification
Role of labour exchange	mediation	mediation / registration	mediation / registration

Figure 8: Overview of the characteristics of labour exchange rates of unemployment

4 Conclusions

The Dutch bureau for statistics has developed two sets of indicators of unemployment for the period 1900-1940, based on different sources. One was based on the statistics of trade union insurance funds and the other on labour exchanges. The trade union data was taken as a sample of the labour force and used to calculate unemployment rates. The data from the labour exchanges yielded the officially registered unemployment.

These processes of data gathering were generated by two rather different social phenomena, namely job finding and insurance, but their development showed some remarkable similarities. Both unemployment insurance and employment assistance started out of private initiatives in order to relieve the social need of workers. In both cases the local authorities intervened in these initiatives; for the unemployment insurance by subsidising the trade union unemployment funds and for job finding by setting up a system of local, public employment assistance. The benefits of the arrangements were only recognised much later by the central government and meanwhile the central government hesitated to become involved. The meaning of employment assistance and unemployment insurance changed as a result.

Public labour exchanges for example, were set up as economic institutions to fulfil both social and economic ends. As the share of private employment assistance declined and the unemployment became more severe and persistent over the 1920s and 1930s, the role of employment assistance shifted and employment assistance became an economic institution to fulfil economic ends, namely both mediation between supply and demand of labour *and* registration of unemployment. The interpretation of the statistic of registered unemployment changed therefore too. While the early registered unemployment figures can be regarded as a very rough, local indicator of *social* distress, the unemployment figures of 1930s were assumed to give reasonable impression of an *economic* phenomenon: national unemployment classified per occupational group. The unemployment insurance was seen as a more social institution, fulfilling both social and economic goals, though it can be argued that the economic role was the most important one. Both job finding and unemployment insurance went through the process of centralisation, which was speeded up by national government. In spite of the fact that the role and meaning of unemployment insurance and employment assistance had changed, the method of constructing unemployment figures stayed the same.

Comparing both indicators of unemployment for the 31st of December 1930 yield two interesting insights into the indicators of unemployment.

First, it can be argued that when trade union and labour exchange statistics started, they measured unemployment of two different groups of workers. Typical trade union members were skilled, male workers living in the Western part of the country whereas workers that registered at labour exchanges were as a rule unskilled, male workers living in urban areas mostly in the western part of the country. In both categories however, the same groups of workers were excluded more or less systematically from the count of unemployment. Typical workers that were absent or underrepresented in both the trade union statistics and the labour exchange statistics were women, self-employed, agricultural workers and working family members.

This situation changed after 1917 when the Unemployment Resolution 1917 was accepted and unemployed trade union members were compelled to register at labour exchanges. Voluntary registration at labour exchanges however remained relatively low even when the central government had set up a national system of labour exchanges with agencies. The characteristics of the registered unemployed changed as a result. For the 31st of December 1930 for example, it seems very likely that the majority (60%) of the registered unemployed workers was also included in the sample for the trade union statistic. Both indicators therefore measured roughly the same group of workers after registration duty was imposed on trade union members.

Second, the statistics of registered unemployment seemed to be quite inaccurate. When registered unemployment is related to the total Dutch labour force, an unemployment rate of 4.3% is found; not an unemployment rate for the government to worry much about and definitely not hinting at the mass unemployment of the 1930s. The Percentage of Unemployment added up to 18.2 %, which seems to reflect the crisis-unemployment of the 1930s much better. It seems therefore justified to conclude that the registered unemployment only partly reflects the prevailing unemployment, and though the Index Number of Unemployment is based on a biased sample of the labour force (the trade union members), it appears to give a better impression of unemployment.

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