

## **How does New Zealand compare? Some international comparisons of disaggregated unemployment data**

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*This paper describes the underlying pattern of New Zealand's unemployment experience (to the extent that the very limited data permit) and compares it with the pattern in Australia, Norway, the UK and USA. It is shown that although New Zealand's unemployment rate is low by international standards, the distribution of unemployment is more inequitable and that the actual unemployment rates for some sub-groups in New Zealand are approaching, and at times exceeding, unemployment rates for equivalent sub-groups in the other four countries.*

### **Introduction**

Unemployment rates in the industrialized capitalist countries increased substantially during the 1970s. New Zealand was no exception to this trend; in fact, given the relatively lower unemployment rates in New Zealand in the early 1970s, the increase in the rates in this country was far more spectacular than in many others. Nonetheless, New Zealand's total unemployment rate, however measured, is still below average for the OECD countries. But while this may give satisfaction to some, we cannot adequately compare the impact of unemployment on different societies without disaggregating total unemployment into its component rates. (Unemployment is the result of complex interactions between such factors as working-age population, participation rates, and labour demand which in turn vary by industry, occupation, age, sex, and ethnic group.) The total unemployment in a nation is the total of the widely varying unemployment experienced by these population sub-groups. There is no reason to suppose that the differential impact of unemployment on these groups would be the same from one country to another and it is even possible that countries with low global unemployment rates may have very high rates for certain sub-groups.) In order to assess better New Zealand's unemployment experience, it was decided to compare disaggregated unemployment rates with similar data (where it could be obtained) from four other countries: Australia, Norway, the United Kingdom and the United States of America.

The selection of such a set is inevitably fraught with difficulty because of the various criteria that one or another investigator may deem important. In selecting our list we have kept in mind three factors. First, the availability of suitable and reliable data to complete the coverage of the categories chosen for analyses. This proved a major consideration as

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data paucity severely limited our choice of countries. For example Ireland was excluded because eligibility rules for receipt of unemployment benefits meant that very few young unemployed enrolled; Belgium, Denmark, Japan, the Netherlands and Switzerland were excluded because no information was available on the duration of unemployment and Austria, Finland, France and Germany were excluded because of severe irreconcilable discontinuities in the unemployment data. Our second criterion was to choose countries which could be compared with New Zealand on the basis of certain socio-economic aspects. These included comparability of population, institutional arrangements, economic structure and educational, historical and cultural links. The last of these is, we believe, quite important. Countries with similar social structures are likely to adopt analogous attitudes toward unemployment, its definition, measurement and resolution and therefore, from the point of view of our study, enhance the probability of comparing like with like. Finally, we do not consider it unimportant to select countries in which New Zealanders have particular interest. The tendency is to compare New Zealand's economic performance with the major OECD countries. Consequently one aspect of this paper is to highlight New Zealand's disaggregated unemployment experience with respect to those countries with which New Zealanders choose to compare themselves.

Australia provides a particularly useful comparison. Although the Australian labour force is much larger than New Zealand's, the economic structure is similar. Both countries have a highly efficient and well developed primary sector and a developing, if somewhat protected, secondary sector. This, in addition to their close proximity, suggests that fluctuations in the world economy are likely to have similar consequences for the nature of unemployment within the two countries. Selection of Australia also provides us with an opportunity to compare the registration method of collecting unemployment data with the more popular survey method. On the whole Australian results from the alternative methods are similar — but not identical (Australian Industries Development Association, 1978). The comparison of unemployment data based on different methods of collection has always been considered a problem. However the Australian evidence suggests that the distortion created is not so severe as to destroy the usefulness of such comparisons. In our analysis Australian survey data is used. The statistics for the USA are collected entirely by survey technique. The nature of their survey is similar to that used in Australia and therefore comparable. For current purposes the American data is particularly useful as it provides coverage of the racial distribution of unemployment and permits a revealing comparison on this issue with New Zealand census data. The United Kingdom is included for two major reasons. First, official unemployment data is collected on the basis of registrations at unemployment offices as in New Zealand. Second, the UK represents a mature industrial country with high global unemployment rates. Examination of the UK experience therefore provides us with an insight into the effects of an economic depression in a heavily industrialized work force. The final country for study, Norway, was chosen because unemployment data is also collected on the basis of registrations at unemployment offices and because Norway has a population of similar size to that of New Zealand's, although the economic structure is somewhat different with agriculture being quite unimportant.

Despite the foregoing, we warn readers that there are considerable difficulties in making comparisons between countries. Apart from variations in the method of data collection further problems arise because different countries use different classification criteria; for example, in Australia, any person seeking part-time work would be considered unemployed. In New Zealand such a person would be recorded as "inactive" or not in the workforce (OECD, 1979, pp.38-39). Other difficulties of interpretation arise from the varying incentive to register and from the job creation and manpower training subsidy schemes operating in the various countries which impact differently on population sub-groups.

Because of the criteria used in selecting our five countries for study we believe that the

problems outlined above will not cause severe distortions and that we can still utilize the data to investigate the impact of unemployment at the disaggregate level but, before doing so, we should compare the relative performance of New Zealand and the four countries at the aggregate level. The data for such a comparison together with the data for other OECD countries are presented in Table 1. The table shows clearly how unemployment rates in the industrialized countries have risen since the late 1960s. It will be seen that the UK and USA have always had above average unemployment rates. Australia has had above average rates in recent years. Norway, on the other hand, has tended to have rather low rates and its total level of unemployment has altered very little since the 1960s. New Zealand's experience is, of course, the most unusual with very low rates indeed until the mid-1970s with the rate increasing five-fold between 1976 and 1979.

Table 1 *Standardised unemployment rates in selected OECD countries* <sup>(a)</sup>

Country	Average 1964-1973	Average 1974-1979	1976	1977	1978	1979	1980 1st quarter
USA	4.4	6.6	7.5	6.9	5.9	5.7	6.0
Japan	1.2	1.9	2.0	2.0	2.2	2.1	1.8
Germany	0.8	3.2	3.6	3.6	3.5	3.2	2.8
France	2.2	4.5	4.4	4.9	5.2	5.9	6.0
UK	3.1	5.1	5.5	6.1	6.1	5.8	6.0
Italy	5.5	6.6	6.6	7.1	7.2	7.6	7.8
Canada	4.7	7.2	7.1	8.0	8.3	7.4	7.4
Australia	1.9	5.0	4.7	5.6	6.4	6.2	6.0
Finland	2.3	4.5	3.9	6.0	7.4	6.0	4.6
Norway	1.7	1.8	1.8	1.5	1.8	2.0	1.6
Spain	2.8	5.6	5.0	5.5	7.3	9.0	10.9
Sweden	2.0	1.9	1.6	1.8	2.2	2.1	1.8
TOTAL <sup>(b)</sup>	3.0	4.9	5.3	5.3	5.2	5.1	5.2
New Zealand <sup>(c)</sup>	0.3	0.9	0.4	0.7	1.8	2.0	2.2

Notes:

(a) Standardising undertaken by OECD.

(b) Representing about 90 percent of total OECD.

(c) Annual unemployment figures used were calendar year quarterly averages and quarterly figures are as at end of quarter. Labour force figures are October estimates, except 1980 which is a February estimate.

Source: OECD Economic Outlook; NZ Department of Statistics Monthly abstract of statistics; *Intercensal labour force estimates (1981)*.

### Sex-Structure

Table 2 depicts the movement in unemployment rates for males and females, in the countries under study, from 1972 to 1980. For New Zealand, the official series for males and females move together through time and there appears to be little evidence of a substantial disparity between them. One noticeable feature however is the tendency for female unemployment rates to exceed male rates for the period after 1975. This may indicate that

women became more prone to unemployment or it could be that unemployed women became more inclined to register. The ineligibility of married women for the unemployment benefit has tended to reduce the incentive for them to register but the change in the Employment Service from an administrator of the "dole" to something approximating more closely an employment agency may have encouraged a greater number to do so and there is some evidence of this from the provisional 1981 Census results (Poot and Brosnan, 1982).

Nonetheless, the number of unemployed is still understated by the registration data, and even the census does not record "discouraged workers" among the unemployed. Several attempts have been made to measure "hidden unemployment" (Gallacher, 1974; Walsh, 1978; Hicks, 1980A) and an estimate which includes these is incorporated in Table 2. The inclusion of that series into the analysis changes the picture considerably. The female unemployment rate now lies well above that for males for all years throughout the 1970s suggesting that women's unemployment has been the relatively more severe (if unrecognized) problem throughout this period. The comparison of this series with registered unemployment lends further support to the belief that the propensity of women to register rises during cyclical downturns in the economy.

Table 2 *Unemployment rates by sex*

Year	Australia		Norway		UK		USA		New Zealand		New Zealand(a)	
	M	F	M	F	M	F	M	F	M	F	M	F
1972	2.0	3.9	1.4	2.1	5.1	1.7	4.9	6.6	0.6	0.4	2.4	6.6
1973	1.6	3.6	1.0	2.4	3.6	1.2	4.1	6.0	0.2	0.2	1.9	5.6
1974	1.9	4.1	1.0	2.3	3.7	1.1	4.8	6.7	0.1	0.1	2.5	5.4
1975	3.8	7.0	1.9	2.9	5.5	2.1	7.9	9.3	0.4	0.4	2.1	6.9
1976	3.9	6.4	1.4	2.2	7.1	3.5	7.0	8.6	0.4	0.6	2.3	4.5
1977	4.6	7.5	1.0	2.2	7.4	4.4	6.2	8.2	0.5	0.8	1.6	4.8
1978	5.4	7.9	1.3	2.4	7.2	4.4	5.2	7.2	1.6	2.2	1.7	6.2
1979	5.2	8.2	1.6	2.4	6.7	4.3	5.1	6.8	1.8	2.4	2.2	4.5
1980	5.1	7.9	1.2	2.3	8.7	5.7	6.9	7.4	2.6	3.3	—	—

Note:

(a) Includes estimates of hidden unemployment.

Source: ILO; Hicks (1980A).

In each of the other countries of Table 2, unemployment in general has increased considerably throughout the 1970s and in all cases, except the UK, the female rate has risen more rapidly than the male rate. Another way of looking at the increasing unemployment among women is to compare their share of unemployment with their share of employment. In the UK between 1970 and 1976, women's share of employment rose from 38 percent to 41 percent of employees in jobs; at the same time, female unemployment rose from 14 percent to 25 percent of total unemployment (Burghes, 1977). In New Zealand, census figures show that, between 1971 and 1976, women's share of employment rose from 29.6 percent to 31.7 percent while their share of unemployment, although not increasing, remained at a level of about 45 percent of total unemployment. In 1976, the USA and Australia each exhibited a ratio of female unemployment to total unemployment similar to that experienced by New Zealand (45.6 and 46.4 percent respectively). In both cases, how-

ever, the share of female employment to total employment was greater (40.1 percent and 35.6 percent respectively).

The evidence suggests, therefore, that female unemployment in New Zealand has been a relatively greater problem over the last decade than male unemployment. In addition, when women's share of employment is considered, the burden of unemployment has fallen more heavily on women in New Zealand than is the case in the UK, USA, or Australia. Finally, when hidden unemployment is taken into account, New Zealand female unemployment rises to a level not much below the rates being experienced in the USA and Australia with the ratio of female to male rates clearly being much greater than for the countries specified.<sup>1</sup>

### Age-Structure

The age breakdown of unemployment, provided in Table 3, suggests that unemployment in New Zealand is largely confined to young workers. Clearly New Zealand is not alone in facing high and rising levels of youth unemployment. It can be seen that for each country there is a tendency for a wide gap to exist between the rate of youth unemployment and the rate of total unemployment. Demographic factors such as the changing age-distribution of the working population may account for part of this tendency, but it is far from a complete explanation.

The relative performance with respect to youth unemployment is to some extent hidden if one focuses solely on the unemployment rates of the groups concerned. For example youth unemployment rates have been lower in New Zealand than for any of the other countries; an exception is Norway where young people do not enter the labour force until about age 20. This, perhaps, is to be expected given New Zealand's lower overall unemployment rate. More instructive is the proportion of total unemployed accounted for by the youth groups in each country compared to youth's contribution to the workforce. The youth unemployed generally account for a higher proportion of all unemployed (both in total and by sex) in New Zealand than for any of the other countries listed. In addition, although each country exhibits a higher proportion of both young males and females unemployed than the proportion each group represents in the workforce, the difference, particularly in the case of females, tends to be greater in New Zealand than in the other countries.

The relatively low contribution of youth to unemployment in the UK may be explained by many EEC policies, initiated in the wake of the decline in European manufacturing that have created an "affluent" but unemployed elite amongst older workers. Essentially this represents *de facto* early retirement.<sup>2</sup>

### Duration

Some economists dismiss short-term unemployment as a serious problem, arguing that it is "simply the manifestation of the efficient functioning of the allocative mechanism of the labour market : the healthy concomitant of the process of economic growth and change" (Newton, 1975). This is all very well if you are not one of the unemployed but

- 1 This assumes that hidden unemployment is less important in the USA and Australia. This is a reasonable assumption since theirs is survey data. Hicks (1980A) argues that the hidden unemployment in New Zealand would be largely recorded if a survey method were implemented.
- 2 The authors wish to thank an anonymous referee for this point.

Table 3 *Youth<sup>(a)</sup> and total unemployment by sex*

	1976		1977		1978		1979		1980	
	M	F	M	F	M	F	M	F	M	F
<b>Australia</b>										
Youth unemployment rate	13.7	17.7	16.6*	21.9*	16.1	16.8	14.4*	19.0*	14.5	18.6
Total unemployment rate	4.0	6.2	4.8*	7.5*	5.4	7.5	4.7*	7.4*	5.0	7.4
Youth unemployment as percentage of total unemployment	30.3	38.9	32.8	43.2	29.6	35.7	30.2	39.7	29.1	38.2
Youth labour force as percentage of total labour force	8.9	13.7	9.4*	14.9*	9.9	15.9	9.9*	15.5*	9.9	15.2
<b>Norway</b>										
Youth unemployment rate	3.0	2.4	2.7	2.3	3.9	3.0	3.8	3.0	4.2	3.9
Total unemployment rate	1.0	1.0	0.8	0.9	1.4	1.1	1.2	1.0	1.3	1.2
Youth unemployment as percentage of total unemployment	16.3	18.5	18.2	19.9	14.7	18.0	16.0	18.9	17.5	21.0
Youth labour force as percentage of total labour force	5.4	7.3	5.4	7.2	5.3	6.9	5.1	6.4	5.3	6.6
<b>UK</b>										
Youth unemployment rate	—	(b) —	15.7*	15.0*	15.7*	15.1*	13.9*	13.1*	17.6*	16.2*
Total unemployment rate	—	—	6.7*	4.4*	6.8	4.6	6.3	4.4	7.2*	5.2*
Youth unemployment as percentage of total unemployment	—	—	17.8	39.7	17.9	37.7	17.5	34.3	19.0	34.7
Youth labour force as percentage of total labour force	—	—	7.6*	11.6*	7.7*	11.5*	7.9*	11.4*	7.8*	11.2*

	—	—	7.6*	11.6*	7.7*	11.5*	7.9*	11.4*	7.8*	11.2*
USA										(c)
Youth unemployment rate	19.2	18.7	17.3	18.3	14.8	17.0	15.0	16.3		17.7
Total unemployment rate	7.0	8.6	6.3	8.2	5.0	7.1	4.9	6.8		7.1
Youth unemployment as percentage of total unemployment	23.4	23.3	24.0	24.0	26.2	25.4	26.3	24.9		25.6
Youth labour force as percentage of total labour force	8.6	10.8	8.7	10.7	8.9	10.7	8.6	10.4		9.2
New Zealand										
Youth unemployment rate	1.0	2.4	0.8*	2.1*	5.0*	8.1*	6.0*	8.9*	7.0*	10.0*
Total unemployment rate	0.3	0.6	0.2*	0.6*	1.7*	2.1*	1.6*	2.3*	2.0*	2.6*
Youth unemployment as percentage of total unemployment	36.8	68.9	39.4	69.9	39.8	67.8	38.3	65.8	35.3	64.1
Youth labour force as percentage of total labour force	10.0	18.5	9.9	17.9	10.0	17.5	10.0	17.0	10.0	16.6

Notes:

- (a) Youth = under 20 years of age.
- (b) Not available.
- (c) Data for both sexes combined.

\* Labour force estimated from trends in official data.

Source: ILO; Australian Bureau of Statistics The labour force; Norway Office of Statistics; UK Central Statistical Office; US Department of Labour.

Table 4 *Share of longer-term unemployment*<sup>(a)</sup> (percentages)

Group	Australia				Norway				UK				USA			
	1976	1977	1978	1979	1976	1977	1978	1979	1976	1977	1978	1979	1976	1977	1978	1979
Youths <sup>(b)</sup>	54.3 <sup>(e)</sup>	— <sup>(f)</sup>	54.9 <sup>(e)</sup>	50.9 <sup>(e)</sup>	7.7	5.3	5.7	6.2	29.7	31.1	31.7	29.3	34.0	34.4	36.4	35.2
Prime-age workers <sup>(c)</sup>	30.4 <sup>(e)</sup>	— <sup>(f)</sup>	30.6 <sup>(e)</sup>	35.9 <sup>(e)</sup>	49.8	44.7	44.1	53.2	33.5	33.8	34.5	34.0	38.1	39.1	38.3	40.6
Older workers <sup>(d)</sup>	15.3 <sup>(e)</sup>	— <sup>(f)</sup>	14.5 <sup>(e)</sup>	12.1 <sup>(e)</sup>	42.5	50.0	50.1	40.6	36.8	35.1	33.9	36.6	28.0	26.5	25.3	24.3
Males	55.6	55.2	57.2	54.4	39.0	42.2	45.6	38.5	18.3	23.6	26.5	27.5	39.6	41.4	41.9	39.7
Females	44.4	44.8	42.7	45.5	61.0	57.8	54.4	61.5	81.7	76.4	73.5	72.5	60.4	58.7	58.1	60.3
Unemployment rate	4.8	5.7	6.3	6.2	1.8	1.5	1.8	2.0	5.1	5.5	5.5	5.5	7.5	6.9	5.9	5.7
Long-term unemployment as percentage of total unemployed	40.3	47.0	52.9	51.7	24.7	22.0	19.4	20.9	53.6	59.1	61.8	60.9	32.1	27.9	22.8	20.2

## Notes:

- (a) Unemployment greater than three months.  
 (b) Less than 25 years (less than 20 in Norway).  
 (c) 25-45 years (20-49 in Norway).  
 (d) Over 45 years (over 50 in Norway).  
 (e) Data are for total unemployment in the year.  
 (f) Data not collected.

Source: OECD Economic outlook; Australian Bureau of Statistics The labour force; Australian Bureau of Statistics Labour force experience.

even if this stance were adopted, long-term unemployment with its serious social and psychological consequences cannot be dismissed in the same way; an apparent consequence of higher unemployment rates is that individual spells of unemployment are getting longer. Unfortunately, the only data available on duration of unemployment refer to the duration up to a specific date. The spells of unemployment recorded by these data are uncompleted since the persons concerned will presumably be unemployed beyond that date. There is no straight translation from these figures to the more illuminating ones of the duration of completed spells. Nor does there even exist at present an agreed international definition of the duration of unemployment. Nonetheless, the data on uncompleted spells (Table 4) show that the proportion of people unemployed who are out of work for three months or longer (long-term unemployment) typically increases with the overall level of unemployment. An OECD report (*Economic outlook*, 1980) argues that there may also be something of a ratchet effect in that, while duration falls along with unemployment, it does so to a lesser extent. That long-term unemployment is a problem for the countries currently under review is clearly evident in the table. It was estimated that long-term unemployment accounted, in mid-1979, for approximately 20.2 percent of unemployed in the USA, 60.9 percent in the UK, 51.7 percent in Australia, and 20.9 percent in Norway. New Zealand data are in Table 5 and we see that with 32.8 percent of unemployed counted as long-term, New Zealand was about average.

Table 5 Share of long-term unemployment<sup>(a)</sup>: New Zealand April 1981 (percentages)

	Male	Female	Total
Youths <sup>(b)</sup>	25.0	29.9	54.9
Prime-age Workers <sup>(c)</sup>	21.4	7.4	28.8
Older Workers <sup>(d)</sup>	12.1	4.2	16.3
Males			41.5
Females			58.5
Longer-term unemployed as a percent of total	19.2	13.6	32.8

Notes:

- (a) Unemployment greater than three months.
- (b) 15-24 years.
- (c) 25-39 years.
- (d) Over 40 years.

Source: NZ Department of Labour Monthly employment operations.

If we disaggregate further, we find that most typically older workers, once they become unemployed, are more inclined to be out-of-work for longer periods. Despite this, it turns out that, since young people experience the most unemployment, they do account for a large share of long-term unemployment – and, in Australia and New Zealand, over half the long-term unemployed are less than 25.

We might expect the statistics to underrepresent the degree of long-term unemployed among women since many married women who have been unemployed for long periods may abandon hope of finding work and drop-out of the pool of measured unemployed. When we look at the data, we do find that women are less inclined to be found among the long-term unemployed than in the total unemployed in the UK, USA and Australia, although

not in Norway. In New Zealand, women comprised 40.7 percent of the total unemployed at April 1981 and, as Table 5 shows, 41.5 percent of the long-term unemployed. The seriousness of long-term unemployment for women is heightened when we see in the table that most of this long-term female unemployment is accounted for by women aged less than 25. If, as we conjectured, many of the long-term unemployed older women become "discouraged workers" rather than remaining on the books as unemployed, the concentration of long-term unemployment among females may be much greater than the data indicate.

### Racial Disadvantage

Burghes (1977) has noted that unemployment among racial minority groups is characterized by two outstanding features: their vulnerability in periods of rising and high unemployment and, at all levels of unemployment, the generally higher level of unemployment among the young and among women from racial minorities. Very few countries collect unemployment statistics by ethnic origin so that our study of this aspect on an international basis must, of necessity, be limited but fortunately for us, the country in which the racial disadvantage in unemployment is the most studied is the USA. Table 6 outlines the unemployment status of the USA civilian labour force for 1978. In each age and sex group the non-white unemployment rate exceeds the white unemployment rate; the total non-white unemployment rate, calculated at 11.9 percent, was well over double the white unemployment rate of 5.2 percent. The greatest discrepancy between the white and non-white unemployment rates is for youths aged 16-19. For males in this group, the non-white unemployment rate was 2.6 times greater than for whites in the same age bracket and for non-white teenage females, it was nearly 2.7 times greater. The disadvantage of being non-white in America is further highlighted by the fact that non-whites form only 12.1 percent of the workforce but account for 23.7 percent of the country's unemployment. Again young non-white women are the most disadvantaged; they comprise only 0.5 percent of the workforce but have 3.2 percent of the country's unemployment.

Statistics on unemployment by race in New Zealand are collected only at the time of the census. The New Zealand data provided in Table 6 is based on information collected at the 1981 Census. The total Polynesian (Maori and Pacific Island Polynesian) unemployment rate, 13.6 percent, was nearly four times the non-Polynesian rate of 3.5 percent. The Polynesian population comprise 10.4 percent of the workforce but have 31 percent of the total unemployment. Polynesian women aged 15-19 have the highest unemployment rate of any group in either country and their share of unemployment in New Zealand is over nine times their share of the New Zealand workforce.<sup>3</sup> On the basis of these data, it appears that non-whites are more greatly disadvantaged in New Zealand than the USA.

### Occupational and Industrial Dimensions

The process of economic growth involves changes in technology which alter the output mix and, accordingly, the relative size of different industries and the demand for various occupational groups. If we add to this the cyclical and seasonal influences to which some industries and occupations are subject, it becomes apparent that an individual's probability of employment depends in no small measure upon the type of work performed and the

3 If we were to take the Maori population separately we would find the Maori-Pakeha differentials to be even greater. See Poot and Brosnan, 1982.

industry in which it is performed. Burghes (1977) points out that, in the UK, the unskilled have always borne a disproportionate share of unemployment and quotes a Department of Employment study which found that in September of each of four selected years, 1959, 1963, 1968 and 1972, the main labouring occupations had consistently represented over 50 percent of total unemployment despite the change in total unemployment from just over 250,000 in 1959 to 650,000 in 1972. The 1971 General Household Survey in the UK indicated that 27 percent of the economically active population were classified as unskilled or semi-skilled manual workers; 42 percent of the unemployed in the same survey were in this category. At the other end of the scale, 44 percent of the economically active population were non-manual workers, this later group accounting for only 25 percent of the unemployed. Both skilled and supervisory workers had unemployment rates equal to their proportions of the economically active population. The substantial rise in unemployment since 1974 has had the effect of reducing the percentage rate of unemployment for the unskilled as other occupational groups have begun to experience higher levels of unemployment. However general labourers still account for the largest proportion of registered unemployed.

**Table 6** *Unemployment by age, sex and ethnicity : USA and New Zealand*

	Unemployment rate		Share of total unemployment (percent)		Share of the labour force (percent)	
	M	F	M	F	M	F
<b>United States</b>						
<i>White</i>						
16-19	13.5	14.4	10.1	9.4	4.5	4.0
20-44	4.3	6.1	21.4	21.6	30.3	21.2
45+	1.4	3.5	7.6	6.3	17.2	10.9
Total	4.5	6.2	39.1	37.3	52.0	36.0
<i>Black and other</i>						
16-19	34.4	38.4	3.1	3.2	0.6	0.5
20-44	10.4	12.7	6.7	7.8	3.9	3.7
45+	2.8	5.3	1.6	1.3	1.9	1.5
Total	10.9	13.1	11.3	12.3	6.3	5.7
<b>New Zealand</b>						
<i>Non-Polynesian</i>						
15-19	8.9	12.2	10.7	12.7	5.5	4.8
20-44	2.8	3.4	21.9	13.9	35.4	18.4
45+	1.9	1.6	7.3	2.7	17.9	7.5
Total	3.1	4.3	39.9	29.2	58.8	30.7
<i>Polynesian</i>						
15-19	29.6	42.6	7.1	7.4	1.1	0.8
20-44	10.1	8.9	10.3	4.2	4.6	2.2
45+	6.1	3.5	1.6	0.4	1.2	0.5
Total	12.5	15.8	19.0	12.0	6.9	3.5

Source: NZ Department of Statistics (1982); US Department of Commerce.

When we look at the data for the other countries (for space reasons not presented here) it is clear that, in these as well, unemployment hits hardest amongst the less skilled and the least experienced. In all cases, apart from Australia, workers in the occupations most closely associated with manufacturing (Production and Related Workers, Transport Equipment Operators and Labourers) account for a greater share of unemployment than of the workforce. In all of these countries, the group's share in total unemployment is approximately 1.4 times its share in the workforce. First-job seekers appear to fare even worse (except in Norway). In New Zealand, first-job seekers' share in unemployment is 19.3 times their share in the workforce. This is by far the worst of the countries considered and no doubt reflects the fact that New Zealand's unemployment problem is largely one of youth unemployment.

Perhaps even more illuminating of the disadvantaged position of the unemployed once out of a job is the number of job opportunities. The proxy for this is usually the unemployment/vacancy ratio. Burghes (1977, p.23) notes that in England, between 1959 and 1974 there was, at best, one vacancy for every four unemployed labourers. In September 1976, the ratio of unemployed "general labourers" to notified vacancies was 56 to 1. In these terms they were almost ten times worse off than all other occupational groups. Table 7 provides unemployment/vacancy ratios in New Zealand for four skill classifications. Although these skill classifications are rather crude, it is clear from the table that the semi-skilled and unskilled of both sexes experience the greatest disadvantage in unemployment. It is interesting however that the ratio for the unskilled manual workers (male or female) never rises as high as the 56 to 1 reported in the UK although, for men, the unskilled manual labourers are at least ten times worse off than skilled manual workers – a figure similar to the one reported by Burghes.

Table 7 *Ratio of registered unemployment to vacancies : New Zealand* <sup>(a)</sup>

	1970		1975		1978	
	Male	Female	Male	Female	Male	Female
Non Manual <sup>(b)</sup>	0.2	0.1	1.9	3.0	10.8	13.1
Skilled Manual <sup>(c)</sup>	0.05	1.0	0.2	1.3	2.6	3.6
Semi-Skilled Manual <sup>(d)</sup>	1.7	4.6	6.7	8.9	14.3	17.5
Unskilled Manual <sup>(e)</sup>	1.8	0.1	10.1	4.0	28.6	22.1

Notes:

- (a) June.
- (b) Non Manual = Professional, technician and related workers; Executive, Clerical and related workers; Shorthand-Typist/Typist/Office Machinist.
- (c) Skilled Manual = Tradesmen.
- (d) Semi-Skilled Manual = Sales workers; Farm workers; Logging/Sawmilling workers; Miners and Quarrymen; Seamen; Drivers; Cooks.
- (e) Unskilled Manual = Storemen, Packers; Freezing workers; Process factory workers; all Labourers.

Source: NZ Department of Labour, unpublished statistics.

If we were to turn our attention to the industrial structure of unemployment, immediately apparent is the tendency in all countries considered for the construction industry to contribute more than proportionately to unemployment than to the workforce (except in Australia) and for tertiary sector classifications (e.g. finance and community services) to contribute relatively much less to unemployment than to the workforce. Despite the difficulties of making comparisons between countries with different classification systems, it does not appear that the industrial breakdown of unemployment in New Zealand is vastly different to that being experienced in other countries. New Zealand's major areas of concern, besides construction, are manufacturing and the wholesale and retail trade. The two last mentioned contributing particularly to female unemployment. Despite other dissimilarities, it is clear that certain industries and occupations are more prone to unemployment; wherever these are found, they will inevitably be the major contributors to that country's unemployment.

### Regional Dimension

Behind New Zealand's national unemployment figures lie considerable regional differences. Thus at the 1976 Census when the national unemployment rate was 1.5 percent, Otago and Southland had rates of 1.1 and 1.2 percent while the rates for Northland and East Coast stood at 4.0 and 3.2 percent respectively. The individual rates are themselves, of course, the outcome of the complex underlying patterns of change in factors such as participation rates, labour force and the process of job creation. When international comparisons are made, further complications arise relating to the differing definition of what comprises a region from one country to another. These problems notwithstanding, some comment can be passed on the distribution of unemployment within New Zealand compared with the distribution of unemployment in other countries by examining the *coefficient of variation* across regions within the countries concerned.<sup>4</sup> This coefficient is a useful shorthand measure of how dissimilar the regional unemployment rates are. The coefficient ranges from zero to 100. It would have a value of zero if all regions had the same unemployment rate and values approaching 100 if the rates were very widely dispersed. The values of the coefficient were found to be:

Country	Year	Regional Units	Coefficient of Variation
Australia	1976	States	13.8
Norway	1979	Employment Office Regions	47.8
UK	1978	Standard Regions	31.0
USA	1979	States	25.0
New Zealand	1976	Statistical Areas	38.5

According to this measure, unemployment is relatively evenly distributed among the Australian states and exceptionally unevenly distributed among New Zealand's Statistical Areas and Norway's Employment Office Regions. The distribution of unemployment between the regions in the remaining countries lies somewhere between these two extremes. To the extent that the regional units chosen are compatible, the data suggest that in regional distribution unemployment in New Zealand is generally less equitable than other countries considered.

4 The coefficient of variation (V) is used to compare the dispersion of two or more sets of data when the sets themselves are not equivalent. It provides a measure of relative dispersion and is given by the formula,  $V = \frac{s}{\bar{x}}$ , where  $s$  is an estimate of the standard deviation and  $\bar{x}$  is the sample mean.

Statistical Areas were chosen as the Regional Units for New Zealand because they correspond most closely (Central Auckland aside) to the units used in the other countries. Had we chosen instead to use Employment Districts the coefficient of variation would have been 59.5. Although Employment District data are less comparable to the other countries' data, they do indicate more clearly the regional distribution of unemployment. These data are presented in Table 8 and we see that the highest unemployment rates are for Whangarei and Hastings with Gisborne, Tauranga and Napier also being among the worst affected. The least affected districts have been Wellington and Lower Hutt with Dunedin also having lower rates. The greatest increase in unemployment has occurred for the major industrial centres of the southern North Island highlighting the depression in manufacturing as a major cause of unemployment (Hicks, 1980B).

Table 8 *Registered unemployment as a percentage of 1976 Census labour force*<sup>(a)</sup>

Employment District	1976	1977	1978	1979	1980
Whangarei	1.57	1.94	2.81	4.85	5.64
Auckland	0.28	0.21	2.19	1.24	2.07
Manukau	0.41	0.29	2.64	2.50	3.33
Hamilton	0.49	0.45	1.44	2.21	3.24
Tauranga	0.72	0.84	3.32	2.46	3.17
Rotorua	0.51	0.67	2.18	2.14	2.40
Gisborne	1.57	1.01	1.36	1.88	2.23
Napier	1.16	0.91	1.96	3.30	3.64
Hastings	2.16	2.00	2.67	3.79	5.41
New Plymouth	0.60	0.74	2.36	2.96	2.88
Wanganui	0.47	0.42	1.65	2.21	3.58
Palmerston North	0.59	0.22	1.44	1.15	2.20
Masterton	1.20	0.61	1.77	1.83	2.58
Lower Hutt	0.11	0.15	0.92	0.85	1.47
Wellington	0.11	0.15	1.50	1.44	1.34
Blenheim	0.97	0.77	1.89	2.74	3.14
Nelson	0.56	0.37	1.57	2.08	2.71
Greymouth	0.17	0.43	1.08	1.31	2.37
Christchurch	0.34	0.51	2.39	2.49	2.87
Timaru	0.37	0.51	1.50	2.46	2.73
Dunedin	0.43	0.26	0.74	1.23	2.31
Invercargill	0.58	0.30	0.76	1.93	2.31
New Zealand	0.50	0.46	1.89	1.99	2.65

Note:

(a) June.

Source: Unpublished vacancy and unemployment statistics from NZ Department of Labour; NZ Department of Labour (Various Issues and Titles) Monthly employment operations.

## Conclusion

In this paper we have looked at who and where are the unemployed. In particular we have seen how vulnerability to unemployment varies — striking particularly hard, in all countries, at those at the bottom of society. The less skilled form the highest proportion of the unemployed in most countries and New Zealand is no exception. This, in turn, means that those in the workforce who have not had access to education and training, the young, women and racial minorities, bear a disproportionate share of unemployment.

Although the global measure of unemployment for New Zealand suggests that this country has suffered less than most, the disaggregated unemployment data paint a quite different picture and the distribution of unemployment is more inequitable than in the other countries used for comparison. The regional disparity is greater than the other countries' data suggest. Furthermore, adult females and the young of both sexes bear a greater proportion of unemployment (when related to their share of the labour force) than in any of the other countries examined and more than half of long-term unemployment is borne in New Zealand by the young, especially young women. Racial disadvantage in employment, on the basis of the data that does exist, appears to be at least as severe in New Zealand as the USA and for young Maori and other Polynesian women the situation is considerably worse.

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