Chapter VI

THE NATURE OF YOUTH-ADULT UNEMPLOYMENT DIFFERENTIALS

Youth unemployment has become a major issue in the political debate, as evidenced by the ever-growing number of studies on this topic. Youth unemployment rates are indeed generally much higher than adult rates, as shown in Table 32 of the Statistical Annex. Unemployment rates for youth have also risen very sharply in recent years: the average youth unemployment rate in the seven major countries combined increased from 11.8 per cent in 1976 to 17.4 per cent in 1982. In response to this, Member governments have invested large amounts of public funds in specific youth measures. However, despite the relatively high rate of unemployment the average duration of unemployment is lower for youth (Table 32). This section will explore the reasons for these differences using what has been called the "labour market dynamics" approach, based on flows of people into and out of employment and unemployment over various periods of time.

From the data shown in Table 32 it appears, on the face of it, that on average young people have shorter spells of unemployment. This would imply that, in proportion to their numbers, young people enter unemployment in much greater numbers than adults. Even if the unemployment rates for youth were no higher than for adults, the rate of inflow of youth would need to be higher to compensate for their shorter average stay in unemployment. Indeed, the fact that the unemployment rates for youth are higher than for adults means that the rate of youth inflow must be higher still.

1. Among recent Secretariat reports and publications see the reviews of youth employment policies in Ireland and Portugal, OECD (1983b) as well as OECD (1980, 1981a). See also Franz (1982) and the massive body of research information in Freeman and Wise (1982).

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### Table 32. Mean average duration of unemployment in progress by age and sex.

<table>
<thead>
<tr>
<th>Year</th>
<th>Youth</th>
<th>Prime-age adults</th>
<th>Older workers</th>
<th>Youths</th>
<th>Prime-age adults</th>
<th>Older workers</th>
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<td></td>
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<tr>
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<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>1976</td>
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<td>4.1</td>
<td>2.9</td>
<td>3.3</td>
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</tr>
<tr>
<td>1979</td>
<td>2.9</td>
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<td>4.5</td>
<td>2.9</td>
<td>3.6</td>
<td>4.1</td>
</tr>
<tr>
<td>1982</td>
<td>3.7</td>
<td>4.3</td>
<td>4.9</td>
<td>3.4</td>
<td>4.0</td>
<td>4.4</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1976</td>
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<td>13.6</td>
<td>7.4</td>
<td>9.7</td>
<td>15.2</td>
</tr>
<tr>
<td>1979</td>
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<td>9.4</td>
<td>15.2</td>
<td>9.3</td>
<td>12.8</td>
<td>19.2</td>
</tr>
<tr>
<td>1982</td>
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<td>20.7</td>
<td>11.9</td>
<td>14.0</td>
<td>22.6</td>
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<tr>
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<td>10.4</td>
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</tr>
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<td>11.9</td>
<td>4.6</td>
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<td>12.4</td>
</tr>
<tr>
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<td>5.3</td>
<td>8.8</td>
<td>11.8</td>
<td>5.5</td>
<td>8.9</td>
<td>13.3</td>
</tr>
<tr>
<td><strong>Great Britain</strong> (July data)</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1976</td>
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<td>8.4</td>
<td>12.1</td>
<td>3.1</td>
<td>6.4</td>
<td>10.4</td>
</tr>
<tr>
<td>1979</td>
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<td>12.9</td>
<td>18.5</td>
<td>4.0</td>
<td>9.3</td>
<td>17.5</td>
</tr>
<tr>
<td>1982</td>
<td>8.3</td>
<td>13.7</td>
<td>16.1</td>
<td>6.6</td>
<td>10.5</td>
<td>17.0</td>
</tr>
<tr>
<td><strong>United States</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1976</td>
<td>3.1</td>
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<td>5.9</td>
<td>2.5</td>
<td>3.8</td>
<td>5.6</td>
</tr>
<tr>
<td>1979</td>
<td>2.1</td>
<td>3.4</td>
<td>4.3</td>
<td>1.9</td>
<td>2.5</td>
<td>3.4</td>
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<tr>
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<td>4.6</td>
<td>4.8</td>
<td>2.6</td>
<td>3.5</td>
<td>4.1</td>
</tr>
</tbody>
</table>

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a) Data for Canada and France are from national sources. Data for Germany and Great Britain are Secretariat estimates; for methods of calculation see Note E of the Technical Annex. For the United States the data are Secretariat estimates adjusted to be consistent with the total mean average durations published in the national source.

b) The age groups are as follows: youth are those aged less than 25 years; prime-age adults are those aged 25-54 years except in France (25-49 years) and Canada (25-44 years); older workers are those aged 55 years and over except in France (50 years and over) and Canada (45 years and over).
The conclusion from this is that movements of youth into and out of unemployment must be very rapid indeed, especially in North America, where the labour market as a whole seems to be much more fluid than in Europe. For example, while the total Canadian unemployment rate over the period January-February 1981 moved only very slightly, from 8.3 to 8.1 per cent, almost 40 per cent of the stock (367 000) entered and just over 40 per cent (399 000) left unemployment. The proportion of unemployed youth who entered and left during this period of only one month would be higher still.

However, while average youth unemployment is of short duration, Chapter V shows that there is a growing proportion of youth unemployment which is of long duration. The levels of long-duration unemployment currently reached, even in North America, indicate that the burden of unemployment is not shared out evenly among all youth, or even those youth who become unemployed, but concentrated to a significant degree on a small proportion of unemployed youth.

The main aim of this chapter will be to throw more light on the degree of concentration of youth unemployment, especially as compared with adults. The data already quoted will be extended further, bringing in some new elements. In the first place data will be presented on flows into unemployment and the duration of complete spells of unemployment as opposed to the data on unemployment in progress shown in Table 32. Further, there is a discussion of the problem of recurrent spells of unemployment. The concentration of youth unemployment will be worse than it might appear at first sight if the same young people tend to enter and re-enter unemployment several times over a given period.

The degree of concentration of youth unemployment is important for policy purposes, especially if the number and characteristics of those likely to bear the greatest burden can be easily identified. One of the factors which may cause youth to move into long-term or recurrent unemployment may be the stigma associated with a previous period of unemployment. This issue has already been discussed at length in the context of long-term unemployment (see Chapter V, Section C) and will be raised again here in the section on recurrent unemployment.

The material presented draws heavily on a study which the Secretariat commissioned of labour market flows in five Member countries: Canada, France, Germany, the United Kingdom and the United States. In addition, Professor Wolfgang Franz, University of Mannheim, prepared an overview study based on these five papers, and this chapter draws on this material as well as other studies available to the Secretariat.

A. THE DECOMPOSITION OF THE UNEMPLOYMENT RATE

The first step in the analysis of labour market dynamics is to decompose the unemployment rate into two main elements—the proportion of the labour force entering unemployment and the length of time they remain there. In a completely stationary labour market, where inflows into and outflows from unemployment occur at a constant rate and cancel out, the numbers unemployed will be constant and the following identity will hold:

\[
\text{numbers unemployed} = \text{numbers entering} \times \text{average completed duration of unemployment per month} \times \text{average number of spells of unemployment per person over the period}
\]

(For example, if 1 000 people enter and leave unemployment every month and stay there for an average of two months, the numbers in the pool of unemployed will be 2 000; as 2 000 people will join and 2 000 will leave every two months. Each one joining will replace a person who is leaving and each will be replaced by a new entrant when he or she leaves in turn.)

Over a period of time it is possible for a person to enter the pool of unemployed more than once. Then the average inflow into unemployment may be expressed as the product of the average numbers of persons who enter for the first time during one period multiplied by the number of times that they enter. Defining, as is natural, the average risk of becoming unemployed over a given period as being the numbers of persons entering unemployment over that period divided by the numbers in the labour force, the identity then becomes:

\[
\text{average unemployment rate} = \text{average risk of becoming unemployed over a given period} \times \text{average completed duration of unemployment} \times \text{average number of spells of unemployment per person over the period}
\]

If the calculations are done over a sufficiently short period, it may be appropriate to drop the last term. The assumption of stationarity is still required in any event. If it does not hold, it is possible to develop more complex identities relying on the concept of the expected completed duration of unemployment (a concept similar to that of the expected duration of life, used in demography) and this is effectively what has been done in most of the country studies. Full details are given in the papers cited. The Canadian and United States studies rely partly on “gross flows” data derived from matching up two consecutive months of labour force survey results for those who are common to the sample from month to month and counting the numbers of people who move into and out of unemployment during that period. The British, French and German studies are concerned with flows on to and off the unemployment register—the German study being based on the outflow during just one period of the year.

2. The country papers are as follows: Canada: Hasan and de Broucker (1982a); France: Barge and Salais (1982); Germany: Cramer and Werner (1982); United Kingdom: J. Bowers (1982); and the United States: N. Bowers (1982). References in the text to “the Canadian study” etc. will be to these papers.
B. THE RISK OF BECOMING UNEMPLOYED

Some of the results relating to the risk of becoming unemployed are shown in Table 33 below. Despite serious differences in definitions and measurements among the countries included here, the general finding is that youth face a considerably higher risk of unemployment than adults. On average, the risk is about three times higher for youth than for adults. The incidence is not evenly dispersed among all youths. The German data, for example, show that young females are more likely to become unemployed than young males while the opposite pattern is observed in North America. U.S. data also reveal large racial differences in the risk of becoming unemployed for the different age groups. For example, a non-white teenager has almost a 50 per cent risk of becoming unemployed per year, twice the risk his white counterpart faces.

Table 33. The risk of becoming unemployed

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>15-19</td>
<td>8.0</td>
<td>7.1</td>
<td>15-19</td>
</tr>
<tr>
<td>20-24</td>
<td>4.3</td>
<td>4.2</td>
<td>20-24</td>
</tr>
<tr>
<td>25-44</td>
<td>1.9</td>
<td>3.0</td>
<td>25-34</td>
</tr>
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<td>45-64</td>
<td>1.7</td>
<td>2.8</td>
<td>45-54</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>55+</td>
</tr>
<tr>
<td>Total</td>
<td>2.7</td>
<td>3.6</td>
<td>Total</td>
</tr>
</tbody>
</table>

a) Risk per month.
b) Risk per year.
Sources: Canada: Hazan and de Broucker (1982a); Germany: Cramer and Werner (1982); United States: N. Bowers (1982).

1. Where do unemployed youths come from?

Why do young people typically face a much higher risk of unemployment than adults? One possible explanation might be that their route into unemployment differs from that of adults. For instance, if school leavers typically become unemployed before receiving a job, this would account, at least in part, for their higher incidence of unemployment. The country data provide only limited support for this hypothesis.

In France, the March 1980 labour force survey results showed that over 50 per cent of unemployed teenagers had not found a job since leaving school. Moreover, 20 per cent of young males entered unemployment after their military service. On the other hand, although the German data show some differences in the flow pattern between youths and adults, these differences cannot account for much of the higher incidence of unemployment. Only 7 and 10 per cent of 15-19 and 20-24-year-old males, respectively, were in school or training before becoming unemployed compared to 6 per cent of adult males. The inflow from the armed forces was 6 per cent for the age group 20-24 years, but negligible for other age groups.

In North America, where young people typically combine schooling with labour force participation, there is ample evidence of a strong seasonal pattern in the teenage labour force flows. U.S. data show that in June and July of 1979, 42 and 24 per cent, respectively, of teenagers who the previous month had not been in the labour force, entered in those months. Labour force exits, on the other hand, were relatively high in August and September. Such variations are clearly related to the closing and opening of the school year.

To sum up, the fact that many youths are new entrants into the labour market, coming from schooling or military service, for example, may cause a somewhat higher risk of unemployment. But this is clearly not enough to explain all of the variation observed. A major part must be due to differences in the rate of entry into unemployment after separation from employment.

2. Separation from employment

The Canadian and United States papers show clearly that the relatively high risk of unemployment for youth...
is associated with the higher rate of job separation of youth. For example, on average over the period 1976-80, nearly 13 per cent of Canadian teenagers separated from employment in any given month, a rate of employment separation about four times as large as that of prime-age adults and over twice the rate for young adults. Similar findings are reported in the U.S. paper from an analysis of gross flows data for selected years over the period 1968-81.

An analysis of Australian labour market flows during the year 1979-80 shows that during an average month over 7 per cent of Australian teenagers who were employed at the beginning of the month were no longer employed at the end of the month, compared to only 1.5 per cent of prime-age males. The authors point out that if this rate of employment separation was evenly spread among the teenage workforce “then during the twelve months all teenagers employed at the beginning of the year would have separated from employment once during the period”.

Part of the higher rates of employment separation, especially among teenagers, presumably reflects the seasonal phenomenon mentioned above. However, seasonal variation in labour force entrance and exit related to the closing and opening of the school year cannot account for much of the large differential in employment separation rates between youth and adults. Thus, it is worth discussing employment separation at some length.

Several different interpretations have been placed on the high rate at which youths separate from jobs. Some would argue that this is a normal part of the transition from school to work as young people “shop around” in the job market for information and work experience before settling into a more stable career. Others argue that the main explanation lies in the nature of the jobs typically available for youth. Many youth jobs are dead-end, menial jobs offering little career prospects and/or employers may tend to fire young workers first during a recession. Unfortunately, the country studies do not provide any information on the type of jobs held by young people so that it is only possible here to examine these important issues indirectly.

Job separations can occur through quits or layoffs. Do young workers quit more frequently than adults? There is some limited evidence available from the country papers on this question. French data for 1975 show a higher quit rate among youth: 36 and 30 per cent of male teenagers and young adults, respectively, had entered unemployment by quitting their previous job compared to only 23 per cent of all males. However, by 1980 the differential in quit rates between young and adult workers had virtually disappeared. Data for Germany for 1977 show that only 8 per cent of all unemployed teenagers had quit their last job compared to 16 and 14 per cent of all young adults and adults, respectively. Thus, higher quit rates do not appear to be a specific characteristic of youth labour market behaviour and it is difficult to accept this as a major explanation of the greater incidence of unemployment among youth.

All this suggests that unemployed youths are more likely to have left their previous job involuntarily than of their own accord. Indeed, it is commonly argued that, in an economic downturn, youth are laid-off more frequently than adult employees. Why should employers discriminate against young workers in this way?

In principle, one might wish to distinguish between lay-offs due to a reduction in the firm’s demand for labour and those arising from unsatisfactory performance by the youth in question. However these classifications are not mutually exclusive, since many youths are hired before their productivity (as observed by the employer) is high enough to justify their employment. On the other hand, when the demand for the firm’s output decreases, the employer has to select those workers who will be dismissed. Institutional regulations and/or collective agreements in some countries—Italy and Germany, for example—make it difficult, if not impossible, to lay off older workers. In addition, the firm may hesitate to fire trained adult workers because its investment in their training might be lost forever if they find a new job. Hence, those youths who do not have firm-specific or general skills are fired first, indicating that both demand conditions and personal characteristics contribute to the higher incidence of youth unemployment. There is a more severe sorting process in a recession and young workers with less work experience and human capital tend to be sorted out first.

Moreover, youths are less likely than older workers to have security of employment. The German study analysed the inflows onto the unemployment register in Scotland were less likely than unqualified school leavers to have left or lost their first job. 5. See Foster and Gregory (1982, p. 121).

6. A survey of Scottish school leavers carried out in the Spring of 1981 also shows high rates of employment separation after only a brief period spent in the labour market. Three-quarters of those who entered and remained in the labour market after leaving school had started a job by the time of the survey. Among this group, almost 30 per cent had already separated from their first job and over half of those who had lost their first job were employed in new jobs at the time of the survey. See MacLeod, Main and Raffe (1983).

7. See Osterman (1980) for an extensive review of this debate.

8. Since the Australian gross flows data distinguish between full-time and part-time employment, Foster and Gregory (1982) are able to examine the role of flows between full-time and part-time employment for various age-sex groups. Even though part-time employment accounted for 20 per cent of teenage employment compared to only 3 per cent of prime-age males in 1979-80, their results show that “the major contribution of employment separation to teenage unemployment is from the labour market for full-time workers. Employment separation and higher rates of teenage unemployment cannot be explained by the greater involvement of teenagers in part-time employment”.

9. Foster and Gregory (1982) report that, among the unemployed in July 1980 who had left their last full-time job during the previous 18 months, 66 per cent of teenagers had left involuntarily compared to 59 per cent of adults.

10. Within the youth work force there is an additional sorting process which is often related to educational experience. For example, MacLeod, Main and Raffe (1983) report that qualified school leavers in Scotland were less likely than unqualified school leavers to have left or lost their first job.
September-October 1977 and showed that youths were over three times as likely as adults to have previously held fixed-term contracts. Similar age-related differences in the propensity to enter unemployment through losing a temporary job are noted in the French study. For example, in 1980 about one-third of all unemployed French youth (excluding school-leavers) had entered unemployment in this way compared to only about one in every eight in 1975.

C. THE DURATION OF UNEMPLOYMENT

Table 34 below, the counterpart of Table 33, contains data on the average expected completed duration of unemployment. It shows that the tendency for the average duration of unemployment to increase with age is preserved when data on expected completed durations of unemployment are used in place of data on duration in progress\textsuperscript{11}. There are, however, certain caveats which need to be mentioned before finally concluding that on average youth tend to suffer shorter unemployment spells than adults.

First, for the two countries for which time series are available, there is some evidence of a relative deterioration in the position of young adults. This can be illustrated very clearly for the United Kingdom by a comparison of the increases in expected completed durations between 1979 and 1981. For males aged 18-24 the increase was 117 per cent compared to only 27 per cent for males aged 16-18; the equivalent increases for females were 66 and 18 per cent, respectively. The increase in spell length for young adult males in the United States over the period 1979-81 was 25 per cent compared to only 11 per cent for teenage males.

Second, following many other analysts, Hasan and de Broucker (1982a) argue that the dividing line between unemployment and non-participation in the labour market is "often fuzzy". Many unemployed people stop searching for a job only because they become discouraged, and are not counted in official labour force statistics even though they could very reasonably be classed as unemployed. Hasan and de Broucker present evidence which implies that youths are more prone to discouragement than adult workers\textsuperscript{12}. They show that, if part of withdrawals out of the labour force from unemployment are ignored (those occurring after unemployment has already continued for a certain number of months), then the average unemployment duration of teenagers would increase by significantly more than prime-age adults.

### Table 34. Expected completed duration of unemployment

<table>
<thead>
<tr>
<th>Year</th>
<th>Teenagers\textsuperscript{a}</th>
<th>Young adults\textsuperscript{b}</th>
<th>Prime-age adults\textsuperscript{c}</th>
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<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>1980</td>
<td>2.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Germany</td>
<td>1977</td>
<td>2.1</td>
<td>2.3</td>
</tr>
<tr>
<td>United Kingdom\textsuperscript{d}</td>
<td>1973</td>
<td>0.8</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>1976</td>
<td>2.0</td>
<td>1.9</td>
</tr>
<tr>
<td></td>
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<td>3.4</td>
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<td></td>
<td>1981</td>
<td>4.7</td>
<td>4.0</td>
</tr>
<tr>
<td>United States\textsuperscript{e}</td>
<td>1973</td>
<td>1.6 (1.8)</td>
<td>1.5 (1.6)</td>
</tr>
<tr>
<td></td>
<td>1975</td>
<td>1.9 (1.8)</td>
<td>1.7 (1.8)</td>
</tr>
<tr>
<td></td>
<td>1979</td>
<td>1.7 (1.8)</td>
<td>1.6 (1.8)</td>
</tr>
<tr>
<td></td>
<td>1981</td>
<td>1.9 (1.9)</td>
<td>1.8 (1.8)</td>
</tr>
</tbody>
</table>

\textsuperscript{a} Teenagers in the United Kingdom are the 16-18 age group, in Canada and Germany the 15-19 age group, and in the United States the 16-19 age group.
\textsuperscript{b} Young adults are 20-24-year-olds except in the United Kingdom where the age group is 18-24.
\textsuperscript{c} Prime-age adults are 25-44-year-olds except in the United States where the age group is 25-59.
\textsuperscript{d} Data refer to Great Britain only and are for July of each year.
\textsuperscript{e} Data refer to whites only. Data in parentheses refer to non-whites.

Sources: For Canada, Germany, United States: see Table 33; United Kingdom: J. Bowers (1982).

The same findings apply to the United States study which shows that in 1981, 30 per cent of all unemployed teenagers terminated unemployment by leaving the labour force compared to 17 per cent of unemployed adults. Other research for the United States—Clark and Summers (1979)—has shown that age-related differences in average completed durations tend to diminish once account is taken of the effects of labour force withdrawal. Some rough estimates in the German study put the flows out of the labour force (in 1980) at nearly 30 per cent for unemployed teenagers, 28 per cent for

\textsuperscript{11} Björklund (1981) reports similar patterns for Sweden.

\textsuperscript{12} For additional confirmation of this, see the discussion on "discouraged worker" effects on age-sex participation rates in Chapter 1.
the 20-24 age group, and 24 per cent for the adult unemployed.

There is thus a possibility that two short spells of unemployment separated by a spell of apparent withdrawal from the labour market might better be counted as one longer spell of unemployment; in this case some of the apparent gap in average length of spells of unemployment between youth and adults would disappear.

D. MULTIPLE SPELLS OF UNEMPLOYMENT

The above emphasizes the importance of examining the incidence of multiple spells of unemployment for different groups within the labour market. Looking at unemployment experience over a long period of time, a certain incidence of multiple spells might well be expected. Individual characteristics (such as low-skill levels) which increase the risk of unemployment for a given person at one moment in time will make unemployment more likely in future periods if they persist.

The studies commissioned by the Secretariat do indicate that, over the relatively brief period of one to two years, there is a significant incidence of multiple spells of unemployment. For example, data from the Canadian study indicate that about 16 per cent of persons with some previous unemployment had more than one unemployment spell during 1979. The figures for youth were somewhat higher, but the differences were not large. On the other hand, Robertson (1982, pp. 99-100) concludes that young persons do not exhibit a markedly greater incidence of multiple spells than older workers over the longer period, 1975-7913.

The United States study indicates that in 1977 young people were somewhat more likely to report two or more spells of unemployment than other age groups. The French data also indicate that recurrent spells of unemployment are more common among youth than adults. Between October 1977 and March 1978, 13.5 per cent of all unemployed teenage males had two or more spells of unemployment compared with 8.7 per cent of adults. The equivalent figures for females are 10.7 per cent and 5.6 per cent, respectively.

Finally, Moylan, Millar and Davies (1982) using results from the United Kingdom DHSS Cohort Study report that persons exhibiting recurrent unemployment tended to be slightly younger than the unemployed as a whole. Thus, there is evidence from a number of OECD countries to suggest that youth are somewhat more prone than other labour force groups to experience recurrent spells, at least when the period covered is no longer than one or two years.

There is also United States evidence suggesting that individuals who report multiple spells in one time period tend to have a higher incidence of multiple spells in a subsequent period than those with one or no recorded spells. Allowing for data limitations, there seemed to be some general tendency in all age groups for the incidence of multiple spells in 1978 to be greater among those persons who had multiple spells in 1977. Youth aged 16-24 who had two or more spells in 1977 were more likely than their adult counterparts to report two or more spells in 1978; this was especially the case for young adults.

As may be expected, when the phenomenon of multiple spells is taken into account, the average time spent in unemployment by young people, over any relatively long period of time, will lengthen. Magun (1982, pp. 27-28), again using the unique data source provided by the Canadian Longitudinal Labour Force Data Base, found that over the period 1975-79 after controlling for influences relating to sex, occupation, industry, province and labour market conditions, young people experienced on average greater total unemployment than older people, despite the fact that, as already noted, the average length of single spells of unemployment is shorter for youths than for adults14.

E. THE CONCENTRATION OF UNEMPLOYMENT

Measures of the concentration of unemployment are concerned with the way that unemployment is spread out over individuals experiencing unemployment. If everybody in the labour market experienced a single spell of unemployment of equal length during a given period, there would be no concentration of unemployment at all. However, some concentration is likely to occur purely by chance. If everybody not in unemployment had a constant and equal probability of entering unemployment over any interval of time, while those in unemployment had a constant and equal probability of leaving unemployment, there would still be a noticeable concentration of unemployment. However the degree of concentration observed in practice is much greater than could be obtained by such chance effects15.

13. Robertson's information was derived from the Canadian Longitudinal Labour Force Data Base, composed of a number of linked administrative data files. This data base contains micro historical data on the labour market experience of a ten per cent sample of all "insured" workers (forming about 90 per cent of the total Canadian workforce). By using information given in the various administrative files a week-by-week labour force activity profile showing employment, unemployment and "gap" weeks (usually relating to non-labour force activities) was established for each individual. The weekly incidence of unemployment and "gap" spells. It should be noted that the sample was restricted to individuals recorded as employed or unemployed both at the beginning and the end of the 5-year period. Robertson (1982) does not discuss how this might tend to bias the results.

14. The apparent conflict between this finding and that of Robertson (1982) quoted above, to the effect that young persons in Canada do not exhibit a markedly greater incidence of multiple spells over the period 1975-79, is explained by two factors. First, Magun used a definition of unemployment based on weeks when benefits were paid while Robertson used weeks in which the individual was not employed. Second (and more significant), Magun standardized his comparisons while Robertson did not.

15. See Clark and Summers (1979) and the Canadian study for evidence that the actual concentration of unemployment in long spells is greater than would be expected under a Markov process with stable transition probabilities.
Concentration may be viewed in several ways. We may ask what proportion of individuals are in long-term unemployment at any moment of time\(^1\). Alternatively we may look at the concentration of unemployment over a period of time dividing up the total number of weeks of unemployment suffered by all individuals according to the number of weeks suffered by each individual. Finally, it is possible to look at the contribution to the total number of weeks of unemployment which are made by long spells of unemployment, short spells of unemployment and multiple spells of unemployment.

Some relevant evidence from the country studies is as follows. In Canada 45 per cent of all unemployment in 1980 was accounted for by spells lasting more than three months and 20 per cent by spells lasting more than six months (although the proportion of spells exceeding six months was only 5 per cent). Concentration of unemployment was less marked among teenagers. Spells lasting more than three months accounted for one-third of teenage unemployment and about half of all young adult unemployment. In addition, only about 11 per cent of all teenage unemployment was accounted for by spells exceeding six months compared with 24 per cent for all other age groups. On the other hand, Magun (1982, p. 43) reports that over the longer period 1975-79, taking multiple spells into account, the burden of unemployment in Canada was concentrated roughly as strongly among young people as old people.

The U.S. study also concludes that there is clear evidence of unemployment concentration. The degree of concentration also varies by age, sex, and economic conditions. Referring to 1978 and to spells lasting 15-52 weeks, about 75 per cent of male teenage unemployment was due to such spells compared with 60 per cent of female teenage unemployment. The highest concentration for both sexes and races, however, occurred among young adults, whereas the concentration of teenage unemployment was less than that of prime-age adults.

For Germany, the survey of the outflow from the unemployment register in May-June 1981 provided data on the total distribution of unemployment (including multiple spells) over the preceding 18 months. Those who were unemployed six months or more accounted for 49 per cent of all unemployment among teenagers, 57 per cent among young adults and 68 per cent among adults.

To conclude, there is evidence that unemployment is strongly concentrated, especially when a period of one or two years is taken as the reference. Over such periods the concentration among teenagers appears to be less than that among young adults and adults.

F. STATE DEPENDENCE

In the previous chapter on long-term unemployment it was concluded that an individual's chance of leaving unemployment over a given period depends to some extent on the length of time he or she has already spent in the state of unemployment. This is one form of what is called "state (or experience) dependence". Another form of state dependence is present if the experience of one spell of unemployment makes an individual more liable to suffer spells of unemployment in the future\(^1\).

The evidence for this form of state dependence seems to be rather limited. Heckman and Borjas (1980), using a small sample of data relating to young men leaving school drawn from the U.S. National Longitudinal Surveys of Young Men, concluded that they had found no evidence of this type of state dependence ("occurrence" dependence). On the other hand, Ellwood (1982) shows that a teenager who spends time out of work in one year will probably spend less time working in the subsequent year than he would have had he worked the entire previous year. However, the absolute magnitude of the effect found was small. Even a six-month spell out of work generated only an additional three to four weeks out of work one year later. Thus, his data provide no evidence that early unemployment sets off a vicious cycle of recurrent unemployment. What does appear to persist, however, is the effects of lost work experience on wages. His results suggest that early work experience in the first few years after leaving school could increase wages by 10-20 per cent at the end of four years. Hence, youth unemployment is not simply an accident at the beginning of the youth's working life which will be forgotten in the future.

G. SUMMARY OF THE EMPIRICAL RESULTS

A vast amount of information is available from the Secretariat's study of the dynamics of youth unemployment. A brief summary is very difficult since there is no country-wide agreement on certain aspects of youth unemployment. Despite this caveat, the following conclusions appear reasonably general on the basis of the evidence:

i) The nature of youth unemployment is rather different from adult unemployment; in any given year, youths face a much higher risk of entering unemployment.

ii) Youth (15-24 year olds) are not a homogeneous group. In particular, young adults (20-24 year olds) have tended to fare less well than teenagers in the labour market in recent years. (This may be partly because governments in many Member countries have tended to target policies on school leavers.)

16. See Tables 27 and 29; which show that older people are more strongly affected by long-term unemployment than younger people, on average.

17. See Heckman and Borjas (1980) for a discussion of the various forms of state dependence.
iii) Changes in labour force status between employment, unemployment and not-in-the-labour force are more frequent among youth. This higher turnover is part of the normal transition process from school to work as young people shop around in the labour market. However, the higher rate of employment separation among youths accounts for most of the differential between youth and adult unemployment rates. Most of these job separations are involuntary, reflecting the fact that youth shoulder a major part of the burden of adjustment to economic change.

iv) While youth face a higher risk of unemployment, the average duration of youth unemployment spells appears to be shorter compared to that of adults. However, it is very important in interpreting these brief spells of youth unemployment to take due account of the phenomenon of labour force withdrawal which may bias estimates of completed durations downwards. Youth has a higher propensity to terminate spells of unemployment by withdrawing from the labour force than other groups.

v) Youths are more prone than other labour force groups to experience multiple spells of unemployment when a one or two year period is taken as reference. Some recent Canadian evidence suggests that, over a long period, youths suffer as much unemployment as adults.

vi) The majority of unemployed young people do not appear to be less successful than adults in finding jobs. However, within the youth population, there is a "core" group which is particularly likely to experience extended and/or multiple spells of unemployment. This core expands during a prolonged recession as youth are very vulnerable to layoffs and less likely to be hired.

vii) There is evidence of strong concentration of unemployment. Over relatively short periods of one to two years, there appears to be less concentration of unemployment among teenagers than among young adults or adults. However, recent Canadian evidence appears to imply that this may not be true when a longer period of five years is taken.

viii) Past spells of unemployment seem to increase the probability of future unemployment, but the immediate effect may not be very large. On the other hand, youth unemployment results in the loss of on-the-job training, and hence could have a significant impact on future earnings.

18. Some of the specific measures which many Member governments have introduced in recent years to tackle the serious youth unemployment problem may also have increased turnover. See MacLeod, Main and Raffe (1983) for some evidence on this in connection with the Youth Opportunities Programme in the United Kingdom.
BIBLIOGRAPHY

Agence Nationale pour l’Emploi (1980), A Study of Long-Term Unemployment in the European Economic Community, study No. 79/68 of Programme of Action and Research on Developments in the Labour Market, Commission of the European Communities (mimeo).


EIRR (1980), European Industrial Relations Review, November.


Employment and Immigration Canada (1981), Unemployment Insurance in the 1980’s, Ottawa, July.

Evans, A.A. (1974), Hours of Work in Industrialised Countries, Geneva: ILO.


Walsh, K. (1983), *The Duration of Unemployment in the USA*, Institute of Manpower Studies, University of Sussex, March.