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Unemployment, Non-Participation and Labour Market Slack among Irish Males

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Introduction

Despite the central place of the concept of unemployment in macroeconomics, economists devote relatively little attention to the problems attendant on its measurement. Most theoretical discussions assume that a well-defined measure of unemployment is available and econometric studies often use official published unemployment series without discussing their validity. However, specialists in labour economics are aware of the important complications that arise in the measurement of unemployment and of the fact that no single series provides an ideal measure of labour market slack. The issues that arise in this context have been reviewed in several specialised studies (Garvey, 1998, and Royal Statistical Society, 1995).

This chapter deals with the measurement of labour market conditions among Irish males over the period 1983-96. The central question addressed is how important is it to take account of other indicators of labour market slack to supplement the information conveyed by the conventional unemployment rate. As well as looking at the full range of time series evidence available from the published results of the Labour Force Survey (LFS), we use the detailed results of the 1993 Survey to explore the individual characteristics associated with different labour market outcomes. Attention is confined to male labour market outcomes because different, and more complex, issues arise in connection with women's labour force participation and employment. These have been studied separately (Murphy and Walsh, 1997).

Alternative measures of labour market slack

Labour force participation rates may be affected by the availability of employment opportunities. For this reason they should be used to supplement the evidence from unemployment rates when assessing the trend in labour market conditions. The non-employment rate captures the effects of both unemployment and non-participation.¹

A rising rate of male non-employment has been widely observed in recent years. This

¹If E = employment, P = population, and U = unemployment, the employment rate $E/P = (1 - U/(U+E)) \times ((U+E)/P)$, that is (1 minus the unemployment rate) times the participation rate.

reflects lower rates of labour force participation as well as higher rates of unemployment. In the United States the fall in the employment rate of older males has been attributed to a combination of reduced labour supply and declining wages, with the former playing the main role in the 1960s, the latter in the 1980s (Juhn, 1992). In Ireland, a marked contrast between the labour market outcomes of men and women has been noted (Murphy and Walsh, 1997). Since the end of the recession of the early 1980s, the number of women at work has increased steadily. Between 1985 and 1996 female employment grew by 45 per cent. On the other hand, the number of men at work did not begin to grow until 1989 and by 1996 had increased by only 9 per cent. Over the same period there was a decline in the female unemployment rate relative to the male - in 1983 the female unemployment rate was 17 per cent higher than the male rate but since 1992 the male rate has been slightly higher than the female. Finally, there has been a sharp rise in labour force participation rates for women aged 20 and over while male participation rates have declined. These developments are part of a long-run trend for the share of women in the labour force to grow, which has been attributed to factors such as declining family size, rising women's educational levels and shifts in the demand for labour in favour of traditionally female occupations (Walsh, 1993). A relative deterioration in male employment and earnings could also be due to increased exports of unskilled-labour-intensive products from low-wage countries, the empirical importance of which has been much debated recently (IMF, 1997).

International comparisons

The LFS and its US counterpart, the Current Population Survey, is the main source of modern labour market statistics². It provides two measures of the population's labour force status - one based on the respondent's self-assessed principal economic status (PES), the other on his or her situation with respect to employment in a reference week prior to the survey. The latter forms the basis of the International Labour Office (ILO) definition of the labour force that is widely used in international comparisons and generally regarded as more

²The Irish Live Register of the unemployed has become an increasingly unreliable guide to the level and trend of unemployment - see Murphy and Walsh, 1997, for a discussion of this issue.

meaningful, from an economic perspective, than the PES measure.³ Table 1 presents data on an ILO basis on the unemployment rate, the labour force participation rate, and the non-employment rate among men aged 25-54 years in the 20 OECD countries in 1994. Ireland's unemployment and non-employment rates are surpassed only by Finland and Spain. It is evident from Figure 1 that high unemployment rates tend to be associated with low labour force participation rates. A regression of the log of the labour force participation rate, y , on the log of the unemployment rate, x , yielded the following result when all twenty OECD countries were included: (absolute t -ratio in parentheses)

$$\hat{y} = 4.56 - 0.019x \quad \bar{R}^2 = 0.19 \\ (1.94)$$

The negative coefficient of the unemployment rate is expected, but it is not highly significant statistically. It is evident from the scatterplot in Figure 1 that Ireland, Spain and Finland are outliers, with relatively high labour force participation rates in view of their high unemployment rates. When the regression is run excluding these three countries the following result is obtained:

$$\hat{y} = 4.58 - 0.029x \quad \bar{R}^2 = 0.23 \\ (2.11)$$

There is an increase in the level of significance and the elasticity of the participation rate with respect to the unemployment rate is higher, although still very low. It may be concluded that there is some evidence from the international evidence that high unemployment rates depress male labour force participation rates, but that the effect is not large and the three countries with the highest unemployment rates, of which Ireland is one, are exceptions to this generalisation.

Trends in unemployment and non-employment in Ireland

Figure 2 presents the Irish male unemployment rate on the standard ILO basis and on the broader PES definition over the period 1983-1996. The two series convey the same

³A detailed discussion of these measures is contained in Murphy and Walsh (1997).

information about the cyclical behaviour of the labour market since 1983. The unemployment rate reached a peak in 1987, fell sharply over the years 1987-1991, rose to a lower peak in 1993, and has fallen very rapidly since then. Although over the longer run an upward drift in the unemployment rate at comparable stages of the business cycle is apparent and has been taken as evidence of hysteresis (Leddin and Walsh, 1995), the series in Figure 2 show no evidence of an upward drift from peak to peak, or trough to trough, since 1983.

To establish the relationship between the two unemployment rates more precisely we have regressed the log of the PES unemployment rate (y) on the log of the ILO unemployment rate (x) and a time trend, for the period 1983-96, with the following result (absolute t -ratios in parentheses):

$$\hat{y} = 0.36 + 0.92x + 0.0052Time \quad \bar{R}^2 = 0.98$$

(3.6) (25.6) (5.5)

D.W. = 2.97

The elasticity of the PES rate with respect to the ILO rate is significantly less than unity (Wald test, $\text{Prob } \chi^2 < 0.05$), indicating that the cyclical fluctuations in the PES rate are dampened slightly relatively to those in the ILO rate. The positive trend is highly statistically significant, confirming that the PES rate has tended to rise relative to the ILO rate over time.

The reason why the PES unemployment rate exceeds the ILO rate is that many men who classify themselves as "usually unemployed" do not report any form of active job search and hence are classified as "inactive" rather than "unemployed" according to ILO conventions.⁴ Our regression results indicate that, controlling for the level of unemployment as measured by ILO definitions, the proportion of the male population in the inactive categories has been increasing over time.

Figure 3 shows the male non-employment rate on a PES and ILO basis for the years 1983-96. The gap between the two measures of non-employment is much smaller than between the two unemployment rates - reflecting the fact that little of the discrepancy between the unemployment rates is due to the classification of employed males. The

⁴See Murphy and Walsh, 1996, for a detailed discussion of this issue.

relationship between the two non-employment rates was explored by regressing the log of the PES rate (y) on the log of the ILO rate (x) and a time trend, for the period 1983-96, with the following result:

$$\hat{y} = -0.03 + 1.01x + 0.0004Time \quad \text{D.W.} = 2.65 \quad \bar{R}^2 = 0.99$$

(0.3) (33.0) (1.2)

The elasticity of the PES unemployment rate with respect to the ILO rate is not significantly different from unity (Wald test, $\text{Prob } \chi^2 > 0.05$), indicating that there is no significant difference between the cyclical behaviour of the two series. The trend variable is not significantly different from zero, which establishes that there has been no upward trend in non-employment that is not reflected in both series. While the cyclical pattern in the non-employment rates is similar to that in the unemployment rates, there is a marked upward trend in the former that is not evident in the latter. This reflects a falling trend in the rate of male labour force participation, which we discuss below. The closer concordance between the two non-employment rates bolsters the case for using this indicator, as well as the unemployment rate, in assessing the trend in labour market conditions.

Demographic factors are often believed to play an important role in labour market developments. The entry of the post-war baby-boom generation on the labour market in the 1970s tended to depress the opportunities for young workers, resulting in a downward movement in the age-earnings profile in the United States and a rise in the relative youth unemployment rate in many European countries⁵. Since 1980 these trends have been reversed in most OECD countries. In Ireland, however, the population aged 15-24 is still exceptionally high as a proportion of the population aged 25-54 - at 44.9 per cent compared with an (unweighted) OECD average of 34.5 per cent (1994). Yet despite this, the youth unemployment rate as a percentage of the adult rate is relatively low in Ireland (Figure 4). A factor that may help account for this is the relatively low labour force participation rate among Irish teenagers - only 26.4 per cent of the Irish male population aged 15-19 were in the labour force, compared with the OECD average of 36.4 per cent. Emigration has been very important in this age group. The openness of the labour market tends to stabilise the rate of

⁵See OECD, 1996, for a review of these developments.

unemployment.

Conflicting views have been aired about the effect of Ireland's demographic structure on labour market outcomes. In the past the high rate of growth of the labour force was often invoked as a factor contributing to the high unemployment rate, but in recent years it has been argued that the availability of an abundant supply of labour force entrants has contributed to the rapid growth of employment. The truth is difficult to establish due to the need to control for other influences. On the basis of a panel study of 20 countries over the period 1970-94 that took into account aggregate employment conditions, trend, and some country-specific influences, the OECD concluded that

relative population [structure] has no statistically significant effect on teenage male employment and only a small effect on young adult men's employment rates. (OECD, 1996, p. 141)

Other factors, such as the degree of labour market flexibility, are more important than purely demographic influences. Ireland has coped well up to now with the entry of the baby boom generation of the 1970s onto the labour market. In the mid 1980s high emigration among school leavers eased the pressure on the labour market, but in recent years the growth of employment has been more than adequate to absorb the natural increase of the labour force.

Figure 5 displays the Irish PES and ILO unemployment rates by age in 1993. The PES unemployment rate is relatively flat over the interval 25-64, but the ILO rate continues to fall with advancing age. As a result the discrepancy between the PES and ILO rates widens at the older age groups, reflecting the tendency for older men to continue to classify themselves as "usually unemployed" even when they have ceased any form of active job search. Figure 6 shows the pattern of the non-employment rate by age, which is very different from that of the unemployment rate⁶. Non-employment is high among those aged 15-24, reflecting the large proportion still in full-time education; the rate is flat over the range 25-54, and then rises sharply after age 55. (Only between ages 21 and 62 is half or more of the male population at work.)

⁶As there is virtually no difference between the PES and ILO age-specific non-employment rates, only the ILO rate is shown in Figure 5.

The rise in non-employment among older males provides the strongest evidence of the existence of hidden unemployment or labour market slack that is not reflected in the conventional unemployment figure. A perspective on the extent of this phenomenon is provided in Figure 7 which shows the proportions who classified themselves in the PES "usually unemployed", "retired", and "disabled, permanently ill, etc." categories in 1993. Over the interval from age 20 to 49 the total number of these three categories is roughly constant, with the numbers unemployed declining and those in the other two categories rising. After aged 50 the total rises sharply, as the decline in the numbers unemployed is more than offset by the rising numbers "retired" and "disabled". It is striking that in the age group 55-59 the numbers in each of these three categories are almost equal.

There is clearly an element of arbitrariness about the labour force status to which elderly men with poor employment prospects are assigned. Econometric analysis shows that the same factors are associated with non-participation and unemployment among males aged 20-59, namely being single, low educational attainment, living in local authority housing, and living in a household with other unemployed or inactive adults (Murphy and Walsh, 1996).

In Figure 8 we show the age-specific ILO unemployment and non-employment rates for the years 1983-96. The same cyclical pattern is common to all three age groups, but it is most pronounced among youths aged 15-24 and least pronounced among those aged 45-64. The age-specific non-employment rates display a similar but much less pronounced cyclical pattern to that revealed by the unemployment rates. Among younger and older males a secular rise in non-employment has been the dominant feature.

The recent fall in the youth unemployment rate should be interpreted in light of the continuing reduction in the labour force participation rate in this age group. There was a sharp rise in the non-employment rate among males aged 45-64 in the first half of the 1980s and this has not been reversed during the recent boom - since the late 1980s about 30 per cent of the men in this age group are not employed and, as we noted above, a preponderance of them are either retired or permanently ill. Among the population of prime working age (25-44 years) unemployment is the dominant form of non-employment and the labour force participation rate has remained within a very narrow range (92.3 to 93.9 per cent). As a

consequence there is a very close correlation between the non-employment and unemployment rates in this age group. The recent pronounced fall in both the unemployment and non-employment rates in this age group is unambiguous evidence of an improvement in labour market conditions.

Some obvious reasons may be cited for the falling employment rate among younger and older males. Labour force participation has been falling over the long run among teenagers and young adults due to the rise in educational participation. In the past a high rate of labour force participation by elderly males was partly a reflection of the high propensity of older farmers to be classified as gainfully occupied and a decline was to be expected as the importance of the farm labour force diminished. It is also likely that the deteriorating earnings prospects facing poorly-educated older workers and wider provision of various "pre-retirement" pension options have also contributed to the fall labour force participation⁷.

To test for the existence of a cyclical discouraged worker effect, we have explored the relationship between the age-specific labour force participation rates and the unemployment rates and a time trend. The results in Table 2 show a marked non-linear trend in the 15-24 and 45-64 age groups. Having fallen rapidly, participation rates in these age groups are tending to level off. The influence of the unemployment rate is small and not statistically significant, suggesting that cyclical influences on participation are not important. Moreover, the coefficients of the unemployment rate are positive, indicating that if anything the participation rates vary pro-cyclically (although the effect is not significant in any age group). This is contrary to the generally reported result of counter-cyclical variation in participation rates (Borjas, 1996). The positive coefficients on the unemployment rate could be a reflection of a tendency for reductions in the participation rates to have resulted in lower unemployment rates in the 15-24 and 45-64 age groups. Among males of prime working age, 25-44, there is no evidence of systematic influences on the participation rate, which has remained in a narrow range between 92.3 and 94.8 per cent.

These results do not indicate the existence of a significant level of labour market

⁷The numbers in receipt of a state Invalidity Pension increased from 20,849 in 1983 to 40,226 in 1994, while the numbers on the pre-retirement schemes introduced in 1990 had reached 18,000 by 1996.

discouragement in the guise of cyclical variations in the participation rate, but the sharp fall in the participation rate among younger men should be borne in mind in assessing the unemployment rate in this age group.

In Figure 9 we show the ILO unemployment rate for married and single males.⁸ The cyclicity of the rate for single men is higher than that for married men, and there is a much more pronounced downward trend in the latter. In 1988 the ratio of the single to married unemployment rate was 1.4:1, by 1996 it had risen to 1.85:1. The reasons for the relative increase in the unemployment rate among single men merits further research⁹. Changes in the population structure may be relevant. The ratio of single to married men aged 20-39 rose from 0.9:1 to 1.4:1 over this period. As marriage became a rarer status it may also have become more selective of characteristics favourable to good labour market outcomes.

In view of the likely greater element of voluntary unemployment among unmarried males, the rate among married males is of particular significance as an indicator of labour market conditions. This had fallen to 8.7 per cent in 1996, indicating that labour market conditions are now much tighter than is suggested by the overall unemployment rate of 11.9 per cent.

Discouragement and disguised unemployment

We have drawn attention to the existence of a certain number of men who are not economically active according to ILO definitions but who none the less have some attachment to the labour force and may regard themselves as "unemployed". In this section we explore the reported job search behaviour and some of the characteristics of those in this situation and use these to gauge the extent of the phenomenon of hidden unemployment.

In Table 3 we investigate the level of interest in employment among men of prime working age who are classified as ILO inactive in 1993. Only a relatively small minority (13.3

⁸These cannot be calculated for years before 1988 from published data.

⁹In our study of the factors affecting participation and unemployment based on the 1993 LFS returns, we found that single men had worse outcomes, *ceteris paribus*, than married men (Murphy and Walsh, 1996).

per cent) of those the inactive were looking for work¹⁰, and of these a sizeable minority (38.3 per cent) stated that they could not take up work within two weeks (predominantly because of educational commitments). Thus only 8.2 per cent of inactive males could be classified as unemployed in the sense of passively seeking work and available for work.

The label "discouraged workers" could be applied to ILO inactive males who state that they are interested in employment, even if not currently seeking a job. The LFS asks all of those not looking for work whether they "want a job". A minority (21.9 per cent) of inactive males answered "yes" to this question. Not all of these should be regarded as discouraged workers, however, because some gave reasons such as "in school" or "retired" for not seeking work. We have treated as discouraged workers only those who wanted a job and said they were not looking for work for one of the following reasons:

- "lack education/skill/experience",
- "too young",
- "could not find any work", and
- "believe no work available"

The numbers in these categories constitute 4.9 per cent of ILO inactive males. If this 4.9 per cent of discouraged workers is added to the 8.2 per cent interested in and passively seeking work, we obtain a total of 13.1 per cent of the inactive aged males aged 20-59 who might be classified as in some sense unemployed. Treating those in these categories as "unemployed" raises the rate of unemployment, but not very significantly¹¹. In 1993 the conventional ILO unemployment rate among males aged 20-29 was 15.3 per cent; if the individuals defined as discouraged workers in Table 3 are added to the numerator and denominator, the unemployment rate rises to 16.8 per cent. This shows that despite the growing proportion of inactive men in the prime working age groups the extent of disguised unemployment and discouragement appears to be relatively minor.

¹⁰They were not, however, "actively" seeking work, which is the reason they were not classified as unemployed. This means that they did not indicate the use of any of the thirteen possible methods of job search specified in the LFS prompt.

¹¹If we let E = employed, U = unemployed and D = discouraged workers, the conventional unemployment rate is $U/(U+E)$ and the broader measure is $(U+D)/(U+E+D)$.

We have examined some of the characteristics of those falling into the discouraged worker/disguised unemployment categories in 1993 (Table 4). Those in these categories were less well educated than the total population of males of prime working age. On the other hand, those in the first category (not seeking work for reasons of discouragement) were markedly older than both those in the second category (passively looking for work), and than the population as a whole. Those in the second category were less likely to be married. Thus a picture emerges of two fairly distinct types of discouraged workers - one comprised of somewhat older, poorly educated men who have given up working due to the belief that there are no jobs, presumably suitable, available - or none for which they are qualified - and a second group consisting of younger men, also relatively poorly educated - having regard to their age - who are not actively seeking work, but are interested in a job.

It is possible to use the published LFS data and that contained in Garvey (1988) to study the relationship between an inclusive measure of unemployment with the conventional rate over the period 1983-96. In the published LFS results the ILO inactive population is broken down into those who are "marginally attached to the labour force" and "others economically inactive". The following sub-categories, which are similar to those we have discussed above, are classified as marginally attached to the labour force in the LFS:

- Discouraged workers (not looking for work due to pessimism about employment prospects)
- Those passively seeking, and available for, work.¹²

The effect of amplifying the definition of unemployment by treating these categories as unemployed rather than inactive is to raise the unemployment rate by about 8 per cent in 1996 - from 11.9 to 12.9 per cent. Figure 10 shows how the broad and narrow unemployment rates have varied since 1983. It is clear that the same cyclical pattern is present in both series, but there has been a tendency for the gap between them to widen. To establish the relationship between the two rates more precisely we have regressed the log of the inclusive unemployment rate (y) on the log of the conventional unemployment rate (x) and a time trend, for the period 1983-96, with the following result:

¹²A small number on lay-offs, who are not looking for work, are also included in this category.

$$\hat{y} = 0.2 + 0.97x + 0.0037Time \quad \bar{R}^2 = 0.96 \quad D.W. = 1.62$$

(1.0) (17.4) (2.5)

The elasticity of the inclusive rate with respect to the conventional rate is not significantly different from unity, indicating that the two measures share the same cyclical pattern. The trend variable is statistically significant, however, indicating that the rate of marginal attachment to the labour force has been increasing over time, independently of the rate of unemployment as conventionally measured. This is an important finding, indicating a deterioration in the labour market situation not revealed in the conventional measure of male unemployment. None the less, the general conclusion is still valid that the rate of "hidden unemployment", although rising, is not very large among Irish men.

Conclusion

In this chapter we have reviewed the evidence on the level and trend in male unemployment in Ireland since 1983. We showed that the various measures of the unemployment rate that are available - the PES and ILO definitions, and the rate excluding and including those "marginally attached to the labour force" - all display the same general pattern over time. While there is no major discrepancy between these alternative indices of unemployment, the conventional ILO rate is lower than PES rate or the rate which treats men who are marginally attached to the labour force as unemployed. The relative importance of those excluded from the conventional measure of unemployment has been increasing over time. We believe that it makes sense to view the various measures of unemployment as locating individuals on a continuum depending their attachment to the labour force and the intensity of their job search activity.

The non-employment rate provides a comprehensive measure of the gap between the numbers at work and the total in each demographic group. While the unemployment rate has not drifted upward since 1983, the non-employment rate has shown a positive trend due to the downward trend in labour force participation rates. In the younger age groups there has been a big increase in the proportions staying on in the educational system, while among older men early retirement has become increasingly common. It is striking that after age 50 the majority of non-employed men are not unemployed but either retired, disabled, or permanently ill. The numbers in these categories have been on a long-run upward trend, but do not appear to

be cyclically sensitive.

We looked at the characteristics of those who could be classified as constituting the "hidden unemployed" - the men who although not actively seeking work were either passively interested in employment or had given up looking for work because they believed they would not obtain an offer of employment. We showed that there are two distinct groups among the hidden unemployed - one comprised of older men who had given up looking for work because they believed they would not get an offer of a suitable job, the other comprised of younger men who had not yet started seriously to look for a job. Both sub-categories shared many of the characteristics of those who are unemployed according to conventional definitions, in particular low educational levels.

The performance of the Irish labour market in recent years has been impressive. Employment has grown at an unprecedented rate. While women have benefited disproportionately from this boom, there has also been a marked improvement in male labour market indicators, especially since 1993. The rate of unemployment among married men had fallen to 8.7 per cent by 1996. Among older men, however, there has been little decline in either the unemployment or the non-employment rate - the latter has remained close to 30 per cent since the 1980s. The majority of older men who were not working are retired or permanently ill, rather than unemployed.

It is likely that the options of early retirement and/or permanent invalidity will grow in importance relative to overt unemployment among older men. The state benefit system has encouraged those on unemployment benefits or assistance to switch to various pre-retirement schemes. For those with poor educational qualifications these options are likely to be more attractive than remaining in long-term unemployment with little chance of obtaining a job that would significantly increase disposable income. While these inactive men constitute a growing number of workless people dependent mainly on state transfer payments, and enjoying only a modest standard of living, their significance for the measurement of labour market slack is probably not very great. It is unlikely that a significant proportion of them would be drawn back into the employed labour force even under the most favourable economic conditions.

It may be concluded that the rise of non-employment among older Irish men is mainly a reflection of long-run structural changes in the economy and society rather than an indication of an increase in the macroeconomic output gap. While the increasing tendency for men to drop out of the labour force before the normal retirement age poses important social and human questions, its economic significance is limited by their lack of skills and weak motivation to seek employment.

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Table 1 Labour market indicators, males aged 25-54, OECD countries, 1994

	Labour force participation rate	Employment rate	Unemployment rate	Non-employment rate
Japan	97.5	95.5	2.0	4.5
Luxembourg	94.9	92.6	2.5	7.4
Greece	94.5	90.0	4.8	10.0
Portugal	93.6	89.1	4.8	10.9
Netherlands	92.6	87.4	5.6	12.6
US	91.7	87.2	4.9	12.8
Norway	90.6	86.3	4.7	13.7
Belgium	92.1	86.2	6.4	13.8
France	95.1	85.9	9.7	14.1
New Zealand	92.3	85.9	7.0	14.1
Denmark	91.9	85.7	6.7	14.3
Australia	91.4	84.5	7.5	15.5
UK	93.0	83.9	9.8	16.1
Germany	89.2	83.0	6.9	17.0
Sweden	89.8	82.8	7.9	17.2
Canada	91.4	82.7	9.5	17.3
Italy	87.0	81.8	6.0	18.2
Ireland	90.8	77.7	14.4	22.3
Spain	92.9	77.6	16.4	22.4
Finland	90.9	75.1	17.4	24.9

Source: OECD, *Employment Outlook*, July 1996, Tables 4.1, 4.2, and 4.3.

Note: The employment rate and the non-employment rate can be derived from the unemployment rate and the labour force participation rate. If E = employment, P = population, and U = unemployment, $E/P = (1 - U/(U+E)) \times (U+E)/P$, that is, the employment rate equals 1 minus the unemployment rate times the participation rate.

Table 2 Regression of labour force participation rate (y) on unemployment rate (x) and trend, log linear specification, 1983-96 (absolute t-ratios in parentheses)

(absolute t-ratios in parentheses)						
Males aged:	Estimated coefficients:				$\bar{R}^2$	D.W.
	<i>Intercept</i>	<i>x</i>	<i>Trend</i>	<i>Trend squared</i>		
15-24	4.14 (77.8)	0.0214 (0.64)	- 0.0341 (9.1)	0.00067 (2.7)	0.985	1.78
25-44	4.54 (63.9)	0.0005 (0.8)	0.0012 (0.5)	- 0.00014 (0.8)	0.10	1.30
45-64	4.40 (71.4)	0.0160 (0.6)	- 0.0148 (5.3)	0.00063 (3.5)	0.91	2.25

Note: Unemployment and labour force participation rates on ILO definitions.

Table 3 Attachment to labour force of ILO inactive males aged 20-59

Looking for job?			
Yes = 13.3%		No = 86.7%	
Could start within two weeks?		Want a job?	
Yes = 61.7%	No = 38.3% (of which Must complete education = 67.8%)	Yes = 21.9% of which Discouraged = 26.4%	No = 78.1%

Note: "Discouraged" equals not looking for work for one of the following reasons: "lack of education/skill/experience", "too young", "could not find any work", or "believe no work available".

Table 4 Characteristics of Discouraged Workers.
(percentage distribution)

	Males aged 20-59	Discouraged Workers I*	Discouraged Workers II**
Age			
20 - 24	15.8	10.5	18.7
25 - 29	12.4	9.6	10.0
30 - 34	14.0	7.9	13.2
35 - 39	14.1	13.2	15.6
40 - 44	13.7	16.7	14.5
45 - 49	11.9	11.8	13.2
50 - 54	10.2	14.5	8.2
55 - 59	8.0	15.8	6.6
Education			
No formal education	0.6	5.7	1.6%
Primary	24.7	66.7	52.8
Inter/Group	28.7	19.3	28.2
Leaving	26.6	5.7	12.1
3rd Level Non Univ	9.2	1.8	2.1
3rd Level University	8.3	0.9	2.4
Higher Degree	1.8	0.0	0.5
Marital status			
Single	35.6	34.6	44.1
Married	61.5	58.8	51.7
Divorced	0.9	1.8	0.8
Widowed	2.1	4.8	3.4

* Prime aged males categorized as ILO inactive, wanting to work but not looking due to discouragement as defined in Table 3.

** Prime aged males categorized as ILO inactive, looking for work and able to commence within 2 weeks.

Figure 1
Scatterplot of labour force participation and unemployment rates, males aged 25-54, OECD countries

Figure 2
Unemployment rate, males

Figure 3
Non-employment rate, males aged 15-64

Figure 4
Youth unemployment rates as percentage of adult rates,
OECD, 1994

Figure 5
Male unemployment rate by age group, 1993

Figure 6
Male non-employment rate by age group, 1993

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Figure 7
Non-employed males by age group, 1993
(excluding students)

Figure 8.a
Unemployment and non-employment rates,
males aged 15-24

Figure 8.b
Unemployment and non-employment rates,
males aged 25-44

Figure 8.c
Unemployment and non-employment rates,
males aged 45-64

Figure 9
Unemployment rate by marital status, males

Figure 10
Male unemployment rate
Including and excluding marginally attached workers

Data Appendix

Male unemployment rates (%)

Age group:	PES		ILO				Single	Married
	15-64	15-64	15-64	15-24	25-44	45-64		
		excl.	incl.					
		marginally attached						
1983	15.3	13.3	14.0	22.1	12.9	8.1	n.a.	n.a.
1984	17.0	15.0	15.7	24.8	14.3	9.9	n.a.	n.a.
1985	18.8	16.1	17.3	24.8	15.8	11.2	n.a.	n.a.
1986	19.0	16.4	17.5	28.3	15.4	10.7	n.a.	n.a.
1987	19.3	16.6	17.6	27.2	15.3	11.1	n.a.	n.a.
1988	18.6	15.9	17.1	26.0	15.3	11.5	19.2	13.8
1989	17.6	14.8	16.1	22.5	14.8	11.1	17.4	13.0
1990	15.2	12.7	14.0	19.9	12.3	9.6	15.7	10.7
1991	17.3	14.2	15.6	23.3	13.9	10.1	18.3	11.4
1992	18.1	15.2	16.8	24.9	15.1	10.7	20.2	11.9
1993	18.7	15.6	17.3	27.0	15.3	10.9	21.6	11.7
1994	17.7	14.7	16.2	25.4	14.0	10.8	19.5	11.3
1995	15.4	12.1	13.7	20.5	11.6	9.2	16.4	9.1
1996	14.7	11.9	12.9	19.3	11.3	9.6	16.1	8.7

Source: Labour Force Surveys, 1987-96 and Garvey (1988).

**Male labour force
participation rates
(ILO)**

Age group	15-24	25-44	45-64
1983	64.0	92.3	82.8
1984	62.6	93.9	83.0
1985	61.7	94.8	80.6
1986	60.2	93.9	79.5
1987	58.1	93.5	79.7
1988	56.0	93.8	79.6
1989	53.6	93.7	78.1
1990	53.4	93.5	77.5
1991	52.3	93.5	78.4
1992	50.6	92.5	77.5
1993	49.7	92.3	77.6
1994	48.8	92.7	77.7
1995	49.1	92.4	77.0
1996	47.1	93.3	77.3

Source: Labour Force Surveys, 1987-96 and Garvey (1988).

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