

# BULLETIN

## Measuring Unemployment

### Introduction

Unemployment remains at the top of the policy agenda in the UK and across Europe. Mass unemployment represents an enormous economic and social cost, it is a major cause of low income and is an important factor in fuelling inequality. A wide variety of labour market programmes and changes in social security systems have been introduced in attempts to deal with unemployment and to integrate the unemployed into the world of work.

Hence it is unsurprising that the unemployment rate is one of the most widely quoted economic and social indicators - at international, national, regional and local levels. It is used both as an indicator of labour market imbalance and of deprivation, and as a device for ranking areas for policy assistance. Yet the task of defining and measuring unemployment in a clear and unambiguous fashion is a problematic one.

This *Bulletin* outlines some of the results from recent research<sup>1</sup> conducted at the IER on alternative measures of employment and non-employment, focusing on how a suite of alternative measures of unemployment is necessary to capture the new reality of non-participation in a changing labour market.

### Conceptual issues in measuring unemployment

In labour market terms the adult population is conventionally divided into three main categories:

- the *employed* – those who either have a paid job (of at least one hour's duration a week) – in an employee or self-employed capacity, or are on government-supported training and employment programmes, or are unpaid family workers;

- the *unemployed* – those who do not have a job but have actively sought work in the last four weeks and are available to take up a job within two weeks (i.e. the 'ILO definition' of unemployment);
- the economically *inactive*: remaining members of the population.

### Key labour market developments

Over recent years there have been a number of important changes in the UK labour market, which have prompted some users of labour market statistics to question the applicability of conventional approaches to measuring employment, unemployment and inactivity. These developments include:

- a reduction in the number of jobs in manufacturing and a growth in employment in services;
- falling demand for traditional skilled manual labour – predominantly men;
- a greater premium on higher level skills/qualifications, and a decline in employment opportunities for those with no or few formal qualifications;
- a growth in 'flexible' working – notably part-time, but also temporary, jobs;
- an increase in the number of women in employment - with more married women seeking employment, and taking shorter breaks for child-birth/-rearing ;

and

- the entrenchment of high levels of unemployment and non-employment – particularly amongst some sub-groups of the population and in some areas.

## The blurring of conventional distinctions

An important outcome of these labour market developments is a greater variety of patterns of work and non-work. A smaller proportion of working age adults are in traditional full-time jobs, and more have discontinuous employment patterns.

As a result, the conventional distinctions between *employment*, *unemployment* and *inactivity* have become blurred. This new reality has been characterised as 'fuzzy', 'complex' and 'fluid'; such that all kinds of grey areas exist on the fringes of employment, unemployment and inactivity as conventionally defined.<sup>2</sup>

## Practical issues in measuring unemployment

In the light of the blurring of conventional distinctions as a result of ongoing labour market developments, particular concerns have been levelled about the validity of *unemployment* statistics and the applicability of conventional approaches to measuring unemployment. In the mid 1990s these concerns prompted a review by the Royal Statistical Society of the measurement of unemployment, and a House of Commons Employment Committee inquiry into unemployment and employment statistics.

These reviews encompassed three main debates, focusing on data sources, issues of definition and issues of interpretation.

### Data sources

'Official' unemployment statistics in Great Britain are derived from one of two main series:

- the claimant count (CC) unemployment series;
- the Labour Force Survey (LFS).

A third important source used for analysis at the *micro area* level (which falls outside the scope of this *Bulletin*) is:

- the Census of Population.

These data sources differ in terms of:

- ◇ *coverage* – the CC series covers all claimant unemployed, while the LFS is a sample survey;
- ◇ *scope and basis of the definition* of unemployment adopted – the CC series is sensitive to benefit regulations because it is a by-product of an administrative system, whereas it is possible to derive the ILO definition of unemployment from the LFS;
- ◇ *frequency* – the CC series provides a monthly count, and the LFS a quarterly count;

- ◇ *geographical disaggregation* – the CC series may be disaggregated to smaller geographical areas (e.g. wards, postcode sectors) than the LFS.

There has been considerable debate about the relative merits of the claimant and survey figures.

### Issues of definition

As highlighted above, the scope of the definition of unemployment adopted varies between sources. Those recorded as unemployed in the claimant count and the LFS are distinct but overlapping groups of the population. Hence, estimates of the numbers and composition of the unemployed vary according to the scope of the definition applied.

Much of the debate regarding definitional issues has centred on the classification of borderline cases, thus shifting the focus of attention beyond who *is* counted as unemployed to who *should be* counted as unemployed.

### Issues of interpretation

Despite the use of unemployment as both an economic and a social indicator, the foremost use of the unemployment rate is as an indicator of the overall labour market situation.

Nevertheless, it has become increasingly apparent to a larger number of users of, and commentators on, labour market statistics that there is no straightforward one-to-one relationship between unemployment change and job losses (or gains). Rather, interactions between labour supply and demand are such that in the face of employment loss in a particular local area there may be:

- a decline in the number of people seeking work (i.e. a rise in inactivity); and/or
- an increase in the numbers of people commuting to jobs in other local areas; and/or
- net out-migration of people to other local areas;

as well as

- an increase in unemployment.

The processes of labour market adjustment are various and complex, and the conventional unemployment rate may measure only 'the tip of the iceberg' of joblessness.

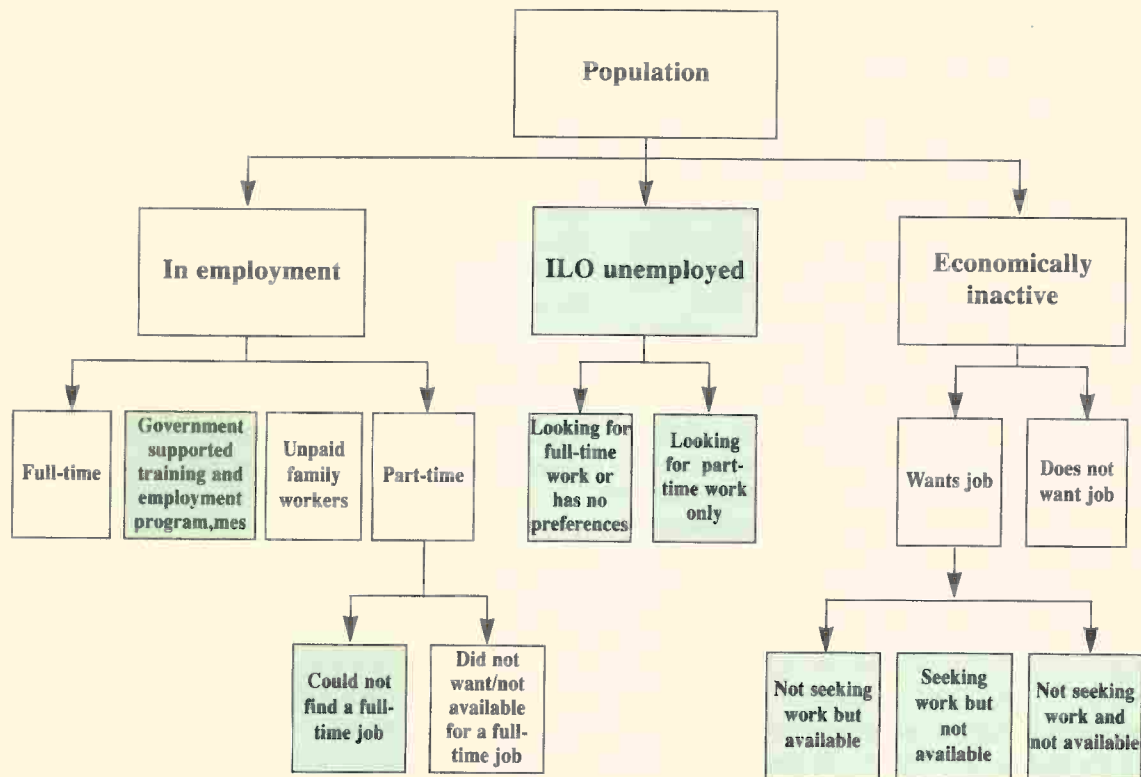
## Creating alternative measures

In order to gain more insights into the complexity of the labour market and the extent of joblessness it is necessary to use a wider range of statistics to measure unemployment and non-employment.

As a first step towards developing a wider range of statistics to measure unemployment, the three main labour market categories can be further disaggregated. For example, a distinction may be made between those *in employment* working full-time and those working on a *part-time* basis. In turn, those working part-time may be sub-divided into those who could not find a full-time job, and those who did not want or who were unavailable to work full-time. Similar distinctions could be made between

permanent and non-permanent working arrangements. An obvious way to subdivide the *unemployed* category is according to the duration of unemployment. Further distinctions may be based on the type of work sought. Within the economically *inactive* category many different reasons for inactivity may be distinguished, but perhaps the most important is between those who want a job and those who do not want a job. Some of these key disaggregations are illustrated in Figure 1.

**Figure 1: Conventional categorisation of employment, unemployment and inactivity**



**Table 1: Alternative indicators of unemployment and non-employment**

Indicator	Definition
U1	ILO unemployed
U2	U1 + those employed on government-supported education and training programmes
U3	U2 + those inactive who want a job but are not seeking work because they believe no jobs are available*
U4	U3 + those inactive who want a job and are not seeking work** but available
U5	U4 + those inactive who want a job and seeking work but not available
U6	U2 + all those inactive who want a job
U7	U6 + those part-timers who could not find a full-time job
U8	U1 + all inactive

\* Discouraged workers; (these are a subset of those who are inactive and want a job).

\*\* For whatever reason – not just those who are discouraged workers.

By aggregating together various sub-categories it is possible to generate a suite of alternative indicators of employment, unemployment and inactivity. The US Bureau of Labor Statistics publishes six alternative measures of unemployment – ranging from those unemployed for 15 weeks or longer as a percentage of the civilian labour force (*U1* – the ‘narrowest’ measure) to the total unemployed plus all those who want and are available for work but who are not currently looking for work *plus* all people employed part-time for economic reasons (*U6* – the ‘broadest’ measure). So, as well as the *unemployed*, the broadest measure includes some individuals who in a conventional categorisation would be included as *inactive* and some who would be included as *employed*.

In the UK context the Employment Policy Institute has published alternative indicators of unemployment at the individual and household levels, while at the IER LFS data has been used to operationalise alternative indicators of labour reserve at regional level<sup>3</sup> (see Table 1). The list of indicators *U1-U7* in Table 1 is not intended to be definitive or exhaustive; rather it is illustrative of the range of possible indicators that can be operationalised. Indeed, the ILO unemployment rate (*U1*) is the ‘narrowest’ measure included in the list, while one of the ‘broadest’ measures (*U7*) incorporates the inactive who want a job and those individuals working part-time who could not find a full-time job, in addition to the ILO unemployed; (i.e. all those in the sub-categories shaded in Figure 1). The ‘broadest’ measure (*U8*) encompasses all of the *non-employed* (i.e. the inactive plus the unemployed).

### The geography of unemployment and non-employment

Analyses of alternative measures of unemployment and non-employment at the regional level in the UK show that use of a conventional unemployment rate tends to understate the extent of non-employment amongst adults of working age to the greatest degree in the traditional ‘high unemployment’ regions – such as the Northern region, Scotland, Wales and the North West. Furthermore, complementary analyses of a wider range of data on labour market participation reveals that the broad regional geography of unemployment and non-employment is reinforced by a similar geography of under-employment and insecure employment.

Similar analyses have also been conducted across member states of the European Union at the NUTS 1 level of regional disaggregation using data from the European LFS.<sup>4</sup> There are difficulties in making international comparisons due to differences between countries in employment structures, social welfare regimes and the character and extent of labour market policies. Nevertheless, the unemployment rate is

widely used as an indicator in the allocation of EU funds. In this regard it is salient to note that the UK regions – along with those in the Netherlands and Italy – are amongst those where ILO unemployment understates ‘broader unemployment’ (defined in this instance as the unemployed *plus* those inactive who would like or are seeking or are available for work) to the greatest degree.

### Conclusions

Labour market developments have led to a more complex situation in which there is greater ambiguity about what constitutes *employment*, *unemployment* and *inactivity*. The boundaries between these main categories have become increasingly fuzzy, and the conventional unemployment rate provides only a partial picture of joblessness.

In order to gain a more complete picture of joblessness/ labour market slack/labour market attachment, etc., there is a case for a wider range of indicators than those conventionally used. This might involve developing suites of alternative ‘narrower’ and ‘broader’ indicators to provide insights into the severity and extensiveness of particular labour market situations across the spectrum from ‘complete employment’ to ‘complete non-employment’. A greater range of (non)participation statistics may help clarify the understanding and interpretation of labour market developments amongst labour market analysts.

### Notes

1. This Bulletin summarises some of the results from a research project on ‘Alternative Measures of Employment and Non-Employment’ funded by the ESRC (Award No. R000236608), undertaken by Anne Green and Terence Hogarth. It also draws on related research on inter- and intra-urban variations in unemployment and non-employment funded by the Joseph Rowntree Foundation, and on studies of international labour market structures funded by the Department for Education and Employment.
2. Green A.E. (1997) ‘Exclusion, unemployment and non-employment’, *Regional Studies* 31, 505-20.
3. Green A.E. and Hasluck C. (1998, in press) ‘(Non)-Participation in the labour market: alternative indicators and estimates of labour reserve in UK regions’, *Environment and Planning A*.
4. Green A. E. (1997) ‘Unemployment and non-employment in Europe: insights using alternative measures’, Paper presented at the EURRN Conference, Frankfurt Oder, Germany, September.