## The Production and Presentation of Statistics of Unemployment. Comparability Issues.

#### Abstract

The United Nations publishes unemployment statistics for 123 countries. Most of these statistics are based on International Labour Office (ILO) criteria for the definition of unemployment. Many countries also produce unemployment statistics based on insurance records and on the basis of registered unemployment.

This paper aims to compare the main features of the different methods. The dimensions compared include the conceptual basis for the definition of unemployment, boundaries of employment and inactivity, entry statistics and duration of unemployment, use of denominators for production of unemployment rates, and the cultural influence of the statistics.

The paper identifies conflicts between achieving international comparability and national needs. Survey statistics that underpin international comparisons do not support geographically detailed analysis within countries. The value of unemployment statistics based on ILO criteria is limited by a failure to recognise the concept of entry to unemployment and the difficulties of integration with administrative unemployment statistics. The standard labour force survey (LFS) questionnaire should be modified to support the production of statistics for entrants to unemployment. The sampling frame should be modified to ensure consistency with nationally produced unemployment statistics derived from administrative records.

#### Introduction – Three Conceptual Bases of Unemployment Statistics

Three types of systems – insured unemployment, registered unemployment, and unemployment measured by sample social surveys – provide the basis for most unemployment statistics. The first statistical series started in 1886 when the Board of Trade asked the trade unions to provide monthly statistics of the number of their members who were not in employment (Garside, 1980). This series led to the idea of insured unemployment. The UK and many other countries have offices that help people find work or pay benefits to those without work. Such systems provided the basis for statistics of registered unemployment. In the United States, concern about mass unemployment in the

by John Adams, Hasan Al-Madfai, and Ray Thomas <sup>1</sup> 1930s led the government to develop household surveys in order to measure the extent of unemployment (see Anderson, 1988).

The International Labour Office (ILO) gives details of registered unemployment systems for 75 countries (see http://laborsta.ilo.org/). Nearly all the countries of Eastern and Western Europe have

insurance and/or registered unemployment systems. The US uses insurance based statistics to help make unemployment estimates at sub-national levels (see Section 5 below). But the system that has increasingly dominated in recent decades is the sample survey.

Since 1948 the monthly Current Population Survey (CPS) has been the dominant method of measuring unemployment in the US The main focus of the CPS is employment and unemployment, and nowadays the CPS would be described as a labour force survey. The CPS defines unemployment in terms of the numbers seeking work. In the 1980s, when the time came for an international standard, the CPS provided a model. The 13th International Conference of Labour Statisticians in 1982 adopted the seeking-work criterion of the CPS presumably because it could be applied in any country independently of any existing national systems for dealing with unemployment. ILO criteria for conduct of labour force surveys and the definition of unemployment (Hussmans et al., 1990) count the numbers seeking work in almost exactly the same way as the CPS. The ILO provides details of labour force surveys conducted in 109 countries.

The standard labour force survey (LFS) does not use the word unemployment. The crucial question in the UK LFS, for example, is "Thinking of the 4 weeks ending on Sunday. Were you looking for any kind of paid work at any time in those four weeks?" By avoiding the term unemployment, the ILO criteria aim to produce statistics that are independent of national insurance and other systems that give benefits to the unemployed and therefore use the term 'unemployment' in a variety of different contexts. But this pursuit of independence makes comparison with other datasets difficult or impossible. ILO unemployment statistics for the UK, for example, are not comparable to UK claimant unemployment statistics. The next section of the paper discusses the categorisation of unemployment – the boundaries between employment and unemployment, and between unemployment and inactivity. Section 3 focuses on entry to unemployment – important because entry to unemployment is not recognised by labour force measures of unemployment, but is demonstrably important in developing policies that go beyond seeing exits from unemployment as the exclusive solution to unemployment problems.

The choice of denominators is a key theme of sections 4, 5, and 6. Sections 4 and 6 refer to problems with the conventional economically-active-population denominators for measurement of unemployment rates at the national and local levels, and the main population alternatives. Section 5 identifies a flaw in the use of current level of unemployment as a denominator in the usual measure of long-term unemployment and introduces the idea of population at risk denominators as a superior alternative. Section 6 discusses problems associated with measuring unemployment on a local scale and Section 7 points to the increasing need for such measures.

Section 8 points out that the seeking-work criterion of the ILO definition of unemployment conditions users of unemployment statistics to view unemployment as a matter that belongs exclusively to the unemployed, although this runs against many cultural traditions. The section suggests modification of the ILO criteria for the definition of unemployment and modification of labour force survey sampling methods in ways that would add value to unemployment statistics at local and national levels without reducing international comparability.

## **Fixing the Boundaries**

The definition of what is considered as employment is generous both in the CPS and the standard LFS. The crucial question in the CPS questionnaire is 'LAST WEEK, did you do ANY work for pay or profit?' (http://www.bls. gov/cps/cps htgm.htm). The LFS questionnaire in the UK asks first 'Did you do any paid work in the seven days ending Sunday as an employee or as self-employed?', and later '(In) the seven days ending Sunday, how many hours did you actually work ..?' These questions support the production of statistics of employment as defined by the ILO as paid work of one hour or more per week. The motivation for the generosity of this definition is the wish to link production to total labour input (Hussmanns et al., 1990, p 71), or in other words, to produce statistics of labour productivity in terms of output per person-hour rather than just output per person. It is unlikely that this differentiation is understood or accepted by most survey respondents.

The LFS in the UK, like the CPS, establishes employment with questions that elicit the amount of paid work of more than one hour. But in the 2001 UK census of population respondents were asked if they were in employment. The resulting census statistics gave an employment level of 640 thousand, or 2.5%, below that of the corresponding LFS estimate, and an unemployment level of 204 thousand, or 14%, above the LFS figure (Heap, 2005).

It seems unlikely that the line between employment and unemployment is drawn at this one hour boundary in most systems of insured or registered unemployment statistics. In the UK the rules specify that claimants for unemployment benefits cannot work for more than 16 hours per week. It can be expected that each insurance or registered unemployment system will have individual regulations on the matter.

A similar variety of regulations can be expected to apply at the other boundary. ILO criteria specify that respondents must be seeking work within the reference period. The search period supported by the Organisation for Economic Co-operation and Development (OECD) is four weeks. In the UK both LFS and the census ask about two weeks. Surveys in Japan and Taiwan ask only about one week. Those expecting to take up a specific job can also be classified as unemployed. The CPS in the US includes as unemployed those laid off from employment who are expecting to resume their former work.

ILO criteria specify that respondents must be available to take up work within two weeks in order to be classified as unemployed. But the conditions for eligibility for Job Seekers Allowance (JSA), the name given to claimant unemployment in the UK, is tougher. A number of welfare groups describe JSA as being "about hassling people off the dole into low paid work by making it tougher to sign on" (for example, Urban 75, undated). Being available for work to qualify for JSA means being ready to start permanent or temporary work immediately.

The standard LFS questionnaire supports a major conceptual extension of unemployment by including a question '... Even though you were not looking for work, ... would you like to have a regular paid job at the moment ...?'. This question in the UK LFS is addressed to respondents after they have been identified as economically inactive by questions that have established that they are not classified as in employment nor as unemployed. The question is also part of the standard LFS in Europe. Statistics for the number wanting work but not classified as unemployed are published by Eurostat.

There is a follow-up question on the main reason for not seeking work. In the UK LFS the pre-coded answers are given in this order: student; waiting to take up a job; looking after family; sick; believes no jobs available. The interpretation of statistics resulting from this question may be influenced by the ordering of these pre-codes and the precise instructions given to interviewers. That last pre-code reminds us that the ILO definition is tight in that it excludes respondents who are not looking for work because they believe that no suitable jobs are available. This clash between the logic of the individual and that of the ILO criteria is honoured by describing such respondents as discouraged workers. (Hussmans et al., 1990, p 107-8). Statistics for discouraged workers are published by the OECD (see http://www1.oecd.org/scripts/ cde/-queryScreen.asp?), but are rarely subjected to detailed appraisal. According to the OECD there were more than two million discouraged workers in Japan in 2000.

#### **Entry and Short-duration Unemployment**

Statistics relating to the duration of unemployment commonly include figures for unemployment of up to four weeks. But such figures usually relate to uncompleted spells of unemployment. It does not include completed spells of unemployment of less than four weeks. The distribution by duration is subject to left-hand censoring or truncation.

This limitation is avoidable. It is not, however, avoided by the ILO criteria for labour force surveys, nor by the CPS questionnaire. Questions on unemployment are addressed only to those who are unemployed at the time the survey is conducted. CPS and labour force survey questionnaires establish the number of those who became unemployed during the previous four weeks, but do not include those who became unemployed during the previous four weeks but had exited from unemployment by the date of the survey. The sample is biased against being representative of the whole population of working age. Newly unemployed who have re-entered employment or become economically inactive within four weeks are not included. Kiefer (1998) described the resultant statistics for duration of unemployment as subject to 'length-biased sampling'.

Systems that record entry to unemployment, such as the UK system of claimant unemployment, can be used to produce the numbers exiting before four weeks. The Office for National Statistics (ONS) makes available such statistics extending back to 1983 through the Nomis database. Chart 1 (see pg 14) indicates that monthly exits before four weeks are small relative to the total stock of unemployment but represent a substantial proportion of monthly entrants.

Monthly exits before four weeks show strong seasonal variation, but 12-month moving averages range between 20-30% of entrants. That range is small relative to the variation in levels of unemployment in this period. Cross-section analysis also shows a relatively small variation in exits before four weeks. The coefficient of variation (CoV) among 659 parliamentary constituency areas (PCAs) in 2004 was only 15% compared with the CoV for unemployment rates of 54% (calculations by the authors).

The omission of unemployment of less than four weeks could be considered a matter of poor survey design. We could make an analogy with a hypothetical survey of incidence of the common cold. It is to be expected that a survey of the common cold would ask people when they last suffered from a cold in order to get information relevant to catching a cold. It is unlikely that the survey would be limited to those who had colds on the day the survey was conducted. It is unlikely that respondents would first be asked 'Do you feel healthy?', and if they answered 'Yes', discarded from the sample! But the standard labour force survey creates an analogous situation by addressing questions on unemployment only to those unemployed at the time of the survey.

The omission of unemployment of less than four weeks does not affect statistics for unemployment of more than a month's duration. But the OECD regularly publishes statistics for member countries for the percentage of unemployment of less than a month. The statistics are footnoted with the misleading comment 'These percentages only take into account those persons for whom the duration of unemployment is known'. In fact, LFS duration statistics are based on uncompleted spells of unemployment – the difference between the date previously worked or the date started seeking and the date the survey was conducted. The only statistics of duration collected by the LFS relate to periods longer than the specified period. Exit statistics are necessary to measure known duration and exit statistics by duration are not obtainable from LFS surveys.

Countries with systems of insured and registered unemployment can be expected to have records that support the production of statistics of entry to, and exit from, unemployment. The Bureau of Labor Statistics (BLS) in the US publishes weekly statistics for initial claims and continuing claims for insured unemployment. But the BLS web site does not include any breakdown of continuing claims by duration.

The BLS also produces monthly statistics for mass layoffs. The mass layoff numbers come from establishments which have at least 50 initial claims during a 5-week period. Extended mass layoff statistics, issued quarterly, relate to a subset of such establishments where employers indicate that 50 or more workers were separated from their jobs for at least 31 days.

European countries seem to make little use of administrative data on entry to unemployment. Some implications of the failure to recognise the concept of entry to unemployment can be illustrated with statistics for claimant unemployment in the UK. Chart 2 (see pg 15) illustrates that statistics for the 659 UK parliamentary constituency areas (PCAs) in 2004 show a 90% correlation between entry to unemployment and the unemployment rate. It could be said that the chart only demonstrates







the obvious – that the main cause of unemployment is becoming unemployed – but the scale of geographical variation is remarkable and notable.

Statistics of entry to unemployment have not been widely used in the UK. Over the past decade government labour market policy in the UK has been focused almost exclusively on exits from unemployment. Labour market policy in the UK has been dominated by programmes and slogans such as 'new deal' and 'welfare to work' as if unemployment were solely a matter of the unemployed making themselves employable.

As a result, authorities know little about the causes of unemployment or the factors that are leading to growing inequality in the geographical distribution of unemployment. In light of the large variation between areas, it is not surprising that the emphasis on exits has been associated with an increase in inequality in the geographical distribution of unemployment (Adams and Thomas, 2005).

# Characteristics of the Unemployed and Long-term Unemployment

Labour force surveys can be expected to provide profile information on the unemployed on the same basis as that for the employed so that it is possible to make comparisons between the unemployed and employed population. The CPS questionnaire also includes questions on the previous job, including: 'Did you lose or quit that job, or was it a temporary job that ended?' These questions support the production of statistics on six alternative reasons for unemployment: temporary layoff; permanent job losers; completed temporary jobs; job leavers; re-entrants; and new entrants. But guidelines for the standard LFS do not include questions that would elicit this information.

The information available from administrative systems can be expected to vary according to the nature of the system. The BLS does not publish details on insured unemployment except for those on Federal programmes – presumably because of variations between different state schemes. Claimant unemployment in the UK included occupation until 2000. Although the JSA system appears to require a lot more information from claimants, little gets through to the domain of published statistics.

Labour force surveys and administrative systems produce statistics for duration of unemployment. But there is a flaw in the way those statistics are usually presented – both by national and international organizations. The usual form of publication has been to express the numbers in duration groups as a percentage of total unemployment. The right hand cell in such tables is typically the numbers employed for a year or more as a percentage of all unemployment. That figure has become a standard measure of long-term unemployment. Webster (1996 and 1997) called this measure Long-term Unemployed As a Percentage of Unemployment (LAPU).

LAPU is a misleading measure – especially in time series analysis. Numerator and denominator are incommensurate. The size of the denominator is determined by the number who became unemployed in the previous twelve monthswhich is not directly related to long-term employment. This problem is well recognised by the ILO (see http://www.ilo.org/public/english/employment/strat/ kilm/kilm10.htm) and has been succinctly described in a report of the Royal Statistical Society:

At a time of rising unemployment the number of shortterm unemployed will be increasing, and consequently, the percentage of long-term will be decreasing. This might mistakenly be read as an improving situation. Conversely when unemployment is falling the percentage of long-term unemployment will increase if most of the slack is taken by those recently out of work. (Working Party, 1995, p 387-379)

Use of a population at risk denominator provides a straightforward solution to this problem. In the case of year-or-more unemployment the population at risk (PAR) is the number unemployed a year earlier. The number unemployed a year earlier are all at risk of being unemployed a year later, and no-one not unemployed a year earlier is at risk of being unemployed a year later. But recognition of the problems with LAPU has not prevented a generation of economists from seizing on LAPU statistics to assert that the long-term unemployed have become insulated from the labour market. Stephen Nickell, a member of the Bank of England Monetary Policy Committee, writes:

"long-term unemployed still form a substantial and important group ... this has a significant macroeconomic impact because the long-term unemployed tend to lose skills and motivation as well as being discriminated against by employers. This weakens their attachment to the labour market... They become ineffective in holding down wage inflation and this leads to the impact of adverse shocks to the economy ... (Nickel, 1999, page 23).

Use of a population at risk (PAR) denominator reveals that year-or-more unemployment is actually more sensitive to changes in the state of the labour market than PAR rates for less than year unemployment groups (Adams and Thomas, 2004 and 2005). But Stephen Nickell was misled by LAPU statistics.

Webster (forthcoming) found that LAPU lags total unemployment by six quarters. Chart 3 shows that LAPU statistics lag the PAR rate by up to two years. Chart 3 (see pg 16) demonstrates that the PAR rate for year-or-more unemployment moves parallel to the trend in unemployment for less than a year. The parallelism suggests that levels of less-than-year and year-or-more unemployment are influenced by the same set of factors.

#### **Denominators for Unemployment Rates**

In 1886, when the Board of Trade in the UK asked trade unions for the number of their members who were unemployed they also asked for the total number of members. The number of members provided an obvious denominator to support unemployment rates that could be used to make comparisons over time and between industries. When the UK introduced compulsory unemployment insurance in 1911, the insured population provided an obvious denominator. Nowadays the standard denominator for unemployment rates is the number in employment plus the number unemployed – usually described as the economically active population.

Employment, unemployment, and inactivity are usually thought of as three alternative labour market states. But the use of the economically active population as a denominator for unemployment is not consistent with the way employment, activity, and inactivity rates are usually measured. Employment rates and activity rates are usually expressed as a percentage of the working age population or, of the population in the specific age group under consideration. Use of a common population denominator would support direct comparison of unemployment rates with employment, activity, and inactivity rates.

Use of the number of trade union members as a denominator in the 19th century could be justified on the grounds that it could be assumed that the major flows over time between employment and unemployment were accounted for by trade union members. A recession could be expected to reduce employment and increase unemployment. The ratio of unemployment to employment could be expected to be an appropriately sensitive monitor of changes in labour market conditions over time. But it cannot be so easily assumed in the 21st century that the dominant flows between employment and unemployment are limited to the economically active population. Flows between employment and inactivity, and between unemployment and inactivity, detract from the value of the unemployment rate as an economic indicator.

Not taking economic inactivity into account also limits the value of the conventional unemployment rate for comparisons between different areas, age groups, or social groups. It can be expected, for example, that the scale of unemployment is often correlated with the scale of economic inactivity (for example, Beatty et al., 1997 and 2000). Where this happens comparisons based on the conventional rate could be expected to systematically understate the differences in economic or social conditions in different regions.

A systematic relationship does not preclude a lot of individual variation, and in making comparisons between two particular areas or two particular groups, the conventional unemployment rate can be misleading. There is, for example, wide variation in activity rates for women between different countries, especially in the older age groups. In many cases it would give a false picture to make comparisons of conventional unemployment rates without taking into account the differences in activity rates.

The ILO acknowledges this problem in regard to youth unemployment where there is great variation in the scale of economic inactivity due to variation in the proportion classified as inactive because of training or full-time education and to cultural matters such as social expectations about women working outside the home. The ILO response has been to produce statistics entitled "Youth unemployment, share of youth unemployed to youth population", or in other words, unemployment rates with population denominators – in this case the population aged 15–24 years.

Unemployment rates with population denominators reveal substantial differences between countries. Youth unemployment rates using the conventional economically active denominator are particularly high for a number of East European countries – Bulgaria, Poland, and Slovakia. But the impression given by these statistics is mitigated by expressing unemployment using a population denominator. It might be assumed that a substantial proportion of the youth in these countries are economically inactive because they are investing in human capital by remaining in the educational system.

One of the problems with measuring unemployment rates at a local scale is that statistics for the economically active population are not available; statistics for employment are usually produced only by place of employment. Statistics for residents in employment in local areas are available only from censuses or surveys. The following section discusses the solution adopted for claimant unemployment in the UK since 2003 – to use population of working age (PWA) denominators. There do not appear to have been any disadvantages with unemployment rates measured in this way except for lack of comparability with the conventional rates used at national and regional levels.

## Local Unemployment Statistics

There is no contest at the local level between the quality of survey statistics on one side and insurance or registered unemployment statistics on the other. Sample size limits the accuracy of survey statistics for local areas. But administrative statistics from insurance and registered unemployment systems can be produced on a 100% basis. The United States combines CPS statistics with unemployment insurance statistics to produce unemployment rates for more local areas. The CPS sample is 60,000. According to Local Area Unemployment Statistics (LAUS) as displayed on the BLS website there are 31,792 series to query for. These include series relating to states, counties, parts of cities divided by county boundaries, and minor civil divisions.

The coverage and rules of insurance schemes vary between states. Not all of those who become unemployed are eligible for insurance benefits. Benefits do not usually extend beyond 26 weeks and the average duration is about 16 weeks. The insured unemployment rate is typically about one third of the CPS rate. The Bureau of Labor Statistics, with state authorities, makes estimates of labour force, employment, and unemployment on the basis of the CPS, the Current Employment Survey (CES) and the unemployed insurance statistics.

The scale and sophistication of the estimation processes needed to produce estimates for local areas is formidable and impressive. The CES 'place of work' estimates are adjusted on the basis of commuting data to 'place of residence'. Separate estimates are implied for those who have come to the end of their period of insured unemployment, and for entrants and re-entrants to unemployment who are not covered by the insurance system. There are integral seasonal adjustment programs. The statistics are controlled to state totals.

In the UK, statistics for claimant unemployment for local areas are publicly available in considerable detail through the Nomis database at the University of Durham (http://www.nomisweb.co.uk/). But these statistics are not reconcilable with those for ILO unemployment from the Labour Force Survey (LFS). The LFS includes questions on claimant unemployment. But the grossed up statistics from the LFS are typically about 20% below the level of the administrative count of claimants (Jenkins and Laux, 1999).

The Local Labour Force Survey in the UK has an enhanced sample in low population areas to increase geographical coverage. This supports the production of unemployment statistics based, for example, on parliamentary constituency areas (PCAs) – that have on average a population of working age of 43,000 within a fairly narrow range. But little reliability can be given to most of the unemployment statistics. In 2003 the level of unemployment in 40 PCAs was too low to support any estimate of the annual average, and it was not possible to give any confidence level to the estimate of the unemployment rate for 2003 for more than half of the remaining 600 PCAs.

Statistics for claimant unemployment are produced on a 100% basis from administrative statistics, are available monthly, and are more up-to-date. The LFS, at the time of writing, can only give patchy annual unemployment statistics for PCAs for 2003. The claimant system provides monthly statistics that, at the time of writing, support analysis of the pattern of seasonal variation for individual PCAs in 2004. The PCA showing the greatest seasonal variation in 2004 was Dorset South, on the

south coast, with a coefficient of variation (CoV) of 22%. Unsurprisingly seaside areas show the greatest seasonal variation. Seven PCAs have CoVs of more than 20%. But at the other extreme seven PCAs, all in major cities, have CoVs of less than 2% (calculations by the authors).

Statistics of unemployment in the UK have been available on a place of residence basis since 1983. Their development depended upon the system of postcoding that was completed in 1974 and upon computerisation in the early 1980s of the unemployment statistics based on employment office areas. An account of this development, including explanation of the abandonment of statistics of registered unemployment, is given in Brimmer (1981).

The incompatibility noted between claimant statistics and the LFS does not provide a sound basis for the production of unemployment rates with the conventional economically active population denominator. The statistics of unemployment rates for local areas first published in 2003 and available back to 1996 have, as noted in Section 5, used population of working age (PWA) denominators.

## **Geography and Full Employment**

The concept of full employment as well as the concept of unemployment was more of less invented in Britain. William Beveridge's Full Employment in a Free Society published in 1944 remains the most comprehensive single study of unemployment problems in industrial societies. Beveridge distinguished frictional, structural, and demand deficiency unemployment. Frictional unemployment was conceived as unavoidable unemployment between ending one job and starting another. Frictional unemployment can be assumed to be mostly short-term.

Beveridge would not have been surprised at the small variation in the proportion of exits before four weeks that is revealed by statistics of exits from claimant unemployment. Such short-term unemployment would have been classifiable as frictional unemployment which can be expected to exist independently of the state of the labour market. Frictional unemployment for Beveridge would constitute the minimum level of unemployment achievable. It would set the level of unemployment compatible with full employment.

Beveridge identified demand deficiency and structural unemployment, and noted the difficulty of making the distinction between them. Structural unemployment could be regarded as a form of demand deficiency unemployment. Making the distinction and identifying appropriate remedies depends upon the availability of regional and local statistics.

Several generations of economists have elaborated on the idea of full employment in a theoretical way with concepts such as Non-Accelerating Inflation Rate of Unemployment (NAIRU). The central point is that an optimum level of

full employment is achieved when labour market pressure for higher wages and salaries is not sufficient to lead to runaway inflation. The concept of NAIRU demonstrates that full employment is inseparable from the geographical distribution of unemployment. It cannot be assumed that labour market pressures that lead to wage inflation, or labour market vacuums that lead to unemployment, are likely to occur equally in all labour markets in all parts of a country.

If unemployment is unequally distributed geographically, inflationary labour market pressures will be reached first in areas of low unemployment. Areas of low unemployment will have achieved full employment or over-full employment while other areas continue to suffer from high unemployment. The proper functioning of the labour market as well as the management of the labour market by the government requires statistical information on areas within a country.

ILO/LFS statistics could be said to be adequate at a regional level, but not at local level. Over the past few decades in the UK, for example, there has been persistent growth of inner city unemployment. The main unemployment problem has become intra-regional rather than inter-regional. Survey based statistics, such as those of the LFS, are inadequate for measurement and investigation of the relatively finely-grained variation in unemployment levels now evident in every sizable urban area.

Chart 4 shows the distribution of unemployment in England among PCA areas. The map divides PCAs into quartiles according to the claimant unemployment rate. The lightly dotted PCAs are in the lowest quartile with the lowest unemployment rates. The PCAs coloured black are those in the top quartile with the highest unemployment rates. In between light grey shading denotes PCAs in the second quartile with below average levels of unemployment, and the the dark grey denoted the third quartile with above average levels of unemployment. The map shows that high levels of unemployment are concentrated in urban areas. Every city and major town contains major concentrations of unemployment. With a small number of exceptions there are no major concentrations of unemployment that are not urban areas.

ILO measures of unemployment are inadequate for investigation of such a fine grained geographical distribution. Chart 4 demonstrates the need to combine 'whole population' information from the LFS with administrative data on unemployment, as was used to construct this chart.

## The Cultural Influence

International Labour Office criteria define unemployment in terms of seeking employment. In other words unemployment is a condition found among the population. At first sight that seems unobjectionable. How can anybody be unemployed if they are not looking for employment?

One feature of this definition is that it puts the onus of being unemployed upon the individual. If individuals are unemployed, it is implied, it is their own fault. But the idea that individuals should have the right to work is a component of a number of belief systems. Islam, for example, recognises a right to work. The Cairo Declaration on Human Rights in Islam (1990) states that "Work is a right guaranteed by the State and the Society for each person with capability to work (http://www.humanrights. harvard.edu/documents/regionaldocs/cairo\_dec.htm).

The Catholic church teaches that "The obligation to earn one's bread presumes the right to do so. A society that denies this right cannot be justified, nor can it attain social peace." (Centesimus Annus, 1991, para 43). The former Soviet Union managed to achieve full employment by insisting that everyone should work. The UN-HABITAT Human Settlements Programme has a Charter of Human Rights that specifies that male and female citizens have the right to work through worthy employment with sufficient resources to guarantee the quality of their lives.

The practical consequence of the ILO exclusive emphasis on seeking work is a lack of acknowledgement of factors that contribute to unemployment. Defining unemployment as a condition does not require investigation of cause. The LFS does not, like the CPS, include questions on reasons for unemployment, and does not allow for the production of statistics for entry to unemployment that give indications of cause (see Thomas, 2005, for elaboration).

The easiest reform would be to modify ILO guidelines for the conduct of labour force surveys. Modification would require the inclusion of a question on unemployment addressed to all respondents – not just to those unemployed on the date of the survey. For example, 'Have you been unemployed at any time during the past three months?' or, to more fully comply with other ILO criteria, 'have you been without paid employment and seeking work at any time during the past three months?'.

Such questions would recognise the concept of entry to unemployment and would provide statistics on the number of entrants. A follow-up question on dates of unemployment would support the production of statistics for unemployment in the four weeks prior to the survey date. Statistics for the number of entrants in the previous four weeks would provide support for the production of accurate statistics on duration of unemployment, and so deal with 'length-biased sampling'.

Questions identifying entry could well elicit reasons for unemployment along the lines of the CPS. Data on reasons would allow for better international comparisons and would

Chart 4 Unemployment rates for PCAs in England in 2004



support more comprehensive analysis of time trends in unemployment than is possible with the statistics produced in accordance with current ILO criteria.

ILO/LFS statistics are also of limited value in investigating the geographical distribution of unemployment. The inescapable problem with ILO criteria is that they are based on survey statistics that cannot be expected to provide adequate information on local unemployment. They are difficult to integrate with national statistical systems that have the geographical detail and data on entry.

ILO guidelines for the conduct of labour force surveys followed the pattern set by the US Current Population Survey more than thirty years earlier. It is ironic that nowadays the CPS provides less information on unemployment in the US labour market than do insured unemployed statistics. Weekly statistics on entry to insured unemployment provide information on current trends. Monthly mass layoff statistics provide information on an important cause of unemployment. The Local Area Unemployment Statistics system demonstrates the value of combining administrative systems with survey statistics with the production of statistics that combine information of a few thousand CPS respondents identified as unemployed with statistics for around three million continuing claims for unemployment insurance. But the value of such combining is not expressed in the ILO criteria for the conduct of labour force surveys.

In the case of the UK the nearest equivalent insurance statistics – the claimant statistics – account for a much larger proportion of unemployment (as defined by ILO criteria) than US insured unemployment statistics. But it is known that the UK LFS data does not provide accurate information on claimant unemployment. The production of estimates of ILO unemployment by means of statistical estimates on the lines of the BLS would not be the best solution.

The general solution would be, not for labour force surveys to ignore administrative unemployment systems, but for the standard LFS to embrace administrative unemployment systems. The administrative records of insurance or registrant based unemployment systems could be used as part of the sampling frame for labour force surveys. Weighted sample figures could be grossed up to national totals in accordance with standard statistical practice and there would be no loss of representativeness. The focus on unemployment could be achieved without reducing comparability between LFS statistics for the employed, unemployed, and inactive populations at the national level, and without jeopardising international comparability of statistics relating to any of these categories. The ILO guidelines for the conduct of the standard LFS could be extended to give detailed guidance on the methods that might be followed.

Such a development could be expected to contribute to the quality of unemployment statistics as defined both by ILO criteria and by national administrative systems. Comparison of the survey results for the administrative sample with that of the general population could be expected to yield information that would support the production of estimates of ILO unemployment for local areas that would be of more ascertainable quality than the LAUS estimates in the US. The addition of a range of ILO personal profile variables to administratively defined unemployment statistics could be expected to add significant value to these statistics for national policy and decision making.

## Addendum

Many of the points made in this article are supported by statistical evidence that is included here only in highly summarised form. For a more detailed report see John Adams and Ray Thomas 'Patterns and Trends in Unemployment in Scotland 1985 to 2004' to be published by Scotecon at the Universities of Stirling and Strathclyde. Acknowledgement is made to the Royal Statistical Society for the award of a Campion Fellowship to Ray Thomas that has supported the research for this article. Acknowledgment is made to Scotecon for a grant to John Adams for the 'Patterns and Trends in Unemployment in Scotland 1985 to 2004' study that has also supported the research underlying this article.

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## Endnotes

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