

# **A Critique of the Statistics that Support European Employment Policy**

*Monica Threlfall*

**Presentation to the Royal Statistical Society, 18 November 2002<sup>1</sup>**

## **Introduction<sup>2</sup>**

What I propose to talk about are the problems that arise when policymakers and politicians use statistics to defend government performance, to identify labour market and social problems, and to advocate solutions. I would not be doing this if I had not become convinced that there are some serious flaws in the way policymakers and the public discuss employment and unemployment. These flaws arise because policymakers are led to believe that certain statistical figures should be interpreted in a certain way. Perhaps they expect too much from statistics. Statisticians, for their part, probably believe they are merely responding to government demands in a neutral way. Yet misleading interpretations emerge, solidify into stone, and then become hard to dislodge.

Still, I am going to have a go, taking a crowbar to prise apart and deconstruct at least part of the existing edifice. I hope that I shall be able to put the pieces back together again.

Policymakers need an accurate understanding of what is going on in the world of work. For this, as Dr Catherine Hakim argued just 2 years ago here at the Royal Statistical Society with reference to women's

---

<sup>1</sup> This talk uses some of the data and arguments discussed in three articles and a conference paper: (2000) 'European employment: a new approach to analysing trends', *European Journal of Social Quality*, Vol. 2, Issue 2, pp.13-50; (2000) 'Comparing Unemployment in the UK and the European Union: a Gender and Working Time Analysis', *Policy and Politics*, Vol.28(3), pp 309-329; an edited French version (2000) 'Comparer le chômage au Royaume Uni et dans l'UE: une analyse du genre et du temps de travail', *Recherches Sociologiques*, Vol. XXXI (2), pp.61-85; 'The European Employment Strategy: Towards an All-working Society?', paper presented to the European Consortium for Political Research, Pan-European Conference on European Integration, Bordeaux, 26-28 September 2002.

<sup>2</sup> I would like to thank the Royal Statistical Society of for their invitation to address this meeting, and would especially like to express my gratitude to Professor Ray Thomas for his unstinting interest in my research and for encouraging me to talk to specialists such as the members of the RSS.

employment and particularly to part-time work, ‘new kinds of statistics are needed in order to understand current labour market and social trends’. I will therefore set out the problems that I perceive are inherent to common presentations of labour market statistics, and then offer alternatives. My overall aim is to reconcile the researchers’ and policymakers’ need for significant indicators for social and policy analysis, with the available statistical pictures so as to support more accurate interpretations that will allow for better informed policy decisions.

## **The unemployment rate problem**

Let me start with the unemployment rate, since this was my starting point too. I must say at this point that I am not a statistician, but am trained in political science. While researching the European Union’s policies in the field of working conditions, equal treatment and employment strategies during the mid-1990s, I followed the political debate about the causes and remedies for unemployment, and was struck by the political competition between member-states about whose social and labour market model was best at creating jobs and keeping unemployment low. At the time, the British government and the CBI were prone to claims that the UK labour market was performing better than the European average and better than Germany. There were some fairly hubristic media messages portraying Britain as a titan towering over stricken European economies.

**Table 1 Youth unemployment in France and Britain**

<b>1996</b>	<b>FRANCE</b>	<b>BRITAIN</b>
1) ILO Unemployment rate, aged 15-24, /labour force	28%	15%
2) No. aged 15-24 unemployed	712,000	681,000
3) Total No. aged 15-24 in population	7,340,000	7,090,000
4) % unemployed over population aged 15-24	9.70%	9.60%
<b>REASON FOR UNEMPLOYMENT RATE DIFFERENCES</b>		
5) Labour market participation rate of 15-24 age group	35.20%	64.50%
6) No. in education aged 15-24	4,450,000	2,520,000
7) No. in employment aged 15-24	1,873,000	3,889,000

Source: Eurostat, EULFS results 1996, Luxembourg; OOEPC, 1997, various tables.

Studying the European Labour Force Survey Results for 1996, I came across this quite stark, yet quite unexceptional example of how a

gaping void can open up between the figures and their meaning. The unemployment rate of young people in France and Britain was as in Table 1.

*The following points stand out:*

a. A high youth unemployment rate of 28% (Row 1) sent French politicians into a spin, since it suggested that France had a very large pool, almost a *third* [a third of what, nobody asks...] of frustrated jobseekers, discontented young people who might vent their anger in riots or a vote against the governing party. UK government circles in the meantime were boasting that young people could earn their living easily, citing the mass of young French waiters as proof.

*In fact, the unemployment rate did not support such an interpretation and was misleading.*

b. Row 2 shows that the British government in fact had the same *size* of potential problem (of the frustrated jobseekers) on their hands as the French, given that the two countries had a not too different size of population (row 3). Therefore, the dimension of the problem, the percentage of unemployed youth among the population, was in fact no different in both countries (row 4).

c. If we look at the reason for the unemployment rate differences, it turns out to be a simple matter of very different labour market participation rates (row 5). In addition, more young French people were in education, while more young Britons were in employment. But what a stunning contrast of interpretations can be derived from the unemployment rate!

*This, I have argued elsewhere, is not a sustainable state of affairs if trust in politicians and statisticians is to be sustained.*

*Problem:      Denominators in the presentation of  
unemployment*

The problem lies with the denominator used in employment statistics, a matter that needs to be looked at with care.

In the conventional presentation, the numerator is presented as a percentage of the population at risk of falling into unemployment [labour force], based on an increasingly erroneous presumption that if a person is not already active in the labour market, then they are not at risk.

	<b>CONVENTIONAL % RATE</b>	<b>ALTERNATIVE % RATE/RATIO</b>
<b>NUMERATOR:</b>	UNEMPLOYED	UNEMPLOYED
<b>DENOMINATOR:</b>	LABOUR FORCE [employed + unemployed]	ADULT POPULATION ['inactive' + employed + unemployed]

I do not wish to dismiss at a stroke one of the best known macro-economic indicators. The conventional presentation of the unemployment rate is still meaningful for:

- a. Employers wishing to gage the supply of labour at their disposal
- b. Governments wishing to use *fluctuations* in the unemployment rate as an indicator of economic growth or slow-down, particularly as a predictor of a coming recession.
- c. A positive economic indicator of *job supply*: there are many more young people in work in the UK than in France, ergo there are jobs for them – an issue we will return to later.

*But the unemployment rate [labour force denominator] is not a meaningful social indicator. Worse, it may be a perverse one in the case of youth rates. For in the UK, if nearly two thirds of young people are in the labour market, then they are probably not in education.<sup>3</sup> Given what we know about the employers' and the economy's need for skills, and the fall in demand for unskilled labourers, the fact that so many of this age group in France remain in education may be considered to be a positive indicator of social and policy success. In this light, the UK's 15% youth unemployment rate is, perversely, masking a problem, but it is paraded as a success – a clear failure in statistical communication.*

Another issue is the way that the choice of denominator affects our understanding of gender differences, especially if used in aggregate. We have seen that varying labour market participation rates for young people invalidate the meaning of the unemployment rate as an

---

<sup>3</sup> In fact as much as half (49%) of all aged 15-19 are active in the UK, compared to 11% in France, at an age where it is socially desirable that they should be at school or in further or higher education. At age 20-24, 78% were in the labour market in the UK v. 57% in France. This, by contrast, may be considered positive, if it reflects earlier graduation from shorter spells in tertiary education.

internationally comparative indicator. The same problem arises with differential female participation rates. In countries with low female participation rates, the pool of unemployed women will be a larger proportion of the (reduced) female labour force, as seen in Table 2.

**Table 2 Female unemployment in Italy and Britain**

1996	ITALY	BRITAIN
ILO Unemployment rate of women / 'actives' (lab. force)	16.50%	6.30%
No. of women unemployed	1,419,000	792,000
No. women aged 15+ in population	24,885,000	23,756,000
% unemployed women / population	5.70%	3.30%

Source: Calculated from Tables in Eurostat (1997) *Labour Force Survey Results 1996*.

The case of women in Italy and Britain shows that, even where there is a genuine difference in unemployment, the use of the conventional unemployment rate distorts it and makes it appear worse than it is *in social terms* (16.5% is more than twice 6.3%, but 5.7% is less than twice 3.3%).

Again, the distorting effects of varying participation rates by age or gender destroy the value of the aggregate unemployment rate as a meaningful indicator. Therefore it should only be used with caution, for instance applied to *core-age males*, because the vast majority of these are participants in the labour market (>90% of males aged 25-49 want to work) and there is therefore hardly any distorting effect of the use of labour force as the denominator, particularly for international comparisons. This may appear gender-biased and is certainly not meant to suggest that female unemployment is not important, merely that the female unemployment *rate* does not support correct or policy-relevant interpretations. We return to the measurement of female job needs later.

## **The fuzzy labour force**

The conclusion I draw from this is that the unemployment rate is a very blunt tool, even be a misleading one, because the labour force today is a fuzzy entity. It is fuzzy because it no longer signals a relatively homogeneous group of mostly men, who left school at 15 and remained in the labour force until retirement (complemented by a reduced cohort of young women). Whereas once 'labour force' was coterminous with an identifiable social category, today it is more like an unbounded space that a variety of people of different ages enter, leave, and re-enter at a variety of rates – often termed 'transitional

labour markets' (or as displaying 'varying degrees of attachment to the labour market' in statistical parlance).

Furthermore, the outer boundaries of the labour force -- that conceptual line that is supposed to separate the 'actives' from the others, the people defined as 'economically inactive' (though this only means they are not participating in the labour market) are also blurred, and increasingly so. The boundaries are blurred by categories of

- a. Inactives who *want to work* and would work if a suitable job presented itself, but have fallen out the unemployment category of the LFS since it requires 'jobseeking' as a mark of 'activity' and readiness to take up work immediately (actually within two weeks).
- b. Inactives who do paid care work, e.g. fostering and respite care.
- c. *Actives* temporarily 'inactive' but engaged in care work *and paid for it* (maternity/paternity leave, parental leave)
- d. Employed persons who don't get paid, e.g. family workers
- e. Those who are not employed yet whose pension contribution records include recognition of time spent caring for children (in certain countries).

In the case of such 'inactives', it is not a question of weak attachment to the labour market but fuzziness about what constitutes work and employment.

## **The employment rate problem**

Sensing that the use of the labour force as the denominator is questionable, some statistical authorities now present employment data in the form of the 'employment rate' using the working age population as the denominator. For clarity's sake, this could more usefully be called the employment *ratio*, as it is in some sources, since its denominator is not the labour force, unlike the unemployment rate. This new employment rate/ratio has become the focus of the whole of the European Union's Employment Strategy, approved by all member states. They all contribute with periodic reports and mutual feedback on the progress of their employment rate/ratio. Indeed, the EU's major employment goal is to increase this and specific statistical targets have been set that member-states are committed to meet.

It is argued that this statistic has the advantage of showing how many people are in jobs as a proportion of the population, and that in addition, the higher it is, the lower the *unemployment* rate is likely to

be as well, thus killing two birds with one stone. At first glance, it appears to be a better indicator of economic performance.

Yet, I am also critical of the statistical presentation of the employment rate/ratio because it does not really support *policy-relevant* interpretations, being subject to quite strong distorting effects. The problem lies with the major question of employment fragmentation -- the growing number of people who have a part-time working day or a short working week. Employment fragmentation in terms of hours-worked means that the social significance of having a job has changed. It no longer means earning a living, since the old norm of a working week close to 40 hours is what entitles a person to earn a 'living wage', in theory at least.

The effect of employment fragmentation is sufficiently well known for the European Commission to produce full-time equivalents (FTEs), as seen in its *Employment in Europe* reports. Yet by translating all employment into FTEs, we lose track of the headcount of part-timers and over-timers, and the FTE airbrushes out the image of fragmented working times.

Instead, I would argue that it is increasingly important to statistically represent working time, and particularly the lesser known phenomenon of minor employment in mini-jobs, where people are employed for just a few hours a week, represented in the EU LFS Results as 1-10 hours, the smallest category given (the UK labour force survey presents the numbers doing 1-6 hrs work a week). The need for internationally comparable breakdowns of hours worked is crucial to key political debates about job-creation, labour market flexibility, and the European social model. In the next section, I explain the importance of having such data available. Then I refer to the difficulty of representing the impact of mini-jobs given the existing statistics.

### **'Mini-jobs', 'few-hours', or 'short-hours' employment.**

A higher employment ratio over population is obtained simply when a larger number of people declare they have worked for one hour or more in the week of reference. The employment ratio takes no account of whether each person has a daily full-time or half-time job or is just employed for a few hours a week. Therefore the more flexible a labour market and the more casual jobs there are - the more early morning cleaners, irregular waiter shifts, pub nights, Saturday jobs, and lunchtime-only workers there are - the higher the *employment*

rate/ratio. It is therefore far from being an indicator that good jobs are being created. In international comparisons, the employment rate/ratio winners are clearly Denmark, Sweden, UK, and the Netherlands, all of whom have the highest levels of part-time work (well over 20%), reaching to over 40% of all employment in Netherlands in 2000. In addition, in the same three states (UK, Denmark, & Netherlands) a significant proportion of the labour force is employed in such mini-jobs, namely 5 %, 6%, and 10% respectively.

Figure 1 is a way of presenting the Table 3 data as a pie chart for the EU as a whole, showing that there are at least four different types of employment in terms of working time. A version of this for Denmark, the UK, or Netherlands would show even more clearly how significant the part-time and short-time modalities of employment are, which is why the employment ‘rate’ (ratio) is not a good comparative indicator.

**Table 3 The EU labour force in segments of working time from job-seeking to full-time employment**

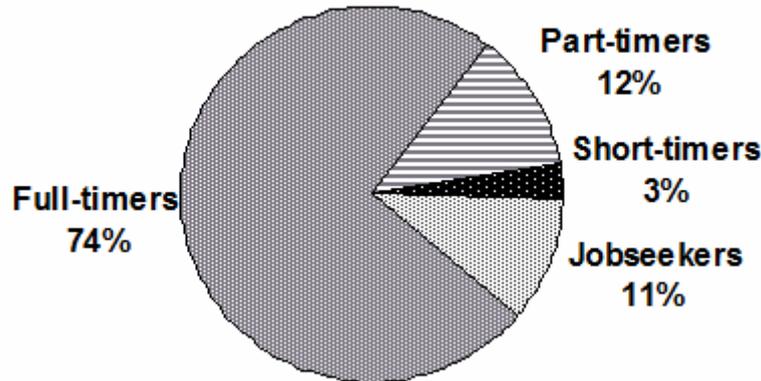
Rate over labour force	LFS year	EU-15	BEL	DK	GER	GRE	SPA	FR	IRL	IT	N	AUS	POR	FIN	SW	UK
A. % working 'FT'	1995	75.0	78.4	72.9	76.8	86.5	71.5	74.4	77.4	82.6	58.2	82.5	86.0	73.2	68.2	69.3
	1996	74.4	77.8	73.1	76.1	85.5	71.5	73.6	78.0	82.0	57.8	80.6	84.6	74.4	65.9	69.1
	1997	74.0	77.7	73.4	74.4	86.2	72.5	72.7	78.9	81.4	58.4	80.7	84.2	75.2	66.1	69.9
B. % working 'PT' (11+ hrs)	1995	11.4	11.5	14.2	12.1	4.0	4.9	12.3	8.7	5.2	23.8	11.5	5.9	7.6	20.3	16.3
	1996	11.7	11.9	14.2	11.9	4.5	5.0	12.6	8.4	5.3	25.1	12.6	6.8	7.4	18.6	16.8
	1997	12.1	12.5	15.0	12.2	3.9	5.2	13.2	9.0	5.7	25.5	12.7	7.7	7.6	18.5	17.6
C. % working 'PT' (1-10 hrs)	1995	2.9	0.7	<u>5.9</u>	2.9	0.4	1.1	1.4	1.9	0.4	<u>10.9</u>	1.8	1.0	2.2	3.4	<u>5.7</u>
	1996	2.9	0.8	<u>5.1</u>	3.2	0.3	1.2	1.4	1.8	0.5	<u>10.4</u>	1.5	1.2	2.3	2.9	<u>5.8</u>
	1997	3.0	0.9	<u>6.1</u>	3.5	0.3	1.3	1.5	2.0	0.5	<u>10.3</u>	1.5	1.5	2.1	2.9	<u>5.6</u>
D. % seeking work / unemployed (0hrs)	1995	10.7	9.3	7.0	8.2	9.1	22.7	11.9	12.0	11.8	7.2	4.3	7.1	17.0	8.1	8.7
	1996	10.9	9.5	6.8	8.8	9.7	22.2	12.4	11.7	12.2	6.4	5.3	7.3	15.6	9.5	8.2
	1997	10.8	9.0	5.4	9.9	9.6	20.9	12.6	10.2	12.4	5.5	5.1	6.6	15.0	10.4	7.1
<b>Total labour force</b>		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Sources : Rows A,B & C: M.Threlfall calculations based on various tables; D: from EULFS Results 1995, 1996 and 1997 (Eurostat, Luxembourg: OPEC 1996, 1997, 1998).

Definitions: As ‘full-time’ hours vary between countries, this figure refers to different definitions or concepts of a full working week rather than a specific number of hours. ‘Part-time’: this has no specific ceiling of hours, as it the contractual or popularly understood (i.e. the respondent’s) definition of ‘not-a full-time post’, as defined in each country or contract – as indicated by Eurostat.

Note: Because of rounding up and some unclassified jobs, columns add up to just under 100%, but Sweden column only adds up to c.97% because of difficulties in separating FT and PT employment.

**Figure 1      The EU labour market by segments of working time**



Source: M.Threlfall, based on Table 3.

The point is that the results presented in the table and the pie chart and the analysis above are not well supported by the available statistics - it is laborious for the researcher to work out even though it is useful data for policymakers. It shows that the aggregate employment 'rate'(ratio) - so easily interpreted as a positive indicator of economic growth and job creation - in fact *only indicates the degree to which employment fragmentation has advanced in a given country and the extent of job-spread across a wider spectrum of the population. The employment 'rate' (ratio) as presented in many EU and OECD publications in fact hides these two striking phenomena.* Even though it is quite controversial at the political level, *the crucial statistical data that should support policy discussion is in fact missing.*

## **Alternative Presentations**

Turning now to alternative presentations, I would like to make so bold as to suggest that it should be easier to construct different tables and graphs based on the existing Eurostat Labour Force Survey data. I refer especially to this survey because its methodology is harmonised at EU and applicant country level and we must increasingly understand phenomena in a comparative context.

For instance, to start with Table 3 & Figure 1, if the dividing line between employment and unemployment is 1 hr, then the labour force would be, as a very first step, better represented as a spectrum of the kind I have constructed, in which there is a stepped progression between working no hours, to working a few hours, right through to working very long hours. I am not saying the data is not collected, it

is, but it is not presented. In fact, the employment by hours worked is no longer featured in the Eurostat's LFS Results tables.

However, even such proposed changes to the appearance of the labour force would not be enough. For in order to understand why transitional labour markets or fragmented work make such a difference to a country's *apparent* job-creation performance, both increasing its employment 'rate' (ratio) and decreasing its unemployment rate, one has to take into account what is happening among the so-called 'economically inactive' non-participants in the labour market. If it is they (rather than the unemployed) who are filling the pool of part-timers and short-timers, then the economically inactive such as women and young people who do these jobs are increasing the size of the labour force, and by statistical effect, reducing the proportion (%) of the unemployed.

For this reason it would be desirable if all current figures were presented using the population as denominator, whether it is the working age population or each gender/age group population. For instance, unemployment ratios over working-age population.

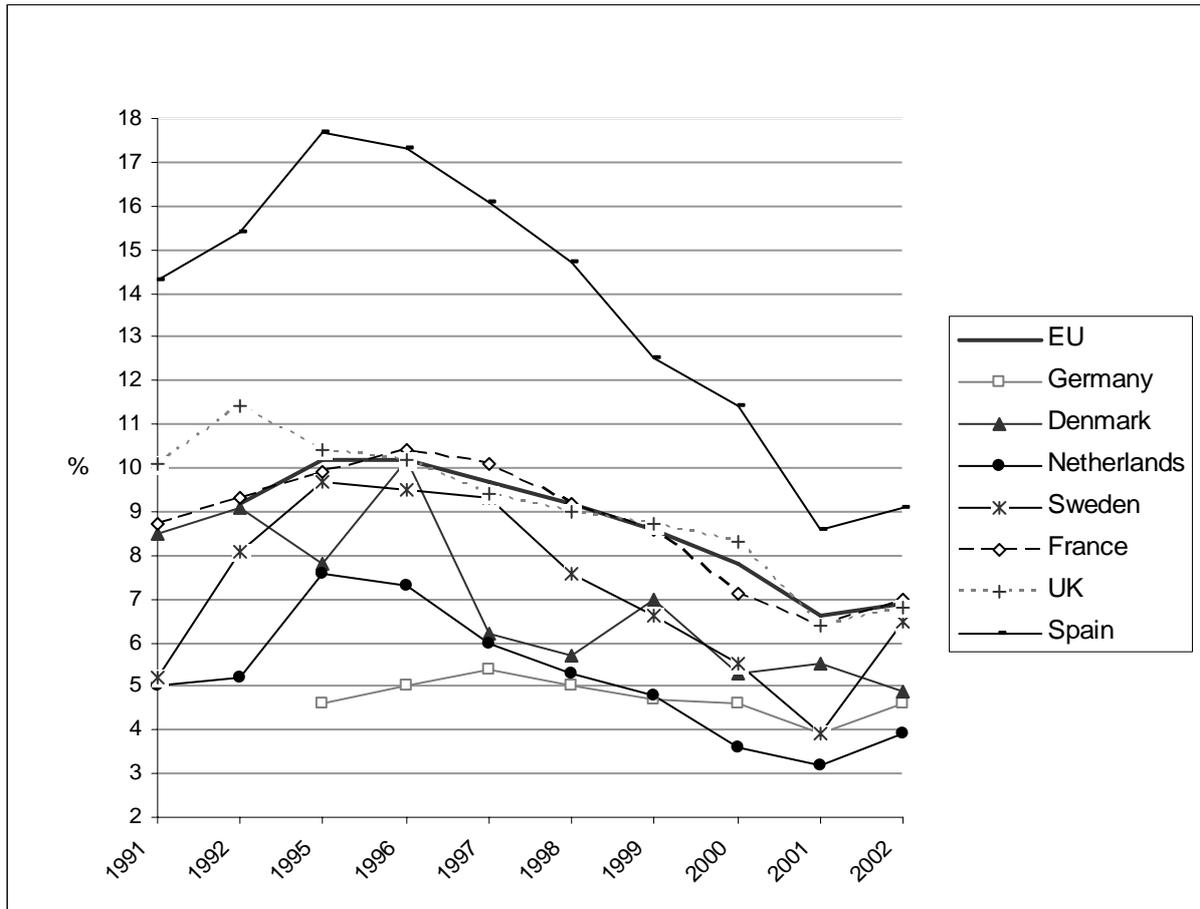
## **Unemployment ratios**

The advantages of unemployment ratios are that they enable:

- Pictures of female jobseeking, not distorted by the participation rate
- Pictures of youth unemployment, undistorted by FT educational activity
- Pictures of older workers' jobseeking, undistorted by retirement rates
- Pictures of core-age male workers (this would not be that different if males maintain participation rates of 90% or over)

Eurostat has recently started to present these in some tables relating to the 15-24 age group, as seen in Figure 2.

**Figure 2. Youth Unemployment Ratios (Male+Female / EU Population Aged 15-24)**



Source : 1991-2001: Franco, A. (2002) Eurostat Rapid Reports: Main Results of LFS 2001. 2002: M.Threlfall on basis of Eurostat (2003) Labour Force Survey Results 2002.

## **Part-time and full-time employment ratios for women**

There is a widespread and ongoing debate about the interpretation of the increase in women's labour market participation, its desirability or otherwise, and about the significance of part-time work. I would agree with Catherine's Hakim's approach to focus on the preferences of women, and therefore it is important to include it in all representations. While part-time work is acceptable as an indicator of choice of employment hours and of a certain balance between paid work and unpaid care work, it is unlikely to indicate a strong measure of financial independence for women. The *full-time* employment 'rate'(ratio), by contrast, is arguably a better indicator of financial autonomy of women, because it significantly indicates non-dependence on a spouse.

*For this reason I propose that the full-time employment ratio and a part-time employment 'rates' (ratios) over population should be constructed in all official data.*

To summarise, the full-time employment ratio is:

- a better indicator of the existence of jobs from which a person is more likely to be earning a living (social indicator).
- a better economic indicator of job-creation.

The part-time employment 'rate'(ratio) is a:

- better indicator of trends in employment of women
- indicator of women's choices
- indicator of *potential* work-life balance (this would also be true of men, but the proportion of them is currently very small)

## **Activity of the whole population**

Finally, I would like to end with a proposal that I have hardly worked on myself. More than a proposal, it is a request for statisticians to make it easier, when they present and publish labour market data, for non-statisticians to obtain a clear view of the total activity of the whole population, both market and non-market activity, paid and unpaid activity. There is absolutely no statistical challenge in this, being merely a question of adding and subtracting, but given the utter simplicity of the exercise, it is remarkable that it is not readily available. The labour force survey itself asks a number of questions of 'inactives' – a word that must now be hastily abolished in such contexts – and from these questions the extent of care work and other activity can be deduced. There is also the possibility of incorporating views obtained from other surveys, such as those on households and time budgets.

I will end by saying that I hope that the proposals I have made, namely:

- 1) To support policymakers in order that they may shift away from discussing the unemployment rate
- 2) To persuade them to use unemployment ratios for all age groups and especially for the young, the older workers and women workers;
- 3) To support them to achieve a more nuanced discussion of the employment 'rate'(ratio), when it must be used, by consistently providing working time breakdowns, particularly regarding the fringe of mini-jobs or short-hours work that is,

## **Radical Statistics Issue 88**

in my view, key to deciphering international comparisons of employment and unemployment;

- 4) To support a better understanding of women's choices and possibilities by providing female full-time and part-time employment ratios;
- 5) To support a merger between data on the labour market with data on the activity of the 'inactives' in order to show the actual activity of non-participants in paid labour, and reveal that most of what they do are not only socially necessary but also economically significant.

After all, if Britain's assiduous shoppers are said to have been the ones to fend off the latest threat of a recession, and if we are now to consider shopping till you're dropping to be necessary work, we have no excuse not to incorporate all socio-economic activity, particularly care work, into a whole, and more holistic, picture.

*Monica Threlfall, Senior Lecturer in Politics, Department of Politics, International Relations and European Studies, Loughborough University, Loughborough LE11 3TU, UK.*  
*Editor, International Journal of Iberian Studies*  
[www.intellectbooks.com/journals/ijis](http://www.intellectbooks.com/journals/ijis)