

## Comment on Tim Barmby, Marco Ercolani and John Treble: *Sickness absence in the UK 1984-2002*

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Although the UK rate of absence from work due to sickness has been remarkably stable for the past two decades, there exists a considerable variation in the rate of absence between groups in the labour force. Tim Barmby, Marco Ercolani and John Treble have given us an informative and innovative paper that explores this variation and provides helpful clarifying insights.

At the centre of their paper is the idea that the nature of the wage contract entered into by a worker influences the likelihood of being absent from work: absence from work is greater if contracted work hours exceed desired hours. If income effects can be discounted—not a weak assumption—high normal time wages or overtime premiums reduce absenteeism, and longer contracted hours will prompt higher absenteeism.

How well are these ideas supported by the very large data set constructed from a sequence of Labour Force Surveys, 1984-2002? The evidence that higher wage workers are less likely to be absent from work, after controlling for age, education, gender, etc is strong for both males and females. The conjecture that those working long contractual hours are more likely to be absent, *ceteris paribus*, is not given clear support. In some regressions, it appears that beyond a certain length of usual hours, the degree of absenteeism falls as contracted hours increase. This, perhaps surprising, finding is not inconsistent with evidence on job satisfaction for the European community which suggests that job satisfaction is particularly high amongst workers working over 45 hours. (For example, evidence in the second European Survey on Working Conditions.) Certain jobs may be particularly desirable and prompt both long hours, high job satisfaction, and perhaps low absenteeism. This scenario is consistent with the data here. The authors give thought to these lines of analysis. However, the nature of heterogeneity of jobs, although important to ex-

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plain the heterogeneity of contractual hours, is not specified in the model so that it is not possible to determine how a particular form of job heterogeneity is capable of providing a unified explanation of the evidence.

A closely related form of the argument concerning wages would be to think in terms of a model in which workers may “shirk” and that those receiving wages that are high relative to their expected wage would be incentivised to avoid absenteeism, in order to avoid the possibility of being fired as a “shirker”. This approach would suggest constructing an expected wage based on a Mincer equation for each worker and using the difference between the expected and actual wage as the explanatory variable.

Absenteeism may be related to contracted hours partly as a consequence of the *nature* of the hours being worked. For example, we might expect that those working unsocial hours or shifts would be more likely to be absent from work, for a given length of contracted hours. The table below depicts results from the European Labour Force Survey and suggests that between 1992 and 1998 working in jobs offering shifts or unsocial hours is increasing in both the UK and across the EU generally. This might be thought to indicate a tendency towards higher absenteeism due to sickness, if on becoming ill, workers who are employed during unsocial hours are more likely not to work. We briefly explore evidence regarding this linkage. Countries with higher absence from work due to sickness include The Netherlands, Germany and Sweden, and we might ask how far shift and unsocial hours working is more common in these countries. The evidence for The Netherlands is particularly weak, although Sweden does appear to have high shift, evening, and Sunday work. Perhaps in subsequent work it will be possible to estimate the sensitivity of absenteeism to unsocial hours and shifts, and to link this empirical understanding with the underlying theory of compensating wage differentials.

**Table 1. Shift and "unsocial hours" working, European Union, 1992 and 1998 (percentages of persons in employment)**

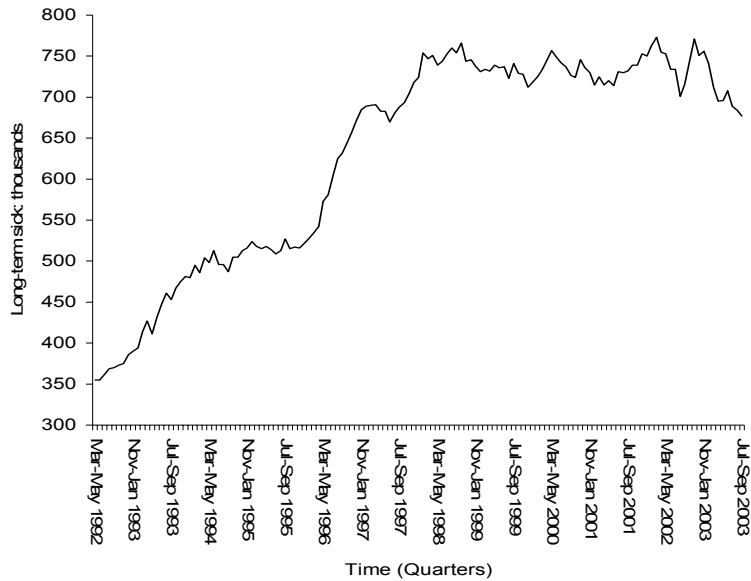
	Persons reporting "usually working"									
	Shift		Evening		Night		Saturday		Sunday	
	1992	1998	1992	1998	1992	1998	1992	1998	1992	1998
<b>Austria</b>	..	15.3	..	14.1	..	8.7	..	26.1	..	15.1
<b>Belgium</b>	13.1	16.5	11.7	12.6	4.9	5.2	16.9	18.8	8.7	9.6
<b>Denmark</b>	7.7	7.9	17.7	19.9	7.9	8.0	26.1	26.4	19.4	20.0
<b>Finland</b>	..	24.5	..	26.8	..	9.8	..	27.1	..	18.6
<b>France</b>	7.3	9.0	..	8.4	3.5	3.9	26.2	23.9	8.8	8.4
<b>Germany</b>	10.0	..	14.9	..	7.2	..	20.4	..	10.0	..
<b>Greece</b>	7.3	13.3	29.2	29.0	4.4	4.1	41.9	43.0	13.8	14.3
<b>Ireland</b>	9.5	..	11.0	..	5.2	..	32.0	..	18.4	..
<b>Italy</b>	13.3	18.6	10.7	13.2	4.3	5.1	39.2	39.6	7.7	8.4
<b>Netherlands</b>	7.6	9.0	7.8	17.4	2.1	2.3	26.5	28.3	14.0	15.5
<b>Portugal</b>	6.5	7.9	0.7	..	..	9.3	28.1	29.5	12.3	12.0
<b>Spain</b>	4.7	7.4	..	..	4.3	4.4	39.5	36.3	14.1	14.8
<b>Sweden</b>	..	25.2	..	22.1	..	7.5	..	19.5	..	17.1
<b>UK</b>	11.8	16.1	14.9	17.6	5.7	6.3	24.2	25.2	11.5	13.3
<b>Unweighted average<sup>a</sup></b>	8.8	11.7	15.4	17.5	4.6	4.9	28.7	29.0	12.3	12.9

Notes: <sup>a</sup> Calculated only for countries with data for both 1992 and 1998. .. Data not available.

Source: European Labour Force Survey Results: Tables 61 and 63 of 1992 edition and Table 42 of 1998 edition.

Although the proportion of UK workers that each week are absent due to sickness is largely unchanged in the past two decades, the Chart below shows how the proportion of the UK population of working age that are *inactive* due to long term sickness has increased dramatically in the 1990s. Thus, while workers are no more likely than 20 years ago to be absent due to sickness, the probability that sickness will cause a long term withdrawal from labour force participation has changed markedly. Exactly why sickness in the 1990s should have such a dramatic consequence for the length of working life of about twice as many workers as in the 1980s (an additional quarter of a million workers), but no consequence for the rate of absence for employees, is not clear from the evidence presented here. Progress in health care has probably helped to keep UK employees missing relatively little employment by European standards, but seems to have failed to maintain about a quarter of a million workers in labour force participation relative to the 1980s.

**Figure 1. Number of inactive persons as a result of long-term sickness UK, seasonally adjusted**



From a health care perspective it would be very helpful to use models similar to those developed by the authors to learn how far particular features of a local health delivery system reduce absenteeism due to sickness. Do long queues for elective care surgeries, or poor access to primary care physicians or nurses, encourage workers to be absent from work? Or less conventionally, will access to primary care doctors in late evenings or minor surgery at convenient times in primary care settings, enable workers to reduce their absenteeism and hence add to their productivity? The linkages between health care delivery and labour force productivity provide some understanding of the willingness of politicians to support growth and innovation in public health spending. With data sets similar to those used by these

authors it would be possible to estimate in a cogent way these important relationships and help shape health policy.

