



Sickness Absence a Pan-European Study

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This study, using harmonised data from the European Union's Labour Force Survey (LFS) for all four quarters in 2006, explores the patterns that govern the trends in sickness absence for 26 European Union countries. In the literature various alternative methods are proposed to measure both the incidence and duration of sickness absence. In this paper we follow the methodology developed by Barmby et al. (1999) and employed in several other studies (Barmby et al., 2002, 2004; Ercolani, 2006) where sickness absence is measured as the ratio of the hours reported absent due to illness to contracted hours in the reference week.

Female workers have significantly higher sickness absence. Absence rate increases monotonically with age up to the retirement. The rate is significantly lower for those who remain in the labour market postTretirement; a finding that may be driven by the lower propensity of sickness of that selected sample. Individuals with lower levels of education appear to have higher sickness absence. Nationals, citizens of the country of residence, are estimated to have higher propensity to sickness. This may be explained by their higher level of familiarity with the structure of the labour market and their better knowledge on the statutory employment rights. Individuals in more rural areas exhibit higher propensity to sickness, maybe because they are involved in more labour intensive activities. Furthermore, individuals in temporary contracts, who enjoy lower overall employment protection, are less sickness prone compared to those in permanent contracts. The opposite is true for those in partT time employment, where their absence rate is significantly higher compared to those in fullTtime employment. If individuals with high propensity to sickness are more likely to have a partTtime employment, then the link between absence rate and type of contract may be explained by unobserved characteristics selection effect. The estimates also reveal a link between tenure and sickness. Sickness absence rate is modeled as a quadratic function of tenure, suggesting an inverse "UTshaped" profile. In addition, the rate of sickness absence appears to increase with contracted hours of work and then falls again. If sickness absence is regarded as a mechanism to adjust labour supply, then one would expect the absence rate to increase monotonically with the level of contracted hours. A candidate explanation of the downward slopping segment offered by Barmby et al. (2004) is that it may be driven by unobserved individual characteristics, since it is the people with low propensity to sickness that may choose to work longer hours. Those employed in the service sector appear to have higher absence rate, compared to their counterparts in the industry/manufacturing sector. In addition, whiteTcollar workers exhibit lower propensity to absence compared to blueTcollar workers.

The estimated coefficients of the country dummies confirm the crossTcountry differences observed in the raw data. Finally, the sickness absence is found to exhibit seasonal cyclicity, with low rates during the second and third quarter and high rates in the first and fourth quarter. The gender differences in the sickness absence are further explored by reTestimating the basic model with the inclusion of interaction terms between the female dummy variable and controls for age, education, temporary contract, partTtime contract, and contracted hours. The genderTage interaction terms suggest that it is the 26T35 ageT cohort of female workers that actually exhibits the higher sickness absence. A possible explanation may be that it is during this stage in their life that women form their families and have children that may adversely affect their health. For the other age cohorts no significant differences are estimated between men and women. Regarding the genderTeducation differences, the estimates highlight that it is the female workers with upper secondary education that exhibit lower sickness absence rate. No other significant gender differences are observed among the other educational groups. Women with temporary or partTtime contracts exhibit lower sickness absence compared to men in similar contractual agreements. Finally, the contracted hours sickness absence profile is calculated to be steeper for the female workers compared to male workers.

In order to capture institutions factors affecting absenteeism various country variables have been included in the analysis. Starting with the dependency ratio this is an ageTpopulation ratio of those typically not in the labour force and those in the labour force. The finding suggests that the higher the dependency ratio the lower the sickness absence ratio. However, it can be explained by the fact that there is more pressure to employed people to produce/provide to their households, and thus have lower chances of reporting sickness absence. Lagged quarterly unemployment rate is used in order to capture the cyclicity of absenteeism. The negative sign of the unemployment rate suggests that the sickness absence is proTcyclical. Regarding life expectancy, which is a proxy for good health, has a negative sign. Turning to retirement age the findings suggest that the higher the pensionable age (i.e. the more time individuals are required to spend in the labour market), the higher the pressure they feel in the labour market, and thus the higher chances of absenteeism. Finally, regarding female labour market participation it is found that the wider the participation in the labour market the higher the sickness absence. However, the interaction effect between female and female labour market participation did not reveal any gender differences.