

Economic costs of presenteeism in Hungary

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Abstract

General health status of people has a deep impact on a country's economic performance. When calculating the economic cost caused by ill health, the economic effects of „presenteeism” – when people attend work in not perfect health condition and therefore their productivity and efficiency rates fall behind the potential level – also has to be taken into account. According to an earlier estimation that was using productivity loss data from the United States and health status data and wage rate from Hungary, the economic costs of presenteeism – that is lost production – was around 1,5% of the annual GDP in Hungary in 2011 (Orosz – Kollányi 2012). In my presentation I introduce the results of a new empirical research focusing on the frequency, the economic loss caused by, and other attributes of presenteeism in Hungary.

Using the data of around 1600 respondent it will be estimated how frequent it is in Hungary that someone attends his or her workplace in not fully perfect health condition, and what impact it has on his or her work performance. It will also be revealed what health conditions are the leading causes of presenteeism. It will turn out what differences are in this regard between people with different age, gender, education, working in different sectors of the economy, or holding different positions at their workplaces. Finally, knowing their wage rate and using it as an approximation of the economic value of their work production, we can also give a more accurate estimation for the economic loss caused by presenteeism in Hungary. The results of the research will be of great scientific significance on one hand, and also will be extremely valuable when presenting health as part of the human capital, i.e. as a productive factor of the economy.

Background

General health status of people has a deep impact on a country's economic performance. People in worse health status tend to work less in terms of aggregated labour supply and has smaller work productivity than those in better health status, just to focus on „first-world problems” of ill health. When calculating the economic cost of ill health, however, these indirect economic effects of health status are rarely taken into account. Also, even if they are, usually only the indirect cost caused by illness related *absenteeism* is taken into consideration – i. e. the lost production that occurs because of people being on sick leave.

In turn, as for gauging estimates for lost production, we must also take into account that people, by and large, spend a bulk of their time at work even when not in perfect health, and therefore their productivity and efficiency rates fall behind the potential level. This phenomena, referred as "presenteeism" in English literature, is more widespread and significant than could be ignored¹. Presenteeism can occur when someone has an acute condition and should definitely stay away from work but for some reason still attends workplace. But it isn't only the acute condition that causes loss in efficiency. More

¹ For more on the definition of presenteeism and the different meanings it can bear in different approaches see Johns (2010).

frequently, employees' performance is negatively impacted by various chronic ailments – perhaps not even recognised or thought of as illness – such as back pain, stiff neck, waist or knee pain, headache, different mental and psychological problems like anxiety, chronic stress, depression and sleep disorders being even more widespread. The extent of loss due to the various symptoms greatly depends on the nature of work performed: the same problem may not cause any loss when occurring in one job, while have fatal effects in another. Additionally, when calculating indirect costs, the fact that people seldom work in isolation and one's position is most likely linked to those of others must not be left ignored. Lost production due to illness therefore has a certain 'spillover' effect. Missed deadlines, for instance, have similar effects.

The problem with the costs emerging because of presenteeism is that it is hard to measure. In case of absenteeism usually there is well documented data on the frequency and duration of sick leave, especially in countries where social security systems pay for it. In case of presenteeism however, either the frequency of not working in perfect health condition, or the impact of this condition on work performance can be estimated only by asking employees themselves. In Hungary until recently there was no such data available.

Thus, on one hand, in a previous paper (Orosz – Kollányi 2012) we made a rough estimation of the costs emerging due to presenteeism in the Hungarian economy. For this we combined data gathered from employees of certain companies operating in the United States (Goetzel et al 2004) with data on the health status and morbidity of the Hungarian population and wage rates of Hungarian employees. As can be seen in Table 1. below, the significance of these costs is inevitable:

Table 1. **Annual Indirect costs of illness in Hungary (2011)**

Expense Type	Billion HUF	Notes
Production lost due to sick pay	182.71	Estimate is based on average wages reconstructed according to amount of sick pay
Production lost due to sick leave	37.42	A low-end estimate was used: before each time sick pay was to be collected, a period of 15 days applied as sick leave.
Production lost due to disability	46.66	The monthly cumulated number of people going on invalidity pension in a year multiplied by the gross average wages. (2009 pension data)
Production lost due to immature death	38.01	Gross annual average wages of 50 percent of people having died before turning 60 in a year (assuming uniform distribution of deaths over time). (Mortality data relate to the 1999-2002 period)
Excess costs due to sick leave	61.63	Amount calculated with a median factor of 0.28 based on Nicholson et al (2005)
Costs of presenteeism	409.96	Based on Goetzel et al (2004) using the European Commission's morbidity data (2007)
Excess costs of presenteeism	114.79	Amount calculated with a median factor of 0.28 based on Nicholson et al (2005)
TOTAL INDIRECT COSTS	891.18	

Sources of data and methods: KSH, ONYF, OEP, European Commission (2007), Goetzel et al (2004), Nicholson et al 2005

The direct and indirect costs of illnesses in Hungary in 2011 were almost 3466 billion HUF, 12% of the annual GDP that year. More than one quarter of this were indirect costs, and almost 60% of the indirect costs occurred because of the lost production of presenteeism.

However, the major differences between the labour markets of the United States and of Hungary, that may influence people's on-the-work productivity, and their behaviour and decisions regarding attending workplace or not in case of not feeling entirely well, can not be neglected.

Objectives

Thus – on the other hand – we decided to gather data from Hungarian employees (more precisely: people in Hungary who are economically active) regarding three main questions:

- a. how often does it occur that they attend their workplace in not perfect health condition;
- b. what exactly these conditions are, and
- c. to what extent does this affect their work performance.

Data and methods

To collect these data we designed a short survey. It was partly based on standard health status research tools (like the Work Productivity and Activity Impairment Questionnaire). The survey had three main parts. First we asked the respondent to report about – basically

chronic – illnesses he or she suffers from. We also asked them to report those (health related) complaints they were familiar with. Then we asked how much these illnesses/conditions/complaints influenced their work performance and their other daily activities. The survey also contained a demographic section with basic demographic questions completed with some questions about the respondents' employee status, wage rate, etc. The data collecting process ends in January, 2014. According to the research plans by then we will have around 1000 full, and around 600 abridged survey completed².

According to the data we can estimate how frequent it is in Hungary that someone works in not fully perfect health condition, and that what impact it has on his or her work performance. It will also be revealed what health conditions play the leading role in presenteeism. Based on the demographic data it will turn out what differences are in this regard between people with different age, gender, education, working in different sectors of the economy, holding different positions at their workplaces. Finally, knowing their wage rate and using it as an approximation of the economic value of their work production, we can also give a more accurate estimate for the economic loss caused by presenteeism in Hungary.

Expected results and their significance

According to the estimations presented in Table 1., and knowing the differences between the general health status and the labour market of the United States and Hungary, we expect the magnitude of the costs caused by people working in not perfect health condition to be enormous. The results of the research will be of great scientific significance on one hand, and also will be extremely valuable when presenting health as part of the human capital, as a productive factor of the economy.

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² Abridged survey means that the core questions take place in the Omnibus Questionnaire of the TÁRKI Social Research Institute in November 2013.