

3.4 THE INCENTIVE EFFECTS OF SICKNESS ABSENCE COMPENSATION

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While labour economists have studied the behavioural effects of unemployment insurance benefits in depth, research on the labour market effects of insurance-based monetary compensation for (long-term) ill health (such as long-term sickness absence compensation or temporary disability benefits) only started 20 years ago. During the same period, the take-up of, and public spending on, such benefits have increased significantly, and the total spending on such benefits regularly exceeds the outlay on unemployment benefits.¹ Simultaneously, in a number of countries the behavioural requirements for UI benefits have been made stricter, and in many cases sickness absence compensation is significantly higher than unemployment benefits. Hence, the question is to what extent is the use of sickness absence compensation unwarranted, and how can those individuals affected be incentivised to return to work as quickly as possible after their health has recovered?

Changes in sickness absence compensation and the number of days spent on long-term sickness leave (2015–2019)

The role of sickness absence on the labour market in Hungary is more limited, and since the second half of the 1990s the proportion of eligible workers on sickness leave, and the total number of days on (long-term) sickness benefit was relatively low, and hence the public spending on this benefit amounted to roughly 0.4 percent of the GDP. Despite these low numbers, and largely for budgetary reasons, the generosity of (long-term) sickness benefits was cut in several steps and in different ways between 2009 and 2011.² As a result, Hungary is among the least generous among the EU member states (*Spasova et al*, 2016).

These changes in rules governing sickness absence compensations made it possible for researchers to study the incentive effect of the design of benefits. The changes affected three key parameters. First, starting in 2009 the *replacement rate* of the sickness benefit was reduced to 60 percent from the prior 70 percent of earnings. Second, a *maximum* for (daily) sickness benefits was introduced in May 2009 (this amounted to four times the daily minimum wages), and in May of 2011 this upper threshold was cut to half its previous value. Third, the length of '*passive sickness benefits*' – which is a sickness compensation a person could receive even after their insurance (employment spell) has ended (in the event that they applied for sickness benefit within 3 days following the end of the employment relationship) – was shortened in several

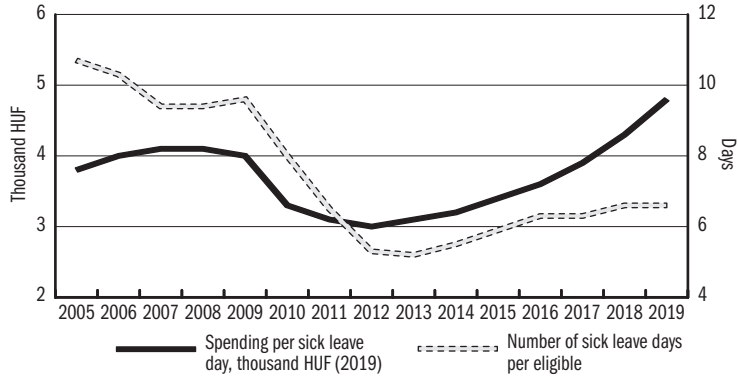
1 The prime example for this is Norway where the spending on sickness-related benefits amounts to 2.5 percent of GDP (which is more than triple the spending on unemployment-related benefits), but – for instance – in Germany and the Netherlands spending on sickness benefits is around 1.5 percent of GDP. Source: Eurostat [spr_exp_fsi].

2 For more details, see: KSH (2014).

steps. Until 2009,³ the maximum duration of the benefits was 90 days, which was cut to 45 days in 2007, to 30 days in 2009, and finally, ‘passive sickness benefits’ were abolished in 2011.⁴

It is likely that the aggregate number of days spent on sick leave and the total compensation was primarily driven by these changes in regulations. As can be easily seen in *Figure 3.4.1*, following the curbing of the generosity of benefits between 2009–2011, the number of days spent on sick leave dropped (by more than 40 percent), and the spending per sick day also decreased (by close to 25 percent).⁵ Besides these factors, it is clear that spending per sick day is driven by changes in real wages; while the number of days spent on sick leave is influenced by the economic cycle, it follows a pro-cyclical pattern.

Figure 3.4.1: Number of sick leave days per eligible person (right scale) and costs per sick leave days (left scale)



Source: KSH Statdat, 2.5.19. Health insurance, sick leave.

3 Earlier, between 1997 – 2003 the maximum duration of passive sickness benefits was 180 days, it was decreased to 90 days in 2004.

4 In most EU member states the insured unemployed are eligible for some kind of sickness benefits (Spasova et al., 2016).

5 As a result of these changes, while in 2009 spending on sickness benefits amounted to 0.38 percent of GDP, in 2012 spending was only 0.19 percent of GDP.

6 While it seems straightforward that sick pay influences the length of sickness leave spells, there is a large range of results in the empirical literature. While Böckermann et al. (2019) find that in Finland, a 10 percent decrease in sick pay decreases the duration of sickness leave by about 10 percent, neither Ziebarth (2013) for Germany, nor Bryso–Dale-Olsen (2019) for Norway found any effect.

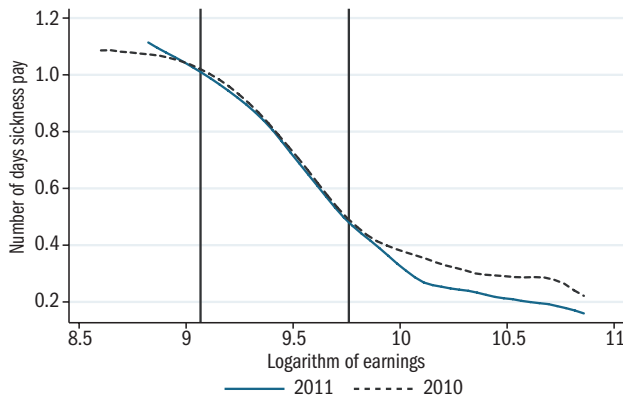
7 These values were the following (expressed in gross earnings in 2010): the maximum in 2009 was 520 thousand HUF, while the 2011 maximum was half of this. This threshold potentially affected only the highest earning 6 percent of male (full-time) employees, the 2011 maximum affected 23 percent.

The incentive effect of sick pay

Csillag (2019) analysed whether the cuts in long-term sick pay incentivised sick workers to return to work quickly.⁶ The main issue is that the income while on sick leave (the sick pay) and the financial payoff to returning to work (wages) are highly positively correlated, since sick pay is typically equal to a fixed proportion of labour income. Thus, Csillag (2019) uses the drastic cut of the maximum sickness benefit as a natural experiment. He compares the evolution of sick leave days of persons who had earnings slightly lower than the 2011 maximum sick pay with two groups: 1) those who had earnings higher than the 2011 maximum sick pay, but lower than the 2009 threshold; and 2) those with the highest earnings, who were already affected by the 2009 maximum threshold.⁷ While the 2011 legislation left the replacement rate of the sick pay in the first (control) group unchanged between 2010 and 2011; the (average) replacement rate fell from 60 to 30 percent in the second group; and it was cut in half (from 42 to 21 percent) in the highest earnings group.

The basic results of the analysis⁸ can clearly be seen in *Figure 3.4.2*: while the number of sick leave days significantly decreased between 2010 and 2011 in the highest earnings group, in the medium and lower earnings group there was no change. The regression results confirm that the number of days spent on sick leave fell to half its value in the high earnings group; and the estimated elasticity of the number of days of sick leave to the sick pay is 0.45. In other words, if the sick pay is reduced by 10 percent, the number of days spent on sick leave is reduced by 4.5 percent.

Figure 3.4.2: The number of days spent on sick leave as a function of previous earnings, 2010, 2011



Note: Local polinomial smoothing. The vertical lines show the maximum benefit thresholds for 2009 and 2011.

Source: *Csillag* (2019).

The finding that sick workers do react to financial incentives leads to further questions. To what extent did sick workers remain on sickness benefit longer than which their health status strictly required prior to the sick pay cuts? Or is it the case that due to the sick pay cuts they return to work before full recovery, and as a result their own health deteriorates in the long term or they possibly infect their co-workers?⁹ *Marczell* (2018) sought to answer these questions by estimating the effect of the decrease in sick leave days brought about by the sick pay cuts on health expenditures. Her hypothesis is that if the health expenditures of the sick workers (or their colleagues') increases due to the decrease in sick leave days, this is a sign that sick workers returned 'too early' to work. However in her empirical analysis, *Marczell* (2018) does not find a statistically significant relationship between the number of days spent on sick leave and (later) health expenditures.

The role of managers in sick leave take-up

Naturally, the number of days spent on sick leave is influenced not only by financial incentives, but also by corporate culture. *Marczell* (2018) found em-

⁸ *Csillag* (2019) used a sample of male employees between age 25–54, restricting the sample to those with a stable employment history and who were in the top 35 percentiles of the earnings distribution. The sample was based on the CERS Databank 'admin2' database, specifically using data from the second semester of 2010 and 2011.

⁹ *Csillag* (2019) only showed that those are the most sensitive to financial incentives who, in all likelihood, are not chronically ill.

pirical evidence supporting this hypothesis in the case of pregnant women. What influences sick leave in this group is a very important question, since the typical pregnant woman in Hungary spent 16 weeks on sickness leave between 2003–2011 (due to the pregnancy being considered ‘high risk’);¹⁰ and spending extended periods out of work negatively affects later employment status of women according to the international literature. *Marczell* (2018) puts forward the hypothesis that managers who recently gave birth can induce pregnant employees to spend less time on sickness leave, likely by creating a more inclusive workplace. According to the author’s results, pregnant employees spend on average 1.5 weeks less on sickness leave when working with such managers. It seems that 1) this is not simply due to having female managers; 2) it is not due to the sorting of women who are in better health working in more inclusive workplaces, and 3) there is no (long-term) adverse health effect of working longer for these women.¹¹

Long-term sickness benefits or unemployment insurance benefit following job-loss?

Márk–Csillag (2020) analysed the outcomes of those sick employees who lost their jobs and were eligible for the ‘passive sickness benefits’.¹² First, they looked at the role of financial incentives in claiming passive sickness benefits. They find that not only are variables proxying individuals’ health (health spending in the recent past) correlated with the decision to claim passive sickness benefits, but also those with higher earnings (and working in the public sector) had a higher propensity to take up passive sickness benefits following job-loss. They find that those who got significantly higher monetary benefits from claiming passive sickness benefits rather than UI benefits (which was maximised at a relatively low value) had a 1 percentage point higher probability to take up the first type of benefit.

The authors’ second question is: if a portion of eligible persons indeed used passive sickness benefits as a substitute for UI benefits, then did the radical cuts to the maximum length of the claiming period speed up return to work for sick jobseekers?¹³ Looking at the labour market history of those claiming passive sickness benefits before and after the 2007 legislation change, *Márk–Csillag* (2020) found no statistically significant difference. More precisely, those workers who had low health spending prior to job-loss (who are likely to be healthier) had a higher probability to be re-employed immediately after the expiration of the claimed passive sickness benefits (after 45 days), but this difference between the claimants before and after the policy change disappeared by 90 days following job-loss. By contrast, the legislative change had no effect on the re-employment behaviour of those who are likely to be chronically ill. In other words, while it is true that some employees who lost their jobs claimed passive benefit due to financial (rather than health-related)

10 This finding relates to those employees who had stable employment patterns. The sample was composed of those eligible for maternity benefits, meaning that they worked at least 180 days in the two years prior to giving birth, and from May 1st 2010 they had to work at least 365 days out of the last two years. The analysis was based on the CERS Databank ‘admin2’ database.

11 *Marczell* (2018) had no data on the health of the newborn.

12 They used males aged 25–54, who worked as employees at firms with at least 100 employees. In their sample, roughly 3 percent of all job endings result in ‘passive sickness benefit’.

13 The literature on the maximum duration of UI benefits clearly shows that longer potential duration leads to longer non-employment spells.

reasons, shortening the benefit duration did not lead to significantly quicker job finding on average. This is in line with the early literature on the effect of cutting the maximum duration of unemployment insurance benefits (see *Galasi-Nagy, 2002*).

Summary

The legislative changes concerning long-term sickness benefits in the past fifteen years led to a significant cut in its generosity. The papers analysing claiming behaviour of long-term sickness benefits all came to the conclusion that not only the person's health condition, but also financial incentives played a role. This was the case both for the number of days spent on long-term sickness benefits and the take-up of passive sickness benefits. The crucial question in future research projects ought to be whether sickness benefits are at such a low level that many people return to work before full recovery, or rather that the decrease in generosity led to the curbing of fraudulent claiming behaviour.

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