# "Where did you come from, where did you go?": How work characteristics before sick absenteeism might predict duration of leave and future job prospects

Based on López-Forés & Tojerow (2021) / DULBEA Working Paper

# An overview >>

There exists a body of literature which individually identifies job characteristics determining longer sick absences. To date, however, these factors have not been considered simultaneously to draw trajectories on individuals' employment perspectives. This study uses an exhaustive dataset compiling Belgian social security data which identifies individuals on sick leave and their potential transitions to other (in)active statuses. Advanced survival methods are used to identify workers more at risk of long-term work incapacity and to draw trajectories depending on different exit routes (i.e. (un)employment, career break, retirement, etc.). The authors complement the findings by analysing job prospects through an event study. The evidence shows that workers with relative higher job stability and those working for employers with higher reallocation capabilities returned to work more quickly. Conversely, workers in the health care and education sectors stayed away longer from the labour market. This extends previous findings on how sick presenteeism (going to work despite feeling ill) and the difficulty to spare workload can aggravate sicknesses. The final contribution of this paper was to find evidence that workers reduce their volume of work and revenue after a period of at least 6 months on sick leave. Diverging effects were found depending on the type of worker: low-skilled and part-time workers were less affected.

# Key contributions

- In Belgium, workers on sick leave who used to work in either the **health care or education** sectors are found to stay sick absent longer. In addition, job stability and employers' reallocation capabilities are crucial for a return to work.
- After sick leave, individuals are found to **never reach** their **previous levels of volume of work and revenues** although low-skilled and part-time workers seem to recover better.

## Introduction

Government expenditure has been steadily increasing as a consequence of the rise in the number of people entitled to receive disability allowances. Recently, the literature has tried to identify the causes of this rise. It is widely accepted that the prevalence of sick absenteeism differs in accordance with specific job features (firm size, sector of work, volume of work, etc.). In this study, the authors use a comprehensive dataset including a wide range of work characteristics before and after a period of sick leave to predict the length of the absence and future job prospects. To do so, this empirical paper exploits survival models and an event study. Compared to the current literature on the topic, this paper extends the existing knowledge by differentiating between different exit routes of work incapacity.

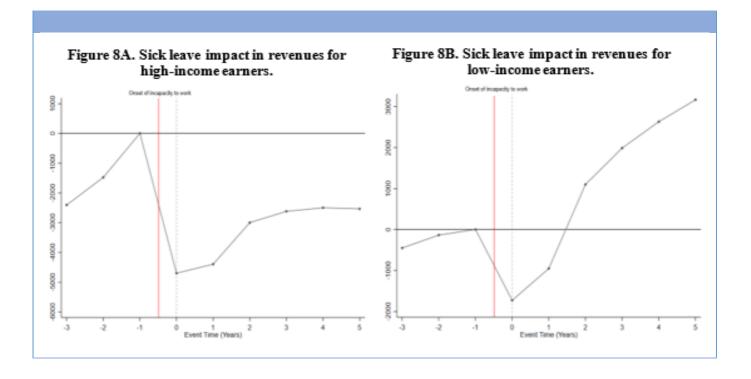
# **Empirical Methodology**

This study exploits a detailed Belgian social security dataset that includes work characteristics (volume of work, sector, annual revenue, etc.) and socio-economic characteristics (gender, age, household status, etc.). Two-digit *code nace* specifications allow for a detailed identification of the sector of work. To identify work characteristics associated with longer periods away from the labour market, the authors use several survival methods. The survival analysis includes a subsample with all individuals who were in the state of work incapacity for at least two consecutive quarters between the years 2004 and 2009. The individuals were followed until the event of *death* or "right censoring" at the first quarter of 2015, whichever came first. The analysis includes the estimation of survival curves via the Kaplan-Meier estimator; then it compares the impact of different work characteristics through the Cox proportional hazards model. In addition, this empirical study implements an independent competing risk model to identify work characteristics associated with specific trajectories. Lastly, this empirical study examines the impact of sick absence on future job prospects through an event study, where the event is the onset of work incapacity. Future job prospects are analysed in terms of volume of work and revenue.

### Results

This empirical paper brings new evidence that the longer a person stays away from the labour market, the lower the odds that she will go back to employment. The findings contribute to the understanding of how the characteristics of the job held before the incapacity onset can affect its duration. Individuals working in enterprises with higher reallocation and accommodation capabilities (large and public employers) are more likely to return to work. In addition, the results show that workers in health care and education tend to stay longer in work incapacity. This is directly related to the concept of sick presenteeism (going to work despite feeling ill). The authors argue that direct personal work and the lack of substitutes in the sector might be driving this phenomenon in these specific sectors. Furthermore, the degree of job stability is also identified as a cause for sick presenteeism and longer sick absences. Finally, results show that individuals on sick leave are more likely to go back to employment through a part-time job.

The empirical study also presents the impact of a period (of at least 6 months long) in work incapacity on future job prospects. Findings show that individuals suffer from a drop in revenue and volume of work after one year of work incapacity, and that they do not reattain their levels previous to the work incapacity onset. However, the results diverge for low-skilled and part-time workers who are found to be less affected in the long run in terms of income (Figure 8A& 8B). Hence, seniority is argued to play a fundamental role in predicting the impact of sick leave on future earnings.



# Policy implications

This empirical paper aims at helping in the prevention of long-term work incapacity cases in the Belgian context. As suggested by the results, employers' reallocation capabilities play a crucial role in determining the duration of the sick leave. To improve these capabilities, the authors put forward the idea of creating networks of small-private enterprises which could rely on each other to reallocate workers with a disability. In addition, governments should implement policies to ease the difficult situation in terms of work pressure that health care and education workers face. Finally, part-time workers seem to be at an advantage in terms of revenue recovery, which the authors believe is a direct consequence of the Belgian legislation that encourages the exit of work incapacity through a part-time job.

# References

López-Forés, L. & Tojerow, I. (2021) "Where did you come from, where did you go?": How job characteristics before sick absenteeism might predict duration and job prospects. *DULBEA Working Paper*.

Link to the article

(to be included)



Authors, personal sites: Laura López Forés, Ilan Tojerow.



### **Related Studies:**

- Flach, Groothoff, Krol, & Bültmann (2011). Factors associated with first return to work and sick leave durations in workers with common mental disorders. *European Journal of Public Health*, 22(3), 440-445.
- Markussen, S., Røed, K., Røgeberg, O., & Gaure, S. (2009). The anatomy of absenteeism. *Journal of Health Economics*, *30*(2), 277-292.



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Département d'Economie Appliquée de l'ULB (DULBEA), Solvay Brussels School of Economics and Management CP140, Avenue Franklin Roosevelt 50, 1050 Bruxelles (Belgium)

Tel +32.2.650.41.11 https://dulbea.ulb.be dulbea@ulb.be

