

ANALYSIS OF SICKNESS ABSENCE DATA IN CROATIA: EMPHASIS ON TOURISM

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Abstract

Purpose – Sickness absence is the most common form of absenteeism. Regardless of its real causes, sickness absence can have several potential consequences for individuals, company, society and country. When it comes to Croatia, sickness absence regulation is defined by health insurance system. The purpose of this article is to explore and determine the trend of sickness absence, in Croatia from 2007 to 2016. Since tourism makes a big part of Croatian economy, a special attention in this article will be drawn to analysis of sickness absence rates in this sector.

Methodology – In this study, desk research of available literature and relevant websites is performed. Health insurance system in Croatia is explored and the data about sickness absence in Croatia available in the Annual Reports of the Croatian Health Insurance Fund are analyzed. In this paper, special emphasis is given to the tourism sector. For that purpose, available sickness absence data for Accommodation and food service activities are analyzed as well.

Findings – The results show high levels of sickness absence in Croatia. When it comes to tourism, there are slight differences between average country data and the data from Accommodation and food service activities.

Originality of the research – This paper contributes to the existing literature of absenteeism and sickness absence as one of its most commonly referred form. This research can also contribute to a better understanding of the extent of sickness absence and its consequences for the employers and the economy in general.

Keywords sickness absence, absenteeism, sick leave, health insurance system, Croatia

INTRODUCTION

Sickness absence or sick leave is one of the most common forms of involuntary absence behavior. It is a complex phenomenon influenced by factors at different levels, and should be understood as interaction between the individual's health and the social insurance system, levels of benefits, type of work, flexibility at work, attitudes towards work and other medical, social and psychosocial factors (Sieurin, Josephson and Vingård, 2009). Sickness absence has several potential consequences that can be measured at different levels in society: for a sick-listed individual, the family of a sick-listed individual, the employer, the workgroup, the health services, society and the insurer (Vingård, Alexanderson and Norlund 2004). At the company level the most important (negative) economic consequence of absenteeism is its high costs. These costs typically include salary costs for the person who is absent, costs of replacement staff, costs associated with lost productivity, reduced quality of services or costs of human resource management and occupational health management time spent dealing with absence that could be used for other purposes (Whitaker, 2001).

In European Union, the data about sickness absence costs refer to official statistical data that are being collected through individual state's national systems of social, i.e. health insurance. The costs of sickness absence are covered and shared in different proportions between the employer and the EU state. Almost all Member States provide a double payment arrangement for sickness absence. On the one hand, there is a period of sick pay that is paid by the employer. On the other hand, after this period, benefits are paid by the social security system (Spasova, Bouget and Vanhercke, 2016). Some social security systems include a waiting period from one to fourteen days for receiving sickness benefits. While in some countries employee receives the compensation for sick leave in full (Luxembourg, Norway), other countries pay only certain percentage (Croatia, UK) (Spasova, Bouget and Vanhercke, 2016).

Some studies deal with sickness absence behavior at the national, i.e. country level, while other authors research differences existing among several countries. Beblo and Otlieb (2012) explored sickness absences of German men and women from a longitudinal perspective. For that purpose, they used the data from German Socio-Economic Panel. The focus of their study was sickness absence pattern depending on household characteristics and existing working conditions. This research showed that the stereotype of higher absences of women due to family obligations does not seem to correspond to the actual behavior of German employees. Further on, De Paola, Scoppa and Pupo (2014) analyzed how is sickness absence of Italian public sector employees affected by the changes in sick leave policy in Italy. The reform from 2008 increased the short-term sickness absence and decreased the long-term absence behavior. Gimeno et al. (2004) analyzed sickness absence frequency in 15 EU member states and used the data collected by the 3rd European Survey on Working Conditions. The results showed that sickness absence rates were lower in Southern European countries compared with Central and Northern European countries, and, in general, slightly higher in men than in women. Thorsen et al. (2015) performed a study about the differences in sickness absence in Nordic countries. According to this research, long-term sickness absence is high in Norway and Sweden, low in Denmark and Iceland, and moderate in Finland. Short-term sickness absence (i.e. sickness absence of less than 8 days) shows different i.e. opposite pattern: short-term sickness absence is high in Denmark, low in Norway, and moderate in Sweden and Finland. The sickness absence patterns for demographic groups are to a high degree similar in the Nordic countries. In general, women have more sickness absence than men do. Older employees have more long-term sickness absence than younger employees. Younger employees have more short-term sickness absence than older employees. Municipality employees have more sickness absence than employees do in the government and in the private sector. The sector 'Public administration, education and health' has a particularly high sickness absence rate.

According to Eurostat the EU Member States spent over €138 billion on paid sickness absence benefits in 2014 (1% of EU GDP). In Croatia sickness absence payments totalled for 2.76% of GDP in 2014 (compared with 2.85% in 2013). In 2014, 1.25% of these were covered by employers, i.e. related to sickness of 42 days or less, and 1.51% were covered by the social protection system (sickness of over 42 days) (Spasova, Bouget and Vanhercke, 2016).

In 2016, during regular controls of sickness absences conducted by Croatian Health Insurance Fund, many irregularities were found and around 21% of sickness absences have been closed (HZZO, 2018). This data shows that sickness absence is a major problem in Croatia. Therefore, the purpose of this paper is to explore and determine the trend of sickness absence in Croatia in a 10-year period: from 2007 to 2016. Since the costs of sickness absence in Croatia are distributed among private companies and Croatian Health Insurance Fund, it is important to analyze both kinds of these data.

Finally, since tourism is a major part of the Croatian economy, a special attention will be drawn to analysis of sickness absence rates in Accommodation and food service activities (according to National Classification of Activities, activity "I").

The first section will give a detail overview of the health insurance system in Croatia. In the methodological part, it will be explained which data will be analyzed and in what way. Further on, a brief explanation of the analyzed data will be given. This paper ends with a conclusion with recommendations for future researches.

1. HEALTH INSURANCE SYSTEM IN CROATIA

The Labor Act and the Law on Compulsory Health Insurance regulate sickness absence in Croatia. Employees can take a sickness absence because of illness, injury, for a medical examination that cannot be performed outside the working hours, due to medically required isolation, complications during pregnancy, accompanying a sick person, or caring for a sick child or spouse. Employees are entitled to receive sickness benefits in case they are registered for mandatory health insurance with the Croatian Health Insurance Fund (CHIF) as an economically active person with a permanent residence in Croatia. Cash benefits itself are under supervision of the Croatian Health Insurance Fund. There are two types of cash benefits in Croatia:

- income-replacement benefit while temporarily incapacitated for work and
- cash sickness benefit.

Income-replacement benefit are paid to individuals that are employed or self-employed, farmers, priests, persons providing assistance and care to a Croatian war veteran, parents with carer status, etc., while those who acquire health insurance status through other income (author contract, copyright contract) are entitled to receive cash sickness benefit (European Commission, 2017).

According to the Law on Compulsory Health Insurance (NN 80/13, 137/13), the income-replacement benefit for sickness absence is normally paid by the employer for the first 42 days of sickness, or 7 days for a worker with a disability. The amount of the payment depends on the collective agreement or employment contract, but may not be less than 70% of employee's average wage in the 6 months preceding his/her sickness absence. From the 43rd day of sickness absence, or the eighth day for a disabled employee, income replacement benefit is calculated and paid out by the employer and reclaimed from the CHIF. In this case, the maximum rate is limited to HRK 4,257.28. Employee is entitled to income-replacement sickness benefits until his recovery, but as a rule no longer than

an uninterrupted period of 18 months for the same diagnosis. After this, the benefit is reduced to half of this amount.

When it comes to monetary sickness benefits, salary compensations are paid by the employers (out of their own resources or the resources of the Croatian Health Insurance Fund). The upper limit of this compensation is up to 70% of the average base and cannot be more than HRK 4,257.28 (European Commission, 2017).

The share of compensation cost in total CHIF's expenses is on average 11.5% (in 2016 it was 0.313% of Croatian GDP). For the period between 2007 and 2014 this share continuously declined: from 13.65% in 2007 it dropped to 9.54% in year 2014 (4.99% average annual drop rate). In 2015 and 2016 the share began to rise again (9.91%, i.e. 10.29%). For the same analyzed period (2007 – 2016) compensations for sickness and disability made up between 40.79% (2011) and 51.87% (2007) of total compensation costs. Between 60 and 65% of this costs refers to compensation for sickness, while the rest refers to compensations for family member care and compensations for pregnancy complications.

2. METHODOLOGY

Croatian Health Insurance Fund reports annual statistical data about sickness absence in Croatia. For that reason, the CHIF Annual Reports for years 2007 to 2016 will be analyzed. These reports are available on CHIF website. Sickness absence data include:

- the rate of temporary incapacity for work, i.e. sickness absence,
- days of sickness absence,
- average duration of sickness absence and
- the average number of daily sick employees.

The rate of temporary incapacity for work is calculated as a quotient of number of daily sick employees and the number of active insured persons. The data will be analyzed in two ways: 1) in total and 2) separately for:

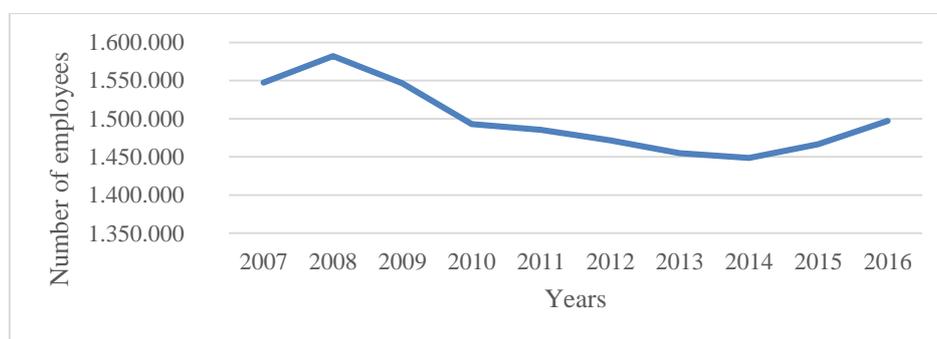
- sickness absence at the employers' expense (those less than 42 days),
- sickness absence at the CHIF expense (over 43 days),
- sickness absence at the CHIF expense for tourism industry.

For the purpose of this research, the data for tourism will be analyzed from the named reports for activity I – Accommodation and food service activities for the period 2010-2016 according to the Croatian National Classification of Activities – NKD 2007, since the data for the preceding period (category H – Hotels and restaurants) is not comparable. Descriptive statistic data and results will be shown in line diagrams.

3. RESULTS

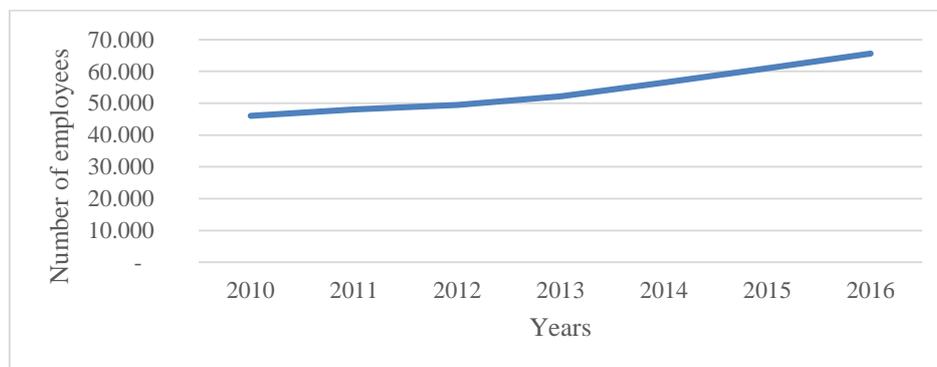
In the period 2007-2016 the number of active insurers, i.e. employees was decreasing at the average annual rate of 0.37%. In 2016, there were 1,582,261 active insurers, which is 50,345 insurers less than in 2007 (Figure 1). In case of Accommodation and food service activity, the trend is opposite: from 2010 to 2016 the number of employees was growing at an annual rate of 4.5% (Figure 2). Additionally, insured persons in Accommodation and food service activity make 4.38% of the total active insurers in Croatia.

Figure 1: **Total number of active insurers – employees for the period 2007 to 2016**



Source: Annual Reports of the Croatian Health Insurance Fund 2007-2016

Figure 2: **Number of active insurers – employees in Accommodation and food service activity for the period 2010 to 2016**

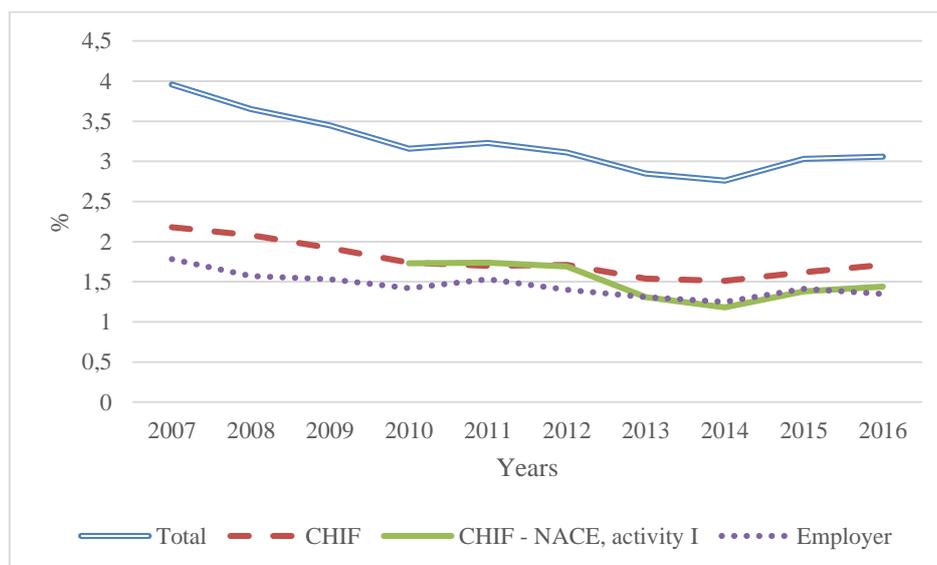


Source: Annual Reports of the Croatian Health Insurance Fund 2010-2016

Further on, the data shows the decrease in the total rate of temporary incapacity for work, i.e. sickness absence from 3.96% in 2007 to 2.76% in 2014 with an exception of a slight increase in 2011. Until 2016 total rate of sickness absence has grown to 3.06%. Sickness absence rate at the employers expense varied between 1.78% in 2007 and 1.35% in 2016. When it comes to sickness absence rates at the CHIF expense, they varied between 2.18% in 2007 and 1.71% in 2016. Due to revised National Classification of Activities and

different data coverage, the data for tourism, i.e. *Accommodation and food service activities* can be analyzed starting from 2010. Rates for Accommodation and food service activities sector were similar to the CHIF average until 2012. In 2013 they decreased for 0.68% and continued to fall for another year. In 2016 sickness absence rate was 1.44% (Figure 3).

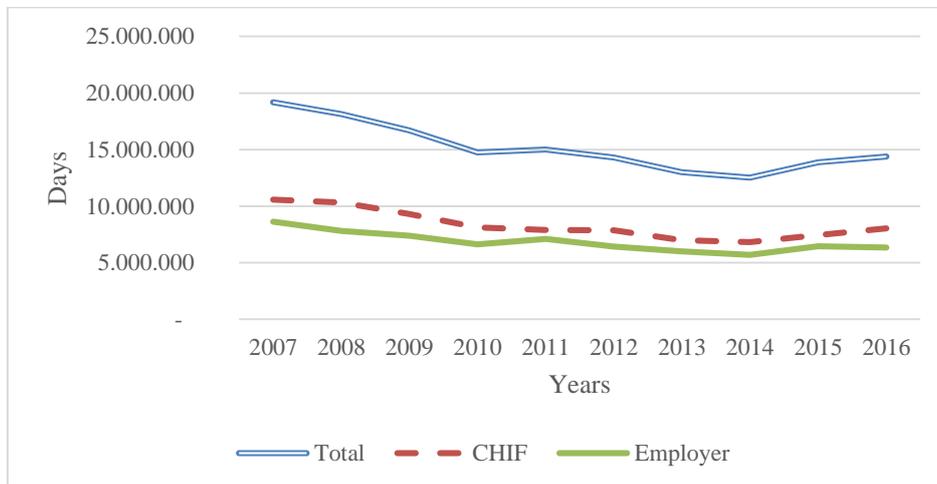
Figure 3: **Average rate of sickness absence for the period 2007 to 2016**



Source: Annual Reports of the Croatian Health Insurance Fund 2007-2016

A positive development in terms of decrease in the number of sick days leave is observed between 2007 and 2014: 19,196,911 days in 2007 and 12,518,637 days in 2014. This indicator started to grow in 2015 and continued to grow in 2016. The data on the days of sickness absence at the employer's expense show a similar trend – drop rate from 2007 to 2010, a slight growth in 2011, fall until 2014 and then growth again until 2016, while CHIF data show a constant decrease until 2014 and a slight growth in two last observed years (Figure 4).

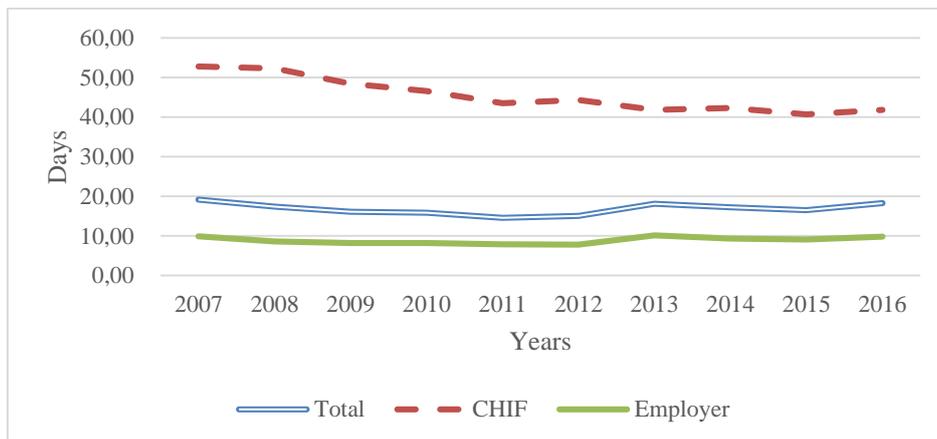
Figure 4: **Total number of days of sickness absence for the period 2007 to 2016**



Source: Annual Reports of the Croatian Health Insurance Fund 2007-2016

In the observed period of ten years, average duration of total sickness absence decreased from 19.16 days per patient in 2007 to 14.61 days in 2011. Starting from 2012 the average total duration shows constant growth and in 2016 amounted 18.27 days per patient. Similar behavior is observed for the sickness absences on employer's expense, while CHIF data shows a negative trend in the last ten years with a few slight exceptions in 2012, 2014 and 2016 (Figure 5).

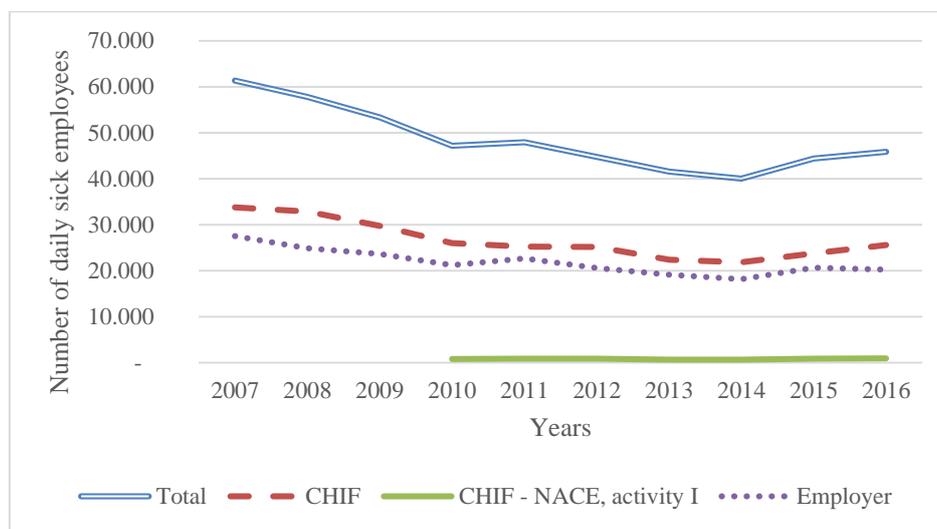
Figure 5: **Average duration of sickness absence in days for the period 2007 to 2016**



Source: Annual Reports of the Croatian Health Insurance Fund 2007-2016

In 2007 on average 61,322 employees daily were sick. With some oscillations this number constantly decreased in the observed period: on average 3.18% per year. For the same observed period average annual rate of decline for CHIF data was 3.03%. The highest average annual rate of decline was recorded for the number of employees whose sickness absence was covered by their employers – average annual rate of decline was 3.37%. When it comes to Accommodation and food service activity data, in 2009, on average 798 employees daily were on sick leave. During the observed period, the daily number of patients on sick leave was stable, with some minor oscillations (Figure 6).

Figure 6: Average number of daily sick employees for the period 2007 to 2016



Source: Annual Reports of the Croatian Health Insurance Fund 2007-2016

CONCLUSION

Absenteeism is affected by many factors on individual, organizational and state level. Sickness absence as one of its most common form is not an exception. Since the financial costs of an absent employee are very high, managing sickness absence should be high on the list of every state and company's priorities. In the European Union, sickness absence is regulated by health and/or social security systems of every Member State. When it comes to Croatia, the main role in sickness data monitoring has Croatian Health Insurance Fund. The data from the CHIF Annual Reports for a 10-year period show some interesting facts. First, the number of employees was showing a negative trend from 2008 to 2014 and after that started to grow. During the observed 6-year-period, tourism shows a positive trend – the number of employed persons grew from 45,999 in 2010 to 65,582 in 2016. Second, average rate of sickness absence decreased from 3.96% in 2007 to 2.76% in 2014 and then started to grow – in 2016 this rate was 3.06%. Even though this rate is smaller than it was back at the beginning of the observed period, the fact that it started to grow could be explained by the growth of the number of employed persons. Further on, average rates of sickness absence in tourism followed the CHIF average until

2012. After that, the rates drastically decreased and stayed under the CHIF average until the end of the observed period. It can be concluded that in tourism industry less people take sick leave. The reasons for this could be industry specifics, such as working conditions, younger workers, seasonality, etc. When it comes to the total number of days of sickness absence, annual data show that 19,196,911 days in 2007 and 14,391,304 days in 2016 were lost because of sickness absence. The data about the average duration of sickness absence in days show that employees take more short-term sickness absences (at the employer's expense) than the long-term (at the CHIF's expense). Finally, in comparison with the CHIF data average, the average daily number of sick employees in tourism doesn't follow the same trend. Even though the daily number of sick employees' decreases from 2007 to 2014 and increases in 2016 for both CHIF and employer's expense, tourism average varies from one year to another.

Sickness leave is an indicator with a clearly negative connotation for every organization, especially for those work-intensive activities like tourism and hospitality. Available analysed data on sickness leaves suggest that the situation in this sector is somewhat better than for the economy as whole on average. Since tourism accounts for a great portion of Croatian economic activities, absenteeism, as one of the determinants of labour productivity, should be the subject of more intensive studies. However, available aggregate data on the national level do not suffice for a quality research of this topic. Future researches should focus on gathering more detailed data on absenteeism, its causes and consequences, since the literature in this area is very scarce.

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