



## Wage differences according to health status in France



Mohamed Ali Ben Halima\*, Emeline Rococo

*Institute for Research and Information in Health Economics, 10 rue Vauvenargues, 75018 Paris, France*

### ARTICLE INFO

#### Article history:

Received 4 February 2014

Received in revised form

18 September 2014

Accepted 19 September 2014

Available online 22 September 2014

#### Keywords:

France

Self-perceived health status

Activity limitations

Long-term chronic illness

Wage differential

Discrimination

Unobserved productivity

### ABSTRACT

Many OECD countries have implemented anti-discrimination laws in recent decades. However, according to the annual report published in 2010 by the French High Authority for the Fight against Discrimination and for Equality, the second most commonly cited factor in discrimination claims since 2005 is a handicap or health status.

The aim of this research is to estimate the level of unexplained components in the wage gap that can be attributed to wage discrimination based on health status in France in 2010 utilizing data from the Health, Healthcare and Insurance survey among 1594 individuals. Three health indicators are used: self-perceived health status, activity limitations and long-term chronic illness.

To measure the wage gap according to an individual's health status, the analysis considers the endogenous selection of health status and unobserved differences in productivity.

The results demonstrate that wage discrimination is experienced by individuals in poor health regardless of the health indicator utilized.

The hourly wage rate among individuals with poor self-assessed health status is on average 14.2% lower than among individuals with good self-assessed health status. However, for individuals suffering from a long-term chronic illness or an activity limitation, the gap is 6.3% and 4.5%, respectively. The decomposition performed on wage differences according to health status by correcting for health status selection bias and controlling for unobserved differences in productivity indicates that the 'unexplained component' that can be attributed to wage discrimination is equal to 50%.

© 2014 Elsevier Ltd. All rights reserved.

### 1. Introduction

Many OECD countries have implemented anti-discrimination laws in recent decades. However, some forms of wage discrimination persist. Notably, in France, discrimination is experienced by gender (Meurs and Ponthieux, 2000), trade union representative status (Breda, 2014) and national origin (Aeberhardt et al., 2010).

Research about other sources of wage discrimination, such as health status, is less abundant. Yet, according to the annual report published in 2010 by the French High Authority for the Fight against Discrimination and for Equality, the second most commonly cited factor in discrimination claims since 2005 is a handicap or health status, which included 19% of filed claims.

The primary cause of discrimination is an individual's origin, which is cited in 27%–29% of claims. Gender and trade union

activities are third (9% of claims) and fifth place (5% of claims), respectively; in other words, these factors motivate fewer claims than a handicap or health status. Furthermore, health status and handicaps are the primary reason cited in discrimination claims originating from the public sector and the second most common in private sector claims. These figures alone are sufficient to justify investigation into wage discrimination on the basis of health status.

Utilizing data from the Health, Healthcare and Insurance survey (ESPS), this study estimates the level of wage discrimination based on health status in France in 2010, incorporating the endogenous selection of health status and the impact of working conditions on individuals' wages and health. Failure to consider endogenous selection can produce biased estimates. In effect, unobserved characteristics leading to the selection of specific health status categories can also influence wage levels. Having said that, several previous studies estimating wage discrimination levels do not consider the endogenous selection of health status (Deleire, 2001; Gannon and Munley, 2009; Kidd et al., 2000), which essentially depends on characteristics influencing wages as the return to individuals' labor. Additionally, working conditions are rarely included in estimates of wage discrimination levels (Deleire, 2001;

\* Corresponding author.

E-mail addresses: [benhalima@irdes.fr](mailto:benhalima@irdes.fr) (M.A. Ben Halima), [emeline.rococo@gmail.com](mailto:emeline.rococo@gmail.com) (E. Rococo).

Gannon and Munley, 2009; Kidd et al., 2000; Madden, 2004). There is, nevertheless, a connection among working conditions, health status and wages (Baudelot and Gollac, 1993; Rosen, 1986).

Although the existence and level of wage discrimination based on health status has been broached in different countries such as the United Kingdom (Kidd et al., 2000; Madden, 2004), Ireland (Gannon and Munley, 2009) and the United States (Deleire, 2001), we are unaware of previous research conducted on this subject in France. In addition, this phenomenon may differ from country to country according to the culture and the legislation in effect.

This article first presents the interrelation among health status and wages and education on estimated wage discrimination by health status. Second, it presents the econometric model, descriptive statistics and regression results. Finally, the level of wage discrimination according to health status is analyzed.

## 2. Health status and wages

There is dual causality between health status and wage rate. Wage rates can effectively be influenced by health status, but wage can also have an impact on health status. These effects have been widely studied in the academic literature including the Grossman model (1972), which argues that each individual begins with a health capital stock that determines the amount of healthy time available to them. This time can be utilized to accumulate health capital, the consumption of goods (notably medical goods), leisure activities and labor market productivity. The production of health enhances both the amount of healthy time available and access to the labor market. Because healthy time invested in labor market productivity is remunerated as wages, the marginal benefits of investments in health increase with the salary.

### 2.1. Impact of wage on health status

Within the European Union (EU-15), which includes France, it has been suggested that low wages (two-thirds lower than the average income in the country) increase the likelihood of self-reporting an average health status by 2% after controlling for working conditions (Cottini and Lucifora, 2009). In France, there is also a correlation between income level and mortality (Jusot, 2004). In effect, the risk of mortality among the 20% poorest, adjusted for working conditions and cultural habits, is an estimated two times higher than that for the 20% wealthiest. This probability of death progressively diminishes along the wage distribution scale implying an economic mortality gradient. In France, there is also a significant mortality differential according to pension level for identical socio-professional categories (Bommier et al., 2005).

### 2.2. Impact of health status on wages

However, health status also has an effect on individuals' wages. In the United States between 1992 and 1993, men reporting poor health earned 6.4% less than men in good health (Pelkowski and Berger, 2004). This wage differential was estimated at 7.2% for women. Reduced earnings due to permanently impaired health during the course of an individual's lifetime has been estimated at approximately 52%, measured in terms of the annual hourly wage rate and the number of years worked (Pelkowski and Berger, 2004).

The impact of health status on wages can be explained in several ways. Because health status has an influence on individuals' human capital stock, notably the acquisition of skills (Bartel and Taubman, 1979), wage differentials can be observed.

Furthermore, some authors have demonstrated that improvements in health status increase individuals' productivities (Davis et al., 2005; Tompa, 2002). If individuals are rewarded according

to their productivity, an increase in productivity generates an equivalent increase in wages. In addition to the direct impact of health status on productivity, an employer can also perceive health status as being correlated with individuals' unobserved characteristics that contribute to productivity (preferences, risk aversion, compliance, etc.).

In addition to productivity and human capital differentials, health status can also have an impact on wages due to discrimination.

In the United Kingdom (Kidd et al., 2000), the hourly wage differential between individuals in good or poor health is estimated to be 13.2%. Only fifty percent of this wage gap is explained by observable characteristics when applying the Oaxaca and Blinder (1973) decomposition model. The effects of wage discrimination at the labor force participation level are also included. Individuals will choose whether to participate by comparing their reservation wage (wage level under which an individual will refuse to participate) against the expected wage. Wage discrimination against individuals in a poor state of health may reduce the level of labor market participation. After controlling for labor force participation in the United Kingdom, the wage gap between individuals in good and poor states of health is an estimated 14.1% (Kidd et al., 2000). The proportion unexplained by individual differences also amounts to 50% of the wage gap (Kidd et al., 2000).

According to Oaxaca and Blinder (1973), the proportion of the observed wage gap unexplained by individual differences cannot be attributed entirely to discrimination; a wage gap can result from unobserved differences in productivity (Jones, 2006). However, by comparing individuals with a health problem, those limited in their working capacities and those who are not, it is possible to obtain a more accurate measure of discrimination (Deleire, 2001; Gannon and Munley, 2009; Jones, 2006; Madden, 2004). Individuals with a non-limiting health problem should not be subject to discrimination because they are no less productive than individuals without a health problem. The unexplained part of the wage gap between individuals in poor health with no activity limitations and individuals in good health would thus be due to discrimination. However, the unexplained component of the wage gap between individuals with poor health and activity limitations and those with good health cannot be attributed solely to discrimination but may also reflect unobserved differences in productivity (Deleire, 2001; Gannon and Munley, 2009; Jones, 2006; Madden, 2004).

A study of Ireland that incorporated unobserved differences in productivity found that, between 1994 and 2001, 61.3% of the wage differential observed by health status for men was the result of discrimination (Gannon and Munley, 2009). A similar effect was observed in 1995 among men in Great Britain, and the estimated proportion of the wage gap due to discrimination was approximately 50% (Madden, 2004).

Even if the analytical methods employed to estimate wage discrimination according to health status differ vary slightly, the conclusions invariably point to the existence of comparable levels of wage discrimination based on health status.

## 3. Data and econometric model

### 3.1. Health, healthcare and insurance survey (ESPS) survey

The 2010 ESPS survey is a general population survey. It has been approved by the French commission on data privacy. The ESPS survey was conducted utilizing a sample of health insurance beneficiaries and their healthcare consumption known as the Permanent Sample of Health Insurance Beneficiaries, which is representative of the population of beneficiaries in France. This sample of randomly selected individuals was covered by one of the

Download English Version:

<https://daneshyari.com/en/article/7334725>

Download Persian Version:

<https://daneshyari.com/article/7334725>

[Daneshyari.com](https://daneshyari.com)