Minimum Wage Effects of the Worker Posting Law? A Micro Data Analysis for the German Construction Sector

The introduction of a minimum wage in Germany has been discussed for a relatively short period of time. Especially the employment effect of a minimum wage law is debated controversially.

While the neoclassical labor market model with perfect competition inevitably predicts rising unemployment when a wage floor is introduced, particularly the new monopsony theory (Manning 2003a) postulates the contrary. Introducing a binding minimum wage, lower than the equilibrium wage, in a thin labor market with certain market power on the employer side can raise employment.

Given the existing ambiguity of theoretical positions, the impact of the minimum wage on employment has to be analyzed empirically. An extensive number of international studies attend to the impacts of minimum wages, especially for the United States and the United Kingdom. To sum up, the recent empirical literature provides no unambiguous result either concerning the economic effects of minimum wages. The institutional settings of the minimum wage regulations as well as the prevalent economic and institutional conditions in the particular country seem to be the determining factors for the direction and magnitude of the minimum wage effects.

This paper analyzes the impacts on wages and employment of the introduction of a minimum wage in the German construction sector in 1997, which was related to the Worker Posting Law. This law forces foreign firms sending temporary workers to Germany to comply with the German labor market laws, especially with those concerning minimum wages. From January 1, 1997 the minimum pay had been 17 DM $(8.69 \ \ \ \ \ \)$ in western Germany, as of September, 1 1997 it was 16 DM $(8.18 \ \ \ \)$ in western and 15.14 DM $(7.74 \ \ \ \ \)$ in eastern Germany.

A difference-in-differences approach is used to analyze the effects on wage growth and the employment retention probability. In order to identify the wage and employment effects despite the lack of information on working hours in our database (IABS 1975–2001), we apply a probability approach. The size of the treatment and the control group is not exogenously given, but is determined by the maximum-likelihood criterion. We use two estimation approaches based on different assumptions concerning working hours.

The descriptive analysis of the minimum wage introduction for eastern Germany shows that in the first two deciles of the wage distribution the wage increased above average in the year in which the minimum wage was introduced. Concerning the employment retention probability, first evidence of a negative impact of the wage floor arises in this part of the country. For western Germany, however, no descriptive indication of wage or employment effects can be found.

The results of the econometric estimation, in contrast, show a wage effect not only in eastern but also in western Germany. The impact on wages, however, is considerably stronger in the eastern German construction sector. At the same time the results of the logit estimation for the employment retention probability for eastern German workers imply that this group was also at higher risk of losing their jobs. The improvement of the pay situation in the low-wage sector seemed to have been paid for dearly through job losses of those workers affected by the minimum wage.

In contrast, no detrimental employment effects can be detected for western Germay. For the western German construction sector both estimation approaches show positive impacts on the employment retention probability for the group of workers affected by the minimum wage. Although any interpretation requires caution due to the partly missing statistical significance, there is evidence supporting the view that the minimum wage has even increased employment in the group of workers affected.

A possible explanation for the opposite direction of the employment effects is the size of the minimum wage in relation to the median wage. In western Germany the minimum wage in the construction sector was around 63% of the median wage in 1997, whereas in eastern Germany it was 82%. The results are compatible with the view that negative employment effects dominate if the minimum wage exceeds a certain critical level relative to the median wage. A moderate minimum wage does not inevitably lead to a decrease in employment. Even positive employment effects may arise according to Manning's argumentation. However, one should be cautious when transfering these results to other sectors.