

## Abstract

This thesis consists of three essays revolving around the topics of labor market institutions and policy evaluation. In the first chapter, I focus on the impact of outsourcing on workers' earnings and possible reasons that firms outsource by estimating panel data and event study models. In the Norwegian labor market, the general rule is that employees shall be employed permanently, and temporary contracts are regulated and only allowed for a limited duration. I find that firms increasingly contract out a wide range of activities that were previously done in-house, such as cleaning, security, logistics, and catering. Workers who become outsourced experience a 14 percent earnings decline, which is mostly explained by a decrease in contracted hours. Firms are likely to outsource to reduce costs and reduce rigidity in contractual working hours, which is possible as contractor firms operate on lower non-wage costs and have more workers with less than full-time contractual working hours.

The second chapter focuses on the effect of collective bargaining agreements on workers and firms by estimating panel data and regression discontinuity design models. We find that establishments' exposure to legislated collective bargaining agreements extensions leads to higher average earnings and lower earnings dispersion. We also find that collective bargaining agreement adoption is strongly associated with increases in union density. Using a regression discontinuity design to isolate the causal effect of a collective bargaining agreement mandate, we find that collective bargaining coverage has no detectable impacts on pay or performance. We discuss alternative explanations for the diverging findings across these two research designs, including the presence of union threat effects, the role of unions in local bargaining and the differences in populations studied.

In the final chapter, I discuss the properties of regression discontinuity design estimation in settings in which the treatment cutoff is defined by a fraction determined at a group level. For example, establishments in which a union barely won by getting over 50% of workers' votes are compared to establishments where the union barely lost, to measure the impacts of establishment unionization on workers' outcomes. In such settings, the estimates may be biased due to irregular support of the running variable, which may result in a different composition of group sizes just above and just below the policy cutoff. To address this issue, practitioners have used two alternative definitions of the running variable. I discuss the properties of the alternative running variables and provide an identifying assumption of the regression discontinuity design method when the running variable is discrete or has irregular support. Moreover, I provide weights that can help reduce the bias that occurs when using an alternative running variable.