



MASTER'S THESIS
“Minimum Wages“

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The Long-Term Consequences of Minimum Wages

Daniel Bursian studied in the Elite Graduate Program “Master in Quantitative Economics” at LMU Munich. As part of his master’s thesis, he theoretically examined how a minimum wage affects the level of employment in the long run when skills are lost during prolonged periods of unemployment.

Minimum Wages – The Status Quo

Before the introduction of minimum wages, many economists warned of rising unemployment. The reasoning: higher wage floors increase labor costs; therefore, companies demand fewer workers. Individuals with low productivity, in particular, would find it harder to secure a position if their expected contribution does not justify the minimum wage. For the minimum wage introduced in Germany in 2015, such fears were initially not realized: the unemployment rate continued to fall in the following years. It is only more recently that unemployment has begun to rise again.

Low-skilled employees, in particular, were intended to benefit from higher wages through the minimum wage. At the same time, there are indications of unfavorable developments at the lower end of the labor market: after 2015, the proportion of unemployed individuals without completed vocational training increased. Furthermore, the average duration of unemployment rose among the long-term unemployed—a group in which individuals without a vocational qualification are disproportionately represented.

Long-term unemployment acts like a vicious cycle: the longer the period of unemployment lasts, the lower the chances of finding a new job. Macroeconomic labor market models often represent these heterogeneous opportunities through differences in human capital. Human capital encompasses all productivity-relevant characteristics, such as education or professional experience. A key explanation for declining placement prospects is, therefore, the gradual loss of human capital during phases of unemployment.

The Long-Term Consequences

Within the framework of a search-and-matching model, Daniel Bursian demonstrates that a minimum wage can amplify the decline in job opportunities. For many employees who possess professional experience or a reliable work routine, it primarily results in higher wages initially. However, for individuals with very low qualifications or those lacking recent work experience, it can become a hurdle. If companies perceive that the expected performance does not justify the minimum wage, the chances of being hired decrease.

In the short term, the overall effect of a minimum wage on the unemployment rate remains small, as skills and work routines are lost only gradually. Over a longer period, however, more and more job seekers slide into a state of low human capital due to phases of prolonged unemployment, where the minimum wage then acts as a barrier to hiring. The result is a more polarized labor market: those with stable employment histories benefit, while long-term unemployment increases at the lower end.

For the German context, Daniel Bursian calibrates the model specifically for low-skilled workers and compares a scenario without a minimum wage to the 2015 minimum wage. In the long run, the minimum wage triggers an 8.4 percentage point increase in the unemployment rate for unskilled workers, with 80% of this total increase only being reached after 11 years. In contrast, the short-term increase is significantly lower at 2.4 percentage points. These findings suggest that the most significant adjustments occur gradually rather than abruptly.

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