Monopsonistic Wage Compression in Thin Labor Markets: Employer Concentration, Search Frictions, and Rent Extraction Among Low-Skill Manufacturing Workers in South-East Poland, 2015–2022

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Abstract. This study examines the relationship between employer market concentration and wage compression in geographically constrained, thin labor markets across the South-East Polish manufacturing corridor. Using matched employer–employee administrative panel data spanning 2015–2022 and a Herfindahl–Hirschman Index (HHI)-based monopsony identification strategy, we estimate wage markdown elasticities via a two-stage least squares instrumental variable approach, instrumenting local labor market concentration with historical firm entry patterns. Our results indicate that a one standard deviation increase in HHI is associated with a 6.3–8.7 percentage-point reduction in the marginal revenue product–wage gap closure rate. Heterogeneity analysis reveals disproportionate rent extraction targeting female workers and those with sub-secondary educational attainment. The findings carry substantive implications for EU labor market regulation, minimum wage policy design, and antitrust enforcement frameworks in post-transitional economies.

Keywords: monopsony, wage markdown, employer market concentration, search frictions, thin labor markets, Herfindahl–Hirschman Index, rent extraction, post-transitional economies, matched employer–employee panel data

Introduction

The question of how employer market power shapes wage determination has re-emerged as one of the most consequential debates in contemporary labor economics, particularly in the context of post-industrial regional economies where the spatial distribution of firms remains highly asymmetric. Classical competitive labor market theory posits that wages converge toward the marginal revenue product of labor under conditions of frictionless mobility and atomistic employer competition. However, a rapidly expanding empirical literature—building on the canonical models of Burdett and Mortensen (1998) and Robinson's (1933) foundational monopsony framework—has demonstrated that structural departures from this benchmark are not only common but systematically predictable along geographic, demographic, and sectoral dimensions. In thin labor markets, defined by a limited number of employers relative to the working-age population within a realistic commuting radius, employers acquire oligopsonistic or fully monopsonistic pricing power over labor. This power is operationalized through wage markdowns: the wedge between a worker's marginal revenue product and their realized compensation. Search friction models (Manning, 2003; Dube et al., 2020) suggest that this wedge widens as job-to-job mobility costs increase and outside option valuations deteriorate—a dynamic particularly acute in peripheral manufacturing zones with limited sectoral diversification. In the European context, the South-East Polish sub-regions of Podkarpackie and Świętokrzyskie constitute textbook cases of such labor market thinness, characterized by high employer concentration in the automotive parts and light manufacturing subsectors, persistently below-average real wage growth relative to the national median, and limited intra-regional labor mobility attributable to inadequate transportation infrastructure and family-tied residential immobility. The policy salience of this issue has intensified between 2024 and 2026, as the European Commission's Directive on Adequate Minimum Wages (2022/2041/EU) mandates member states to assess and address wage adequacy gaps through collective bargaining coverage diagnostics—a framework that implicitly requires governments to confront the structural employer-side distortions that render statutory minima insufficient in isolation. Despite this regulatory momentum, micro-econometric evidence on the precise magnitude of concentration-induced wage suppression in Central and Eastern European thin labor markets remains sparse, fragmented, and methodologically inconsistent. This paper addresses this lacuna by deploying a rigorous quasi-experimental identification strategy applied to a uniquely granular, longitudinally consistent matched employer–employee administrative dataset compiled from the Social Insurance Institution (ZUS) and the Polish Central Statistical Office (GUS) registers. The remainder of the paper is organized as follows: Section 2 reviews the theoretical underpinnings of dynamic monopsony and search-and-matching frameworks relevant to the Polish context; Section 3 describes the administrative data infrastructure, sample construction, and variable operationalization; Section 4 presents the two-stage least squares estimation strategy and the instrumental variable construction logic; Section 5 reports baseline estimates, robustness checks, and heterogeneity decompositions; and Section 6 concludes with policy implications for EU-level antitrust and labor market regulation.

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