

Labour Market Concentration, Wages and Job Security in Europe¹

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Monopsony in the labour market

Recent years have seen a renewed interest in the issue of **monopsonistic competition in the labour market**, both among academics and among policy-makers. In monopsonistic labour markets, employers depress labour demand in order to reduce labour costs and reap higher profits from paying workers less than their marginal productivity. In other words, **employment and wages are set at a lower level than what would be achieved in competitive markets**, where employers must pay workers the market rate which aligns with their productivity. Originally, the term “monopsony” used to characterise markets with one buyer (for example of labour - employers) but many sellers (for example workers). However, at least as used in labour economics, the term monopsony or monopsonistic competition encompasses a more general definition, where employers have wage-setting power over workers and labour markets therefore deviate from the competitive ideal.

Labour market concentration as a source of monopsonistic power

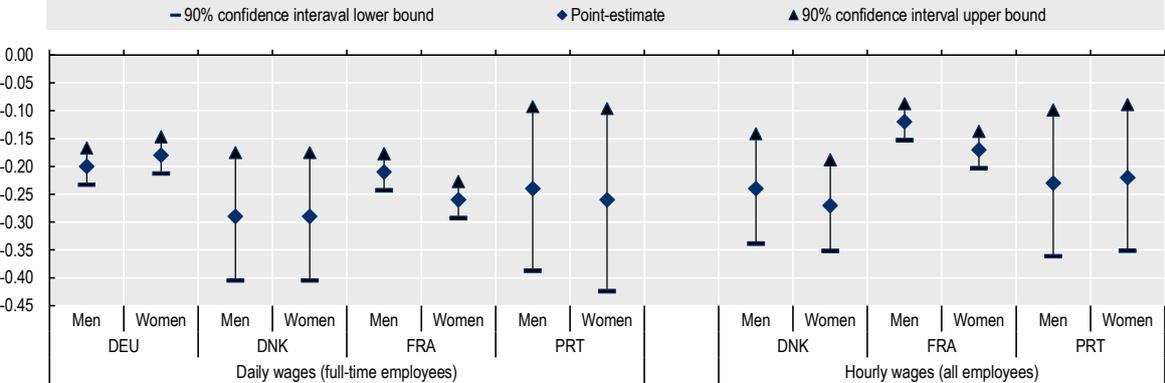
An important source of monopsony power is labour market concentration, since when there are fewer employers in a market, it is more difficult for workers to find suitable outside options. A fast-growing literature has estimated **the impact of local labour market competition on wages**, both in the United States and in European countries. However, due to heterogeneity in the definition of local labour markets and in the resulting measures of concentration, and to differences in specifications, the estimated elasticities are **hardly comparable across studies**. Moreover, this strand of research only considers the impact of labour market concentration on wages. However, there is broad evidence in the literature that workers also value non-wage job attributes and that they may be willing to trade off wages for other dimensions of job quality. If offering high-quality jobs is costly, employers enjoying monopsony power are likely to offer poorer non-wage attributes. Hence, **considering only the wage effects of labour market concentration is likely to underestimate its true cost for workers**.

This study addresses these two limitations by providing comparable evidence of the effects of labour market concentration in **six European countries** and by **considering how such concentration affects not only wages, but also one key dimension of job quality, namely job security**. To do so, rich, administrative linked employer-employee data from Denmark, France, Germany, Italy, Portugal and Spain in the 2010s are leveraged and comparable measures of concentration are built.

Effects on wages

Strictly comparable information on wages is available in Denmark, France, Germany and Portugal. The study first investigates **the impact of labour market concentration on daily wages of full-time workers**, using a specification including individual fixed effects along with time-varying individual characteristics. Since it is crucial to properly control for product market concentration and establishment-level productivity, the specification include firm-by-municipality-by-year fixed effects. These capture productivity at a very disaggregate level, as well as concentration in local product markets, two key confounders of labour market concentration. To address the endogeneity of concentration, the study uses the standard leave-one-out instrument employed by most of the literature. The identifying assumptions are discussed and their limitations highlighted, but the study shows that the results are robust to large violations of these assumptions. Despite the heterogeneity of labour market institutions across the studied countries, the estimated elasticities are strikingly similar: increasing labour market concentration by 10% reduces wages by 0.19% in Germany, 0.22% in France, 0.25% in Portugal and 0.29% in Denmark. These estimates imply that increasing labour market concentration by one standard deviation from the mean reduces daily wages by 3% in Denmark, 2.4% in France, 2.1% in Germany and 2.5% in Portugal. Interestingly, when considering separately new hires and incumbent workers, the study finds a negative effect of labour market concentration on daily wages of full-timers for both groups. This indicates that **reduced outside options not only affect the bargaining power of workers at the time of hiring, but also that of incumbents** (or their representatives, e.g. trade unions) when negotiating pay increases and/or promotions.

Figure 1 - Percentage wage effect of a 10% increase in labour market concentration from the average level

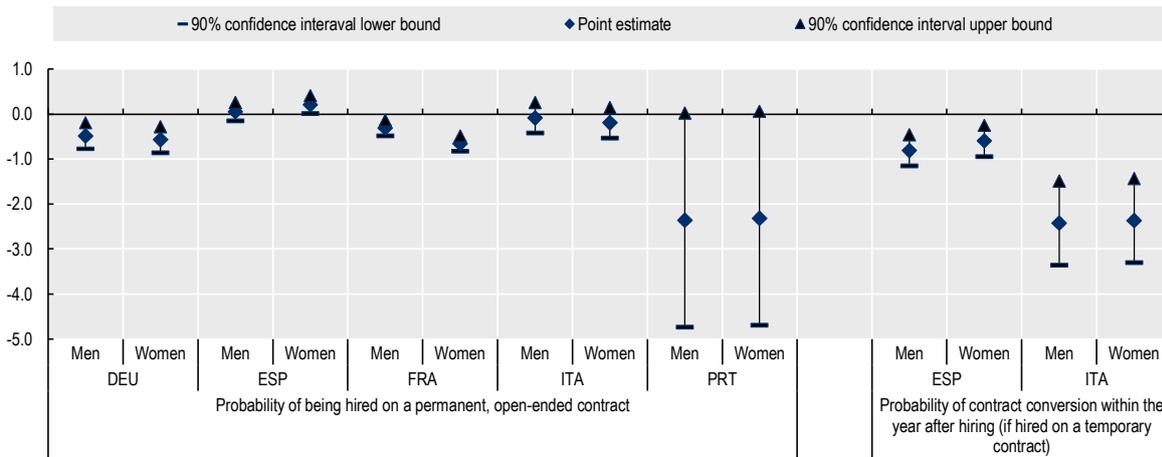


Notes: The chart shows point-estimates and confidence intervals of wage elasticities to changes in the Herfindahl-Hirschman Index (HHI) of the local labour market, defined as couples of 4 digit occupations and functional areas. The estimates are obtained from a linear regression including individual fixed effects, firm-municipality-year fixed effects, industry and plant fixed effects (where different from firmXmunicipality), annual dummies for workers' age, being employed in the previous year, being a new hire and working part-time. The logarithm of HHI is instrumented with the average of the log inverse number of firms in other functional area for the same occupation. Standard errors are clustered at labour market by year level.

Effects on job security

As a second step, the study considers the impact of labour market concentration on job security, as proxied by employment contract type (permanent vs. temporary). This measure of job security is consistent with evidence suggesting that people employed on temporary contracts perceive a much higher risk of losing their job in the short-term than people employed on permanent contracts. Information on the type of contract at the time of hiring is available – or can be reconstructed – in all countries except Denmark. The study reports estimates of **the effect of labour market concentration on the probability of being hired on a permanent rather than a temporary contract**. In Italy and Spain, data allow observing whether individuals hired on a temporary contract at year t have been converted to a permanent contract by the end of the following calendar year. The study finds that **higher labour market concentration reduces the probability of being hired on a permanent contract in France, Germany and Portugal**. An increase in labour market concentration by 10% is estimated to reduce the probability of being hired on a permanent contract by 0.46% in France, 0.51% in Germany and 2.34% in Portugal., i.e. estimated elasticities are more than twice as large as those estimated for wages. This implies that increasing concentration by one standard deviation from the mean reduces the probability of being hired on a permanent contract by 5% in France, 6% in Germany and 24% in Portugal. No significant effect is found in Italy and Spain. This lack of significance is likely due to the fact that, in these countries, most workers are anyway hired on temporary contracts. Therefore, there is not much room for increasing the probability of being hired on a temporary contract even when local labour markets become more concentrated. However, in both countries, **labour market concentration strongly affects the probability of being converted from a temporary to a permanent contract in the first year following hiring**: an increase in labour market concentration by 10% is estimated to reduce this probability by 2.41% in Italy and 0.68% in Spain. In other words, increasing labour market concentration by one standard deviation from the mean therefore reduces the probability of conversion by 28% in Italy and 8% in Spain.

Figure 2 - Percentage effect of a 10% increase in concentration from the average level on the probability of starting a permanent contract at the time of hiring and of being converted if hired on a temporary contract



Notes: The chart shows point-estimates and confidence intervals of percentage elasticities to changes in the Herfindahl-Hirschman Index (HHI) of the local labour market, defined as couples of 4 digit occupations and functional areas. The sample is restricted to new hires. Conversion is defined as a change of contract from temporary to open-ended (and the sample is further restricted to new hires on temporary contract) in the calendar year following new hires. The estimates are obtained from a linear regression including firm-municipality-year fixed effects, industry and plant fixed effects (where different from firmXmunicipality), educational attainment, gender, annual dummies for workers' age, being employed in the previous year and working part-time. The logarithm (HHI) is instrumented with the average of the log inverse number of firms in other functional area for the same occupation. Standard errors clustered at labour-market year level.

Conclusions and policy recommendations

Overall, these results suggest that firm monopsony power not only negatively affects wages but also degrades other dimensions of job quality and, in particular, job security.

Policy interventions **limiting employer concentration and/or its effects** are therefore likely to improve labour market outcomes along such dimensions for incumbent workers and new hires. Potential interventions may include **enforcement actions by antitrust authorities**, such as taking systematically into account labour market outcomes in merger reviews and cracking down on labour market collusion, including on no-poaching and wage-fixing agreements. On the one hand, evidence suggests that mergers increasing concentration do not need to create dominant employers to have a strong negative effect in the labour market. On the other hand, collusion is more likely to occur in concentrated markets, since coordination among few actors is typically easier to sustain.

Other interventions to compensate the effect of labour market concentration are rather in the realm of **labour policy**. These include, e.g. direct interventions to facilitate collective bargaining, raising the minimum wage, and policies to improve geographical mobility and training. Labour unions and collective bargaining have indeed been shown to help counterbalance the effect of firm market power in case of monopsonistic competition. Similarly, under monopsonistic competition, the minimum wage may shift down the firm

marginal labour cost curve and make it flatter, thereby potentially increasing both wages and labour demand. Finally, enhanced geographical mobility and training would make it easier for workers to look for jobs in different, possibly more competitive, local labour markets.