

DISCUSSION PAPER SERIES

IZA DP No. 15641

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Competition Policy across the Atlantic**

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## ABSTRACT

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# Labor Market Concentration and Competition Policy across the Atlantic\*

Drawing upon data from the largest cross-country study of labor market concentration to date, this paper analyzes the level of concentration of labor input markets in Europe and North America and provides a comparative perspective on employers' monopsony power. It explores the characteristics of monopsony in labor markets and documents its impact by looking at the magnitude of employer concentration in selected jurisdictions. Using a harmonized dataset of online vacancies, this paper shows that European labor markets are no more competitive than North American ones. It also supports the view that the effects of concentration on labor markets are broadly similar in both Europe and North America, despite the much stronger labor market institutions in Europe. The article shows that there is no apparent economic or legal justification for a lack of enforcement activity by European competition authorities in labor markets relative to the US. While enforcement action has picked up in the last two years in Europe, there is likely still scope for a significant increase in the role of competition enforcement in labor markets. The article identifies sectors and practices that may be scrutinized with priority by European competition authorities and proposes a mix of enforcement, merger control and well-targeted policy and regulatory solutions to address employers' monopsony power.

**JEL Classification:** J31, J41, J42, L40

**Keywords:** labour market concentration, monopsony, cross-country comparison, competition enforcement

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## Introduction

In both North America and Europe, competition policy has, until recently, most prominently focused on ensuring well-functioning product markets and on capturing conduct on the supply side of the market.<sup>1</sup> While most regimes allow capturing anticompetitive behaviour by both buyers and sellers, the number of cases relating to product markets has been disproportionately higher and up until recent years there had been practically no enforcement on the supply side of labor markets in Europe. Competition authorities, however, generally assumed that labor markets are relatively competitive<sup>2</sup> and that labor monopsony power is a relatively infrequent phenomenon.<sup>3</sup> Since, unlike market power on the seller side, buyer power may not necessarily reduce consumer welfare, the analysis of market power in the upstream market has also traditionally been in terms of countervailing buyer power, where cost reductions arising from a stronger bargaining position of the buyer vis-à-vis the seller would generally increase output and be passed on to consumers in the form of lower prices.<sup>4</sup>

Monopsony power, however, is just as harmful to competition as monopoly is in product markets. Employer monopsony power, defined as the unilateral ability of employers to pay their workers below the competitive level, reduces output, and increases prices for consumers downstream unless the firm faces significant competition in the product market. Even when the product market is competitive, monopsony power still reduces productive efficiency, as it distorts how output is distributed between firms, and harms workers by exploiting the lack of outside options for those workers (i.e. alternative jobs) to reduce wages and working conditions.

A shift in attention towards labor markets has therefore started to materialise among competition authorities across OECD countries, beginning to acknowledge that an increase in the market power held by employers vis-à-vis their workers may be harmful independently of price effects on the downstream market.

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<sup>1</sup> ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, PURCHASING POWER AND BUYERS' CARTELS 6 (2022) Sergei Zaslavsky & Laura K. Kaufmann, Buyer Cartel Doctrine: Lessons From Labor Antitrust, COMPETITION POLICY INTERNATIONAL, June 29, 2021.

<sup>2</sup> ERIC A. POSNER, HOW ANTITRUST FAILED WORKERS 24 (2021).

<sup>3</sup> When there are few employers competing in a market with each other, firms can employ fewer workers than in the competitive equilibrium and offer lower wages. See William M. Boal & Michael R. Ransom, Monopsony in the Labor Market, 35 J. OF ECON. LITERATURE 86 (1997). In "Dynamic Monopsony" or "Modern Monopsony" models, employers may be numerous but workers cannot immediately quit an employer and instantaneously find a new one, because of information asymmetries and other search frictions, or because of explicit anti-competitive practices of firms (e.g. through collusion among employers and unjustified non-compete agreements). See Kenneth Burdett & Dale T. Mortensen, Wage Differentials, Employer Size, and Unemployment, 39 INT'L ECON. REV. 257, 268 (1998); ALAN MANNING, MONOPSONY IN MOTION: IMPERFECT COMPETITION IN LABOR MARKETS 270 (2003). Lastly, workers may have distinct preferences for firms besides the offered wage (e.g. different health insurance plans or "company culture"), which makes it difficult to quit and find an alternative suitable employer. David Card, Ana Rute Cardoso, Joerg Heining & Patrick Kline, Firms and Labor Market Inequality: Evidence and Some Theory, 36 J. OF LABOR ECON. S13, S15–16 (2018)

<sup>4</sup> See, for example, the EU and the US Horizontal Merger Guidelines, which provide for the application of competition law to both sides of the market but focus primarily on how the analysis should be conducted in downstream markets. 2004 O.J. (C 31) 3, ¶ 61. See Case COMP/M.5046, Friesland Foods/Campina, Commission Decision of December 17 2008, ¶ 98. See also the former Section 45 of the Canadian Competition Act, which referred specifically to the "sale of products", impeding its applicability to labour markets. Competition Act, R.S.C. 1985, c C-34, s. 45 (Can.). An amendment of the law will enter into force on June 23, 2023 to criminally prohibit wage-fixing and no-poaching agreements between employers. See GOVERNMENT OF CANADA, GUIDE TO THE 2022 AMENDMENTS TO THE COMPETITION ACT (2022), <https://perma.cc/NWC6-JRGS>. Compare the Guide to the 2022 amendments to the Competition Act of June 24, 2022, available at <https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04671.html#sec03>.

This shift is supported by mounting empirical evidence that monopsony power in labor markets is more pervasive than previously thought. Numerous recent studies have found that the elasticity of labor supply to a firm—or the ability of the firm to unilaterally decrease the salary offered to the marginal worker without losing all workers to a competitor—is indeed low.<sup>5</sup> Other studies have proxied employer power with indicators of market concentration—when a labor market is served by a limited number of employers—and have found high levels of labor market concentration for the United States,<sup>6</sup> the United Kingdom,<sup>7</sup> France,<sup>8</sup> Austria,<sup>9</sup> Portugal,<sup>10</sup> and Norway,<sup>11</sup> among others.

The present study complements the existing literature by measuring labor market concentration for the U.S., Canada, and twelve European countries<sup>12</sup> for the first time using a single methodology and comparable data. The choice of labor market concentration as a proxy for monopsony power was dictated by the availability of data, i.e. job postings information as reported in the Emsi Burning Glass Database. These are treated to enhance the cross-country comparability of the results and are benchmarked on official data on new hires. Concentration is then computed as the Herfindahl-Hirschman Index of employers' shares in a given narrowly defined occupation and geographical region.

This study finds that 18% of workers in the fourteen countries considered are in labor markets that are at least moderately concentrated—according to the definition frequently used by antitrust authorities in the context of selling markets<sup>13</sup>—and 11% are found in highly concentrated markets. Moreover, workers are not evenly distributed across concentrated markets: they are more likely to be employed in concentrated labor markets if they work in rural areas and in certain occupations such as health professionals. Workers

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<sup>5</sup> Anna Sokolova & Todd Sorensen, Monopsony in Labor Markets: A Meta-Analysis, 74 *INDUS. & LABOR REL. REV.* 27, 51 (2021); ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, THE ROLE OF FIRMS IN WAGE INEQUALITY: POLICY LESSONS FROM A LARGE SCALE CROSS-COUNTRY STUDY 81–82 (2021) ; Douglas A. Webber, Firm-Level Monopsony and the Gender Pay Gap, 55 *INDUS. REL.* 323 (2016) ; Arindrajit Dube, Jeff Jacobs, Suresh Naidu & Siddharth Suri, Monopsony in Online Labor Markets, 2 *AM. ECON. REV.: INSIGHTS* 33, 44–45 (2020); Sydnee Caldwell & Emily Oehlsen, Monopsony and the Gender Wage Gap: Experimental Evidence from the Gig Economy 27 (Working Paper, 2018) ; ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, OECD EMPLOYMENT OUTLOOK 2019: THE FUTURE OF WORK 68 (2019)

<sup>6</sup> José Azar, Ioana Marinescu, Marshall Steinbaum & Bledi Taska, Concentration in US Labor Markets: Evidence from Online Vacancy Data, 66 *LABOUR ECON.* 101886 (2020); Efraim Benmelech, Nittai K. Bergman & Hyunseob Kim, Strong Employers and Weak Employees: How Does Employer Concentration Affect Wages?, 57 *J. OF HUM. RES.* S200, S220 (Supp. 2022) ; Yue Qiu & Aaron Sojourner, Labor-Market Concentration and Labor Compensation 12 (*IZA Inst. of Labor Econ.*, Discussion Paper No. 12089, 2019); Kevin Rinz, Labor Market Concentration, Earnings, and Inequality, 57 *J. OF HUM. RES.* S251, (Supp. 2022)

<sup>7</sup> Will Abel, Silvana Tenreyro & Gregory Thwaites, Monopsony in the UK 3–4 (*Ctr. For Econ. & Pol'y Rsch.*, Discussion Paper No. DP13265, 2018).

<sup>8</sup> Ioana Marinescu, Ivan Ouss & Louis-Daniel Pape, Wages, Hires, and Labor Market Concentration, 184 *J. OF ECON. BEHAV. & ORG.* 506, 510-13 (2021)

<sup>9</sup> Gregor Jarosch, Jan Sebastian Nimczik & Isaac Sorkin, Granular Search, Market Structure, and Wages 43 (*Nat'l Bureau of Econ. Rsch.*, Working Paper No. 26239, 2019).

<sup>10</sup> Pedro S. Martins, Making Their Own Weather? Estimating Employer Labour-Market Power and Its Wage Effects 15 (*Ctr. For Globalization Rsch.*, Working Paper No. 95, 2018).

<sup>11</sup> Samuel Dodini, Michael Lovenheim, Kjell G. Salvanes & Alexander Willén, Monopsony, Skills, and Labor Market Concentration 14 (*Ctr. For Econ. & Pol'y Rsch.*, Discussion Paper No. DP15142, 2020).

<sup>12</sup> Austria, Belgium, Czech Republic, Estonia, France, Germany, Latvia, Luxembourg, the Netherlands, Sweden, Switzerland, and the United Kingdom.

<sup>13</sup> See, e.g., DEPARTMENT OF JUSTICE & FEDERAL TRADE COMMISSION, HORIZONTAL MERGER GUIDELINES, 19 (2010) (indicating that high concentration markets display an HHI above 2,500, and moderately concentrated markets an HHI of 1,500 to 2,500).

who have been on the front line during the COVID-19 crisis—those with substantial contact with customers and thus higher than average risks of infection—are also more likely to work in concentrated labor markets. By contrast, workers in teleworkable occupations<sup>14</sup> are employed in much less concentrated markets, on average across countries.

While differences in labor market institutions and protections in different countries may affect to some extent the ability of employers to extend and abuse their market power to the detriment of workers and consumers in some sectors, and so should be taken into account in determining the right combination of policy and regulatory tools to address them, it is unlikely that such differences can justify a significant lower overall *level* of competition enforcement deployed.<sup>15</sup>

First, when comparing, for instance, the US and European labor markets, several factors may contribute to or prevent workers' mobility that may not be directly addressed by competition policy: language barriers, length and stability of contracts, urbanisation levels, and unionisation. As these characteristics change considerably from country to country, no one-size-fits-all solution is likely to work. However, this does not mean that competition policy does not have a role. The EU, for instance, may have fewer rural areas and stronger unions, but it likely has higher language and licensing barriers than the US, which may discourage workers from switching jobs. So while those factors alone do not create monopsony power, they may allow or facilitate a competition reduction and, as such, they may need to be taken into account. The existence of minimum wage laws also does not guarantee that the wage for low-skilled workers is set at the competitive level.

Second, while higher levels of unionisation may contribute to assuaging the negative impact of employer monopsony power, their effect has substantially decreased in recent times in European countries in many sectors. While the average share of employees that are members of trade unions in 2018 in OECD countries was higher than the US (16% against 10%), some European countries have much lower averages (see for instance, Estonia with 4.7%). The percentage of employees covered by a collective bargaining agreement in OECD countries decreased from 46% to 32% between 1985 and 2017.<sup>16</sup> Many sectors are also left out, including in industries employing gig and non-standard workers.

Third, the new evidence presented in this paper further weakens the myth that European labor markets have less employer monopsony power as those in the US.<sup>17</sup> The share of workers in concentrated markets in the United States and Canada is approximately average in the sample of countries considered, according to many of the studies mentioned above. Similarly, this article argues that the effects of labor market concentration on employment, wages, and non-wage attributes are broadly similar across the two sides of the Atlantic, despite the large differences that exist in terms of regulation and labor market institutions.

This contrasts significantly with the behaviour of competition authorities, which has seen the U.S. moving more aggressively to tackle the causes of employer power on the labor market.<sup>18</sup> This article therefore

<sup>14</sup> See Jonathan I. Dingel & Brent Neiman, [How Many Jobs Can Be Done at Home?](#), J. OF PUBLIC ECON., Jun. 21, 2020, at 104235 (classifying occupations that can be performed at home).

<sup>15</sup> Eric Posner & Cristina Volpin, [Labor Monopsony and European Competition Law](#), CONCURRENCES COMPETITION L. REV., no. 4, 2020, at ¶ 12.

<sup>16</sup> ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, [NEGOTIATING OUR WAY UP: COLLECTIVE BARGAINING IN A CHANGING WORLD OF WORK](#) 23 (2022).

<sup>17</sup> This myth is rooted in the fact that European competition authorities has taken only few enforcement actions concerning competition in the labor market – see Section III below.

<sup>18</sup> See generally Posner & Volpin, [supra](#) note 16 (for a comparison of enforcement in labor markets in the EU and in the US). This also contrasts to the existing evidence about European competition authorities' effectiveness on the product market relative to the U.S. See German Gutierrez Gallardo & Thomas Philippon, [How EU Markets Became](#)

discusses the role that the European Commission and other European competition authorities can have in addressing employers' monopsony power within the current analytical framework. While there have been a few cases brought by European national competition authorities in recent years, the European Commission has never brought a case relating to employers' collusion, and the examination of effects under the consumer welfare standard in labor markets has yet to be fully tested in practice. There is however no apparent economic or legal justification for a lower level of enforcement activity by European competition authorities in labor markets. On the contrary, the nascent trend in EU competition law to integrate some sustainability considerations in the competitive assessment may even present a timely further opportunity to allow the integration of the effects on workers' wages and conditions under the traditional interpretation of the consumer welfare standard, for instance, as a product-quality dimension on which companies can compete in the downstream market.

The Article is organised as follows: Part 1 describes the methodology and data used to measure labor market concentration across countries, and the differences that emerge between countries in the share of workers employed in significantly concentrated labor markets. Part 2 then discusses how labor market concentration impacts employment, wages and other non-wage job attributes, based on the existing evidence. Part 3 analyses the enforcement activity of competition authorities in Europe to mitigate employer monopsony power and its effects on the labor market. It also proposes it as a complementary tool to policy and regulatory action. Part 4 concludes.

## I. Labor market concentration: a transatlantic comparison

Using data on the universe of online job vacancies, this section reports estimates of the share of workers in concentrated labor markets for twelve European countries, Canada and the United States. This study uses a large harmonised dataset and a single labor market definition for cross-country comparability. In addition to country-level averages, the section shows how concentration impacts certain segments of the labor market.

Whether a labor market is concentrated depends on how one defines the local labor market where a potential worker can reasonably expect to quickly find a suitable job. The literature typically defines local labor markets with the combination of detailed economic classes (industry or occupation), and a local area capturing, in theory, all employers to which a potential worker could reasonably commute. Some studies of labor market concentration use commuting zones, which are often designed empirically to capture observed home-to-work flows.<sup>19</sup> While administrative units may not fully capture travel-to-work flows in an area, definitions of commuting zones are not necessarily comparable across countries. For this reason, this paper uses Territorial Level 3 (TL3) regions, which are a higher level of geographic aggregation than commuting zones. Designed by the OECD, TL3 regions cover every OECD country, are generally stable over time, and are designed to be roughly comparable across OECD countries.<sup>20</sup> It then adjusts concentration statistics to account for heterogeneity in the average population size of TL3 regions across countries.<sup>21</sup>

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More Competitive Than US Markets: A Study of Institutional Drift 35 (Ctr. for Econ. & Pol'y Rsch., Discussion Paper No. DP12983, 2018)

<sup>19</sup> See, e.g., Andrew Foote, Mark J. Kutzbach & Lars Vilhuber, Recalculating. . . :How Uncertainty in Local Labour Market Definitions Affects Empirical Findings, 53 APPLIED ECON. 1598 (2021).

<sup>20</sup> ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, OECD REGIONS AT A GLANCE 2016 15 (2016).

<sup>21</sup> This article regresses logarithm of aggregate measures of concentration on the logarithm of the country average population of TL3 regions and obtains the predicted value for an average population of 200,000. Then the ratio of the predicted to the actual value is applied to adjust all concentration statistics.

To complete the definition of a labor market, this paper defines the relevant labor market using occupations instead of industries. Occupations are classified based on the skills and qualifications required of the worker and are therefore portable across industries in most cases. For example, a cleaner could find employment cleaning the factory of a manufacturing firm, a hospital in the health industry, or a bank which would be classified as finance. Hovenkamp and Marinescu provide additional examples showing that companies can produce different products while competing for the same workers.<sup>22</sup> Occupations are thus more suitable to define workers' job search patterns, and to measure labor market concentration as a consequence. This paper uses six-digit SOC-2010 for Canada, the United Kingdom and the United States and four-digit ISCO-08 for the rest. The two classifications contain, however, a roughly comparable number of categories.

The standard measure of concentration in the labor market is the Herfindahl-Hirschman index (HHI). This is defined as the sum of the squared percentage shares of each firm in the market.<sup>23</sup> As mentioned above, this paper labels markets as “concentrated” based on the thresholds used by US antitrust authorities—that is, HHIs of 2,500 and above characterise high concentration markets and HHIs between 1,500 and 2,500 moderately concentrated ones.<sup>24</sup>

This paper uses 2019 data on quarterly online job postings from Emsi Burning Glass (EBG) to measure labor market concentration. EBG collects online job postings in many OECD countries, which contain information on the posting's occupation, geography, and firm (including industry), in addition to other characteristics such as skills and educational requirements. The data have been already used to measure concentration in the United States<sup>25</sup> and their coverage has been validated for other countries by the OECD.<sup>26</sup> We aggregate data in two steps: First, this study aggregates data by cell to the 3-digit ISCO level using job posting as weights and then uses employment weights from national labor force surveys to obtain results for any higher level of aggregation.

### **A. A sizeable share of workers are in concentrated labor markets**

This article finds a sizeable share of employment in moderately to highly concentrated markets. Figure 1 shows the share of workers in moderately concentrated labor markets (light blue) and of those who are in highly concentrated labor markets (dark blue), as derived from estimates of HHI aggregated at the national level. Just over 18% of workers find themselves in labor markets that are at least moderately concentrated, on average across the countries in the sample. Of those, more than half, or about 11% of the total, work in highly concentrated labor markets. The highest shares of workers in markets that are at least moderately concentrated are found in Estonia and Latvia with shares above 25%, while the smallest shares are found in Belgium and Switzerland with shares just above 10%. Canada and the United States feature in the middle of the cross-country distribution, with 21% and 17%, respectively, of their workers estimated to be in markets that are at least moderately concentrated. Canada is however close to the top of the distribution as regards the share of employment in highly concentrated markets—14.2%, close the highest value (Estonia, with 15.7%). This is likely due to its sparse population in many local labor markets (see below).

<sup>22</sup> Ioana Marinescu & Herbert Hovenkamp, *Anticompetitive Mergers in Labor Markets*, 94 IND. L. J. 1031, 1051–52 (2019).

<sup>23</sup> Labour market concentration is measured using the Herfindahl-Hirschman index (HHI) computed on the basis of hiring, that is  $HHI_{l,t} = \sum_{f=1}^F s_{f,l,t}^2$ , where  $HHI_{l,t}$  is the HHI in local labour market  $l$  at time  $t$ ;  $F$  is the total number of firms on local labour market  $l$ ;  $t$  denotes time and  $s_{f,l,t}$  is the share of firm  $f$  in employment, hiring or vacancies in local labour market  $l$  at time  $t$ .

<sup>24</sup> DEPARTMENT OF JUSTICE & FEDERAL TRADE COMMISSION, *supra* note 14, at 19.

<sup>25</sup> Azar et al., *supra* note 6, at 101887–88.

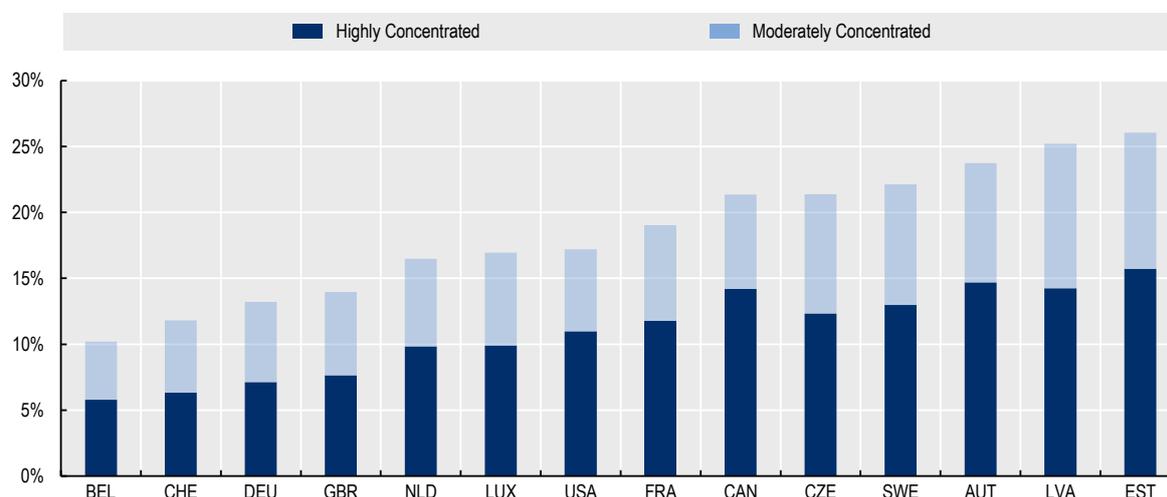
<sup>26</sup> ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, *OECD EMPLOYMENT OUTLOOK 2022* (2022).

The results in this paper confirm that cross-country differences in labor market concentration are not simply due to differences in data or labor market definitions.<sup>27</sup>

Over the last couple of decades, concentration tends to be stable both in Europe and the United States. The job posting data used in this paper does not allow for the comparison of HHI over a long time period. However, using administrative data on new hires, the OECD finds that HHI is relatively stable from 2003 to 2017 in an average of 6 European countries (and Costa Rica).<sup>28</sup> This suggests that over time concentration has been stable in Europe. There is likely variation across countries in this trend, however: Jarosch, Nimczik and Sorkin, for example, find that concentration has increased in Austria.<sup>29</sup> In the United States, Rinz finds a modest decrease in local labor market concentration from around 2000 to 2009, and then a modest increase during the financial crisis.<sup>30</sup>

The remainder of this section investigates within-country differences in concentration with respect to the characteristics of the local area and the characteristics of occupations.

**Figure 1. The share of employment in moderately concentrated to highly concentrated labor markets, 2019**



Notes: Moderately concentrated markets are markets with a Herfindahl-Hirschman Index (HHI) between 1,500 and 2,500. Highly concentrated markets have an HHI greater than 2,500. Labor markets are defined by job vacancies in 6-digit SOC by TL3 regions for Anglophone countries and 4-digit ISCO by TL3 regions for remaining countries. Shares are adjusted to a uniform average population size of 200,000 of TL3 regions. Employment shares are obtained by weighting HHIs using 2019 employment data from labor force surveys at the ISCO 3-digit level and job postings at the same level of disaggregation at which HHIs are defined.

<sup>27</sup> In general, the results in this section accord well with the literature in most respects, especially when one considers that the definition of a labour market usually differs across studies in at least one dimension. The study using the closest definition of local labour market and HHI to this paper reports a share of employment in markets that are at least moderately concentrated of 23% and an average HHI of 1,361 for the United States. See Azar et al., *supra* note 6, at 101893. This is slightly higher, but close to the values found here (17% and 1,042, respectively). Remaining differences are likely due to data cleaning procedures.

<sup>28</sup> ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, *supra* note 12, at 112.

<sup>29</sup> Jarosch et al., *supra* note 9, at 27.

<sup>30</sup> Rinz, *supra* note 6, at S259.

Source: OECD analysis of Emsi Burning Glass (EBG), European Labour Force Survey (European Union countries, Switzerland and the United Kingdom), Current Population Survey (USA), and Canadian Labor Force Survey (Canada).

## B. Concentration is higher in rural areas

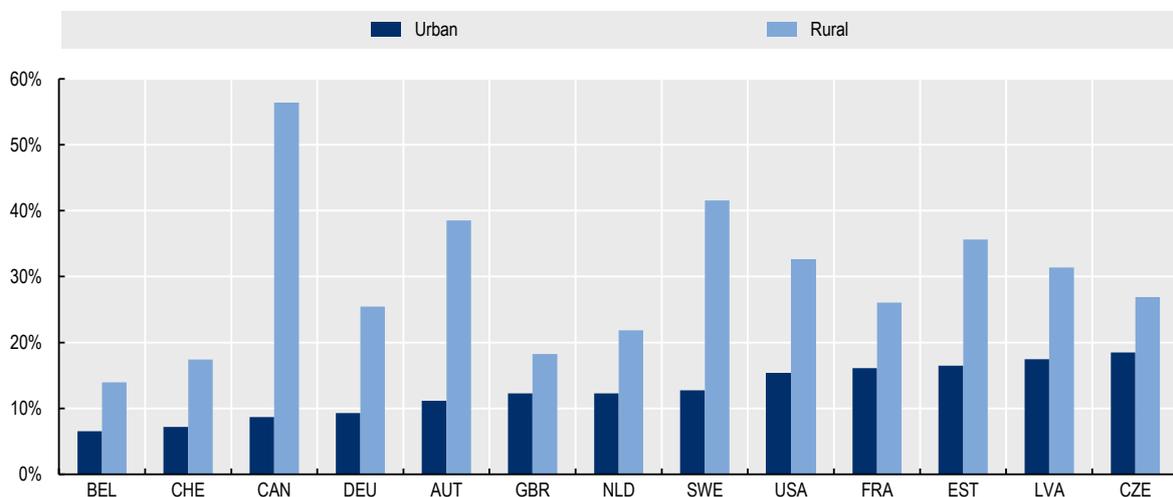
In addition to occupation, the other key dimension of a labor market is geography. Larger labor markets, in particular cities, have long been hypothesized (with increasing empirical evidence) to allow more efficient matches between firms and workers.<sup>31</sup> A worker searching for a job is more likely to find a suitable employer when there are many potential employers, and vice-versa. Labor markets are more efficient when they are thick. The same logic applies to market concentration as measured by HHI: workers should find it easier to quit and find a new employer when there are more potential employers.

As may be expected, urban areas are less concentrated than rural geographies in all countries for which data are available. Figure 2. On average across the countries in our sample, rural regions (30%) have about twice as many people working in moderately concentrated markets than urban regions (13%). The largest disparity is in Canada, a country with large urban centres but also geographically large, but sparsely populated provinces including remote areas.

The finding confirms results from the literature that rural labor markets are more concentrated. Azar et al. and Bassanini, Batut and Caroli find a decrease in HHI as the size of commuting zones increases in the United States and France, respectively.<sup>32</sup> Using the same urban-rural definition as this section (but different data and definition of labor market), the OECD similarly finds a large urban-rural difference in the share of workers in concentrated labor markets across seven OECD countries.<sup>33</sup>

### Figure 2. Rural regions are more concentrated than urban regions

The share of employment in moderately or highly concentrated labor markets by urban geography, 2019



<sup>31</sup> See generally Barbara Petrongolo & Christopher Pissarides, *Scale Effects in Markets with Search*, 116 *ECON. J.* 21; Fredrik Andersson, Simon Burgess & Julia I. Lane, *Cities, Matching and the Productivity Gains of Agglomeration*, 61 *J. Urb. Econ.* 112; Wolfgang Dauth, Sebastian Findeisen, Enrico Moretti & Jens Suedekum, *Matching in Cities* (Nat'l Bureau of Econ. Rsch., Working Paper No. 25227, 2018).

<sup>32</sup> Azar et al., *supra* note 6, at 101892; Andrea Bassanini, Cyprien Batut & Eve Caroli, *Labor Market Concentration and Stayers' Wages: Evidence from France* 8 (IZA Inst. of Labor Econ., Discussion Paper No. 15231, 2022).

<sup>33</sup> ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, *supra* note 12, at 100.

Notes: Luxembourg has no rural regions and is therefore omitted. Urban regions are TL3 regions that have more than 50% of their population living in a functional urban area of over 250,000 people, see Fadic, M. et al. (2019), "Classifying small (TL3) regions based on metropolitan population, low density and remoteness", OECD Regional Development Working Papers, No. 2019/06, OECD Publishing, Paris, <https://doi.org/10.1787/b902cc00-en>. See also notes to Figure 1.

Source: OECD analysis of Emsi Burning Glass (EBG), European Labour Force Survey (European Union countries, Switzerland, and the United Kingdom), Current Population Survey (USA), Canadian Labor Force Survey (Canada).

### ***C. Some blue-collar and health-related occupations are in more concentrated labor markets***

A few blue-collar occupations and health-related labor markets tend to be more concentrated. Figure 3 depicts the average share in concentrated markets by two-digit ISCO occupation.<sup>34</sup> The occupations which are the most concentrated, on average, are handicraft and printing workers, and health professionals and associate professionals (such as paramedics, nurses and ambulance workers), where about 40% of employment is in concentrated markets.

The least concentrated occupations are information and communication technology professionals, sales workers and business administration professionals where less than 7% of workers in these occupations are found in concentrated markets. The least concentrated occupations are not confined to high-skill, high-wage professionals. General cleaners and helpers and sales workers are also present in the least concentrated occupations, likely because workers in these occupations are typically employed in numerous small establishments and shops. In short, occupations in the least concentrated markets appear to be employable in a wide variety of industries, which would grant them more employment options.

The analysis in this paper also finds that workers in middle-skill occupations are the most likely to be in concentrated labor markets. Low-skill workers face the lowest concentration and high-skill workers the next highest after middle-skill workers. This pattern is not particularly robust across countries. The declining employment share of middle-skill jobs, and the rise in job polarisation and deindustrialisation is a well-documented fact across many OECD countries.<sup>35</sup> As the employment shares of middle-skill jobs shrink, the remaining workers may face a smaller and smaller pool of potential employers who continue to use the production technologies to employ them.

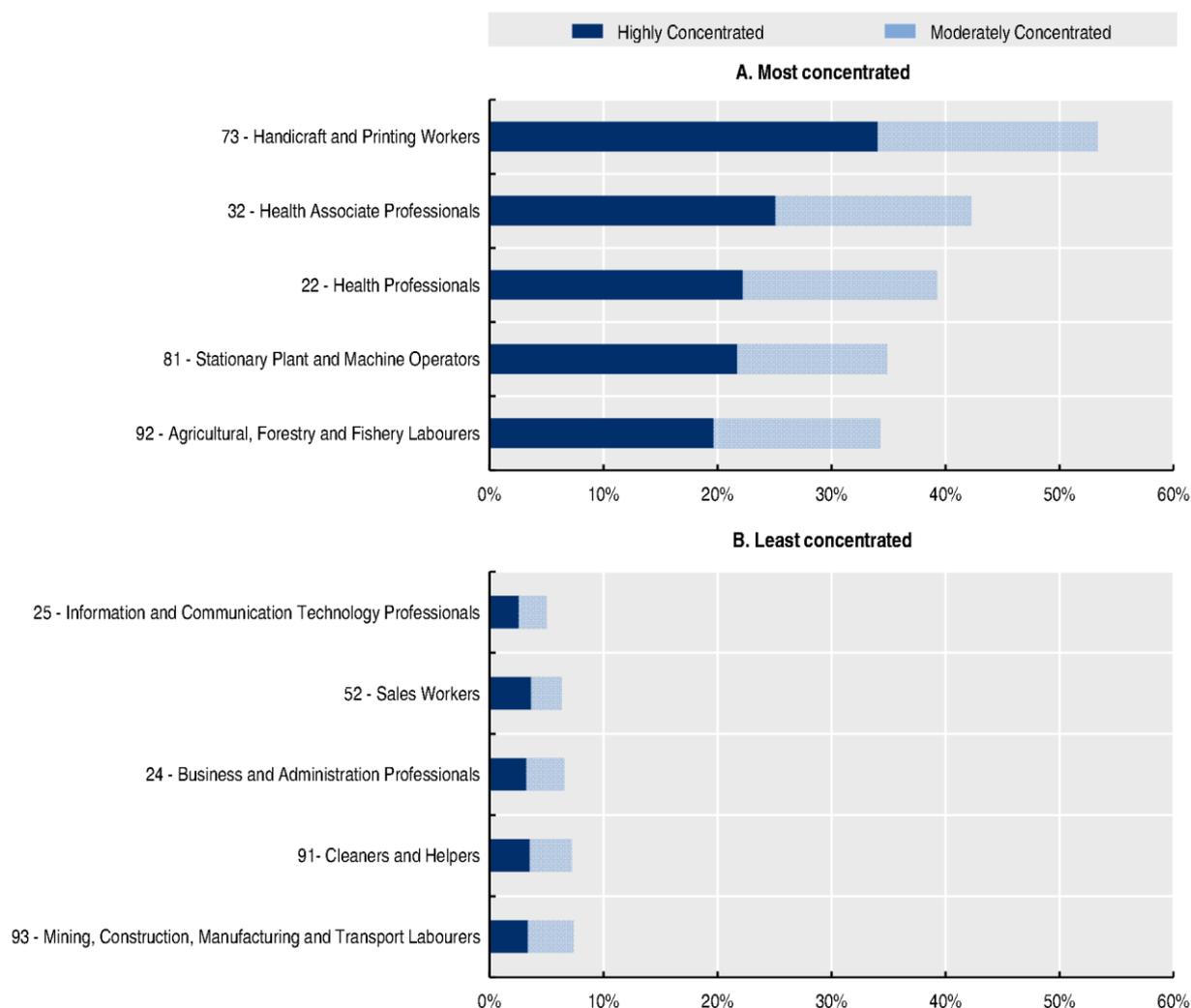
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<sup>34</sup> These results are robust across individual countries. In particular, each occupation appearing in the most and least concentrated also appears at the top of the country level distribution in a majority of the fourteen countries in the sample.

<sup>35</sup> ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, OECD EMPLOYMENT OUTLOOK 2017 82 (2020).

**Figure 3. The occupations facing the most and least concentrated labor markets, 2019**

Share of employment in moderately concentrated to highly concentrated labor markets by ISCO 2-digit occupation



Notes: Occupations sorted by their average (unweighted) Herfindahl-Hirschman Index (HHI) across countries. ISCO 2-digit occupations “6” and “9” omitted due to irregular cross-country coverage. See also notes to Figure 1.

Source: OECD analysis of Emsi Burning Glass (EBG), European Labour Force Survey (European Union countries, Switzerland and the United Kingdom), Current Population Survey (USA), Canadian Labor Force Survey (Canada), Australian Labour Force Survey (Australia).

#### ***D. Labor market concentration and the COVID-19 pandemic highlighted existing inequalities in the labor market***

The onset of the COVID-19 crisis saw workers split into three groups based on the characteristics of their occupation: those who were able to work from home (**telework**), those who found themselves unemployed or on reduced working hours, and those who continued to work in their physical workplace and in proximity to other people during the pandemic, or front-line workers. The gradual abatement of lock downs and the recovery of the labor market has greatly diminished the ranks of the unemployed and those on short-time work.<sup>36</sup> However, more than two years after the onset of the pandemic, the dichotomy between those who must work in person versus from home, is still relevant.

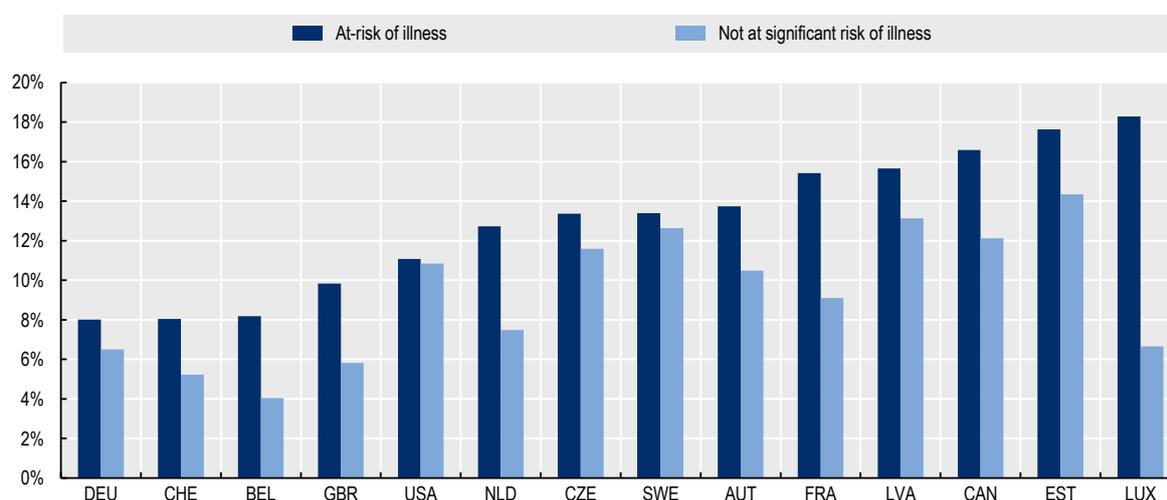
<sup>36</sup> ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, OECD EMPLOYMENT OUTLOOK 2021 78 (2021)

Labor market concentration may degrade occupational safety if investing in a safe work environment is costly for employers. Employers in concentrated markets may not need to offer a safe work environment to attract and retain good workers. Moreover, the ease with which a worker can credibly quit can by itself spur greater safety measures.

Figure 4 depicts the share of workers in highly concentrated labor markets by whether their occupation is required to work in person, and whether, because of close contacts with colleagues or customers, they have a high risk of COVID-19 illness on the job compared to those who do not.<sup>37</sup> On average, about 13% of these workers at significant risk of COVID-19 infection are found in highly concentrated labor markets compared a little over 9% of those who are not. The largest gaps are found in Luxembourg, France and the Netherlands, the smallest in the United States and Sweden.

#### Figure 4. Occupations where workers face significant risk of COVID-19 infection tend to be more concentrated

The share of employment in highly concentrated labor markets by whether an occupation is at-risk of infection on the job, 2019



Notes: ISCO 3-digit level Occupations are defined as “unsafe” or “at risk of illness” following Basso, G. et al. (2022), “Unsafe Jobs, Labour Market Risk and Social Protection”, *Economic Policy*, <https://doi.org/10.1093/epolic/eiac004>. ISCO group 951 is omitted due to poor suitability of conversion from O\*NET to ISCO. See also notes to Figure 1.

Source: OECD analysis of Emsi Burning Glass (EBG), European Labour Force Survey (European Union countries, Switzerland and the United Kingdom), Current Population Survey (USA), and Canadian Labor Force Survey (Canada).

Workers who are able to telework, in contrast to front-line workers, are found in less concentrated labor markets. Occupations amenable to telework are those who have been able to work from home without physically interacting with co-workers or customers, as the typical tasks they perform on the job allow for it.<sup>38</sup> Compounding the a priori occupational health disparity with front-line workers, 9% of workers in occupations amenable to telework were employed in highly concentrated markets on the eve of the COVID-19 crisis, compared to 12% of those workers who could not telework (Figure 5).

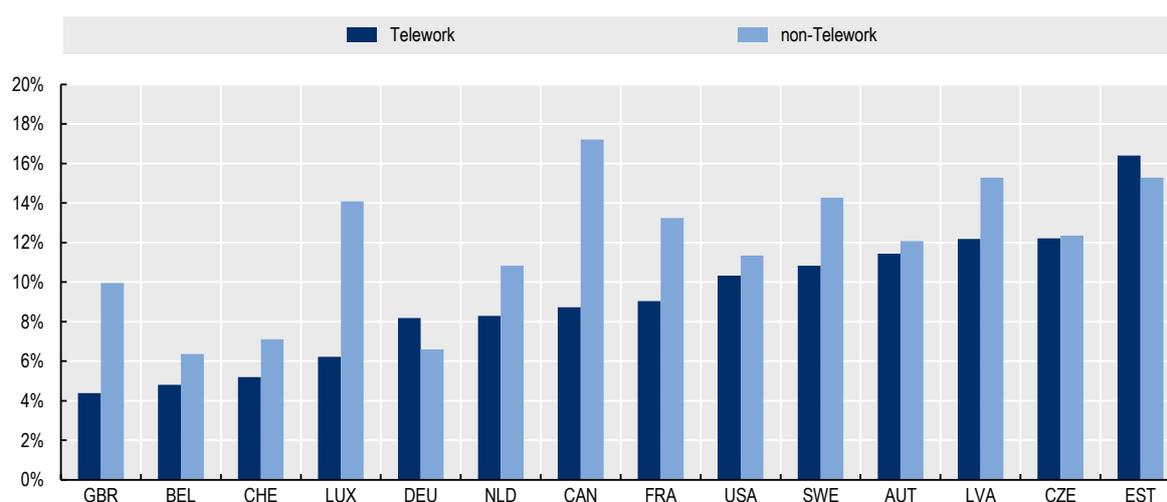
<sup>37</sup> Gaetano Basso, Tito Boeri, Alessandro Caiumi & Marco Paccagnella, *Unsafe Jobs, Labour Market Risk and Social Protection*, 37 *ECON. POL'Y* 229 (2022) (classifying occupations according to the risk of contracting an aerial-transmitted virus, such as COVID-19).

<sup>38</sup> Dingel & Neiman, *supra* note 15, at 2.

In addition to protecting workers from the virus, the shift to telework may enable them to search in a wider labor market than simply their local living area. This has the potential to lower local employers' monopsony power further for workers in these occupations. In a recent work from the OECD, allowing workers in occupations amenable to telework to search and accept positions outside of their local labor market has the potential to reduce HHI by at most 20%.<sup>39</sup>

### Figure 5. Workers who can telework face less concentrated labor markets

The share of employment in highly concentrated labor markets by whether the occupation is amenable to telework, 2019



Notes: Whether an occupation is amenable to telework is defined according to Dingel and Neiman (2020) and is coherent with Basso et al. (2022)'s definition of "safe" occupations. See also notes to Figure 1.

Source: OECD analysis of Emsi Burning Glass (EBG), European Labour Force Survey (European Union countries, Switzerland and the United Kingdom), Current Population Survey (USA) and Canadian Labor Force Survey (Canada).

## II. Economic effects of labor market concentration in Europe and the United States

The previous section presented evidence that labour market concentration is not only a U.S. phenomenon, but is equally present on both sides of the Atlantic. However, the importance of this result depends on the consequences of labour market concentration, and in particular, the extent to which concentration leads to monopsony power. If this is the case, one should expect greater concentration to cause worse labour market outcomes : in particular, lower employment, lower wages and worse working conditions. To complete the picture, this section focuses on the available evidence on the effect of concentration on employment, wages and non-wage job attributes in both Europe and the United States.

### A. Employment

In principle, one would expect to find a clear negative relationship between measures of labor market concentration and employment, when estimated over a large sample of local labor markets. In practice, however, few studies have documented this relationship due to the difficulty of identifying the effect of labor

<sup>39</sup> ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, *supra* note 26 (2022).

market concentration independently from other confounding factors while simultaneously solving potential reverse causality issues.

Most of the economy-wide studies in the literature focus directly on horizontal mergers, which are more likely to result in increased concentration, and typically find negative effects of mergers on employment levels of merged firms.<sup>40</sup> Many other studies, much more abundant in the United States than in Europe, focus on horizontal mergers in specific markets and find more mixed results. For example, a number of studies find no impact of mergers on employment in the US hospital industry.<sup>41</sup>

The limit of merger studies is that they usually cannot disentangle changes in *product market* competition and, often, efficiency gains from mergers from changes in *labor market* competition. Policy responses are different when the effect on employment derives from efficiency gains instead of inefficient demand restraints. To the authors' knowledge only two studies try to isolate directly the economy-wide effect of labor market concentration on employment, however: Marinescu, Ouss and Pape and Popp examine its impact in France and Germany, respectively, and find very large negative effects of concentration: taking their estimates at face value, increasing labor market concentration by 10% would imply an employment effect between 1.5% and 3%.<sup>42</sup>

Indirect evidence of the employment effect of monopsonistic market power can also be obtained from the large literature on the employment impact of the minimum wage. In a standard model with competitive labor markets, the impact of the minimum wage on employment is unambiguously negative.<sup>43</sup> Yet, the empirical evidence is much less conclusive and many studies have found no or small disemployment effects of minimum wage increases.<sup>44</sup> Monopsony models provide a simple explanation for the lack of negative impact of moderate minimum wage hikes on employment.<sup>45</sup> Concerning specifically labor market concentration, Azar et al. and Popp look at the impact of changes in minimum wages in the United States

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<sup>40</sup> See, e.g., See Martin J. Conyon, Sourafel Girma, Steve Thompson & Peter W. Wright, Do Hostile Mergers Destroy Jobs?, 45 J. ECON. BEHAV. & ORG. 427 (2001) (for the United Kingdom); Eero Lehto & Petri Böckerman, Analysing the Employment Effects of Mergers and Acquisitions, 68 J. ECON. BEHAV. & ORG. 112 (2008) (for Finland); Donald S. Siegel & Kenneth L. Simons, Assessing the Effects of Mergers and Acquisitions on Firm Performance, Plant Productivity, and Workers: New Evidence from Matched Employer-Employee Data, 31 STRAT. MGMT. J. 903 (2010) (for Sweden); DAVID ARNOLD, MERGERS AND ACQUISITIONS, LOCAL LABOR MARKET CONCENTRATION, AND WORKER OUTCOMES (2021) (for the United States); Klaus Gugler & B. Burcin Yurtoglu, The Effects of Mergers on Company Employment in the USA and Europe, 22 INT'L J. INDUS. ORG. 481 {PINCITE} (2004) (cross-country study covering European countries and the United States).

<sup>41</sup> Janet Currie, Mehdi Farsi & W. Bentley Macleod, Cut to the Bone? Hospital Takeovers and Nurse Employment Contracts, 58 INDUS. & LABOR REL. REV. 471 488–89 (2005); Elena Prager & Matt Schmitt, Employer Consolidation and Wages: Evidence from Hospitals, 111 AM. ECON. REV. 397, 410 (2021).

<sup>42</sup> Ioana Marinescu, Ivan Ouss & Louis-Daniel Pape, supra note 8, at {PINCITE}; Martin Popp, Minimum Wages in Concentrated Labor Markets {PINCITE} (Bavarian Graduate Program Econ., Discussion Paper No. 214, 2021).

<sup>43</sup> See, e.g., Charles Brown, Minimum Wages, Employment, and the Distribution of Income, 3 Handbook of Labor Economics 2101, 2149 (1999).

<sup>44</sup> See e.g. Dube, A. (2019), Impacts of minimum wages : review of the international evidence, HM Treasury and Department for Business, Energy & Industrial Strategy, <https://www.gov.uk/government/publications/impacts-of-minimum-wages-review-of-the-international-evidence>.

<sup>45</sup> MANNING, supra note 3, at 338–47. In practice, in a monopsony model, in the unconstrained equilibrium, employment is lower than in the competitive equilibrium because the curve representing the marginal cost of labour is above (and steeper than) the supply curve. Moderate levels of the minimum wage shift down the marginal cost curve and make it flatter. As a result, employment is higher than in the unconstrained equilibrium and more reactive to changes in labour demand.

and Germany, respectively, using granular data on local concentration.<sup>46</sup> They both find that the effect of the minimum wage on employment becomes less negative as labor market concentration increases, and is even estimated to be positive in the most concentrated markets.

Together, these results confirm that labor market concentration tends to have a negative average impact on employment, although more research is needed to establish the precise magnitude of this effect.

## **B. Wages**

Theory predicts that monopsonistic competition reduces both employees and wages below efficient levels. Many papers have investigated the effect of local labor market concentration on wages. In the United States, they consistently find a negative effect<sup>47</sup> but with a wide variation of elasticities. Certain studies find elasticities lower than -0.1 in absolute terms, meaning that a 10% increase in concentration is estimated to decrease wages by at least 1%.<sup>48</sup> Other studies, however, find much smaller elasticities, comprised between -0.01 and -0.05.<sup>49</sup> The latter better compare with elasticities found in European studies. Elasticities between -0.020 and -0.024 have been found for France.<sup>50</sup> Point estimates of -0.028, -0.010 and -0.043 are reported for Portugal, Norway and Germany, respectively,<sup>51</sup> while the OECD finds an elasticity of -0.028, by pooling data for Austria, Denmark, France, Finland and Spain (and Costa Rica).<sup>52</sup> Finally, in the only study estimating cross-country comparable elasticities, Bassanini et al. find strikingly similar effects across Denmark, Germany, France and Portugal (ranging from -0.019 in Germany to -0.029 in Denmark), despite significant differences in labor market institutions and industrial structures across these countries.<sup>53</sup>

It is hard to compare European estimates with US ones due to different samples and specifications. In fact, many European studies try to control for firm heterogeneity, firm productivity and/or product market competition,<sup>54</sup> likely key confounders of labor market concentration and wages, while most US studies do not simultaneously control for all these factors—with the exception of that of Benmelech, Bergman and Kim, whose point estimates are only slightly larger than the European estimates.<sup>55</sup> Overall, this suggests that, both in Europe and the United States, two identical workers employed by equally productive firms

<sup>46</sup> See generally, José Azar, Emiliano Huet-Vaughan, Ioana Marinescu, Bledi Taska & Till von Wachter, Minimum Wage Employment Effects and Labor Market Concentration (Nat'l Bureau Econ. Rsch., Working Paper No. 26101, 2019); Popp, supra note 42.

<sup>47</sup> Strictly speaking, this statement is true only for instrumental variable estimates.

<sup>48</sup> See, e.g., Qiu & Sojourner, supra note 6; Arnold, supra note 40, at 24; José Azar, Ioana Marinescu & Marshall Steinbaum, Labor Market Concentration, J. HUM. RES. S167, 101899 (Supp. 2022) .

<sup>49</sup> Rinz, supra note 6, at S271–73; Benmelech, Bergman & Kim, supra note 6, at S214; GREGOR SCHUBERT, ANNA STANSBURY & BLEDI TASKA, EMPLOYER CONCENTRATION AND OUTSIDE OPTIONS 19 (2021) .

<sup>50</sup> Marinescu, Ouss & Pape, supra note 8, at 516 .

<sup>51</sup> Martins, supra note 10, at 15; Dodini, Lovenheim, Salvanes & Willén, supra note 11, at 61; Popp, supra note 42, at 77.

<sup>52</sup> ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, supra note 5, at 115–17.

<sup>53</sup> Andrea Bassanini et al., Labour Market Concentration, Wages and Job Security in Europe 13–14 (IZA Inst. of Labor Econ., Discussion Paper No. 15231, 2022).

<sup>54</sup> A couple of studies do not control for heterogeneity, productivity or product market competition, and are exceptions. See Dodini, Lovenheim, Salvanes & Willén, supra note 11, at 21; Popp, supra note 42, at 27. A couple of other European studies only control for firm heterogeneity through firm fixed effects. See Martins, supra note 10, at 3; ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, supra note 5, at 19, 33 n.2.

<sup>55</sup> Benmelech, Bergman & Kim, supra note 6, at S211.

facing the same degree of competition in product market, but whose local labor markets differ by 10% in terms of concentration, are likely to display a wage difference of at least 0.2%-0.3%. While this effect may seem low at first glance, one needs to consider that the distributions of concentration indexes are typically much dispersed. For example, the 90<sup>th</sup> percentile is between 550% and 800% higher than the median in the countries covered by Bassanini et al.<sup>56</sup> This implies that the estimated contribution of concentration to the dispersion of the wage distribution is substantial in economic terms.

A few studies have investigated how the wage effect of concentration varies with the degree of unionisation of the workforce and all find that the greater the degree of unionisation, the smaller the impact of concentration.<sup>57</sup> This is consistent with the view that unions can exert strong countervailing power in monopsonistic labor markets, improving efficiency.<sup>58</sup>

There is some, albeit limited, evidence that in Europe the wage elasticity to labor market concentration has become more negative in the past two decades. In other words, the impact of concentration appears to have become stronger over time. For example, the OECD finds this result in the five European countries it focuses on.<sup>59</sup> One likely explanation can be found the concomitant reduction of collective bargaining and the weakening of trade unions,<sup>60</sup> which may be increasingly less able to act as a countervailing power.

### **C. Non-wage job attributes**

There is a large literature showing that workers consider wages and working conditions together when evaluating jobs and job offers, and are ready to trade off part of their wage for terms and conditions of employment that they consider to be better.<sup>61</sup> If delivering better terms and conditions of employment is costly for employers, it can be expected that monopsonistic employers will tend to offer jobs with worse terms and conditions.<sup>62</sup> This is the equivalent of degrading quality in the product market. Yet, there is surprisingly little literature on the effect of labor market concentration on the terms and conditions of employment. In the United States, Qiu and Sojourner estimate that a 10% increase in concentration reduces the probability of being covered by employer-provided health insurance by about 3% at the sample mean.<sup>63</sup> Bassanini et al. find that concentration tends to increase the probability of being hired on a more precarious contract type.<sup>64</sup> At the sample mean, they find that an increase in concentration by 10% dampens the probability of being offered an open-ended contract at the time of hiring by 0.5% to 2.3% in

<sup>56</sup> Bassanini et al., *supra* note 12, at 9–10.

<sup>57</sup> See Benmelech, Bergman & Kim, *supra* note 6, at S233 (for the United States); Abel, Tenreyro & Thwaites, *supra* note 7, at 9 (for the United Kingdom)]; Marinescu, Ouss & Pape, *supra* note 8, at 517–18 (for France); Samuel Dodini, Kjell Salvanes & Alexander Willén, *The Dynamics of Power in Labor Markets: Monopolistic Unions versus Monopsonistic Employers* 23 (CESifo Econ. Stud., Working Paper No. 9495, 2021) (for Norway).

<sup>58</sup> See Thomas E. MaCurdy & John H. Pencavel, *Testing between Competing Models of Wage and Employment Determination in Unionized Markets*, 94 J. POL. ECON. S3, S32 (1986) Orley C. Ashenfelter, Henry Farber & Michael R. Ransom, *Labor Market Monopsony*, 28 J. LABOR ECON. 203, 209 (2010).

<sup>59</sup> ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, *supra* note 5, at 116–17.

<sup>60</sup> ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, *OECD EMPLOYMENT OUTLOOK 2019*, *supra* note 5, at 151–55.

<sup>61</sup> See, e.g., Alexandre Mas & Amanda Pallais, *Valuing Alternative Work Arrangements*, 107 Am. Econ. Rev. 3722, 3734–46 (2017); Christopher Taber & Rune Vejlin, *Estimation of a Roy/Search/Compensating Differential Model of the Labor Market*, 88 Econometrica 1031, 1061 (2020); Thomas Le Barbanchon, Roland Rathelot & Alexandra Roulet, *Gender Differences in Job Search: Trading Off Commute Against Wage*, 136 Quarterly J. Econ. 381, 423 (2020)

<sup>62</sup> MANNING, *supra* note 3, at 132–36.

<sup>63</sup> Qiu & Sojourner, *supra* note 6, at 19.

<sup>64</sup> Bassanini et al., *supra* note 12, at 19.

France, Germany and Portugal. Moreover, they also estimate that, for those hired on a temporary contract, an increase in concentration of the same magnitude reduces the probability of having the employment relationship converted into an open-ended one within one year by 0.7% in Spain and 2.4% in Italy. Although more research is needed, these results suggest that concentration tends to have a negative impact on non-wage job attributes when these are costly for employers.

### III. A transatlantic overview of competition policy and enforcement in labor markets

#### A. The consumer welfare standard is no obstacle to competitive labor markets

As mentioned above, in spite of increasing evidence of concentration in labor markets in both the United States and European countries, competition enforcement has so far been characterised by a significant asymmetry. Competitive product markets have been the almost exclusive focus of competition authorities in both continents. A shift in attention toward labor markets has only started to materialise more recently, in particular because of growing awareness that labor markets may be potentially less competitive than commonly thought.<sup>65</sup>

This has raised the question whether negative effects on labor markets are sufficient to justify enforcement or whether price effects on consumers in the product market are required.

In the EU, no formal obstacle seems to exist to recognise harm to workers as a standalone anticompetitive harm. The focus on harm from price increases and quality decreases has been associated with the goal of protection of the competitive process in this jurisdiction and the EU courts have never unambiguously embraced the enhancement of consumer welfare as the predominant goal of EU competition law.<sup>66</sup>

Further, in a recent merger decision by the European Commission (EC), *Aurubis/Metallo*, the authority left some leeway for future broader interpretations, separating in passing the existence of competitive harm from the evidence of direct harm to final consumers. The EC explicitly stated that, in buyer power cases, it can intervene when the merger can significantly impede competition, including by protecting the competitive process, “even if it cannot be demonstrated that such reduction of competition affects consumer welfare.”<sup>67</sup>

This suggests that the reluctance on the part of some authorities to address buyer power in cases where there was no evidence of harm in the downstream product market<sup>68</sup> may be unjustified and now seems to be changing, in particular as regards employers’ monopsony.

The discussion around the need for evidence of consumer harm has little bearing in those cases where anticompetitive conduct does not require the examination of its effects and is qualified as “by object”. Restrictions of competition “by object” are typically those that by their very nature have the potential to distort competition under Article 101 of the Treaty on the Functioning of the European Union (TFEU),<sup>69</sup> the

<sup>65</sup> ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, *COMPETITION IN LABOUR MARKETS* 8 (2020) .

<sup>66</sup> Konstantinos Stylianou & Marios Iacovides, *The Goals of EU Competition Law: A Comprehensive Empirical Investigation*, *LEGAL STUD.*, January 28, 2022, at 1, 8

<sup>67</sup> Case M.9409, *Aurubis/Metallo Group Holding*, decision of 1 July 2020, [https://ec.europa.eu/competition/mergers/cases/decisions/m9409\\_3908\\_3.pdf](https://ec.europa.eu/competition/mergers/cases/decisions/m9409_3908_3.pdf).

<sup>68</sup> *See, e.g.*, ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, *MONOPSONY AND BUYER POWER* 313 (2008).

<sup>69</sup> “By object” restrictions have been considered by the Court of Justice of the European Union as those “types of coordination between undertakings which reveal a sufficient degree of harm to competition that it may be found that there is no need to examine their effects”, see Case C-67/13 P, *Groupement des cartes bancaires v. European*

EU equivalent of Section 1 of the Sherman Act. Of course, evidence of the effects may still be required to the purposes of calculating a fine or for private enforcement actions.

The main forms of anticompetitive agreements in labor markets that are susceptible to be analysed under Article 101 TFEU (collusion between employers; non-competes; and cooperation agreements) are described below. A discussion on merger control follows.

### **1. Collusion between employers**

Anticompetitive conduct by employers colluding can qualify as “by object” under EU competition law. It may include wage-fixing, no-poaching, no-solicitation agreements, as well as exchange of commercially sensitive information.

Several competition authorities (for instance the US,<sup>70</sup> Hong Kong,<sup>71</sup> Japan,<sup>72</sup> Portugal,<sup>73</sup> and Peru<sup>74</sup>) have issued best practices to guide firms’ behaviour in labor markets in relation to such agreements. There have also been several investigations brought by national competition authorities in relation to no-poach agreements, wage-fixing or information exchange on salaries, for example, in Spain,<sup>75</sup> France,<sup>76</sup> the

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*Commission*, 11 September 2014, EU:C:2014:2204, para. 58. The concept is close, but not identical, to that of “per se” restrictions in the US.

<sup>70</sup> U.S. DEP’T OF JUSTICE ANTITRUST DIV. & FED. TRADE COMM’N, ANTITRUST GUIDANCE FOR HUMAN RESOURCE PROFESSIONALS (2016).

<sup>71</sup> HONG KONG COMPETITION COMM’N, COMPETITION COMM’N ADVISORY BULLETIN: COMPETITION CONCERNS REGARDING CERTAIN PRACTICES IN THE EMPLOYMENT MARKETPLACE IN RELATION TO HIRING AND TERMS AND CONDITIONS OF EMPLOYMENT (2018).

<sup>72</sup> COMPETITION POL’Y RSCH. CTR., JAPAN FAIR TRADE COMM’N, REPORT OF THE STUDY GROUP ON HUMAN RESOURCE AND COMPETITION POLICY (2018).

<sup>73</sup> AUTORIDADE DA CONCORRENCIA, BEST PRACTICES IN PREVENTING ANTICOMPETITIVE AGREEMENTS IN LABOR MARKETS (2021).

<sup>74</sup> INDECOPI, INFORMATIONAL GUIDELINES ABOUT ANTICOMPETITIVE AGREEMENTS AMONG COMPANIES IN LABOR MARKETS (2020).

<sup>75</sup> See, e.g., Comisión Nacional de la Competencia (CNMC), Decision S/0120/08, Transitarios of 31 July 2010 and Decision S/0086/08, Peluquería Profesional of 2 March 2011; Comisión Nacional de la Competencia (CNMC), Decision S/DC/0612/17, Montaje y Mantenimiento Industrial of 1 October 2019.

<sup>76</sup> See, e.g., Autorité de la concurrence, dec. no. 17-D-20 of 18 October 2017, pp. 44–45.

Netherlands,<sup>77</sup> Portugal,<sup>78</sup> Lithuania,<sup>79</sup> Poland,<sup>80</sup> Romania,<sup>81</sup> Hungary,<sup>82</sup> Greece,<sup>83</sup> Peru,<sup>84</sup> Colombia,<sup>85</sup> Brazil<sup>86</sup> and Mexico.<sup>87</sup> Some of these cases have been discovered while looking at collusion in the product markets. The French competition authority, for instance, issued a sanction against several companies in the PVC and linoleum covering sectors which, together with the industry association, had engaged in price-fixing and entered a gentlemen's agreement not to poach each other's employees. Similarly, in Spain, the authority found agreements in the freight forwarding and hairdressing products respectively. In both cases, no-poach agreements between the cartel members were found whilst investigating the collusion at the level of the product market.

Other recent cases started as autonomous investigations in the labour market, for instance, in the sport sector, involving agreements not to poach or to decrease or cap payments for basketball or football players. In Europe, for example, the Portuguese competition authority issued in 2021 a statement of objection against a no-poaching agreement entered into by the Portuguese Professional Football League and 31 sports clubs. The League and the clubs had convened not to hire football players who terminated their contracts for circumstances related to Covid-19. An interim measure was adopted by the authority to suspend the effectiveness of the agreement.

There has not been an investigation of this kind by the European Commission yet, but the European Commission's Executive Vice-President Vestager in a recent speech referred to no-poach and wage-fixing

<sup>77</sup> See, e.g., Gerechthof's-Hertogenbosch, May 2010, <https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:GHSHE:2010:BM3366>. For an account in English, see Göneç Gürkaynak, Ayşe Güner & Ceren Özkanlı, Competition Law Issues in the Human Resource Field, 4 J. European Competition Law & Practice 201, 203 (2013).

<sup>78</sup> See, e.g., Portuguese Competition Authority, Case PRC/2020/1, 29 April 2022, [https://extranet.concorrenca.pt/PesquisAdC/PRC\\_OR\\_INC\\_OR\\_PCC\\_Page.aspx?IsEnglish=True&Ref=PRC\\_2020\\_1](https://extranet.concorrenca.pt/PesquisAdC/PRC_OR_INC_OR_PCC_Page.aspx?IsEnglish=True&Ref=PRC_2020_1).

<sup>79</sup> See, e.g., Competition Council of the Republic of Lithuania, Press Release, By Agreeing Not to Pay Players' Salaries Lithuanian Basketball League and Its Clubs Infringed Competition Law, KT.GOV.LT (Nov. 18, 2021), <https://kt.gov.lt/en/news/by-agreeing-not-to-pay-players-salaries-lithuanian-basketball-league-and-its-clubs-infringed-competition-law>.

<sup>80</sup> See, e.g., Emily Craig, Poland Investigates Basketball League No-Poach Agreements, GLOBAL COMPETITION REVIEW (April 23, 2021), <https://perma.cc/4HMJ-ARA2>.

<sup>81</sup> See, e.g., Julie Masson, Romania Launches First Labour Market Probe, GLOBAL COMPETITION REVIEW (Feb. 1, 2021), <https://perma.cc/VF8M-FUAH>.

<sup>82</sup> See, e.g., Emily Craig, Hungary Fines Recruitment Association for Price-Fixing and No-Poach Agreements, GLOBAL COMPETITION REVIEW (Jan. 7, 2021), <https://perma.cc/5NNZ-8RUM>.

<sup>83</sup> See, e.g., Olivia Rafferty, Greece Punishes Elevator Association for Wage-Fixing, GLOBAL COMPETITION REVIEW (Mar. 7, 2022), <https://perma.cc/8HNB-PMDP>.

<sup>84</sup> See, e.g., Olivia Rafferty, Peru Probes Construction Companies Over No-Poach Agreements, GLOBAL COMPETITION REVIEW (Feb. 14, 2022), <https://perma.cc/T3XF-2VK2>.

<sup>85</sup> See, e.g., Julie Masson, Colombia Probes Top Football Clubs for No-Poach Agreements, GLOBAL COMPETITION REVIEW (Dec. 1, 2021), <https://perma.cc/PVB5-ZHVX>.

<sup>86</sup> See, e.g., CADE, Investigation n° 08700.004548/2019-61, March 2021, <https://perma.cc/C3H7-GC4P>.

<sup>87</sup> Julie Masson, COFECE Sanctions Football Clubs in First No-Poach Probe, GLOBAL COMPETITION REVIEW (Sept. 24, 2021), <https://perma.cc/6JRZ-NT5D>.

and more generally to the importance of enforcing competition against buyer cartels, as they hurt suppliers and make the economy work less efficiently.<sup>88</sup>

There seems to be consensus in considering these types of horizontal collusion as “by object” infringements and unlikely to generate efficiencies, an approach that is close, albeit not identical to the US one of “per se” infringements.<sup>89</sup>

Some of these investigations took place in the most concentrated sectors as per Section 1 above (for instance, the healthcare sector in the Dutch hospitals case and the Brazilian case mentioned above), confirming that health professionals may be particularly vulnerable to competition restrictions by their employers. Others are consistent with the finding that limited cross-sectoral employability may create labor market power, including for highly specialised workers, like sport professionals, who can still be exposed to labor market power. They are also consistent with the finding that market concentration in the product market and labor market concentration may be associated.

Given the data presented under Part 1 in relation to the most concentrated sectors and the impact of labor market power on first-line workers, it is easy to see how competition authorities may decide to scrutinise thoroughly or even prioritise screening of healthcare markets, including hospitals, health insurances, medical devices and other equipment markets.<sup>90</sup> The labor markets corresponding to these product markets are not only likely to be concentrated, but were affected by the pandemic crisis due to surges in demand for professionals that are often public facing and exposed to Covid-19 infection risks. During the pandemic, labor markets were specifically prioritised, among others, by the Peruvian,<sup>91</sup> Portuguese<sup>92</sup> and the US<sup>93</sup> competition authorities, which feared the pandemic could give opportunities for employers to collude in such markets.<sup>94</sup>

Even if such cases are recognised as “by object,” and thus no proof of actual effects is needed, their harmful effects in the downstream markets are well-established. Wage-fixing and no-poach agreements reinforce employers’ market power and may lead to higher prices and lower quality, in addition to softening downstream competition, particularly if competitors have downstream market power and there are barriers to entry.<sup>95</sup> This was recognised by the Portuguese Authority in the Professional Football League case, where it noted that the agreement could reduce the quality of the football matches and harm consumers, by preventing the recruitment of players according to the needs of the team and pushing talented players

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<sup>88</sup> M. Vestager, Executive Vice-President, Speech, A New Era of Cartel Enforcement, EUROPEAN COMMISSION (Oct. 22, 2021), <https://perma.cc/9943-7M84>.

<sup>89</sup> Posner & Volpin, supra note 16, at 4–5; Autoridade da Concorrença, Labour Market Agreements and Competition Policy Issues Paper 21 (2021).

<sup>90</sup> ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, THE ROLE OF COMPETITION IN PROMOTING ECONOMIC RECOVERY 31 (2020).

<sup>91</sup> Indecopi, supra note 73, at 3.

<sup>92</sup> AUTORIDADE DA CONCORRENÇA, COMPETITION POLICY PRIORITIES IN 2022 1 (2022)

<sup>93</sup> Office of Public Affairs, Dep’t of Justice, Press Release, Justice Department and Federal Trade Commission Jointly Issue Statement on COVID19 and Competition in U.S. Labor Markets, DEP’T OF JUSTICE (Apr. 13, 2020), <https://perma.cc/9YVV-5ME7>.

<sup>94</sup> See generally, ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, CO-OPERATION BETWEEN COMPETITORS IN THE TIME OF COVID-19 (2020) (for a broader analysis of co-operation agreements aimed at addressing market disruptions in the context of COVID-19).

<sup>95</sup> Autoridade da Concorrença, supra note 88, at 14–15 (2021)

to leave abroad.<sup>96</sup> In addition, no-poach agreements may also limit knowledge spillovers and harm innovation.<sup>97</sup>

Specific investigatory and evidentiary challenges may arise in connection with the transparency or lack of transparency around wages. A specific investigatory challenge that competition authorities may find, for instance, in European countries which allow for coordinated or branch- level- collective bargaining arises from the difficulties of distinguishing wage-fixing and information exchange practices or other concerted practice from lawful co-ordination among employers in view of negotiations with trade unions.<sup>98</sup> Transparency around wages is also likely to enable tacit coordination, which, while it may not be illegal, may be very detrimental for workers. This is particularly noteworthy in conjunction with the increasingly common pay transparency practices of companies, such as Microsoft, or with individuals publishing on social networks information about wages (these latter typically upon leaving a job).<sup>99</sup> Conversely, however, the lack of information about wages and the variety of compensation levels between workers at the same firm and in the same role, sometimes based on background, experience, or even gender, may make it difficult to show harm when such proof may be needed, such as in private litigation.<sup>100</sup> In the EU, a rebuttable presumption of harm assists private parties once they have proved the existence of a cartel.<sup>101</sup>

## 2. Non-competes

One of the most problematic types of agreements affecting workers' mobility are non-competes, which, by restraining their possibility to switch jobs, can significantly increase labor market power. Differently from the US Section 1 of the Sherman, which applies to restraints of trade, Article 101 of the TFEU does not currently capture non-competes, because they are concluded by the workers and the employers. Article 101 TFEU applies only to "agreements and concerted practices between undertakings". Workers, according to the EU case law, do not constitute "undertakings", for the duration of their employment relationship. In this sense the case law as it is currently interpreted would prevent enforcement action against non-competes under Article 101 TFEU.<sup>102</sup> Civil law, however, tends to consider non-competes valid only when aimed at protecting intellectual property and education investments and trade secrets, and reasonably limited in time and scope.

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<sup>96</sup> Autoridade da Concorrência, Press Release, AdC Issues Sanctioning Decision for Anticompetitive Agreement in the Labor Market for the First Time, CONCORRENCIA (Apr. 29, 2022), <https://perma.cc/8G2D-UXU4>.

<sup>97</sup> Autoridade da Concorrência, supra note 94, at 16.

<sup>98</sup> Gönenç Gürkaynak, Ayşe Güner & Ceren Özkanlı, Competition Law Issues in the Human Resource Field, 4 J. European Competition Law & Practice 201, 207 (2013); ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, OECD EMPLOYMENT OUTLOOK 2019, supra note 5, at 195–204.

<sup>99</sup> See Jena McGregor, Microsoft Announces It Will Include Pay Ranges in All U.S. Job Postings. Experts Predict It Will Be the First of Many, FORBES (Jun. 9, 2022), <https://perma.cc/Z3PV-UNXG> (describing Microsoft's pay transparency initiative to disclose salary ranges for all job postings in the US from 2021, following a new state law). See also Leah Nysten (@leah\_nysten), TWITTER (Apr. 9, 2022), <https://perma.cc/6RSM-T63J> (for a similar, individual initiative by an antitrust reporter).

<sup>100</sup> POSNER, supra note 2, at 51.

<sup>101</sup> Directive 2014/104/EU, of the European Parliament and of the Council of 26 November 2014 on Certain Rules Governing Actions for Damages under National Law for Infringements of the Competition Law Provisions of the Member States and of the European Union, 2014 O.J. (L 349) 1, 7–8.

<sup>102</sup> The regime is different for no-solicitation and no-poaching agreements analysed in merger control, which may be considered directly related and necessary to the implementation of a cleared merger transaction.

Some studies suggest, however, that the use of non-competes may be quite pervasive in some European countries, such as Finland, the Netherlands and Austria.<sup>103</sup>

If workers were to be considered as independent economic units, a non-compete would be akin to an exclusive supply agreement, whereby the supplier (of labor) is obliged or induced to sell its (labor) input only to one buyer (the employer). This is a type of agreement that in the product market is regarded with at least some suspicion and may be anticompetitive, depending on the market shares of the buyer, the countervailing power of the supplier, the duration of the supply agreement, and entry barriers. It is to be noted, however, that the current EU legal framework provides for a safe harbour in relation to this type of agreement, requiring both the supplier's and the buyer's market shares not to exceed 30%.<sup>104</sup>

While the mandatory compensation mechanisms for non-compete agreements provided for by civil law would allow compensating the workers for their mobility restrictions, they would not address the inefficiency resulting from loss or reduction of knowledge spillover effects, harm to innovation, or the foreclosure of potential competitors from the market,<sup>105</sup> thereby potentially leaving a gap in enforcement.

As such, and within the current EU framework, a regulatory solution banning or limiting non-competes that are not justified by legitimate pro-competitive reasons would likely be more appropriate, particularly in those sectors where high levels of labor market concentration are present.

### **3. Collective bargaining rights as countervailing force**

From the viewpoint of competition policy, deprioritising enforcement against collaboration between competitors regarded as having important positive social effects may be a powerful way to safeguard workers' protection, in addition to enforcement against what have been called "atypical" cartels.

The Court of Justice of the European Union has traditionally held that collective bargaining agreements between employers and workers aimed at improving salaries and other working conditions do not infringe EU competition law.<sup>106</sup> It also accepted restrictions as inherent to legitimate objectives pursued by certain professions in Wouters<sup>107</sup> and Meca Medina.<sup>108</sup>

Paradoxically, however, while on the one hand the EU notion of "undertaking" prevents the prohibition of non-competes under competition law, on the other hand it also exposes some self-employed workers to the risk of competition enforcement. The qualification of workers as non-undertakings traditionally served the purpose of exempting workers from competition law action when they were collectively bargaining for their remuneration and working rights. But its limits have been exposed by the evolution of labor markets, including as regards digital platforms.

The European Commission has therefore recently published guidelines to address this issue, noting that collective negotiation and bargaining between certain categories of "solo self-employed" and their counterparties are specifically allowed. Such categories include the solo self-employed that are "in a

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<sup>103</sup> ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, supra note 26 (2022).

<sup>104</sup> See Guidelines on Vertical Restraints, 2022 O.J. (C 248/01) ¶ 321.

<sup>105</sup> POSNER, supra note 2, at 95.

<sup>106</sup> See, e.g., Case C-413/13, FNV Kunsten Informatie en Media v. Staat der Nederlanden, EU:C:2014:2411, ¶ 23 (Dec. 14, 2014); Case C-67/96, Albany International BV v. Stichting Bedrijfspensioenfonds Textielindustrie, EU:C:1999:430, ¶ 60 (Sept. 21, 1999).

<sup>107</sup> Case C-309/99, J. C. J. Wouters, J. W. Savelbergh and Price Waterhouse Belastingadviseurs BV v. Algemene Raad van de Nederlandse Orde van Advocaten, intervener: Raad van de Balies van de Europese Gemeenschap, EU:C:2002:98, ¶ 107 (Feb. 19, 2002).

<sup>108</sup> Case C-519/04 P, Meca-Medina and Majcen v. Commission, EU:C:2006:492, ¶ 45 (Jul. 18, 2006).

situation comparable to workers” and those that are “in a weak negotiating position”.<sup>109</sup> The solo self-employed who face a monopsonist or a counterparty with significant labor market power can use collective agreements “as a legitimate means to correct the imbalance in bargaining power between the two sides”.<sup>110</sup>

#### **4. Co-operation agreements between employers to safeguard living wages and living conditions**

Across the EU, the debate has recently rekindled on whether and how competition law and the consumer welfare standard adopted by many jurisdictions can allow for harm to sustainability and sustainability efficiencies to be taken into account in competition cases. In this context, the debate has also moved towards an examination of whether the traditional analytical tools of price, quality, choice and innovation are well suited for such analysis.

This debate has largely been provoked by the consequences of climate change and the urgency of achieving carbon neutrality goals. However, according to a definition that is commonly accepted, sustainable development encompasses three dimensions: an environmental, an economic and a social dimension.<sup>111</sup> In this latter dimension, some authorities, including the European Commission, and some commentators<sup>112</sup> also consider the protection of workers’ income and working conditions.

This approach would seek to ensure that some market failures or other demand side issues are considered when conducting a competition analysis in specific cases. This might include, for instance, the so-called “first mover disadvantage” situation, which one can imagine as a situation where employers able and willing to ensure higher living wage and living conditions to their workers may not bear such costs for fear of being undercut by rivals or seeing consumers switching to competitors offering cheaper products produced with lower working conditions.

Such coordination would not be necessary if consumers could drive producers to remunerate competitively their workers by way of orienting their purchasing decisions towards companies offering better wages and production conditions. This happens where the treatment of workers is a differentiation factor on which companies can compete and where consumers are able to express a purchasing preference for it. However, demand may not work efficiently in driving this shift due to significant asymmetries of information and behavioural biases on the part of consumers that may lead them to underestimate this feature of the quality dimension of the product compared to others.<sup>113</sup>

The question arises therefore whether, in such cases, it would be possible to envisage that a cooperation between employers setting a minimum living wage level may, under very specific circumstances, establish a “social norm”<sup>114</sup> and be used to bring such conditions to existence in the market and ensure they are applied across the industry.

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<sup>109</sup> See European Commission, Press Release, Commission adopts Guidelines on collective agreements by solo self-employed people, 29 September 2022.

<sup>110</sup> Communication from the Commission, Guidelines on the Application of EU Competition Law to Collective Agreements Regarding the Working Conditions of Solo Self-Employed Persons, at ¶ 33, C(2022) 6846 final (Sep. 29, 2022).

<sup>111</sup> ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, SUSTAINABILITY AND COMPETITION OECD COMPETITION COMMITTEE DISCUSSION PAPER 12 (2020).

<sup>112</sup> SIMON HOLMES, CLIMATE CHANGE, SUSTAINABILITY AND COMPETITION LAW 354-405 (2020).

<sup>113</sup> For a fuller analysis of demand problems affecting the matching between supply and demand in relation to sustainability, see CRISTINA VOLPIN, SUSTAINABILITY AS A QUALITY DIMENSION OF COMPETITION: PROTECTING OUR FUTURE (SELVES) 3–4 (2020).

<sup>114</sup> ROMAN INDERST, FELIX RHIEL & STEFAN THOMAS, SUSTAINABILITY AGREEMENTS AND SOCIAL NORMS 13–14 (2022).

It should be noted that there are significant distinguishing features between co-operation between employers in labour markets and co-operation between firms to promote environmental sustainability or fight climate change, including as regards the externalities and efficiencies they may yield.

A co-operation between employers aimed at wage-fixing may artificially create employers' monopsony power and it is very likely to eliminate or distort competition between players in attracting workforce. The employers have no incentives to set the level of wages at a competitive level. Therefore, significant risk of anticompetitive coordination between the participants may arise in connection with such cooperation, which suggests applying considerable caution to this approach and preferring regulatory initiatives to protect workers when possible. In the context of private initiatives, certification standards and labelling schemes may be used in some cases to inform consumers and ensure that better working conditions are provided in an industry.<sup>115</sup>

Where these are not sufficient, coordination may in very limited circumstances be tolerated when it yield significant efficiencies, but it would have to be strictly limited in time and adequately monitored by a competition authority. As noted below, authorities approached some cases by using their priority setting discretion and engaging with the involved parties by means of business review or comfort letters.

In an interesting case brought to the attention of the US Department of Justice (DoJ) in 2000, the Apparel Industry Partnership, including manufacturers like Nike and Reebok, asked for a business review letter in relation to the adoption of a Workplace Code of Conduct.<sup>116</sup> The request stemmed from concerns for the declining conditions in sweatshop manufacturing factories, where "employees work[ed] long hours for low wages under unsafe or unhealthful working conditions" both in the US and abroad. The Code included, in addition to recognition of employees' rights to collective bargain and legal limits on regular and overtime work, also a requirement to pay employees the higher of legally required minimum wages or the prevailing industry wage. While the Code of Conduct was likely not setting a standard beyond the legal one, and compliance with it was not mandatory, the question arose whether it may have a negative impact on retail prices. In the letter, the DoJ noted that compliance with the minimum wage and maximum working hours requirements may potentially increase manufacturing costs, but it concluded that the Code would not have an appreciable impact on outputs or final prices in the United States. The DoJ also seemed to acknowledge that the respect of reasonable working conditions may represent a quality dimension of the product that consumers may appreciate and that the companies could advertise, thus giving the Code "a net procompetitive effect".<sup>117</sup>

More recently, in Europe, a law firm issued an opinion forecasting a low risk of competition investigation by the European Commission or other authorities vis-à-vis the initiative of the Fair Wear Foundation involving "raising wages from current levels to an agreed benchmark representing or approaching, a living wage" for its members' workers.<sup>118</sup>

The German Bundeskartellamt allowed agreements between competitors concerning voluntary commitments to set fair wage standards in the banana sector. The Federal Cartel Office noted that the

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<sup>115</sup> See Ruben Maximiano & Cristina Volpin, *Addressing the Climate Crisis without Changing the Competition Policy Framework: Reality or a Mirage?*, 23 *Business Law International* 101, 108 (2022) (for an analysis in the context of the environmental dimension of sustainability)

<sup>116</sup> Letter from Joel I. Klein, Assistant Attorney General, to Kenneth A. Letzler, Esq. & Richard M. Lucas, Esq. (April 7, 2000), 1.

<sup>117</sup> *Id.* at 3.

<sup>118</sup> See Arnold and Porter LLP, *Opinion to Fair Wear Foundation re: The Application of EU Competition Law to the Adoption of the Living Wage Standard*, June 1, 2015, <https://api.fairwear.org/wp-content/uploads/2016/06/OpinionToFWF-TheApplicationOfEUCompetitionLawToFWFLivingWageStandardfinal1.pdf>.

agreements did not involve any anticompetitive exchange of information on procurement prices, costs, production volumes or margins.<sup>119</sup>

The recent draft Guidelines of the Netherlands Competition Authority addresses, among others, sustainability agreements “aimed at the identification, prevention, restriction or mitigation of the negative impact of economic activities on people (including their working conditions)”. Under the draft Guidelines, sustainability agreements to ensure that the companies involved and their supply chain respect national or international labor law standards do not fall under the cartel prohibition, provided that they do not unduly restrict competition and do not involve disclosure of commercially sensitive information. These may include banning child labor, paying liveable wages, and respecting the right to unionize.<sup>120</sup>

In the EU, the EU competition rules find their constitutional-level ground in Article 3(3) of the Treaty on European Union (TEU) which promote “a highly competitive social market economy, aiming at full employment and social progress”. The European Commission also recently published a new draft of the Horizontal Co-operation Guidelines which specially provides for the possibility that certain sustainability benefits yielded by anticompetitive agreements, including in relation to labor and human rights development, may exempt the agreement.<sup>121</sup>

It is to be noted, however, that much like for other sustainability dimensions, it is possible that consumers will increasingly consider the fair treatment of workers as a quality dimension of product and have and express a certain willingness to pay for it, to the extent that they are informed of it. In the absence of supply side problems, such as significant information asymmetries or behavioural biases preventing consumers from expressing a preference for products with production and distribution processes that promote labor rights, this would allow services with higher levels of workers protection to enter the market and be increasingly more competitive. It would also avoid entailing possible risks of cartel spillovers brought about by labor-related cooperation between competitors. The treatment of workers would thus become a differentiating factor of the downstream product on which employers may compete at the level of the product market (e.g. a digital platform offering driving services guaranteeing paid annual leave, full insurance and pension benefits to its workers).<sup>122</sup>

### **C. Merger control**

If the decisional practice of European competition authorities has been limited so far in relation to collusion, the scrutiny of labor markets in merger control has not taken place at all. This would require the scrutiny of mergers that affect labor input markets, between firms that may or may not also be competitors in the product market. The test applied by the European Commission and by many European competition authorities to determine whether a concentration may be problematic in a labor market would be whether it significantly impedes effective competition in such a market, including via the creation or strengthening of a dominant position (the SIEC test).

The theories of harm that could be adopted in labor markets are symmetrical to product markets. A merger between competitors for the labor input may give rise to unilateral horizontal effects, reducing employment and wages below competitive levels. Coordinated effects, such as in the form of explicit or tacit collusion,

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<sup>119</sup> Bundeskartellamt, Press Release, [Achieving Sustainability in a Competitive Environment – Bundeskartellamt Concludes Examination of Sector Initiatives](https://perma.cc/WP2P-QCTR), BUNDESKARTELLAMT (Jan. 18, 2022), <https://perma.cc/WP2P-QCTR>.

<sup>120</sup> AUTORITEIT CONSUMENT & MARKT (ACM), GUIDELINES ON SUSTAINABILITY AGREEMENTS OPPORTUNITIES WITHIN COMPETITION LAW 10 ¶ 27 (2021) (second draft).

<sup>121</sup> Draft Guidelines on the Applicability of Article 101 of the Treaty on the Functioning of the European Union to Horizontal Co-operation Agreements, 2022 O.J. (C 164/01) 8, ¶ 601.

<sup>122</sup> For a deeper examination of sustainability as a quality dimension, see generally, Volpin, [supra](#) note 110.

would lead to similar results. A problematic vertical merger would be one whereby access to workers of actual or potential rival employers is hampered or eliminated, so that rival employers do not have the ability or the incentives to compete. One could envisage, for instance, the merging of a private medical clinic with a medical staff recruitment firm or the merger of a restaurant chain with a professional culinary school in a local market.

It is also possible that an otherwise anticompetitive merger may give rise to efficiencies in the labor market. It should be noted that, in this case, an increase in wage, an improvement in the working conditions of the employees or more employment could be taken into account as efficiencies only if resulting from increased efficiency, and not if they are the result of transferring the increased rents deriving from the loss of competition after the merger.<sup>123</sup>

The consideration of harm and efficiencies in labor markets as part of the competition analysis conducted by competition authorities is different from the application of a ministerial public policy consideration related to employment protection. For example, in some EU Member States, an otherwise anticompetitive merger may be cleared based on a ministerial decision that such public interest consideration is prevalent compared to the protection of the competitive process. These decisions, however, while taken after an in-depth industrial policy analysis, may be less predictable and to some extent more arbitrary than an efficiency-based decision.<sup>124</sup>

A more regular implementation of the merger control scrutiny of labor markets may require a fine-tuning of the analytical tools relating, in particular, to market definition (such as in the form of a conceptualisation of the small but significant and non-transitory decrease in wages, “SSNDW” test), the assessment of market concentration, market power, and the qualitative and sometimes quantitative evaluation of harm and efficiencies. This will also inevitably affect the process of gathering evidence on the part of the competition authority, involving looking at the suitable alternative options for the relevant employees involved. As for merger cases with effects in product markets, more in-depth assessments are resource-intensive, and would be expected only to occur in certain cases. Also in cases where the theories of harm relating to issues in the product market, where present, may be more easily relied on to block a merger, it may not be necessary to do a full-out investigation also on effects on labor markets.

While it is expected that mergers with local labor markets will fall under the jurisdiction of national competition authorities in the EU, rather than the European Commission, Article 22 of the EU Merger Regulation (EUMR) will likely allow the European Commission to scrutinise such issues in order to provide guidance to national enforcers.

#### ***D. Other competition policies to enable workers’ mobility***

In their advocacy powers, competition authorities may have a role not only in raising awareness about the importance of competition law and risks connected to its violation, but also in promoting and advising governments in the design and adoption of pro-competitive policy initiatives.

One important instrument that may be helpful in identifying and eliminating obstacles to workers’ mobility is the competition assessment of new or existing regulation to minimise unnecessary occupational licensing and promote well-functioning labor markets. A way of preserving competence and performance standards without imposing unnecessary barriers to entry in the labor market as a worker/supplier could be the use of certification schemes.

Competition authorities may also consider proposing measures supporting the adoption of teleworking policies; enhancing transparency on employers’ characteristics or, for instance, for platform workers allowing the portability of performance rating systems to facilitate their mobility, or prohibiting single-homing

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<sup>123</sup> ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, *supra* note 65, at 34–35.

<sup>124</sup> Posner & Volpin, *supra* note 16, at 7.

obligations or other forms of penalising or prohibiting multi-homing (e.g. bonuses linked to number of hours in service for gig workers for instance). Such measures may also be relevant as potential remedies in merger cases.

## Conclusion

Drawing upon data from the largest cross-country study of labor market concentration to date and analyzing the level of concentration of labor input markets in Europe and North America, this paper dismantles the myth that European labor markets are not characterised by employer monopsony power. These data reveal that, despite differences in labor market set-ups, regulation and institutions, such as the degree of unionisation, the proportion of urban population, language and mobility barriers, to name a few, the level of concentration in Europe is analogous to that in the US.

The negative effects of concentration on labor market outcomes are also broadly similar across the Atlantic, and are felt on employment, wages, and non-wages attributes.

Given non-negligible cross-country differences in Europe, generalizing the conditions of European labor markets is challenging. However, it can be noted from the present analysis that concentration levels and wage and non-wage effects in European labor markets may be associated with compounding factors, such as labor market frictions, transactions and search costs, workers' inertia, unwillingness of workers to relocate, and language barriers.

These factors cannot, by themselves, be addressed by competition law enforcement. They can, however, contribute to facilitating the creation, strengthening or abuse of employers' market power, with consequences that may have to be considered in the competition analysis or addressed by alternative pro-competitive policy measures.

Well-functioning labor markets require competition authorities to ensure that employers' monopsonies or oligopsonies are not formed or abused. In both the United States and some European jurisdictions, competition authorities have recently become more proactive in addressing anticompetitive practices in labour markets. Nonetheless, their attention has so far focused almost exclusively on collusive practices.

The EU legislative framework, as it stands, can address many forms of anticompetitive creation or exploitation of employer's power under the consumer welfare standard. The law is, however, in some cases written or interpreted in a way that is not very well-suited to evolving labor markets and current business models and conducts (e.g. the definition of "undertaking" risks preventing some categories of self-employed workers from collective bargaining).

Based on the concentration data collected, this article shows that some European sectors and workers may be more vulnerable to monopsony power than others. Competition authorities in Europe may thus wish to prioritise scrutiny of some blue-collar manufacturing industries and healthcare markets, including hospitals, health insurances, and medical equipment markets.

The far-reaching effects of monopsony power in evolving labour markets and business practices will require responses not only from the full toolbox of competition authorities, however, but also from other policy avenues.

For this reason, it is important to recognise that while competition enforcement has an essential role in addressing labor market monopsony, other policy and legislative interventions can affect concentration and its impact on various labor market outcomes. Collective bargaining, minimum wages, teleworking policies and skill and retraining policies are few but relevant examples of policies that can be mobilized to counteract the negative effects of power imbalances on labor market outcomes.

A mix of regulatory initiatives to enable workers' mobility and incentivise teleworking—together with effective competition enforcement and advocacy measures by competition authorities—is likely to be more effective in addressing labor market concentration and related negative effects on workers in Europe.