

Labor Market Concentration and Competition Policy Across the Atlantic

Satoshi Araki,[†] Andrea Bassanini,^{††} Andrew Green,^{†††} Luca Marcolin,[‡] and Cristina Volpin^{‡‡}

Drawing upon data from the largest cross-country study of labor market concentration to date, this Essay 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 Essay 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 Essay 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 United States. 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 Essay 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.

INTRODUCTION

In both North America and Europe, competition policy has, until recently, most prominently focused on ensuring

[†] Junior Economist, Jobs and Income Division, Organisation for Economic Co-operation and Development.

^{††} Senior Economist, Jobs and Income Division, Organisation for Economic Co-operation and Development, and Research Fellow, IZA.

^{†††} Economist, Skills and Employability Division, Organisation for Economic Co-operation and Development.

[‡] Economist, Skills and Employability Division, Organisation for Economic Co-operation and Development, and KU Leuven.

^{‡‡} Competition Expert, Competition Division, Organisation for Economic Co-operation and Development. This Essay expresses the personal views of the authors. It does not necessarily reflect the official views of the Organisation for Economic Co-operation and Development or any of its Member Countries. The authors are grateful to the participants of the 2022 *University of Chicago Law Review* Symposium on Law and Labor Market Power for comments and suggestions.

well-functioning product markets and on capturing conduct on the supply side of the market.¹ While most regimes allow capturing anticompetitive behavior 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, have generally assumed that labor markets are rather competitive² and that labor monopsony power is a relatively infrequent phenomenon.³ Because, 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 understood 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.⁴

¹ ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, PURCHASING POWER AND BUYERS' CARTELS 6 (2022); Sergei Zaslavsky & Laura Kaufmann, *Buyer Cartel Doctrine: Lessons from Labor Antitrust*, COMPETITION POL'Y INT'L (June 29, 2021), <https://perma.cc/JQ2T-BPRC>.

² ERIC A. POSNER, HOW ANTITRUST FAILED WORKERS 24 (2021).

³ When there are few employers competing in a market with each other, firms can employ fewer workers than in the competitive equilibrium and can offer lower wages. See William M. Boal & Michael R. Ransom, *Monopsony in the Labor Market*, 35 J. ECON. LITERATURE 86, 87–88 (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, either because of information asymmetries and other search frictions or because of explicit anticompetitive practices of firms (e.g., through collusion among employers and unjustified noncompete 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. LAB. ECON. S13, S15–16 (2018).

⁴ See, for example, the EU and the U.S. 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. Guidelines on the Assessment of Horizontal Mergers Under the Council Regulation on the Control of Concentrations Between Undertakings, 2004 O.J. (C 31/03) ¶ 61. See Case No. COMP/M.5046, *Friesland Foods/Campina*, Commission Decision of December ¶ 98. See also the former Section 45 of the Canadian Competition Act, which referred specifically to the sale of products, thus impeding its applicability to labor 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-poach agreements between employers. See Guide to the 2022 Amendments to the Competition Act, GOV'T OF CANADA (June 24, 2022), <https://perma.cc/NWC6-JRGS>; see also Budget Implementation Act, 2022, No. 1 S.C. 2022, c 10 (Can.) (amending Competition Act of June 24, 2022).

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 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 worsen working conditions.

A shift in attention toward labor markets has therefore started to materialize among competition authorities across the Organization for Economic Co-operation and Development (OECD) countries, which are beginning to acknowledge that an increase in the market power held by employers vis-à-vis their workers may be harmful independent of price effects on the downstream market.

This shift is supported by mounting empirical evidence that monopsony power in labor markets is more pervasive than was 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.⁵ 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

⁵ E.g., Anna Sokolova & Todd Sorensen, *Monopsony in Labor Markets: A Meta-Analysis*, 74 INDUS. & LAB. RELS. 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) [hereinafter OECD, *THE ROLE OF FIRMS*]; Douglas A. Webber, *Firm-Level Monopsony and the Gender Pay Gap*, 55 INDUS. REL. 323, 325 (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 (2018) (Working Paper) (available at <https://perma.cc/G4G5-8D3N>); ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, *OECD EMPLOYMENT OUTLOOK 2019: THE FUTURE OF WORK* 68 (2019).

concentration for the United States,⁶ the United Kingdom,⁷ France,⁸ Austria,⁹ Portugal,¹⁰ and Norway,¹¹ among others.

The present study complements the existing literature by measuring labor market concentration for the United States, Canada, and twelve European countries¹² 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 Lightcast Database). These data 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 markets¹³—and 11% are 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

⁶ See, e.g., José Azar, Ioana Marinescu, Marshall Steinbaum & Bledi Taska, *Concentration in US Labor Markets: Evidence from Online Vacancy Data*, 66 LAB. ECON. 101886, 101887 (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* 19 (IZA Inst. of Lab. Econ., Discussion Paper No. 12089, 2019) (finding that U.S. labor market concentration has increased since the Great Recession but is now below 2000 levels); Kevin Rinz, *Labor Market Concentration, Earnings, and Inequality*, 57 J. HUM. RES. S251, S253 (Supp. 2022) (noting that industrial concentration has risen at the national level over the last four decades).

⁷ Will Abel, Silvana Tenreyro & Gregory Thwaites, *Monopsony in the UK* 3–4 (Ctr. for Econ. & Pol'y Rsch., Discussion Paper No. 13265, 2018).

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

⁹ 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).

¹⁰ 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).

¹¹ Samuel Dodini, Michael F. Lovenheim, Kjell G. Salvanes & Alexander Willén, *Monopsony, Skills, and Labor Market Concentration* 14 (Ctr. For Econ. & Pol'y Rsch., 2020).

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

¹³ See, e.g., U.S. DEPARTMENT OF JUSTICE & FEDERAL TRADE COMMISSION, *HORIZONTAL MERGER GUIDELINES* 19 (2010) (indicating that highly concentrated markets display an HHI above 2,500, and moderately concentrated markets display an HHI of 1,500 to 2,500).

in rural areas and in certain occupations such as health professionals. Workers 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 occupations¹⁴ are employed in much less concentrated markets on average across countries.

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. These differences should be taken into account in determining the right combination of policy and regulatory tools to address concentration. Nonetheless, they are unlikely to justify a significantly lower overall *level* of competition enforcement.¹⁵

First, when comparing, for instance, the U.S. 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, urbanization levels, and unionization. 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 has no role. The European Union, for instance, may have fewer rural areas and stronger unions, but it likely has higher language and licensing barriers than the United States, which may discourage workers from switching jobs. So, while those factors alone do not create monopsony power, they may allow or facilitate 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 unionization may contribute to mitigating the negative impact of employer monopsony power, unions' 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 United States (16% against 10%), some European countries have much lower averages (see, for instance, Estonia with 4.7%). The percentage of employees covered by a

¹⁴ See Jonathan I. Dingel & Brent Neiman, *How Many Jobs Can Be Done at Home?*, 189 J. PUB. ECON. 1, 3–7 (2020) (classifying occupations that can be performed at home).

¹⁵ Eric Posner & Cristina Volpin, *Labor Monopsony and European Competition Law*, CONCURRENCES COMPETITION L. REV., no. 4, 2020, at ¶ 12.

collective bargaining agreement in OECD countries decreased from 46% to 32% between 1985 and 2017.¹⁶ Many sectors are also left out, including industries employing gig and nonstandard workers.

Third, the new evidence presented in this Essay further weakens the myth that European labor markets have less employer monopsony power than those in the United States.¹⁷ 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 Essay argues that the effects of labor market concentration on employment, wages, and nonwage 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 with the behavior of competition authorities, which have acted more aggressively to tackle the causes of employer power on the labor market in the United States than in Europe.¹⁸ This Essay therefore 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 such a lower level of enforcement activity by European competition authorities in labor markets. On the contrary, the nascent trend in EU competition law of integrating some sustainability considerations into the competitive assessment may even present a timely further opportunity to allow the integration of the effects on workers' wages and conditions under

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

¹⁷ This myth is rooted in the fact that European competition authorities have taken only a few enforcement actions concerning competition in the labor market. See *infra* Part III.

¹⁸ See generally Posner & Volpin, *supra* note 15 (comparing enforcement in labor markets in the European Union and in the United States). This enforcement activity also contrasts with the existing evidence about European competition authorities' effectiveness on the product market relative to the United States. See Germán Gutiérrez & Thomas Philippon, *How EU Markets Became More Competitive Than US Markets: A Study of Institutional Drift* 35 (Ctr. for Econ. & Pol'y Rsch., Discussion Paper No. 12983, 2018).

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 Essay is organized as follows: Part I describes the methodology and data used to measure labor market concentration across countries as well as the differences that emerge between countries in the share of workers employed in significantly concentrated labor markets. Part II then discusses how labor market concentration impacts employment, wages, and other nonwage job attributes, based on the existing evidence. Part III analyzes the enforcement activity of competition authorities in Europe to mitigate employer monopsony power and its effects on the labor market. It also proposes enforcement action as a complementary tool to policy and regulatory reform.

I. LABOR MARKET CONCENTRATION: A TRANSATLANTIC COMPARISON

Using data on the universe of online job vacancies, this Part 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, harmonized dataset and a single labor market definition for cross-country comparability. In addition to providing country-level averages, this Part 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 a 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 empirically designed to capture observed home-to-work flows.¹⁹ 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 Essay 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

¹⁹ 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, 1598 (2021).

designed to be roughly comparable across OECD countries.²⁰ It then adjusts concentration statistics to account for heterogeneity in the average population size of TL3 regions across countries.²¹

This Essay completes the definition of the relevant labor market by using occupations instead of industries. Occupations are classified based on the skills and qualifications that are required of the worker and are 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 in the financial sector. Herbert Hovenkamp and Ioana Marinescu provided additional examples showing that companies can produce different products while competing for the same workers.²² Therefore, occupations are more suitable to define workers' job search patterns, and thus more suitable to measure labor market concentration. This Essay 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.²³ As mentioned above, this Essay labels markets as "concentrated" based on the thresholds used by U.S. antitrust authorities—that is, HHIs of 2,500 and above characterize highly concentrated markets, and HHIs between 1,500 and 2,500 characterize moderately concentrated ones.²⁴

This Essay uses 2019 data on quarterly online job postings from Lightcast to measure labor market concentration. Lightcast collects online job postings in many OECD countries. The postings contain information on the job's occupation, geography, and

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

²¹ This Essay regresses the 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.

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

²³ Labor 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 labor market at time; f is the total number of firms on local labor market (l); t notes time and $s_{f,l,t}^2$ is the share of firm f in employment, hiring or vacancies in local labor market l at time t .

²⁴ U.S. DEPARTMENT OF JUSTICE & FEDERAL TRADE COMMISSION, *supra* note 13, at 19.

firm (including industry), in addition to other characteristics such as skills and educational requirements. The data have already been used to measure concentration in the United States,²⁵ and their coverage has been validated for other countries by the OECD.²⁶ We aggregate the data in two steps. First, this study aggregates data by cell to the three-digit ISCO level using job posting as weights. Then, it uses employment weights from national labor force surveys to obtain results for any higher level of aggregation.

A. Sizeable Share of Workers Are in Concentrated Labor Markets

This Essay 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 gray) and of those who are in highly concentrated labor markets (dark gray), as derived from estimates of HHI aggregated at the national level. On average, just over 18% of workers find themselves in labor markets that are at least moderately concentrated 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, which have shares above 25%, while the smallest shares are found in Belgium and Switzerland, which have shares just above 10%. Canada and the United States feature in the middle of the distribution, with 21% and 17%, respectively, of their workers estimated to be in markets that are at least moderately concentrated. Canada, however, is close to the top of the distribution as regards the share of employment in highly concentrated markets (14.2%), second only to Estonia (15.7%). This is likely due to its sparse population in many local labor markets. The results in this Essay confirm that cross-country differences in labor market concentration are not simply due to differences in data or labor market definitions.²⁷

²⁵ Azar et al., *supra* note 6, at 101886–88.

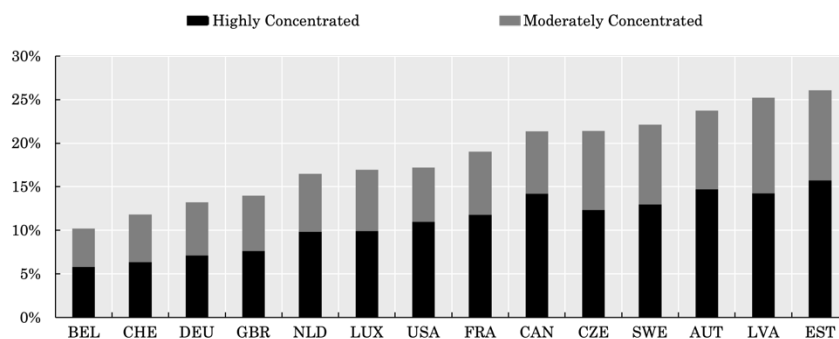
²⁶ ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, OECD EMPLOYMENT OUTLOOK 2022, BUILDING BACK MORE INCLUSIVE LABOR MARKETS (2022).

²⁷ In general, the results discussed in this Part accord well with the literature in most respects, especially when one considers that the definition of a labor market usually differs across studies on at least one dimension. The study that used definitions of local labor market and HHI that are closest to those adopted in this Article reports a 23% share of employment in U.S. markets that are at least moderately concentrated and an average HHI of 1,361 in the United States. *See* Azar et al., *supra* note 6, at 101893. This is slightly

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

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

FIGURE 1. THE SHARE OF EMPLOYMENT IN MODERATELY CONCENTRATED TO HIGHLY CONCENTRATED LABOR MARKETS, 2019³¹



B. Concentration Is Higher in Rural Areas

In addition to occupation, the other key dimension of a labor market is geography. Larger labor markets—cities, in

higher, but close to the values found here (17% and 1,042, respectively). Remaining differences are likely due to data-cleaning procedures.

²⁸ OECD, *THE ROLE OF FIRMS*, *supra* note 5, at 112.

²⁹ Jarosch et al., *supra* note 9, at 27.

³⁰ Rinz, *supra* note 6, at S259.

³¹ Notes: Moderately concentrated markets are those with an 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 six-digit SOC by TL3 regions for Anglophone countries and four-digit ISCO by TL3 regions for remaining countries. Shares are adjusted to a uniform

particular—have long been hypothesized (with increasing empirical evidence) to allow more efficient matches between firms and workers.³² 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 would 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 (

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 three-digit level and job postings at the same level of disaggregation at which HHIs are defined.

Source: Lightcast, European Labour Force Survey (European Union countries, Switzerland and the United Kingdom), Current Population Survey (USA), Canadian Labor Force Survey (Canada), and authors' calculations.

³² See generally Barbara Petrongolo & Christopher Pissarides, *Scale Effects in Markets with Search*, 116 *ECON. J.* 21 (2006); Fredrik Andersson, Simon Burgess & Julia I. Lane, *Cities, Matching and the Productivity Gains of Agglomeration*, 61 *J. URB. ECON.* 112 (2007); Wolfgang Dauth, Sebastian Findeisen, Enrico Moretti & Jens Suedekum, *Matching in Cities* (Nat'l Bureau of Econ. Rsch., Working Paper No. 25227, 2018).

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 not only sizeable urban centers but also geographically vast yet sparsely populated provinces, including remote areas.

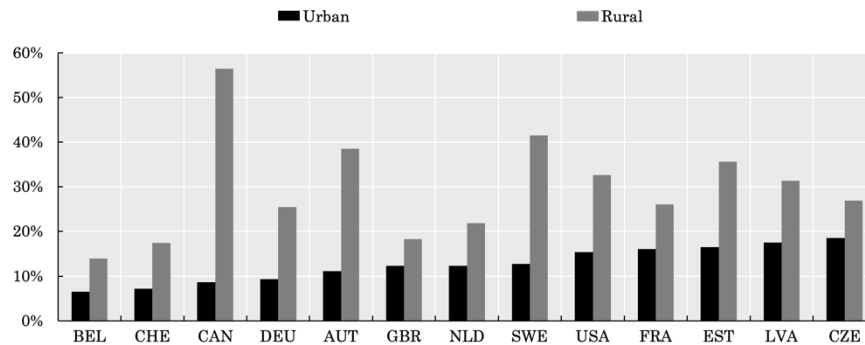
This finding confirms results from the literature that rural labor markets are more concentrated. José Azar, Iona Marinescu, Marshall Steinbaum, and Bledi Taska, and Andrea Bassanini, Cyprien Batut, and Eve Caroli found a decrease in HHI as the size of commuting zones increases in the United States and France, respectively.³³ Using the same urban-rural definition as this Section (but different data and definition of labor market), the OECD similarly found a large urban-rural difference in the share of workers in concentrated labor markets across seven OECD countries.³⁴

³³ Azar et al., *supra* note 6, at 101892–93; Andrea Bassanini, Cyprien Batut & Eve Caroli, *Labor Market Concentration and Stayers' Wages: Evidence from France* 8, 20 (IZA Inst. of Lab. Econ., Discussion Paper No. 15231, 2022).

³⁴ OECD, *THE ROLE OF FIRMS*, *supra* note 5, at 100.

FIGURE 2. RURAL REGIONS ARE MORE CONCENTRATED THAN URBAN REGIONS³⁵

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



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.

³⁵ 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 Milenko Fadic, José Enrique Garcilazo, Ana Moreno Monroy & Paolo Veneri, *Classifying Small (TL3) Regions Based on Metropolitan Population, Low Density and Remoteness* 19 tbl.2 (OECD Reg'l Dev. Working Paper, No. 2019/06, 2019), and see also notes to Figure 1.

Source: Lightcast, European Labour Force Survey (European Union countries, Switzerland, and the United Kingdom), Current Population Survey (USA), Canadian Labor Force Survey (Canada), and authors' calculations.

Figure 3 depicts the average share in concentrated markets by two-digit ISCO occupation.³⁶ The occupations that are the most concentrated, on average, are handicraft and printing workers as well as 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 fewer 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, workers in occupations in the least concentrated markets appear to be employable in a wide variety of industries, which would grant them more employment options.

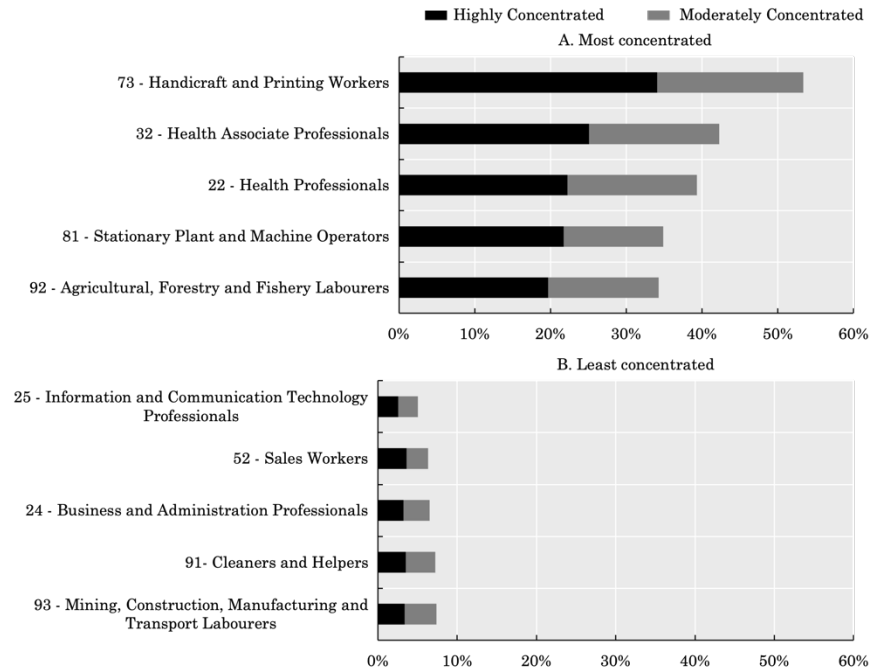
The analysis in this Essay also finds that workers in middle-skill occupations are the most likely to be in concentrated labor markets. Low-skill workers face the lowest concentration and high-skill workers the next highest after middle-skill workers. This pattern is not particularly robust across countries. The declining employment share of middle-skill jobs, and the rise in job polarization and deindustrialization, is a well-documented fact across many OECD countries.³⁷ 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.

³⁶ These results are robust across individual countries. In particular, each occupation that appears in the most and least concentrated markets also appears at the top of the country-level distribution in a majority of the fourteen countries in the sample.

³⁷ ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, OECD EMPLOYMENT OUTLOOK 2017, at 82.

FIGURE 3. THE OCCUPATIONS FACING THE MOST AND LEAST CONCENTRATED LABOR MARKETS, 2019³⁸

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



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 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 (frontline workers). The gradual abatement of lockdowns and the recovery of the labor market have greatly diminished the ranks of the unemployed and those on job replacement

³⁸ Notes: Occupations sorted by their average (unweighted) HHI across countries. ISCO two-digit occupations 6 and 9 omitted due to irregular cross-country coverage. See also notes to Figure 1.

Source: Lightcast, 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), and authors' calculations.

schemes.³⁹ However, more than two years after the onset of the pandemic, the dichotomy between those who must work in person versus those who can work from home is still relevant.

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.

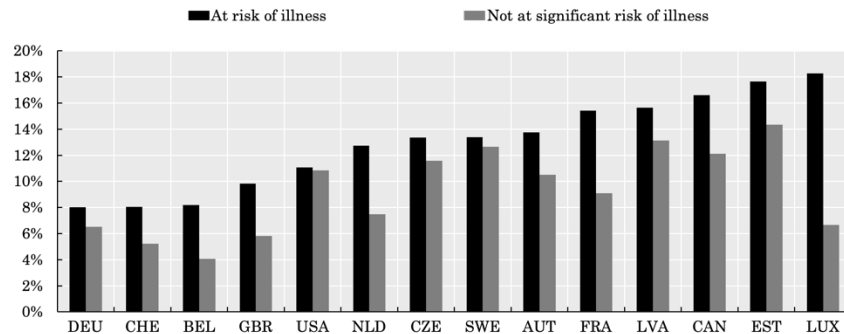
Figure 4 depicts the share of workers in highly concentrated labor markets by whether their occupation is required to work in person and whether because of close contacts with colleagues or customers, they have a higher risk of COVID-19 illness on the job than those who do not.⁴⁰ On average, about 13% of these workers at significant risk of COVID-19 infection are found in highly concentrated labor markets compared to a little over 9% of those who are not. The largest gaps are found in Luxembourg, France, and the Netherlands; the smallest gaps are found in the United States and Sweden.

³⁹ ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, OECD EMPLOYMENT OUTLOOK 2021, NAVIGATING THE COVID-19 CRISIS AND RECOVERY 78.

⁴⁰ See generally Gaetano Basso, Tito Boeri, Alessandro Caiumi & Marco Paccagnella, *Unsafe Jobs, Labour Market Risk and Social Protection*, 37 *ECON. POL'Y* 229, 229 (2022) (classifying “occupations according to the risk of contracting an aerial-transmitted virus, such as COVID-19”).

FIGURE 4. OCCUPATIONS WHERE WORKERS FACE SIGNIFICANT RISK OF COVID-19 INFECTION TEND TO BE MORE CONCENTRATED⁴¹

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



Workers who are able to telework, in contrast to frontline workers, are found in less concentrated labor markets. Occupations amenable to telework are those where workers have been able to work from home without physically interacting with coworkers or customers, since the typical tasks that they perform on the job allow for it.⁴² Compounding the a priori occupational health disparity with frontline 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).

In addition to protecting workers from the virus, the shift to telework may enable them to search in a wider labor market than their local living area. This has the potential to further decrease local employers' monopsony power for workers in these occupations. A recent OECD work showed that allowing workers in occupations amenable to telework to search and accept positions

⁴¹ Notes: ISCO three-digit level occupations are defined as unsafe or at risk of illness. See Gaetano Basso, Tito Boeri, Alessandro Caiumi & Marco Paccagnella, *Unsafe Jobs, Labour Market Risk and Social Protection*, 37 *ECON. POL'Y* 229, S40–42 (Supp. 2022). ISCO group 951 is omitted due to poor suitability of conversion from O*NET to ISCO. See also notes to Figure 1.

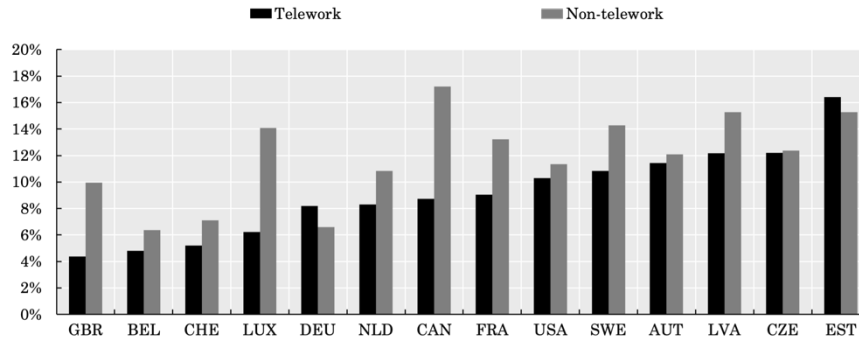
Source: Lightcast, European Labour Force Survey (European Union countries, Switzerland and the United Kingdom), Current Population Survey (USA), Canadian Labor Force Survey (Canada), and authors' calculations.

⁴² Dingel & Neiman, *supra* note 14, at 2–3.

outside of their local labor market has the potential to reduce HHI by about 20%.⁴³

FIGURE 5. WORKERS WHO CAN TELEWORK FACE LESS CONCENTRATED LABOR MARKETS⁴⁴

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



II. ECONOMIC EFFECTS OF LABOR MARKET CONCENTRATION IN EUROPE AND THE UNITED STATES

The previous Part presented evidence that labor market concentration is equally present on both sides of the Atlantic. However, the importance of this result depends on the consequences of labor 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 labor market outcomes: in particular, lower employment, lower wages, and worse working conditions. To complete the picture, this Part focuses on the available evidence on the effect of concentration on employment, wages, and nonwage job attributes in both Europe and the United States.

⁴³ ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, BUILDING BACK MORE INCLUSIVE LABOR MARKETS, *supra* note 26, at 168–69.

⁴⁴ Notes: Whether an occupation is amenable to telework is defined according to Dingel and Neiman (2020) and is coherent with Basso’s definition of “safe” occupations. See Basso et al., *Unsafe Jobs: Labour Market Risk and Social Protection*, *supra* note 40, at 236–38; see also notes to Figure 1.

Source: Lightcast, European Labour Force Survey (European Union countries, Switzerland and the United Kingdom), Current Population Survey (USA), Canadian Labor Force Survey (Canada), and authors’ calculations.

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 market concentration independent 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 they typically find negative effects of mergers on employment levels of merged firms.⁴⁵ There are many other studies, much more common in the United States than in Europe, that have focused on horizontal mergers in specific markets. These studies have found more mixed results. For example, a number of studies have found no impact of mergers on employment in the U.S. hospital industry.⁴⁶

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 directly isolate the economy-wide effect of labor market concentration on employment: Marinescu and her colleagues Ivan Ouss and Louis-Daniel Pape examined its impact in France, and Martin Popp examined its impact in Germany. They found very large negative effects of concentration. Taking their estimates at

⁴⁵ See, e.g., Martin J. Conyon, Sourafel Girma, Steve Thompson & Peter W. Wright, *Do Hostile Mergers Destroy Jobs?*, 45 J. ECON. BEHAV. & ORG. 427, 428 (2001) (United Kingdom); Eero Lehto & Petri Böckerman, *Analysing the Employment Effects of Mergers and Acquisitions*, 68 J. ECON. BEHAV. & ORG. 112, 112–13 (2008) (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, 903–04 (2010) (Sweden); David Arnold, *Mergers and Acquisitions, Local Labor Market Concentration, and Working Outcomes 1* (2021) (unpublished manuscript) (available at <https://perma.cc/SV2Y-T2QH>); Klaus Gugler & B. Burcin Yurtoglu, *The Effects of Mergers on Company Employment in the USA and Europe*, 22 INT'L J. INDUS. ORG. 481, 498 (2004) (finding negative effects of mergers on labor demand in Europe, but not in the U.S.).

⁴⁶ See, e.g., Janet Currie, Mehdi Farsi & W. Bentley MacLeod, *Cut to the Bone? Hospital Takeovers and Nurse Employment Contracts*, 58 INDUS. & LAB. RELS. REV. 471, 488–89 (2005); Elena Prager & Matt Schmitt, *Employer Consolidation and Wages: Evidence from Hospitals*, 111 AM. ECON. REV. 397, 410 (2021).

face value, increasing labor market concentration by 10% would imply an employment effect between 1.6% and 3.2%.⁴⁷

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.⁴⁸ Yet, the empirical evidence is much less conclusive, and many studies have found no or small disemployment effects of minimum wage increases.⁴⁹ Monopsony models provide a simple explanation for the lack of negative impact of moderate minimum wage hikes on employment.⁵⁰ Concerning labor market concentration specifically, Azar and colleagues Emiliano Huet-Vaughan, Marinescu, Taska and Till von Wachter looked at the impact of changes in minimum wages in the United States using granular data on local concentration. Popp did the same with regard to Germany.⁵¹ 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 employment and wages below efficient levels. Many papers have

⁴⁷ See generally Ioana Marinescu, Ivan Ouss & Louis-Daniel Pape, *supra* note 8; Martin Popp, *Minimum Wages in Concentrated Labor Markets* (Bavarian Graduate Program Econ., Discussion Paper No. 214, 2021).

⁴⁸ See, e.g., Charles Brown, *Minimum Wages, Employment, and the Distribution of Income*, in 3 HANDBOOK OF LAB. ECON. 2101, 2149 (O. Ashenfelter & D. Card eds. 1999).

⁴⁹ See, e.g., ARINDRAJIT DUBE, IMPACTS OF MINIMUM WAGES: REVIEW OF THE INTERNATIONAL EVIDENCE 2 (2019).

⁵⁰ MANNING, *supra* note 3, at 338–47. In practice, in a monopsony model, employment is lower in the unconstrained equilibrium than in the competitive equilibrium because the curve representing the marginal cost of labor 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 labor demand.

⁵¹ See generally José Azar, Emiliano Huet-Vaughan, Ioana Marinescu, Bledi Taska & Till von Wachter, *Minimum Wage Employment Effects and Labor Market Concentration* 1, 2–3 (Nat'l Bureau Econ. Rsch., Working Paper No. 26101, 2019); Popp, *supra* note 47, at 1–2.

investigated the effect of local labor market concentration on wages. In the United States, these papers consistently find a negative effect⁵² 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%.⁵³ Other studies, however, find much smaller elasticities, comprised between -0.01 and -0.05.⁵⁴ The latter elasticities better compare with those found in European studies. Elasticities between -0.020 and -0.024 have been found for France.⁵⁵ Point estimates of -0.028, -0.010, and -0.043 are reported for Portugal, Norway, and Germany, respectively,⁵⁶ while the OECD finds an elasticity of -0.028, by pooling data for Austria, Denmark, France, Finland, and Spain (and Costa Rica).⁵⁷ Finally, in the only study estimating cross-country comparable elasticities, Bassanini and his colleagues found 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.⁵⁸

It is hard to compare European estimates with U.S. ones due to different samples and specifications. In fact, many European studies try to control for firm heterogeneity, firm productivity, or product market competition⁵⁹—likely key confounders of labor market concentration and wages—while most U.S. studies do not simultaneously control for all these factors, with the exception of that of Efraim Benmelech, Nittai Bergman, and Hyunseob Kim, whose point estimates are only slightly larger than European

⁵² Strictly speaking, this statement is true only for instrumental variable estimates.

⁵³ See, e.g., Qiu & Sojourner, *supra* note 6, at 15; ARNOLD, *supra* note 45, at 24; José Azar, Ioana Marinescu & Marshall Steinbaum, *Labor Market Concentration*, 57 J. HUM. RES. S167, S169 (Supp. 2022).

⁵⁴ Rinz, *supra* note 6, at S271–73; Benmelech et al., *supra* note 6, at S214; GREGOR SCHUBERT, ANNA STANSBURY & BLEDI TASKA, EMPLOYER CONCENTRATION AND OUTSIDE OPTIONS 19 (2022).

⁵⁵ Marinescu et al., *supra* note 8, at 516.

⁵⁶ Martins, *supra* note 10, at 15; Dodini et al., *supra* note 11, at 61; Popp, *supra* note 47, at 77.

⁵⁷ OECD, THE ROLE OF FIRMS, *supra* note 5, at 115–17.

⁵⁸ Andrea Bassanini, Giulia Bovini, Eve Caroli, Jorge Casanova Ferrando, Federico Cingano, Paolo Falco, Florentino Felgueroso, Marcel Jansen, Pedro S. Martins, António Melo, Michael Oberfichtner & Martin Popp, *Labour Market Concentration, Wages and Job Security in Europe* 13–14 (IZA Inst. of Lab. Econ., Discussion Paper No. 15231, 2022).

⁵⁹ A couple of studies do not control for heterogeneity, productivity, or product-market competition, and are exceptions. See Dodini et al., *supra* note 11, at 21; Popp, *supra* note 47, at 27. A couple of other European studies control for firm heterogeneity only through firm fixed effects. See Martins, *supra* note 10, at 3; OECD, THE ROLE OF FIRMS, *supra* note 5, at 19, 33 n.2.

estimates.⁶⁰ Overall, this suggests that, both in Europe and the United States, two identical workers employed by equally productive firms 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 ninetieth percentile is between 550% and 800% higher than the median in the countries covered by Bassanini and his colleagues.⁶¹ 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 unionization of the workforce, and all of them have found that the greater the degree of unionization, the smaller the impact of concentration.⁶² This is consistent with the view that unions can exert strong countervailing power in monopsonistic labor markets, improving efficiency.⁶³

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. This is the case, for instance, for the five European countries in one OECD study.⁶⁴ One likely explanation can be found in the concomitant reduction of collective bargaining and the weakening of trade unions,⁶⁵ which may be increasingly less able to act as a countervailing power.

C. Nonwage Job Attributes

There is a large literature showing that workers consider wages and working conditions together when evaluating jobs and

⁶⁰ Benmelech et al., *supra* note 6, at S211, S214–15.

⁶¹ Bassanini et al., *supra* note 58, at 9–10.

⁶² See Benmelech et al., *supra* note 6, at S233 (United States); Abel et al., *supra* note 7, at 9 (United Kingdom); Marinescu et al., *supra* note 8, at 517–18 (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) (Norway).

⁶³ See Thomas E. MaCurdy & John H. Pencavel, *Testing Between Competing Models of Wage and Employment Determination in Unionized Markets*, 94 J. POL. ECON. S3, S32–33 (Supp. 1986); Orley C. Ashenfelter, Henry Farber & Michael R. Ransom, *Labor Market Monopsony*, 28 J. LAB. ECON. 203, 209 (2010).

⁶⁴ OECD, THE ROLE OF FIRMS, *supra* note 5, at 116–17.

⁶⁵ See *id.* at 117–18.

job offers, and that they are ready to trade off part of their wage for terms and conditions of employment that they consider to be better.⁶⁶ 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.⁶⁷ 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, Yue Qiu and Aaron Sojourner estimated that a 10% increase in concentration reduces the probability of being covered by employer-provided health insurance by about 3% at the sample mean.⁶⁸ Bassanini and his colleagues found that concentration tends to increase the probability of being hired on a more precarious contract type.⁶⁹ At the sample mean, they found 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 France, Germany, and Portugal.⁷⁰ Moreover, they also estimated 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.⁷¹ Although more research is needed, these results suggest that concentration tends to have a negative impact on nonwage job attributes when these are costly for employers.

⁶⁶ 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 Q.J. ECON. 381, 423 (2020).

⁶⁷ MANNING, *supra* note 3, at 132–36.

⁶⁸ Qiu & Sojourner, *supra* note 6, at 19.

⁶⁹ Bassanini et al., *supra* note 58, at 19.

⁷⁰ See *id.* at 18.

⁷¹ See *id.* at 19.

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 characterized 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 materialize more recently, in particular because of growing awareness that labor markets may be potentially less competitive than commonly thought.⁷²

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 European Union, no formal obstacle seems to exist to recognize 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.⁷³

Further, in a recent merger decision by the European Commission (EC), *Aurubis/Metallo*,⁷⁴ 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 could significantly impede competition, including by protecting the competitive process, “even if it cannot be demonstrated that such reduction of competition affects consumer welfare.”⁷⁵

This suggests that the reluctance on the part of some authorities to address buyer power in cases where there was no evidence

⁷² For a review of the evidence, see ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, *COMPETITION IN LABOUR MARKETS* 8 (2020).

⁷³ Konstantinos Stylianou & Marios Iacovides, *The Goals of EU Competition Law: A Comprehensive Empirical Investigation*, *LEGAL STUD.*, Jan. 28, 2022, at 1, 8.

⁷⁴ Case M.9409, *Aurubis/Metallo Group Holding* ¶ 376 (July 1, 2020).

⁷⁵ *Id.*

of harm in the downstream product market⁷⁶ 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 deeming conduct anticompetitive 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 Union⁷⁷ (TFEU), the EU equivalent of Section 1 of the Sherman Act. Of course, evidence of the effects may still be required for 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 analyzed under Article 101 of the TFEU—collusion between employers, noncompetes, 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-poach, no-solicitation agreements, as well as exchange of commercially sensitive information.

⁷⁶ See, e.g., ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, MONOPSONY AND BUYER POWER 313 (2008).

⁷⁷ "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." Case C-67/13 P, *Groupement des cartes bancaires v. European Comm'n*, ECLI:EU:C:2014:2204, ¶ 58 (Sept. 11, 2014). The concept is close, but not identical, to that of per se restrictions in the United States.

Several competition authorities (for instance, the United States,⁷⁸ Hong Kong,⁷⁹ Japan,⁸⁰ Portugal,⁸¹ and Peru⁸²) have issued best practices to guide firms' behavior 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 the exchange of information about salaries, for example, in Spain,⁸³ France,⁸⁴ the Netherlands,⁸⁵ Portugal,⁸⁶ Lithuania,⁸⁷ Poland,⁸⁸ Romania,⁸⁹ Hungary,⁹⁰

⁷⁸ See generally U.S. DEPARTMENT OF JUSTICE ANTITRUST DIVISION & FEDERAL TRADE COMMISSION, ANTITRUST GUIDANCE FOR HUMAN RESOURCE PROFESSIONALS (2016).

⁷⁹ See generally HONG KONG COMPETITION COMMISSION, COMPETITION COMMISSION ADVISORY BULLETIN: COMPETITION CONCERNS REGARDING CERTAIN PRACTICES IN THE EMPLOYMENT MARKETPLACE IN RELATION TO HIRING AND TERMS AND CONDITIONS OF EMPLOYMENT (2018).

⁸⁰ See generally COMPETITION POLICY RESEARCH CENTER, JAPAN FAIR TRADE COMMISSION, REPORT OF THE STUDY GROUP ON HUMAN RESOURCE AND COMPETITION POLICY (2018).

⁸¹ See generally AUTORIDADE DA CONCORRÊNCIA, BEST PRACTICES IN PREVENTING ANTICOMPETITIVE AGREEMENTS IN LABOR MARKETS (2021).

⁸² See generally INDECOPI, INFORMATIONAL GUIDELINES ABOUT ANTICOMPETITIVE AGREEMENTS AMONG COMPANIES IN LABOR MARKETS (2020).

⁸³ See, e.g., Resolución S/0120/08, Transitarios, Comisión Nacional de la Competencia (CNMC), July 31, 2010; Resolución S/0086/08, Peluquería Profesional, Comisión Nacional de la Competencia (CNMC), Mar. 2, 2011; Resolución S/DC/0612/17, Montaje y Mantenimiento Industrial, Comisión Nacional de la Competencia (CNMC), Oct. 1, 2019.

⁸⁴ See, e.g., Décision n° 17-D-20 du 18 octobre 2017 relative à des pratiques mises en œuvre dans le secteur des revêtements de sols résilients, Autorité de la concurrence, 44–45.

⁸⁵ See, e.g., Gerechtshof's-Hertogenbosch, 5 mei 2010, ECLI:NL:GHSHE:2010:BM3366 (De Nederlandse Vereniging Van Anesthesiemedewerkers/Stichting Amphia Ziekenhuis). For an account in English, see Gönenç Gürkaynak, Ayşe Güner & Ceren Özkanlı, *Competition Law Issues in the Human Resource Field*, 4 J. EUR. COMPETITION & PRACTICE 201, 203 (2013).

⁸⁶ See, e.g., Anticompetitive Practices, Autoridade da Concorrência, PRC/2020/1, Apr. 29, 2022, <https://perma.cc/4HJA-SYED>.

⁸⁷ 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*, KONKURENCIJOS TARYBA (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>.

⁸⁸ See, e.g., Emily Craig, *Poland Investigates Basketball League No-Poach Agreements*, GLOB. COMPETITION REV. (Apr. 23, 2021), <https://perma.cc/4HMJ-ARA2>.

⁸⁹ See, e.g., Julie Masson, *Romania Launches First Labour Market Probe*, GLOB. COMPETITION REV. (Feb. 1, 2021), <https://perma.cc/VF8M-FUAH>.

⁹⁰ See, e.g., Emily Craig, *Hungary Fines Recruitment Association for Price-Fixing and No-Poach Agreements*, GLOB. COMPETITION REV. (Jan. 7, 2021), <https://perma.cc/5NNZ-8RUM>.

Greece,⁹¹ Switzerland,⁹² Peru,⁹³ Colombia,⁹⁴ Brazil,⁹⁵ and Mexico.⁹⁶ Some of these practices have been discovered while authorities were 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 sector which, together with the industry association, had engaged in price-fixing and entered a gentlemen's agreement not to poach each other's employees.⁹⁷ Similarly, in Spain, the competition authority found agreements in the freight forwarding and hairdressing products respectively.⁹⁸ 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 labor 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 imposed a fine of about 11.3 million euros on the Portuguese Professional Football League and thirty-one sports clubs for entering into a no-poach agreement.⁹⁹ The League and the clubs had convened not to hire football players who terminated their contracts for circumstances related to COVID-19.

There has not yet been an investigation of this kind by the European Commission, but in a recent speech the European Commission's Executive Vice President Margrethe Vestager referred to no-poach and wage-fixing agreements as well as more generally to the importance of enforcing competition against

⁹¹ See, e.g., Olivia Rafferty, *Greece Punishes Elevator Association for Wage-Fixing*, GLOB. COMPETITION REV. (Mar. 7, 2022), <https://perma.cc/8HNB-PMDP>.

⁹² See, e.g., *COMCO Secretariat Investigates The Labour Market in the Banking Sector*, COMPETITION COMM'N (Dec. 5, 2022), <https://perma.cc/V3C6-T2DY>.

⁹³ See, e.g., Olivia Rafferty, *Peru Probes Construction Companies Over No-Poach Agreements*, GLOB. COMPETITION REV. (Feb. 14, 2022), <https://perma.cc/T3XF-2VK2>.

⁹⁴ See, e.g., Julie Masson, *Colombia Probes Top Football Clubs for No-Poach Agreements*, GLOB. COMPETITION REV. (Dec. 1, 2021), <https://perma.cc/PVB5-ZHVX>.

⁹⁵ See, e.g., Investigation n° 08700.004548/2019-61, Conselho Administrativo de Defesa Econômica, N° 36/2021/CGAA8/SGA2/SG/CADE, Mar. 2021.

⁹⁶ See, e.g., Julie Masson, *COFECE Sanctions Football Clubs in First No-Poach Probe*, GLOB. COMPETITION REV. (Sept. 24, 2021), <https://perma.cc/6JRZ-NT5D>.

⁹⁷ See generally *Décision n° 17-D-20 du 18 octobre 2017 relative à des pratiques mises en œuvre dans le secteur des revêtements de sols résilients*, Autorité de la concurrence, 44–45.

⁹⁸ See generally *Resolución S/DC/0612/17, Montaje y Mantenimiento Industrial*, Comisión Nacional de la Competencia (CNMC), Oct. 1, 2019; *Resolución S/0086/08, Peluquería Profesional*, Comisión Nacional de la Competencia (CNMC), Mar. 2, 2011.

⁹⁹ See, e.g., *Anticompetitive Practices*, Autoridade da Concorrência, PRC/2020/1, Apr. 29, 2022, <https://perma.cc/4HJA-SYED>.

buyer cartels, as they hurt suppliers and make the economy work less efficiently.¹⁰⁰

There seems to be consensus around 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 U.S. one of *per se* infringements.¹⁰¹

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

Given the data presented in Part I related to the most concentrated sectors and the impact of labor market power on front-line workers, it is easy to see how competition authorities may decide to scrutinize thoroughly or even prioritize screening of healthcare markets, including hospitals, health insurances, medical devices, and other equipment markets.¹⁰² The labor markets corresponding to these product markets not only are likely to be concentrated, but also were also affected by the pandemic crisis due to surges in demand for professionals who are often public facing and thus exposed to COVID-19 infection risks. During the pandemic, labor markets were specifically prioritized by, among others, the Peruvian,¹⁰³ Portuguese¹⁰⁴ and U.S.¹⁰⁵ competition

¹⁰⁰ Speech by Margrethe Vestager at the Italian Antitrust Association Annual Conference – “A New Era of Cartel Enforcement” (Oct. 22, 2021) (transcript available at <https://perma.cc/9943-7M84>).

¹⁰¹ Posner & Volpin, *supra* note 15, at 4–5; AUTORIDADE DA CONCORRENCIA, LABOUR MARKET AGREEMENTS AND COMPETITION POLICY ISSUES PAPER 21 (2021).

¹⁰² ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, THE ROLE OF COMPETITION IN PROMOTING ECONOMIC RECOVERY 31 (2020).

¹⁰³ INDECOPI, *supra* note 82, at 3.

¹⁰⁴ AUTORIDADE DA CONCORRÊNCIA, COMPETITION POLICY PRIORITIES IN 2022, at 1 (2022).

¹⁰⁵ Department of Justice & Federal Trade Commission, *Joint Statement on COVID-19 and Competition in U.S. Labor Markets* (Apr. 2020), <https://perma.cc/9YVV-5ME7>.

authorities, which feared that the pandemic could give opportunities for employers to collude in such markets.¹⁰⁶

Even if such cases are recognized as involving “by object” infringement, 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.¹⁰⁷ This was recognized by the Portuguese Authority in the Professional Football League case, where the Portuguese competition authority noted that the agreement could, if continued, 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 to leave abroad.¹⁰⁸ In addition, no-poach agreements may also limit knowledge spillovers and harm innovation.¹⁰⁹

Specific investigatory and evidentiary challenges may arise in connection with the transparency or lack of transparency around wages. One 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 practices, from lawful coordination among employers in view of negotiations with trade unions.¹¹⁰ Transparency around wages is also likely to enable tacit coordination, which, while it may not be illegal, may still 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

¹⁰⁶ See ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, CO-OPERATION BETWEEN COMPETITORS IN THE TIME OF COVID-19, at 2–3 (2020) (noting that restrictive horizontal practices continue to be subject to close scrutiny in light of increased cooperation between competitors during COVID-19).

¹⁰⁷ AUTORIDADE DA CONCORRÊNCIA, *supra* note 104, at 14–15 (2021).

¹⁰⁸ Press Release, *AdC Issues Sanctioning Decision for Anticompetitive Agreement in the Labor Market for the First Time*, AUTORIDADE DA CONCORRÊNCIA (Apr. 29, 2022), <https://perma.cc/8G2D-UXU4>.

¹⁰⁹ AUTORIDADE DA CONCORRÊNCIA, *supra* note 104, at 16.

¹¹⁰ Gürkaynak et al., *supra* note 85, at 207; ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, OECD EMPLOYMENT OUTLOOK 2019, *supra* note 5, at 195–204.

latter typically upon leaving a job).¹¹¹ 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.¹¹² In the European Union, a rebuttable presumption of harm assists private parties once they have proved the existence of a cartel.¹¹³

2. Noncompetes.

One of the most problematic types of agreements affecting workers' mobility are noncompetes, which, by restraining workers' ability to switch jobs, can significantly increase labor market power. Differently from Section 1 of the Sherman Act, which applies to restraints of trade, Article 101 of the TFEU does not currently capture noncompetes, because they are concluded by the workers and the employers. Article 101 of the 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 noncompetes under Article 101 TFEU.¹¹⁴ Civil law, however, tends to consider noncompetes valid only when aimed at protecting intellectual property and education investments and trade secrets, and when reasonably limited in time and scope.

Some studies suggest, however, that the use of noncompetes may be quite pervasive in some European countries, such as Finland, the Netherlands, and Austria.¹¹⁵

If workers were considered as independent economic units, an unjustified noncompete would be akin to an exclusive supply agreement, whereby the supplier (of labor) is obliged or induced

¹¹¹ 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 (June 9, 2022), <https://perma.cc/Z3PV-UNXG> (describing Microsoft's pay-transparency initiative to disclose salary ranges for all job postings in the United States from 2021, following a new state law); see also Leah Nylén (@leah_nylen), TWITTER (Apr. 9, 2022), <https://perma.cc/6RSM-T63J> (an antitrust reporter's similar, individual initiative).

¹¹² POSNER, *supra* note 2, at 51.

¹¹³ Council Directive 2014/104, 2014 O.J. (L 349) 1, 7–8 (EC).

¹¹⁴ The regime is different for no-solicitation and no-poach agreements analyzed in merger control, which may be considered directly related and necessary to the implementation of a cleared merger transaction.

¹¹⁵ ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, *supra* note 26, at 117, 180–82 (2022) (reviewing European studies on noncompete agreements).

to sell its input (labor) to only 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 buyer's market shares, the supplier's countervailing power, the duration of the supply agreement, and entry barriers. However, the current EU legal framework provides a safe harbor for this type of agreement, requiring that both the supplier's and the buyer's market shares not exceed 30%.¹¹⁶

While the mandatory compensation mechanisms for noncompete agreements provided for by civil law would allow compensation for the workers for mobility restrictions, the mechanisms would not address the inefficiency resulting from the loss or reduction of knowledge spillover effects, harm to innovation, or the foreclosure of potential competitors from the market,¹¹⁷ thereby leaving a potential gap in enforcement.

As such, within the current EU framework, a regulatory solution banning or limiting noncompetes that are not justified by legitimate procompetitive reasons would likely be more appropriate, particularly in those sectors with high levels of labor market concentration.

3. Collective bargaining rights as countervailing force.

From the viewpoint of competition policy, deprioritizing 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 that are aimed at improving salaries and other working conditions do not infringe EU competition law.¹¹⁸ It also accepted restrictions as inherent to legitimate objectives pursued by certain professions in *J.C.J. Wouters v. Algemene Raad van de*

¹¹⁶ See Commission Regulation 2022/248, 2022 O.J. (C 248) 5.

¹¹⁷ POSNER, *supra* note 2, at 91–92.

¹¹⁸ See, e.g., Case C-413/13, *FNV Kunsten Informatie en Media v. Staat der Nederlanden*, ECLI:EU:C:2014:2411, ¶ 23 (Dec. 14, 2014); Case C-67/96, *Albany International BV v. Stichting Bedrijfspensioenfonds Textielindustrie*, 1999 E.C.R., I-5882.

*Nederlandse Orde van Advocaten*¹¹⁹ and *Meca-Medina v. Commission*.¹²⁰

Paradoxically, however, while on the one hand the EU notion of “undertaking” prevents the prohibition of noncompetes 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 is specifically allowed. Such categories include the solo self-employed that are in a situation comparable to “workers” and those that are “in a weak negotiating position.”¹²¹ 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.”¹²²

4. Cooperation agreements between employers to safeguard living wages and living conditions.

Across the EU, a debate has recently been rekindled about whether and how competition law and the consumer welfare standard that many jurisdictions have adopted 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 toward 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

¹¹⁹ Case C-309/99, *J.C.J. Wouters, J.W. Savelbergh & Price Waterhouse Belastingadviseurs BV v. Algemene Raad van de Nederlandse Orde van Advocaten*, interveners: Raad van de Balies van de Europese Gemeenschap, 2002 E.C.R. I-1690.

¹²⁰ Case C-519/04 P, *Meca-Medina and Majcen v. Commission of the European Communities*, 2006 E.C.R. I-7023.

¹²¹ See European Commission, *Press Release, Commission Adopts Guidelines on Collective Agreements by Solo Self-Employed People* (Sept. 29, 2022), <https://perma.cc/XH36-RDS2>.

¹²² Commission Regulation 2022/374, 2022 O.J. (C 374) 11.

accepted, sustainable development encompasses three dimensions: an environmental, an economic, and a social dimension.¹²³ In this latter dimension, some authorities, including the European Commission and some commentators,¹²⁴ 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 switch to competitors offering cheaper products produced under lower working conditions.

Such coordination would not be necessary if consumers could drive producers to competitively remunerate their workers by way of orienting their purchasing decisions toward 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 behavioral biases on the part of consumers that may lead them to underestimate this feature of the quality dimension of the product compared to others.¹²⁵

The question therefore arises whether, in such cases, it would be possible to envisage that an instance of cooperation between employers setting a minimum living wage level may, under very specific circumstances, establish a "social norm"¹²⁶ and be used to bring such conditions into existence in the market and ensure that they are applied across the industry.

There are significant distinguishing features between cooperation among employers in labor markets and cooperation among firms to promote environmental sustainability or fight

¹²³ ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, SUSTAINABILITY AND COMPETITION OECD COMPETITION COMMITTEE DISCUSSION PAPER 12 (2020).

¹²⁴ Simon Holmes, *Climate Change, Sustainability, and Competition Law*, 8 J. ANTITRUST ENF'T 354, 357 (2020).

¹²⁵ For a fuller analysis of demand problems affecting the matching of supply and demand in relation to sustainability, see, for example, CRISTINA VOLPIN, SUSTAINABILITY AS A QUALITY DIMENSION OF COMPETITION: PROTECTING OUR FUTURE (SELVES) 3–4 (2020).

¹²⁶ ROMAN INDERST, FELIX RHIEL & STEFAN THOMAS, SUSTAINABILITY AGREEMENTS AND SOCIAL NORMS 13–14 (2021).

climate change, including as regards the externalities and efficiencies they may yield.

Cooperation between employers aimed at wage-fixing may artificially create employer 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 anti-competitive coordination between the participants may arise in connection with such cooperation, which counsels in favor of 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.¹²⁷

Where these private initiatives are not sufficient, coordination may be tolerated in very limited circumstances when it yields 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 U.S. Department of Justice (DOJ) in 2000, the Apparel Industry Partnership, which included manufacturers like Nike and Reebok, asked for a business-review letter in relation to the adoption of a Workplace Code of Conduct.¹²⁸ The request stemmed from concerns about 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 United States and abroad.¹²⁹ The Code was not mandatory. The Code included a recognition of employees’ rights to collective bargaining, legal limits on regular and overtime work, and a requirement to pay employees the higher of legally required minimum wages or the prevailing industry wage.¹³⁰ While the Code of Conduct was not likely to set a standard beyond the legal one, and compliance with it was not mandatory, there was a question

¹²⁷ See Ruben Maximiano & Cristina Volpin, *Addressing the Climate Crisis without Changing the Competition Policy Framework: Reality or a Mirage?*, 23 *BUS. L. INT’L* 101, 108 (2022) (providing an analysis in the context of the environmental dimension of sustainability).

¹²⁸ Letter from Joel I. Klein, Assistant Attorney General, to Kenneth A. Letzler, Esq. & Richard M. Lucas, Esq. 1 (Apr. 7, 2000) (available at <https://perma.cc/T5FD-6EDE>).

¹²⁹ *Id.*

¹³⁰ *Id.* at 2.

about whether it would have a negative impact on retail prices. In the letter, the DOJ noted that compliance with the minimum wage and maximum working hours requirements would 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.¹³¹ The DOJ also seemed to acknowledge that the respect of reasonable working conditions might represent a quality dimension of the product that consumers would appreciate and that the companies could advertise, thus giving the Code “a net procompetitive effect.”¹³²

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 an 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.¹³³

The German Federal Cartel Office (*Bundeskartellamt*) allowed agreements between competitors concerning voluntary commitments to set fair wage standards in the banana sector. The Federal Cartel Office noted that the agreements did not involve any anticompetitive exchange of information on procurement prices, costs, production volumes, or margins.¹³⁴

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)”¹³⁵ Under the draft Guidelines, sustainability agreements designed 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.¹³⁶ These

¹³¹ *Id.* at 3.

¹³² *Id.*

¹³³ See Memorandum from Arnold & Porter LLP to the Fair Wear Foundation 4 (June 1, 2015) (on file with author).

¹³⁴ *Achieving Sustainability in a Competitive Environment – Bundeskartellamt Concludes Examination of Sector Initiatives*, BUNDESKARTELLAMT (Jan. 18, 2022), <https://perma.cc/WP2P-QCTR>.

¹³⁵ AUTORITEIT CONSUMENT & MARKT, GUIDELINES ON SUSTAINABILITY AGREEMENTS OPPORTUNITIES WITHIN COMPETITION LAW 10 (2021) (second draft).

¹³⁶ *Id.*

may include banning child labor, paying livable wages, and respecting the right to unionize.¹³⁷

In the European Union, the EU competition rules find their constitutional ground in Article 3(3) of the Treaty on European Union (TEU), which promotes “a highly competitive social market economy, aiming at full employment and social progress”.¹³⁸ The European Commission also recently published a new draft of the Horizontal Co-operation Guidelines that specially provides for the possibility that certain sustainability benefits yielded by anticompetitive agreements, including benefits related to labor and human rights development, may exempt the agreement.¹³⁹

However, much like with other sustainability dimensions, it is possible that consumers will increasingly consider the fair treatment of workers as a product-quality dimension for which consumers are willing to pay, to the extent that they are informed of it. In the absence of supply-side problems, such as significant information asymmetries or behavioral biases preventing consumers from expressing a preference for products made with production and distribution processes that promote labor rights, this dynamic would allow services with higher levels of workers’ protection to enter the market and be increasingly more competitive. It would also avoid creating possible risks of cartel spillovers brought about by labor-related cooperation between competitors. The treatment of workers would thus become a differentiating factor in 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).¹⁴⁰

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

¹³⁷ *Id.*

¹³⁸ Consolidated Version of the Treaty on European Union art. 3(3), Oct. 26, 2012, 2012 O.J. (C 326/13) 17.

¹³⁹ Commission Regulation 2022/374, 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) 8.

¹⁴⁰ For a deeper examination of sustainability as a quality dimension, see generally VOLPIN, *supra* note 125.

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 (the SIEC test), including via the creation or strengthening of a dominant position.

The theories of harm that could be adopted in labor markets are symmetrical to those for 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 explicit or tacit collusion, 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, such 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 improvements in the allocative and productive efficiency of the labor market, for instance in the form of an increase in wages toward the competitive level.¹⁴¹

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, in a given case, there is a public interest consideration that outweighs the need to protect the competitive process. These decisions, however, while made after an in-depth industrial policy analysis, may be less predictable and, to some extent, more arbitrary than an efficiency-based decision.¹⁴²

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 conceptualization 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

¹⁴¹ ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, *supra* note 72, at 34–35.

¹⁴² Posner & Volpin, *supra* note 15, at 7.

will also inevitably affect the process of gathering evidence on the part of the competition authority, since it will involve looking at the suitable alternative options for the relevant employees. As for merger cases with effects in product markets, more in-depth assessments are resource intensive and would be expected to occur in only certain cases. Also, in cases where the theories of harm relating to issues in the product market may be more easily relied on to block a merger, it may not be necessary to also conduct a full-out investigation on the 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 European Union, rather than the European Commission, Article 22 of the EU Merger Regulation (EUMR) will likely allow the European Commission to scrutinize such issues in order to provide guidance to national enforcers.¹⁴³

D. Other Competition Policies to Enable Workers' Mobility

With their advocacy powers, competition authorities may have a role to play not only in raising awareness of the importance of competition law and of the risks connected to its violation but also in promoting and advising governments in the design and adoption of procompetitive 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 minimize unnecessary occupational licensing and promote well-functioning labor markets. A way of preserving competence and performance standards without imposing unnecessary barriers to entry for workers or suppliers in the labor market could be the use of certification schemes.

Competition authorities may also consider proposing measures that: support the adoption of teleworking policies; enhance transparency on employers' characteristics; allow the portability of platform workers' performance rating systems to facilitate their mobility; or prohibit single-homing obligations or other forms of penalizing or preventing 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.

¹⁴³ Council Regulation 2004/139, art. 22, 2004 O.J. (L 24) 1, 3.

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 Essay dismantles the myth that European labor markets are not characterized by employer monopsony power. These data reveal that, despite differences in labor market setups, regulations, and institutions—such as the degree of unionization, the proportion of urban population, and language and mobility barriers—the level of concentration in Europe is analogous to that in the United States. The negative effects of concentration on labor market outcomes are also broadly similar across the Atlantic, and these effects are felt on employment, wages, and nonwage attributes.

Given the nonnegligible cross-country differences in Europe, generalizing the conditions of European labor markets is challenging. However, this Essay's analysis suggests that concentration levels and wage and nonwage effects in European labor markets may be associated with compounding factors, such as labor market frictions, transaction 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 procompetitive policy measures.

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

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

Based on the concentration data collected, this Essay shows that some European sectors and workers may be more vulnerable to monopsony power than others. Competition authorities in Europe may thus wish to prioritize 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 labor markets and business practices will require responses not only from the full toolbox of competition authorities but also from other policy avenues. For this reason, it is important to recognize 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 a few 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 incentivize 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 and consumers in Europe.