

Occupational Health Inequalities and Collective Bargaining: a Cross-National Examination of the Gap Between Migrants and Citizens

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Non-technical summary

People working in heavily unionised sectors or countries often experience greater wellbeing. Empowering workers seems to improve mental health and may even reduce mortality rates, in part because unions improve wages and working conditions. Collective bargaining institutions in particular can improve health and wellbeing among workers by redistributing power between employees and employers. Because wages and working conditions are recognised as key social determinants of health, collective bargaining institutions are what Marmot has called the ‘causes of the causes’ of health.

In this paper, then, we unpack this complex issue by examining how collective bargaining, an important structural driver of health, affects migrant health and migrant health inequalities. This is an important gap, given that most migrants migrate for work, and that working conditions, precarity and income are all key social determinants of health.

We use data from the EU Labour Force Survey (2007, 2013 & 2020), which covers 900,000 individuals across 31 countries. We examine the relationship between collective bargaining coverage and exposure to occupational health risks among migrants and citizens. We find that migrants’ occupational health outcomes are little responsive to changes in collective bargaining coverage compared to citizens. Additionally, contrary to expectations, lower levels of coverage correlate with lower reported health risks and fewer work-related health issues. Importantly, the healthy migrant effect – the extent to which migrants have a lower probability of suffering from work-related health problems – seems to vary across different levels of coverage. More precisely, the healthy migrant effect is only significant in contexts with high-levels of coverage. We suggest avenues for future research.

Occupational Health Inequalities and Collective Bargaining: a Cross-National Examination of the Gap Between Migrants and Citizens

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Abstract: Collective bargaining institutions play a crucial role in determining wages and working conditions, which are both important social determinants of health. We use data from the EU Labour Force Survey (2007, 2013 & 2020), which covers 900,000 individuals across 31 countries. We examine the relationship between collective bargaining coverage and exposure to occupational health risks among migrants and citizens. We find that migrants' occupational health outcomes exhibit less responsiveness to changes in collective bargaining coverage compared to citizens. Additionally, contrary to expectations, lower levels of coverage correlate with lower reported health risks and fewer work-related health issues. We suggest avenues for future research.

Keywords: Collective bargaining, determinants of health, union coverage

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Introduction

People working in heavily unionised sectors or countries often experience greater wellbeing^{1,2}. Empowering workers seems to improve mental health¹ and may even reduce mortality rates³, in part because unions improve wages and working conditions. Collective bargaining institutions in particular can improve health and wellbeing among workers by redistributing power between employees and employers. Because wages and working conditions are recognised as key social determinants of health, collective bargaining institutions are what Marmot has called the ‘causes of the causes’ of health⁴.

What is less clear, however, is *whose* health benefits from these institutions? Collective bargaining institutions may improve the health of everyone in part because collective bargaining agreements can be extended to non-unionised workers under conditions of “high coverage”. The more workers are covered by collective bargaining agreements (including non-unionised workers), the more broadly union negotiations’ health benefits are shared.

However, one worry with collective bargaining is that it can create dualized labour markets which differentiate between labour market ‘insiders’ and ‘outsiders’. Insiders are those employed in secure contracts, and their better employment conditions, protected by collective agreements, are effectively subsidised by “cheaper” outsiders, employed on fixed-term or otherwise precarious contracts and not covered by collective bargaining agreements. Despite worries about the effects of collective bargaining on outsiders, higher levels of coverage do seem to improve the health of some outsiders, such as those who are disabled⁵ or unemployed, particularly where collective bargaining covers more than 85% of the workforce⁶. It is unclear, however, whether collective bargaining also protects a different kind of outsider: migrant workers.

One reason migrant workers may not benefit from collective bargaining is that trade unions may fail to bargain for migrant workers. In many European countries, migrants remain (despite some growth over time) a small proportion of all union members^{7,8} and their under-representation in both relative and absolute terms may mean that the issues of greatest concern to them do not get sufficient recognition. This marginalisation within the union movement is compounded by social and linguistic exclusion⁹, hostile labour markets in host countries⁸, and assumptions about unions’ politics¹⁰. Migrant workers, for example, might purposefully exclude themselves from union organizing if they perceive unions to be part of hostile labour market environments. In some countries, trade unions have indeed been tasked with monitoring

cases where migrant workers do not have the right to work and with reporting “illegal workers” to the authorities ¹¹ and sometimes unions appear more concerned with estimating the number of undocumented migrants in certain industries ¹² rather than improving working conditions and ensuring that work standards are respected. These fears have led some migrant workers to create their own independent unions ^{13,14} but it can be difficult for these nascent ‘communities of struggle’ to be effective at winning concessions, especially compared to sector-wide collective bargaining.

Even where trade unions do not participate in the “hostile environment”, there is evidence that unions are not “identity neutral” ¹⁵: they can systematically privilege one category of workers over others and provide differential access, support and organizational power. For example, in Theodoropoulos’s study⁹ of the food and restaurant industry in the UK, migrant workers ‘laughed’ at the possibility of strikes as means of raising awareness or rectifying the exploitative conditions in their workplaces, and little faith was expressed in the coordination with majority union members on a particular issue. There is, of course, a great deal of diversity around whether trade unions include migrants in their membership and unions’ political priorities, but many of the challenges cited above appear common across settings ^{8,16,17}.

Beyond issues of union strategy and inclusiveness, another reason migrant workers may not benefit from collective bargaining is that they are over-represented in precarious, gig-economy work¹⁸. Gig workers are the classic “outsiders” in contemporary dualized and neoliberal labour markets, with little access to formal legal support, and plagued by a lack of autonomy over their own work and time. Migrant workers are very often employed in this type of work ^{19,20}, partly because gig economy platforms require very little documentation from their workers ^{21,22}. Together, these patterns suggest the impact of collective bargaining for migrants might be minimal because the gig economy, particularly where this means ‘self-employed’, is often not covered by collective bargaining agreements ^{23,24}.

Migrants, then, may fail to feel the health benefits of unions because they are employed in occupations that are simultaneously: (1) less likely to be covered by union agreements and (2) bad for your health. Short-term migrants and migrant seasonal workers especially, are often subjected to precarious contracts, low pay, abusive employers, long hours and industrial accidents^{25–29}, and these risks seem to be especially high in the gig economy³⁰. Regarding occupational health problems, a recent systematic review focused on the US and European destination countries found that 47% of migrant workers in manual occupations suffered from

at least one morbidity, and that 22% had experienced at least one injury or accident ³¹. However, there was a lack of consistency across studies regarding whether these occupational health problems were more prevalent than among native workers ³¹.

Yet, whether migrants will experience worse health than natives as a result is unclear, because of the “healthy migrant effect”. Migrants are likely to be in better health than natives, partly because of who selects into migration ³², and partly because some migrants are less likely to binge-drink, smoke, and eat unhealthy food ^{33–35}. However, within this overall pattern, health inequalities between migrants and natives vary substantially by country of origin, gender, occupation, migration type, and with experiences of discrimination ^{31,33,36–39}. So far, most investigations of migrant health have focused on individual-level rather than structural and policy drivers⁴⁰. Structural factors are likely to be empirically important because significantly different patterns have been found across country contexts ³¹. For example, while the healthy migrant effect has primarily been documented in the US and also holds in Italy, immigrants are less healthy than natives in France, Belgium and Spain ⁴¹. While there has been very little research in terms of which policies matter, one study has shown that restrictive integration policies negatively affect migrants’ health across a wide range of European countries, partly offsetting the “healthy migrant” effect ⁴².

In this paper, then, we unpack this complex issue by examining how collective bargaining, an important structural driver of health^{1–3,6}, affects migrant health and migrant health inequalities. This is an important gap, given that most migrants migrate for work ^{43,44}, and that working conditions, precarity and income are all key social determinants of health^{45–49}.(Evagora-Campbell et al., 2022; Flynn & Wickramage, 2017).

Methods

Studying the institutional determinants of health inequalities between migrants and natives is complicated by the fact that most cross-national surveys, such as the European Social Survey, do not have sufficiently large in-country samples to study migrant populations over time and across institutional regimes. A strength of our study is that we use the largest available European household sample survey ^{50(p5)}, the EU Labour Force Survey (EU LFS), which covers 31 countries with a total sample size of approximately 4 million respondents a year, of which 5% (650,000) are migrants. While the EU LFS does not routinely collect data on health, it fielded an occupational health module in three years: 2007, 2013, and 2020, which we focus

on here. We include employees only, aged 15-64, who work in the country in which they were interviewed. Our analytical sample numbers approximately 910,000-930,000 respondents across all three years, depending on the outcome variable.

We analyse three binary outcome variables relating to health at work: (1) Exposure to any mental well-being risk factors at work; (2) Exposure to any physical health risk factors at work; (3) Suffering from physical or mental health problems in the past year, caused or made worse by work.

We explore how changes in the percentage of employees covered by a collective bargaining agreement within countries affect these health environments and outcomes using binomial logistic regressions with country fixed effects (Appendix A). We operationalise trade union strength using collective bargaining coverage. This variable measures the share of employees to which collective bargaining agreements apply, even if these employees are not trade union members themselves. Collective bargaining coverage has been shown to be particularly important in terms of driving union inclusiveness towards outsiders, such as agency workers⁵¹ or the unemployed⁶. Conceptually, coverage better captures what unions “do” for workers, such as improving wages and working conditions. These factors are more likely to be related to the occupational health outcomes we study here, compared to unionisation, which is more likely to influence a diffuse measure of self-rated health (not included in the EU LFS) through social capital or social integration.

Coverage of collective bargaining is measured using a three-level categorical variable of low (0-47% coverage), medium (48-85% coverage), or high (86-100%) coverage. We impose these categories based on data driven gaps in the continuous variable, which is sourced from the OECD-IASS-ICTWSS database⁵². We explore whether the effect of collective bargaining coverage on health outcomes at work differs by citizenship status by interacting coverage and the categorical variable of citizenship. We constructed this variable by grouping the EU LFS citizenship variable into three categories: citizen, EU migrant and Rest of the World migrant (Appendix A). We chose to focus on citizenship rather than country of birth as an imperfect measure of migrant status, because the former is a better (though imperfect) indicator of formal rights to live and work in a country, and through these rights, the extent to which workers have the power to protest against unsafe practices at work.

Country fixed effects control for time-invariant country characteristics, but not for changes in the composition of country populations over time, or changes in political factors, the economy,

or state spending. These factors could be correlated both with collective bargaining coverage and health outcomes at work. We therefore include the following individual-level controls: five-year age group (10 levels), sex, education level (three levels), occupation (1 digit ISCO code), and whether the respondent is a proxy respondent, since some countries used proxy respondents much more than others^{53(p16)}. Sector of occupation is not included because it has a missingness rate of 64% within our analytical sample. We also include country-year controls: GDP per capita (logged) (sourced from Eurostat), the share of left-wing seats in parliament⁵⁴, the share of government spending spent on social expenditure and health expenditure respectively (sourced from Eurostat, except for the UK, where OECD COFOG data was used), and finally the country-year score on the MIPLEX migrant labour integration index⁵⁵.

Despite the unique advantages of this dataset, limitations remain and the findings should be interpreted with these in mind. First, the period of analysis is fairly narrow (2007-2020), meaning that only a limited number of countries changed coverage category over this period, which limits the main source of variation in the independent variable (Appendix B, Table A2). The analysis should be updated with future waves of the health module. Second, there is very high missingness in the outcome variables (around 73% among those who are employees and aged 15-64), because of high non-response rates^{50,56}. Third, some of the response categories for health risks at work changed over time (Appendix A) and there were some differences between countries in how questions were asked and how the survey was fielded⁵⁰. Lastly, the last wave was fielded over a period that overlapped with the start of the COVID pandemic (Appendix B provides descriptive statistics on how outcome variables changed over time).

Results

The first finding is that despite some differences which we outline below, migrants' and citizens' health at work is similarly affected by collective bargaining systems. In other words, differences in health risks and health outcomes between collective bargaining systems dwarf differences between migrants and citizens within these systems.

Focusing first on differences in health risks and health outcomes between collective bargaining systems, there appears to be an inverse-U shape between the probability of experiencing physical and mental health risks, and the extent of coverage (Figures 1-2). The average probability of facing mental and physical health risks at work is lowest in systems with low or high coverage, while it is higher in systems with medium coverage (Figures 1-2). It appears

that exposure to physical health risks at work is more sensitive to collective bargaining coverage than exposure to mental health risks. Percentage differences in the probability of facing physical health risks at work across coverage categories are larger than for mental health risks, within every citizenship category (Table 1).

Figure 1: Probability of experiencing mental health risks in the work environment, by coverage and citizenship category. EU LFS 2007, 2013, 2020.

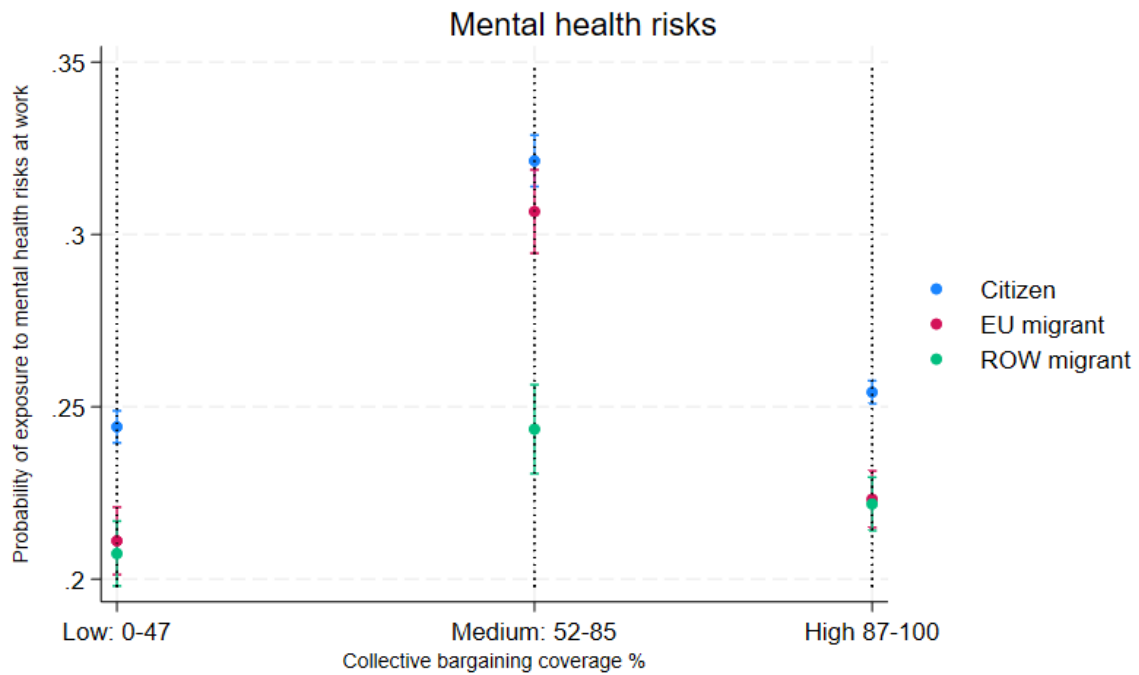
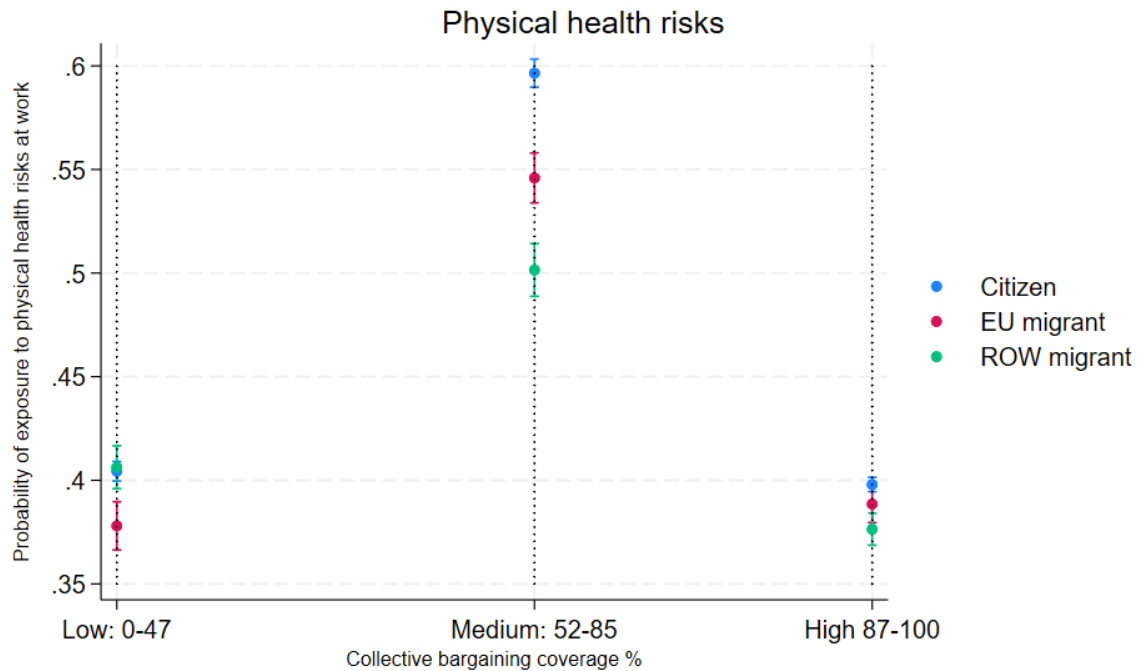


Figure 2: Probability of experiencing physical health risks in the work environment, by coverage and citizenship category. EU LFS 2007, 2013, 2020.



However, the pattern is very different in terms of the probability of developing any health problems because of work – in this case, the probability of poor health outcomes is lower for systems below 85% coverage, and higher for systems with higher levels of coverage (Figure 3). It is difficult to comment on the scale of changes, because the average probability of experiencing health problems at work is low to start with. However, it appears that differences across coverage categories are also large: around 56% difference in the probability of experiencing any health problems between medium and high coverage systems (Table 1).

Figure 3: Probability of experiencing any health problems because of work, by coverage and citizenship category. EU LFS 2007, 2013, 2020.

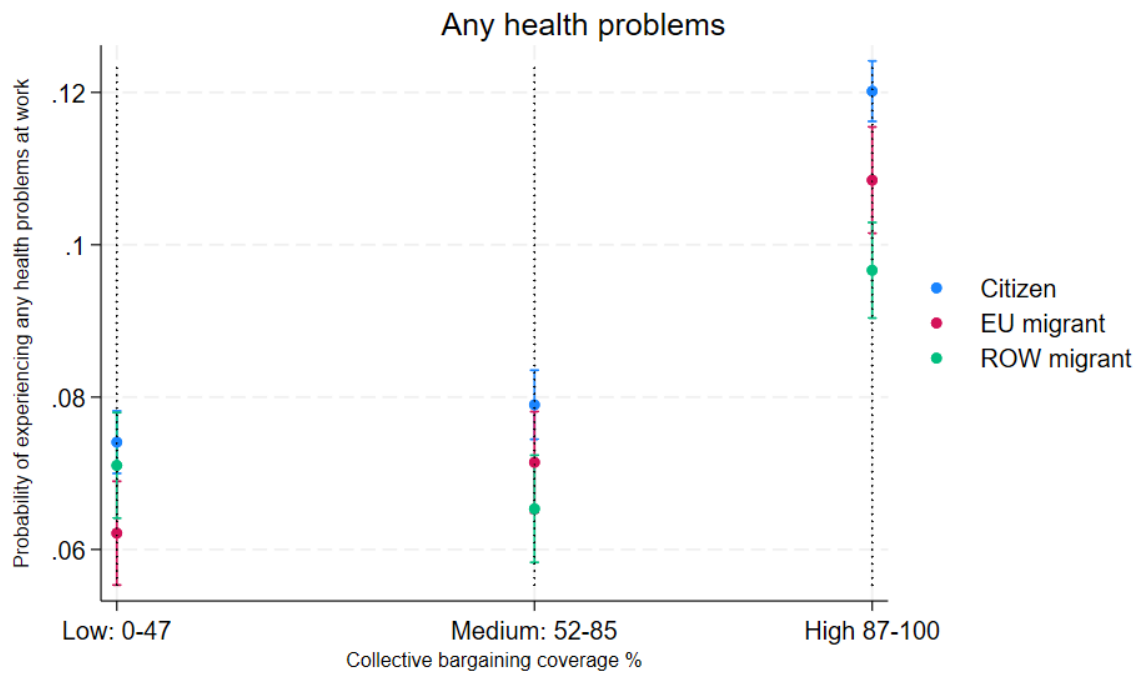


Table 1: Predicted differences in health outcomes across coverage systems (in percentage points and % difference relative to the mean of the lower coverage – means provided in Table A2 in the Appendix), by citizenship status. EU LFS 2007, 2013, 2020

COVERAGE		MENTRISK		PHYSRISK		ANY HEALTH PROBLEMS	
		p.p	% diff from Low cov	p.p.	% diff from Low cov	p.p.	% diff from Low cov
Low to Medium	Citizen	0.08	33%	0.19	46%	0.00	NA
	EU migrant	0.10	30%	0.17	38%	0.01	NA
	ROW migrant	0.04	16%	0.10	19%	-0.01	NA
		p.p	% diff from Medium cov	p.p.	% diff from Medium cov	p.p.	% diff from Medium cov
Medium to High	Citizen	- 0.07	-27%	- 0.20	-49%	0.04	57%
	EU migrant	- 0.08	-34%	- 0.16	-51%	0.04	56%
	ROW migrant	- 0.02	-14%	- 0.13	-31%	0.03	56%

Note: non-significant changes in red

In terms of how differences across collective bargaining systems differ by citizenship category, work-related health outcomes for “rest of the world” (ROW) migrants are significantly less responsive to collective bargaining coverage compared to citizens. ROW migrants experience less of an increase in the probability of being subjected to mental and physical health risks (when comparing medium coverage systems to low coverage systems) and less of a decrease (when comparing high coverage systems to medium coverage systems). This is true for work-related health outcomes as well: they experience a smaller increase in the probability of experiencing health problems than citizens when comparing high coverage systems to medium coverage systems (Table 1).

For EU migrants, the patterns are slightly more complex, and differ depending on the outcome variable. Similarly to ROW migrants, EU migrants’ exposure to physical health risks is less sensitive to differences in coverage relative to citizens, but more sensitive relative to ROW migrants’ exposure. In contrast, EU migrants’ exposure to mental health risks at work is more sensitive to differences in collective bargaining coverage relative to citizens. Differences between coverage systems affect EU migrants’ probability of experiencing any health problems similarly to citizens (Table 1).

Finally, we summarise how different citizenship categories report health risks and health problems differently, across collective bargaining systems. Citizens are most likely to report being exposed to health risks at work, as well as suffering from health problems as a result of work. Depending on the outcome and the coverage system, they report similar or higher health risks and health problems relative to both EU migrants and ROW migrants (Figures 1-3). Differences between EU and ROW migrants are more complex – in most cases, there are no significant differences between them; however in medium coverage systems, EU migrants report higher exposure to both mental and physical health risks than ROW migrants (Figures 1-2).

Discussion

In this paper we examine the health effects of collective bargaining on migrants relative to citizen workers, using data from over 900,000 people across 31 countries. Our results open up a number of puzzles that require further examination because they do not neatly align with existing theory on the health effects of collective bargaining for either insiders or outsiders.

Before we start unpacking these results in more detail, we must stress two limitations of our analysis. The first is the nature of the variables available to us. While our dataset’s large sample

allows us to examine inequalities between migrants and citizens across institutional regimes, our data lacks a direct measure of health status. The EU Labour Force Survey asks people about health risks *at work* and whether they have a health problem that was caused by or made worse *by their work*. In other words, these questions do not measure well-being in general but rather perceptions of risk and attributions of causality (i.e., whether people connect their current health problems to their current working conditions). This matters because perceptions of risk and attributions of causality will vary depending on origin country and will be shaped by collective bargaining regimes. It is likely that migrants from high-income origin countries might have different expectations regarding what makes a healthy workplace than migrants from low-income origin countries. At the same time, migrants or citizens from countries with high levels of coverage might have different expectations about what makes a healthy workplace. The second challenge is the healthy migrant effect. This suggests migrants should be healthier than citizens on average, though this pattern may vary according to origin country and/or by migrant integration policies in destination countries. The healthy migrant effect matters because migrants' and citizens' baseline health (which is not possible to measure with our data) may also inform whether they believe their workplaces are risky for their health. For example, we can hypothesise that the less healthy someone is, the more they feel exposed to health risks. Conversely, someone who feels less healthy in general may be less likely to assign the cause of their (worsening) ill-health to work specifically.

In the context of these limitations, our results uncover a major puzzle, namely that the three types of collective bargaining systems we identify (low, middle, and high) seem to produce somewhat unexpected configurations in terms of both (1) perceived workplace risks and (2) whether work caused any health problems. While the survey question on health problems does not make an explicit link with health risks, it would be reasonable to expect that people in systems that report high risks may also report high health problems, and vice-versa. However, this is not what we find. In fact, there is a disconnect between health risks and health problems caused by work in both medium and high coverage systems. In medium coverage systems, health risks are perceived to be high, while the probability of health problems caused by work is estimated to be low. In contrast, under high coverage systems, health risks are perceived to be low while health problems caused by work are reported to be high. This pattern is broadly similar for citizens and for both groups of migrants, except for the fact that migrants seem less affected by the differences across collective bargaining systems than citizens.

One interpretation of these patterns is that reducing work-related health risks in high coverage settings is not translating into health improvements. This seems unlikely, in part because the extent of this disconnect between risks and outcomes varies depending on where these migrants come from in the world. For example, when we split ROW migrants into origin country groups, we find that in high coverage destination countries, migrants from high-income countries (e.g., the USA) are far more likely to report work-related health problems than migrants from low-income countries. In fact, reported levels of work-related health problems among ROW migrants from low-income countries working in high coverage destination countries are more similar to other low-income country migrants working in medium coverage countries than they are to migrants from high-income settings working in a high-coverage collective bargaining regime. This suggests that the composition of the migrant population in terms of origin countries may be partly driving our results.

A second puzzle is that workers in medium coverage settings have higher exposure to health risks than workers in low and high coverage settings. To some extent, this pattern follows the Calmfors-Driffill ⁵⁷ hypothesis, whereby medium levels of centralisation in collective bargaining should benefit insiders more than outsiders, relative to both low and high levels of bargaining centralisation (centralisation is highly correlated with coverage) ⁵⁸. Under medium levels of bargaining centralisation, there is more likely to be a collective action problem, where trade unions both have substantial power (relative to low centralisation systems) but also have more incentives to “look after their own” instead of prioritising the common good (relative to high coverage systems). What does not align with the Calmfors-Driffill hypothesis is that we should observe a sharper inverse-U shape for migrant workers (the outsiders in our framing) relative to citizen insiders. Instead, we see the opposite.

A third puzzle concerns low coverage settings, which do not seem to fit existing theory. These are contexts where the perception of work-related health risks is low and where employees are less likely to attribute their health problems to their working environment. Again, in the context of existing theory and empirical evidence, these results are puzzling because we would expect low coverage settings to be places with greater work-related health risks, with those risks leading to more health problems ^{3,6}. With the exception of the UK, Ireland and Switzerland, all countries in this coverage category are post-communist countries (Appendix B, Table A2). This means that they are not only poorer (relatively to other European countries) but they also share a very different history and political economy that may well be informing these results – both from the perspective of actual experiences and in terms of reporting.

The fourth puzzle concerns how we think about the differences between migrants and citizens in terms of work-related health problems. One of the striking aspects of our results is that the healthy migrant effect – the extent to which migrants have a lower probability of suffering from work-related health problems – seems to vary across different levels of coverage. More precisely, the healthy migrant effect is only significant in contexts with high-levels of coverage. If we expect migrants to have better health than citizens (as some evidence suggests we should), then the absence of a significant healthy migrant effect in low and medium coverage systems potentially says something important about that labour market, namely that migrants are doing worse than expected in those settings. It is possible that settings with low and medium levels of coverage are hosting migrants who arrive with better health than citizens and harming their health to such an extent that migrants have become indistinguishable from citizens. We cannot prove this with the data we have, in particular because we have no data on migrants' length of stay or underlying health status. While the way in which health status and work-related health problems interact is unknown and could add complexity to this interpretation, we believe this explanation is potentially plausible and hope it spurs future debate about these patterns.

In short, there are few neat conclusions from these data but they do raise a number of important questions for future analysis. We hope, then, that this paper generates discussion among social epidemiologists and political economists regarding how labour market institutions such as collective bargaining affect the health of migrants and citizens in order to more fully understand the causes of the causes of ill health.

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APPENDIX

Section A. Methodology

Fixed effects

Year fixed effects were not included, both because two-way fixed effect models are difficult to interpret (they produce a complex weighted mean of within-country and cross-sectional effects) and are also very unstable, as a result of statistical packages such as Stata automatically and arbitrarily dropping year or country dummies when the model becomes unidentifiable under very common conditions (e.g.: Kropko & Kubinec, 2020).

Coverage variable

We use the historical trend in adjusted coverage, meaning the “proportion of employees covered by collective (wage) agreements in force among employees with the right to bargain, based on combined administrative and/or survey data sources” (OECD, 2021, p. 23). Any missing data was linearly interpolated. Missing values for 2020 were linearly extrapolated as long as there was data for 2018 and/or 2019, and that the extrapolation resulted in a number between 0 and 100.

Migrant variable

We assigned non-nationals to “EU migrant” if their citizenship was coded as EFTA (since these countries have freedom of movement in the EU), EU15, EU27, EU28, NMS10, NMS13 or NMS3 (NMS means New Member States). We include migrants from the UK as EU migrants since all EU membership terms remained in place post Brexit, until 31st December 2020. Our classification means that it is possible that migrants from Croatia were classified as EU migrants in 2007 even though Croatia joined the EU in 2013, because the code NMS3 groups 2007 and 2013 accession countries.

Mental health risk variable

Mental health risk factors – outcome indicator

“Exposure at work to one of the following risk factors that can affect mental well-being. Identify the factor considered to be the most risky for mental well-being.”

	2007	2013	2020
Harassment or bullying			
Violence or threat of violence			
Time pressure or work overload			
Poor communication or cooperation			
Difficult customers, patients, pupils			
Job insecurity			
Lack of autonomy			
Other			

We coded “exposure to any mental health risk” as “1” if the respondent identified any of the following risk factors highlighted in dark orange. The list of risk factors was expanded in 2020. However, in order to make the outcome variable comparable across years, we restricted the admissible response categories to those fielded in 2007 and 2013.

Physical health risk variable

Physical health risk factors – outcome indicator

“Exposure at work to one of the following risk factors that can affect physical health. Identify the factor considered to be the most risky for physical health.”

	2007	2013	2020
Chemicals, dusts, fumes, smoke or gases			
Noise or vibration			
Difficult work postures, movements, loads			
Risk of accident			
Strong visual concentration			
Slips, trips, falls			
Use of machines or hand tools			
Use of vehicles			
Other			

We coded “exposure to any physical health risk” as “1” if the respondent identified any of the following risk factors highlighted in dark orange. The list of risk factors changed over the years. We made the assessment that the following 2020 response categories “Slips, trips and falls”,

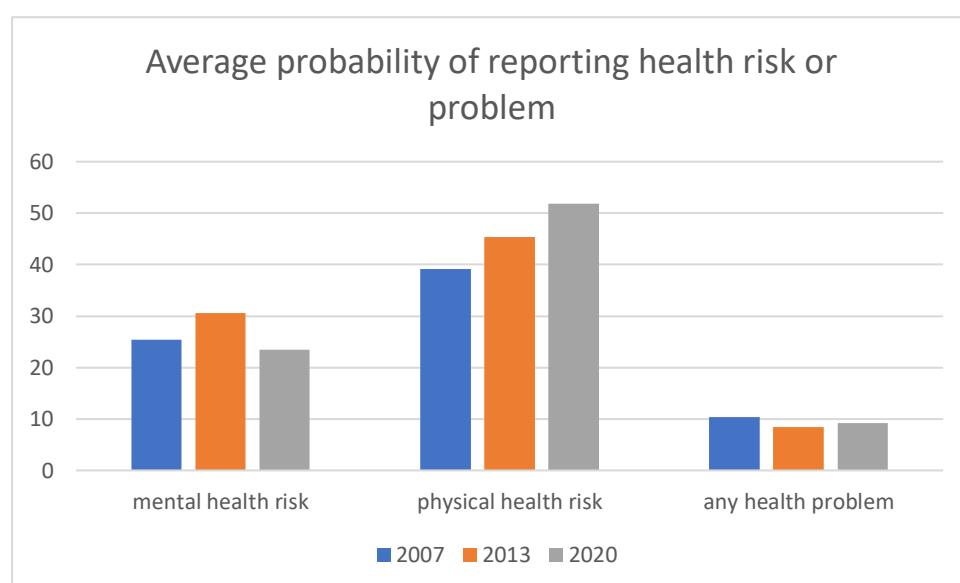
“use of machine or handtools”, and “use of vehicles” were intended to capture the “risk of accidents” category fielded in 2007 and 2013. We restricted the admissible response categories to those fielded in all years.

Any health problem variable

The survey question for health problems changed between 2007 and 2013. The same question was fielded in 2013 and 2020. In 2007, the question was: “Type of the most serious complaint caused or made worse by work”. In 2013 and 2020, the question was: “Type of the most serious health problem caused or made worse by work.” The only difference between option categories is that in 2013, the option “Stomach, liver, kidney or digestive problem” was added, and kept in 2020.

Section B. Descriptive statistics

Figure A1: change in the mean probability of reporting a health risk or health problem across waves



Note: These are means within the population who are currently employees, aged 15-64.

Table A1 : Mean health outcomes in the sample, by coverage system and citizenship. EU LFS 2007, 2013, 2020

CITIZENSHIP	COVERAGE	MENTRISK	PHYSRISK	ANY HP
Citizen	Low: 0-47	0.23	0.42	0.07

EU migrant	Low: 0-47	0.32	0.44	0.06
ROW migrant	Low: 0-47	0.22	0.51	0.06
Citizen	Medium: 52-85	0.25	0.41	0.07
EU migrant	Medium: 52-85	0.24	0.31	0.07
ROW migrant	Medium: 52-85	0.16	0.40	0.06

Table A2: Sample countries, with coverage level across years

	2007	2013	2020
AUSTRIA	High	High	High
BELGIUM	High	High	High
BULGARIA	Low	Low	Low
SWITZERLAND	Low	Low	Low
CYPRUS	Medium	Low	
CZECHIA	Low	Low	Low
GERMANY	Medium	Medium	Medium
DENMARK	Medium	Medium	Medium
ESTONIA	Low	Low	Low
SPAIN	Medium	Medium	Medium
FINLAND	High	High	
FRANCE	High	High	High
UK	Low	Low	
GREECE	High	Low	
CROATIA	Medium	Medium	
HUNGARY	Low	Low	Low
IRELAND	Low	Low	
ICELAND	High	High	High
ITALY	High	High	High
LITHUANIA	Low	Low	Low
LUXEMBOURG	Medium	Medium	Medium
LATVIA	Low	Low	Low
MALTA		Medium	
NETHERLANDS	Medium	High	Medium

	2007	2013	2020
NORWAY	Medium	Medium	
POLAND	Low	Low	Low
PORTUGAL	High	Medium	Medium
ROMANIA	High	Low	
SWEDEN	High	High	High
SLOVENIA	High	Medium	
SLOVAKIA	Low	Low	

Figure A2: Proportion of people reporting health problems (with countries ordered by the level of coverage)

